DRAFT ENVIRONMENTAL IMPACT REPORT

Parkline

JUNE 2024

Prepared by
ICF

Prepared for
City of Menlo Park

State Clearinghouse No. 2022120058

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APPENDICES

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Acronyms and Abbreviations

ABAG	Association of Bay Area Governments
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
ADT	average daily traffic
AGR	Agricultural Supply
AIC	Artificial Intelligence Center
ALMS	Automatic Load Management System
AMI	area median income
ARPANET	Advanced Research Projects Agency Network
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
ATC	ATC Group Services
ATCM	airborne toxic control measures
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BAWSCA	Bay Area Water Supply and Conservation Agency
BER	business environmental risks
BFE	base flood elevation
BMBL	Biosafety in Microbiological and Biomedical Laboratories
BMP	best management practices
BMR	Below market rate
BOQ	bachelor officer quarters
BSL	biosafety levels
BTEX	benzene, toluene, ethylbenzene, and xylenes
C/CAG-VTA	City/County Association of Governments-Santa Clara Valley Transportation Authority
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CCE	Community Choice Energy
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDP	Conditional Development Permit
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act

CFR	Code of Federal Regulations
CFS	cubic feet per second
CGS	California Geological Survey
CHRIS	California Historical Resources Information System
CHRSC	California Historical Resource Status Code
CIP	Capital Improvement Program
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CPUC	California Public Utilities Commission
CREC	controlled recognized environmental conditions
CRHR	California Register of Historical Resources
CRS	community rating system
CSD	City School District
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DARPA	Defense Advanced Research Projects Agency
dB	decibel
dBA	A-weighted decibel
DOF	Department of Finance
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources
EIR	environmental impact report
EMFAC	EMission FACtor
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Endangered Species Act
ESA	environmental site assessment
ESL	Environmental Screening Level
ESMP	Environmental Site Management Plan
EV	electric vehicle
EVAE	emergency vehicle access easement
EVCS	electric vehicle charging station
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FPHA	Federal Public Housing Authority
FTA	Federal Transit Administration

FTE	full-time equivalent
GHG	greenhouse gas
GIS	geographic information system
GSP	groundwater sustainability plan
GWP	global warming potential
HABS	Historic American Buildings Survey
HCD	Housing and Community Development
HEU	Housing Element Update
HI	hazard index
HNA	Housing Needs Assessment
HOV	high-occupancy vehicle
HRA	health risk assessment
HREC	historical recognized environmental condition
HVAC	heating, ventilation, and air-conditioning
IEEE	Institute of Electrical and Electronics Engineers
IND	Industrial Service Supply
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
ISG	Individual Supply Guarantee
ITE	Institute of Transportation Engineers
LBP	lead-based paint
LCM	lead-containing material
LCP	lead-containing paint
Ldn	day-night level
LEED	Leadership in Energy and Environmental Design
Leq	equivalent sound level
LID	low-impact development
Lmax	maximum sound level
Lmin	minimum sound level
LOP	Local Oversight Program
LOS	level of service
LRA	Local Responsibility Area
LSAA	Lake and Streambed Alteration Agreement
LT	long term
LTS	less than significant
MBTA	Migratory Bird Treaty Act
MEIR	maximally exposed individual receptor
MIGR	Fish Migration
MLD	most likely descendant
MMRP	Mitigation Monitoring and Reporting Program
MOU	Memorandum of Understanding
MPFPD	Menlo Park Fire Protection District
MPMW	Menlo Park Municipal Water

MPPD	Menlo Park Police Department
MRP	Municipal Regional Permit
MTC	Metropolitan Transportation Commission
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCP	National Contingency Plan
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NI	No Impact
NIH	National Institute of Health
NMFS	National Marine Fisheries Service
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRHP	National Register of Historic Places
NSR	New Source Review
NWIC	Northwest Information Center
OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyls
PCE	Peninsula Clean Energy
PDA	Priority Development Area
PF	Public Facility
PFAS	per- and poly-flouroalkyl substances
PG&E	Pacific Gas and Electric
PGAM	peak ground acceleration
PLM	polarized light microscopy
PPE	personal protective equipment
PPV	peak particle velocity
PRC	Public Resources Code
PS	Potentially Significant
R&D	research and development
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental conditions
RHNA	Regional Housing Needs Allocation
ROG	reactive organic gas
RPS	Renewables Portfolio Standard
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWF	Recycled Water Facility
RWQCB	Regional Water Quality Control Board

RWS	Regional Water System
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDWA	Safe Drinking Water Act
SEIR	subsequent environmental impact report
SGMA	Sustainable Groundwater Management Act
SF&SJRR	San Francisco & San José Railroad
SFBAAB	San Francisco Bay Area Air Basin
SFHA	Special Flood Hazard Area
SFPUC	San Francisco Public Utilities Commission
SHELL	Shellfish Harvesting
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	short-lived climate pollutants
SLF	Sacred Lands File
SLM	sound-level meter
SLR	sea-level rise
SMCDEH	San Mateo County Department of Environmental Health
SMCWPPP	San Mateo Countywide Water Pollution Prevention Program
SOI	Secretary of the Interior
SPRR	Southern Pacific Railroad
SPWN	Fish Spawning
SRI	Stanford Research Institute
ST	short term
State	State of California
STC	Sound Transmission Class
SU	Significant and Unavoidable
SUHSD	Sequoia Union High School District
SVCW	Silicon Valley Clean Water
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAZ	transportation analysis zones
TDM	transportation demand management
TDS	total dissolved solids
TIA	transportation impact analysis
TIF	transportation impact fee
TK	transitional kindergarten
TMDL	total maximum daily load
TNM	Traffic Noise Model
TOD	transit-oriented development
TPA	Transit Priority Area

TSCA	Toxic Substances Control Act
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
UST	underground storage tanks
UWMP	Urban Water Management Plan
VdB	vibration decibel level
VMT	vehicle miles traveled
VOC	volatile organic compound
VRF	variable refrigerant flow
WBSD	West Bay Sanitary District
WDR	waste discharge requirement
WILD	Wildlife Habitat
WSA	Water Supply Assessment
WSAP	Water Shortage Allocation Plan
WSCP	Water Shortage Contingency Plan
WTP	water treatment plant
WWTP	wastewater treatment plant

Overview of the Proposed Project

Lane Partners (Project Sponsor) is proposing to redevelop SRI International's existing 63.2-acre research campus located at 333 Ravenswood Avenue[1] adjacent to city hall and near Menlo Park's downtown and Caltrain station (Project Site). Parkline (Proposed Project) would include a new office/research-and-development (R&D) campus with no increase in office/R&D square footage; up to 550 new dwelling units at a range of affordability levels (comprising 450 multi-family units and townhomes, along with a proposed land dedication to an affordable-housing developer that could accommodate up to 100 affordable units); new bicycle and pedestrian connections; approximately 26.4 acres of open space; and decommissioning of a 6-megawatt natural gas cogeneration plant. In total, the Proposed Project would result in approximately 1,768,802 square feet (sf) of mixed-use development, with approximately 1,093,602 sf of office/R&D uses and approximately 675,200 sf of residential uses. The Proposed Project would demolish all buildings on SRI International's Campus, excluding Buildings P, S, and T, which would remain onsite and be operated by SRI International. The city of Menlo Park is the Lead Agency for the Proposed Project.

Overview of the Project Variant

In addition to describing the Proposed Project, this environmental impact report (EIR) includes a description and evaluation of a variant to the Proposed Project, called the "Increased Development Variant" (Project Variant). The Project Variant is a variation of the Proposed Project at the same Project Site (although the Project Site would be slightly expanded to include 201 Ravenswood Avenue), generally with the same objectives, background, and development controls but with the following differences:

1. The Project Site has been expanded to include the parcel at 201 Ravenswood Avenue and create a continuous frontage area along Ravenswood Avenue and increase the overall Project Site by approximately 43,762 sf (approximately 1.0 acre), for a total of approximately 64.2 acres;
2. The Project Variant would include up to 250 additional residential rental dwelling units compared to the Proposed Project (an increase from 550 to 800 units, inclusive of up to 154 units to be developed by an affordable-housing developer);
3. The Project Variant would reduce the underground parking footprint within the site, both by removing underground parking from the multifamily residential buildings in the residential area and removing the underground parking connection between office/R&D Building O1 and Building O5. As a result, Parking Garage (PG) 1 and PG2 increase in square footage and height compared to the Proposed Project and the number of structured spaces increases by 400 (with no change in the total number of parking spaces proposed for the office/R&D buildings); and
4. The Project Variant would include an approximately 2- to 3-million-gallon emergency water reservoir that would be buried below grade in the northeast area of the Project Site, in addition to a small pump station, an emergency well, and related improvements that would be built at and below grade (i.e., emergency generator, disinfection system, surge tank) (referred to as "reservoir" throughout this document). It would be built and operated by the city of Menlo Park.

[1] The Project Site also includes the addresses 301 Ravenswood Avenue and 555 and 565 Middlefield Road.

The Project Variant would not differ from many of the basic characteristics of the Proposed Project, particularly with respect to the commercial component. For example, total office/R&D development would remain the same as under the Proposed Project. Certain residential uses, including the affordable-housing site and a limited number of townhome units, would shift to the corner of the site nearest to the intersection of Middlefield Avenue and Ravenswood Avenue. In addition, the existing buildings associated with First Church of Christ, Scientist and Alpha Kids Academy (Chapel buildings) at 201 Ravenswood would be demolished.

Areas of Controversy

California Environmental Quality Act (CEQA) Guidelines Section 15124 specifies that the Draft EIR summary identify "areas of controversy" known to the Lead Agency, including issues raised by agencies and the public.

A Notice of Preparation (NOP) was released for the Proposed Project and Project Variant on December 2, 2022, for a 30-day public review period. A public scoping meeting was held before the city's Planning Commission on December 12, 2022. This summary list is based on written comments received (included in Appendix 1 of this Draft EIR) and comments stated during the public scoping meeting. The topics that would result in physical impacts under CEQA are addressed in the EIR analysis. Potential areas of controversy may include those listed below:

Project Description

- Reconsider the number of proposed housing units
- Provide more housing units
- Decrease the number of proposed housing units
- Consider the employee/square footage ratio
- Consider a lower-impact, smaller development option
- Consider including more affordable housing
- Include comparable housing density to Willow Village Project
- Consider consolidating proposed open space

Alternatives

- Develop a range of alternatives
- Consider a lower-impact alternative
- Consider an alternative with similar housing density to the Willow Village Project

Land Use

- Analyze land use compatibility
- Consider removing conditional development permit because it is growth inducing
- Consider whether the proposed higher-density housing conforms to surrounding uses

Aesthetics

- Analyze visual impacts of rooftop equipment, building heights, and shadows
- Consider transitions of lower façade heights, building heights, setbacks, and lines of sight

Transportation

- Include a Transportation Demand Management program
- Analyze traffic impacts and vehicle miles traveled
- Analyze cumulative traffic impacts to the city and overall traffic patterns
- Prepare vehicle miles traveled analysis pursuant to city guidelines
- Include illustrations of pedestrian, bicyclist, and vehicle conditions at the Project Site and roadways
- Encourage slow streets
- Include a discussion on vehicular, pedestrian, and bicyclist safety
- Consider commute times and congestion generated from proposed employees
- Include traffic changes near Ravenswood and surrounding neighborhoods
- Analyze the transportation benefits from increased housing near the Project Site
- Include a base traffic analysis of number of housing units and square footage of commercial space
- Analyze traffic and congestion at all intersections within a one mile radius
- Analyze impacts of proposed driveways
- Consider reducing driveways to apartment complexes on Laurel Street
- Consider not reducing existing parking
- Consider reducing minimum parking requirements
- Consider including mitigation for traffic impacts

Air Quality

- Analyze direct and indirect air quality impacts of the Proposed Project on sensitive receptors, such as Menlo-Atherton High School
- Analyze cumulative air quality impacts on schools and the community in general due to increased vehicular movement and volumes of all cumulative projects

Greenhouse Gas Emissions

- Consider if the Proposed Project will help Menlo Park achieve goal of reducing greenhouse gases

Noise

- Identify Project-induced noise sources and volumes that may affect school facilities, including classrooms and outdoor school areas

Cultural and Tribal Resources

- Include summary of Assembly Bill 52, Senate Bill 18, tribal consultation, and cultural resources assessments

Population and Housing

- Address jobs/housing imbalance
- Consider long-term impacts on housing needs
- Include market analysis to reflect downtown Menlo Park apartments and office rents
- Include housing availability and displacement
- Analyze consistency of RHNA housing cycle with the Proposed Project

Public Services and Recreation

- Analyze impacts on surrounding public services, recreational facilities, and libraries
- Consider the increase in calls for police services due to the proposed park near Menlo Atherton High School and Laurel Street
- Analyze impact on Menlo-Atherton ratio of teachers, staff, and students
- Analyze impacts on school facilities and accessibility (including Encinal and Hillview)
- Consider reducing the size of the Proposed Project to protect safety and accessibility
- Include impacts on Burgess Park

Utilities and Service Systems

- Analyze impacts of the Proposed Project on infrastructure
- Consider the increased demand and supply for water

Cumulative

- Analyze the impacts of Caltrain raising train tacks at Alma/Ravenswood near the Project Site
- Consider the increase in number of trains with electrification and increased gate down time at Ravenswood/Glenwood

Project Alternatives

In accordance with CEQA and CEQA Guidelines, specifically Section 15126.6, an EIR must describe a reasonable range of alternatives to a project, or the location of a project, that could attain most of the project's basic objectives while avoiding or substantially lessening any of the significant environmental effects of the project. The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. CEQA states that an EIR should not consider alternatives "whose effects cannot be ascertained and whose implementation is remote and speculative."

The four alternatives to the Proposed Project discussed and analyzed in Chapter 6, *Alternatives*, of this EIR are:

- **No-Project Alternative.** The No-Project Alternative would continue the existing uses on SRI International's research campus, which consists of 38 buildings with approximately 1.38 million sf of mostly R&D space and areas for supporting uses. The cogeneration plant, a 6-megawatt natural gas facility that currently generates power for the Project Site, would remain. Under the No-Project Alternative, 3,308 employees could work in the existing buildings on the SRI campus, which is the maximum number of employees allowed under the current Conditional Development Permit (CDP). Therefore, the number of employees that would work at the Project Site would increase by approximately 2,208 compared to existing conditions. No new construction would occur, and no housing would be provided at the Project Site. The No-Project Alternative would include renovations and tenant improvements to the existing buildings, as needed, to ensure modern seismic safety features meet all standards set forth by the California Building Standards Code, address hazards, remediate known hazardous materials, etc.
- **Project Preservation Alternative 1 (Retain Building 100).** Preservation Alternative 1 (Retain Building 100) would retain the existing two-story Building 100, an individually eligible historic resource and historic district contributor, and rehabilitate it for office or support functions, such as visitor functions, conferences, etc. Alterations to interior floor plans may be required for alternative uses, such as amenity space, but no exterior alterations are likely to be required. The other individually eligible Buildings A and E would be demolished, as would all other contributing buildings proposed for demolition under the Proposed Project. All new office and residential buildings included in the Proposed Project would be built as proposed under this alternative. In addition, as under the Proposed Project, the existing onsite cogeneration plant would be decommissioned. In total, approximately 295,736 sf of existing office floor area would remain, compared to approximately 286,730 sf under the Proposed Project. Approximately 1,084,596 sf of gross floor area would be demolished and replaced under this alternative, compared to 1,094,197 sf under the Proposed Project. However, in total, Preservation Alternative 1 would result in the same amount of total office/R&D floor area and the same amount of residential floor area as the Proposed Project.
- **Project Preservation Alternative 2 (Retain Buildings 100, A, and E).** This alternative would retain three individually eligible buildings and historic district contributors: the existing two-story office building (Building 100), the existing two-story office/R&D building (Building A), and the existing three-story office/R&D building (Building E). Under Preservation Alternative 2, Building 100 would be rehabilitated for office or support functions, such as visitor functions and conferences. Alterations to the interior floor plans of Building 100 may be required for use as amenity space, but no exterior alterations are likely to be required. Buildings A and E would be rehabilitated and retained for office/R&D use. Buildings A and E would require substantial upgrades to meet current code

requirements; however, even with such upgrades, the buildings are not anticipated to meet market demand for contemporary, state-of-the-art office/R&D facilities in Silicon Valley, given the general floor plan configurations and other existing physical constraints. Under Preservation Alternative 2, all other contributing historic district buildings proposed for demolition under the Proposed Project would be demolished. In addition, as under the Proposed Project, the existing onsite cogeneration plant would be decommissioned. In total, approximately 743,829 sf of existing office floor area would remain, compared to approximately 286,730 sf under the Proposed Project. Approximately 636,503 sf of gross floor area would be demolished and replaced under this alternative, compared to 1,094,197 sf under the Proposed Project. In total, Preservation Alternative 2 would result in the same total amount of office/R&D floor area as the Proposed Project but a decrease of 68,000 sf in residential floor area. Therefore, Preservation Alternative 2 would result in slightly less development than the Proposed Project, with approximately 44 fewer residential units.

- **Project Preservation Alternative 3 (Retain Buildings 100, A, E, and B).** This alternative would retain all three individually eligible buildings as well as historic district contributor Building B. Under Preservation Alternative 3, Building 100 would be rehabilitated for office or support functions such as visitor functions, conferences, etc. Alterations to the interior floor plans of Building 100 may be required for use as amenity space, but no exterior alterations are likely to be required. Buildings A and E would be rehabilitated and retained for office/R&D use. Buildings A, B, and E would require substantial upgrades to meet current code requirements, but even with such upgrades, the buildings are not anticipated to meet market demand for contemporary, state-of-the-art office/R&D facilities in Silicon Valley, given the general floor plan configurations and other existing physical constraints. Under Preservation Alternative 3, all other contributing historic district buildings proposed for demolition under the Proposed Project would be demolished. In addition, as under the Proposed Project, the existing onsite cogeneration plant would be decommissioned. In total, approximately 878,936 sf of existing office floor area would remain compared with approximately 286,730 sf under the Proposed Project. Approximately 501,393 sf of gross floor area would be demolished and replaced under this alternative, compared with 1,094,197 sf under the Proposed Project. In total, Preservation Alternative 3 would result in the same amount of office/R&D floor area as the Proposed Project but a decrease in residential floor area amounting to 68,000 sf. Therefore, Preservation Alternative 3 would result in slightly less development than the Proposed Project, with approximately 44 fewer residential units.

In addition to the alternatives to the Proposed Project, Chapter 6, *Alternatives*, includes a discussion and analysis of alternatives to the Project Variant. Based on the goal of reducing the Project Variant's significant impacts while attempting to meet the basic Project objectives, the city has developed the following three alternatives to the Project Variant for evaluation in this Draft EIR, similar to the alternatives selected for the Proposed Project: Variant Preservation Alternative 1 (Retain Building 100 and the Chapel), Variant Preservation Alternative 2 (Retain Buildings 100, A, and E, and the Chapel), and Variant Preservation Alternative 3 (Retain Buildings 100, A, E, and B, and the Chapel). In addition, the impacts of the Project Variant are also compared to the No-Project Alternative. It is important to note that these alternatives are similar in concept to those selected for the Proposed Project, as listed above. However, the Project Variant alternatives include slightly altered site plans due to the differences between the Proposed Project and the Project Variant. For the sake of efficiency and to avoid repetitive text, only the key differences of the Project Variant alternatives are discussed in Chapter 6, *Alternatives.*

Each alternative is compared to the Proposed Project and discussed in terms of its adverse effects on the environment. Analysis of the alternatives focuses on those topics for which significant adverse impacts would result from the Proposed Project and Project Variant. As discussed in Chapter 6,

Alternatives, Preservation Alternatives 2 and 3 for both the Proposed Project and the Project Variant would retain all four individually eligible resources. Therefore, these alternatives would result in a less-than-significant impact on individually eligible historic resources, compared to the significant and unavoidable impacts under the Proposed Project and Project Variant. Because Preservation Alternative 3 would result in slightly less construction than Preservation Alternative 2, slightly fewer construction-related impacts would occur under Preservation Alternative 3. For these reasons, Preservation Alternative 3 would be the environmentally superior alternative for both the Proposed Project and the Project Variant.

Impacts and Mitigation Measures

Table ES-1 presents a summary of the impacts of the Proposed Project and Project Variant, proposed mitigation measures, and each impact's level of significance after mitigation. The environmental impacts are identified and classified as "Significant," "Potentially Significant," "Less than Significant," or "No Impact." According to State CEQA Guidelines Section 15382, a significant impact is "…a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project…" State CEQA Guidelines Section 15126.4 (a)(1) also states that an EIR "…shall describe feasible mitigation measures which could minimize significant adverse impacts…" Mitigation measures are identified for all impacts labeled as "Significant" or "Potentially Significant" where feasible mitigation measures have been identified.

Significant Impacts

As discussed in more detail throughout the resource-specific sections in Chapter 3, *Environmental Impact Analysis*, and as summarized in Table ES-1, impacts in the following areas would be significant or potentially significant without implementation of mitigation measures for both the Proposed Project and Project Variant. Impacts related to the areas listed below (i.e., air quality, cultural resources, tribal cultural resources, biological resources, geology and soils, hydrology and water quality, and hazards and hazardous materials) would be reduced to a less-than-significant level if the mitigation measures recommended in this EIR are implemented.

- Air Quality (conflict or obstruct with applicable air quality plans, cumulatively considerable net increase in criteria pollutants, cumulative air quality impacts)
- Cultural Resources (archeological resources, inadvertent disturbance of human remains, and cumulative cultural resources impacts)
- Tribal Cultural Resources
- Biological Resources (special-status species, wildlife movement and native wildlife nursery sites, and cumulative biological resources impacts)
- Geology and Soils (paleontological resources, cumulative paleontological resources impacts)
- Hydrology and Water Quality (water quality, and cumulative hydrology and water quality impacts)
- Hazards and Hazardous Materials (upset and accident conditions involving hazardous materials, exposure to schools, and Cortese List)

Impacts related to the following areas would be less than significant, and no mitigation measures would be required for both the Proposed Project and the Project Variant:

- Land Use and Planning
- Transportation
- Air Quality (expose sensitive receptors to substantial pollutant concentrations, other air emissions)
- Energy
- Greenhouse Gas Emissions
- Noise (operational noise, cumulative operational noise impacts)
- Biological Resources (conflicts with local policies or ordinances that protect biological resources)
- Geology and Soils (strong seismic ground shaking and seismically related ground failure, substantial soil erosion, unstable soils or geologic units, expansive soils, cumulative impacts related to seismic hazards, cumulative impacts related to soil erosion and soil hazards)
- Hydrology and Water Quality (Groundwater Supply and Recharge, Drainage and Flooding, Conflict or Obstruct a Water Resource Management Plan)
- Hazards and Hazardous Materials (routine hazardous materials use, impairment of emergency response or evacuation plans, cumulative hazards and hazardous materials impacts)
- Population and Housing
- Public Services and Recreation
- Utilities and Service Systems

The Proposed Project and the Project Variant would result in no impact related to agriculture and forestry resources, mineral resources, and wildfire, and no mitigation measures would be required.

Significant and Unavoidable Impacts

CEQA requires that an EIR identify any significant environmental effects that cannot be avoided should a project be implemented. Many impacts identified for the Proposed Project and the Project Variant would either be less than significant or mitigated to a less-than-significant level with implementation of identified mitigation measures, as discussed throughout Chapter 3 of this EIR. However, impacts related to noise (construction noise [Impact NOI-1], ground-borne vibration [Impact NOI-3], and cumulative construction noise [Impact C-NOI-1]) and impacts related to cultural resources (historical resources [Impact CR-1]) would be significant and unavoidable even with implementation of mitigation measures for both the Proposed Project and the Project Variant. Because the EIR identifies impacts that would remain significant and unavoidable, the city will need to determine whether to approve the Proposed Project or the Project Variant as proposed and, if so, provide its rationale in a Statement of Overriding Considerations.

Draft EIR Conclusions

In accordance with State CEQA Guidelines Section 15123(b)(3), this summary section must identify issues to be resolved, including whether or how to mitigate the significant effects and the choice among alternatives. Chapter 3 of the Draft EIR, *Environmental Impact Analysis*, presents mitigation measures to reduce or avoid significant impacts identified for the Proposed Project. Chapter 4 of the Draft EIR, *Project Variant Analysis*, presents mitigation measures to reduce or avoid significant impacts identified for the Project Variant. A Mitigation Monitoring and Reporting Program (MMRP) for both the Proposed Project and the Project Variant will be prepared to define the timing of implementation of the measures, the parties who will be responsible for implementation, and the parties who will be responsible for reporting and verifying implementation.

How to Comment on This Draft EIR

This Draft EIR is considered a draft under CEQA because it must be reviewed and commented upon by public agencies, organizations, and individuals before being finalized. This document is being distributed for a 45-day (minimum) public review and comment period. Readers are invited to submit written comments on the document. Comments are most helpful when they suggest specific alternatives or measures that would better mitigate significant environmental effects. Hard copies of the Draft EIR are available for review at the Menlo Park Library, located at 800 Alma Street, and the Belle Haven Library, located at 100 Terminal Avenue. Electronic copies of the Draft EIR are available for review online at [https://menlopark.gov/Government/Departments/Community-Development/Projects/Under-review/Parkline].

The 45-day public review period for the draft EIR is from **June 20, 2024,** to **August 5, 2024**. Written comments should be submitted during this review period to:

By email:
cdsandmeier@menlopark.gov

By mail:
Corinna Sandmeier, Principal Planner
City of Menlo Park
Community Development Department, Planning Division
701 Laurel Street
Menlo Park, CA 94025
Email: cdsandmeier@menlopark.gov

Email correspondence is preferred.

To receive comments on the Draft EIR, a public hearing will be held before the Planning Commission on July 22, 2024. Hearing notices will be mailed to responsible agencies and interested individuals.

Summary Table

Table ES-1 describes impact topics considered in the EIR, identifies the level of significance without mitigation, recites recommended mitigation measures, and recites level of significance with mitigation for both the Proposed Project and the Project Variant. For a complete description of potential impacts and recommended mitigation measures for the Proposed Project, please refer to the specific topic discussion in Chapter 3, *Environmental Impact Analysis*, or to Chapter 4, *Project Variant Analysis*, for a discussion of the impacts of the Project Variant. All impact conclusions are the same for both the Proposed Project and the Project Variant. As shown in Table ES-1, all mitigation measures required to reduce impacts for the Proposed Project are also required for the Project Variant. However, one additional mitigation measure, Mitigation Measure CR-1.4, would be required for the Project Variant to document the Chapel buildings, which is a historic resource.

Levels of significance in Table ES-1 are categorized as follows:

NI	No Impact
LTS	Less than Significant
PS	Potentially Significant
LTS/M	Less than Significant with Mitigation
SU	Significant and Unavoidable with Mitigation

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
3.1, Impacts Found Not to Be Significant						
Agriculture and Forestry Resources	NI	None required	N/A	NI	None required	N/A
Mineral Resources	NI	None required	N/A	NI	None required	N/A
Wildfire	NI	None required	N/A	NI	None required	N/A
3.2, Land Use						
Division of an Established Community	NI	None required	N/A	NI	None required	N/A
Impact LU-1: Conflicts with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect. The Proposed Project would not result in a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Proposed Project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	LTS	None required	N/A	LTS	None required	N/A
Impact C-LU-1: Cumulative Land Use Impacts. Cumulative development would not result in a significant environmental impact on land use and planning; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	NI	None required	N/A	NI	None required	N/A
3.3, Transportation						
Impact TRA-1: Conflict with an Applicable Plan, Ordinance, or Policy Addressing the Circulation System, including Transit, Roadway, Bicycle, and Pedestrian Facilities. The Proposed Project would not conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	LTS	None required	N/A	LTS	None required	N/A
Impact TRA-2: Exceed an Applicable VMT Threshold of Significance. The Proposed Project would not exceed an applicable VMT threshold of significance.	LTS	None required	N/A	LTS	None required	N/A
Impact TRA-3: Substantially Increase Hazards due to a Geometric Design Feature or Incompatible Uses. The Proposed Project would not substantially increase hazards due to a design feature or incompatible uses.	LTS	None required	N/A	LTS	None required	N/A
Impact TRA-4: Result in Inadequate Emergency Access. The Proposed Project would not result in inadequate emergency access.	LTS	None required	N/A	LTS	None required	N/A
Impact C-TRA-1: Cumulative Impacts Related to Conflicts Addressing the Circulation System. Cumulative development would not result in a significant environmental impact related to conflicts with an applicable plan, ordinance,	LTS	None required	N/A	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation	Project Variant Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.						
Impact C-TRA-2: Cumulative Impacts Related to VMT. Cumulative development could result in a significant environmental impact related to VMT; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-TRA-3: Cumulative Impacts Related to Hazards due to a Design Feature or Incompatible Uses. Cumulative development would not result in a significant environmental impact related to substantially increasing hazards due to a design feature or incompatible uses; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-TRA-4: Cumulative Impacts Related to Inadequate Emergency Access. Cumulative development would not result in a significant environmental impact related to inadequate emergency access; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
3.4, Air Quality						
Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan. The Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan.	PS	***Mitigation Measure AQ-1.1: Landscaping Equipment*** Contractor(s) and sub-contractor(s) responsible for landscaping shall, as a condition of contract, use all-electric landscaping equipment, which eliminates all criteria air pollutant emissions associated with landscaping activities. ***Mitigation Measure AQ-1.2: Architectural Coatings*** The Project Sponsor shall use super-compliant architectural coatings during construction and operation of all buildings, which shall have a volatile-organic-compound (VOC) content that meets SCAQMD Rule 1113, Architectural Coatings, as revised on February 5, 2016. ***Mitigation Measure AQ-1.3: Construction Fugitive Dust Emissions*** The Project construction contractor(s) and sub-contractor(s) shall implement the following BAAQMD BMPs for fugitive dust control, which are required for all construction activities within the San Francisco Bay Area Air Basin. These measures would reduce fugitive dust emissions primarily during soil movement and grading but also during vehicle and equipment movement on unpaved project sites.	LTS/M	PS	***Mitigation Measure AQ-1.1: Landscaping Equipment*** Contractor(s) and sub-contractor(s) responsible for landscaping shall, as a condition of contract, use all-electric landscaping equipment, which eliminates all criteria air pollutant emissions associated with landscaping activities. ***Mitigation Measure AQ-1.2: Architectural Coatings*** The Project Sponsor shall use super-compliant architectural coatings during construction and operation of all buildings, which shall have a volatile-organic-compound (VOC) content that meets SCAQMD Rule 1113, Architectural Coatings, as revised on February 5, 2016. ***Mitigation Measure AQ-1.3: Construction Fugitive Dust Emissions*** The Project Variant construction contractor(s) and sub-contractor(s) shall implement the following BAAQMD BMPs for fugitive dust control, which are required for all construction activities within the San Francisco Bay Area Air Basin. These measures would reduce fugitive dust emissions primarily during soil movement and grading but also during vehicle and equipment movement on unpaved project sites.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material offsite shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). 5. All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 8. A publicly visible sign shall be posted with the telephone number and name of the person to contact regarding dust complaints. This person shall respond and take corrective action, if necessary, within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.			1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material offsite shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph). 5. All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 8. A publicly visible sign shall be posted with the telephone number and name of the person to contact regarding dust complaints. This person shall respond and take corrective action, if necessary, within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.	
Impact AQ-2: Cumulatively Considerable Net Increase in Criteria Pollutants. The Proposed Project would not result in a cumulative net increase in a criteria pollutant for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard.	PS	Implement ***Mitigation Measure AQ-1.1***, ***Mitigation Measure AQ-1.2***, *and* ***Mitigation Measure AQ-1.3***, above.	LTS/M	PS	Implement ***Mitigation Measure AQ-1.1***, ***Mitigation Measure AQ-1.2***, *and* ***Mitigation Measure AQ-1.3***, above.	LTS/M
Impact AQ-3: Expose Sensitive Receptors to Substantial Pollutant Concentrations. The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations.	LTS	None required	N/A	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
Impact AQ-4: Other Air Emissions. The Proposed Project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people.	LTS	None required	N/A	LTS	None required	N/A
Impact C-AQ-1: Cumulative Air Quality Impacts. Cumulative development could result in a significant environmental impact on air quality; the Proposed Project would not be a cumulatively considerable contributor to a significant environmental impact.	PS	Implement ***Mitigation Measure AQ-1.1***, ***Mitigation Measure AQ-1.2***, *and* ***Mitigation Measure AQ-1.3***, above.	LTS/M	PS	Implement ***Mitigation Measure AQ-1.1***, ***Mitigation Measure AQ-1.2***, *and* ***Mitigation Measure AQ-1.3***, above.	LTS/M
3.5, Energy						
Impact EN-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources. The Proposed Project would not result in significant environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation.	LTS	None required	N/A	LTS	None required	N/A
Impact EN-2: Conflict with Energy Plan. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTS	None required	N/A	LTS	None required	N/A
Impact C-EN-1: Cumulative Energy Impacts. Cumulative development would result in a less-than-significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-EN-2: Cumulative Conflicts with Energy Plans. Cumulative development would not conflict with or obstruct implementation of a state or local plan for renewable energy or energy efficiency and would result in a less-than-significant environmental impact; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
3.6, Greenhouse Gas Emissions						
Impact GHG-1: Generation of GHG Emissions during Construction. Construction of the Proposed Project would not generate GHG emissions that may have a significant impact on the environment.	LTS	None required	N/A	LTS	None required	N/A
Impact GHG-2: Conflicts with Applicable Plans and Policies. The Proposed Project would not conflict with an applicable plan, policy, or regulation, adopted for the purpose of reducing emissions of GHGs.	LTS	None required	N/A	LTS	None required	N/A

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
3.7, Noise						
Airport Noise	NI	None required	N/A	NI	None required	N/A
Impact NOI-1: Construction Noise. Construction of the Proposed Project would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.	PS	***Mitigation Measure NOI-1.1: Implement Noise Reduction Plan to Reduce Construction Noise*** Prior to issuance of any demolition, grading, and/or building permits for construction of the Proposed Project, the Project Sponsor and/or contractor(s) shall (i) develop a construction noise control plan to reduce noise levels and demonstrate how the Proposed Project will comply with Menlo Park Municipal Code daytime (i.e., during non-exempt hours) and nighttime noise standards to the extent feasible and practical, subject to review and determination by the Community Development Department, and (ii) provide a note on all development plans, stating that, during ongoing grading, demolition, and construction, the Project Sponsor shall be responsible for requiring contractors to implement measures to limit construction-related noise, as set forth in the plan and in this mitigation measure (NOI-1.1). The plan shall also include measures to reduce noise levels such that a 10-decibel (dB) increase over the ambient noise level does not occur at nearby noise-sensitive land uses to the extent feasible and practical, as determined by the city of Menlo Park. For concrete pouring occurring during early-morning hours, the closest distance that equipment for concrete pouring shall operate to noise-sensitive land uses is 100 feet, which applies to residential properties and the church property on the north side of Ravenswood Avenue. Equipment for concrete pouring shall operate no closer than 200 feet from the property line of residential properties in the Classics of Burgess Park or Linfield Oaks neighborhoods. These distances are based on the anticipated locations for the concrete pouring activities. The plan shall demonstrate that, to the extent feasible and practical, noise from concrete pouring activities that occur daily between 6:00 a.m. and 8:00 a.m. will comply with the applicable city of Menlo Park noise limit of 50 A-weighted decibels (dBA) from 6:00 a.m. to 7:00 a.m. or 60 dBA from 7:00 a.m. to 10:00 p.m. at the nearest existing residential or noise-sensitive land use. The plan shall also demonstrate that, to the extent feasible and practical, as determined by the city, noise from individual pieces of equipment proposed for use will not exceed the limit for powered equipment (i.e., 85 dBA Leq at 50 feet) and combined noise from construction activities during all hours will not result in a 10 dB or greater increase beyond the ambient noise level at the nearest noise-sensitive land uses. Activities that would produce noise	SU	PS	***Mitigation Measure NOI-1.3: Implement Noise Reduction Plan to Reduce Construction Noise (Project Variant)*** Prior to issuance of any demolition, grading, and/or building permits for construction of the Proposed Project, the Project Sponsor and/or contractor(s) shall (i) develop a construction noise control plan to reduce noise levels and demonstrate how the Proposed Project will comply with Menlo Park Municipal Code daytime (i.e., during non-exempt hours) and nighttime noise standards to the extent feasible and practical, subject to review and determination by the Community Development Department, and (ii) provide a note on all development plans, stating that, during ongoing grading, demolition, and construction, the Project Sponsor shall be responsible for requiring contractors to implement measures to limit construction-related noise, as set forth in the plan and in this mitigation measure (NOI-1.3). The plan shall also include measures to reduce noise levels such that a 10-decibel (dB) increase over the ambient noise level does not occur at nearby noise-sensitive land uses to the extent feasible and practical, as determined by the city of Menlo Park. For concrete pouring occurring during early-morning hours, the closest distance that equipment for concrete pouring shall operate to noise-sensitive land uses is 100 feet, which applies to residential properties and the church property on the north side of Ravenswood Avenue. Equipment for concrete pouring shall operate no closer than 200 feet from the property line of residential properties in the Classics of Burgess Park or Linfield Oaks neighborhoods. These distances are based on the anticipated locations for the concrete pouring activities. The plan shall demonstrate that, to the extent feasible and practical, noise from concrete pouring activities and emergency well construction that occur overnight and between 6:00 a.m. and 8:00 a.m. will comply with the applicable city of Menlo Park noise limit of 50 A-weighted decibels (dBA) from 10:00 p.m. to 7:00 a.m. or 60 dBA from 7:00 a.m. to 10:00 p.m. at the nearest existing residential or noise-sensitive land use. The plan shall also demonstrate that, to the extent feasible and practical, as determined by the city, noise from individual pieces of equipment proposed for use will not exceed the limit for powered equipment (i.e., 85 dBA Leq at 50 feet) and combined noise from construction activities during all hours will not result in a 10 dB or greater increase beyond the ambient noise level at the nearest noise-	SU

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		above applicable daytime or nighttime limits shall be scheduled only during normal daytime construction hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday). If it is determined that a particular piece of equipment will not meet the requirements of this mitigation measure, that equipment shall not be used outside normal daytime construction hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday). The plan shall be approved by the city prior to the issuance of building permits to confirm the precise noise minimization strategies that will be implemented and document the strategies that will be employed to the extent feasible and practical. The measures to reduce noise from construction activity may include, but are not limited to, the following: • Require all construction equipment to be equipped with mufflers and sound control devices (e.g., intake silencers, ducts, engine enclosures, acoustically attenuating shields, noise shrouds) that are in good condition (i.e., at least as effective as those originally provided by the manufacturer) and appropriate for the equipment. • Maintain all construction equipment to minimize noise emissions. • Locate construction equipment as far as feasible from adjacent or nearby noise-sensitive receptors. • Stockpiling locations shall be as far as feasible from adjacent or nearby noise-sensitive receptors. • Require all stationary equipment to be located so as to maintain the greatest possible distance from nearby existing buildings, where feasible and practical. • Require stationary noise sources associated with construction (e.g., generators and compressors) in proximity to noise-sensitive land uses to be muffled and/or enclosed within temporary enclosures and shielded by barriers, to the extent feasible and practical. • Install noise-reducing sound walls or fencing (e.g., temporary fencing with sound blankets) around noise-generating equipment, to the extent feasible and practical, where no perimeter wall is provided. See also Mitigation Measure NOI-1.2. • Prohibit the idling of inactive construction equipment for prolonged periods (i.e., more than 2 minutes) during early-morning hours. • Provide advance notification by mailing/delivering notices to surrounding land uses regarding the			sensitive land uses. Activities that would produce noise above applicable daytime or nighttime limits shall be scheduled only during normal daytime construction hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday). If it is determined that a particular piece of equipment will not meet the requirements of this mitigation measure, that equipment shall not be used outside normal daytime construction hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday). The plan shall be approved by the city prior to the issuance of building permits to confirm the precise noise minimization strategies that will be implemented and document the strategies that will be employed to the extent feasible and practical. The measures to reduce noise from construction activity may include, but are not limited to, the following: • Require all construction equipment to be equipped with mufflers and sound control devices (e.g., intake silencers, ducts, engine enclosures, acoustically attenuating shields, noise shrouds) that are in good condition (i.e., at least as effective as those originally provided by the manufacturer) and appropriate for the equipment. • Maintain all construction equipment to minimize noise emissions. • Locate construction equipment as far as feasible from adjacent or nearby noise-sensitive receptors. • Stockpiling locations shall be as far as feasible from adjacent or nearby noise-sensitive receptors. • Require all stationary equipment to be located so as to maintain the greatest possible distance from nearby existing buildings, where feasible and practical. • Require stationary noise sources associated with construction (e.g., generators and compressors) in proximity to noise-sensitive land uses to be muffled and/or enclosed within temporary enclosures and shielded by barriers, to the extent feasible and practical. • Install noise-reducing sound walls or fencing (e.g., temporary fencing with sound blankets) around noise-generating equipment, to the extent feasible and practical, where no perimeter wall is provided. See also Mitigation Measure NOI-1.2. • Prohibit the idling of inactive construction equipment for prolonged periods (i.e., more than 2 minutes) during early-morning hours. • Provide advance notification by mailing/delivering notices to surrounding land uses regarding the	

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period. • Provide the name and telephone number of an onsite construction liaison through onsite signage and the notices mailed/delivered to surrounding land uses. If construction noise is found to be intrusive to the community (i.e., if complaints are received), the construction liaison shall take reasonable efforts to investigate the source of the noise and require that reasonable measures be implemented to correct the problem. • Use electric motors rather than gasoline- or diesel-powered engines to avoid noise associated with compressed air exhaust from pneumatically powered tools, to the extent feasible and practical (as determined by the city). Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust could be used; this muffler can lower noise levels from the exhaust by about 10 dB. External jackets on the tools themselves could be used, which could achieve a reduction of 5 dB. • Limit the use of public address systems. • Limit construction traffic to the haul routes established by the city. The Project Sponsor and/or the contractor(s) shall obtain a permit to complete work outside the normal daytime construction hours outlined in the Menlo Park Municipal Code (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday); this may be incorporated into the conditional development permit for the Proposed Project. Furthermore, the plan shall require verification that construction activities will be conducted at adequate distances or otherwise shielded with sound barriers, as determined through analysis, from noise-sensitive receptors when occurring outside normal daytime construction hours; compliance with the Menlo Park Municipal Code will be verified through measurement. ***Mitigation Measure NOI-1.2 Install Sound Barrier*** Prior to issuance of the first construction permit, a permanent or temporary noise barrier shall be erected along the property line immediately south of the townhomes. The temporary barrier shall not be removed until the barrier is no longer needed to reduce noise from construction activities and comply with the thresholds identified in this EIR. The barrier shall start at Laurel Street, then continue perpendicularly to Laurel Street along the property line for a			construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period. • Provide the name and telephone number of an onsite construction liaison through onsite signage and the notices mailed/delivered to surrounding land uses. If construction noise is found to be intrusive to the community (i.e., if complaints are received), the construction liaison shall take reasonable efforts to investigate the source of the noise and require that reasonable measures be implemented to correct the problem. • Use electric motors rather than gasoline- or diesel-powered engines to avoid noise associated with compressed air exhaust from pneumatically powered tools, to the extent feasible and practical (as determined by the city). Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust could be used; this muffler can lower noise levels from the exhaust by about 10 dB. External jackets on the tools themselves could be used, which could achieve a reduction of 5 dB. • Limit the use of public address systems. • Limit construction traffic to the haul routes established by the city. The Project Sponsor and/or the contractor(s) shall obtain a permit to complete work outside the normal daytime construction hours outlined in the Menlo Park Municipal Code (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday); this may be incorporated into the conditional development permit for the Proposed Project. Furthermore, the plan shall require verification that construction activities will be conducted at adequate distances or otherwise shielded with sound barriers, as determined through analysis, from noise-sensitive receptors when occurring outside normal daytime construction hours; compliance with the Menlo Park Municipal Code will be verified through measurement. ***Mitigation Measure NOI-1.2 Install Sound Barrier*** Prior to issuance of the first construction permit, a permanent or temporary noise barrier shall be erected along the property line immediately south of the townhomes. The temporary barrier shall not be removed until the barrier is no longer needed to reduce noise from construction activities and comply with the thresholds identified in this EIR. The barrier shall start at Laurel Street, then continue	

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		distance of approximately 330 feet. The barrier shall continue parallel to Barron Street along the property line for a distance of approximately 400 feet and end at Burgess Drive. The distances cited here are preliminary and based on the preliminary Project design. The actual distances shall be determined in a more precise manner during the design phase for the noise barrier. The temporary noise barriers shall be at least 12 feet high and constructed from a material with a minimum weight of 2 pounds per square foot, with no gaps of perforations. All noise control barrier walls shall be designed to preclude structural failure due to such factors as wind, shear, shallow soil failure, earthquake, or erosion. The design and location of the sound barrier shall be supported by a technical analysis of the proposed design and installed prior to demolition/construction. The design of the sound barrier may be incorporated into the noise control plan in Mitigation Measure NOI-1.1 (or, for the Project Variant, Mitigation Measure NOI-1.3).			perpendicularly to Laurel Street along the property line for a distance of approximately 330 feet. The barrier shall continue parallel to Barron Street along the property line for a distance of approximately 400 feet and end at Burgess Drive. The distances cited here are preliminary and based on the preliminary Project Variant design. The actual distances shall be determined in a more precise manner during the design phase for the noise barrier. The temporary noise barriers shall be at least 12 feet high and constructed from a material with a minimum weight of 2 pounds per square foot, with no gaps of perforations. All noise control barrier walls shall be designed to preclude structural failure due to such factors as wind, shear, shallow soil failure, earthquake, or erosion. The design and location of the sound barrier shall be supported by a technical analysis of the proposed design and installed prior to demolition/construction. The design of the sound barrier may be incorporated into the noise control plan in Mitigation Measure NOI-1.1 (or, for the Project Variant, Mitigation Measure NOI-1.3).	
Impact NOI-2: Operational Noise. Operational Noise. Operation of the Proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.	LTS	None required	N/A	LTS	None required	N/A
Impact NOI-3: Ground-borne Vibration. The Proposed Project would generate excessive ground-borne vibration or ground-borne noise levels.	PS	***Mitigation Measure NOI-3.1: Vibration Control Measures for Annoyance from Construction Activities*** Daytime construction activity involving an excavator, or other equipment capable of generating similar vibration levels, shall take place no closer than 50 feet from residential or other sensitive land uses, to the extent feasible and practical, subject to review and approval by the Community Development Department; equipment smaller than an excavator may operate less than 50 feet from residential land uses. Jackhammers shall be further restricted, operating no closer than 30 feet from residential land uses. The 50-foot restriction may be greater for equipment that results in greater vibration levels than an excavator. Maintaining these distances between equipment and the nearest sensitive land uses would ensure that vibration levels would be below a peak particle velocity (PPV) of 0.032 inch per second (in/sec). Early-morning construction activity involving concrete trucks shall occur after 7:00 a.m. when the daytime threshold from ConnectMenlo is applicable (0.032 in/sec) rather than the nighttime threshold (0.016 in/sec).	SU	PS	***Mitigation Measure NOI-3.1: Vibration Control Measures for Annoyance from Construction Activities*** Daytime construction activity involving an excavator, or other equipment capable of generating similar vibration levels, shall take place no closer than 50 feet from residential or other sensitive land uses, to the extent feasible and practical, subject to review and approval by the Community Development Department; equipment smaller than an excavator may operate less than 50 feet from residential land uses. Jackhammers shall be further restricted, operating no closer than 30 feet from residential land uses. The 50-foot restriction may be greater for equipment that results in greater vibration levels than an excavator. Maintaining these distances between equipment and the nearest sensitive land uses would ensure that vibration levels would be below a peak particle velocity (PPV) of 0.032 inch per second (in/sec). Early-morning construction activity involving concrete trucks shall occur after 7:00 a.m. when the daytime threshold from ConnectMenlo is applicable (0.032 in/sec) rather than the nighttime threshold (0.016 in/sec).	SU

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation	Project Variant Impact Significance without Mitigation	Mitigation Measures	Impact Significance with Mitigation
		When construction requires the use of the aforementioned types of equipment closer to nearby sensitive uses or before the allowable hours, reduction measures shall be incorporated, to the extent feasible and practical, such as the use of smaller or less vibration-intensive equipment. The feasibility of reduction measures shall be subject to review and determination by the Community Development Department. In addition, the construction contractor shall appoint a vibration coordinator for the Proposed Project who will serve as the point of contact for vibration-related complaints during construction. Contact information for the vibration coordinator will be posted at the Project Site and on a publicly available website for the Proposed Project. Should complaints be received, the vibration coordinator shall work with the construction team to adjust activities, to the extent feasible and practical, and reduce vibration or reschedule activities for a less sensitive time. The vibration coordinator shall notify the Community Development Department of all vibration-related complaints and actions taken to address the complaints.			When construction requires the use of the aforementioned types of equipment closer to nearby sensitive uses or before the allowable hours, reduction measures shall be incorporated, to the extent feasible and practical, such as the use of smaller or less vibration-intensive equipment. The feasibility of reduction measures shall be subject to review and determination by the Community Development Department. In addition, the construction contractor shall appoint a vibration coordinator for the Proposed Project who will serve as the point of contact for vibration-related complaints during construction. Contact information for the vibration coordinator will be posted at the Project Site and on a publicly available website for the Proposed Project. Should complaints be received, the vibration coordinator shall work with the construction team to adjust activities, to the extent feasible and practical, and reduce vibration or reschedule activities for a less sensitive time. The vibration coordinator shall notify the Community Development Department of all vibration-related complaints and actions taken to address the complaints.	
Impact C-NOI-1: Cumulative Construction Noise. Cumulative development would result in a significant environmental impact related to construction noise; the Proposed Project would be a cumulatively considerable contributor to a significant environmental impact**.**	PS	Implement ***Mitigation Measure NOI-1.1*** *and* ***Mitigation Measure NOI-1.2,*** above.	SU	PS	Implement ***Mitigation Measure NOI-1.1*** *and* ***Mitigation Measure NOI-1.2,*** above.	SU
Impact C-NOI-2: Cumulative Operational Noise. Cumulative development would not result in a significant environmental impact related to operational noise; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-NOI-3: Cumulative Vibration Impacts. Cumulative development would not result in a significant environmental impact related to exposing persons to or generating excessive ground-borne vibration or ground-borne noise levels; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
3.8, Cultural and Tribal Resources						
Impact CR-1: Historical Resources. The Proposed Project would cause a substantial adverse change in the significance of historical resources, pursuant to Section 15064.5.	PS	***Mitigation Measure CR-1.1: Documentation*** Prior to issuance of any demolition, grading, or construction permits for the site, the Project Sponsor shall undertake documentation of all contributing buildings and landscape elements of the SRI International Campus Historic District and the three individually eligible historic resources (Buildings 100, A, and E). The documentation shall be funded by the Project Sponsor and undertaken by a qualified professional who meets the Secretary of the Interior's	SU	PS	***Mitigation Measure CR-1.1: Documentation*** Prior to issuance of any demolition, grading, or construction permits for the site, the Project Sponsor shall undertake documentation of all contributing buildings and landscape elements of the SRI International Campus Historic District and the three individually eligible historic resources (Buildings 100, A, and E). The documentation shall be funded by the Project Sponsor and undertaken by a qualified professional who meets the Secretary of the Interior's	SU

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		professional qualification standards for history, architectural history, or architecture (Code of Federal Regulations, Title 36, Part 61, Appendix A). Documentation shall be submitted to the Menlo Park Planning Division, or a qualified historic consultant, for review prior to issuance of demolition permits. The documentation package created shall consist of the items listed below: • CR-1.1.a: Digital Photography • CR-1.1.b: Historical Report • CR-1.1.c: Site Plan and Drawings The documentation materials shall be submitted to the Northwest Information Center at Sonoma State University, the repository for the California Historical Resources Information System. The documentation shall also be offered to state, regional, and local repositories, including the Menlo Park Public Library, Menlo Park Historical Association, San Mateo County History Museum, Computer History Museum, and SRI International. Materials will be provided in archival digital and/or hard-copy formats, depending on the capacity and preference of the repository. This measure would create a collection of reference materials that would be available to the public and inform future research. ***CR-1.1.a: Digital Photography***. Digital photographs shall be taken of <u>all</u> contributing buildings and landscape elements. Photographs will capture the overall character and setting of the eligible SRI International Campus Historic District and the three individually eligible historic resources (Buildings 100, A, and E). All digital photography shall be conducted according to current National Park Service standards, as specified in the National Register Photo Policy Factsheet.[75] The photography shall be undertaken by a qualified professional with demonstrated experience in documentation photography. Large-format negatives are not required. Photograph views for the data set shall include: • At least one photograph of each contributing building, which may be the primary façade or an oblique view showing the primary façade and a secondary façade; • Photographs of all façades of the three individually eligible buildings (Buildings 100, A, and E); • Detail views of character-defining features of the three individually eligible buildings (Buildings 100, A, and E); • Representative interior views of the three individually eligible buildings (Buildings 100, A, and E); and			professional qualification standards for history, architectural history, or architecture (Code of Federal Regulations, Title 36, Part 61, Appendix A). Documentation shall be submitted to the Menlo Park Planning Division, or a qualified historic consultant, for review prior to issuance of demolition permits. The documentation package created shall consist of the items listed below: • CR-1.1.a: Digital Photography • CR-1.1.b: Historical Report • CR-1.1.c: Site Plan and Drawings The documentation materials shall be submitted to the Northwest Information Center at Sonoma State University, the repository for the California Historical Resources Information System. The documentation shall also be offered to state, regional, and local repositories, including the Menlo Park Public Library, Menlo Park Historical Association, San Mateo County History Museum, Computer History Museum, and SRI International. Materials will be provided in archival digital and/or hard-copy formats, depending on the capacity and preference of the repository. This measure would create a collection of reference materials that would be available to the public and inform future research. ***CR-1.1.a: Digital Photography***. Digital photographs shall be taken of <u>all</u> contributing buildings and landscape elements. Photographs will capture the overall character and setting of the eligible SRI International Campus Historic District and the three individually eligible historic resources (Buildings 100, A, and E). All digital photography shall be conducted according to current National Park Service standards, as specified in the National Register Photo Policy Factsheet.[75] The photography shall be undertaken by a qualified professional with demonstrated experience in documentation photography. Large-format negatives are not required. Photograph views for the data set shall include: • At least one photograph of each contributing building, which may be the primary façade or an oblique view showing the primary façade and a secondary façade; • Photographs of all façades of the three individually eligible buildings (Buildings 100, A, and E); • Detail views of character-defining features of the three individually eligible buildings (Buildings 100, A, and E); • Representative interior views of the three individually eligible buildings (Buildings 100, A, and E); and	

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		• Contextual views of the site and each contributing landscape element. All photographs shall be referenced on a photographic key map or site plan. The photographic key shall show the photograph number, with an arrow to indicate the direction of the view. Digital photographs shall be in an uncompressed RAW file format and saved as TIFF files. Each image shall be a minimum of 1,600 by 1,200 pixels, at 300 pixels per inch or larger, and in color. The file name for each electronic image shall correspond with the name in the index of photographs and on the photograph label. If repositories request hard copies, the photographs shall be printed on archival paper. Drone photographs of the site shall be taken and saved in a digital file format on an archival DVD, then submitted to the repositories with the photographic documentation. The use of digital photography and drone photography is encouraged in CR-1.2: Interpretive Program. ***CR-1.1.b: Historical Report.*** A written historical narrative and report that meets Historic American Buildings Survey (HABS) historical report guidelines shall be produced for the three individually eligible buildings. This HABS-style historical report may be based on documentation provided in the 2022 historic resource evaluation for the site and include historic photographs and drawings, if available. The HABS-style historical report shall follow an outline format, with a statement of significance and a description of the buildings. The HABS-style historical report shall be submitted to the repositories along with the historic resource evaluation (2022), which documents the history of the site and the historic district. ***CR-1.1.c: Site Plan and Drawings.*** An existing-conditions site plan shall be produced, depicting the current configuration and spatial relationships of the contributing buildings and landscape features. The existing-conditions site plan shall be prepared by a professional who meets the Secretary of the Interior's professional qualification standards for architecture or historic architecture and reviewed by the professional retained to prepare the written history. Documentation of plantings is not required, but a depiction of the locations and types of mature trees, as well as designed hardscape and landscape features, shall be included. Reasonable efforts shall be made to locate original drawings and/or site plans of the district and contributing buildings from its period of significance. If located, selected			• Contextual views of the site and each contributing landscape element. All photographs shall be referenced on a photographic key map or site plan. The photographic key shall show the photograph number, with an arrow to indicate the direction of the view. Digital photographs shall be in an uncompressed RAW file format and saved as TIFF files. Each image shall be a minimum of 1,600 by 1,200 pixels, at 300 pixels per inch or larger, and in color. The file name for each electronic image shall correspond with the name in the index of photographs and on the photograph label. If repositories request hard copies, the photographs shall be printed on archival paper. Drone photographs of the site shall be taken and saved in a digital file format on an archival DVD, then submitted to the repositories with the photographic documentation. The use of digital photography and drone photography is encouraged in CR-1.2: Interpretive Program. ***CR-1.1.b: Historical Report.*** A written historical narrative and report that meets Historic American Buildings Survey (HABS) historical report guidelines shall be produced for the three individually eligible buildings. This HABS-style historical report may be based on documentation provided in the 2022 historic resource evaluation for the site and include historic photographs and drawings, if available. The HABS-style historical report shall follow an outline format, with a statement of significance and a description of the buildings. The HABS-style historical report shall be submitted to the repositories along with the historic resource evaluation (2022), which documents the history of the site and the historic district. ***CR-1.1.c: Site Plan and Drawings.*** An existing-conditions site plan shall be produced, depicting the current configuration and spatial relationships of the contributing buildings and landscape features. The existing-conditions site plan shall be prepared by a professional who meets the Secretary of the Interior's professional qualification standards for architecture or historic architecture and reviewed by the professional retained to prepare the written history. Documentation of plantings is not required, but a depiction of the locations and types of mature trees, as well as designed hardscape and landscape features, shall be included. Reasonable efforts shall be made to locate original drawings and/or site plans of the district and contributing buildings from its period of significance. If located, selected	

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		representative drawings (e.g., site plans, elevations, sections, relevant key details) shall be photographed or scanned at high resolution, reproduced, and included in the dataset. Original architectural drawings or as-built drawings of the three individually eligible buildings proposed for demolition shall be submitted as part of the documentation package. Original drawings for Buildings A and E are known to be available in the SRI International records and therefore should be reproduced. Reasonable efforts should be made to locate original drawings for Building 100. If original architectural or construction drawings of Building 100, including floor plans and elevations, cannot be located, measured drawings shall be prepared, according to HABS guidelines, by a professional who meets the Secretary of the Interior's professional qualification standards for architecture or historic architecture and reviewed by the professional retained to prepare the written history. ***Mitigation Measure CR-1.2: Interpretive Program*** The Project Sponsor, in consultation with a qualified historian or architectural historian who meets the Secretary of the Interior's professional qualification standards and an experienced exhibit design professional, shall develop an interpretive program for the site. The interpretive program plan shall be reviewed by the Menlo Park Planning Division or a qualified historic consultant prior to the issuance of any permits for demolition, grading, or construction on the site. The plan shall include information regarding the proposed format and location of the content, along with information regarding the high-quality graphics and written narratives that will be incorporated. The interpretive display/feature shall be fully implemented and/or installed prior to issuance of the final certificate of occupancy for Parkline (Project Variant) and inspected by Menlo Park Planning Division staff members or a qualified historic consultant to confirm its adherence to requirements for mitigation measures. The Project Sponsor shall provide a robust interpretive program with multiple permanent outdoor displays concerning the history of SRI International. The high-quality interpretive displays shall be installed within the Project Site boundaries; made of durable, all-weather materials; and positioned to allow high public visibility and interactivity. In addition to narrative text, the interpretative displays may include photographs, news articles, memorabilia, and drawings. The interpretive program may use source materials from the historic resource evaluation or materials prepared as part of Mitigation Measure CR-1.1 but should			representative drawings (e.g., site plans, elevations, sections, relevant key details) shall be photographed or scanned at high resolution, reproduced, and included in the dataset. Original architectural drawings or as-built drawings of the three individually eligible buildings proposed for demolition shall be submitted as part of the documentation package. Original drawings for Buildings A and E are known to be available in the SRI International records and therefore should be reproduced. Reasonable efforts should be made to locate original drawings for Building 100. If original architectural or construction drawings of Building 100, including floor plans and elevations, cannot be located, measured drawings shall be prepared, according to HABS guidelines, by a professional who meets the Secretary of the Interior's professional qualification standards for architecture or historic architecture and reviewed by the professional retained to prepare the written history. ***Mitigation Measure CR-1.2: Interpretive Program*** The Project Sponsor, in consultation with a qualified historian or architectural historian who meets the Secretary of the Interior's professional qualification standards and an experienced exhibit design professional, shall develop an interpretive program for the site. The interpretive program plan shall be reviewed by the Menlo Park Planning Division or a qualified historic consultant prior to the issuance of any permits for demolition, grading, or construction on the site. The plan shall include information regarding the proposed format and location of the content, along with information regarding the high-quality graphics and written narratives that will be incorporated. The interpretive display/feature shall be fully implemented and/or installed prior to issuance of the final certificate of occupancy for Parkline (Project Variant) and inspected by Menlo Park Planning Division staff members or a qualified historic consultant to confirm its adherence to requirements for mitigation measures. The Project Sponsor shall provide a robust interpretive program with multiple permanent outdoor displays concerning the history of SRI International. The high-quality interpretive displays shall be installed within the Project Site boundaries; made of durable, all-weather materials; and positioned to allow high public visibility and interactivity. In addition to narrative text, the interpretative displays may include photographs, news articles, memorabilia, and drawings. The interpretive program may use source materials from the historic resource evaluation or materials prepared as part of Mitigation Measure CR-1.1 but should	

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		also incorporate other primary and secondary sources, such as existing oral histories, historic photographs, and video footage where available and practicable. In addition to interpreting the overall significance of the SRI International campus as a historic district, the interpretive displays shall feature information on the individual significance of Buildings 100, A, and E, including the specific innovations, significant persons, and architecture associated with those buildings, as applicable. In addition to interpretive displays in public areas of the site, the Project Sponsor may consider additional means of onsite interpretation, including digital interpretation methods (e.g., websites, mobile applications, interpretive videos, drone footage, virtual- or augmented-reality experiences, artwork inspired by or related to the history of the site). Creative means of interpretation, such as landscape and play features, along with other means of presenting information regarding the history and development of the site, are encouraged. Although the interpretive program shall include information on the history and development of SRI International, as well as the important persons and innovations associated with the institution, interpretation may also include information on previous eras of site history, such as the residential estate era and Dibble General Hospital era. ***Mitigation Measure CR-1.3: Relocation of SRI Monument*** The Project Sponsor, in consultation with a qualified historian or architectural historian who meets or exceeds the Secretary of the Interior's qualifications standards, and a professional conservator shall develop and implement a relocation plan for the SRI International Monument. The receiver site shall retain the relationship between the SRI Monument and the campus setting, the landscape materials, and the immediate setting to the extent feasible. Altering the setting and placing the SRI International Monument along a prominent walkway axis is not recommended as it may negatively impact the historic character of the setting. The SRI International Monument relocation plan shall include: 1) Identification of a receiver site on the Project Site. i. Description of how the receiver site reflects the historic setting of the SRI International Monument south of Building I, on the brick median in the visitor parking lot west of Building A. ii. Specifications for the removal of the SRI International Monument from its current location, transport to the			also incorporate other primary and secondary sources, such as existing oral histories, historic photographs, and video footage where available and practicable. In addition to interpreting the overall significance of the SRI International campus as a historic district, the interpretive displays shall feature information on the individual significance of Buildings 100, A, and E, including the specific innovations, significant persons, and architecture associated with those buildings, as applicable. In addition to interpretive displays in public areas of the site, the Project Sponsor may consider additional means of onsite interpretation, including digital interpretation methods (e.g., websites, mobile applications, interpretive videos, drone footage, virtual- or augmented-reality experiences, artwork inspired by or related to the history of the site). Creative means of interpretation, such as landscape and play features, along with other means of presenting information regarding the history and development of the site, are encouraged. Although the interpretive program shall include information on the history and development of SRI International, as well as the important persons and innovations associated with the institution, interpretation may also include information on previous eras of site history, such as the residential estate era and Dibble General Hospital era. ***Mitigation Measure CR-1.3: Relocation of SRI Monument*** The Project Sponsor, in consultation with a qualified historian or architectural historian who meets or exceeds the Secretary of the Interior's qualifications standards, and a professional conservator shall develop and implement a relocation plan for the SRI International Monument. The receiver site shall retain the relationship between the SRI Monument and the campus setting, the landscape materials, and the immediate setting to the extent feasible. Altering the setting and placing the SRI International Monument along a prominent walkway axis is not recommended as it may negatively impact the historic character of the setting. The SRI International Monument relocation plan shall include: 2) Identification of a receiver site on the Project Site. iv. Description of how the receiver site reflects the historic setting of the SRI International Monument south of Building I, on the brick median in the visitor parking lot west of Building A. v. Specifications for the removal of the SRI International Monument from its current location, transport to the	

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		receiver site, and identification of possible secure, environmentally controlled storage location during construction of the Project Variant. The specifications shall include protective measures to ensure the monument is not damaged during removal, transport, storage, and re-installation. The specifications shall include a timeline for removal and storage that will occur following the Historic American Buildings Survey (HABS) photographic documentation and prior to the beginning of ground-disturbing construction. iii. Project plans or drawings that show the SRI International Monument clearly identified on demolition drawings as well as the receiver site on construction plans. The SRI International Monument relocation plan shall be reviewed by the Menlo Park Planning Division or a qualified historic consultant prior to the issuance of any permits for demolition, grading, or construction on the Project Site. The final SRI International Monument relocation plan shall be submitted to the construction superintendents and confirmation of receipt shall be documented via email.			receiver site, and identification of possible secure, environmentally controlled storage location during construction of the Project Variant. The specifications shall include protective measures to ensure the monument is not damaged during removal, transport, storage, and re-installation. The specifications shall include a timeline for removal and storage that will occur following the Historic American Buildings Survey (HABS) photographic documentation and prior to the beginning of ground-disturbing construction. vi. Project plans or drawings that show the SRI International Monument clearly identified on demolition drawings as well as the receiver site on construction plans. The SRI International Monument relocation plan shall be reviewed by the Menlo Park Planning Division or a qualified historic consultant prior to the issuance of any permits for demolition, grading, or construction on the Project Site. The final SRI International Monument relocation plan shall be submitted to the construction superintendents and confirmation of receipt shall be documented via email. ***Mitigation Measure CR-1.4: Documentation of the Chapel (Project Variant)*** Prior to issuance of a demolition permit for the First Church of Christ, Scientist and Alpha Kids Academy (Chapel buildings), the Project Sponsor shall undertake documentation of the Chapel at 201 Ravenswood Avenue. The documentation shall be funded by the Project Sponsor and undertaken by a qualified professional(s) who meets the Secretary of the Interior's Professional Qualification Standards for history, architectural history, or architecture (Code of Federal Regulations, Title 36, Part 61, Appendix A) and be submitted for review by the Menlo Park Planning Division or a qualified historic consultant prior to issuance of a demolition permit for the Chapel buildings. The documentation package created shall consist of the items listed below, consisting of (a) digital photography and (b) a historical report. The documentation materials shall be submitted to the Northwest Information Center at Sonoma State University, the repository for the California Historical Resources Information System. The documentation shall also be offered to local repositories, including the Menlo Park Public Library, Menlo Park Historical Association, and San Mateo County History Museum. Materials shall either be provided in archival digital and/or hard copy formats,	

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project: Impact Significance without Mitigation	Proposed Project: Mitigation Measures	Proposed Project: Impact Significance with Mitigation	Project Variant: Impact Significance without Mitigation	Project Variant: Mitigation Measures	Project Variant: Impact Significance with Mitigation
					depending on the capacity and preference of the repository. This measure would create a collection of reference materials that would be available to the public and inform future research. Although the documentation would use some of the guidelines and specifications developed for the Historic American Buildings Survey (HABS), the documentation package would not need to be delivered as HABS documentation to the Library of Congress. (a) Digital Photography. Digital photographs shall be taken of the Chapel at 201 Ravenswood Avenue. All digital photography shall be conducted according to current National Park Service (NPS) standards, as specified in the National Register Photo Policy Factsheet (updated May 2013). The photography shall be undertaken by a qualified professional with demonstrated experience in documentation photography. Large-format negatives are not required. Photograph for the data set shall include: • Photographs of all façades • Detailed views of character-defining features • Representative interior views of the nave and narthex • Contextual views of the site, including the courtyards at the corners of the cross plan for the Chapel. Contextual views may include the multi-use building, but full façade and detailed views of the multi-use building are not required. (b) Historical Reports. A written historical narrative and report that meets HABS Historical Report Guidelines shall be produced for the Chapel at 201 Ravenswood Avenue. This HABS-style historical report may be based on the documentation provided in the 2024 Department of Parks and Recreation 523 form evaluation for the property and include historic photographs and drawings, if available. The HABS-style historical report shall follow an outline format, with a statement of significance for the building and a description of the building.	
Impact CR-2: Archaeological Resources. The Proposed Project could cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5.	PS	***Mitigation Measure CR-2.1: Train Workers to Respond to the Discovery of Cultural Resources*** Prior to the start of ground-disturbing activities, the archaeological consultant or project archaeologist shall conduct archaeological resources sensitivity training for workers and construction superintendents. Training shall be required for all construction personnel participating in ground-disturbing construction to alert them to the archaeological sensitivity of the area and provide protocols to follow in the event of a discovery of archaeological	LTS/M	PS	***Mitigation Measure CR-2.1: Train Workers to Respond to the Discovery of Cultural Resources*** Prior to the start of ground-disturbing activities, the archaeological consultant or project archaeologist shall conduct archaeological resources sensitivity training for workers and construction superintendents. Training shall be required for all construction personnel participating in ground-disturbing construction to alert them to the archaeological sensitivity of the area and provide protocols to follow in the event of a discovery of archaeological	LTS/M

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		materials. The principal archaeological consultant and project archaeologist shall develop and distribute, for job-site posting, a document ("ALERT SHEET") that summarizes the potential finds that could be exposed, the protocols to be followed, and the points of contact to alert in the event of a discovery. The ALERT SHEET and protocols shall be presented as part of the training. The contractor shall be responsible for ensuring that all workers requiring training are in attendance. Training shall be scheduled at the discretion of the Project Sponsor in consultation with the city. Worker training shall be required for all contractors and sub-contractors and documented for each permit and/or phase of a permit that requires ground-disturbing activities onsite. ***Mitigation Measure CR-2.2: Stop Work if Archaeological Material or Features Are Encountered during Ground-Disturbing Activities*** If a potentially significant subsurface cultural resource is encountered during ground-disturbing activities, all construction activities within a 100-foot radius of the find shall cease until a qualified archaeologist (i.e., one who meets the Secretary of the Interior's professional qualifications for archaeology or one under the supervision of such a professional) determines whether the resource requires further study. The archaeological consultant shall review, identify, and evaluate cultural resources that may be inadvertently exposed during construction to determine if a discovery is a historical resource and/or unique archaeological resource under CEQA. Significant resources shall be subject to treatment/mitigation that prevents an adverse effect on the resource, in accordance with PRC Section 15064.5. Mitigation could include avoidance, preservation in place, or the scientific removal, analysis, reporting, and curation of any recovered cultural materials. If the discovery constitutes a tribal cultural resource, consultation shall be undertaken between the city and the tribe(s) to determine appropriate treatment. All developers in the Project Site shall include a standard inadvertent discovery clause in every construction contract involving ground-disturbing activities to inform contractors of this requirement. Any previously undiscovered resources found during construction activities shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of CEQA criteria by a qualified archaeologist in accordance with Mitigation Measure CR-2.2.			materials. The principal archaeological consultant and project archaeologist shall develop and distribute, for job-site posting, a document ("ALERT SHEET") that summarizes the potential finds that could be exposed, the protocols to be followed, and the points of contact to alert in the event of a discovery. The ALERT SHEET and protocols shall be presented as part of the training. The contractor shall be responsible for ensuring that all workers requiring training are in attendance. Training shall be scheduled at the discretion of the Project Sponsor in consultation with the city. Worker training shall be required for all contractors and sub-contractors and documented for each permit and/or phase of a permit that requires ground-disturbing activities onsite. ***Mitigation Measure CR-2.2: Stop Work if Archaeological Material or Features Are Encountered during Ground-Disturbing Activities*** If a potentially significant subsurface cultural resource is encountered during ground-disturbing activities, all construction activities within a 100-foot radius of the find shall cease until a qualified archaeologist (i.e., one who meets the Secretary of the Interior's professional qualifications for archaeology or one under the supervision of such a professional) determines whether the resource requires further study. The archaeological consultant shall review, identify, and evaluate cultural resources that may be inadvertently exposed during construction to determine if a discovery is a historical resource and/or unique archaeological resource under CEQA. Significant resources shall be subject to treatment/mitigation that prevents an adverse effect on the resource, in accordance with PRC Section 15064.5. Mitigation could include avoidance, preservation in place, or the scientific removal, analysis, reporting, and curation of any recovered cultural materials. If the discovery constitutes a tribal cultural resource, consultation shall be undertaken between the city and the tribe(s) to determine appropriate treatment. All developers in the Project Site shall include a standard inadvertent discovery clause in every construction contract involving ground-disturbing activities to inform contractors of this requirement. Any previously undiscovered resources found during construction activities shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of CEQA criteria by a qualified archaeologist in accordance with Mitigation Measure CR-2.2.	

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
Impact CR-3: Inadvertent Disturbance of Human Remains. The Proposed Project could result in a significant impact due to the disturbance of human remains, including those interred outside of dedicated cemeteries.	PS	***Mitigation Measure CR-3.1: Comply with State Regulations Regarding the Discovery of Human Remains at the Project Site*** Procedures of conduct following the discovery of human remains citywide have been mandated by Health and Safety Code Section 7050.5, PRC Section 5097.98, and California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at a site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The San Mateo County Coroner shall be notified immediately. The coroner shall then determine whether the remains are Native American. If the coroner determines the remains are Native American, the coroner shall notify the NAHC within 24 hours, which will, in turn, shall notify the person the NAHC identifies as the MLD in connection with any human remains. Further actions shall be determined, in part, by the desires of the MLD. The Project Sponsor, the Project archaeologist, and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects, including those associated with known and unknown Native American burial locations (CEQA Guidelines Section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final treatment and disposition of the human remains and associated or unassociated funerary objects. The MLD will have 48 hours to make recommendations regarding the treatment and disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, or the owner does not accept the recommendation of the MLD in accordance with Public Resources Code 5097.98(e), the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.	LTS/M	PS	***Mitigation Measure CR-3.1: Comply with State Regulations Regarding the Discovery of Human Remains at the Project Site*** Procedures of conduct following the discovery of human remains citywide have been mandated by Health and Safety Code Section 7050.5, PRC Section 5097.98, and California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at a site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The San Mateo County Coroner shall be notified immediately. The coroner shall then determine whether the remains are Native American. If the coroner determines the remains are Native American, the coroner shall notify the NAHC within 24 hours, which will, in turn, shall notify the person the NAHC identifies as the MLD in connection with any human remains. Further actions shall be determined, in part, by the desires of the MLD. The Project Sponsor, the Project archaeologist, and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects, including those associated with known and unknown Native American burial locations (CEQA Guidelines Section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final treatment and disposition of the human remains and associated or unassociated funerary objects. The MLD will have 48 hours to make recommendations regarding the treatment and disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, or the owner does not accept the recommendation of the MLD in accordance with Public Resources Code 5097.98(e), the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.	LTS/M
Impact C-CR-1: Cumulative Historic Resources Impacts. Cumulative development would not result in a significant environmental impact on historic resources; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-CR-2: Cumulative Archaeological Resources and Human Remains Impacts. Cumulative development could	PS	Implement **Mitigation Measure CR-2.1**, **Mitigation Measure CR-2.2**, and **Mitigation Measure CR-3.1,** above.	LTS/M	PS	Implement **Mitigation Measure CR-2.1**, **Mitigation Measure CR-2.2**, and **Mitigation Measure CR-3.1,** above.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
result in a significant environmental impact on archeological resources and human remains; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.						
3.9, Tribal Cultural Resources						
Impact TCR-1. Tribal Cultural Resources. The Proposed Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and: a) Listed or eligible for listing in the California Register of Historical Resources or a local register of historical resources, as defined in PRC Section 5020.1(k), or b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	PS	***Mitigation Measure TCR-1: Stop Work if Tribal Cultural Resources Are Encountered during Ground-Disturbing Activities*** If Native American cultural resources are encountered during ground-disturbing activities, the archaeological consultant shall review, identify, and evaluate the find to determine if the discovery could qualify as a tribal cultural resource, as defined in Public Resources Code Section 21074. Tribal representatives from the city's Assembly Bill 52 notification lists shall be consulted regarding this determination. If the discovery is determined to qualify as a tribal cultural resource, it shall be subject to treatment/mitigation that prevents an adverse effect on the resource, in accordance with Public Resources Code Section 15064.5. Mitigation shall be determined through consultation between the city and the tribe(s). Implement **Mitigation Measure CR-2.1**, **Mitigation Measure CR-2**, and **Mitigation Measure CR-3.1**, above.	LTS/M	PS	***Mitigation Measure TCR-1: Stop Work if Tribal Cultural Resources Are Encountered during Ground-Disturbing Activities*** If Native American cultural resources are encountered during ground-disturbing activities, the archaeological consultant shall review, identify, and evaluate the find to determine if the discovery could qualify as a tribal cultural resource, as defined in Public Resources Code Section 21074. Tribal representatives from the city's Assembly Bill 52 notification lists shall be consulted regarding this determination. If the discovery is determined to qualify as a tribal cultural resource, it shall be subject to treatment/mitigation that prevents an adverse effect on the resource, in accordance with Public Resources Code Section 15064.5. Mitigation shall be determined through consultation between the city and the tribe(s). Implement **Mitigation Measure CR-2.1**, **Mitigation Measure CR-2**, and **Mitigation Measure CR-3.1**, above.	LTS/M
Impact C-TCR-1: Cumulative Tribal Cultural Resources Impacts. Cumulative development could result in a significant environmental impact on tribal cultural resources; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact on tribal cultural resources.	PS	Implement **Mitigation Measure TCR-1**, **Mitigation Measure CR-2.1**, **Mitigation Measure CR-2**, and **Mitigation Measure CR-3.1**, above.	LTS/M	PS	Implement **Mitigation Measure TCR-1**, **Mitigation Measure CR-2.1**, **Mitigation Measure CR-2**, and **Mitigation Measure CR-3.1**, above.	LTS/M
3.10, Biological Resources						
Riparian Habitat and Sensitive Natural Communities	NI	None required	N/A	NI	None required	N/A
State or Federally Protected Wetlands and Non-Wetland Waters	NI	None required	N/A	NI	None required	N/A
Adopted Habitat Conservation Plan or Natural Community Conservation Plan	NI	None required	N/A	NI	None required	N/A
Impact BIO-1: Special-Status Species. The Proposed Project could result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	PS	***Mitigation BIO-1.1: Initial Bat Habitat Survey*** A qualified bat biologist shall conduct an initial survey of all buildings and trees on the Project Site that are slated for removal to determine whether suitable habitat for a moderate-size colony of common bat species (i.e., at least 10 big brown bats or at least 20 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size, is present. The locations of trees with	LTS/M	PS	***Mitigation BIO-1.1: Initial Bat Habitat Survey*** A qualified bat biologist shall conduct an initial survey of all buildings and trees on the Project Site that are slated for removal to determine whether suitable habitat for a moderate-size colony of common bat species (i.e., at least 10 big brown bats or at least 20 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size, is present. The locations of trees with	LTS/M

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		suitable cavities and crevices, as well as any buildings with accessible interiors or crevices (e.g., roof tiles or other exterior features) that support suitable roost locations, shall be identified, and potential entry and exit locations shall be mapped. For trees and buildings that are determined, in the qualified biologist's discretion, not to provide suitable habitat for a moderate-size colony of common bat species, or a pallid bat or Townsend's big-eared bat colony of any size, no further surveys shall be required. If the qualified biologist determines that buildings or trees provide suitable habitat, then further surveys under Mitigation Measures BIO-1.2 and BIO-1.3 shall be required. ***Mitigation Measure BIO-1.2: Maternity Season Survey*** A qualified bat biologist shall conduct a focused survey for roosting bats within all buildings and trees on the Project Site where suitable habitat was identified during the initial habitat survey, during the maternity season (generally March 15–August 31), and prior to the start of construction to determine the presence or absence of a maternity colony, the species present, and an estimate of the colony size, if present. If close inspection of potential roost features during the daytime is infeasible, the focused survey shall consist of a dusk emergence survey when bats can be observed flying out of the roost. If work will be initiated during the maternity season, this survey shall be conducted 1 year prior to the year in which construction will occur. If a maternity colony is detected, the exclusion measures described in Mitigation Measure BIO-1.4, below, shall be implemented prior to March 15 of the year in which construction occurs to ensure that bats are excluded from the roost prior to the start of construction. ***Mitigation Measure BIO-1.3: Pre-Construction Activity Bat Survey*** A pre-construction activity survey shall be conducted for roosting bats within all buildings and trees on the Project Site that are slated for removal and within which suitable habitat was identified during the initial habitat survey and the maternity roosting survey. The survey shall be conducted by a qualified bat biologist within 7 days prior to the start of building demolition or tree removal for the purpose of impact avoidance. If building demolition and/or tree removal occurs in phases, a pre-activity survey shall be conducted within 14 days prior to the demolition of each building and/or removal of each tree with suitable roost habitat. If close inspection of potential roost features during the daytime is infeasible, the focused survey shall			suitable cavities and crevices, as well as any buildings with accessible interiors or crevices (e.g., roof tiles or other exterior features) that support suitable roost locations, shall be identified, and potential entry and exit locations shall be mapped. For trees and buildings that are determined, in the qualified biologist's discretion, not to provide suitable habitat for a moderate-size colony of common bat species, or a pallid bat or Townsend's big-eared bat colony of any size, no further surveys shall be required. If the qualified biologist determines that buildings or trees provide suitable habitat, then further surveys under Mitigation Measures BIO-1.2 and BIO-1.3 shall be required. ***Mitigation Measure BIO-1.2: Maternity Season Survey*** A qualified bat biologist shall conduct a focused survey for roosting bats within all buildings and trees on the Project Site where suitable habitat was identified during the initial habitat survey, during the maternity season (generally March 15–August 31), and prior to the start of construction to determine the presence or absence of a maternity colony, the species present, and an estimate of the colony size, if present. If close inspection of potential roost features during the daytime is infeasible, the focused survey shall consist of a dusk emergence survey when bats can be observed flying out of the roost. If work will be initiated during the maternity season, this survey shall be conducted 1 year prior to the year in which construction will occur. If a maternity colony is detected, the exclusion measures described in Mitigation Measure BIO-1.4, below, shall be implemented prior to March 15 of the year in which construction occurs to ensure that bats are excluded from the roost prior to the start of construction. ***Mitigation Measure BIO-1.3: Pre-Construction Activity Bat Survey*** A pre-construction activity survey shall be conducted for roosting bats within all buildings and trees on the Project Site that are slated for removal and within which suitable habitat was identified during the initial habitat survey and the maternity roosting survey. The survey shall be conducted by a qualified bat biologist within 7 days prior to the start of building demolition or tree removal for the purpose of impact avoidance. If building demolition and/or tree removal occurs in phases, a pre-activity survey shall be conducted within 14 days prior to the demolition of each building and/or removal of each tree with suitable roost habitat. If close inspection of potential roost features during the daytime is infeasible, the focused survey shall include a	

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	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		include a dusk emergence survey when bats can be observed flying out of the roost. If a moderate-size maternity colony of common bat species (i.e., at least 10 big brown bats, 20 Yuma myotis, 100 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size or any kind (i.e., a maternity or non-maternity colony), is not detected during the survey, no additional measures shall be required. If a moderate-size maternity colony of common bat species (i.e., at least 10 big brown bats, 20 Yuma myotis, or 100 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size or any kind (i.e., a maternity or non-maternity colony), is present, the qualified bat biologist shall identify an appropriate disturbance-free buffer zone for the species identified. The buffer will be maintained until either the end of the maternity season or until a qualified biologist determines that all young are volant (i.e., capable of flight) to avoid the loss of dependent young. ***Mitigation Measure BIO-1.4: Bat Exclusion*** If bats are present in a building or tree to be removed or disturbed, the individuals shall be safely evicted outside the bat maternity season (approximately March 15–August 31) and the winter torpor period (approximately October 15–February 28, depending on weather). Bats may be evicted through exclusion, as directed by a qualified biologist, after notifying the California Department of Fish and Wildlife. The qualified biologist must be present for the removal of trees or structures occupied by bats. For eviction from roost trees, trimming or removing trees shall follow a two-step removal process whereby limbs and branches not containing roost habitat are removed on day 1, then the entire tree is removed on day 2. The disturbance or removal of structures containing, or suspected of containing, active (non-maternity or hibernation) or potentially active common bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change roost conditions, causing bats to abandon and not return to the roost. Removal shall be completed the subsequent day. Alternatively, exclusion methods may include the installation of one-way doors and/or use of ultrasonic deterrence devices. One-way doors and/or deterrence devices shall be left in place for a minimum of 2 weeks, with a minimum of five fair-weather			dusk emergence survey when bats can be observed flying out of the roost. If a moderate-size maternity colony of common bat species (i.e., at least 10 big brown bats, 20 Yuma myotis, 100 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size or any kind (i.e., a maternity or non-maternity colony), is not detected during the survey, no additional measures shall be required. If a moderate-size maternity colony of common bat species (i.e., at least 10 big brown bats, 20 Yuma myotis, or 100 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size or any kind (i.e., a maternity or non-maternity colony), is present, the qualified bat biologist shall identify an appropriate disturbance-free buffer zone for the species identified. The buffer will be maintained until either the end of the maternity season or until a qualified biologist determines that all young are volant (i.e., capable of flight) to avoid the loss of dependent young. ***Mitigation Measure BIO-1.4: Bat Exclusion*** If bats are present in a building or tree to be removed or disturbed, the individuals shall be safely evicted outside the bat maternity season (approximately March 15–August 31) and the winter torpor period (approximately October 15–February 28, depending on weather). Bats may be evicted through exclusion, as directed by a qualified biologist, after notifying the California Department of Fish and Wildlife. The qualified biologist must be present for the removal of trees or structures occupied by bats. For eviction from roost trees, trimming or removing trees shall follow a two-step removal process whereby limbs and branches not containing roost habitat are removed on day 1, then the entire tree is removed on day 2. The disturbance or removal of structures containing, or suspected of containing, active (non-maternity or hibernation) or potentially active common bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change roost conditions, causing bats to abandon and not return to the roost. Removal shall be completed the subsequent day. Alternatively, exclusion methods may include the installation of one-way doors and/or use of ultrasonic deterrence devices. One-way doors and/or deterrence devices shall be left in place for a minimum of 2 weeks, with a minimum of five fair-weather	

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		nights with no rainfall and temperatures no colder than 50°F. ***Mitigation Measure BIO-1.5: Compensatory Mitigation for Bat Habitat*** If a maternity colony of common bat species containing at least 10 big brown bats, 20 Yuma myotis, or 100 individuals of other non-special-status bat species, or a pallid bat or Townsend's big-eared bat day roost of any type (maternity or non-maternity) or any size, is determined to be present on the Project Site, replacement roost habitat that is appropriate to the species shall be provided, as determined by a qualified bat biologist. The nature of the replacement roost habitat (e.g., the design of an artificial roost structure) shall be determined by the qualified bat biologist, based on the number and species of bats detected. Ideally, the roost structure shall be installed on the Project Site. If replacement habitat cannot be placed on the site, it shall be installed no more than 100 feet from the site (or as close to the site as feasible). The exact placement of replacement habitat shall be determined in consultation with the qualified bat biologist.			nights with no rainfall and temperatures no colder than 50°F. ***Mitigation Measure BIO-1.5: Compensatory Mitigation for Bat Habitat*** If a maternity colony of common bat species containing at least 10 big brown bats, 20 Yuma myotis, or 100 individuals of other non-special-status bat species, or a pallid bat or Townsend's big-eared bat day roost of any type (maternity or non-maternity) or any size, is determined to be present on the Project Site, replacement roost habitat that is appropriate to the species shall be provided, as determined by a qualified bat biologist. The nature of the replacement roost habitat (e.g., the design of an artificial roost structure) shall be determined by the qualified bat biologist, based on the number and species of bats detected. Ideally, the roost structure shall be installed on the Project Site. If replacement habitat cannot be placed on the site, it shall be installed no more than 100 feet from the site (or as close to the site as feasible). The exact placement of replacement habitat shall be determined in consultation with the qualified bat biologist.	
Impact BIO-2: Wildlife Movement and Native Wildlife Nursery Sites. The Proposed Project could interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	PS	***Mitigation Measure BIO-2.1: Avoidance and Pre-construction Surveys for Nesting Migratory Birds*** The Project Sponsor shall implement the following measures to avoid and minimize construction-period impacts on nesting birds: • **Avoidance of the Nesting Season.** To the extent feasible, the commencement of demolition and construction activities shall be scheduled to avoid the nesting season. If demolition and construction activities are scheduled to take place outside the nesting season, all potential demolition/construction impacts on nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31. • **Pre-Activity/Pre-Disturbance Nesting Bird Surveys.** If it is not possible to schedule demolition and construction activities between September 1 and January 31, then pre-activity surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests will be disturbed during implementation of the Proposed Project. Surveys shall be conducted no more than 7 days prior to the initiation of demolition or construction activities for each construction phase.	LTS/M	PS	***Mitigation Measure BIO-2.1: Avoidance and Pre-construction Surveys for Nesting Migratory Birds*** The Project Sponsor shall implement the following measures to avoid and minimize construction-period impacts on nesting birds: • **Avoidance of the Nesting Season.** To the extent feasible, the commencement of demolition and construction activities shall be scheduled to avoid the nesting season. If demolition and construction activities are scheduled to take place outside the nesting season, all potential demolition/construction impacts on nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31. • **Pre-Activity/Pre-Disturbance Nesting Bird Surveys.** If it is not possible to schedule demolition and construction activities between September 1 and January 31, then pre-activity surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests will be disturbed during implementation of the Project Variant. Surveys shall be conducted no more than 7 days prior to the initiation of demolition or construction activities for each construction phase.	LTS/M

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		During the surveys, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings) in and immediately adjacent to the impact areas for migratory bird nests. • **Non-Disturbance Buffers Around Active Nests.** If an active nest is found close enough to work areas to be disturbed by demolition or construction activities, a construction-free buffer zone (typically 300 feet for raptors and 100 feet for other species) will be established around the nest to ensure that no nests of species protected by the MBTA and California Fish and Game Code are disturbed during implementation of the Proposed Project. The ornithologist shall determine the extent of the buffer. • **Nesting Deterrence.** If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, other vegetation) that are scheduled to be removed by the Proposed Project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation and prevent any potential delay for the Proposed Project because of the presence of active nests in these substrates.			During the surveys, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings) in and immediately adjacent to the impact areas for migratory bird nests. • **Non-Disturbance Buffers Around Active Nests.** If an active nest is found close enough to work areas to be disturbed by demolition or construction activities, a construction-free buffer zone (typically 300 feet for raptors and 100 feet for other species) will be established around the nest to ensure that no nests of species protected by the MBTA and California Fish and Game Code are disturbed during implementation of the Project Variant. The ornithologist shall determine the extent of the buffer. • **Nesting Deterrence.** If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, other vegetation) that are scheduled to be removed by the Project Variant may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation and prevent any potential delay for the Project Variant because of the presence of active nests in these substrates.	
Impact BIO-3: Conflicts with Any Local Policies or Ordinances that Protect Biological Resources. The Proposed Project would not result in conflicts with the Menlo Park Municipal Code or the city general plan.	LTS	None required	N/A	LTS	None required	N/A
Impact C-BIO-1: Cumulative Biological Resources Impacts. Cumulative development could result in a significant environmental impact on biological resources; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	PS	Implement **Mitigation Measure BIO-1.1** through **Mitigation Measure 1.5**, and **Mitigation Measure BIO-2.1,** above.	LTS/M	PS	Implement **Mitigation Measure BIO-1.1** through **Mitigation Measure 1.5**, and **Mitigation Measure BIO-2.1,** above.	LTS/M
3.11, Geology and Soils						
Surface Fault Rupture	NI	None required	N/A	NI	None required	N/A
Landslides	NI	None required	N/A	NI	None required	N/A
Loss of Topsoil	NI	None required	N/A	NI	None required	N/A
Lateral Spreading	NI	None required	N/A	NI	None required	N/A
Unique Geologic Features	NI	None required	N/A	NI	None required	N/A
Septic Systems	NI	None required	N/A	NI	None required	N/A
Impact GS-1: Strong Seismic Ground Shaking and Seismically Related Ground Failure. The Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death	LTS	None required	N/A	LTS	None required	N/A

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	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
involving (1) strong seismic ground shaking and (2) seismically related ground failure, including liquefaction.						
Impact GS-2: Substantial Soil Erosion. The Proposed Project would not result in substantial soil erosion.	LTS	None required	N/A	LTS	None required	N/A
Impact GS-3: Unstable Soils or Geologic Units. The Proposed Project would not be located on a geologic unit or soil that would be unstable or would become unstable as a result of the Proposed Project and potentially result in subsidence, liquefaction, or collapse.	LTS	None required	N/A	LTS	None required	N/A
Impact GS-4: Expansive Soils. The Proposed Project could be located on expansive soils, but would not create a substantial direct or indirect risks to life or property.	LTS	None required	N/A	LTS	None required	N/A
Impact GS-5: Paleontological Resources. The Proposed Project could destroy a unique paleontological resource or site.	PS	***Mitigation Measure GS-5.1: Conduct Worker Awareness Training*** Before the start of excavation or grading activities, the Project Sponsor shall retain a Project Paleontologist, as defined in Mitigation Measure GS-5.1, who is experienced in teaching non-specialists. The paleontologist shall train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, and proper notification procedures should fossils be encountered. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying the Project Paleontologist, who shall evaluate the significance of the find. ***Mitigation Measure GS-5.2: Conduct Protocol and Procedures for Encountering Paleontological Resources*** In the event that fossils or fossil bearing deposits are discovered during ground disturbing activities, excavations within a 50-foot radius of the find shall be temporarily halted or diverted. Ground disturbance work shall cease until a city-approved qualified paleontologist determines whether the resource requires further study. The paleontologist shall document the discovery as needed (in accordance with Society of Vertebrate Paleontology standards [Society of Vertebrate Paleontology 2010]), evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The excavation plan	LTS/M	PS	***Mitigation Measure GS-5.1: Conduct Worker Awareness Training*** Before the start of excavation or grading activities, the Project Sponsor shall retain a Project Paleontologist, as defined in Mitigation Measure GS-5.1, who is experienced in teaching non-specialists. The paleontologist shall train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, and proper notification procedures should fossils be encountered. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying the Project Paleontologist, who shall evaluate the significance of the find. ***Mitigation Measure GS-5.2: Conduct Protocol and Procedures for Encountering Paleontological Resources*** In the event that fossils or fossil bearing deposits are discovered during ground disturbing activities, excavations within a 50-foot radius of the find shall be temporarily halted or diverted. Ground disturbance work shall cease until a city-approved qualified paleontologist determines whether the resource requires further study. The paleontologist shall document the discovery as needed (in accordance with Society of Vertebrate Paleontology standards [Society of Vertebrate Paleontology 2010]), evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The excavation plan	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		shall be submitted to the city of Menlo Park for review and approval prior to implementation, and all construction activity shall adhere to the recommendations in the excavation plan.			shall be submitted to the city of Menlo Park for review and approval prior to implementation, and all construction activity shall adhere to the recommendations in the excavation plan.	
Impact C-GS-1: Cumulative Impacts Related to Seismic Hazards. Cumulative development would not result in a significant environmental impact from seismically related hazards; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-GS-2: Cumulative Impacts Related to Soil Erosion and Soil Hazards. Cumulative development would not result in a significant environmental impact from soil erosion and soil hazards; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-GS-3: Cumulative Impacts Related to Paleontological Resources. Cumulative development would not result in a significant environmental impact with mitigation on paleontological resources; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	PS	Implement **Mitigation Measure GS-5.1** and **Mitigation Measure GS-5.2,** above.	LTS/M	PS	Implement **Mitigation Measure GS-5.1** and **Mitigation Measure GS-5.2,** above.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
3.12, Hydrology and Water Quality						
Risk Release of Pollutants Due to Project Inundation in Flood Hazard, Tsunami, or Seiche Zones	NI	None required	N/A	NI	None required	N/A
Impact HY-1: Water Quality. The Proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality.	PS	Implement **Mitigation Measure HAZ-2.1** and **Mitigation Measure HAZ-2.2**, below.	LTS/M	PS	Implement **Mitigation Measure HAZ-2.1** and **Mitigation Measure HAZ-2.2**, below.	LTS/M
Impact HY-2: Groundwater Supply and Recharge. The Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded.	LTS	None required	N/A	LTS	None required	N/A
Impact HY-3: Drainage and Flooding. The Proposed Project would not substantially alter the existing drainage pattern of the Project Site in a manner that would result in substantial erosion or flooding, impede or redirect floodflows, contribute runoff that would exceed the capacity of the stormwater system, or provide substantial additional sources of polluted runoff.	LTS	None required	N/A	LTS	None required	N/A
Impact HY-4: Conflict or Obstruct a Water Resource Management Plan. The Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	LTS	None required	N/A	LTS	None required	N/A
Impact C-HY-1: Cumulative Hydrology and Water Quality Impacts. Cumulative development could result in a significant environmental impact on hydrology and water quality; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	PS	Implement **Mitigation Measure HAZ-2.1** and **Mitigation Measure HAZ-2.2**, below.	LTS/M	PS	Implement **Mitigation Measure HAZ-2.1** and **Mitigation Measure HAZ-2.2**, below.	LTS/M
3.13, Hazards and Hazardous Materials						
Airport Hazards	NI	None required	N/A	NI	None required	N/A
Wildland Fires	NI	None required	N/A	NI	None required	N/A
Impact HAZ-1: Routine Hazardous Materials Use. The Proposed Project would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials.	LTS	None required	N/A	LTS	None required	N/A
Impact HAZ-2: Upset and Accident Conditions Involving Hazardous Materials. The Proposed Project could create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	PS	***Mitigation Measure HAZ-2.1: Prepare and Implement an Environmental Site Management Plan*** Prior to ground disturbing activities, the Project Sponsor shall retain the services of a qualified environmental engineering firm to prepare and implement an Environmental Site Management Plan (ESMP) for review and approval by the appropriate regulatory agency prior to issuance of building permits and commencement of construction. The purpose of the ESMP is to protect	LTS/M	PS	***Mitigation Measure HAZ-2.1: Prepare and Implement an Environmental Site Management Plan*** Prior to ground disturbing activities, the Project Sponsor shall retain the services of a qualified environmental engineering firm to prepare and implement an Environmental Site Management Plan (ESMP) for review and approval by the appropriate regulatory agency prior to issuance of building permits and commencement of construction. The purpose of the ESMP is to protect	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and to address the possibility of encountering unknown contamination or hazards in the subsurface. The ESMP shall summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and groundwater, if contaminated media are encountered during deep excavations; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, state, and federal laws, policies, and regulations. The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall: 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively; 2) describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations; and 3) designate personnel responsible for implementation of the ESMP. The ESMP shall be prepared by a commercial environmental engineering firm with expertise and experience in the preparation of ESMPs and stamped by an appropriately licensed professional. In addition, the ESMP shall establish protocols and measures for addressing the discovery of presently unknown environmental conditions or subsurface structures such as underground storage tanks (USTs), sumps, or wells, would include procedures for evaluating, handling, storing, testing and disposing of these unknown materials (as applicable), and would also establish required health and safety provisions for all workers who could be exposed to said hazardous materials (in accordance with state and federal worker safety regulations). If the environmental engineering firm subsequently identifies the need for further sampling, the Project Sponsor shall implement this and any other requirements identified in the ESMP. ***Mitigation Measure HAZ-2.2: Require Groundwater Monitoring and Sampling prior to Dewatering Activity*** Prior to any construction activity with the potential to require dewatering any ground disturbing activity, the Project Sponsor shall measure both water levels and water quality prior to and during dewatering, with a focus on potential constituents of concern, based on known or			construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and to address the possibility of encountering unknown contamination or hazards in the subsurface. The ESMP shall summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and groundwater, if contaminated media are encountered during deep excavations; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, state, and federal laws, policies, and regulations. The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall: 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively; 2) describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations; and 3) designate personnel responsible for implementation of the ESMP. The ESMP shall be prepared by a commercial environmental engineering firm with expertise and experience in the preparation of ESMPs and stamped by an appropriately licensed professional. In addition, the ESMP shall establish protocols and measures for addressing the discovery of presently unknown environmental conditions or subsurface structures such as underground storage tanks (USTs), sumps, or wells, would include procedures for evaluating, handling, storing, testing and disposing of these unknown materials (as applicable), and would also establish required health and safety provisions for all workers who could be exposed to said hazardous materials (in accordance with state and federal worker safety regulations). If the environmental engineering firm subsequently identifies the need for further sampling, the Project Sponsor shall implement this and any other requirements identified in the ESMP. ***Mitigation Measure HAZ-2.2: Require Groundwater Monitoring and Sampling prior to Dewatering Activity*** Prior to any construction activity with the potential to require dewatering any ground disturbing activity, the Project Sponsor shall measure both water levels and water quality prior to and during dewatering, with a focus on potential constituents of concern, based on known or	

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		suspected water quality impacts within or near the Project Site. The Project Sponsor shall ensure the collection and testing of samples prior to initiating construction activities with the potential to require dewatering. The sampling locations shall be an appropriate distance from the proposed dewatering site, as determined by a geotechnical evaluation of local groundwater and soil conditions. If contaminated water is detected, remedial measures to limit potential exposure to affected media and/or contain the spread shall be implemented. Several options can be employed (e.g., implementing onsite treatment/remediation; disposing in the sewer system (with any appropriate pre-treatment) or at a hazardous materials disposal facility, depending on type and level of contamination; tanking; or stopping or phasing underground construction. Affected water shall be handled with the appropriate use of personal protective equipment (PPE) and treated so that it complies with discharge and reporting requirements and applicable water quality objectives or hauled offsite for treatment and disposal at a permitted waste treatment facility. Upon disposal of the affected water, the Project Sponsor shall be responsible for demonstrating to the city of Menlo Park that the treatment and disposal requirements set forth in this mitigation measure have been met by providing a waste manifest or proof of a valid waste discharge requirement (WDR) permit. ***Mitigation Measure HAZ-2.3: Conduct a Hazardous Building Materials Survey*** Prior to the issuance of any demolition permit, the Project Sponsor shall conduct a Hazardous Building Materials Survey. The survey shall be performed by a licensed contractor at structures that are scheduled to be demolished but have not been surveyed previously (i.e., as part of the 2021 Limited Hazardous Materials Survey). The Hazardous Building Materials Survey shall identify the presence of hazardous building materials, including asbestos-containing materials (ACMs), lead-based paint (LBP), and polychlorinated biphenyls (PCBs). Should this survey determine that hazardous building materials are present, the following actions shall be implemented by the Project Sponsor: • A health and safety plan shall be developed by a certified industrial hygienist for potential LBP, asbestos, or other hazardous building material risks present during demolition. The health and safety plan shall then be implemented by a licensed contractor. The health and safety plan shall comply with federal Occupational Safety			suspected water quality impacts within or near the Project Site. The Project Sponsor shall ensure the collection and testing of samples prior to initiating construction activities with the potential to require dewatering. The sampling locations shall be an appropriate distance from the proposed dewatering site, as determined by a geotechnical evaluation of local groundwater and soil conditions. If contaminated water is detected, remedial measures to limit potential exposure to affected media and/or contain the spread shall be implemented. Several options can be employed (e.g., implementing onsite treatment/remediation; disposing in the sewer system (with any appropriate pre-treatment) or at a hazardous materials disposal facility, depending on type and level of contamination; tanking; or stopping or phasing underground construction. Affected water shall be handled with the appropriate use of personal protective equipment (PPE) and treated so that it complies with discharge and reporting requirements and applicable water quality objectives or hauled offsite for treatment and disposal at a permitted waste treatment facility. Upon disposal of the affected water, the Project Sponsor shall be responsible for demonstrating to the city of Menlo Park that the treatment and disposal requirements set forth in this mitigation measure have been met by providing a waste manifest or proof of a valid waste discharge requirement (WDR) permit. ***Mitigation Measure HAZ-2.3: Conduct a Hazardous Building Materials Survey*** Prior to the issuance of any demolition permit, the Project Sponsor shall conduct a Hazardous Building Materials Survey. The survey shall be performed by a licensed contractor at structures that are scheduled to be demolished but have not been surveyed previously (i.e., as part of the 2021 Limited Hazardous Materials Survey). The Hazardous Building Materials Survey shall identify the presence of hazardous building materials, including asbestos-containing materials (ACMs), lead-based paint (LBP), and polychlorinated biphenyls (PCBs). Should this survey determine that hazardous building materials are present, the following actions shall be implemented by the Project Sponsor: • A health and safety plan shall be developed by a certified industrial hygienist for potential LBP, asbestos, or other hazardous building material risks present during demolition. The health and safety plan shall then be implemented by a licensed contractor. The health and safety plan shall comply with federal Occupational	

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
		and Health Administration (OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA) requirements. • Necessary approvals shall be acquired from the city of Menlo Park and/or county (by the licensed contractor) for specifications or commencement of abatement activities. Abatement activities shall be conducted by a licensed contractor. • The Bay Area Air Quality Management District (BAAQMD) shall be notified 10 days prior to initiating demolition at structures that contain asbestos. Section 19827.5 of the California Health and Safety Code requires local agencies not to issue demolition or alteration permits until an applicant has demonstrated compliance with the notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. In addition: o Asbestos shall be disposed of at a licensed disposal facility, to be identified by the licensed contractor. o The local office of Cal/OSHA shall be notified of asbestos abatement activities. o Asbestos abatement contractors shall follow state regulations contained in 8 CCR 1529 and 8 CCR 341.6 through 341.14 where asbestos-related work would involve 100 square feet or more of ACM. o Asbestos removal contractors shall be certified as such by the Contractors Licensing Board of the State of California. The owner of the property where abatement is to occur shall have a hazardous waste generator number assigned by and registered with the California Department of Health Services in Sacramento. o The contractor and hauler of hazardous building materials shall file a hazardous waste manifest, with details about hauling the material from the site and disposing of it. Pursuant to California law, the city of Menlo Park shall not issue the required permit until the Project Sponsor has complied with the notice requirements described above. ***Mitigation Measure HAZ-2.4: Conduct a Focused Soil Vapor Intrusion Investigation*** Prior to construction, the Project Sponsor shall retain the services of a qualified environmental consulting firm to conduct a focused soil vapor investigation. The investigation			Safety and Health Administration (OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA) requirements. • Necessary approvals shall be acquired from the city of Menlo Park and/or county (by the licensed contractor) for specifications or commencement of abatement activities. Abatement activities shall be conducted by a licensed contractor. • The Bay Area Air Quality Management District (BAAQMD) shall be notified 10 days prior to initiating demolition at structures that contain asbestos. Section 19827.5 of the California Health and Safety Code requires local agencies not to issue demolition or alteration permits until an applicant has demonstrated compliance with the notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. In addition: o Asbestos shall be disposed of at a licensed disposal facility, to be identified by the licensed contractor. o The local office of Cal/OSHA shall be notified of asbestos abatement activities. o Asbestos abatement contractors shall follow state regulations contained in 8 CCR 1529 and 8 CCR 341.6 through 341.14 where asbestos-related work would involve 100 square feet or more of ACM. o Asbestos removal contractors shall be certified as such by the Contractors Licensing Board of the State of California. The owner of the property where abatement is to occur shall have a hazardous waste generator number assigned by and registered with the California Department of Health Services in Sacramento. o The contractor and hauler of hazardous building materials shall file a hazardous waste manifest, with details about hauling the material from the site and disposing of it. Pursuant to California law, the city of Menlo Park shall not issue the required permit until the Project Sponsor has complied with the notice requirements described above. ***Mitigation Measure HAZ-2.4: Conduct a Focused Soil Vapor Intrusion Investigation*** Prior to construction, the Project Sponsor shall retain the services of a qualified environmental consulting firm to conduct a focused soil vapor investigation. The investigation	

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project Impact Significance without Mitigation	Mitigation Measures	Proposed Project Impact Significance with Mitigation	Project Variant Impact Significance without Mitigation	Mitigation Measures	Project Variant Impact Significance with Mitigation
		shall be conducted in the areas that are designated for residential and office/R&D use and shall be designed to protect building occupants from potential long-term impacts associated with vapor intrusion. The investigation shall provide the data needed to determine whether long-term engineering controls shall be needed as part of the proposed building development. The soil vapor investigation's methodology and sampling program shall be conducted by an environmental consulting firm with applicable expertise and experience. The soil vapor investigation shall be implemented by the Project Sponsor prior to construction of buildings on the Project Site. If the environmental consulting firm or appropriate regulatory agency providing oversight determines engineering controls are required, they shall be designed by a qualified engineer in compliance with requirements of the appropriate regulatory agency and/or the city of Menlo Park to address vapor conditions by redirecting and/or minimizing soil vapor. The performance of the installed vapor mitigation systems shall be confirmed by appropriate quality assurance/quality control inspection and test methods, as certified by the design engineer, and the certification shall be provided to the appropriate regulatory agency providing oversight and city of Menlo Park as needed. Specific engineering controls may include, but shall not be limited to: • Installation of subsurface migration barriers; and/or • Inclusion of ventilated foundations for any proposed structures; and/or • The use and implementation of an alternative method or structural design to address soil gas releases and reduce the potential for hazardous conditions to occur. Appropriate engineering control systems shall be determined with concurrence, approval, and oversight from the appropriate regulatory agency providing oversight and shall be dependent on building placement and construction.			shall be conducted in the areas that are designated for residential and office/R&D use and shall be designed to protect building occupants from potential long-term impacts associated with vapor intrusion. The investigation shall provide the data needed to determine whether long-term engineering controls shall be needed as part of the proposed building development. The soil vapor investigation's methodology and sampling program shall be conducted by an environmental consulting firm with applicable expertise and experience. The soil vapor investigation shall be implemented by the Project Sponsor prior to construction of buildings on the Project Site. If the environmental consulting firm or appropriate regulatory agency providing oversight determines engineering controls are required, they shall be designed by a qualified engineer in compliance with requirements of the appropriate regulatory agency and/or the city of Menlo Park to address vapor conditions by redirecting and/or minimizing soil vapor. The performance of the installed vapor mitigation systems shall be confirmed by appropriate quality assurance/quality control inspection and test methods, as certified by the design engineer, and the certification shall be provided to the appropriate regulatory agency providing oversight and city of Menlo Park as needed. Specific engineering controls may include, but shall not be limited to: • Installation of subsurface migration barriers; and/or • Inclusion of ventilated foundations for any proposed structures; and/or • The use and implementation of an alternative method or structural design to address soil gas releases and reduce the potential for hazardous conditions to occur. Appropriate engineering control systems shall be determined with concurrence, approval, and oversight from the appropriate regulatory agency providing oversight and shall be dependent on building placement and construction.	
Impact HAZ-3: Exposure to Schools. The Proposed Project could emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	PS	Implement ***Mitigation Measure HAZ-2.1***, ***Mitigation Measure HAZ-2.2***, *and* ***Mitigation Measure HAZ-2.3***, above.	LTS/M	PS	Implement ***Mitigation Measure HAZ-2.1***, ***Mitigation Measure HAZ-2.2***, *and* ***Mitigation Measure HAZ-2.3***, above.	LTS/M
Impact HAZ-4: Cortese List. The Proposed Project would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard for the public or the environment.	PS	Implement ***Mitigation Measure HAZ-2.1*** *and* ***Mitigation Measure HAZ-2.2***, above.	LTS/M	PS	Implement ***Mitigation Measure HAZ-2.1*** *and* ***Mitigation Measure HAZ-2.2***, above.	LTS/M

Table ES-1. Summary of Impacts and Mitigation Measures for the Proposed Project and the Project Variant

Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
Impact HAZ-5: Impairment of Emergency Response or Evacuation Plans. The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan.	LTS	None required	N/A	LTS	None required	N/A
Impact C-HAZ-1: Cumulative Hazards and Hazardous Materials Impacts. Cumulative development would not result in a significant environmental impact related to hazards and hazardous materials; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
3.14, Population and Housing						
Impact POP-1: Unplanned Population Growth. The Proposed Project would not induce substantial unplanned direct or indirect population growth.	LTS	None required	N/A	LTS	None required	N/A
Impact POP-2: Displacement of People or Housing. The Proposed Project would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere.	LTS	None required	N/A	LTS	None required	N/A
Impact C-POP-1: Cumulative Unplanned Population Growth. Cumulative development would not result in a significant environmental impact related to unplanned population growth; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
3.15, Public Services and Recreation						
Impact PS-1: Fire Services. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered fire service facilities.	LTS	None required	N/A	LTS	None required	N/A
Impact PS-2: Police Services. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered police service facilities.	LTS	None required	N/A	LTS	None required	N/A
Impact PS-3: School Facilities. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered school facilities.	LTS	None required	N/A	LTS	None required	N/A

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
Impact PS-4: Parks and Recreational Facilities. The Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated, nor would it require construction or expansion of recreational facilities that would have an adverse physical effect on the environment.	LTS	None required	N/A	LTS	None required	N/A
Impact PS-5: Library Facilities. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered library facilities.	LTS	None required	N/A	LTS	None required	N/A
Impact C-PS-1: Cumulative Public Services and Recreation Impacts. Cumulative development would not result in a significant environmental impact related to public services or recreation; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
3.16, Utilities and Service Systems						
Impact UT-1: Construction or Relocation of Utilities. The Proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	LTS	None required	N/A	LTS	None required	N/A
Impact UT-2: Water Supply. The Proposed Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	LTS	None required	N/A	LTS	None required	N/A
Impact UT-3: Generation of Wastewater. The Proposed Project would not result in a determination by the wastewater treatment providers that they have inadequate capacity to serve the Proposed Project's projected demand in addition to the providers' existing commitments.	LTS	None required	N/A	LTS	None required	N/A
Impact UT-4: Generation of Solid Waste. The Proposed Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	LTS	None required	N/A	LTS	None required	N/A
Impact UT-5: Compliance with Solid Waste Regulations. The Proposed Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	LTS	None required	N/A	LTS	None required	N/A

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Impacts[a] *Note: The summary of impacts and impact statements for the Proposed Project apply to the Project Variant as well.*	Proposed Project			Project Variant		
	Impact Significance without Mitigation	**Mitigation Measures**	**Impact Significance with Mitigation**	**Impact Significance without Mitigation**	**Mitigation Measures**	**Impact Significance with Mitigation**
Impact C-UT-1: Cumulative Water Service and Infrastructure Impacts. Cumulative development could result in a significant environmental impact on water service; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-UT-2: Cumulative Wastewater Service and Infrastructure Impacts. Cumulative development would not result in a significant environmental impact on wastewater service; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-UT-3: Cumulative Stormwater Service and Infrastructure Impacts. Cumulative development would not result in a significant environmental impact on stormwater service; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-UT-4: Cumulative Solid Waste Impacts. Cumulative development would not result in a significant environmental impact on solid waste; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-UT-5: Cumulative Natural Gas and Electric Service Impacts. Cumulative development would not result in a significant environmental impact on natural gas and electric service; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact.	LTS	None required	N/A	LTS	None required	N/A
Impact C-UT-6: Cumulative Telecommunications Impacts. Cumulative development would result in a less-than-significant environmental impact on telecommunications; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact on telecommunications.	LTS	None required	N/A	LTS	None required	N/A

Notes:

NI	No Impact
LTS	Less than Significant
PS	Potentially Significant
LTS/M	Less than Significant with Mitigation
SU	Significant and Unavoidable with Mitigation
N/A	Not Applicable

Chapter 1
Introduction

1.1 Purpose of This Environmental Impact Report

This Draft Environmental Impact Report (Draft EIR) for Parkline (Proposed Project) has been prepared by the lead agency, the city of Menlo Park, in conformance with the provisions of the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations Title 14, Section 15000 et seq.). The lead agency is the public agency that has principal responsibility for carrying out or approving a project. Here, the city has principal responsibility for approving the Proposed Project.

The purpose of this EIR is to assess and disclose the potential environmental impacts associated with the adoption and implementation of the Proposed Project, as more particularly described in Chapter 2, *Project Description*, and determine corresponding mitigation measures as necessary. This Draft EIR assesses potentially significant environmental impacts that could result from the Proposed Project. As defined in CEQA Guidelines Section 15382, a "significant effect on the environment" is:

> . . . a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

As provided in the CEQA Guidelines, an EIR is an "informational document" that is intended to inform public-agency decision-makers and the public of the significant environmental effects of a project, identify possible ways to avoid or substantially lessen the significant effects, and describe reasonable alternatives to a project. The purpose of this Draft EIR is to provide the city, responsible and trustee agencies, other public agencies, and the public with detailed information about the environmental effects that could result from implementing the Proposed Project; examine and identify methods for mitigating any adverse environmental impacts should the Proposed Project be approved; and consider feasible alternatives to the Proposed Project, including the required No-Project Alternative.

The city will use the EIR, along with other information in the public record, to determine whether to approve, modify, or deny the Proposed Project and require any environmental conditions or mitigation measures as part of Project approvals. Specifically, the city and any responsible agencies or other agencies will rely on the EIR for their consideration related to the adoption of the initial Project approvals (e.g., Development Agreement, General Plan Amendment, Zoning Ordinance Amendment, Conditional Development Permit [CDP]), and thereafter for processing of any related subsequent approvals (e.g., architectural control applications, and other implementing permits) that are consistent with the Project approvals, and any approvals required for the off-site improvements located within the city's jurisdiction intended to implement the Proposed Project, subject to the requirements of CEQA.

1.2 Project Overview

Lane Partners (Project Sponsor) is proposing to redevelop SRI International's existing 63.2-acre research campus adjacent to city hall and near Menlo Park's downtown and Caltrain station (Project Site). The

Project Site is currently zoned C-1(X) (Administrative and Professional District, Restrictive); a small portion of the Project Site at the northeast corner is zoned P (Parking). There are no uses permitted as of right in the C-1 district. Conditionally permitted uses include professional, executive, and administrative offices; research facilities; multiple dwellings; public utilities; and "special uses." The Project Site is currently governed by a CDP approved in 1975 and subsequently amended in 1978, 1997, and 2004. The CDP permits up to 1,494,774 sf of gross floor area but restricts the maximum building coverage to 40 percent of the site, maximum height to 50 feet, and maximum number of employees to 3,308, along with other restrictions. Residential uses are conditionally allowed in the C-1 district, although the CDP does not currently authorize residential uses.

The Proposed Project would redevelop the SRI International Campus by creating a new office/R&D campus with no increase in office/R&D square footage; up to 550 new dwelling units within a new residential area at a range of affordability levels; new bicycle and pedestrian connections; and open space. The Proposed Project would organize land uses generally within two areas within the Project Site, consisting of 1) an approximately 10-acre residential area in the southwestern portion of the Project Site and 2) an approximately 53.2-acre office/R&D area in the remainder of the Project Site. The Proposed Project would demolish 35 of the 38 existing buildings on the Project Site. In addition, a 6-megawatt natural gas cogeneration plant that generates power and steam energy for the SRI International Campus would be decommissioned and demolished. The entire Project Site would be converted to an all-electric design with limited exceptions for operational energy needs, consistent with the intent of the city's adopted Reach Code.[1] Existing Buildings P, S, and T, comprising approximately 286,730 sf, would remain onsite and continue to be operated by SRI International and its tenants.[2] In total, the Proposed Project would result in approximately 1,768,802 sf of mixed-use development, including approximately 1,093,602 sf of office/R&D uses and approximately 675,200 sf of residential uses. Approximately 26.4 acres of open space areas and supporting amenities would be developed at the Project Site, including a network of publicly accessible bicycle and pedestrian trails, open spaces, and active/passive recreational areas that would be available to the public. In addition, the Project Site would include community-oriented amenities, such as a community playing field and a children's playground area.

The proposed buildings in the office/R&D area would be designed to accommodate either office or R&D uses or life science, or a combination of both. Because future commercial tenants are not yet known, the EIR will evaluate two buildout scenarios: a 100 percent office scenario and a 100 percent R&D scenario. The buildout scenarios are discussed in more detail under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis.*

[1] In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

[2] As discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*, SRI International is proposing to construct tenant improvements at Buildings P, S, and T, as well as related site utility work, to modernize the buildings for SRI International's near-term and ongoing operations. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included as a cumulative project for purposes of this EIR analysis.

1.3 CEQA Process

Notice of Preparation

The notice of preparation (NOP) was released for the Proposed Project on December 2, 2022, for a 30-day public review period. A public scoping meeting was held on December 12, 2022, before the Planning Commission. The NOP noted that the Proposed Project may have a significant effect on the environment and that an EIR would be prepared for the Proposed Project. A copy of the NOP is included in Appendix 1 of this EIR.

The NOP was sent to individuals, local interest groups, adjacent property owners, and responsible and trustee state and local agencies that have jurisdiction over or interest in environmental resources or conditions in the vicinity of the Project Site. The purpose of the NOP was to allow various private and public entities to transmit their concerns and comments on the scope and content of this EIR, focusing on specific information related to each individual's or group's interest or agency's statutory responsibility early in the environmental review process.

In total, 65 comment letters were received in response to the NOP, including 20 comment letters received during the 30-day public review period and 45 comment letters received after the public review period ended; all of these comment letters were considered during the preparation of this EIR. Three comment letters were received from agencies (Native American Heritage Commission, California Department of Transportation, and Sequoia Union High School District), one comment letter was received from an organization (Menlo Together), and 61 comment letters were received from individuals. In addition, members of the public made comments at the Planning Commission hearing. Copies of the NOP comment letters (including those received during and after the public review period) and the comments that were recorded at the Planning Commission hearing are included in Appendix 1 of this EIR.

The NOP concluded that the following environmental resource areas would be addressed as separate sections in this Draft EIR:

- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

The Proposed Project would not result in impacts on agricultural and forestry resources or mineral resources because none of these exist at the Project Site; there would also be no impacts related to wildfire. A detailed analysis of these topics is therefore not included in this Draft EIR; however, these topics are briefly discussed in Section 3.1, *Impacts Found Not to Be Significant*.[3]

[3] As discussed in Section 3.1, *Impacts Found Not to Be Significant*, this EIR does not consider aesthetics in determining the significance of impacts under CEQA, pursuant to Public Resources Code Section 21099. However, a discussion of the Proposed Project's potential impacts related to aesthetics is included in Appendix 3.1-1 of this EIR for informational purposes.

Draft EIR

Impact Analysis

This Draft EIR analyzes significant effects that could result from the Proposed Project. As explained in Section 15002(g) of the CEQA Guidelines, a significant effect on the environment is defined as a substantial adverse change in the physical conditions that exist in the area affected by a project. Pre-project environmental conditions (i.e., the environmental baseline) are considered in determining impact significance. The impact significance thresholds for each environmental resource area presented in this Draft EIR are based on CEQA Guidelines Appendix G, *Environmental Checklist Form*. In addition, this Draft EIR uses city-adopted significance criteria for transportation impacts. Where significant impacts are identified, the Draft EIR recommends feasible mitigation measures to reduce, eliminate, or avoid the significant impacts and identifies which significant impacts are unavoidable despite mitigation.

As discussed in more detail in Chapter 3, *Environmental Impact Analysis*, cumulative impacts (i.e., two or more individual effects that, when considered together, compound or increase other related environmental impacts) are discussed for each environmental resource area. The methodology for assessing cumulative impacts varies by topic, depending on the cumulative context for the individual topic, as discussed in Chapter 3. This document also discusses feasible alternatives to the Proposed Project in Chapter 6, *Alternatives Analysis*.

In accordance with Section 15143 of the CEQA Guidelines, this Draft EIR focuses on the significant effects on the environment that could result from construction and operation of the Proposed Project. Section 15131 of the CEQA Guidelines specifies that "[e]conomic or social effects of a project shall not be treated as significant effects on the environment," but "[a]n EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes." When doing so, "[t]he intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes." Therefore, this Draft EIR does not treat economic or social effects of the Proposed Project as significant effects on the environment in and of themselves. In addition, if it is determined that a potential impact is too speculative for evaluation, this condition is noted, and further discussion of the impact is not necessary under CEQA.

Public Review

This Draft EIR is considered a draft under CEQA because it must be reviewed and commented upon by public agencies, organizations, and individuals before being finalized. This document is being distributed for a 45-day (minimum) public review and comment period. Readers are invited to submit written comments on the document. Comments are most helpful when they suggest specific alternatives or measures that would mitigate significant environmental effects better or raise specific questions about the details in the Draft EIR. Hard copies of the Draft EIR are available for review at the Menlo Park Library located at 800 Alma Street and the Belle Haven Library located at 100 Terminal Avenue. Electronic copies of the Draft EIR are available for review online at https://menlopark.gov/Parkline.

The 45-day public review period for the draft EIR is from **June 20, 2024,** to **August 5, 2024**. Written comments should be submitted during this review period to:

By email:
cdsandmeier@menlopark.gov

By mail:
Corinna Sandmeier, Principal Planner
City of Menlo Park
Community Development Department, Planning Division
701 Laurel Street
Menlo Park, CA 94025
Email: cdsandmeier@menlopark.gov

Email correspondence is preferred.

To receive comments on the Draft EIR, a public hearing will be held before the Planning Commission on July 22, 2024. Hearing notices will be mailed to responsible agencies and interested individuals.

Final EIR and Project Approval

Following the close of the public review period, the city will prepare responses to all substantive comments related to potential physical changes to the environment. The Draft EIR, along with the written and oral substantive comments received during the review period, as well as responses to those comments, will make up the Final EIR. The Final EIR will be considered by the Planning Commission when making the decision whether to recommend that the City Council certify the Final EIR and then approve or deny the Proposed Project.[4] The City Council is the final decision-making body regarding the Project-specific discretionary development entitlements (e.g., Development Agreement, General Plan amendments, zoning amendments, CDP, etc.) and certification of the Final EIR for the Proposed Project.[5] The Planning Commission is expected to be the final decision-making body on any subsequent architectural control applications for development of the specific buildings within the Proposed Project site unless the Planning Commission's action is appealed to the City Council. The Proposed Project would also involve permits for heritage tree removals, subject to review by the city arborist, among other permits. Chapter 2, *Project Description*, provides a detailed description of the discretionary approvals and other permits by the city and responsible or other agencies that are anticipated to be required for implementation of the Proposed Project.

Certification of the Final EIR by the City Council as complete and adequate, in conformance with CEQA, does not grant any land use approvals or entitlements for the Proposed Project. The merits of the Proposed Project will be considered by the Planning Commission and City Council following certification of the Final EIR. The CEQA Guidelines require that, for one or more significant and unavoidable impacts that cannot be substantially mitigated, a lead agency must prepare a Statement of Overriding Considerations that balances the social, economic, technological, and legal benefits of approving a project against the significant and unavoidable environmental impacts that would result from project implementation. If significant and unavoidable impacts are identified, the City Council will consider the Statement of Overriding Considerations for the Proposed Project.

[4] Following certification of the EIR, the Planning Commission and City Council will have discretion to approve the Proposed Project, the Increased Development Variant (Project Variant), or alternatives to the Proposed Project.

[5] Id.

1.4 Report Organization

This Draft EIR is organized into the following chapters:

- *Executive Summary:* Provides a summary of the Proposed Project and the impacts that would result from its implementation and describes mitigation measures recommended to reduce, eliminate, or avoid significant impacts. The Executive Summary also describes the Increased Development Variant (Project Variant) and the alternatives to the Proposed Project.
- *Chapter 1—Introduction*: Discusses the purpose of the overall Draft EIR, provides a summary of the Proposed Project and CEQA process, and summarizes the organization of the Draft EIR.
- *Chapter 2—Project Description*: Describes the Project Site location and setting, objectives for the Proposed Project, Project characteristics, and the required approvals process.
- *Chapter 3—Environmental Impact Analysis*: Describes the following for each technical environmental topic: existing conditions (i.e., setting), applicable regulations adopted by the city and other agencies, potential environmental impacts of the Proposed Project and their level of significance, and mitigation measures recommended to reduce or avoid identified potential impacts. Because future tenants in the Office/R&D buildings have not been identified, this EIR evaluates two buildout scenarios: a 100 percent office scenario and a 100 percent R&D scenario. This will ensure that the EIR will evaluate the Proposed Project's maximum potential impact and that any future Office/R&D tenant mix will be within the scope of the EIR analysis. Each impact evaluation in the EIR will evaluate the most impactful scenario, or "worst-case" scenario, for the resource area being analyzed. The most impactful scenario is the scenario with the greatest potential to result in significant environmental impacts. Potential cumulative impacts are also addressed in each topical section. Potential adverse impacts are identified by level of significance, as follows: less than significant (LTS), significant (S), less than significant with mitigation (LTS/M), and significant and unavoidable (SU). The significance of each potential impact is categorized before and after implementation of any recommended mitigation measure(s). If uncertain, impacts that might be significant are characterized as "potentially significant" (PS).
- *Chapter 4—Project Variant Analysis:* Evaluates the potential environmental impacts of the Project Variant and their level of significance as well as recommends mitigation measures to reduce or avoid identified potential impacts. The Project Variant is a variation of the Proposed Project at the same Project Site (although the Project Site would be slightly expanded to include 201 Ravenswood Avenue), generally with the same objectives, background, and development controls but with the following differences:
    - The Project Site has been expanded to include the parcel at 201 Ravenswood Avenue and create a continuous Project frontage area along Ravenswood Avenue and increase the overall Project Site by approximately 43,762 square feet (sf) (approximately 1.0 acre), for a total of approximately 64.2 acres;
    - The Project Variant would include up to 250 additional residential rental dwelling units compared to the Proposed Project (an increase from 550 to 800 units, inclusive of up to 154 units to be developed by an affordable housing developer);
    - The Project Variant would reduce the underground parking footprint within the site, both by removing underground parking from the multifamily residential buildings in the residential area and removing the underground parking connection between office/research-and-development (R&D) Building O1 and Building O5. As a result, Parking Garage (PG) 1 and PG2 increase in square

footage and height compared to the Proposed Project and the number of structured spaces increases by 400 (with no change in the total number of parking spaces proposed for the office/R&D buildings); and

- The Project Variant would include an approximately 2- to 3-million-gallon emergency water reservoir that would be buried below grade in the northeast area of the Project Site, in addition to a small pump station, an emergency well, and related improvements that would be built at and below grade (i.e., emergency generator, disinfection system, surge tank) (referred to as "reservoir" throughout this document). It would be built and operated by the city of Menlo Park.

If the Project Sponsor exercises its option right to acquire the property at 201 Ravenswood Avenue, the Project Variant could be put forth by the Project Sponsor and made available for selection by the decision-makers as part of an approval action. The city could approve a modified version of the Project Variant with either or both of the residential and water reservoir components (i.e., additional dwelling units and no emergency water reservoir, emergency water reservoir and no additional dwelling units, or additional dwelling units and emergency water reservoir).

- *Chapter 5—Other CEQA Considerations*: Provides discussions required by CEQA, including a list of the Proposed Project's significant and unavoidable environmental impacts, significant irreversible environmental changes, and growth-inducing impacts.
- *Chapter 6—Alternatives Analysis*: Evaluates alternatives to the Proposed Project, including the No-Project Alternative, Preservation Alternative 1 (Retain Building 100), Preservation Alternative 2 (Retain Buildings 100, A, and E), and Preservation Alternative 3 (Retain Buildings 100, A, E, and B). In addition, the following alternatives to the Project Variant are evaluated: No-Project Alternative, Variant Preservation Alternative 1 (Retain Building 100 and the Chapel), Variant Preservation Alternative 2 (Retain Buildings 100, A, and E, and the Chapel), and Variant Preservation Alternative 3 (Retain Buildings 100, A, E, and B, and the Chapel).
- *Chapter 7—Report Preparers*: Lists the entities and people who prepared the EIR and supporting materials for the Proposed Project.

Chapter 2
Project Description

Lane Partners (Project Sponsor) is proposing to redevelop SRI International's existing 63.2-acre research campus adjacent to city hall and near Menlo Park's downtown and Caltrain station (Project Site). Parkline (Proposed Project) would include a new office/research and development (R&D) campus with no increase in office/R&D square footage; up to 550 new dwelling units at a range of affordability levels (comprised of 450 multi-family units and townhomes, and a proposed land dedication to an affordable housing developer that could accommodate up to 100 affordable units); new bicycle and pedestrian connections; approximately 26.4 acres of the Project Site to be available as open space; removal of approximately 708 existing trees, including 198 heritage trees, and planting of approximately 873 new trees; and decommissioning of a 6 megawatt natural gas cogeneration plant. In total, the Proposed Project would result in approximately 1,768,802 square feet (sf) of mixed-use development, with approximately 1,093,602 sf of office/R&D uses and approximately 675,200 sf of residential uses. The Proposed Project would demolish all buildings on SRI International's Campus, excluding Buildings P, S, and T, which would remain onsite and be operated by SRI International.

2.1 Project Site Location and Setting

Project Location

The 63.2-acre Project Site is located at 333 Ravenswood Avenue[1] in the city of Menlo Park (city) (as shown in Figure 2-1). The Project Site is between El Camino Real and Middlefield Road, near the downtown area and Menlo Park Caltrain station. The Project Site consists of five parcels (Assessor's Parcel Numbers 062-390-660, 062-390-670, 062-390-730, 062-390-760, and 062-390-780).

Regional access to the Project Site is provided by U.S. 101, approximately 1.4 miles to the east,[2] and State Route (SR) 82 (El Camino Real), approximately 0.4 mile to the west. In addition, the Menlo Park Caltrain station is located off Ravenswood Avenue, between Alma Street and El Camino Real, providing daily service between San Francisco and San Jose, with connection to BART at the Millbrae Caltrain station. The majority of the Project Site is within 0.50 mile of the Caltrain station and also close to the San Mateo County Transit District (SamTrans) bus and Menlo Park community shuttle stops on Middlefield Road and Ravenswood Avenue. The Project Site is served by SamTrans routes 81, 82, 296, and 397 and Menlo Park community shuttle routes M1 and M4.

[1] The Project Site also includes the addresses 301 Ravenswood Avenue and 555 and 565 Middlefield Road.

[2] For descriptive purposes, true northwest is Project north, with El Camino Real running in a north–south direction and Ravenswood Avenue running in an east–west direction. Compass directions in this document have Middlefield Road in a north–south direction and Ravenswood Avenue in an east–west direction. All references are labeled accordingly.

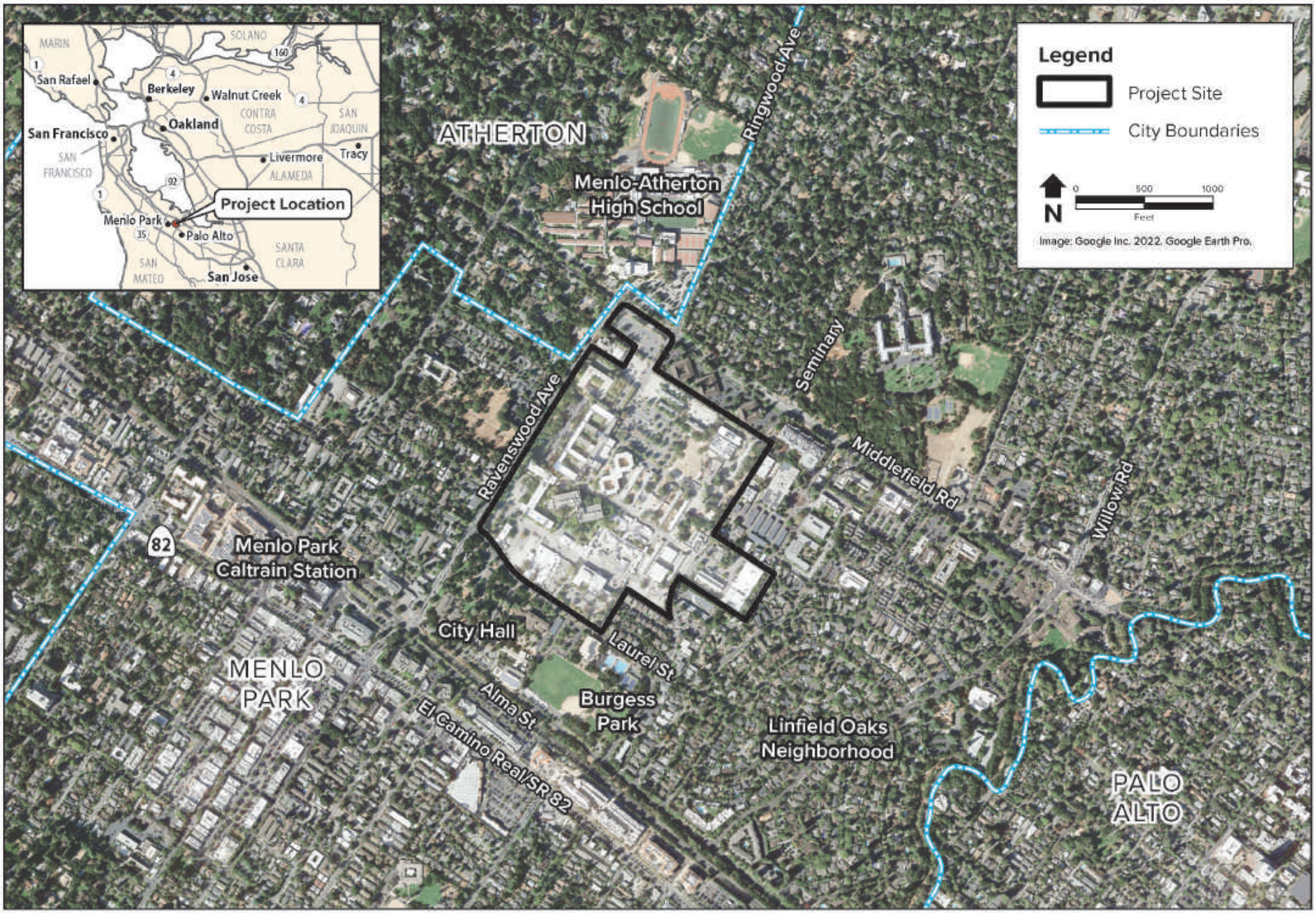

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Figure 2-1
Project Location
Parkline

The vicinity of the Project Site generally consists of residential neighborhoods and public facilities. To the north, along Ravenswood Avenue, are single-family and multi-family residences. To the east are Menlo-Atherton High School, single-family residences, and a mix of office buildings, including the United States Geological Survey (USGS) offices on Middlefield Road. To the south are a mix of offices, single-family residences, and multi-family residential units in the Linfield Oaks neighborhood and immediately adjacent to the southwest is the Classics of Burgess Park neighborhood. To the west, across Laurel Street, are city hall, Burgess Park, and a childcare facility; and farther to the west is the downtown area and Menlo Park Caltrain station. To the northeast is the property at 201 Ravenswood Avenue, which is surrounded on three sides by the Project Site. This property includes buildings affiliated with First Church of Christ, Scientist and Alpha Kids Academy.

Project Site

Project Site History

The Project Site was originally part of a site that included the Dibble Hospital, which was a military hospital developed during the early 1940s in support of World War II. Of the approximately 100 buildings constructed for Dibble Hospital between 1943 and 1945, 20 are extant. After the end of the war in 1946, the Dibble Hospital site was subdivided; a portion of the property was redeveloped and became the Menlo Park Civic Center. The Project Site was purchased by Stanford University for student housing to accommodate the increased enrollment from veterans who were attending under the GI Bill; the site was renamed Stanford Village.

The Stanford Research Institute, founded in 1946, began occupying the property in the late 1940s to early 1950s. In 1970, the Stanford Research Institute became independent of Stanford University; it became a non-profit research institute, SRI International. Of the existing 38 buildings at the Project Site, 18 were purpose built separately by SRI International, generally between the 1970s and the 1980s. Since its founding, SRI International's R&D work has led to innovations such as ultrasound for medical applications, cancer drugs, smog and ozone depletion research, color television, early internet research, personalized computing, and development of the computer mouse. SRI International has at least 4,600 patents to date and has worked on more than 50,000 R&D projects.

As documented in the historic resource evaluation prepared for the Proposed Project by Page & Turnbull,[3] none of the existing structures are currently listed in the National Register of Historic Places or the California Register of Historical Resources (California Register). However, Page & Turnbull found that Buildings A, E, and 100 are individually eligible for listing in the California Register due to their association with SRI International's advancements in computing, business and economics, health and medicine, and the physical sciences. Building A is also individually significant from an architectural standpoint because it was designed by master architects Stanton & Stockwell, exemplifying the Midcentury Modern style. In addition, Page & Turnbull found that SRI International's campus may be eligible for listing as a historic district for its association with SRI International's contributions to society. There are 26 buildings and two landscape features that could be considered contributors to a historic district.

[3] Page & Turnbull. 2022. *SRI International Campus Historic Resource Evaluation for Parkline Project*, *City of Menlo Park, San Mateo County*. April 21. Refer to Appendix C of the *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County* in Appendix 3.8-1 of this EIR.

Existing Site Characteristics

The Project Site serves as SRI International's research campus, which consists of 38 buildings with approximately 1.38 million sf of mostly R&D and office space, as well as supporting uses. Of the 38 buildings, one building (Building 302) is used exclusively for campus amenities, four buildings (Buildings 309, R, U, W) are used exclusively for support functions, and the remaining buildings incorporate a mix of amenity, office, R&D, laboratory, and supporting uses. Onsite laboratory uses include dry labs, wet labs, and specialty labs to accommodate evolving scientific research at the Project Site.[4] The buildings range in height from approximately 12 to 48 feet above the finished grade. Historical employment trends at the SRI International Campus indicate that the total square footage of the structures on the Project Site exceeds SRI International's current or projected needs. Employment on the site has ranged between approximately 1,400 to 2,000 workers since 2003, with fewer employees now working onsite as a result of the COVID-19 pandemic and shifts in work patterns. Approximately 1,100 people are currently employed at the Project Site; no residents currently live at the Project Site.

Table 2-1 summarizes the existing buildings at the Project Site. Figure 2-2 depicts the existing buildings at the Project Site.

Table 2-1. Existing Conditions at the Project Site

Building	Use	Construction Date	Area (sf)
100	Office/Research	1943	9,006
108	Office/Research	1943	10,093
110	Office/Research	1943	12,836
201	Office/Research	1943	9,128
202	Office/Research	1943	10,514
203	Office/Research	1943	10,070
204	Office/Research	1943	10,557
205	Office/Research	1943	10,039
301	Office/Research	1943–1944	19,943
302	Amenity	1943–1944	2,893
303	Office/Research	1943	4,267
304	Office/Research	1943	22,978
305	Office/Research	1943	9,982
306	Office/Research	1943	14,331
307	Office/Research	1992	9,600
309	Support	1943	9,236
320	Office/Research	1943	19,440
402/404	Office/Research	1943	16,867
405	Office/Research	1948–1956	2,055
406	Office/Research	1943	16,520
408	Office/Research	1943	15,395
409	Office/Research	1948–1956	5,527

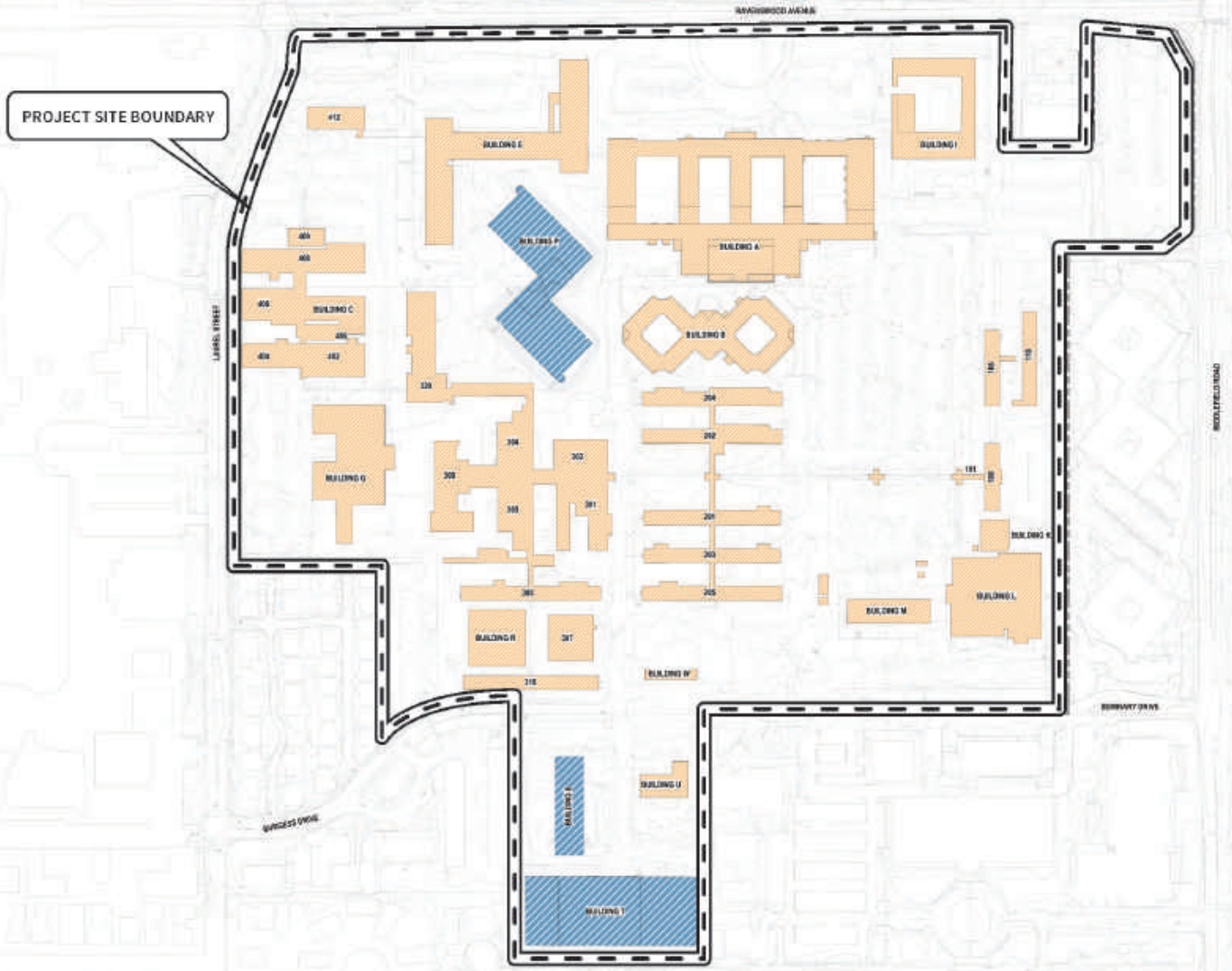
[4] ATC. 2021. *Phase I Environmental Site Assessment – SRI International, 333 Ravenswood Avenue Menlo Park, California 94025.* Project Number 129-7-1. March 12.

Building	Use	Construction Date	Area (sf)
412	Support	1943	5,858
A	Office/Research	1958–1961	276,113
B	Office/Research	1976–1977	135,110
E	Office/Research	1966	171,980
G	Office/Research	1964	59,536
I	Office/Research	1969	39,220
I	Amenity	1969	17,700
K	Office/Research	1971	4,101
L	Office/Research	1967	75,267
M	Office/Research	2000	25,772
M1	Office/Research	1962	1,440
P[a,b]	Office/Research	1980–1981	183,423
R	Support	1984	23,009
S[a]	Office/Research	1981	21,241
T	Office/Research	1962/1979/2006	82,066
U	Support	1986–1987	5,400
W	Support	1988	1,819
Total Existing Buildings			***1,380,332 sf***

Source: Lane Partners, SRI International, Page & Turnbull, 2022

Notes:

a. As discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*, SRI International is proposing to construct tenant improvements at Buildings P, S, and T, as well as related site utility work, to modernize the buildings for SRI International's near-term and ongoing operations. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project, and are included as a cumulative project for purposes of this EIR analysis. The square footages for Buildings P and S shown in this table represent existing square footage and do not reflect any changes associated with SRI International's proposed tenant improvements. If approved and constructed, the tenant improvements are anticipated to add approximately 3,000 sf to Building P and to remove approximately 6,000 sf from Building S. Buildings P, S, and T will thereafter accommodate 700 employees.



BUILDING NUMBER	BUILDING COVERAGE (SF)	GROSS FLOOR AREA (SF)
A	75,673	276,113
B	33,150	135,110
E	42,996	171,990
G	32,858	99,538
I	24,750	50,550
K	4,101	4,101
L	36,052	73,267
M	12,822	25,772
P	42,440	165,423
R	14,400	23,088
S	12,599	21,241
T	52,985	82,068
U	5,400	5,400
W	1,819	1,819
100	4,563	9,006
108	5,847	10,093
110	6,416	12,836
201	9,128	9,128
202	10,514	10,514
203	10,070	10,070
204	10,557	10,557
205	10,039	10,039
301	19,943	19,943
302 CAF	2,893	2,893
303	4,267	4,267
304	22,978	22,978
305	9,982	9,982
306	14,331	14,331
307	9,600	9,600
309	9,236	9,236
320	19,440	19,440
402/404	16,887	16,887
406	2,055	2,055
408	16,520	16,520
409	15,386	15,386
410	5,927	5,927
412	5,858	5,858
M1	1,440	1,440
SBSTN	595	-
TOTAL	635,263	1,380,332

Source: Studios Architecture, OJB, Kier+Wright, 2022.

Figure 2-2
Existing Conditions at the Project Site
Parkline

Under current operations, the Project Site is not open to the public. Most of it is surrounded by a security fence with limited access points. Specifically, the Project Site is currently accessible from two driveways on Laurel Street, five on Ravenswood Avenue, and two on Middlefield Road (at Ringwood Avenue and Seminary Drive). All driveways are stop-sign controlled, except the Middlefield Road/Ringwood Avenue driveway, which is signalized. Currently, the driveway on Middlefield Road at Seminary Drive is not used on a regular basis.

The Project Site is improved with a substantial amount of impervious hardscape. This includes roofs, surface parking lots, streets, and paths, which, in total, cover approximately 74.3 percent of the Project Site.

The Project Site includes native oaks and redwoods as well as adapted non-native species such as eucalyptus and magnolias. Many of the existing trees are located along the property line on Ravenswood Avenue and Laurel Street, delineating the edge of the campus. These trees create a visual buffer between the Project Site and adjacent uses. Most trees on the site have been maintained consistently by a professional arborist and are in good health. There are approximately 1,340 existing trees on the Project Site, including 547 heritage trees, which are distributed across the Project Site.

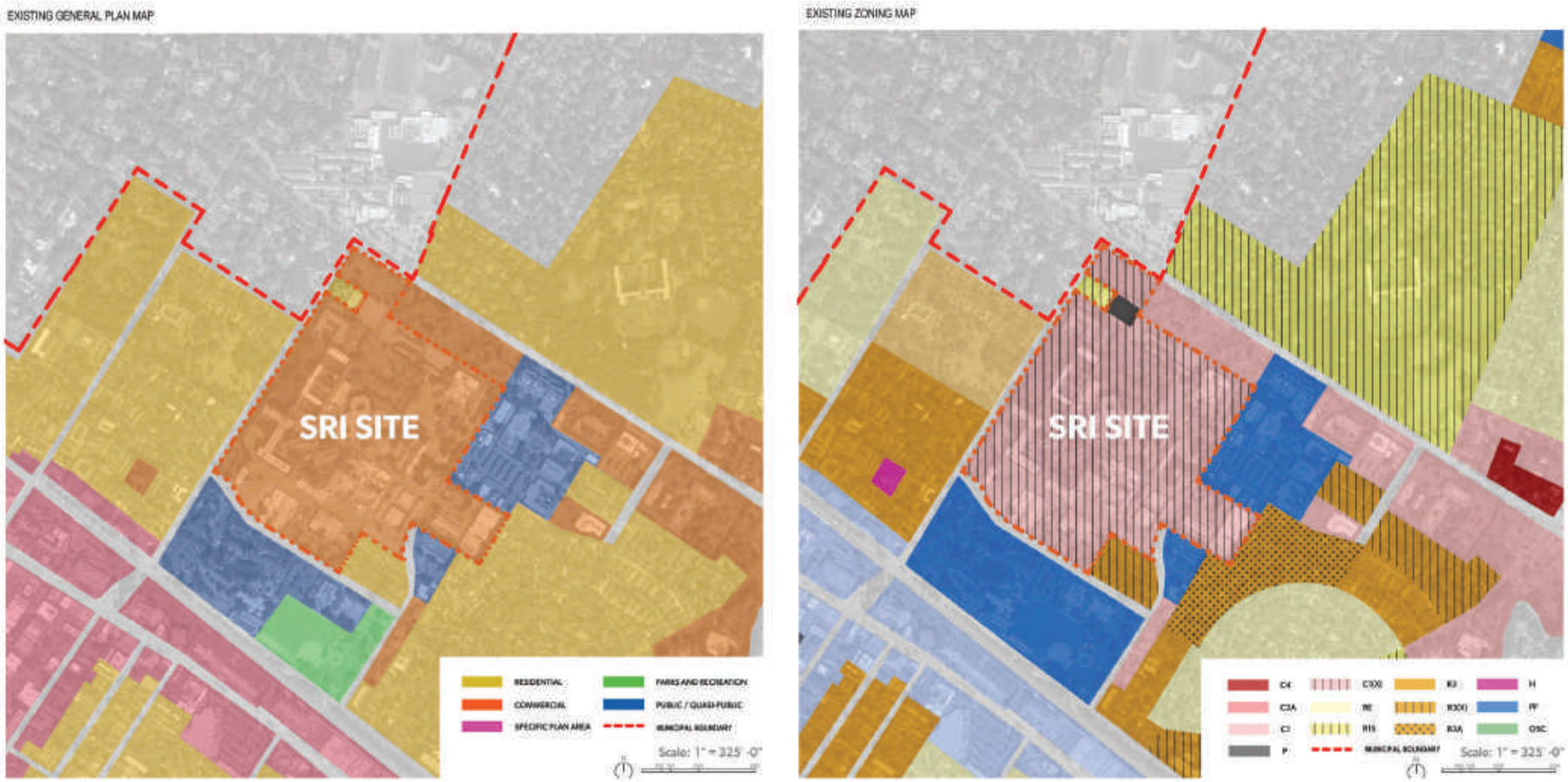
The Project Site also includes a cogeneration plant that serves the existing SRI International Campus. The 6-megawatt natural gas power facility currently generates power and steam energy for the Project Site. Generated power is delivered to a substation where it interconnects with the electric utility company and gets distributed to campus buildings. Generated steam is distributed throughout the SRI International Campus for various uses, including the production of chilled water through centralized steam absorption chillers for building cooling, building heating systems, hot-water heat-exchange systems, and lab processes. During periods when the cogeneration plant is out of operation, steam is produced by an auxiliary boiler in the cogeneration plant. Alternative standby power is delivered to the SRI International Campus by the electric utility provider.

Existing General Plan and Zoning Designations

The current city General Plan, most recently amended in January 2023 and January 2024 to incorporate updates to the Housing Element and Land Use Element, and city Zoning Ordinance designations for the Project Site are discussed in more detail below. Figure 2-3 depicts the current designations. In addition, the Project Site is currently subject to prior entitlements approved in 1975 and subsequently amended.

General Plan

The current city's General Plan Land Use Element designates the Project Site as Commercial—specifically, Professional and Administrative Offices. A range of uses are permitted, including professional, executive, general, and administrative offices; R&D facilities; residential uses; public and quasi-public uses; and similar uses. The maximum residential density is 30 dwelling units per acre. Nonresidential uses are limited to a total floor area ratio (FAR) of 0.40.



Source: Studios Architecture, OJB, Kier+Wright, 2022.

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Figure 2-3
Existing General Plan Land Use and Zoning
Parkline

Zoning Ordinance

The Project Site is currently zoned C-1(X) (Administrative and Professional District, Restrictive) and a small portion of the Project Site at the northeast corner is zoned P (Parking). There are no uses permitted as of right in the C-1 district. Conditionally permitted uses include professional, executive, and administrative offices; research facilities; multiple dwellings; public utilities; and "special uses."

For nonresidential development, the maximum building coverage is 0.40, the maximum FAR is 0.30 (lower than what is permitted under the current city General Plan), and maximum height is limited to 35 feet. For residential development, the maximum building coverage is 0.50 and maximum height is limited to 40 feet. For development with mixed nonresidential and residential uses, the maximum building coverage is 0.55 and maximum height is limited to 40 feet. For development with mixed nonresidential and residential uses or a development with only residential uses, open space must occupy at least 25 percent of a site. The maximum density is 30 dwelling units per acre. The FAR for multiple dwelling units shall increase on an even gradient up to 90 percent for 30 dwelling units per acre. The maximum floor area ratio shall be allowed when the maximum number of dwelling units is proposed, even if less than 30 dwelling units per acre. In a mixed nonresidential and residential development that provides the maximum number of dwelling units, the combined maximum FAR is 1.20.

Construction of any new buildings incorporating residential uses in the C-1 district must adhere to (i) residential design standards set forth in Section 16.30.040 related to building setbacks and projections within setbacks, façade modulation and treatment, building profile, height, exterior materials, building design, open space, access and parking, and lighting, subject to architectural control established in Section 16.68.020, and (ii) residential green and sustainable building provisions set forth in Section 16.30.050 related to green building, energy, water use efficiency and recycled water, waste management, and bird-friendly design.

The "X" zoning designation reflects the additional controls that apply to the site under the Conditional Development Permit (CDP), as discussed in more detail below.

The P district permits landscaped off-street parking lots. There are no conditional uses allowed (i.e., subject to a use permit) in the P district. Where abutting a residential area, development regulations for the P district state that parking areas shall be screened by a 6-foot-high solid fence or wall and protected by a planter or bumper. Plans should be approved by the city engineer prior to development.

Existing Entitlements

The Project Site is currently governed by a CDP approved in 1975 and subsequently amended in 1978, 1997, and 2004. The CDP permits up to 1,494,774 sf of gross floor area but restricts the maximum building coverage to 40 percent of the site, maximum height to 50 feet, and maximum number of employees to 3,308, along with other restrictions. Residential uses are conditionally allowed in the C-1 district, although the CDP does not currently authorize residential uses.

2.2 Project Objectives

Section 15124(b) of the California Environmental Quality Act (CEQA) Guidelines requires a project description to contain a clear statement of project objectives, including the underlying purpose of the project. The underlying purpose of the Proposed Project is to redevelop the outdated SRI International

Campus by creating a revitalized transit-oriented, mixed-use campus adjacent to city hall and proximate to the city's downtown area and Caltrain station. The Project Sponsor has also identified the following objectives for the Proposed Project:

- Redevelop an aging R&D campus into a financially viable residential and commercial mixed-use neighborhood that cohesively balances office/R&D uses, multifamily residential uses, open space, and community-serving uses, with no increase in office/R&D square footage compared to existing conditions.
- Increase the city's housing supply and progress towards its state-mandated housing goals by providing at least 550 new housing units with a mix of types and sizes, including at least 15 percent for low- and moderate-income households, consistent with the city's Below Market Rate Housing Program, and dedicate a portion of the Project Site to an affordable housing developer for future development of up to approximately 100 units of affordable or special-needs housing.
- Ensure the continuity of SRI International's on-going use of existing satellite transmission equipment on-site, which requires unobstructed sightlines to the horizon to ensure no disruption to ongoing research operations.
- Replace obsolete and unsustainable commercial buildings with new state-of-the-art, highly sustainable commercial buildings with flexible floor plates that can accommodate a variety of office and/or R&D tenants.
- Orient new office/R&D buildings in a configuration that leverages operational efficiencies, such as the ability to share amenity spaces, parking, and ensures that the business and security needs of future commercial tenants are met.
- Improve bicycle and pedestrian connectivity and safety within and between the site and adjacent neighborhoods to promote an active public realm and establish interconnected neighborhoods.
- Create separation between the residential uses along Laurel Street and the office/R&D uses by providing independent vehicular access, circulation, and parking/loading areas.
- Provide accessible open space throughout the Project Site, including a large central commons area adjacent to the office/R&D buildings, to create a vibrant park-like setting that emphasizes the preservation of heritage trees where feasible, encourages passive and active recreational activities and promotes health and wellness for residents, tenants, and visitors.
- Use advances in architectural, landscape design, and site planning practices to create distinctive and viable residential and commercial areas within the Project Site that complement the adjacent neighborhoods.
- Incorporate complementary community recreational and retail uses that encourage an active and healthy lifestyle for residents, tenants, and visitors.
- Create a thriving transit-oriented development that facilitates efforts to reduce vehicle miles traveled by siting commercial and residential uses near existing transit corridors and public transportation facilities, and promoting alternatives to automobile transit through implementation of TDM, new bicycle/pedestrian access, and ease of movement between buildings.
- Support local and regional efforts to reduce greenhouse gas emissions, respond to climate change, and promote energy and water efficiency and resource conservation by incorporating sustainable design features and resource conservation measures that align with the city's goals.

- Decommission the existing onsite cogeneration plant to achieve significant reductions in greenhouse gas emissions within the city and region.
- Generate a positive fiscal impact on the local economy and revenue for the city's general fund and other public agencies through enhancing property values, increasing property tax revenue, creation of jobs, and payment of development fees.
- Ensure the flexibility to phase construction of the Proposed Project in response to market conditions.
- Bolster the city's reputation as a hub for technological advancement and innovation and recognize SRI International's contributions to society and the growth of Silicon Valley.
- Facilitate the city's desire to implement an emergency water supply and storage project on the Project Site, as feasible, to increase Menlo Park's resilience in the event of an emergency.

2.3 Project Characteristics

The Proposed Project would redevelop the SRI International Campus by creating a new office/R&D campus with no increase in office/R&D square footage; up to 550 new dwelling units within a new residential area at a range of affordability levels; new bicycle and pedestrian connections; and open space. The Proposed Project would organize land uses generally within two areas within the Project Site, consisting of 1) an approximately 10-acre residential area in the southwestern portion of the Project Site and 2) an approximately 53.2-acre office/R&D area in the remainder of the Project Site. The Proposed Project would demolish 35 of the 38 existing buildings on the Project Site. In addition, a 6-megawatt natural gas cogeneration plant that generates power and steam energy for the SRI International Campus would be decommissioned and demolished. The entire Project Site would be converted to an all-electric design with limited exceptions for operational energy needs, consistent with the intent of the city's adopted Reach Code.[5] Existing Buildings P, S, and T, comprising approximately 286,730 sf, would remain onsite and continue to be operated by SRI International and its tenants.[6] In total, the Proposed Project would result in approximately 1,768,802 sf of mixed-use development, including approximately 1,093,602 sf of office/R&D uses and approximately 675,200 sf of residential uses. Approximately 26.4 acres of open space areas and supporting amenities would be developed at the Project Site, including a network of publicly accessible bicycle and pedestrian trails, open spaces, and active/passive recreational areas that would be available to the public. In addition, the Project Site would include community-oriented amenities, such as a community playing field and a children's playground area.

As discussed under "Buildout Scenarios" in this chapter, because future commercial tenants in the office/R&D area are not yet known, proposed commercial buildings in the office/R&D area are designed to accommodate either office uses, R&D or life science uses, or a combination of both. Therefore, the EIR evaluates two buildout scenarios within the office/R&D area: a 100 percent office scenario and a 100 percent R&D scenario.

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[5] In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

[6] As discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*, SRI International is proposing to construct tenant improvements at Buildings P, S, and T, as well as related site utility work, to modernize the buildings for SRI International's near-term and ongoing operations. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project, and are included as a cumulative project for purposes of this EIR analysis.

Table 2-2 summarizes the development summary for the Proposed Project. Figure 2-4 depicts the conceptual site plan for the Proposed Project.

Table 2-2. Proposed Project Overall Development Summary

Development Intensity	
Total Project Site Area	2,754,035 sf (63.2 acres)
Project Site FAR (Retained + Proposed)	0.75 FAR[a]
Building Area	
Residential Area	675,200 sf (550 dwelling units[b])
Office/R&D Area	1,380,332 sf
• Existing Buildings to Be Retained Under Proposed Project (Buildings P, S, and T)	• 286,730 sf
• Total Proposed Office/R&D Buildings and Amenity Buildings	• 1,093,602 sf
Total Mixed-Use Development (Existing to Be Retained + Proposed)	*2,055,532 sf*
Total Proposed Development	***1,768,802 sf***

Source: Lane Partners and SRI International, 2024

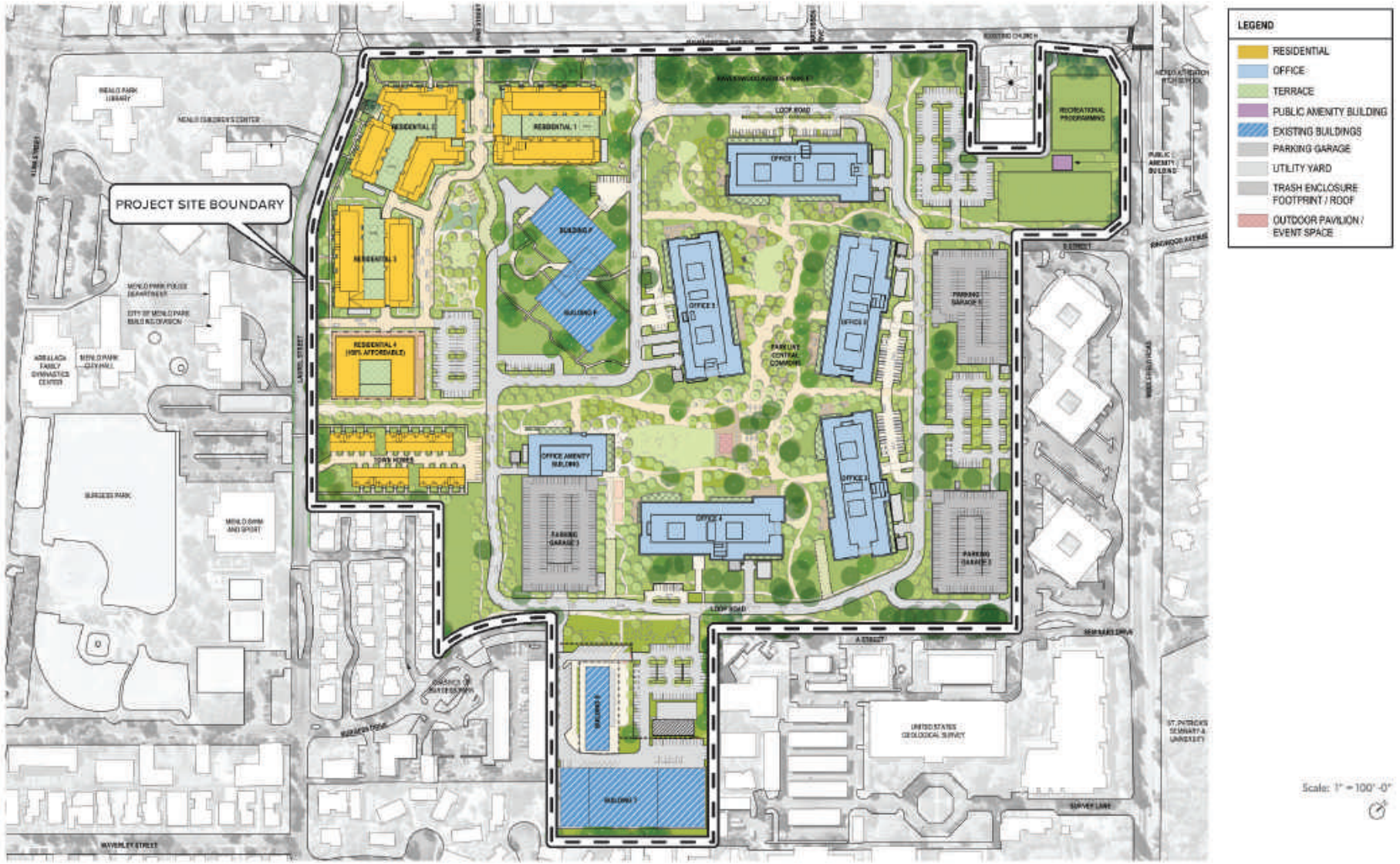
Notes:

a. Residential square footages may vary and inclusive of the 100 affordable housing buildings. FAR is also inclusive of existing Buildings P, S, and T square footages.

b. Inclusive of the 100 units to be developed by an affordable housing developer on the approximately one-acre proposed land dedication within the Project Site.

Buildout Scenarios

The proposed buildings in the office/R&D area would be designed to accommodate either office or R&D uses or life science, or a combination of both. R&D uses are anticipated to include the innovation of a broad range of new products and services while life science uses (as a subset of R&D uses) would focus on products involving innovations related to plants, animals, and human life. Generally, R&D uses may involve the study, testing, engineering, design, analysis, or experimental development of products, processes, or services related to current or new technologies, including basic and applied research, as well as development research across a wide range of disciplines including material science (e.g., new uses for existing materials and polymers), medical and pharmaceutical, software and technology, manufacturing, and chemistry. R&D uses may include small capacity manufacturing, fabricating, processing, and assembling activities necessary to test products and processes under development, as well as storage of products or materials, or similar related activities, where such activities are accessory (secondary) to research and development activities. R&D uses may include laboratory and/or office type settings, depending on specific tenant needs. The buildout of the Office/R&D buildings would depend on a number of factors, including market conditions, availability of financing, and tenancy requirements.



Source: Studios Architecture, OJB, Kier+Wright, 2024.

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Figure 2-4
Conceptual Site Plan for the Proposed Project
Parkline

Because future commercial tenants are not yet known, the EIR will evaluate two buildout scenarios: a 100 percent office scenario and a 100 percent R&D scenario. This will ensure the EIR evaluates the Proposed Project's maximum potential impact and any future commercial tenant mix is within the scope of the EIR analysis. While the proposed commercial buildings could accommodate office uses and/or R&D/life science uses, this would nonetheless result in the same buildout square footages, site plan layout, building heights, and parking spaces. The key differences between the buildout scenarios would be daily vehicle trip generation, employment density (as discussed in detail under "Project Site Occupancy" in this chapter), and certain limited operational or equipment differences (e.g., generator capacity).

The buildout scenarios are discussed in more detail under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis.*

Land Use and Zoning

The current land use and zoning designations for the Project Site cannot accommodate a range of uses and intensities that would be appropriate for a modern mixed-use development. The Proposed Project would be designed with an integrated master plan, with all parcels held in common ownership, allowing for a continuous and complementary site plan and program. To achieve this goal, the Proposed Project would be subject to site-specific, tailored land use controls, including development standards, to guide development on the Project Site and reflect the Proposed Project's specific objectives, through land use approvals by the city. General Plan amendment(s), zoning ordinance and a zoning map amendment(s) would enable the Proposed Project.

It is anticipated that the Proposed Project would be implemented through a Project-level permit (e.g., a CDP) that addresses site-specific topics, such as public works requirements, open space improvements, rules for modifications, design controls, phasing, mitigation measures, operational requirements, and other conditions of approval. The CDP would also regulate density, intensity, and land uses for the Proposed Project.

General Plan Amendment

Amendment(s) to the city General Plan would be required to allow the Proposed Project. As amended, it is anticipated that the applicable General Plan designation would apply to the entire Project Site and allow the proposed residential and non-residential development for the Proposed Project and Project Variant. Further details related to the proposed city General Plan amendment(s) will be developed through further review and coordination with the city.

Zoning Amendment and Rezoning

Amendment(s) to the city's zoning ordinance would be required to allow the Proposed Project. It is anticipated that a zoning ordinance amendment would create one new mixed-use, transit-oriented zoning district and establish discrete development standards including permitted uses, density, lot size and dimensions, building height and open space. It is anticipated that the zoning ordinance amendment would also regulate components such as design standards, transportation demand management (TDM) plans, LEED standards, use of renewable energy, water efficiency, waste management, and bird-friendly design. Details related to the proposed zoning amendment would be developed through further review and coordination with the city.

An amendment to the city's zoning map would be required to apply the new district to the Project Site. The Project Site is also anticipated to include a conditional development "X" overlay to facilitate development flexibility and identify Project Site-specific topics, as needed through issuance of a conditional development permit.

Proposed Development

As discussed in more detail below, the Proposed Project would organize land uses generally into two areas within the Project Site, including:

- An area devoted to residential uses in the southwestern portion of the Project Site; and
- Office/R&D uses in the remainder of the Project Site.

Residential Area

The residential units would be provided in three multi-family residential buildings (Buildings R1, R2, and R3) and townhomes (TH1). The proposed dwelling units would consist of studio units and one-, two-, and three-bedroom units that would be distributed throughout four residential multi-family buildings and 19 townhouses. The 450 multi-family dwelling units would include multi-family rental units located within three buildings (totaling 431 dwelling units) and 19 dwelling units in the townhouses. Consistent with the city's inclusionary housing requirements, 15 percent of these dwelling units (68 dwelling units) would be below-market rate (BMR) housing. Under the city's BMR requirements, the overall income mix for the 15 percent inclusionary units needs to average 80 percent AMI (low income), with the option to provide a range of BMR income levels that achieves a low-income average. The city's BMR requirements also specify that the BMR units generally need to reflect the overall type and size of the market rate units. Beyond the BMR requirement, an additional 100 dwelling units to be developed by an affordable housing developer would all be affordable and located within one building. The multi-family residential buildings would be between three and six stories tall (approximately 45 to 85 feet); the townhouses would be two stories tall (approximately 25 feet). Table 2-3 summarizes the buildout of the area devoted to residential uses.

Table 2-3. Proposed Residential Use Buildout Summary

Dwelling Unit Type	Area (sf)	Number of Dwelling Units	Percent of Dwelling Units
Proposed Market Rate Dwelling Units[7]			
Studio/1 Bath	500 to 600	75	16.7%
1 Bedroom/1 Bath	650 to 800	198	44.0%
2 Bedroom/2 Bath	1,000 to 1,200	144	32.0%
3 Bedroom/2 Bath	1,300 to 1,550	14	3.1%
3 Bedroom/2 Bath (townhouse)	2,150 to 2,400	19	4.2%
Total Market Rate Dwelling Units	*518,599*	*450*	*100%*

[7] Of the 450 market rate dwelling units, 15 percent (or 68 dwelling units) would be affordable in accordance with the city's inclusionary housing requirements found at Menlo Park Municipal Code Section 16.96.020.

Dwelling Unit Type	Area (sf)	Number of Dwelling Units	Percent of Dwelling Units
Proposed Affordable BMR Dwelling Units			
Studio/1 Bath	500 to 600	20	20%
1 Bedroom/1 Bath	650 to 800	20	20%
2 Bedroom/2 Bath	1,000 to 1,200	30	30%
3 Bedroom/2 Bath	1,300 to 1,550	30	30%
Total Affordable BMR Dwelling Units	*156,601*	*100*	*100%*
Total Proposed Residential Uses	***675,200 sf***	***550 dwelling units***	***100.0%***
Source: Lane Partners and SRI International, 2023			

The area devoted to residential uses would be sited along Laurel Street and Ravenswood Avenue, proximate to the Caltrain station and downtown Menlo Park, to encourage public transit utilization by Project residents and visitors. The location of the residential area would also provide residents with access to retail establishments, restaurants, and other services along nearby El Camino Real and Santa Cruz Avenue, including existing public facilities such as Burgess Park and the Arrillaga Family Recreation Center. The two-story townhouses and residential open spaces would also be sited in the residential area between the Proposed Project's multi-family residential buildings and the Classics of Burgess Park single-family residential neighborhood to diversify the housing mix and provide a scaled transition from the new multi-family buildings to the existing single-family residences.

Approximately 3.7 acres of private-use open space and landscaping would be provided within the residential area. The three multi-family buildings would include private second-floor open spaces, which would be distributed throughout the buildings and available to occupants. These spaces would be improved with landscaping, special paving, and trellises. The first floors would open to private patios; the above-grade units would contain private balconies. The townhouses would incorporate private open spaces at the primary entrance to each unit. The design plans for the 100 affordable units have not yet been developed and thus the amount and location of private-use open space and landscaping is not known at this time.

Office/R&D Area

The 53.2-acre office/R&D area would include approximately 1,380,332 sf of office/R&D uses (accounting for existing buildings P, S, and T to be retained under the Proposed Project). The Proposed Project would result in approximately 1,093,602 sf of office/R&D uses, the same as the building area to be demolished under the Proposed Project. Accordingly, the Proposed Project would result in no increase in office/R&D square footage compared to existing conditions. Thus, as summarized in Table 2-4 below, the area devoted to Office/R&D use would include:

- Three existing buildings of approximately 283,730 sf to be retained and operated by SRI (Buildings P, S, and T);
- Five new office/R&D buildings of approximately 1,051,600 sf (Buildings O1, O2, O3, O4, and O5);
- One new commercial amenity building of approximately 40,000 sf; and
- One new community amenity building of approximately 2,002 sf.

Table 2-4. Proposed Office/R&D Use Buildout Summary

Building	Height[a]	Area (sf)
Existing Office/R&D Buildings to Be Retained Under Proposed Project		
Building P[b]	4 stories (61 feet)	183,423
Building S[b]	2 stories (29 feet)	21,241
Building T[b]	2 stories (30 feet)	82,066
Total Existing Buildings to Be Retained Under Proposed Project		***286,730***
Proposed Office/R&D Buildings		
Building O1	3 stories (60 feet)	184,000
Building O2	5 stories (92 feet)	227,300
Building O3	5 stories (92 feet)	227,300
Building O4	4 stories (76 feet)	229,000
Building O5	4 stories (76 feet)	184,000
Commercial Amenity Building	2 stories (35 feet)	40,000
Community Amenity Building	1 story (20 feet)	2,002
Total Proposed Office/R&D Uses		***1,093,602***
Total Buildings in the Office/R&D Uses (Existing to Be Retained + Proposed)		***1,380,332***

Source: Lane Partners and SRI International, 2024

Notes:

a. Heights are rounded to the nearest foot.

b. As discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*, SRI International is proposing to construct tenant improvements at Buildings P, S, and T, as well as related site utility work, to modernize the buildings for SRI International's near-term and ongoing operations. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project, and are included as a cumulative project for purposes of this EIR analysis. The square footages for Buildings P and S shown in this table represent existing square footage and do not reflect any changes associated with SRI International's proposed tenant improvements. If approved and constructed, the tenant improvements are anticipated to add approximately 3,000 sf to Building P and remove approximately 6,000 sf from Building S.

Office/R&D uses would be sited along Ravenswood Avenue, with multiple access points toward the center of the Project Site, providing separate access from the residential area. In addition, two entrances would be provided along Middlefield Road, one at Ringwood Avenue, and one at Seminary Drive. The office/R&D uses would not be accessible from Laurel Street.

Office/R&D Buildings. The Proposed Project would develop modern facilities to attract a variety of tenants. The five office/R&D buildings would range from 184,000 to 229,000 sf, with a maximum height of five stories. Combined, these buildings would have an area of approximately 1,051,600 sf. As discussed under "Buildout Scenarios" in this chapter, because future tenants in the office/R&D area have not yet been identified, the EIR will evaluate two buildout scenarios: a 100 percent office scenario and a 100 percent R&D scenario. The proposed buildings in the office/R&D buildings would be designed to accommodate either office or R&D/life science uses, or a combination of both.

Laboratories associated with R&D/life science uses are categorized by biosafety levels (BSLs) 1 through 4. It is anticipated that the Proposed Project could accommodate BSL-1 or BSL-2 laboratories, as BSL-3 and BSL-4 laboratories are less common (in fact, there are only four operational BSL-4 labs in the United

States).[8] While laboratory uses in Menlo Park have typically not been regulated by its zoning ordinance, the Proposed Project is proposing a new mixed-use, transit-oriented zoning district allowing for office, commercial, R&D and residential uses in proximity to each other, which zoning could address BSLs for laboratory uses. Regardless of the BSL, the Proposed Project would comply with required federal, state, and local standards, including Title 8 of the California Code of Regulations that establishes Cal/OSHA minimum occupational safety & health standards. Furthermore, in accordance with standard industry practice, the Proposed Project would also meet relevant Biosafety in Microbiological and Biomedical Laboratories (BMBL) and National Institute of Health (NIH) guidelines. Refer to Section 3.13, *Hazards and Hazardous Materials*, for further discussion of potential impacts related to laboratory operations.

Commercial Amenity Building. The area of the Project Site devoted to Office/R&D uses would include a two-story campus-serving commercial amenity building of approximately 40,000 sf. This building would serve as a social hub for workers in the office/R&D area. The first floor would include a full-service café with kitchen, servery, and dining areas, which would be publicly accessible. The main entrance on the first floor would face north, with the food service facility; large, open dining areas; and adjacent exterior decks extending to the north and east toward a major landscaped gathering space. The second floor may include supportive commercial amenities such as a fitness center or tenant conference area. Two exterior decks would be oriented to the north and east.

Community Amenity Building. The area of the Project Site devoted to Office/R&D uses would include a one-story community amenity building of approximately 2,002 sf. The community amenity building would be located on the northeast corner of the site, adjacent to a proposed recreational field. This building would include community-serving retail uses, which may include a bicycle repair shop and a juice bar; and publicly accessible restrooms.

Overall Site Design and Open Space

Site Design and Grading

The Proposed Project includes a network of publicly accessible bicycle and pedestrian trails, parks and open spaces, and active/passive recreational areas that would be available to the public. Grading on the Project Site would be designed to protect existing heritage trees to the extent feasible while balancing the required earthwork to limit the need to import or export fill to/from the Project Site. Grading would generally align with existing grades, incorporate gentle slopes, raise first-floor elevations to allow drainage to and within landscaped areas and minimize impacts on pedestrian gathering spaces and walkways, slope the site toward the perimeter and use a loop road to manage stormwater drainage paths to the city's storm drain system, and allow internal roads and driveways to align with existing conditions at the perimeter of the Project Site along public streets. The construction of below-grade parking structures would generate approximately 230,000 to 255,000 cubic yards of earthwork export. The Project would require approximately 89,000 cubic yards of fill for the voids left by the existing basement on the buildings to be demolished. In addition, the existing SRI International Monument would be relocated onsite.

[8] National Institute of Allergy and Infectious Diseases. 2018. *The Need for Biosafety Labs*. Available: https://www.niaid.nih.gov/research/biosafety-labs-needed. Accessed: July 13, 2023.

Open Space and Landscaping

The proposed land use program, including site orientation, was developed to ensure that existing and new trees are distributed throughout the Project Site, which currently has approximately 1,340 trees. In total, the Proposed Project would remove approximately 708 trees, including approximately 198 heritage trees, and plant approximately 873 new trees, resulting in a total of approximately 1,505 trees on the Project Site, an overall increase in the number of trees compared to existing conditions.[9] The Proposed Project would also include approximately 26.4 acres of open space areas and supporting amenities that would be available to the public. Native drought tolerant plants would be planted throughout the Project Site. No invasive and/or noxious plant species would be used in the Proposed Project's landscape design plan. As discussed in more detail below, open space features would include the Ravenswood Avenue Parklet, Parkline Central Commons, and Parkline Recreational Area, among others.

Ravenswood Avenue Parklet. The 6-acre Ravenswood Avenue Parklet would be located on the northern edge of the Project Site, along Ravenswood Avenue. It would protect existing heritage trees by providing a landscaped and screened frontage area for the Project Site. A shared-use path would pass through the existing trees in the setback area and connect with and support bicycle and pedestrian circulation throughout the Project Site. This shared-use path would provide a safe route of travel and separate pedestrians and cyclists from automotive traffic along Ravenswood Avenue. Small-scale public spaces, such as picnic areas and exercise stations, would connect to the shared-use path, offering residents and neighbors an opportunity to move through the site, use active and passive areas, and enjoy a setting that features mature trees and natural landscaping. The Ravenswood Avenue Parklet would also lead to a large multi-use plaza that would open to the campus and provide a visual connection to the Parkline Central Commons.

Parkline Central Commons. The Parkline Central Commons would include a central open space of approximately 9 acres between the office/R&D buildings and amenities building. This common area would provide a variety of programmed open spaces, such as flexible-use lawn areas and a multi-use plaza that would accommodate gatherings. The Parkline Central Commons is anticipated to include an event pavilion and landscaped areas. In addition, smaller landscaped spaces for tenant use would be located adjacent to the buildings, which would provide outdoor seating and shaded tree groves. The primary pedestrian circulation paths would connect the edges of the Project Site to the Parkline Central Commons.

Parkline Recreational Area. The Parkline Recreational Area would provide a community recreational sports area of approximately 2 acres on the northeast corner of the Project Site, at the intersection of Ravenswood Avenue and Middlefield Road, adjacent and connected to the Ravenswood shared-use path. This open space area would support publicly accessible community activities within a recreational field, a children's play area, and other activities. In addition, a community amenity building (discussed above) would contain publicly accessible restrooms and possibly small retail spaces. Specific programming functions for these facilities would be determined in coordination with the city and through community outreach.

[9] Studios Architecture, OJB, Kier+Wright. 2024. *Tree Disposition Plan, Parkline*. May 31. Updated removal and planting information to be finalized prior to issuance of Tree Removal Permit(s) for development within the Project Site, subject to City review and approval.

Lighting and Building Design

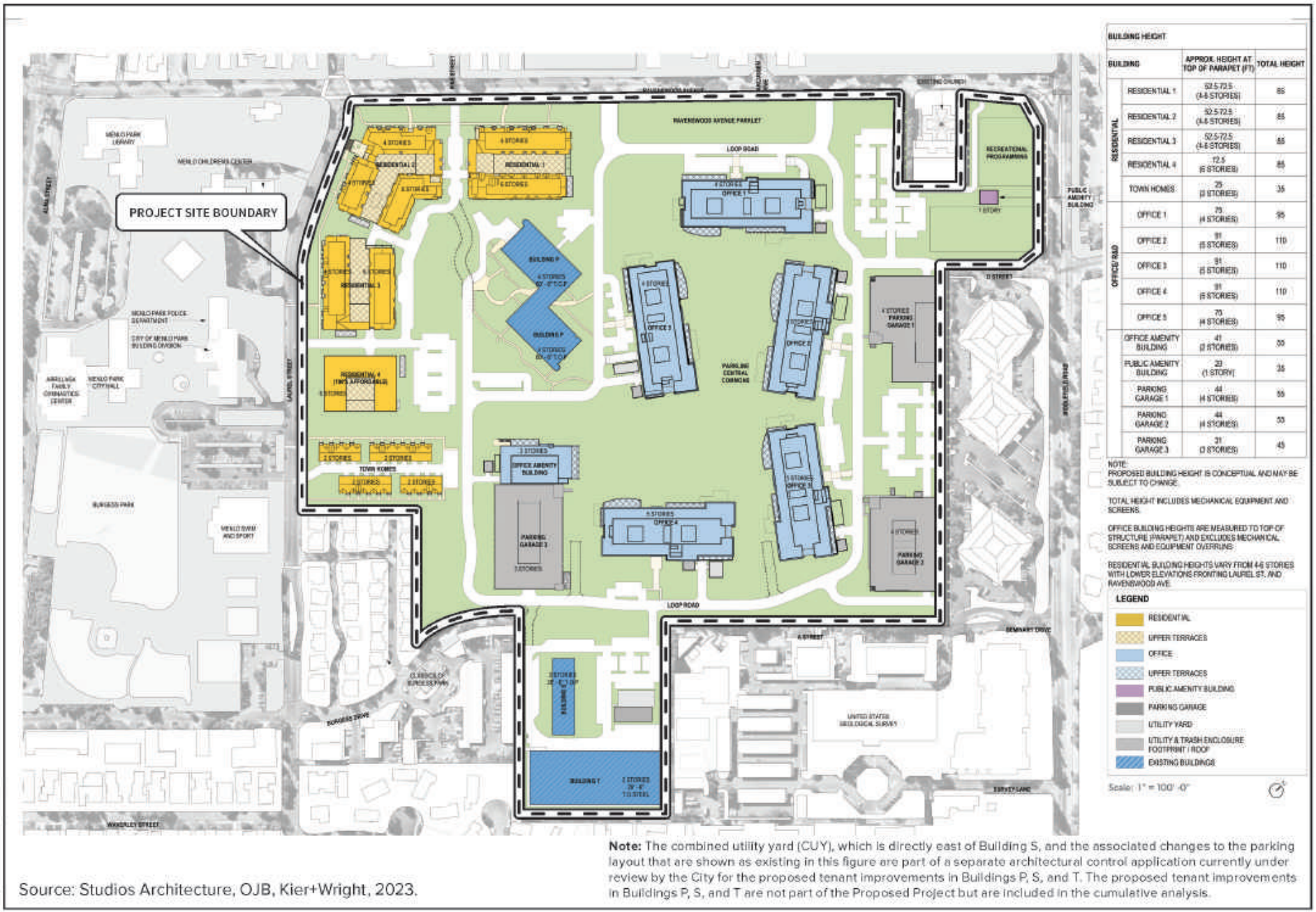
Lighting would comply with CALGreen and city lighting guidelines. All fixtures would be energy efficient and designed to reduce glare and unnecessary light spillage. Under CALGreen, the lighting proposed would be characterized as an "urban cluster" lighting zone (Level 2; LZ2). Therefore, the lighting strategy would comply with level 2 "moderate lighting" standards. To the maximum extent feasible, up-lighting (i.e., lighting that projects upward above a fixture) would be avoided. All lighting would be fully shielded to block illumination from shining upward above the fixture. Occupancy controls for non-emergency lighting as well as wayfinding and safety lighting for vehicles and pedestrians would be provided in accordance with Title 24. Nighttime lighting for safety and wayfinding would be provided along the perimeter of the site as well as internal circulation routes for bicyclists, and pedestrians, and vehicles. All buildings would include safety lighting along pathways and near entrances. All exterior fixtures would be energy efficient, color balanced, and shielded to block illumination from shining outward towards adjacent neighboring uses. Further, they would reduce glare and unnecessary light spillage while providing safe routes of travel for vehicles and pedestrians.[10]

Lighting in parking structures would be screened and controlled so as not to disturb surrounding properties while ensuring adequate public security. The specifics regarding each building's architectural design and configuration within the Project Site would be determined through the city's architectural control (i.e., design review) process, as set forth in the Proposed Project entitlements. In connection with this review, the city will assess whether the final design and configuration comply with Proposed Project entitlements and whether they are within the scope of this EIR. The current conceptual building design for the residential area and the office/R&D area are discussed in more detail below. Figure 2-5 depicts the proposed building heights for the Proposed Project.

Residential Area. The four multi-family residential buildings would be between three and six stories tall (approximately 45 to 85 feet). Private second-floor open spaces would be distributed throughout the market rate housing buildings and would include landscaping, special paving, and trellises. The first floors would open to private patios; above-grade dwelling units would have private balconies. The townhouse buildings would be two stories tall (approximately 25 feet), providing a scaled transition from the new multi-family buildings to the existing single-family residences. The new multi-family buildings would be set back from Laurel Street and Ravenswood Avenue to preserve existing heritage trees and incorporate bicycle and pedestrian connections. The exterior design of buildings within the residential area would be mission-style architecture, which is drawn from key precedents in Menlo Park. Primary exterior materials would consist of light-tone cement plaster, wood trellises and other detailed features, dark-frame metal sash windows, and Spanish-tile roofs.

Office/R&D Area. The office/R&D buildings would range from three to five stories (approximately 60 to 92 feet). The floor-to-floor heights (an average of 16 feet per floor) would provide vertical flexibility for office, R&D, and life science tenants. Maximum building heights would be 110 feet, inclusive of mechanical screens and equipment. Main entrances would be clearly defined. Open spaces for first-floor tenants could be used for informal meetings. Above-grade decks would be integrated into the building design to create human-scale elements, reduce massing, and integrate indoor/outdoor workspaces. The exterior design would incorporate horizontal elements to provide shade, energy-efficient wall and glazing systems, and sustainable materials. The primary exterior building materials would complement the existing site context. Exterior cladding systems include terracotta rainscreens, glass-fiber reinforced concrete, metal panels, and stone and other natural materials.

[10] LUMA Lighting Design. 2023. *Parkline Site Lighting: Draft EIR Lighting Report*. July 7, 2023.



Source: Studios Architecture, OJB, Kier+Wright, 2023.

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

ICF

Figure 2-5
Conceptual Building Height Plan for the Proposed Project
Parkline

The parking garages in the office/R&D area would be sited to maximize the retention of existing heritage trees and provide convenient access to the buildings. These structures would range from three to four stories (approximately 31 to 44 feet), yielding four to five levels of parking. Architecturally, the parking garages would be designed to be compatible background buildings to the buildings in the office/R&D area. Exterior cladding would consist of cementitious or metal panels. Metal trellises, panels, or similar devices would be used to visually screen view to garage interior. Elevator lobby and stair elements would be emphasized for clear wayfinding. Landscaping and other treatments would be incorporated to screen the parking garages from view. Garage façades would be composed of materials that would be compatible with the overall architecture of the Project Site. The amenity buildings would be one or two stories (approximately 20 to 30 feet). The two-story commercial amenity building would be constructed out of mass timber, with exterior patios on the first floor and exterior decks on the second floor. The building's exterior would also contain large glass panels to emphasize views and indoor-outdoor connectivity. The community amenity building would be one-story and contain some retail functions and other support facilities available to the public. Exterior materials would consist of wood or cementitious cladding.

Site Access

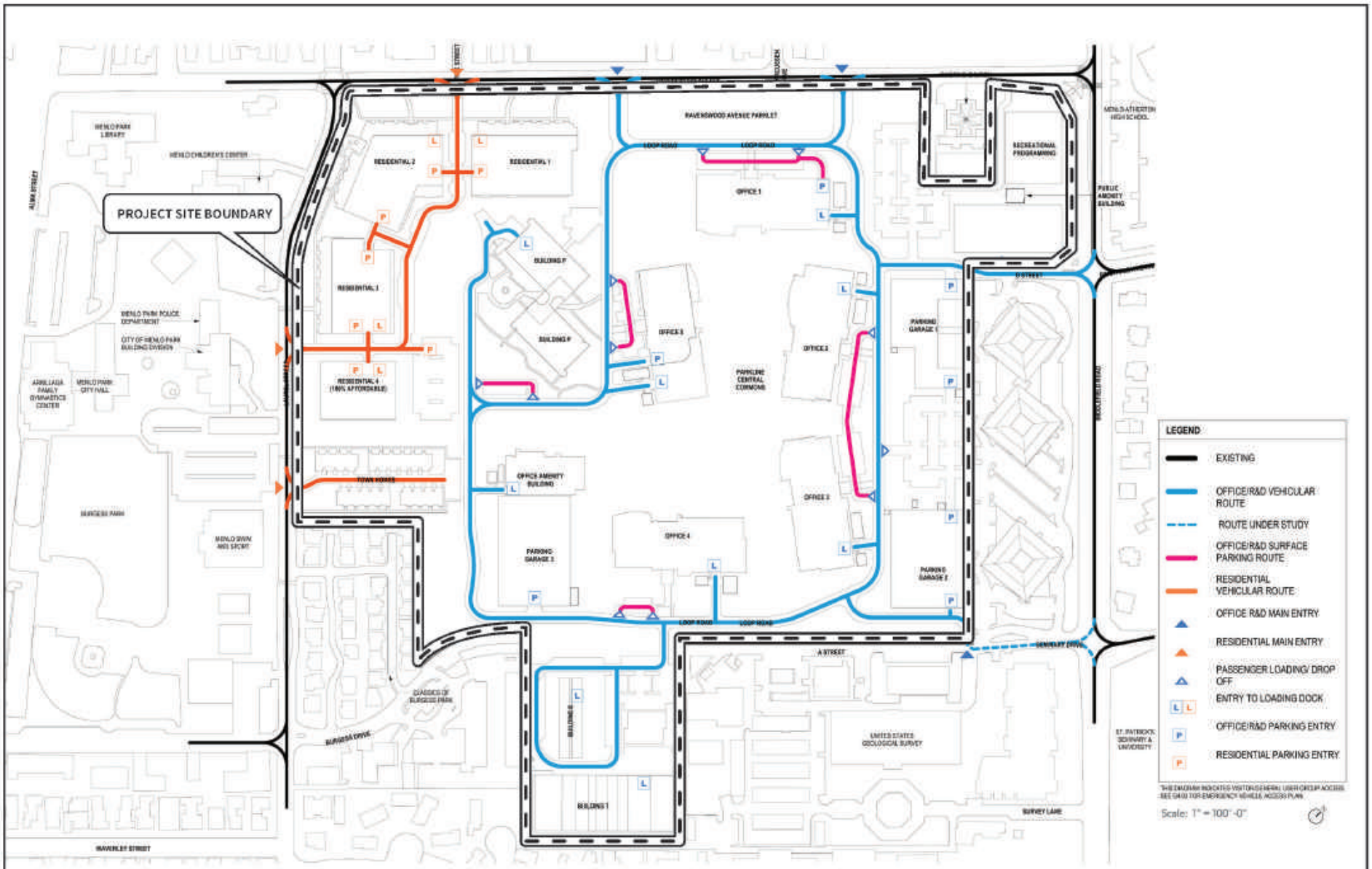
The Project Site fronts four roadways: Ravenswood Avenue, Middlefield Road, Laurel Street, and, partially, Burgess Drive. Ravenswood Avenue and Middlefield Road are minor arterials within the city that provide local access and crosstown circulation. Laurel Street provides access to the Menlo Park Civic Center, which is near Ravenswood Avenue; south of the civic center, Laurel Street is a neighborhood collector street. Burgess Drive provides access to the Classics of Burgess Park neighborhood, a West Bay Sanitary District facility, and the city of Menlo Park Corporation Yard. As discussed in more detail below, the Project Site would be connected to the surrounding roadway network, which serves private vehicles, emergency vehicles, bicycles, and pedestrians.

Vehicular Access

Figure 2-6 depicts the proposed vehicular circulation plan for the Proposed Project, which is designed to achieve the following key objectives:

- Create separation between the residential area and the office/R&D area by providing independent vehicular access and circulation within each area.
- Create publicly accessible but privately owned and maintained onsite roads to manage internal vehicular circulation and access to new buildings as well as loading and parking areas.
- Restrict vehicular circulation to and from Laurel Street related to the office/R&D area.
- Provide adequate emergency vehicle access throughout the Project Site, including improved emergency vehicle connectivity for surrounding areas.

Within the office/R&D area, an internal loop road would be developed through the Project Site, providing vehicular access to each of the surface parking areas in front of the office/R&D buildings as well as access to loading and service areas and garages. Vehicular traffic on this loop road would be separated from vehicles on the residential area access road to minimize vehicular ingress and egress at Laurel Street. The loop road in the office/R&D area would connect to the residential area's private access road via a limited-access path for emergency vehicles only. The office/R&D area's loop road would have designated Class II or Class III bicycle facilities in both directions. These new bicycle facilities would allow local residents



Source: Studios Architecture, OJB, Kier+Wright, 2023.

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Figure 2-6
Conceptual Vehicular Circulation Plan for the Proposed Project
Parkline

access when traversing southwest to northeast or around the Project Site. The new private access road would link the three residential buildings and provide access to surface parking areas, parking garages, and service areas.

In connection with the Proposed Project's entitlement review and process, all proposed driveway access points would be evaluated to determine if they warrant new signals or signage. As part of the Proposed Project, certain off-site improvements would be constructed, including a new traffic signal at the intersection of Seminary Drive and Middlefield Road, bike lane enhancements within Laurel Street and Burgess Drive, improvements along the Project frontage on Ravenswood Avenue, curb changes on Ravenswood Avenue to accommodate left turn pockets, and realignment of West 4th Street (which is within the Project Site), as further described below.

The Proposed Project would be required to comply with the city's TIA Guidelines, which require analysis of both vehicle miles traveled (VMT) and level of service transportation metrics independently, using the methodologies approved by the city for all projects, except those meeting established exemption criteria. Any off-site transportation improvements required for the Proposed Project would not be allowed to increase or induce VMT and would not be expected to require substantial work (e.g., major roadway widening). Rather, it is anticipated that the off-site transportation improvements would likely consist of improvements identified in the city's Traffic Impact Fee program. The Proposed Project would be required to contribute its fair share towards these improvements.

Residential Area. The residential area would have three access points that would serve the residential uses using existing and/or relocated driveways at the following locations:

- Ravenswood Avenue, toward the west side of the Project Site;
- Laurel Street, toward the middle of the residential area, for the multi-family residential buildings; and
- Laurel Street, toward the south end of the residential area, for the townhouses.

Within the residential area, an internal loop road (separate from the main loop road within the office/R&D area) would link the four main multi-family residential buildings to provide vehicular access to parking and loading areas as well as required emergency vehicle access. Proposed driveways along public streets would be designed per city standards.

Office/R&D Area. The office/R&D area would have four access points that would serve the commercial portion of the site by using existing and/or relocated driveways at the following locations:

- Ravenswood Avenue, toward the west end of the office/R&D area;
- Ravenswood Avenue, toward the east end of the office/R&D area;
- Middlefield Road at Ringwood Avenue; and
- Middlefield Road at Seminary Drive.

Within the office/R&D area, all of the access points listed above are existing, except for the new proposed entry point at Middlefield Road/Seminary Drive. This new driveway would use an existing right-of-way easement on the south side of the Project Site. The office/R&D area entry points would be designed to provide dispersed access along the north and east sides of the Project Site. Proposed driveways along public streets would be designed per city standards.

Loading Access

Within the residential area and the office/R&D area, designated off-street loading areas would be provided at each building. The loading areas would be designed to allow adequate circulation and access for trucks and other large vehicles.

Residential Area. Each of the four multi-family residential buildings would have separate, designated off-street loading areas. These would be used for major deliveries, occupant moves, and standard services, such as trash removal. These loading areas would extend from the proposed internal road system in the residential area. Loading areas would be visually screened with exterior walls and landscaping and would be secured with rolling doors after hours.

Office/R&D Area. Each office/R&D building would have an off-street loading area that would accommodate up to two 30- to 40-foot Class 3 commercial trucks. The loading areas would be visually screened from the loop road to the extent feasible, with exterior walls and landscaping, and would be secured with rolling doors after hours.

Emergency Vehicle Access

Interior streets in the residential area and the office/R&D area would be privately owned. An Emergency Vehicle Access Easement (EVAE), an internal circulation route, would be provided to allow access to existing and proposed buildings. Emergency vehicle access to the internal circulation route would be provided from Ravenswood Avenue, Middlefield Road, Laurel Street, and Burgess Drive. The final locations of the EVAEs would be subject to review and approval by the city and Menlo Park Fire Protection District.

Bicycle/Pedestrian Circulation

The Project Site is currently closed to the public and generally surrounded by a secured perimeter. The existing bicycle and pedestrian facilities are limited to on-street bicycle lanes and narrow sidewalks along the perimeter of the site's roadway frontages within the public right-of-way. The Proposed Project would eliminate the existing security perimeter and open the Project Site to the surrounding community by creating accessible and safe multi-modal facilities, allowing bicyclists and pedestrians to circulate throughout the Project Site. These bicycle and pedestrian facilities would be located along the perimeter of the Project Site and throughout the interior to create east–west bicycle and pedestrian linkages that would connect through the Project Site to Burgess Park, the future Caltrain undercrossing, and the Menlo Park downtown area. Figure 2-7 depicts the primary bicycle and pedestrian facilities for the Proposed Project, which include the following:

- **Class I Shared-Use Path adjacent to Ravenswood Avenue:** A Class I multi-use bicycle and pedestrian path would be located on the north side of the Project Site, along Ravenswood Avenue. This onsite path would create a protected option for bicyclists who currently use the bicycle lane on Ravenswood Avenue, which would remain in place. The Class I path would loop southward where it enters the Project Site, then continue toward the east, providing a crossing at Ringwood Avenue and Middlefield Road. This would ensure safe access to Menlo-Atherton High School and connect to the existing bicycle lanes on Middlefield Road.

Source: Studios Architecture, OJB, Kier+Wright, 2023.

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Figure 2-7
Conceptual Bicycle and Pedestrian Circulation Plan for the Proposed Project
Parkline

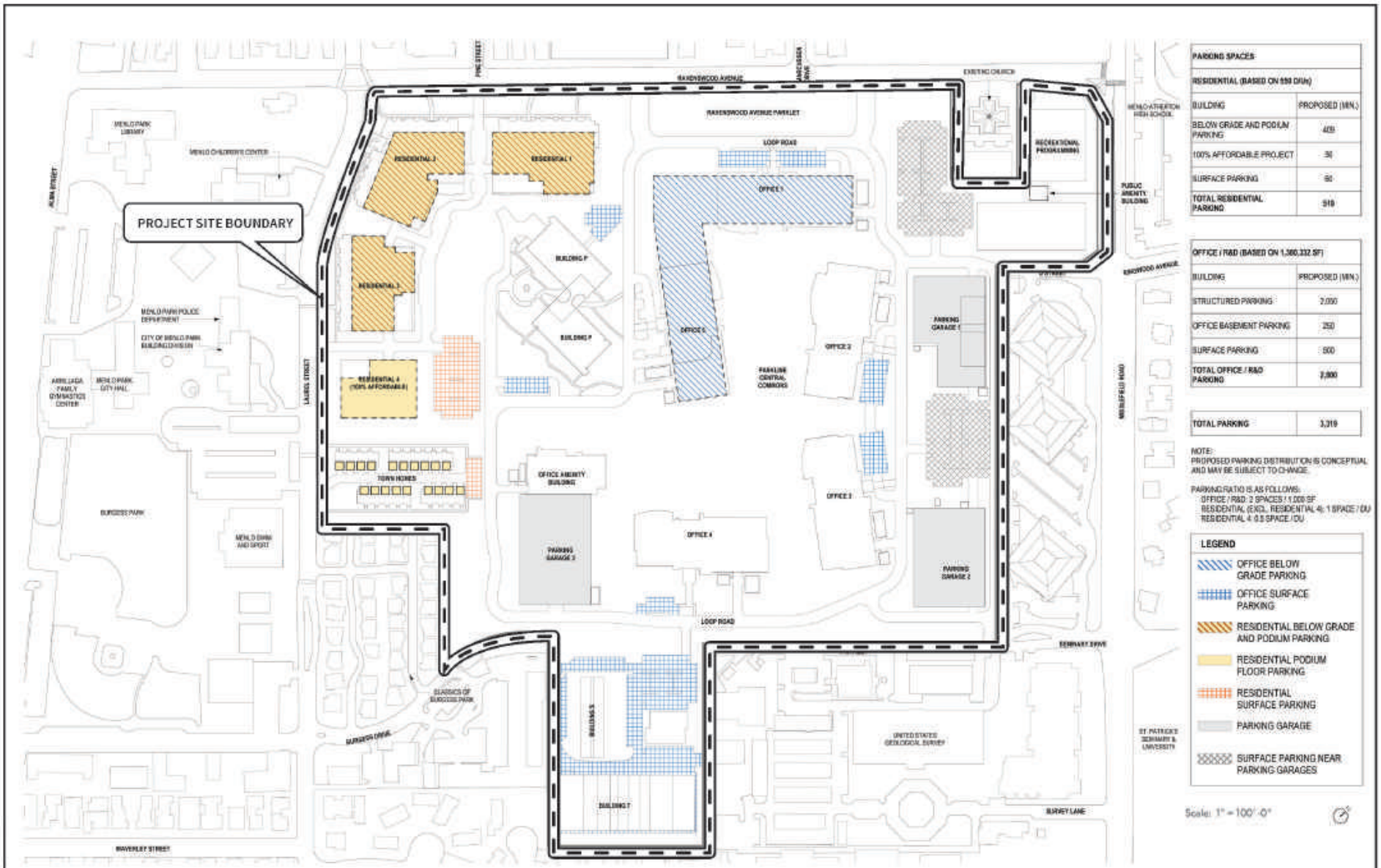
- **Internal Loop Road:** The proposed loop road would incorporate Class II or Class III bicycle facilities and pedestrian walkways into the overall design to accommodate and promote safe and convenient circulation and access to Menlo Park's existing bicycle facilities on the west, north, and east sides of the Project Site.
- **Class I Shared-Use Path along southern Project boundary:** A Class I multi-use bicycle and pedestrian path would extend from the west end of the project site at Burgess Drive and continue along the south side of the Project Site before connecting to Middlefield Road at Seminary Drive. To the west, the path would connect to a Class II or Class III bicycle facility along Burgess Drive to Laurel Street and connect to the future Caltrain undercrossing at El Camino Real and Middle Avenue.
- **Class IV Bicycle Pathway along Laurel Street:** A Class IV exclusive-use bicycle facility would extend along Laurel Street from Ravenswood Avenue to Burgess Drive. This bicycle facility is proposed on both sides of Laurel Street, and would be separated from vehicular traffic with a continuous raised curb.
- **Multiple Pedestrian Access Points:** The Project Site would be designed to promote pedestrian access from the northwest (i.e., to and from the Caltrain station) and provide multiple entrance points on the west, north, east, and south sides of the site.

Parking

Under existing conditions, onsite parking for the SRI International Campus is provided primarily in large surface parking areas, resulting in extensive impervious areas and limited opportunities for landscaping and accessible open space. The Proposed Project would demolish existing surface parking areas and provide three above-ground parking garages, below-ground parking garages, podium parking, and limited surface parking to provide parking for all Proposed Project uses. Figure 2-8 depicts the proposed parking plan for the Proposed Project. The majority of the onsite parking would be provided in above-grade parking structures that would be screened from public view. These would be located in areas used by commercial tenants, residents, and visitors. The Proposed Project would minimize the amount of impervious surface parking area as a strategy to increase the amount of pervious landscaped open space.

The Project Site's proximity to the Menlo Park Caltrain station, along with the Proposed Project's TDM plan (discussed under "Transportation Strategy" in this chapter), is projected to result in lower parking demands. Table 2-5 summarizes the proposed minimum parking ratios and parking spaces.

Residential Area. Within the residential area, approximately 519 parking spaces would be provided within a combination of below grade, podium garages and limited surface parking areas. For each of the four multi-family residential buildings (i.e., market rate and affordable BMR dwelling units), resident parking would be provided in above-grade, one-story podium garages. In addition to podium parking, below-grade parking would also be provided for the market rate multifamily residential buildings. All garages would have code-required electric-vehicle (EV) charging stations and monitored security systems. The garages would be flanked by dwelling units, thereby screening most of the parking from external view. Limited surface parking for short-term or visitor parking would be provided along the private streets adjacent to the multi-family residential buildings. Each of the townhouses would have parking spaces within private garages at each unit. These would be organized around a driving court. Visitor parking would be provided in an adjacent surface parking area.



Source: Studios Architecture, OJB, Kier+Wright, 2023.

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Figure 2-8
Conceptual Parking Plan for the Proposed Project
Parkline

Table 2-5. Proposed Project Parking Summary

Building	Parking Ratio	Parking Spaces
Residential Area		
Multi-family Dwelling Units	1 space per unit	431
Townhouses	2 spaces per unit	38
100 Percent Affordable BMR Dwelling Units	0.5 space per unit	50
Total Parking Spaces		*519*
Office/R&D Area		
Surface Parking		500
Parking Garage (PG) 1		690
PG2		710
PG3	2 spaces /1,000 sf	640
Building O1 (Below grade)		120
Building O5 (Below grade)		120
Total Parking Spaces		*2,800*
Total Proposed Parking Spaces		***3,319 spaces***

Source: Lane Partners and SRI International, 2023

Office/R&D Area. Within the office/R&D area, approximately 2,800 parking spaces would be provided in a combination of three above-ground structures, surface lots, and one-level underground garage below two of the new commercial buildings. The three office/R&D parking garages would be located in the east and west portions of the office/R&D area to provide convenient access to the new office/R&D buildings as well as existing Buildings P, S, and T. PG1 and PG2 would be four stories tall (approximately 44 feet), providing five levels of parking. PG3 would be three stories (approximately 31 feet), providing four levels of parking. The single-level underground parking garages would be located below Buildings O1 and O5. All garages would have code-required EV charging capacity and monitored security systems.

Public Parking/Shared Parking. Public parking for the recreational field and community building would be provided on evenings and weekends in the northeast parking lot. This parking area would meet certain ongoing private parking obligations, as reflected in an easement from the church property at 201 Ravenswood Avenue. Shared parking is also anticipated to be available for residential visitors on evenings and weekends in office/R&D area surface lots and structures.

Transportation Strategy

Transportation Demand Management

Direct access to SamTrans and Menlo Park community shuttle bus stops is available on Middlefield Road and Ravenswood Avenue. The Project Site is served by SamTrans routes 81, 82, 296, and 397 and Menlo Park community shuttle routes M1 and M4. In addition, a significant portion of the Project Site is within 0.5 mile of the downtown Menlo Park Caltrain station. Accordingly, the Proposed Project is considered a Transit Oriented Development (TOD) given the Project Site's proximity to the Menlo Park Caltrain station.

The Proposed Project would include a project-specific TDM plan[11] for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project, consistent with C/CAG's TDM policy requirements. For projects of this type, C/CAG requires a 25 percent trip reduction. For mixed-use projects such as the Proposed Project, this 25 percent trip reduction would be applied to the net trip generation after accounting for internalization. The Proposed Project's TDM plan would meet the C/CAG trip reduction requirement, as it would provide for at least a 25 percent trip reduction for the proposed residential uses and at least a 28 percent trip reduction for the proposed office/R&D uses. Overall, the Proposed Project would implement TDM measures that would complement its mixed-use campus land use program as well as its proximity to the downtown Menlo Park Caltrain station and access to SamTrans and Menlo Park community shuttle bus routes. The Proposed Project's TDM plan would be coordinated with the city through the review and entitlement process. Ultimately, it would include a list of TDM features and programs, an estimate of potential trip reductions, and a recommended monitoring program. The specific TDM measures are still preliminary, but it is anticipated that the Proposed Project would include a range of design features (e.g., onsite amenities to reduce trips offsite, carpool parking, long-term bicycle storage, showers and changing rooms) and ongoing operational programs (e.g., a commute assistance center/kiosk information) to achieve TDM mode-shift targets and thereby reduce the number of trips made by office/R&D tenants and residents.

Senate Bill (SB) 743 and Transit Priority Areas (TPAs)

In accordance with Senate Bill (SB) 743, aesthetics and parking shall not be considered in determining if a project has the potential to result in significant environmental effects, provided the project meets the following criteria under Public Resources Code Section 21099, *Modernization of Transportation Analysis for Transit-Oriented Projects*:

- The project is on an infill site.
- The project is in a Transit Priority Area (TPA).
- The project is a residential, mixed-use residential, or employment-center project.

An infill site is a lot located within an urban area that has been previously developed, or on a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from parcels that are developed with qualified urban uses (Public Resources Code Section 21099(a)(4)). A TPA is defined as an area within 0.5 mile of an existing or planned major transit stop, such as a rail transit station, ferry terminal served by transit, or the intersection of two or more major bus routes (Public Resources Code Section 21099(a)(7)).

The Project Site is a qualifying infill site that is currently developed with a mix of R&D, office, amenity, and supporting uses. The entire perimeter of the Project Site adjoins urban uses or public rights-of-way. The Metropolitan Transportation Commission (MTC) has identified locations of TPAs within the Bay Area.[12] Figure 2-9 depicts the Project Site as largely within a TPA due to its proximity to the Menlo Park Caltrain station, SamTrans bus stops, and Menlo Park shuttle stops. The Proposed Project meets the above criteria as a qualifying mixed-use residential project as the Project would demolish all existing uses on the Project

[11] Fehr & Peers. 2024. *Draft Parkline Transportation Demand Management (TDM) Plan.* January 5. The TDM plan is included as an appendix to the *Parkline Vehicle Miles Traveled Memorandum*, which is included in Appendix 3.13 of this EIR.

[12] Metropolitan Transportation Commission. 2021. *Transit Priority Areas*. Available: https://opendata.mtc.ca.gov/datasets/MTC::transit-priority-areas-2021-1/explore. Accessed: September 28, 2023.

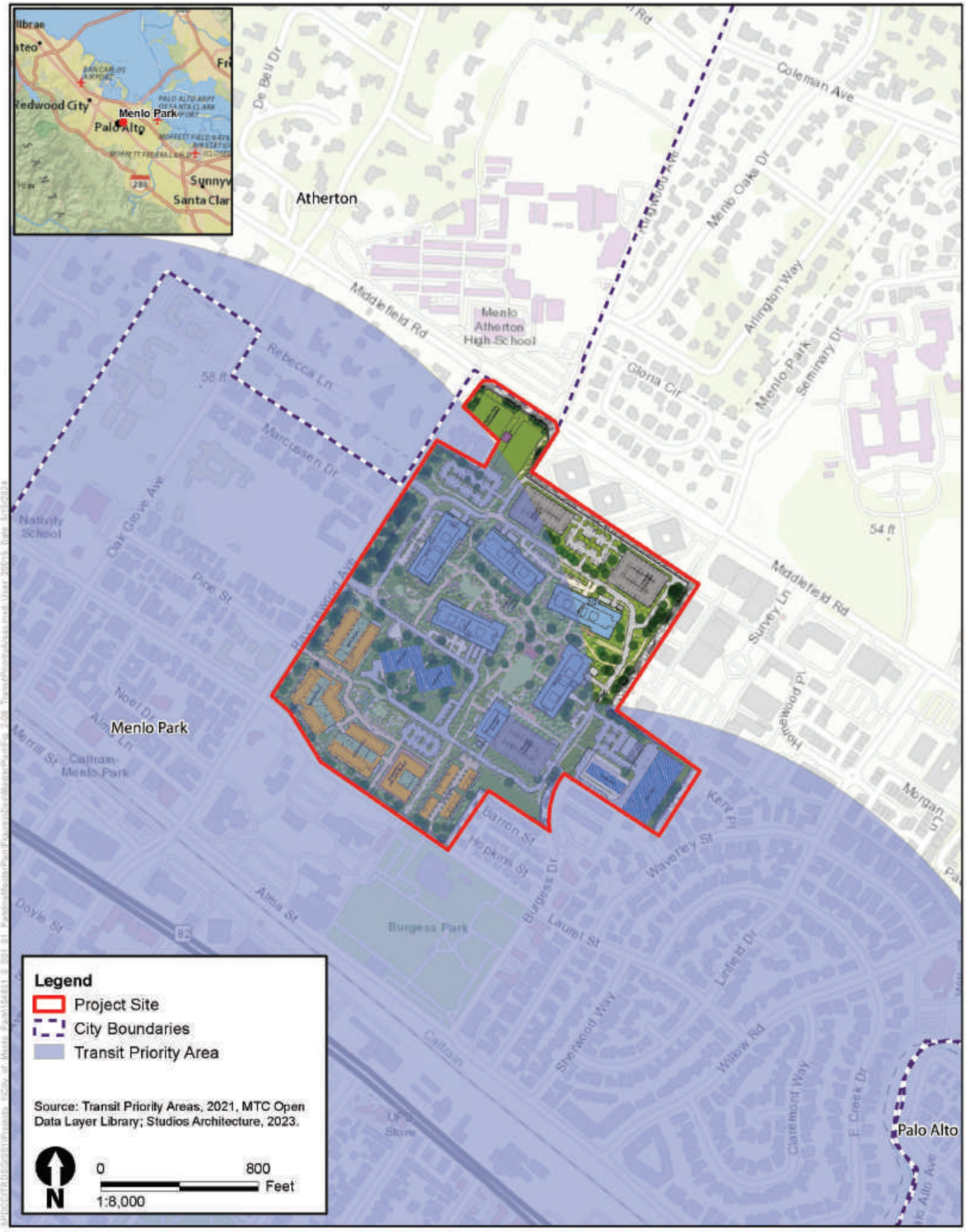

Figure 2-9
Transit Priority Area Map
Parkline

Site, except for existing Buildings P, S, and T, and would construct approximately 1,768,802 sf of mixed-use development, including approximately 1,093,602 sf of office/R&D uses and approximately 675,200 sf of residential uses. Because the Proposed Project meets the three criteria above, this EIR does not consider aesthetics or vehicular parking in determining the significance of impacts under CEQA. Appendix 3.1-1 of this EIR includes a discussion of the Proposed Project's potential aesthetics impacts for informational purposes.

Project Site Occupancy

Approximately 1,100 people are currently employed at the Project Site; no residents currently live at the Project Site. As discussed in more detail below, the Proposed Project would increase the residential population at the Project Site and would result in a net increase in the number of employees at the Project Site.

Residential Area

The residential uses at the Project Site would provide a mix of studio as well as one-, two-, and three-bedroom units and townhomes. Because of the proposed unit sizes, estimates for the onsite population reflect a lower average household size than the city average of 2.50 pph. Across all units, it is expected that the average household size would be approximately 2.37 pph. This would result in a total onsite population of approximately 1,305. Table 2-6 summarizes the onsite population by unit size. Approximately 14 employees would be associated with the 550 new rental units, including rental office staff, housing managers, janitorial staff, and groundskeepers.

Table 2-6. Onsite Population by Unit Size

	Number of Units	Estimated Household Size[a]	Total Number of People
Studio	95	1	95
1-Bedroom Unit	218	2	436
2-Bedroom Unit	174	3	522
3-Bedroom Unit	44	4	176
Townhomes	19	4[a]	76
Total	***550***	***2.37***	***1,305***

Source: California Health and Safety Code Section 50052.5(h), 2024.

a. Assumes townhomes will include an average of three bedrooms.

Office/R&D Area

As discussed under "Buildout Scenarios" in this chapter because future tenants in the office/R&D area are not yet known, the proposed buildings in the office/R&D area would be designed to accommodate either office uses, R&D or life science, or a combination of both. As such, this EIR evaluates two commercial buildout scenarios: a 100 percent office scenario and a 100 percent R&D scenario. One of the key differences between the buildout scenarios would be employment density. In general, R&D and life science uses accommodate fewer employees than office buildings of the same size. Although administrative areas within R&D and corporate office companies typically have similar employee density, R&D and laboratory spaces otherwise have lower employee densities compared to office uses because lab spaces are often used as work areas by employees who also have separate office workstations.

Under either buildout scenario, out of the approximately 1,100 existing employees at the SRI International Campus, it is anticipated that approximately 700 employees would continue to work at the Project Site in Buildings P, S, and T. The 100 percent office scenario would result in approximately 3,868 net new employees at the Project Site, accounting for the 400 existing employees who would no longer work at the Project Site with implementation of the Proposed Project. The 100 percent R&D scenario would result in approximately 2,667 net new employees at the Project Site, accounting for the 400 existing employees who would no longer work at the Project Site. Table 2-7 summarizes the net increase in employees at the Project Site under both buildout scenarios.

Table 2-7. Proposed Project Employment Summary

	Area (sf) or Dwelling Units	100 Percent Office Scenario		100 Percent R&D Scenario	
		Generation Rate	Employees	Generation Rate	Employees
Existing					
Existing Employees and Tenants at SRI International Campus		n/a	1,100	n/a	1,100
Proposed Project					
Residential Area	550 dwelling units	1 employee/ 49 dwelling units	14[a]	1 employee/ 49 dwelling units	14[a]
Office/R&D Area					
Total Net New Proposed Office/R&D Buildings	1,051,600 sf	1 employee/ 250 sf[b]	4,206	1 employee/ 350 sf[b]	3,005
Commercial Amenity Building	40,000 sf	1 employee/ 870 sf	46	1 employee/ 870 sf	46
Community Amenity Building	2,002 sf		2		2
Total Proposed Project Employees			*4,268*		*3,067*
Existing Employees[c]			*400*		*400*
Total Net New Employees			*3,868 employees*		*2,667 employees*

Source: Lane Partners and SRI International, 2023

Notes:

a. In addition to a generation rate of one employee per 49 dwelling units, the employees in the residential area would include two employees for the two manager units in the 100 percent affordable housing building.

b. Generation rates for commercial uses were provided by Project Sponsor in the Parkline Master Plan Project Description, dated October 31, 2022, and cite to lower employment generation rates based on current market trends for office and R&D/life science utilization. While generation rates provided by the Project Sponsor for life science uses are lower at 450 sf per employee, using the above generation rates of 350 sf per employee for R&D uses provides a more conservative scenario for this analysis.

c. The Proposed Project would demolish 35 of the 38 existing buildings on the Project Site; existing Buildings P, S, and T, would remain onsite and be operated by SRI International and its tenants. Of the 1,100 existing employees at SRI International Campus, 400 employees would no longer work at the Project Site with implementation of the Proposed Project and 700 employees would remain in Buildings P, S, and T.

2.4 Proposed Project Sustainability Features and Utilities

Sustainability Features

Most of the existing buildings on the Project Site have reached or exceeded their useful life, have not been designed in a manner that allows for energy-sustainable operations, and no longer adequately support SRI International's R&D needs. Because of their age, some of the older buildings do not have modern seismic safety features, ventilation systems, utility infrastructure, or energy-/water-efficient features. Typical of the time when they were constructed, the buildings are sited on a grid and not oriented to take advantage of seasonal daylight patterns in a manner that would allow for improved energy efficiency. Many of the buildings lack the features required for modern office and R&D uses and therefore are outmoded, given the standards and expectations of the current and rapidly changing business environment.

A key objective of the Proposed Project is to provide a state-of-the-art, energy-efficient, and sustainable campus environment that is focused on reducing emissions and natural resource usage. Nearly all the outdated and energy-inefficient buildings within the Project Site would be replaced with buildings and related improvements that reflect the latest sustainability requirements, including the intent of the city's adopted Reach Code and green building program; the California Green Building Standards Code, known as CALGreen; and California Title 24's new renewable energy mandates. The Proposed Project would also remove the existing cogeneration plant and establish all-electric energy design throughout the Project Site, with the exception of Buildings P and T, which would retain natural gas usage for continued laboratory and R&D purposes.

Performance Standards

The Proposed Project would minimize both construction and operational carbon emissions through a range of sustainability measures and commitments, including:

- **Construction Waste Diversion:** Throughout construction, waste would be source separated and tracked to divert it away from landfills, with a target of recycling more than 80 percent of construction and demolition waste.
- **Replacement of Existing Inefficient Buildings:** The existing site includes buildings that were built over decades, reflecting the needs of various uses and occupants at different periods of history; therefore, they do not have the latest advancements in sustainable design. The Proposed Project would demolish existing inefficient buildings onsite, with the exception of Buildings P, S, and T, and replace them, including the existing cogeneration plant, with new sustainable and energy-efficient buildings.
- **Leadership in Energy and Environmental Design (LEED) Certification:** The Proposed Project is anticipated to incorporate a range of LEED certification strategies or equivalent standards across the residential area and the office/R&D area.

- **All Electric Design for New Buildings:** The new office/R&D buildings, the new commercial and community amenity buildings, and the new residential buildings are all anticipated to incorporate an all-electric design, which would comply with the intent of the city's adopted Reach Code,[13] thereby reducing overall greenhouse gas emissions relative to a typical building using natural gas. It is possible that limited exceptions may be requested to accommodate life science uses.
- **Solar Energy:** The Proposed Project would purchase 100 percent renewable electricity and provide onsite energy generation by installing solar photovoltaic systems, as required by Title 24. The Proposed Project is exploring the use of solar arrays and energy storage as a strategy for generating power onsite, which would power EV charging stations and offset energy use from each building. The Proposed Project may use purchased renewable energy credits and/or participate in a comparable clean energy program to offset any non-renewable energy used at the Project Site, per the anticipated requirements in the proposed zoning.
- **Electric Vehicle Parking:** The Proposed Project would incorporate adequate EV-ready parking spaces within both the office/R&D area and residential area to meet code requirements. Within the residential area, the townhouses would have one EV-ready space; the market rate multi-family buildings would have one EV-ready space per unit, 15 percent of which would have EV chargers. Approximately 15 percent of the parking spaces in the office/R&D area would be EV ready, 10 percent of which would have EV chargers. At a minimum, the Proposed Project would comply with the EV parking requirements of the Menlo Park Municipal Code.
- **Building Design:** The building design approach would target reduced carbon emissions, including operational carbon, embodied carbon, and transportation-related carbon, in the building design. The sustainability program would investigate embodied carbon within building materials and give preference to materials from sustainable sources by providing specification language for reduced embodied carbon materials and construction phase material tracking. For example, for the office amenities building, a mass timber structural system is being considered, which would yield a lower carbon footprint than traditional steel or concrete systems.
- **Water Use Management:** To responsibly manage and reduce potable water use, the Proposed Project would comply with all applicable State and local codes and regulations regarding water usage and, where feasible, incorporate features such as low-flow fixtures, options for greywater use, and recycled water for landscape irrigation, among others.
- **Stormwater Recapture and Drought-Tolerant Landscaping:** The amount of permeable surface area would be increased significantly to reduce stormwater runoff. Native drought-tolerant plants and low-flow drip irrigation systems would be installed to minimize potable water consumption.
- **Fitwel Certification:** New office/R&D buildings would be designed to promote occupant health and wellness through Fitwel certification, a program developed by the Centers for Disease Control to see health as an interconnected system, incorporating various design factors and operational policies to create a healthy workplace and encourage occupants to make small shifts in their everyday lives.

[13] In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

Utilities

As discussed in more detail below, while offsite existing infrastructure would be sufficient to support the majority of the Proposed Project, new onsite utility infrastructure would be required. Within the Project Site, a 12-inch looped water system would feed both the residential and office/R&D areas. The new 12-inch water main would connect to the existing 12-inch water main within Laurel Street, the existing 12-inch water main in front of Building T and a 10-inch water main within Middlefield Road. All storm drain systems would collect and convey stormwater discharge to a single existing 27-inch lateral that connects to the existing storm drain system within Middlefield Road. The proposed sanitary sewer system would collect and convey all sewer discharge to a 12-inch sanitary sewer line that would connect to the existing 18-inch sanitary sewer line in Middlefield Road downstream of the existing sanitary sewer pump (VO Pump Station #1). A joint trench would provide space for electric and telecommunication conduits and pathways. No natural gas would be provided to new structures constructed as part of the Proposed Project.

Off-site improvements in the public right-of-way are anticipated to be included as part of the Proposed Project. At the current time, the scope of potential offsite improvements has not been specifically defined. At a minimum, new curbs, gutters, and sidewalks along the Proposed Project's frontage, as well as a full-street, 3-inch grind and overlay on Laurel Street and Ravenswood Avenue, are anticipated to be required, consistent with the city's standard requirements. Trench restoration would also be required wherever new utility connections would be provided. It is anticipated that the Proposed Project would implement certain green infrastructure features within the public rights-of-way, including stormwater treatment for certain public streets along Proposed Project's frontage(s). The public rights-of-way would be owned by the city and maintained by the Project Sponsor, pursuant to a Storm Water Maintenance Agreement recorded against the Project Site. The final offsite improvements would be determined in conjunction with the city's Public Works Department during the entitlement and review process.

Water

The Project Site is fed from two water sources: (1) a 10-inch-high pressure water distribution main located at the westerly side of the Project Site, off Laurel Street, which includes a water meter and back flow prevention device and (2) a 10-inch water distribution main located at the easterly side of the project site, off of Middlefield Road, which includes a water meter and back flow prevention device. The existing water system within the Project Site consists of 8-inch and 10-inch water mains configured in a looped system that provides water distribution to the existing commercial buildings and feeds the existing fire water system for both existing buildings and fire hydrants.

The Proposed Project would install a dedicated fire service and metered domestic water service for each proposed building. The proposed onsite water system for Project would consist of an approximately 10-inch to 12-inch looped water system that would also be used for domestic water use and fire systems to the onsite buildings and fire hydrants. In addition, there would be metered irrigation service provided to the Project Site campus for the landscaped areas. This proposed system would continue to use the existing 10-inch water distribution mains. The existing water system serving the Project Site is expected to provide adequate flow for fire and domestic flow for both the 100 percent office scenario and the 100 percent R&D scenario, without the need for upgrades or additional facilities.[14]

[14] Kier + Wright. 2024. *Parkline Water Infrastructure Analysis*. March 11.

To manage and reduce potable water use, the Proposed Project would comply with all applicable State and local codes and regulations regarding water usage and, where feasible, incorporate features such as low-flow fixtures, options for greywater use, and recycled water for landscape irrigation, among others. With the implementation of water conservation measures, it is anticipated that the net increase in water use at the Project Site would be approximately 9.8 million gallons per year (30.1 acre-feet) under the 100 percent office scenario and approximately 39 million gallons per year (119.8 acre-feet) under the 100 percent R&D scenario.

Wastewater

As described above, the Proposed Project would provide both potable and recycled water infrastructure and incorporate sewer improvements within public roadways and public utility easements on private streets, where necessary. The Project Site is currently served by sewer infrastructure maintained by West Bay Sanitary District, which provides wastewater collection and conveyance services to the city of Menlo Park. Existing sanitary sewer flows from the Project Site are conservatively estimated to be approximately 152,437 gallons per day. The existing sewer system at the Project Site collects and conveys all sewer discharge to the southeast corner of the Project Site where the sewer systems are split into 8-inch and two 12-inch sewer pipes that run through adjacent properties, where these pipes eventually meet and discharge into one 18-inch sewer pipe. The 18-inch sewer pipe runs northeasterly along Survey Lane and ties into the sanitary sewer confluence point at Sanitary Sewer Manhole #1 (SSMH#1) in the intersection of Middlefield Road, which continues down the 18-inch sewer main traversing Middlefield Road (southeast). This connection point is approximately 400 linear feet south of an existing VO Sewer Pump Station #1 that discharges to an existing 8-inch sewer pipe that meets at the confluence point.

The Proposed Project would result in increased sanitary sewer flows, primarily due to incorporation of new residential uses within the Project Site. For the purposes of this analysis, it is assumed that 95 percent of the interior water usage would be discharged into the sewer system, which is a standard assumption that accounts for various evaporation and system losses. The Proposed Project is estimated to result in a sewer flow rate of approximately 133,206 gallons per day (a net decrease of 19,231 gallons per day) under the 100 percent office scenario and approximately 239,615 gallons per day (a net increase of approximately 87,178 gallons per day) under the 100 percent R&D scenario. Based on the proposed Project water demand and calculated resulting sewer flow volumes, the additional discharge from the proposed Project can be adequately accommodated by the existing sanitary sewer infrastructure with no upsizing or additional infrastructure required. Exterior water uses, such as landscaping, would either be absorbed by the plants and soil, or flow to onsite stormwater treatment areas and, therefore, are not expected to result in discharges to the sewer infrastructure.[15]

Stormwater

Based on the topographical survey for the Project Site, the existing site slopes from the west to east. Most of the Project Site currently drains to a single 27-inch reinforced concrete pipe storm drain main that ties into a 36-inch existing storm drain main running north to south within Middlefield Road. The Proposed Project would reduce the amount of impervious area across the Project Site by introducing new landscaped areas and open spaces and reducing the amount of surface parking and hardscape. Under both scenarios, the Proposed Project would have a pervious surface area of approximately 42.3 percent (1.165 million sf) across the site, compared to only 25.7 percent (643,045 sf) under existing conditions.

[15] Kier + Wright. 2024. *Parkline Sanitary Sewer Demand Analysis*. March 11.

The Project Site would include up to 65,500 sf of bioretention area dispersed throughout the Project Site. Generally, biotreatment areas would either be flow-through planters or recessed biotreatment ponds. The Project bioretention basins would be lined at the bottom and, therefore, no infiltration would occur. In addition to bioretention ponds, the Proposed Project could also include larger centralized treatment areas, which can also serve as open space. Additional strategies to improve onsite drainage would include raising first-floor elevations to allow drainage to and within landscape areas, sloping to the perimeter of the site, and utilizing the loop road to manage stormwater drainage paths to the city's storm drain system. It is assumed that all Project stormwater flows would discharge to the existing 27-inch storm drainpipe; the Proposed Project would maintain the existing drainage pattern toward the northeast corner of the site (i.e., the low point of property). However, if needed, the Project stormwater flows also could be directed to existing smaller storm drain systems in Laurel Street and Burgess Drive.[16]

Because of the reduction in impervious area across the Project Site, the anticipated flow rate for runoff leaving the Project Site would be less than under existing conditions. Reduced impervious surface area, when compared to the existing impervious surface area, and implementation of the bioretention/flow through planters, would result in a flow rate of approximately 39.7 cubic feet per second (CFS) for both scenarios. Compared to existing conditions, this is a decreased flow rate of approximately 18.5 percent in stormwater flows into the existing storm drain system. Therefore, no additional hydromodification measures would be required. The Proposed Project would conform to San Mateo County C3 requirements and incorporate low-impact development stormwater treatment measures. It is anticipated that a stormwater operations and maintenance agreement with the city would be required to ensure that any installed stormwater facilities are properly maintained.

Energy

Although PG&E delivers power, maintains the electrical grid and other infrastructure, and handles customer billing, energy in Menlo Park is purchased through Peninsula Clean Energy, a Community Choice Energy (CCE) program, from renewable energy sources, such as solar, wind, hydroelectric, geothermal, and biomass. CCE programs allow local governments to pool the electricity demands of their communities, purchase power with higher renewable content, and reinvest in local infrastructure.[17]

In 2019, the city adopted local amendments to the 2019 California Building Standards Code and the California Code of Regulations that required electricity to be the only fuel source for new buildings, thereby limiting the use of natural gas. Electrifying buildings maximizes the use of the community's renewable power and reduces greenhouse gas emissions by slowly phasing out the use of natural gas. This ordinance applies to only newly constructed buildings[18] (i.e., those constructed from the ground up), such as the buildings that would be constructed as part of the Proposed Project. The ordinance does not apply to existing Buildings P, S, and T, which would remain onsite and be operated by SRI International and its tenants.[19] The Proposed Project is exploring the use of solar arrays as a strategy for generating power onsite, which would power EV charging stations and offset energy use from each building.

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[16] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

[17] Peninsula Clean Energy. 2023. *Background*. Available: https://www.peninsulacleanenergy.com/background/. Accessed: March 10, 2023.

[18] City of Menlo Park. 2023. *Reach Codes*. Available: https://menlopark.gov/Government/Departments/City-Managers-Office/Sustainability/Reach-codes. Accessed: March 10, 2023.

[19] As discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*, SRI International is proposing to construct tenant improvements at Buildings P, S, and T, as well as related site utility work, to modernize the buildings for SRI International's near-term and ongoing operations. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project, and are included as a cumulative project for purposes of this EIR analysis.

On April 17, 2023, a three-judge panel of the United States District Court, Northern District of California, held an ordinance enacted by the city of Berkeley, of similar effect as the city's adopted Reach Code, to be expressly preempted by the Energy Policy and Conservation Act, 42 U.S.C. § 6297(c). *California Restaurant Association v City of Berkeley*, No. 21-16278, 2023 WL 2962921 (Apr. 17, 2023). On May 31, 2023, the city of Berkeley filed a petition for rehearing en banc before the U.S. Court of Appeals for the Ninth Circuit. On January 2, 2024, the Ninth Circuit denied the petition for rehearing. In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.[20] The foregoing notwithstanding, the Proposed Project intends to conform to the requirements of the city's adopted Reach Code and be subject to Reach Code requirements.

The 6-megawatt natural gas power facility that generates power and steam energy for the SRI International Campus would be demolished.[21] Demolition of the cogeneration plant is anticipated to result in significant reductions in greenhouse gas emissions within the city and region. Under the Proposed Project, all new buildings constructed would be all-electric. Two existing buildings (Buildings P and T) would retain natural gas and diesel backup generators, for continued laboratory and R&D purposes. Thirteen emergency generators are proposed to be installed at the Project Site.[22]

Solid Waste

Throughout construction, waste would be source separated and tracked to divert it away from landfills, with a target of recycling more than 80 percent of construction and demolition waste. Consistent with city requirements, the Project Sponsor would submit documentation to the city describing the Proposed Project's approach to maximizing waste diversion during demolition, construction, and occupancy of the residential and commercial uses. Each component of the Proposed Project would be subject to the city's zero-waste management plan requirements during both construction and operation.

[20] City of Menlo Park. 2024. *Reach Codes*: Available: https://menlopark.gov/Government/Departments/City-Managers-Office/Sustainability/Reach-codes. Accessed: January 5, 2024.

[21] Under existing conditions with the cogeneration facility, generated power is delivered to a substation where it interconnects with the electric utility company and gets distributed to campus buildings. Generated steam is distributed throughout the SRI International Campus for various uses, including the production of site chilled water through centralized steam absorption chillers for building cooling, heating systems, hot-water heat-exchange systems, and lab processes. During periods when the cogeneration plant is out of operation, steam is produced by an auxiliary boiler in the cogeneration plant. Alternative standby power is delivered to the existing SRI International Campus by the electric utility provider.

[22] There are six existing generators along with a cogeneration power facility in place today, with one additional generator proposed to be installed by SRI in connection with its separate tenant improvements prior to Parkline project buildout (subject to separate City review and approval). The Parkline Project would remove 3 of the 6 existing SRI generators along with the cogeneration power facility and would install 13 new generators onsite, yielding a total of 17 generators at Project buildout, inclusive of the one additional generator proposed to be installed by SRI in connection with its separate tenant improvements.

2.5 Proposed Project Construction and Phasing

Construction Schedule and Phasing

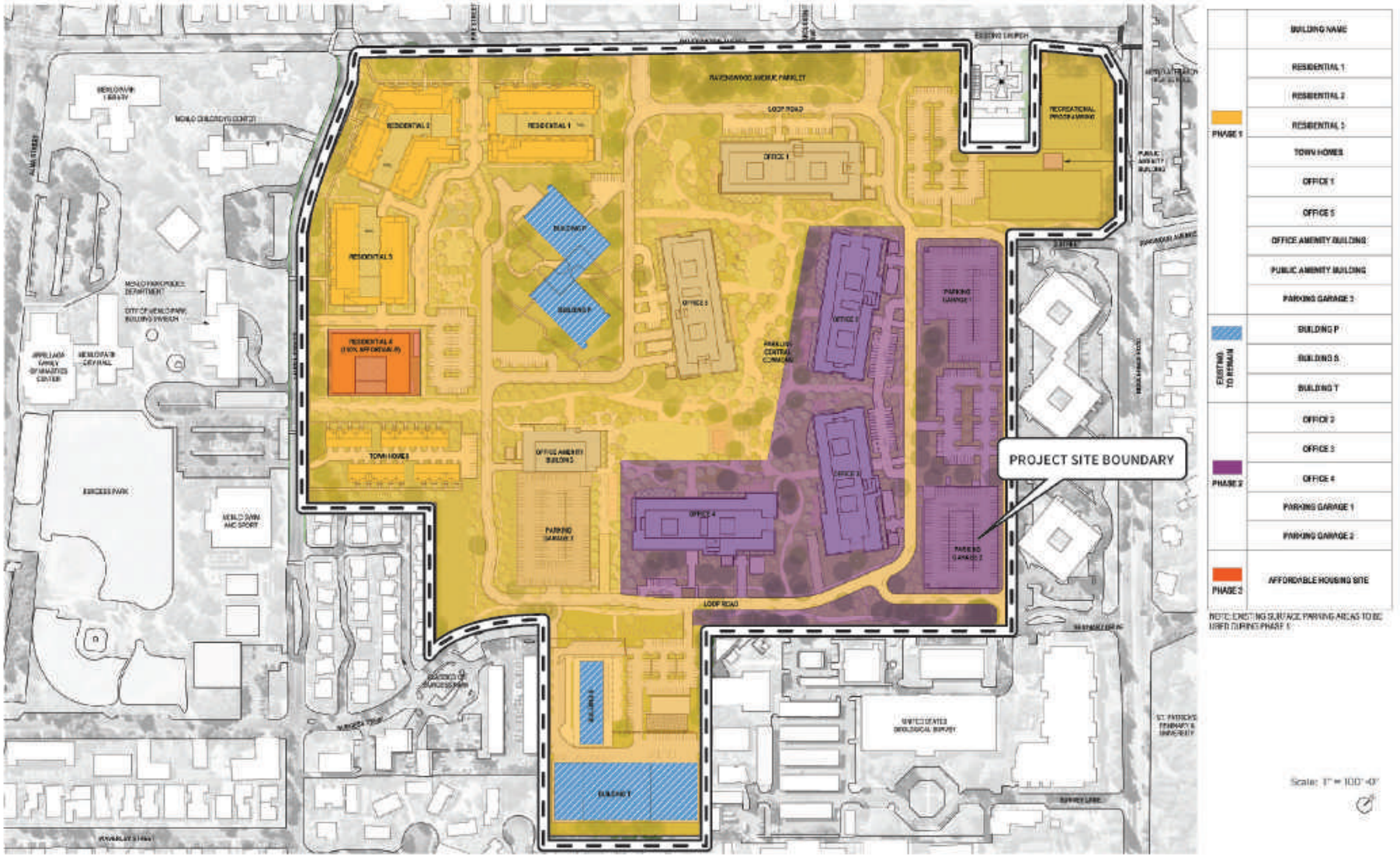
The Proposed Project is anticipated to be constructed in one development phase, with site preparation occurring over the course of 12 to 15 months and buildout of site infrastructure and vertical improvements occurring afterward over the course of 30 to 36 months. Assuming the Proposed Project is constructed in one phase, construction is expected to occur over a total of approximately 51 months, or 4.2 years, conservatively assuming that construction durations will be on the longer end of the estimated ranges. However, the ultimate delivery dates may vary because of market conditions, the availability of financing, and tenancy requirements. Therefore, in order to provide for a conservative analysis for purposes of air quality impacts, a further delineated phasing plan has been evaluated under which the Project is constructed over a longer timeline in three phases, as discussed in more detail below. Assuming the Proposed Project is constructed in three phases, construction could begin as early as mid-2025 and end in late 2031, a period of approximately 6.5 years (77 months). Additional details regarding the Proposed Project's phasing would be developed during the entitlement and review process; some details provided below may be subject to change. Figure 2-10 depicts the proposed construction phasing plan for the Proposed Project.

It is currently anticipated that the maximum depth of excavation would be 15 feet below the current grade. As discussed below, approximately 281,605 cubic yards of excavated soil would be transported offsite for disposal. The Proposed Project would result in approximately 2,981,000 sf (68.4 acres) of ground disturbance during construction, inclusive of right-of-way and off-site improvements along the Project Site frontages.

Phase 1

Phase 1 of construction would include site preparation, grading, and some building construction. Demolition would occur over approximately 9 months and include the removal of the electrical substation adjacent to Laurel Street, the cogeneration plant, SRI International buildings, and site components. In total, 1,095,719 sf of building area would be demolished. However, Buildings P, S, and T would remain at the Project Site. Site preparation and grading would occur over approximately 11 months and include installation of the utilities and infrastructure required to support Phase 1 and the existing buildings. Rough grading would occur over the entire Project Site, including for the areas for construction during Phases 2 and 3.

Building construction during Phase 1 would occur over approximately 21 months. In the residential area, Phase 1 would include the construction of the three market rate multi-family residential buildings and 19 townhouse dwelling units. Below-grade parking would be constructed for residential Buildings 1 and 2. In the office/R&D area, office Buildings 1 and 5 would be constructed, including the below-grade parking for both buildings. In addition, PG3, along with associated surface parking areas, would be constructed. Phase 1 would also include construction of the commercial amenities building, community amenities building, recreational field, and related community-serving facilities. Throughout the Project Site, roads, infrastructure, landscaping, surface parking areas, and associated site improvements would be installed. Future pads for the remaining office buildings and parking structure would be landscaped and secured during interim activities before Phase 2 commences. The architectural coating and paving subphases would occur over approximately 12 months.



Source: Studios Architecture, OJB, Kier+Wright, 2022.

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Figure 2-10
Conceptual Construction Phasing Plan for the Proposed Project
Parkline

Construction grading would be included only in Phase 1, with a total of 39 acres graded. Approximately 231,050 cubic yards of soil would be exported during Phase 1.[23] Temporary construction dewatering for the underground parking garages may be required in some isolated areas of the Project Site to mitigate the effects of shallow groundwater. The number of haul trips is anticipated to include 3,750 trips during demolition and 23,105 trips during building construction, for a total of 35,775 construction haul trips during Phase 1. Up to 213 construction workers could be at the Project Site during Phase 1. Construction is anticipated to occur over approximately 48 months, with Phase 1 operational by mid-2029.

Phase 2

Although the majority of demolition would occur in Phase 1, minor miscellaneous demolition is anticipated to continue in Phase 2. No construction would occur in the residential area during Phase 2. In the office/R&D area, Phase 2 would include construction of the remaining office/R&D buildings (Buildings O2, O3, and O4), parking garages (PG1 and PG2), and site improvements. No below-grade parking is assumed for this phase, which would occur over a period of approximately 25 months. Approximately 43,055 cubic yards of soil would be exported during Phase 2. The number of haul trips is anticipated to include 555 trips during demolition and 4,305 trips during building construction, for a total of 4,860 construction haul trips during Phase 2. Up to 195 construction workers could be at the Project Site during Phase 2. Phase 2 construction is anticipated to be operational by mid-2031.

Phase 3

Although the majority of demolition would occur in Phase 1, minor miscellaneous demolition is anticipated to continue in Phase 3. No construction would occur in the office/R&D area. However, in the residential area, the affordable housing building (Building 4) would be constructed, along with the associated landscaping and paving. No below-grade parking would be included. Approximately 7,500 cubic yards of soil would be exported during Phase 3. The number of haul trips is anticipated to include 88 trips during demolition and 1,500 trips during building construction, for a total of 1,588 construction haul trips during Phase 3. Up to 60 construction workers could be at the Project Site during Phase 3. Construction is anticipated to occur over a total of approximately 21 months, with Phase 3 operations commencing in late 2031.

Construction Equipment

Typical equipment would be used during construction of the Proposed Project. This could include, but would not be limited to, concrete/industrial saws, excavators, graders, rubber-tired dozers, scrapers, cranes, forklifts, generator sets, tractors, loaders, backhoes, drill rigs, welders, pavers, paving equipment, rollers, and aerial lifts. All equipment would be Tier 4 or electric. Pile driving would not be required during construction of the Proposed Project. All staging of construction equipment is expected to be onsite.

Construction Hours

During construction of the Proposed Project, working hours would be from 7:00 a.m. to 6:00 p.m. on weekdays. The range of construction activity in the early morning hours would vary, but concrete pours

[23] The export volumes assume that all disturbed soil would be off-hauled, rather than reused onsite. It is likely that soil would be reused on the Project Site; however, it is currently unknown how much soil would be reused. Therefore, to provide conservative estimates, this EIR assumes that all excavated soil would be exported.

are anticipated to start as early as 7:00 a.m. twice per week (Tuesdays and Thursdays) for approximately 14 months. No nighttime or weekend construction would be required for the Proposed Project. Construction activities occurring outside the typical construction hours of 8:00 a.m. to 6:00 p.m. Monday through Friday, such as the aforementioned concrete pours, would be required to comply with the noise levels set forth in Section 8.06.030 of the city's Municipal Code, whereas construction activities taking place during typical construction hours noted above are excepted from the application of the noise levels pursuant to Section 8.06.040 of the Municipal Code.

2.6 Proposed Project Variant

This EIR also includes a description and evaluation of a variant of the Proposed Project, called the "Increased Development Variant" (Project Variant) in Chapter 4, *Project Variant Analysis*. The Project Variant could reasonably be approved instead of the Proposed Project.

2.7 Proposed Project Approvals and Analyses

City Approvals and Analyses

The following analyses and discretionary approvals by the city would be required prior to development:

- **General Plan Amendment (Text and Map).** A new city General Plan land use designation would be required to provide for the range of Proposed Project land uses, including multi-family residences and public and quasi-public, office, R&D, and compatible uses.
- **Zoning Ordinance Amendment.** A zoning ordinance text amendment would create one or more new zoning districts to establish discrete development standards in accordance with the Proposed Project's uses and features.
- **Rezoning.** An amendment to the city's zoning map would be required to apply the new district(s) to the Project Site. The Project Site may also include a conditional development "X" overlay in order to facilitate development flexibility, as needed.
- **Conditional Development Permit.** A project-level development permit, such as a CDP, is anticipated to be used to implement the Proposed Project and specify site-specific construction, design, phasing, and operational requirements.
- **Development Agreement.** It is anticipated that the Proposed Project would be subject to a negotiated Development Agreement that provides vested rights in exchange for community benefits and additional project commitments.
- **Architectural Control Approval(s).** Architectural control approval would be required for the Proposed Project's architectural elements; this entitlement is anticipated to occur either concurrent with other entitlements, but it could be limited to the first phase if phasing for the Proposed Project is pursued or potentially deferred until after the other entitlements are approved.
- **Heritage Tree Removal Permit(s).** A Heritage Tree Removal Permit would be required to remove heritage trees, in accordance with Chapter 13.24 of the city Municipal Code, as may be modified through the CDP.

- **Vesting Tentative Map.** The Project Site currently comprises five parcels of various sizes. The Project Site would be resubdivided through a phased vesting tentative map in a manner that would reflect the new site plan and infrastructure improvements and provide flexibility for phased construction, based on market demand. It is anticipated that each new building would be located on its own parcel; the remaining open space, private streets, and common areas would be located on a separate parcel (or parcels). Multiple final maps may need to be prepared to match phasing for the Proposed Project.
- **Below Market Rate (BMR) Housing Agreement.** Approval of a below market rate housing agreement would be required by City Council.
- **Transportation Demand Management Plan.** A TDM plan has been prepared for the Proposed Project and is available as part of this EIR for decision-makers to consider.
- **Water Supply Assessment (WSA).** A WSA has been prepared for the Proposed Project in accordance with the requirements of SB 610 (as adopted in the California Water Code as Sections 10910-10915) and is available as part of this EIR for decision-makers to consider. The purpose of the WSA is to demonstrate the sufficiency of the city's water supplies (as the water purveyor for the project) to satisfy the water demands of the Proposed Project, while still meeting the city's existing and planned future uses. Upon completion, the city will issue a determination of sufficiency of existing and future supply for the Proposed Project in accordance with Water Code requirements. The Menlo Park City Council considered and adopted the WSA on May 7, 2024.
- **Housing Needs Assessment (HNA).** A HNA has been prepared for the Proposed Project and is available as part of this EIR for decision-makers to consider. The purpose of the HNA is to evaluate the need for housing associated with the Proposed Project and inform the analysis of population and housing in the EIR. The HNA is not a required analysis under CEQA.
- **Fiscal Impact Analysis.** A fiscal impact analysis will be required to evaluate the revenue and cost items considered, including police, fire, public works, recreation, and library programs; services provided to the public; and general government services for both the city and special districts (e.g., fire and school districts). The fiscal impact analysis will be considered by decision-makers when reviewing the requested land use entitlements. The fiscal impact analysis is not a required analysis under CEQA.
- **Other.** Any additional actions or permits deemed necessary to implement the Proposed Project and off-site improvements, including demolition, grading, foundation, and building permits; public encroachment permits; any permits or approvals required for extended construction hours; tree removal permits; and other additional ministerial actions, permits, or approvals from the city that may be required.

Reviews/Approvals by Responsible and Other Agencies

The various reviews and approvals by responsible and other potentially interested agencies that may be needed for the Proposed Project to proceed are listed below. Some of these agencies would need to approve certain parts of the Proposed Project prior to full implementation, but their approval would not be required for environmental review or EIR certification, pursuant to CEQA. The list includes responsible agencies that may use the EIR for their respective approvals, and other agencies that may be interested in the Proposed Project and the environmental review. This list is not intended to confer responsible-agency status to a listed agency; it is provided for informational purposes only.

- **Pacific Gas & Electric** – Approval for utilities hook-ups.
- **California Regional Water Quality Control Board/San Mateo Countywide Water Pollution Prevention Program** – Approval of National Pollutant Discharge Elimination System permit for stormwater discharges.
- **Native American Heritage Commission** – Oversees tribal consultation pursuant to Public Resources Code Section 21080.3.1 (i.e., Assembly Bill 52) and Government Code Section 65352.3 (i.e., SB 18), if requested by tribe(s).
- **City/County Association of Governments** – Review of potential effects on Routes of Regional Significance as well as the proposed TDM plan.
- **Bay Area Air Quality Management District** – Permits for onsite generators, boilers, and other utility equipment.
- **San Mateo County Transportation Authority** – Review of potential effects on public transit.
- **San Mateo County Environmental Health Division** – Review of food service functions and onsite generators.
- **Menlo Park Fire Protection District** – Approval of proposed fire prevention systems, onsite generators, and emergency vehicle access.
- **West Bay Sanitary District** – Approval of wastewater hook-ups.

Chapter 3
Environmental Impact Analysis

This chapter analyzes the potential impacts that Parkline (Proposed Project) could have on existing environmental conditions. The environmental analysis has been prepared in accordance with the California Environmental Quality Act (CEQA), as amended (Public Resources Code Section 21000, et seq.), and the CEQA Guidelines.

CEQA Methodology

CEQA Guidelines Section 15151 provides guidance for the preparation of an adequate Environmental Impact Report (EIR).

- An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make a decision that intelligently takes account of the environmental consequences of a project.
- An evaluation of the environmental impacts of a project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible.
- Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. (The courts have looked not for perfection but for adequacy, completeness, and a good-faith effort at full disclosure.)

In practice, this guidance suggests that EIR preparers should adopt a reasonable methodology upon which to estimate impacts and make reasonable assumptions, using the best information reasonably available.

Pursuant to CEQA Guidelines Section 15161, this is a project-level EIR. It serves to provide environmental clearance for the Proposed Project and support all necessary approvals and entitlements. For purposes of the EIR analysis, as described further below and in Chapter 2, *Project Description*, because future commercial tenants in the office/research-and-development (R&D) area are not yet known, proposed commercial buildings in the office/R&D area are designed to accommodate either office uses, R&D or life science uses, or a combination of both. Therefore, the EIR evaluates two buildout scenarios within the office/R&D area: a 100 percent office scenario and a 100 percent R&D scenario, as described in more detail below.

Approach to Analysis of the Buildout Scenarios

Section 15126.2 of the CEQA Guidelines requires that an EIR focus on the significant "direct and indirect" and "short-term and long-term" effects of a project. To ensure a reasonably conservative approach in analyzing environmental impacts under CEQA, EIRs typically analyze what could be considered a reasonably foreseeable worst-case scenario with respect to potential physical impacts on the environment to disclose all potential significant impacts that could occur with implementation of a project.

The term "buildout" refers to a future scenario in which development permitted under the Proposed Project is fully implemented. As described in Chapter 2, *Project Description*, the Proposed Project would organize land uses around two land use districts on the Project Site: (1) an approximately 10-acre

residential area in the southwestern portion of the Project Site with approximately 550 units and (2) an approximately 53.2-acre office/R&D area for the remainder of the Project Site with approximately 1,380,332 gross square feet (gsf) of office or R&D uses. The proposed buildings in the office/R&D area would be designed to accommodate either office or R&D uses, or a combination of both.

Buildout of the office/R&D area as part of the Proposed Project would depend on a number of factors, including market conditions, the availability of financing, and tenancy requirements. Because future tenants in the office/R&D area have not been identified, this EIR evaluates two buildout scenarios: a 100 percent office scenario and a 100 percent R&D scenario. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix will be within the scope of the EIR analysis. Each impact evaluation in the EIR evaluates the most impactful scenario, or "worst-case" scenario, for the resource area being analyzed. The most impactful scenario is the scenario with the greatest potential to result in significant environmental impacts. The most impactful scenario can vary by resource topic and by impact. In some cases, the level of impact is not related to whether the l uses involve office as opposed to R&D uses, in which case the analysis accounts for either scenario.

According to the Project Sponsor, the 100 percent office scenario and 100 percent R&D scenario would include the same buildout square footages, site plan layout, building heights, and parking spaces. Therefore, construction- and footprint-related impacts are anticipated to be substantially similar under both scenarios. In addition, all development within the residential area would remain the same under both scenarios (550 units). Thus, the analysis throughout Chapter 3 of this EIR focuses on the operational differences within the office/R&D area under the Proposed Project. In general, the key differences between the two buildout scenarios would be daily vehicle trip generation, employment density, and certain limited operational or equipment differences (e.g., generator capacity).

Table 3.0-1 lists the buildout scenario assumed in the analysis for each impact in each topic section of this EIR (i.e., Section 3.1, *Impacts Found Not to Be Significant*, through Section 3.16, *Utilities and Service Systems*). The buildout scenarios are generally categorized as follows:

- **100 percent office scenario:** Impact analysis evaluates 100 percent office scenario
- **100 percent R&D scenario:** Impact analysis evaluates 100 percent R&D scenario
- **Either Scenario:** Impacts would be the same regardless of the scenario, and impact analysis accounts for either scenario

The *Methods for Analysis* subsection in each topic section of this EIR clarifies what is meant by "Proposed Project" (i.e., 100 percent office, 100 percent R&D, or either scenario) for the purposes of the impact analysis. For the topic sections of this EIR that would analyze more than one buildout scenario, depending on the individual impact topic, a table is included in the *Methods for Analysis* subsection, along with an explanation for the scenario that is evaluated for each impact. If all impacts in a topic section of this EIR would be similar regardless of the scenario, a brief paragraph is included, with an explanation as to why the impact analysis does not depend on whether the buildings are occupied with office as opposed to R&D uses.

Table 3.0-1. Buildout Scenario Evaluated for Each Impact in this EIR

Topic Section	Buildout Scenario Evaluated (i.e., either 100 Percent Office, 100 Percent R&D, or Either Scenario) for Each Impact
Section 3.1, *Impacts Found Not to Be Significant* (Aesthetics,[a] Vehicular Parking, Agriculture and Forestry Resources, Mineral Resources, and Wildfire)	All impacts: Either Scenario
Section 3.2, *Land Use and Planning*	All impacts: Either Scenario
Section 3.3, *Transportation*	TRA-1 (circulation system and bicycle/pedestrian facilities): 100 percent R&D Scenario TRA-1 (transit facilities): 100 percent Office Scenario TRA-2, TRA-3, and TRA-4: Either Scenario
Section 3.4, *Air Quality*	AQ-1 and AQ-2 (construction): Either Scenario AQ-2 (operation), AQ-3, AQ-4: 100 percent R&D Scenario
Section 3.5, *Energy*	EN-1 (construction) and EN-2: Either Scenario EN-1 (operation): 100 percent R&D Scenario
Section 3.6, *Greenhouse Gas Emissions*	GHG-1 (construction) and GHG-2: Either Scenario GHG-1 (operation, except emissions from solid waste): 100 percent R&D Scenario GHG-1 (operation, for emissions from solid waste): 100 percent Office Scenario
Section 3.7, *Noise*	NOI-1 (construction), NOI-3, and NOI-4: Either Scenario NOI-2 (operation): 100 percent R&D Scenario
Section 3.8, *Cultural Resources*	All impacts: Either Scenario
Section 3.9, *Tribal Cultural Resources*	All impacts: Either Scenario
Section 3.10, *Biological Resources*	All impacts: Either Scenario
Section 3.11, *Geology and Soils*	All impacts: Either Scenario
Section 3.12, *Hydrology and Water Quality*	Impacts related to water quality: 100 percent Office Scenario All other impacts: Either Scenario
Section 3.13, *Hazards and Hazardous Materials*	HAZ-1, HAZ-2, and HAZ-3: 100 percent R&D Scenario HAZ-4 and HAZ-5: Either Scenario
Section 3.14, *Population and Housing*	All impacts: 100 percent Office Scenario
Section 3.15, *Public Services and Recreation*	All impacts: 100 percent Office Scenario
Section 3.16, *Utilities and Service Systems*	UT-1 (for all impacts except stormwater), UT-2, and UT-3: 100 percent R&D Scenario UT-1 (stormwater) and UT-5: Either Scenario UT-4: 100 percent Office Scenario

Notes:

[a] Appendix 3.1-1 of this EIR includes a discussion of the Proposed Project's potential aesthetics impacts for informational purposes.

Organization of This Chapter

Each CEQA topic or environmental issue in this chapter is given its own section, with each containing the subsections listed below.

- **Environmental Setting**—This describes existing baseline conditions, including the environmental context and background. The environmental baseline for purposes of the analysis is discussed in detail below. As noted in Chapter 2, *Project Description*, the Project Site consists of the 63.2-acre parcel at 333 Ravenswood Avenue, between El Camino Real and Middlefield Road and near the downtown area and Menlo Park Caltrain station. The Project Site is surrounded mainly by residential neighborhoods and public facilities.
- **Regulatory Setting**—This describes federal, state, and local regulations pertaining to the impact topic that are applicable to construction and operation of the Proposed Project.
- **Environmental Impacts**—Thresholds of significance are identified as well as methods for analysis, which includes a more detailed description of the buildout scenario evaluated for each topic. In addition, the Proposed Project's effects on baseline conditions are evaluated. If the change to baseline conditions would exceed the significance thresholds, this would constitute a significant impact, and mitigation measures to reduce, eliminate, or avoid the significant impact would be suggested. This section also analyzes cumulative impacts.

Determination of Significance

In accordance with Section 15022(a) of the CEQA Guidelines, the city of Menlo Park uses the impact significance criteria designated by CEQA and suggested by CEQA Guidelines Appendix G. These criteria, as well as city-adopted significance criteria from the city's transportation impact analysis (TIA) guidelines for transportation impacts, are used to evaluate the impacts of the Proposed Project throughout this document. These criteria are listed at the beginning of the *Environmental Impacts* subsection under "Thresholds of Significance" throughout this chapter.

In determining whether impacts are significant, an EIR compares the potential impacts of a project with pre-project environmental conditions. Sections 15125(a) and 15126.2(a) of the CEQA Guidelines specify that the baseline normally consists of physical conditions that existed at the time the notice of preparation (NOP) was published or the time the environmental analysis began. With the Proposed Project, the NOP release date of December 2, 2022, serves as the environmental baseline from which impacts of the Proposed Project are generally measured. However, for some resource areas with data gathered at a later date, this later date is considered the baseline and noted in each topical section as needed.

For each impact identified, a level of significance is determined, using the classifications listed below. Significance determinations are indicated in ***bold, italicized*** text.

- ***No Impact (NI)*** denotes situations in which there is no possibility of an adverse effect on the environment.
- ***Less-than-Significant (LTS)*** impacts are effects that are noticeable but not at a level that would exceed established or defined thresholds or effects that are already reduced to a level below such thresholds (e.g., through compliance with applicable laws or features of the Proposed Project).
- ***Significant*** impacts occur in cases in which the Proposed Project would have a significant impact on the environment.

- ***Potentially Significant (PS)*** impacts occur in cases in which it is not precisely clear whether a significant effect would occur. The analysis in these instances assesses probable conditions using conservative assumptions, but the discussion acknowledges that there is some uncertainty regarding the credible extent of the impact.

For each impact identified as being significant or potentially significant, this Draft EIR provides mitigation measures to reduce, eliminate, or avoid the adverse effect. Following analysis of the mitigation measures, a final conclusion is provided, as follows:

- ***Less-than-Significant Impact with Mitigation (LTS/M)*** is the conclusion when impacts would be significant or potentially significant, but implementation of Project-specific mitigation measures would reduce impacts to a level of less than significant.
- ***Significant and Unavoidable (SU)*** is the conclusion if the mitigation measures would not diminish the effects to less-than-significant levels.

In this chapter, impacts are defined using an alphanumeric system that identifies the environmental topic associated with the impact. For example, NOI-1 denotes the first impact in Section 3.7, *Noise*. The abbreviated codes used to identify the environmental issues discussed in this chapter are listed below.

- AQ – Air Quality
- BIO – Biological Resources
- CUL – Cultural Resources
- EN – Energy
- GEO – Geology and Soils
- GHG – Greenhouse Gas Emissions
- HAZ – Hazards and Hazardous Materials
- HY – Hydrology and Water Quality
- LU – Land Use
- NOI – Noise
- POP – Population and Housing
- PS – Public Services and Recreation
- TRA – Transportation
- TCR – Tribal Cultural Resources
- UT – Utilities and Service Systems

Mitigation Measures

The Proposed Project would be required to comply with all applicable mitigation measures identified in the Mitigation Monitoring and Reporting Program (MMRP), which is a requirement of any proposed development project in the city. Mitigation measures identified in this Draft EIR were developed during the analysis to reduce, minimize, or avoid potential environmental impacts associated with the Proposed Project. Project-specific mitigation measures presented in this EIR have been developed by the city and ICF, the city's environmental consultant, unless otherwise noted. For certain mitigation measures, Project Sponsor provided the measures within technical studies, as cited in the respective sections. Mitigation measures provided by the Project Sponsor in technical studies have been peer reviewed by ICF and integrated as warranted.

According to CEQA Guidelines Section 15126.4:

> The discussion of mitigation measures shall distinguish between measures that are proposed by project proponents to be included in a project and other measures proposed by the lead, responsible, or trustee agency or other persons that were not included but the agency determines could reasonably be expected to reduce adverse impacts if required as conditions of

approving the project. This discussion shall identify mitigation measures for each significant environmental effect identified in the EIR.

In this Draft EIR, mitigation measures are provided immediately following each significant or potentially significant impact. Project-specific mitigation measures are numbered to correspond to the impacts they address. For example, Project-specific Mitigation Measure CUL-2.1 refers to the first mitigation measure for Impact CUL-2 in the Cultural Resources section.

If the Proposed Project is approved by the City Council, an MMRP must be adopted. Pursuant to CEQA Guidelines Section 15097, an MMRP is a mechanism for monitoring and reporting revisions to a project or conditions of approval that the public agency required as mitigation to lessen or avoid a significant environmental effect. The city can conduct the reporting or monitoring, or it can delegate the responsibilities to another public agency or private entity that accepts the delegation. The MMRP for the Proposed Project will identify the specific monitoring actions that shall be completed, the various city departments or other entities that shall oversee completion of the mitigation, and a timeline for implementation of the measures. The responsible departments shall ensure that due diligence is carried out during implementation of the measures. Implementation of the MMRP would eliminate or reduce the severity of the significant impacts identified in this EIR.

Approach to Cumulative Impacts

CEQA Guidelines Section 15130(b)(1) sets forth two primary approaches to the analysis of cumulative impacts. The analysis can be based on (1) a list of past, present, and probable future projects producing related impacts that could combine with those of a proposed project or (2) a summary of projections contained in a general plan or related planning document. The methodology used depends on which approach appropriately captures the cumulative context for the resource topic being analyzed. An introductory statement that defines the cumulative geographic context being analyzed and states whether the approach is list based or projections based is included at the beginning of each cumulative impacts section.

- Where a projections-based approach is used, the projections used are either:
    - If the cumulative context is the city, citywide 2040 cumulative buildout is evaluated based on projections utilized in the Menlo Park Housing Element Update Subsequent Environmental Impact Report (SEIR) (Table 4.0-2),[1] certified in January 2023, which include:
        - 20.6 million gsf of non-residential use
        - 1,490 hotel rooms
        - 24,829 residential units
        - 63,810 residents
        - 53,250 employees

    OR

    - If the cumulative context is the city plus adjacent jurisdictions, projections are based on citywide 2040 cumulative buildout as disclosed in the Menlo Park Housing Element Update SEIR and

[1] City of Menlo Park. *City of Menlo Park Housing Element Update Draft Subsequent Environmental Impact Report*. November 2022. Certified January 31, 2023.

growth projections in the Association of Bay Area Governments/Metropolitan Transportation Commission (ABAG/MTC) 2040 Projections (for other jurisdictions).[2] Projection geographies vary, depending on the resource being evaluated. Given their proximity to Menlo Park, the projects that are proposed, approved, or under development in the cities of Palo Alto and East Palo Alto were reviewed to confirm whether those projects are included in the ABAG/MTC projections. Based on this review, the following projects were added to the growth projections for the respective cities:

Palo Alto project (see Table 3.0-3 for a description of the project listed below):

- 429 University Avenue

East Palo Alto project (see Table 3.0-4 for a description of the project listed below):

- Ravenswood Business District/4 Corners Transit-Oriented Development Specific Plan Update

- Where a list-based approach was used, projects were considered based on a review of projects that are currently proposed, approved, or under development in the cities of Menlo Park, Palo Alto, and East Palo Alto at the approximate time of the NOP release date of December 2, 2022. The cumulative analysis for each topic in Section 3.1, *Impacts Found Not to Be Significant*, through Section 3.16, *Utilities and Service Systems*, identifies which projects (if any) in Table 3.0-2, Table 3.0-3, and Table 3.0-4 have the potential to combine with the Proposed Project to result in a cumulative impact, based on characteristics such as distance from the Project Site and the project type. The identified projects are considered in the cumulative analysis. Figure 3.0-1 depicts the locations of the projects that are currently proposed, approved, or under development in the cities of Menlo Park, Palo Alto, and East Palo Alto.

[2] The year 2040 has been selected as the cumulative (maximum buildout) analysis year because it was used for analysis in the ConnectMenlo EIR and the 2023–2031 Housing Element SEIR. The 2040 horizon year is also consistent with Plan Bay Area 2040, which was the source of information used in the ConnectMenlo EIR, the Housing Element SEIR, and was the Bay Area's Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) until Plan Bay Area 2050 was adopted in October 2021. Because it will take up to three years for the growth forecast in Plan Bay Area 2050 to be integrated into MTC's transportation model, after which updates to each county's transportation model will be required, Plan Bay Area 2040 represents the best available source of information to form the foundation for long range population, housing, and employment projections.

Table 3.0-2. Cumulative Projects – Menlo Park

		Land Use and Unit						
ID	Address	Office (gsf)	Retail/ Commercial (gsf)	R&D/Light Industrial (gsf)	Other (gsf)	Hotel (rooms)	Residential (du)	Status
1	301–309 Constitution Drive (Facebook Expansion Project)	962,400	—	—	—	200	—	Under construction, Building 21 completed, temporary occupancy granted for Building 22, hotel construction under way
2	500 El Camino Real (Stanford)	142,840	10,286	—	—	—	215	Under construction
3	150 Jefferson Drive (new magnet high school)	—	—	—	40,000[a]	—	—	Completed (9th, 10th, and 11th grade only)
4	1300 El Camino Real (Springline)	199,054	25,049	—	—	—	183	Completed and partially occupied
5	1021 Evelyn Street (841 Menlo Avenue)	6,610	—	—	—	—	3	Construction proposed
6	2111–2121 Sand Hill Road (Stanford)	39,010	—	—	—	—	—	Construction proposed
7	40 Middlefield Road	3,584	—	—	—	—	—	Construction proposed
8	115 El Camino Real	—	1,543	—	—	—	4	Under construction
9	409 Glenwood Avenue	—	—	—	—	—	7	Construction proposed
10	1350 Adams Court (1315 O'Brien Drive)	—	—	260,400	—	—	—	Under construction
11	1350 Willow Road (Facebook Willow Village)	1,600,000	200,000	—	—	193	1,730	Construction proposed
12	111 Independence Drive	—	746	—	—	—	105	Construction proposed
13	1125 O'Brien Drive	—	2,760	128,525	—	—	—	Construction proposed
14	162–164 Jefferson Drive (formerly 151 Commonwealth Drive)	249,500	—	—	—	—	—	Construction proposed

ID	Address	Land Use and Unit						Status
		Office (gsf)	Retail/ Commercial (gsf)	R&D/Light Industrial (gsf)	Other (gsf)	Hotel (rooms)	Residential (du)	
15	555 Willow Road (formerly a boarding house proposal)	—	—	—	—	—	3	Construction proposed
16	706–716 Santa Cruz Avenue	23,454	12,035	—	—	—	4	Construction proposed
17	1345 Willow Road	—	—	—	—	—	140	Under construction
18	201 El Camino Real	—	7,076	—	—	—	14	Construction proposed
19	141 Jefferson Drive (Menlo Uptown)	—	2,940	—	—	—	483	Under construction
20	1162 El Camino Real	—	—	—	—	—	9	Under construction[b]
21	3723 Haven Avenue (Hotel Moxy)	—	—	—	—	163	—	Construction proposed
22	110 Constitution Drive and 115 Independence Drive (Menlo Portal)	34,819	1,608	—	—	—	335	Under construction
23	301 Constitution Drive (Citizen M Hotel conditional development permit amendment)[c]	—	—	—	—	40	—	Under construction
24	1075 O'Brien Drive and 20 Kelly Court	—	9,869	89,191[c]	—	—	—	Construction proposed
25	1550 El Camino Real	—	—	—	—	—	8	Construction proposed
26	165 Jefferson Drive (Menlo Flats)	—	15,000	—	—	—	158	Construction proposed
27	123 Independence Drive (Sobrato)	—	—	—	—	—	432	Construction proposed
28	995–1005 O'Brien Drive and 1320 Willow Road	—	—	227,998[d]	—	—	—	Construction proposed
29	2245 Avy Avenue (Phillips Brooks School Gymnasium/Flex Building)	—	—	—	15,011[e]	—	—	Construction proposed

ID	Address	Land Use and Unit						Status
		Office (gsf)	Retail/ Commercial (gsf)	R&D/Light Industrial (gsf)	Other (gsf)	Hotel (rooms)	Residential (du)	
30	1220 Hoover Street	—	—	—	—	—	8	Construction proposed
31	3705 Haven Avenue	—	—	—	—	—	99	Construction proposed
32	1030 O'Brien Drive	5,787	—	61,901	—	—	—	Construction proposed
33	795 Willow Road	—	—	—	—	—	62	Construction proposed
34	High-speed rail[f]	—	—	—	—	—	—	Construction proposed
35	333 Ravenswood Avenue (Buildings P, S, and T)[g]	—	—	3,000[h]	—	—	—	Construction proposed
36	1283-1295 El Camino Real	—	2,000	—	—	—	15	Completed
37	133 Encinal Avenue	—	—	—	—	—	24	Completed
38	1010-1026 Alma Street	25,156	324	—	—	—	—	Completed
39	650-660 Live Oak Avenue	16,854	—	—	—	—	17	Completed
40	1275 El Camino Real	9,066	589	—	—	—	3	Construction completed
41	949 El Camino Real (Guild Theatre)	—	—	—	10,854	—	—	Completed
42	1540 El Camino Real	40,759	—	—	—	—	27	Completed
43	Menlo Gateway	—	14,665	694,669[i]	68,519[j]	230	—	Completed
44	506-556 Santa Cruz Avenue and 1125 Merrill Street[k]	22,226	4,617	—	—	—	9	Completed
Total		**3,381,119**	**311,107**	**1,465,684**	**134,384**	**826**	**4,097**	

Source: City of Menlo Park. 2023.

Notes: This list is current as of the date of the NOP for the Proposed Project (December 2, 2022). It includes all projects in Menlo Park that have filed a complete development application for five or more net new residential units or 5,000 gsf or more of net new commercial space. This list conservatively does not account for any reduction in land use associated with structure demolition.

a. This is a school that will accommodate up to 400 students.

b. The existing building has been demolished; however, no vertical construction has occurred on the site.

c. Forty additional hotel rooms are being requested, beyond the 200 listed in the Facebook Expansion Project detailed earlier in this list; project remains subject to the West Campus trip cap. The hotel is almost complete and the forty additional rooms were approved in 2021 or 2022.

d. This total includes a mix of R&D and support office uses.

e. This total includes a mix of recreational and educational uses.

ID	Address	Land Use and Unit: Office (gsf)	Retail/ Commercial (gsf)	R&D/Light Industrial (gsf)	Other (gsf)	Hotel (rooms)	Residential (du)	Status

f. High-speed rail is proposed to run between San Francisco and Los Angeles. Within the San Francisco to San José section, which will go through Menlo Park, high-speed rail trains are proposed to travel at speeds up to 110 miles per hour, with up to four trains per hour. The high-speed rail system will use the Caltrain alignment from San José to San Francisco under a blended system concept.

g. As described in Chapter 2, *Project Description*, SRI International is proposing to construct tenant improvements in Buildings P, S, and T, as well as related site utility work, to modernize the buildings for SRI International's near-term and ongoing operations. Although Buildings P, S, and T are on the Project Site, the proposed tenant improvements and related site utility work are not part of the Proposed Project; they are included as a cumulative project for purposes of this EIR analysis. If approved and constructed, the tenant improvements are anticipated to add approximately 3,000 gsf to Building P and remove approximately 6,000 gsf from Building S. Buildings P, S and T will thereafter accommodate 700 employees.

h. This total includes a mix of office and R&D uses.

i. This total includes a mix of office and R&D uses.

j. This would be a health club that would serve both hotel guests and the public.

k. The applicant is proposing to redevelop the parcels with three mixed-use buildings. The parcels will not be merged, but the project would be a coordinated proposal with linked elements, such as access.

gsf = gross square feet; du = dwelling unit

Table 3.0-3. Cumulative Projects – Palo Alto

ID	Address	Land Use and Unit						Status
		Office (gsf)	Retail/ Commercial (gsf)	R&D/Light Industrial (gsf)	Other (gsf)	Hotel (rooms)	Residential (du)	
45	660 University Avenue	9,115	—	—	—	—	65	Construction Proposed
46	565 Hamilton Avenue	7,450	—	—	—	—	19	Under Construction
47	429 University Avenue	33,000[a]	—	—	—	—	4	Under Construction
48	180 El Camino Real (Building EE)	—	11,799	—	—	—	—	Construction Proposed
Total		**49,565**	**11,799**	**—**	**—**	**—**	**88**	

Source: City of Palo Alto. 2023. *Planning & Development—Projects*. Available: https://www.cityofpaloalto.org/Departments/Planning-Development-Services/Current-Planning/Projects. Accessed: May 9, 2023.

Notes: This list is current as of the date of the NOP for the Proposed Project (December 2, 2022). It includes projects that are within 1 mile of the Project Site as well as projects that include more than 10,000 gsf of development or provide at least 21 residential dwelling units. Depending on the type of use, projects that include less than 10,000 gsf or projects that provide fewer than 21 units generate approximately 10 peak hour trips. If a project would not generate more than approximately 10 peak hour trips, the project is a relatively small project that would not be anticipated to considerably affect the vehicular roadway network. This approach to identifying projects in this jurisdiction differs from the approach used for projects in Menlo Park. This approach was taken in this jurisdiction to identify the projects that could have the potential to combine with the Proposed Project to result in a cumulative impact. This list does not include projects in this jurisdiction that would not involve substantial construction activities or projects that would not be anticipated to generate vehicle trips.

a. This total includes office space, four residential units, ground-floor retail space, and a terrace.

gsf = square feet; du = dwelling unit

Table 3.0-4. Cumulative Projects – East Palo Alto

		Land Use and Unit						
ID	Address	Office (gsf)	Retail/ Commercial (gsf)	R&D/Light Industrial (gsf)	Other (gsf)	Hotel (rooms)	Residential (du)	Status
49	Cooley Landing	—	—	—	3,000	—	—	Construction Completed
50	1062 Runnymeade Street	—	—	—	—	—	4	Construction Proposed
51	120–124 Maple Lane Townhomes	—	—	—	—	—	4	Construction Proposed
52	Ravenswood Business District/4 Corners Transit-Oriented Development Specific Plan Update[a]	2,167,750	165,900	1,467,250	154,700	—	1,600	Construction Proposed
53	2340 Cooley Avenue	—	—	—	—	—	8	Construction Proposed
54	547 Runnymeade Street	—	—	—	—	—	8	Construction Proposed
55	717 Donohoe Street	—	—	—	—	—	14	Construction Proposed
56	755 Schembri Lane	—	—	—	—	—	4	Construction Proposed
57	807 E. Bayshore Avenue	—	—	—	—	—	6	Construction Proposed
58	990 Garden Street	—	—	—	—	—	6	Construction Proposed
59	2331 University Avenue	—	2,500	—	—	—	33	Construction Proposed
60	1039 Garden Street (KIPP Esperanza High School)	—	—	—	38,000[b]	—	—	Construction Completed
61	919 Runnymede Street (Majd residence)	—	—	—	—	—	2	Under Construction
62	2194 University Avenue (Shell gas station improvements)	—	5,305	—	15,000	—	—	Construction proposed
63	1950 University Avenue (University Circle Phase II)	180,000	—	—	—	—	—	Completed
64	760 Weeks Street (Weeks Street Townhomes)	—	—	—	—	—	10	Construction Proposed

ID	Address	Land Use and Unit						Status
		Office (gsf)	Retail/ Commercial (gsf)	R&D/Light Industrial (gsf)	Other (gsf)	Hotel (rooms)	Residential (du)	
65	2041 Euclid Avenue (Woodland Park Euclid Improvements)	—	—	—	—	—	605	Construction Proposed
Total		**2,347,750**	**173,705**	**1,467,250**	**210,700**	**0**	**2,304**	

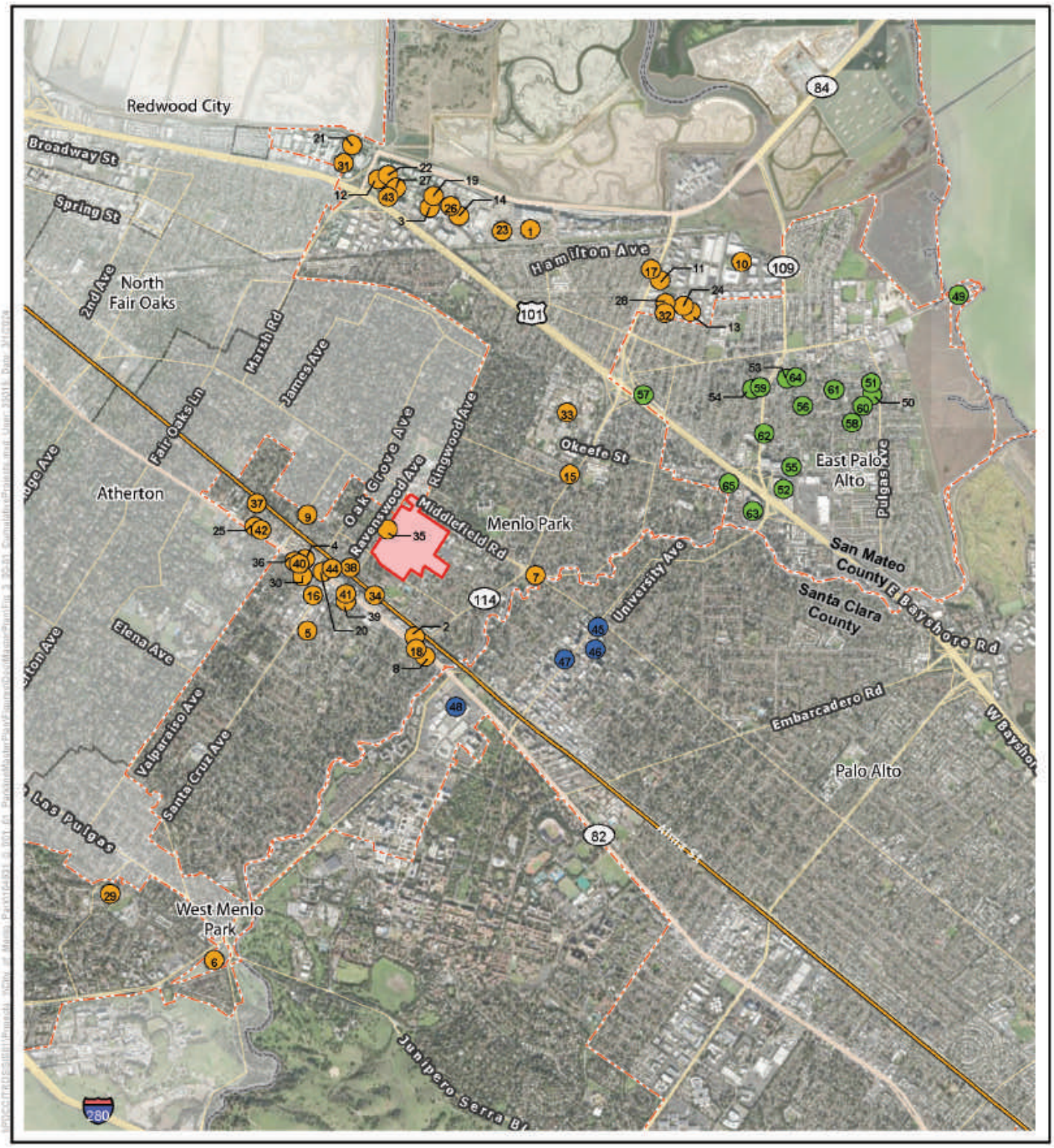
Source: City of East Palo Alto. 2023. *Projects.* Available: https://www.cityofepa.org/projects?term_node_tid_depth=All&field_project_status_value=All&field_project_type_tid=All&keys=&page=2. Accessed: May 9, 2023.

Notes: This list is current as of the date of the NOP for the Proposed Project (December 2, 2022). In addition, this list does not include projects in this jurisdiction that would not include substantial construction activities or are not anticipated to result in the generation of vehicle trips.

a. This list includes the Ravenswood Business District/4 Corners Transit-Oriented Development Specific Plan Update. Along with the programmatic analysis of new development in the specific plan area, the Specific Plan Update EIR will evaluate the following four major development projects: 2020 Bay Road, 1675 Bay Road (Four Corners), 1990 Bay Road (The Landing), and 2555 Pulgas (EPA Waterfront). Thus, this list does not include any proposed development projects in the specific plan area.

b. This is a school that will accommodate up to 550 students.

gsf = square feet; du = dwelling unit



Legend

- Project Site
- City Boundaries
- County Boundary

Cumulative Projects

- (#) Projects in Menlo Park
- (#) Projects in Palo Alto
- (#) Projects in East Palo Alto

Note: Table 3.0-2, Table 3.0-3, and Table 3.0-4 provide additional information for the cumulative projects located in Menlo Park, Palo Alto, and East Palo Alto, respectively.

0 0.5 1 Miles

Source: Imagery, ESRI 2021; Cumulative Projects, City of Menlo Park, City of East Palo Alto, and City of Palo Alto 2023

Figure 3.0-1
Cumulative Projects
Parkline

3.1 Impacts Found Not to Be Significant

This section describes the possible significant effects of the Proposed Project that were determined not to be significant and are, therefore, not discussed in detail in the Draft EIR. Section 15128 of the California Environmental Quality Act (CEQA) Guidelines states that an "EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." This section describes the basis for the city of Menlo Park's determination with regard to each environmental topic, pursuant to CEQA Guidelines Section 15128. This section also describes requirements related to the evaluation of aesthetics and parking impacts.

In the course of evaluating the potential impacts of the Proposed Project with respect to the environmental topics included in Appendix G of the CEQA Guidelines, it was found that the Proposed Project would have ***no impact*** related to the following environmental topics: agriculture and forestry resources, mineral resources, and wildfire. Therefore, these issues are not discussed in detail in this EIR for the reasons set forth below. Additionally, as further described below, the Proposed Project does not require the analysis of impacts related to aesthetics or vehicular parking.

Aesthetics and Vehicular Parking Analysis

SB 743, which was signed into law in 2013 and is codified in Section 21099 of the California Public Resources Code, establishes that aesthetics and parking shall not be considered in determining if a project has the potential to result in significant environmental effects, provided the project meets the qualifying criteria established under Public Resources Code Section 21099. As further described in Chapter 2, *Project Description*, the Proposed Project meets those criteria and, therefore, this EIR does not consider aesthetics or vehicular parking in determining the significance of impacts under CEQA. Appendix 3.1-1 of this EIR includes a discussion of the Proposed Project's potential aesthetics impacts for informational purposes.

Agriculture and Forestry Resources

The Project Site is within an urban area of the city. The current City General Plan Land Use Element designates the Project Site as Commercial—specifically, Professional and Administrative Offices. The California Department of Conservation, Division of Land Resource Protection, maps important farmland, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. The Project Site is classified as Urban and Built-Up Land by the California Department of Conservation.[1,2] The Project Site is not used for agricultural production and does not contain any designated farmland. There are no Williamson Act contracts for land within Project Site.

[1] Urban and Built-Up Land is occupied by buildings with a density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. Common examples include residential, industrial, and commercial uses; institutional facilities; cemeteries; airports; golf courses; sanitary landfills; sewage treatment plants; and water control structures.

[2] California Department of Conservation. 2019. *San Mateo County Important Farmland 2018*. Division of Land Resource Protection, Farmland Mapping and Monitoring Program. Available: https://www.conservation.ca.gov/dlrp/fmmp/Pages/SanMateo.aspx. Accessed: July 11, 2023.

There is no timberland or timberland zoned Timberland Production on the Project Site.[3] None of the trees currently growing on or adjacent to the Project Site are managed for a public benefit and, therefore, the Project Site is not "forestland."[4] Thus, the Proposed Project would not conflict with any existing zoning or forestland or timberland use or involve any changes to the environment that could result in the conversion of forestland or timberland. Therefore, there would be ***no impact*** related to agricultural and forestry resources, and no further analysis is required.

Mineral Resources

The Project Site is within an urban area of the city. The Project Site is not included on the list of mine sites regulated by the Office of Mine Reclamation, in accordance with Assembly Bill 3098, and has not been designated as a locally important mineral resource recovery site in the City General Plan or other applicable land use plan.[5,6] There are no mineral resource recovery operations within the city. Therefore, there would be ***no impact*** related to mineral resources, and no further analysis is required.

Wildfire

The California Department of Forestry and Fire Protection (CAL FIRE) has mapped Very High Fire Hazard Severity Zones in San Mateo County to help responsible local agencies, such as the Menlo Park Fire Protection District, identify measures to reduce the potential for loss of life, property, and resources from wildland fire. According to CAL FIRE, the Project Site is not within a High Fire Hazard Severity Zone or a Very High Fire Hazard Severity Zone and the vicinity of the Project Site is not within either of these zones.[7] The Project Site is within an urban area of the city where the risk of wildfire is low. Therefore, there would be ***no impact*** related to wildfire, and no further analysis is required.

[3] According to Public Resources Code Section 4526 and California Government Code Section 51104(g), "timberland" is defined as land, other than that owned by the federal government or designated by the State Board of Forestry and Fire Protection as Experimental Forestland, that is available for and capable of growing a crop of trees of any commercial species to produce lumber and other forest products, including Christmas trees.

[4] According to Public Resources Code Section 12220[g], "forestland" is land that can support a 10 percent native tree cover of any species, including hardwoods, under natural conditions and allow management of one or more forest resources, including resources with timber, aesthetic, fish and wildlife, biodiversity, water quality, recreational, or other public benefits.

[5] California Department of Conservation. 2023. *AB 3098 List.* Available: https://www.conservation.ca.gov/smgb/Pages/AB-3098-List.aspx. Accessed: July 11, 2023.

[6] City of Menlo Park. 2016. *ConnectMenlo: General Plan Land Use and Circulation and M-2 Area Zoning Plan Update.* Available: menlopark.gov. Accessed: September 7, 2023.

[7] California Department of Forestry and Fire Protection. 2024. *Fire Hazard Severity Zones*. Available: arcgis.com (Fire Hazard Severity Zones in State Responsibility Area). Accessed: May 31,2024.

3.2 Land Use and Planning

This section identifies and evaluates the Proposed Project's potential to physically divide an established community or result in a significant environmental impact due to a conflict with land use policies adopted for the purpose of avoiding or mitigating environmental effects. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated. This section also addresses the consistency of the Proposed Project with applicable land use goals and policies from the current city's General Plan,[1] the Menlo Park Municipal Code, and the city zoning ordinance. The city's General Plan and Menlo Park Municipal Code consistency analysis is provided for environmental review purposes only. The City Council will ultimately determine the Proposed Project's consistency with the goals and policies of the city's General Plan and the requirements of other city planning documents.

Under CEQA, land use and planning analyses generally consider two thresholds of significance: 1) the extent to which a project may physically divide an established community and 2) the consistency of a project with relevant local land use policies adopted to mitigate or avoid an environmental effect. With respect to the thresholds, the magnitude of the impact depends on how a project affects the existing development pattern, development intensity, and the air quality, noise, and visual setting in the immediate area. Specific environmental issues (e.g., visual, transportation, air quality, noise) and their potential significance are discussed in detail in the associated topical resource analyses in this EIR (e.g., Appendix 3.1-1 of this EIR,[2] Section 3.3, *Transportation*, Section 3.4, *Air Quality*, and Section 3.7, *Noise*, respectively).

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. Comments noted that the EIR should review the Proposed Project's consistency with requirements regarding zoning, floor area ratio (FAR), and development density. In addition, comments expressed concern regarding compatibility with existing adjacent land uses, particularly single-family residential neighborhoods.

Existing Conditions

Environmental Setting

Project Site Vicinity and Adjacent Uses

Menlo Park encompasses an area of about 19 square miles, including nearly 12 square miles associated with San Francisco Bay and wetlands. The approximately 7-square-mile urbanized portion of the city is virtually built out. The Project Site is part of a largely built out, suburban portion of the city. Developed uses in the immediate Project Vicinity include residential neighborhoods, parks, civic uses, and offices. Directly adjacent to the Project Site, along Ravenswood Avenue, are the First Church of Christ, Scientist and Alpha Kids Academy, a day care and preschool. Beyond Ravenswood Avenue, to the north, is a mix of

[1] The city General Plan consists of the Open Space and Conservation, Noise, and Safety Elements, adopted May 2013; the 2023–2031 Housing Element, adopted January 2023, along with associated amendments to the Land Use Element and a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development; and the Circulation and Land Use Elements, adopted November 2016.

[2] Appendix 3.1-1 of this EIR includes a discussion of the Proposed Project's potential aesthetics impacts for informational purposes.

residential neighborhoods and churches. This neighborhood in Menlo Park consists of detached single-family and multi-family dwellings. Trinity Church is located within this neighborhood along Ravenswood Avenue. Northeast of the Project Site, across Ravenswood Avenue, is a single-family residential neighborhood in Atherton.

Across Middlefield Road, to the northeast and east, are Menlo-Atherton High School in Atherton and the Vintage Oaks neighborhood in Menlo Park; Vintage Oaks consists of single-family residential properties. Directly adjacent to the Project Site on the east is a small office park with three office buildings along Middlefield Road. The Project Site is bordered on the south by a variety of uses, including office complexes along Middlefield Road; also present are U.S. Geological Survey (USGS) offices, the Linfield Oaks neighborhood, and the Menlo Park Corporation Yard. The Linfield Oaks neighborhood consists of a mix of single- and multi-family residential units. GeoKids, an early childhood development center, is south of the USGS offices. The Classics of Burgess Park neighborhood, located south and west of the Project Site, consists of two-story, single-family residential units on small properties.

Laurel Street and Burgess Park are adjacent to the Project Site on the west. Across Laurel Street, to the west, is Burgess Park, the Menlo Park Civic Center, and a day-care center. The 9.3-acre Burgess Park includes baseball and soccer fields, lighted tennis courts, playgrounds, a skate park, and picnic benches. The Menlo Park Civic Center includes two outdoor pools (Burgess Pool), the Arrillaga Recreation Center and Gymnasium, Menlo Park Police Department headquarters, City Hall, and the Menlo Park Library. The Menlo Children's Center, a preschool and facility for an after-school program, is across from the Project Site on Laurel Street.

As shown in Figure 2-1 in Chapter 2, *Project Description*, the parcels surrounding the Project Site are zoned PF (Public Facility), R2 (Low-Density Apartment District), R3 (Apartment District), R3X (Apartment District, Restrictive), R3A (Garden Apartment Residential District), and R1S (Single-Family Suburban Residential District). Land use designations include Residential, Public/Quasi-Public, and Parks and Recreation.

Project Site

The approximately 63.2-acre Project Site is at 333 Ravenswood Avenue[3] in Menlo Park (as shown in Figure 2-1). Specifically, the Project Site is between El Camino Real and Middlefield Road, near the downtown area and Menlo Park Caltrain station. It consists of five parcels (Assessor's Parcel Numbers 062-390-660, 062-390-670, 062-390-730, 062-390-760, and 062-390-780). The SRI International research campus is located on the Project Site, consisting of 38 buildings with approximately 1.38 million gross square feet (gsf) of mostly research-and-development (R&D) space and areas for supporting uses. Of the 38 buildings, one building (Building 302) is used exclusively for campus amenities, four buildings (Buildings 309, R, U, W) are used exclusively for support functions, and the remaining buildings incorporate a mix of amenity, office, R&D, and supporting uses. The buildings range in height from approximately 12 to 48 feet above the finished grade.

The current city's General Plan Land Use Element designates the Project Site as Commercial—specifically, professional and administrative offices. The range of permitted uses includes professional, executive, general, and administrative offices; R&D facilities; low-density residential uses; public and quasi-public uses; and similar uses. The maximum residential density is 30 dwelling units per acre. Non-residential uses are limited to a total FAR of 0.40.

[3] The Project Site also includes the addresses 301 Ravenswood Avenue and 555 and 565 Middlefield Road.

The Project Site is currently zoned C-1(X) (Administrative and Professional District, Restrictive); a small portion in the northeastern corner is zoned P (Parking). Conditionally permitted uses in the C-1 zoning district include professional, executive, and administrative offices; research facilities; multiple dwellings; public utilities; and "special uses." For nonresidential development, the maximum building coverage is 0.40, the maximum FAR is 0.30 (lower than what is permitted under the current city's General Plan), and the maximum height is limited to 35 feet. For residential development, the maximum building coverage is 0.50 and the maximum height is limited to 40 feet. For development with mixed nonresidential and residential uses, the maximum building coverage is 0.55 and the maximum height is limited to 40 feet. For development with mixed nonresidential and residential uses or a development with only residential uses, open space must occupy at least 25 percent of a site. The maximum density is 30 dwelling units per acre.

Construction of any new buildings that incorporate residential uses in the C-1 district must adhere to (i) the residential design standards set forth in Section 16.30.040 related to building setbacks and projections within setbacks, façade modulation and treatment, building profile, height, exterior materials, building design, open space, access and parking, and lighting, subject to the architectural controls established in Section 16.68.020, and (ii) the residential green and sustainable building provisions set forth in Section 16.30.050 related to green buildings, energy, water use efficiency and recycled water, waste management, and bird-friendly designs.

The "X" zoning designation reflects the additional controls that would apply to the site under the Conditional Development Permit (CDP), as discussed in more detail below. The P district permits landscaped off-street parking lots. No conditional uses (i.e., subject to a use permit) are allowed in the P district. If the P district abuts a residential district, the development regulations state that parking areas shall be screened by a 6-foot-high solid fence or wall and protected by a planter or bumper. Plans should be approved by the city engineer prior to development.

The Project Site is currently governed by a CDP approved in 1975 and subsequently amended in 1978, 1997, and 2004. The CDP permits up to 1,494,774 gsf of floor area but restricts maximum building coverage to 40 percent of the site, maximum height to 50 feet, and the maximum number of employees to 3,308, along with other restrictions. Though conditionally allowed in the C-1 district, the CDP does not currently authorize residential uses.

Regulatory Setting

Menlo Park General Plan

California planning law requires each city and county in the state to adopt a general plan for its future development. A general plan identifies the allowable land uses within its boundaries and establishes policies for both development and the protection of resources. It forms the foundation for a zoning ordinance, which establishes regulatory standards for development and resource protection. The city's General Plan and M-2 Area Zoning Update (ConnectMenlo), adopted in 2016 and most recently amended in January 2023 and January 2024 to incorporate updates to the Housing Element and Land Use Element, is a long-term plan that guides the physical development and character of Menlo Park. The city's General Plan discusses the city's goals, policies, and implementation programs regarding future growth and development in Menlo Park. It also provides a framework for implementation of the city's zoning, subdivision, and building regulations, as codified in the Menlo Park Municipal Code. As such, the city's General Plan is used by the City Council and Planning Commission when considering planning and land use decisions. The central purpose of the city's General Plan, as stated in the document, "is to maintain the

community's special character, including a range of residential, business, and employment opportunities, and accommodate change that will help maintain a vital community."

General Plan – Land Use Designations. The Land Use Diagram in the city's General Plan depicts the land use pattern for future development in Menlo Park. The boundaries of the land use designations in the Land Use Diagram are depicted generally. The land use designations are meant to outline building intensity and population density for various land uses. The city's General Plan designates the Project Site as Commercial—specifically, Professional and Administrative Offices.

General Plan – Goals and Policies. The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, along with associated amendments to the Land Use Element and a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. Applicable city's General Plan goals and policies adopted for environmental protection purposes related to land use are discussed under Impact LU-1, below. In addition, other applicable policies adopted for environmental protection purposes related to other topics are outlined in the relevant sections of this EIR.

Menlo Park Municipal Code

The Menlo Park Zoning Ordinance implements the land uses designated in the city's General Plan. Title 16 of the Menlo Park Municipal Code was adopted as a zoning plan for Menlo Park. It is designed to

> …preserve and extend the charm and beauty inherent to the residential character of the city; to regulate and limit the density of population; encourage the most appropriate use of land; to conserve land and stabilize the value of property; to provide adequate open space for light, air and fire protection; to lessen traffic congestion; to facilitate the provision of community facilities; to encourage tree and shrub planting; to encourage building construction of pleasing design; to provide the economic and social advantages of a planned community.

The Menlo Park Zoning Ordinance defines Menlo Park's zoning districts and identifies the permitted and conditionally permitted uses in each. The ordinance also establishes development regulations regarding building heights, setbacks, parking ratios, building land cover, and floor area. The Project Site is currently zoned C-1(X) (Administrative and Professional District, Restrictive) and P (Parking).

Plan Bay Area

Senate Bill (SB) 375, adopted in 2008, requires preparation of a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP) for the Bay Area. In the Bay Area, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are jointly responsible for developing and adopting a SCS that integrates transportation, land use, and housing to meet GHG reduction targets set by the California Air Resources Board (CARB). MTC and ABAG adopted Plan Bay Area 2050 in 2021.[4] Plan Bay Area 2050 is the integrated land use/transportation plan and

[4] Association of Bay Area Governments and Metropolitan Transportation Commission. 2021. *Plan Bay Area 2050: A Vision for the Future*. Released: October 1, 2021. Available: https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021_rev.pdf. Accessed: September 28, 2023.

demographic/economic forecast for the nine-county San Francisco Bay Area region. The plan coordinates housing plans, open space conservation efforts, economic development strategies, and transportation investments. Plan Bay Area 2050 includes transportation and environmental strategies that support active and shared modes of travel, combined with a transit-supportive land use pattern that places housing near transportation centers.

To reduce GHG emissions, Plan Bay Area 2050 promotes compact mixed-use infill development within bikeable/walkable neighborhoods that are close to public transit, jobs, schools, shopping, parks, recreation, and other amenities. Local jurisdictions voluntarily identified Priority Development Areas (PDAs) as appropriate locations for these types of neighborhoods. PDAs are eligible for capital infrastructure funds, planning grants, and technical assistance. Focusing growth within PDAs maximizes travel choices, reduces dependency on driving, takes advantage of existing infrastructure capacity, and reduces pressure to develop open space.[5] Implementation of the strategies are forecast to lower the number of Bay Area residents who drive to work alone from 50 percent in 2015 to 33 percent in 2050, leading to a 20 percent decrease in greenhouse gas (GHG) emissions compared to 2005 and meeting a state mandate that calls for a 19 percent decrease in GHG emissions by 2050.

Plan Bay Area 2050 also forecasts changes to the Bay Area population, including projected household and job growth, at the regional, county, and sub-county level. *Plan Bay Area 2050 Final Blueprint* includes ABAG's most recent projections for demographic, economic, and land use changes in the coming decades. According to Plan Bay Area 2050, the number of households in San Mateo County is expected to increase by 129,000 between 2015 and 2050, and the number of jobs is expected to increase by 114,000 during the same period. Prior to Plan Bay Area 2050, Plan Bay Area 2040, adopted in 2017, was the most recent regional transportation plan and sustainable communities strategy for the Bay Area region. Plan Bay Area 2050, which updates Plan Bay Area 2040, is consistent with the current Regional Housing Needs Allocation (RHNA) cycle. In addition to providing household and job growth projections at the regional, county, and sub-county levels, Plan Bay Area 2040 provided projections at the city level. However, city-level growth projections are not yet available in Plan Bay Area 2050.[6] Because Plan Bay Area 2050 was adopted in late 2021, Plan Bay Area 2040 will continue to serve as the basis for regional and county-wide transportation models until the models are updated. Updates to the models are anticipated within the next several years. To be consistent with the transportation models, as well as projections used in the city's Housing Element Update and ConnectMenlo, 2040 projections from Plan Bay Area 2040 are used throughout this document.

Environmental Impacts

This section describes the impact analysis related to land use for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

[5] Metropolitan Transportation Commission and Association of Bay Area Governments. 2021. *Plan Bay Area 2050.* Adopted: October 2021. Available: https://www.planbayarea.org/finalplan2050. Accessed: September 28, 2023.

[6] Association of Bay Area Governments. 2021*. Plan Bay Area 2050 Growth Patterns*. Available: https://www.planbayarea.org/digital-library/plan-bay-area-2050-final-blueprint-growth-pattern. Accessed: September 28, 2023.

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Physically divide an established community.
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Methods for Analysis

CEQA requires that an EIR consider whether a proposed project would conflict with any applicable land use plan, policy, or regulation that was adopted for the purpose of avoiding or mitigating an environmental impact. This environmental determination differs from the larger policy determination of whether a proposed project is consistent with a jurisdiction's general plan. The former determination (intended for consideration in a CEQA document) is based on, and limited to, a review and analysis of environmental effects. The latter determination, by comparison, is made by the decision-making body of the jurisdiction and based on the jurisdiction's broad discretion to assess whether a proposed project would conform to the policies and objectives of its general plan/specific plan as a whole. In addition, the broader general plan consistency determination takes into account all evidence in the record concerning project characteristics, its desirability, as well as its economic, social, and other non-environmental effects. A project's conflicts with land use policies do not, in and of themselves, constitute significant environmental impacts. Policy conflicts are considered environmental impacts only when they result in direct environmental effects.

This Draft EIR evaluates the Proposed Project's consistency with the city's General Plan policies adopted to avoid or mitigate environmental effects. Consistency with policies designed to avoid or mitigate environmental land use impacts are discussed in this section. Consistency with policies designed to avoid or mitigate other physical impacts are discussed in the sections that address those particular impacts (e.g., consistency with the city's Climate Action Plan is discussed in Section 3.5, *Energy*, and Section 3.6, *Greenhouse Gas Emission*). The Planning Commission and City Council will consider all policies, as well as overall city General Plan consistency, during the Proposed Project's review process in the non-CEQA context.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact, in which case the analysis does not identify a "worst-case" scenario.

A project's land use and planning impacts are site specific. The two buildout scenarios would occur on the same parcels; therefore, there would be no difference in location that would affect the analysis. Therefore, impacts would be the same regardless of the 100 percent office scenario or 100 percent R&D scenario for purposes of the impact analysis.

Impacts Not Evaluated in Detail

This section describes why the Proposed Project would result in ***no impact*** related to the division of an established community, and no further analysis is required.

Division of an Established Community. The Proposed Project would redevelop a site that is already developed. It would not change the site boundaries. The Proposed Project would include demolition of existing buildings and construction of a new office/R&D campus, with no net increase in existing office/R&D square footage; up to 550 new rental dwelling units; and new bicycle and pedestrian connections. In addition, approximately 26.4 acres of open space would be provided, and a 6-megawatt natural gas cogeneration plant would be decommissioned. Although the Proposed Project would add intensified development in the area, the Project Site has been developed for decades with similar uses. The Proposed Project would add residential uses, which are not a current use at the Project Site; however, properties to the north are zoned R2 (Low-Density Apartment District) and R3 (Apartment District), while properties to the south are zoned R1S (Single-Family Suburban Residential District). The proposed multi-family residential units would act as a transition from the low-density apartments to the north to the single-family neighborhood to the south. In addition, although the Project Site is currently closed to the public and inaccessible, new bicycle and pedestrian connections, along with public open spaces, would increase connectivity between adjacent neighborhoods, public facilities, and schools.

Impacts and Mitigation Measures

Impact LU-1: Conflicts with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect. The Proposed Project would not result in a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Proposed Project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. (LTS)

The Proposed Project would be designed with an integrated master plan, with all parcels held in common ownership, allowing for a continuous and complementary site plan and program. To achieve this goal, the Proposed Project would be subject to site-specific, tailored land use controls, including development standards, to guide development on the Project Site and reflect the Proposed Project's specific objectives through land use approvals by the city. Proposed Project entitlements would include General Plan amendments and zoning amendments, as further discussed below.

It is anticipated that the Proposed Project would be implemented through a Project-level permit (e.g., a CDP) to address site-specific topics such as public works requirements, open space improvements, rules for modifications, design controls, phasing, mitigation measures, operational requirements, and other conditions of approval. The CDP would also regulate density, intensity, and land uses for the Proposed Project.

As discussed under "Methods for Analysis," this impact analysis considers whether the Proposed Project would result in significant environmental effects as a result of a conflict with an applicable land use plan,

policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. The following subsections address the Proposed Project's consistency with applicable land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect, including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance.

Consistency with the General Plan

Land Use Designations

As described above, the city's General Plan Land Use Element designates the Project Site as Commercial—specifically, Professional and Administrative Offices. The range of permitted uses includes professional, executive, general, and administrative offices; R&D facilities; low-density residential uses; public and quasi-public uses; and similar uses. However, the current land use designations for the Project Site cannot accommodate the range of uses and intensities appropriate for a modern mixed-use development.

Amendments to the city's General Plan would be required to allow the Proposed Project to move forward. The applicable General Plan designation, as amended, would apply to the entire Project Site and allow implementation of residential and non-residential development under the Proposed Project or Project Variant. Further details related to proposed city's General Plan amendments would be developed through further review and coordination with the city. With establishment of General Plan amendments for the Project Site, there would be ***no impact.*** No mitigation is required.

Goals and Policies

The determination of whether the Proposed Project would conflict with applicable policies would be based on the Project description in Chapter 2 or, for policies adopted for the purpose of mitigating an environmental impact, the environmental analysis provided in the applicable resource sections of this Draft EIR.

The following discussion concerns general Project consistency with each of the relevant general plan elements. Table 3.2-1, at the end of this section, outlines the adopted general plan goals and policies that have been identified as appliable to the Proposed Project, describes environmental effects and potential conflicts, and provides a determination of "consistent" or "inconsistent" for each policy. Although the table shows some inconsistencies with the general plan, the Proposed Project would be generally consistent with the goals and policies contained in the general plan. The ultimate determination of general plan consistency can and will be made by the City Council. The finding of general plan consistency does not require a project be entirely consistent with each individual general plan policy. A project can be generally consistent with a general plan, even if it does not promote every appliable goal and policy. Assuming approval, the Proposed Project would be generally consistent with applicable goals and policies, and the impact would be ***less than significant***. No mitigation is required.

Compliance with the Zoning Ordinance

A zoning ordinance amendment would create one new mixed-use, transit-oriented zoning district and establish discrete development standards regarding permitted uses, density, lot size and dimensions, building height, and open space. It is anticipated that the zoning ordinance amendment would also regulate components such as design standards, Transportation Demand Management (TDM) plans, Leadership in Energy and Environmental Design (LEED) standards, use of renewable energy, water efficiency, waste management, and bird-friendly designs. Details related to the proposed zoning amendment would be developed through further review and coordination with the city.

An amendment to the city's zoning map would be required for the Project Site, which is anticipated to include a conditional development "X" overlay to facilitate development flexibility and identify site-specific topics, as needed through issuance of a conditional development permit. Upon implementation of a zoning ordinance amendment, the Proposed Project would be in compliance with the zoning ordinance, resulting in ***no impact.*** No mitigation is required.

Consistency with Plan Bay Area

As discussed above, the SCS for the region is Plan Bay Area 2050. This document is not a land use plan and does not mandate any specific actions from local municipalities, such as changes to zoning rules, general plans, or project review processes. Instead, Plan Bay Area 2050 consists of 35 strategies to improve conditions throughout the Bay Area related to housing, the economy, transportation, and the environment. Included are transportation and environmental strategies that support active and shared modes of travel, combined with a transit-supportive land use pattern that places housing near transportation centers throughout the Bay Area.

The Project Site is an already-developed urban site and near transit centers. The Menlo Park Caltrain station is off Ravenswood Avenue, between Alma Street and El Camino Real, providing daily service between San Francisco and San José as well as a connection to Bay Area Rapid Transit (BART) at the Millbrae Caltrain station. The majority of the Project Site is within 0.50 mile of the Caltrain station and also close to SamTrans bus and Menlo Park community shuttle stops on Middlefield Road and Ravenswood Avenue. The Project Site is served by SamTrans routes 81, 82, 296, and 397 and Menlo Park community shuttle routes M1 and M4.

Consistent with Plan Bay Area 2050, the Proposed Project would include a TDM plan. Specifically, the Proposed Project would include a project-specific TDM plan for both residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization. Overall, the Proposed Project would implement TDM measures that would complement the land use program of its mixed-use campus as well as its proximity to the downtown Menlo Park Caltrain station and the SamTrans and Menlo Park community shuttle bus routes. Section 3.3, *Transportation*, describes the Proposed Project's relationship to transit in detail.

As indicated in Section 3.14, *Population and Housing*, the city's jobs/housing ratio is projected to improve by 2050. The Proposed Project's development of housing, in addition to office/R&D uses, in the context of the city's already-high jobs/housing ratio further supports the balanced growth objectives of Plan Bay Area. As described in Section 3.14, *Population and Housing*, the indirect housing demand from the Proposed Project would represent only a small percentage of ABAG's projected housing growth for Menlo Park. Therefore, the Proposed Project would be consistent with Plan Bay Area, and the impact would be ***less than significant***. No mitigation is required.

Cumulative Impacts

Cumulative impacts are addressed only for those thresholds that would result in a Project-related impact. If the Proposed Project would result in no impact with respect to a particular threshold, it would not contribute to a cumulative impact. Therefore, no cumulative analysis is required. As discussed under

"Impacts Not Evaluated in Detail," the Proposed Project would result in no impact related to division of an established community. No cumulative analysis is required.

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. Because land use policies are regional in scope, the geographic context for cumulative assessment of land use impacts is broader than the city and includes regional development under the jurisdiction of ABAG. Past, present, and reasonably foreseeable future cumulative development within this geographic context assumes full build-out of the general plans of the nine ABAG counties as well as development envisioned in the Land Use Element of the city's General Plan.

Impact C-LU-1: Cumulative Land Use Impacts. Cumulative development would not result in a significant environmental impact on land use and planning; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (NI)

CEQA requires that an EIR consider whether a proposed project would conflict with an applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental impact. This environmental determination differs from the larger policy determination of whether a proposed project is consistent with a jurisdiction's general plan. Regional growth in general is reviewed for consistency with adopted land use plans and policies by the individual cities and counties in the geographic context, in accordance with the requirements of CEQA, which require findings of plan and policy consistency prior to approval of entitlements for development. This process applies to all cumulative projects identified in Table 3.0-2, Table 3.0-3, and Table 3.0-4 under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. Project consistency with land use policies or regulations adopted for the purpose of avoiding or mitigating an environmental impact is similarly evaluated for each individual project and addressed in the analysis for each specific resource area. For example, if an individual project results in the division of an established community, this would be addressed in the land use section of that project's EIR or other environmental document. The environmental evaluation for the project would also include an analysis of the division of an established community on a cumulative basis.

Because consistency with land use plans and policies is inherently a project-specific issue, and each jurisdiction would decide on project consistency at the project level, there would be ***no cumulative impact*** as a result of cumulative development in the ABAG region. No mitigation is required. Furthermore, as discussed above, the Proposed Project, with adoption of a general plan amendment, zoning amendment, and a Project-specific CDP, would be generally consistent with the city's General Plan, Menlo Park Municipal Code, and Plan Bay Area 2050.

Table 3.2-1. Comparison of the Proposed Project to General Plan Goals and Policies

General Plan Goal/Policy	Consistency Analysis
Land Use Element – Adopted November 2016 (ConnectMenlo)	
Policy LU-1.1: Land Use Patterns. Cooperate with the appropriate agencies to help ensure a coordinated land use pattern in Menlo Park and the surrounding area.	CONSISTENT. Although the proposed buildings would increase mass and scale compared to the existing visual setting, the Proposed Project would generally be consistent with the development pattern of the area. The Project Site has been developed for decades with office and R&D uses similar to those that would be developed under the Proposed Project. Although the Proposed Project would add residential uses, which are not a current use at the Project Site, properties to the north are zoned R2 (Low-Density Apartment District) and R3 (Apartment District), while properties to the south are zoned R1S (Single-Family Suburban Residential District). The proposed multi-family residential units would act as a transition from the low-density apartments to the north to the single-family neighborhood to the south. Therefore, the Proposed Project would continue the land use patterns north and south of the Project Site. In addition, the Proposed Project would involve approvals from and coordination with various agencies, in addition to the city, as discussed under Section 2.7 in Chapter 2, *Project Description*, which would ensure a coordinated land use pattern in Menlo Park and the surrounding area.
Goal LU-2: Maintain and enhance the character, variety, and stability of Menlo Park's residential neighborhoods.	CONSISTENT. The Proposed Project would involve redevelopment of an existing R&D campus and construction of a new R&D, commercial, and residential mixed-use neighborhood in Menlo Park, which would be developed following city architectural control approval. Although the Proposed Project would increase the density and scale of development at the Project Site, generally altering visual conditions, the residential and office/R&D uses would be consistent with uses in the surrounding community, with appropriate transitions. Although the proposed buildings could be visible from surrounding residential neighborhoods, they would not substantially alter the existing visual character of these neighborhoods. In general, views of the buildings would be limited, consisting mainly of blocked background views; therefore, the buildings would not be a dominant feature in the area.

General Plan Goal/Policy	Consistency Analysis
Policy LU-2.1: Neighborhood Compatibility. Ensure that new residential development possesses a high-quality design that is compatible with the scale, look, and feel of the surrounding neighborhood and respects the city's residential character.	CONSISTENT. The proposed buildings would be visible from surrounding neighborhoods and public spaces. However, the majority of the proposed buildings would be screened from view by existing vegetation or walls and fences, with only some portions visible. Although the proposed buildings would be taller than buildings under existing conditions, the proposed buildings would be generally compatible with surrounding development. The Proposed Project would use advances in architectural, landscape design, and site planning practices to create distinctive and viable residential and commercial areas that complement the adjacent neighborhoods. For the Proposed Project's new residential mixed-use neighborhood, each building's architectural design and configuration would be determined through the design review process set forth in the CDP and the subdivision mapping process.
Policy LU-2.2: Open Space. Require accessible, attractive open space that is well maintained and uses sustainable practices and materials in all new multiple-dwelling and mixed-use development.	CONSISTENT. The Proposed Project would provide approximately 26.4 acres of open space and supporting amenities, including a network of publicly accessible bicycle and pedestrian trails, open spaces, and active/passive recreational areas that would be available to the public. In addition, the Project Site would include community-oriented facilities, such as a community playing field, a children's playground area, and a community amenity building that would accommodate retail uses.
Policy LU-2.3: Mixed-Use Design. Allow mixed-use projects with residential units if the project design addresses potential compatibility issues, such as traffic, parking, light spillover, dust, odors, and the transport and use of potentially hazardous materials.	CONSISTENT. The Proposed Project would not result in incompatible uses related to traffic, parking, dust, odors, or the transport and use of potentially hazardous materials as addressed in Sections 3.3, *Transportation*; Section 3.4, *Air Quality*; Section 3.7, *Noise*; and Section 3.13, *Hazards and Hazardous Materials.* In addition, the Proposed Project would not result in incompatible uses related to light spillover, as discussed in Appendix 3.1-1 of this EIR, which includes a discussion of the Proposed Project's potential aesthetics impacts for informational purposes. Lighting would comply with California Green Building Standards Code (CALGreen) and city lighting guidelines. All fixtures would be energy efficient and designed to reduce glare and unnecessary light spillage.
Policy LU-2.5: Below-Market-Rate Housing. Require residential developments of five or more units to comply with the provisions of the city's Below-Market-Rate Housing Program, including eligibility for increased density above the number of market-rate dwellings otherwise permitted by the applicable zoning as well as other exceptions and incentives.	CONSISTENT. Consistent with the city's inclusionary housing requirements, 15 percent of the proposed dwelling units (i.e., 68 dwelling units) would be below-market-rate housing. An additional 100 dwelling units would be developed by an affordable-housing developer; all units would be affordable and located within one building.
Policy LU-2.6 Underground Utilities. Require all electric and communications lines serving new development to be placed underground.	CONSISTENT. A trench would be dug within the Project Site to provide space for electric and telecommunications conduits. All electric and telecommunications lines would be placed underground.

General Plan Goal/Policy	Consistency Analysis
Policy LU-2.9: Compatible Uses. Promote residential uses in mixed-use arrangements and the clustering of compatible uses such as employment centers, shopping areas, open spaces, and parks within easy walking and bicycling distance of each other as well as transit stops.	CONSISTENT. By providing a mix of uses within the office/R&D area, as well as introducing a residential area, the Proposed Project would cluster compatible uses within easy bicycling/walking distance from downtown Menlo Park and the Menlo Park Caltrain station. The Proposed Project would improve bicycle and pedestrian connectivity and safety between the Project Site and adjacent neighborhoods to promote an active public realm and establish interconnected neighborhoods.
GOAL LU-3: Retain and enhance existing uses and encourage new neighborhood-serving commercial uses, particularly retail services, to create vibrant commercial corridors.	CONSISTENT. The Proposed Project would involve redevelopment of an existing R&D campus into a modern office/R&D area. The office/R&D area would also introduce a new one-story community amenity building with approximately 2,002 gsf. The community amenity building would be on the northeast corner of the site, adjacent to a proposed recreational field. This building would include community-serving retail uses, which may include a bicycle repair shop and a juice bar, as well as publicly accessible restrooms.
Policy LU-3.1: Underutilized Properties. Encourage underutilized properties in and near existing shopping districts to redevelop with attractively designed commercial, residential, or mixed-use development that complements existing uses and supports bicycle and pedestrian access.	CONSISTENT. By updating the existing underutilized R&D campus with a new mixed-use development (i.e., office/R&D, residential, commercial, recreational/open space), the Proposed Project would improve existing underutilized properties by updating existing office/R&D uses. The Proposed Project would be designed with an integrated master plan, allowing for a continuous and complementary site plan and program with multi-use pedestrian and bicycle paths.
Goal LU-4: Promote and encourage existing and new businesses, and attract entrepreneurs and emerging technologies that will provide goods, services, amenities, local job opportunities, and tax revenue for the community while avoiding or minimizing potential environmental and traffic impacts.	CONSISTENT. The Proposed Project would provide goods, services, amenities, local job opportunities, and tax revenue to the existing neighborhood, Menlo Park Civic Center, and the city. The Proposed Project would generate revenue for the city's general fund and public agencies by increasing property values and property tax revenue. As evaluated throughout this Draft EIR, the Proposed Project would minimize potential environmental and traffic impacts through various Project components or mitigation measures.
Policy LU-4.1: Priority Commercial Development. Encourage emerging technology and entrepreneurship, and prioritize commercial development that provides fiscal benefits to the city, local job opportunities, and/or the goods or services needed by the community.	CONSISTENT. The Proposed Project would include commercial development (i.e., office/R&D uses) that would provide fiscal benefits to the city, local job opportunities, and goods and services needed by the community. The Proposed Project would include complementary community recreational and retail uses that would encourage an active lifestyle for residents, tenants, and visitors. The 100 percent office scenario would result in approximately 3,868 net new employees at the Project Site, accounting for the 400 existing employees who would no longer work at the Project Site with implementation of the Proposed Project. The 100 percent R&D scenario would result in approximately 2,667 net new employees at the Project Site, accounting for the 400 existing employees who would no longer work at the Project Site.

General Plan Goal/Policy	Consistency Analysis
Policy LU-4.3: Mixed-Use and Non-residential Development. Limit parking, traffic, and other impacts of mixed-use and non-residential development on adjacent uses, and promote high-quality architectural designs and effective transportation options.	CONSISTENT. Overall, the Proposed Project would include onsite parking, implement TDM measures and a trip cap, and require building-specific architectural control permits. The Proposed Project would provide approximately 3,319 parking spaces on the Project Site (approximately 519 spaces within the residential area and 2,800 spaces within the office/R&D area); proposed parking would require review by the city's transportation manager and approval by the City Council as part of the requested land use entitlements. TDM measures would encourage Project workers and residents to use alternative modes of transportation, thereby reducing the number of vehicles traveling to and from the Project Site. Architectural design would be subject to review and approval of architectural control plans, consistent with the CDP, to ensure a high-quality design.
Policy LU-4.4: Community Amenities. Require mixed-use and non-residential development of a certain scale to support and contribute to programs that benefit the community and the city, including programs related to education, transit, transportation infrastructure, sustainability, neighborhood-serving amenities, child care, housing, job training, and meaningful employment for Menlo Park youth and adults.	CONSISTENT. The office/R&D area would introduce a new one-story community amenity building with approximately 2,002 gsf. The community amenity building would be located on the northeast corner of the site, adjacent to a proposed recreational field. This building would include community-serving retail uses, which may include a bicycle repair shop and a juice bar, as well as publicly accessible restrooms.
Policy LU-4.5: Business Uses and Environmental Impacts. Allow modifications to business operations and structures that promote revenue-generating uses for which potential environmental impacts can be mitigated.	CONSISTENT. The Proposed Project would incorporate a mix of uses, including residential, office/R&D, open space/recreational, and commercial, for both the office/R&D campus and public areas, which would generate revenue. The environmental impacts, as addressed in this Draft EIR, would be mitigated to the extent feasible.
Policy LU-4.6: Employment Center Walkability. Promote local-serving retail and personal service uses in employment centers and transit areas that support walkability and reduce the number of automobile trips.	CONSISTENT. The Proposed Project would provide a new office/R&D campus, up to 550 new rental dwelling units, new bicycle and pedestrian connections, and approximately 26.4 acres of open space. The majority of the Project Site is within 0.5 mile of the Caltrain station and close to the SamTrans bus and Menlo Park community shuttle stops on Middlefield Road and Ravenswood Avenue. The Project Site is served by SamTrans routes 81, 82, 296, and 397 and Menlo Park community shuttle routes M1 and M4. The Proposed Project would implement TDM measures that would complement the land use program of its mixed-use campus as well as its proximity to the downtown Menlo Park Caltrain station as well as SamTrans and Menlo Park community shuttle bus routes. Therefore, the Proposed Project would promote the walkability of the proposed employment center and reduce the number of automobile trips.

General Plan Goal/Policy	Consistency Analysis
GOAL LU-6: Preserve open space lands for recreation, protect natural resources and air and water quality, and protect and enhance scenic qualities.	CONSISTENT. The Proposed Project would provide approximately 26.4 acres of open space and supporting amenities. This would involve establishing new open space areas on the Project Site (e.g., Ravenswood Avenue Parklet, Parkline Central Commons, Parkline Recreational Area) with paths for shared use. The design of the Project Site would create a park-like setting that would preserve existing heritage trees and plant new trees, which would enhance or retain scenic qualities.
Policy LU-6.2: Open Space in New Development. Require new non-residential, mixed-use, and multiple-dwelling development of a certain scale to provide ample open space in the form of plazas, greens, community gardens, and parks whose frequent use is encouraged through thoughtful placement and design.	CONSISTENT. The Proposed Project would include approximately 26.4 acres of publicly accessible open space and supporting amenities. This would involve establishing new open space areas on the Project Site (e.g., Ravenswood Avenue Parklet, Parkline Central Commons, Parkline Recreational Area) with paths for shared use. New multi-family residences within the residential area would also include open spaces in the form of private balconies, patios, and rooftop terraces.
Policy LU-6.3: Public Open Space Design. Promote a public open space design that encourages active and passive uses, with use during daytime and appropriate nighttime hours, to improve quality of life.	CONSISTENT. The mixture of open spaces provided by the Proposed Project, including the shared-use paths and parks, would promote both active and passive uses that would improve the quality of life for users on the Project Site. The proposed open space areas would support publicly accessible community activities within a recreational field, children's play area, picnic areas, exercise stations, shared-use paths, and other activity areas.
Policy LU-6.4: Park and Recreational Land Dedication. Require new residential development to dedicate land, or pay fees in lieu thereof, for park and recreational purposes.	CONSISTENT. The Proposed Project would provide approximately 26.4 acres of open space and supporting amenities. This would involve establishing new open space areas on the Project Site (e.g., Ravenswood Avenue Parklet, Parkline Central Commons, Parkline Recreational Area) with paths for shared use. Residents of the new development as well as the general public would have access to these areas.
Policy LU-6.8: Landscaping in Development. Encourage extensive and appropriate landscaping in public and private development to maintain the city's tree canopy and promote sustainability and healthy living, particularly through additional trees and water-efficient landscaping in large parking areas and the public right-of-way.	CONSISTENT. The Proposed Project would remove approximately 708 trees, including 198 heritage trees, and plant approximately 873 new trees, resulting in a total of 1,505 trees on the Project Site, an overall increase in the number of trees compared to existing conditions. Landscaping at the Project Site would include a combination of native, drought-tolerant, and adapted species and comply with the Menlo Park Water-Efficient Landscaping Ordinance. Native drought-tolerant plants and low-flow drip irrigation systems would be installed to minimize potable water consumption.

General Plan Goal/Policy	Consistency Analysis
Policy LU-7.1: Sustainability. Promote sustainable site planning, development, landscaping, and operational practices that conserve resources and minimize waste.	CONSISTENT. A key objective of the Proposed Project is to provide a state-of-the-art, energy-efficient, and sustainable campus environment that is focused on reducing emissions and natural resource usage. Nearly all of the outdated and energy-inefficient buildings within the Project Site would be replaced with new buildings and related improvements that would reflect the latest sustainability requirements, including the intent of the city's adopted Reach Code[7] and green building program; the California Green Building Standards Code, known as CALGreen; and California Title 24's new renewable energy mandates. The Proposed Project would also remove an existing cogeneration plant and establish an all-electric energy design throughout the Project Site, with the exception of Buildings P and T, which would retain natural gas usage for continued laboratory and R&D purposes. The Proposed Project would minimize both construction and operational carbon emissions through a range of sustainability measures and commitments (e.g., diversion of construction waste, replacement of inefficient buildings, LEED certification or equivalent standards, compliance with the intent of the city's adopted Reach Code, solar energy usage, provision of parking for electric vehicles, sustainable building designs, water use management, stormwater recapture, drought-tolerant landscaping, and Fitwell certification).
Circulation and Transportation Element – Adopted November 2016 (ConnectMenlo)	
Goal CIRC-2: Increase accessibility for and use of streets by bicyclists, pedestrians, and transit riders.	CONSISTENT. The Proposed Project would provide pedestrian connections to adjacent sidewalks. The Proposed Project would eliminate the existing security perimeter and open the Project Site to the surrounding community by creating accessible and safe multi-modal facilities, allowing bicyclists and pedestrians to circulate throughout the Project Site. The Project Sponsor has identified bicycle, pedestrian, and transit routes within the Project Site. Furthermore, the TDM measures would promote bicycle and transit use.
Policy CIRC-2.11: Design of New Development. Require new development to incorporate designs that prioritize safe bicycle and pedestrian travel and accommodate senior citizens, people with mobility challenges, and children.	CONSISTENT. The Proposed Project would facilitate bicycle and pedestrian accessibility and connectivity, both within the Project Site (e.g., new streets with bicycle lanes and sidewalks and new multi-use pathways) and between nearby areas. The Proposed Project would eliminate the existing security perimeter and open the Project Site to the surrounding community by creating accessible and safe multi-modal facilities, allowing bicyclists and pedestrians to circulate throughout the Project Site, including along Ravenswood Avenue, Burgess Drive, and Laurel Street. These bicycle and pedestrian facilities would be located along the perimeter of the Project Site and throughout the interior to create east–west bicycle and pedestrian linkages that would connect the Project Site to Burgess Park, the future Caltrain undercrossing, and the downtown Menlo Park area.

[7] In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

General Plan Goal/Policy	Consistency Analysis
Policy CIRC-5.7: New Development. Ensure that new non-residential, mixed-use, and multiple-dwelling residential developments provide the associated needed transit service, improvements, and amenities in proportion to the demand attributable to the type and scale of the proposed development.	CONSISTENT. The Menlo Park Caltrain station is located off Ravenswood Avenue, between Alma Street and El Camino Real, providing daily service between San Francisco and San José, with connections to BART at the Millbrae Caltrain station. The majority of the Project Site is within 0.5 mile of the Caltrain station and close to the SamTrans bus and Menlo Park community shuttle stops on Middlefield Road and Ravenswood Avenue. The Project Site is served by SamTrans routes 81, 82, 296, and 397 and Menlo Park community shuttle routes M1 and M4. Therefore, the existing transit network would provide service for the Proposed Project.
Goal CIRC-7: Use innovative strategies to provide efficient and adequate vehicle parking.	CONSISTENT. In addition to onsite vehicle parking, the Proposed Project would include TDM measures that would encourage employees and residents to use alternative modes of transportation, thereby reducing the number of vehicles traveling to and from the Project Site. Shared parking is also anticipated to be available for residential visitors in the evening and on weekends in the office/R&D area's surface lots and structures.
Policy CIRC-7.1: Parking and New Development. Ensure that new development provides appropriate parking ratios through the application of appropriate minimum and/or maximum ratios, unbundling, shared parking, electric-car charging, car-sharing, and Green Trip–Certified strategies to accommodate employees, customers, and visitors.	CONSISTENT. The Proposed Project would demolish existing surface parking areas and provide three above-ground parking garages, two one-level below-ground parking garages, podium parking, and limited surface parking to accommodate all uses on the Project Site. The majority of the onsite parking would be provided in above-grade parking structures that would be screened from public view. These would be located in areas used by commercial tenants, residents, and visitors. All garages would have code-required electric-vehicle (EV) charging stations. Shared parking is also anticipated to be available for residential visitors in the evening and om weekends in office/R&D area's surface lots and structures. The Project Site's proximity to the Menlo Park Caltrain station, along with the Proposed Project's TDM plan, is projected to result in lower parking demand.
Policy CIRC-7.2: Off-Street Parking. Ensure both new and existing off-street parking is properly designed and used efficiently through shared parking agreements and, if appropriate, parking in-lieu fees.	CONSISTENT. The Proposed Project would provide approximately 3,319 onsite parking spaces through a combination of podium garages, parking structures, and limited surface parking. The Proposed Project would provide adequate off-street parking and encourage the use of alternative modes of transportation. Because of its proximity to the Menlo Park Caltrain station, as well as implementation of the Project-specific TDM plan, the Proposed Project is projected to result in lower parking demand and less need for off-street parking.

General Plan Goal/Policy	Consistency Analysis
Open Space/Conservation Element – Adopted May 21, 2013	
Policy OSC1.11: Sustainable Landscape Practices. Encourage the enhancement of boulevards, plazas, and other urban open spaces in high-density and mixed-use residential developments, as well as commercial and industrial areas, with landscaping practices that minimize water usage.	CONSISTENT. The Proposed Project would remove approximately 708 trees, including 198 heritage trees, and plant approximately 873 new trees, resulting in a total of 1,505 trees on the Project Site, an overall increase in the number of trees compared to existing conditions. Landscaping at the Project Site would include a combination of native, drought-tolerant, and adapted species and comply with the Menlo Park Water-Efficient Landscaping Ordinance. Native drought-tolerant plants and low-flow drip irrigation systems would be installed to minimize potable water consumption.
Policy OSC1.12: Landscaping and Plazas. Include landscaping and plazas on public and private lands and well-designed bicycle and pedestrian facilities in areas of intensive non-vehicular activity. Require landscaping to provide shade, reduce surface runoff, or obscure parked cars in extensive parking areas.	CONSISTENT. The Proposed Project would include landscaping throughout the Project Site, along with walkways, roads, parks, and plazas. The landscaping would include shade trees in parking areas and stormwater gardens to reduce runoff. The Proposed Project would minimize the amount of impervious surface parking area as a strategy to increase the amount of pervious landscaped open space. Landscaping and other treatments would be incorporated to screen the parking garages from view.
Policy OSC1.13: Yard and Open Space Requirements in New Development. Ensure that required yards and open spaces are provided as part of new multi-family residential, mixed-use, commercial, and industrial development.	CONSISTENT. The Proposed Project would provide approximately 26.4 acres of open space and supporting amenities. This would involve establishing new open space areas on the Project Site (e.g., Ravenswood Avenue Parklet, Parkline Central Commons, Parkline Recreational Area) with paths for shared use. New multi-family structures within the residential area would also include open spaces for residences in the form of private balconies, patios, and rooftop terraces.
2023-2031 Housing Element – Adopted January 2023, Amended 2024	
Policy H1.1: Local Government Leadership. Recognize affordable housing as an important city priority. The city will take a proactive leadership role in working with community groups, other jurisdictions and agencies, non-profit housing sponsors, and the building and real estate industry in following through on identified Housing Element implementation actions in a timely manner.	CONSISTENT. Consistent with the city's inclusionary housing requirements, 15 percent of the dwelling units (i.e., 68 dwelling units) would be below-market-rate housing. An additional 100 dwelling units would be developed by an affordable-housing developer; all units would be affordable and located within one building.

General Plan Goal/Policy	Consistency Analysis
Policy H1.3: Local Funding for Affordable Housing. Seek ways to reduce housing costs for lower-income workers and people with special needs by developing ongoing local funding sources and continuing to utilize other local, State and federal assistance to the fullest extent possible. Funding should also be sought for the development and support of transitional housing. The city will also maintain the below-market-rate housing program requirements for residential and non-residential developments.	CONSISTENT. The Proposed Project would adhere to below-market-rate housing program requirements for both residential and non-residential developments.
Policy H3.1: Special-Needs Groups. Encourage non-profit organizations and private developers to build and maintain affordable housing for groups with special needs, including the needs of seniors; people living with disabilities, including developmental disabilities; the unhoused; people living with HIV/AIDS and other illnesses; people in need of mental health care; single-parent families; large families; and other persons identified as having special housing needs.	CONSISTENT. The Proposed Project would provide at least 550 new housing units with a mix of types and sizes, including approximately 68 units (i.e., 15 percent of 450) for low- and moderate-income households, within the residential area. A portion of the Project Site would be dedicated to affordable or special-needs housing, with the developer providing up to approximately 100 units.
Policy H3.3: Incentives for Special-Needs Housing. Use density bonuses and other incentives to meet special housing needs, including housing for lower-income seniors and people living with disabilities.	CONSISTENT. The Proposed Project would dedicate a portion of the Project Site to affordable or special-needs housing, with the developer providing up to approximately 100 units.
Policy H3.7: Adaptable/Accessible Units for People Living with Disabilities. Ensure that new multi-family housing includes units that are accessible and adaptable for use by people living with disabilities, including developmental disabilities, in conformance with the California Building Code. This strategy will include ways to promote housing design that allows seniors to "age-in-place" in their community.	CONSISTENT. The Proposed Project would comply with the California Building Code by providing units that would be accessible and adaptable for use by people living with disabilities.

General Plan Goal/Policy	Consistency Analysis
Policy H3.8: Develop and Preserve Accessible Units. Promote the development, rehabilitation, and preservation of affordable housing for people living with disabilities, including developmental disabilities, particularly in neighborhoods accessible to public transit, commercial services, and health and community facilities.	CONSISTENT. There is currently no housing available onsite. The Proposed Project would provide at least 550 new housing units with a mix of types and sizes, including approximately 68 units (i.e., 15 percent of 450) for low- and moderate-income households, within the residential area. A portion of the Project Site would be dedicated to affordable or special-needs housing, with the developer providing up to approximately 100 units.
Policy H3.9: Support People Living with Disabilities. Support options for long-term housing with supportive services accommodating people living with disabilities, including developmental disabilities, to live independently in a permanent setting.	CONSISTENT. The Proposed Project would dedicate a portion of the Project Site to affordable or special-needs housing, with the developer providing up to approximately 100 units.
Policy H4.1: Housing Opportunity Sites. Identify housing opportunity areas and sites where a special effort will be made to provide affordable housing consistent with other general plan policies.	CONSISTENT. There is currently no housing available onsite. The Proposed Project would provide at least 550 new housing units with a mix of types and sizes, including approximately 68 units (i.e., 15 percent of 450) for low- and moderate-income households, within the residential area. A portion of the Project Site would be dedicated to affordable or special-needs housing, with the developer providing up to approximately 100 units.
Policy H4.2: Housing to Address Local Housing Needs. Strive to provide opportunities for new housing development to meet the city's share of its Regional Housing Needs Allocation (RHNA). The city intends to provide an adequate supply and variety of housing opportunities to meet the needs of Menlo Park's workforce and special-needs populations; strive to match housing types, affordability, and location with household income; and address the housing needs of extremely low-income persons, lower-income families with children, and lower-income seniors.	CONSISTENT. There is currently no housing available onsite. The Proposed Project would provide at least 550 new housing units with a mix of types and sizes, including approximately 68 units (i.e., 15 percent of 450) for low- and moderate-income households, within the residential area. A portion of the Project Site would be dedicated to affordable or special-needs housing, with the developer providing up to approximately 100 units. Therefore, the housing included in the Proposed Project, at a variety of income levels, would help the city meet its share of the RHNA.

General Plan Goal/Policy	Consistency Analysis
Policy H4.3: Variety of Housing Choices. Strive to achieve a mix of housing types, densities, affordability levels, and designs distributed throughout the city.	CONSISTENT. The Proposed Project's residential area would include 550 new rental dwelling units in multi-family residential buildings and townhouses. The proposed dwelling units would consist of studio units as well as one-, two-, and three-bedroom units that would be distributed throughout four residential multi-family buildings and 19 townhouses. Specifically, 431 multi-family rental units would be provided in three buildings, and 19 dwelling units would be provided in the townhouses. Consistent with the city's inclusionary housing requirements, 15 percent of these dwelling units (i.e., 68 dwelling units) would be below-market-rate housing. The additional 100 dwelling units would be developed by an affordable-housing developer. All of the units would be affordable and located within one building. The multi-family residential buildings would be between three and six stories tall (i.e., approximately 45 to 85 feet); the townhouses would be two stories tall (i.e., approximately 25 feet).
Policy H4.4: Mixed-Use Housing. Encourage well-designed residential mixed-use developments where residential use is appropriate to the setting. Encourage mixed-use development in proximity to transit and services, such as shopping centers; the C-4 district along Willow Road near the Willows neighborhood; properties zoned C-1, C-1-A, C-1-C, C-2 and C-2-A, C-2-B, C-2-S, and P; as well as properties near downtown, to support downtown businesses (consistent with the El Camino Real/Downtown Specific Plan).	CONSISTENT. The Project Site is not located near Willow Road or within the area covered by the El Camino Real/Downtown Specific Plan. However, the Project Site is located in proximity to transit (i.e., SamTrans and Caltrain) and services, such as the facilities at Burgess Park and the Civic Center. The Project Site is also within walking distance of downtown businesses. Therefore, the proposed mixed-use development would be located in proximity to existing facilities and services.
Policy H4.5: Redevelopment of Commercial Shopping Areas and Sites. Encourage housing development in conjunction with the redevelopment of commercial shopping areas and sites.	CONSISTENT. The Proposed Project would include housing development as well as the construction of office/R&D uses, which would allow the Proposed Project to serve as an employment center. Although shopping areas are not proposed as part of the Proposed Project, a small community amenities building would provide some retail services.

General Plan Goal/Policy	Consistency Analysis
Policy H4.11: Inclusionary Housing Approach. Require residential developments involving five or more units to provide very low-, low-, and moderate-income housing units. In-lieu fees are allowed but not encouraged. The units provided through this policy are intended for permanent occupancy and must be deed-restricted, including, but not limited to, single-family housing, multi-family housing, condominiums, townhouses, or land subdivisions. In addition, the city will require larger non-residential developments, as job generators, to participate in addressing housing needs in the community through the city's in-lieu fee requirements.	CONSISTENT. The Project Site is currently a job-generator site. The Proposed Project would also operate as a job generator in the office/R&D area. Rather than provide in-lieu fees, the Proposed Project would include residential uses, which are not currently provided at the Project Site. The residential units would include multi-family housing units and townhouses for a variety of income levels, including very low-, low-, and moderate-income levels.
Policy H4.12: Emphasis on Affordable Housing. To the extent possible, focus housing development on 100 percent affordable housing developments, particularly in areas near existing amenities and in high-opportunity areas of the city. Ministerial review could support this on 100 percent affordable projects within the AHO and in areas under SB10 or citywide.	CONSISTENT. The Proposed Project would provide a total of 550 housing units. Of these, 431 would be multi-family rental units in three buildings; 19 dwelling units would be provided in townhouses. Consistent with the city's inclusionary housing requirements, 15 percent of these dwelling units (i.e., 68 dwelling units) would be below-market-rate housing. The additional 100 dwelling units would be developed by an affordable-housing developer. All of the units would be affordable and located within one building. Therefore, 100 percent of the units within that building would be affordable.
Policy H4.16: Neighborhood Responsibilities within Menlo Park. Seek ways specific to each neighborhood to provide additional housing as part of each neighborhood's fair share responsibility and commitment to help achieve community-wide housing goals. This may range from in-lieu fees, accessory dwelling units, higher-density housing sites, infill housing, mixed-use housing, or other new housing construction.	CONSISTENT. The Proposed Project would add housing to a site where there is currently no housing. However, the Project Site is immediately adjacent to residential neighborhoods in Menlo Park and Atherton, including Vintage Oaks, Linfield Oaks, and the Classics of Burgess Park. Because the Proposed Project would add housing to a site that is already surrounded by residential neighborhoods, the Proposed Project would be consistent with the existing setting.
Policy H6.2: Resilient Design. Encourage housing designs that are resilient to hazards and climate impacts through land use planning tools, development standards, and building standards.	CONSISTENT. The Project Site is generally not subject to natural hazards and climate impacts. As discussed in Section 3.11, *Geology and Soils*, the Project Site is not subject to hazards such as surface fault rupture, landslides, loss of topsoil, or lateral spreading. While the Project Site could be subject to soil erosion, unstable soils, and expansive soils, the proposed housing units would be consistent with the requirements of the California Building Code and the Menlo Park Municipal Code to reduce impacts to less than significant. As discussed in Section 3.12, *Hydrology and Water Quality*, the Project Site is not subject to hazards related to inundation such as floods, tsunami, or seiches. All Project-related development would comply

General Plan Goal/Policy	Consistency Analysis
	with the applicable federal, state, and local requirements, including requirements regarding water quality, flood control, and stormwater management.
Policy H6.3: Renewable Energy/Energy Conservation in Housing. Encourage energy efficiency and/or renewable energy in both new and existing housing and require all-electric fuel sources, energy conservation measures, and renewable energy in the design of all new buildings. Promote energy conservation and/or renewable energy and weatherization features in existing homes. In addition, the city will support the actions contained in the city's Climate Action Plan (CAP).	CONSISTENT. A key objective of the Proposed Project is to provide a state-of-the-art, energy-efficient, and sustainable campus environment that is focused on reducing emissions and natural resource usage. Nearly all of the outdated and energy-inefficient buildings within the Project Site would be replaced with buildings and related improvements that would reflect the latest sustainability requirements, including the intent of the city's adopted Reach Code and green building program, CALGreen, and California Title 24's new renewable energy mandates. The Proposed Project is anticipated to incorporate a range of LEED certification strategies or equivalent standards across the residential area and the office/R&D area.
Policy H6.6: Reduce Personal Automobile Usage. Encourage residents to reduce reliance on personal automobiles for transportation and encourage use of public transit and other alternative forms of mobility.	CONSISTENT. The Menlo Park Caltrain station is located off Ravenswood Avenue, between Alma Street and El Camino Real, providing daily service between San Francisco and San José, with connections to BART at the Millbrae Caltrain station. The majority of the Project Site is within 0.5 mile of the Caltrain station and close to the SamTrans bus and Menlo Park community shuttle stops on Middlefield Road and Ravenswood Avenue. The Project Site is served by SamTrans routes 81, 82, 296, and 397 and Menlo Park community shuttle routes M1 and M4. By siting new residential uses in proximity to existing transit services, personal automobile usage would be reduced.
Policy H6.7: Water Conservation and Reuse. Encourage improved and/or increased water conservation and reuse in the community. Encourage developers to employ water conservation and reuse measures and share what these measures are in new developments. Promote water conservation and reuse in existing homes.	CONSISTENT. To responsibly manage and reduce potable water use, the Proposed Project, including the residential uses, would comply with all applicable State and local codes and regulations regarding water usage and, where feasible, incorporate features such as low-flow fixtures, options for greywater use, and recycled water for landscape irrigation, among others.

General Plan Goal/Policy	Consistency Analysis
Policy H7.1: Housing Design. Review proposed new housing to achieve excellence in development design through an efficient process, and encourage infill development on vacant and underutilized sites that meet the community's needs. The city will encourage innovative new construction and universal housing design that enhances mobility and independence of the elderly.	CONSISTENT. The four proposed multi-family residential buildings would be between three and six stories tall (i.e., approximately 45 to 85 feet). Private second-floor open spaces would be distributed throughout the market-rate housing buildings and include landscaping, special paving, and trellises. The first floors would open to private patios; above-grade dwelling units would have private balconies. The proposed townhouse buildings would be two stories tall (i.e., approximately 25 feet), providing a scaled transition from the new multi-family buildings to the existing single-family residences. The new multi-family buildings would be set back from Laurel Street and Ravenswood Avenue to preserve existing heritage trees and incorporate bicycle and pedestrian connections. The exterior design of buildings within the residential area would be Mission-style architecture, which is drawn from key precedents in Menlo Park. Primary exterior materials would consist of light-tone cement plaster, wood trellises and other detailed features, dark-frame metal-sash windows, and Spanish-style tile roofs. Architectural design would be subject to review and approval of architectural control plans, consistent with the CDP, to ensure high-quality design.

3.3 Transportation

This section identifies and evaluates the Proposed Project's potential impacts related to transportation. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Vehicle-Miles Traveled Analysis for Parkline in Menlo Park, CA* (Parkline VMT Memorandum),[1] and
- *Draft Parkline Transportation Demand Management (TDM) Plan* (TDM plan).[2]

The Parkline VMT Memorandum was prepared by Hexagon Transportation Consultants, Inc. for the Proposed Project. The VMT Memorandum is included in Appendix 3.13-1 of this EIR. The TDM plan was prepared by Fehr & Peers for the Proposed Project and peer reviewed by Hexagon Transportation Consultants, Inc.; the TDM plan is included as an appendix to the Parkline VMT Memorandum.

Issues identified in response to the Notice of Preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. The applicable issues involved Project-related trip generation, distribution, and assignment; an expanded list of study intersections; creation of a Transportation Demand Management (TDM) program; mitigation measures; and the Proposed Project's fair-share contribution as part of the mitigation measures.

Existing Conditions

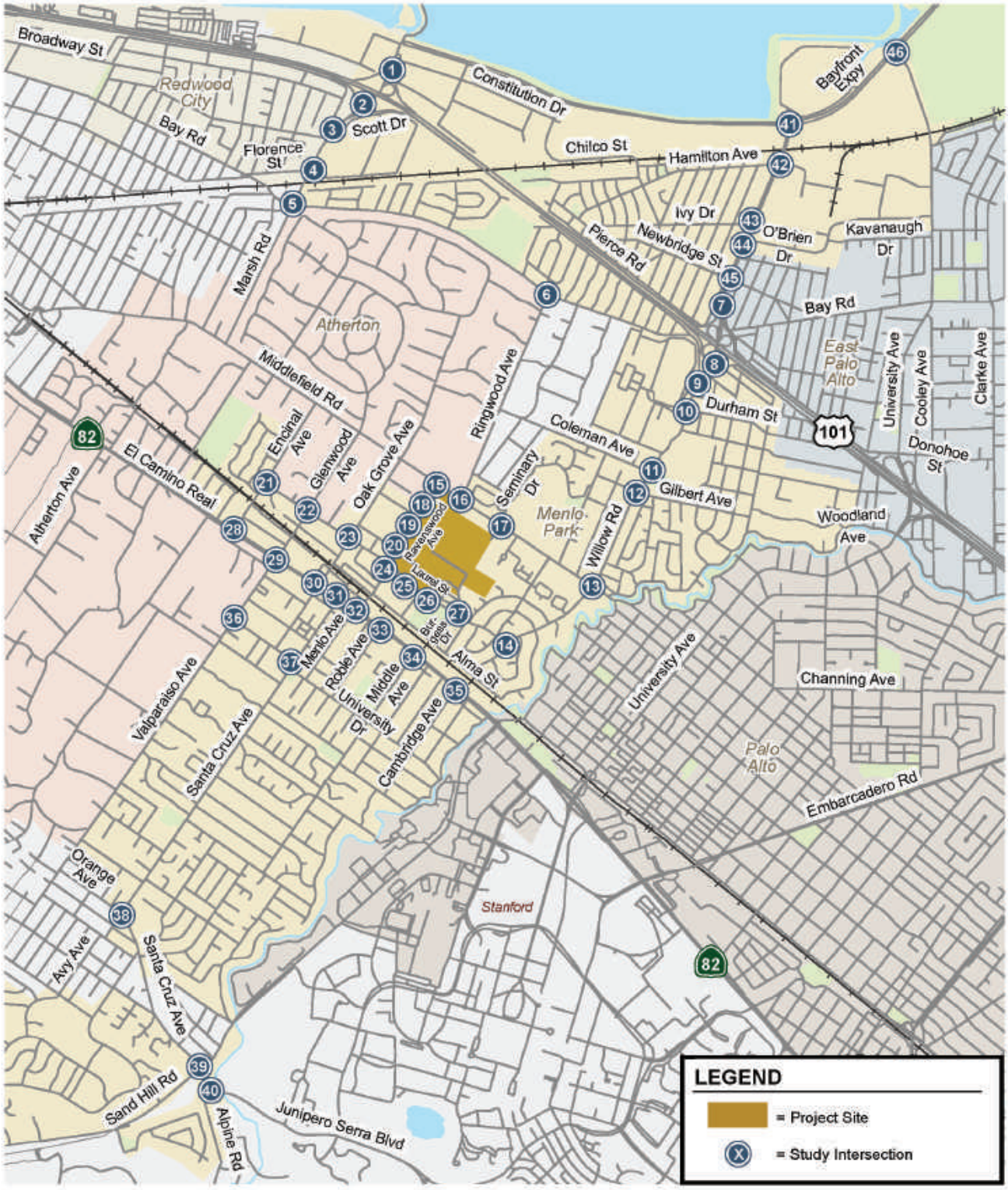
Environmental Setting

This section describes the existing conditions for transportation facilities in the vicinity of the Project Site, including the roadway network, bicycle and pedestrian facilities, and transit service. Figure 3.3-1 shows the location of the Project Site within the existing roadway network as well as the key intersections studied in the *Parkline Draft Transportation Analysis* (Parkline TIA).[3] The existing roadway network discussion below summarizes the key regional and local roadways in Figure 3.3-1.

Existing Roadway Network

Regional access to the Project Site is provided via U.S. 101. Major arterials include El Camino Real. Local access to the Project Site is currently provided from Middlefield Road, Ravenswood Avenue, and Laurel Street. These roadways are described below. Many streets in the Study Area run at a diagonal compared to ordinal directions. For the purposes of this study, U.S. 101, El Camino Real, and all parallel streets are considered north–south streets. Conversely, Ravenswood Avenue and all parallel streets are considered east–west streets. Descriptions of all roadways in the Study Area are provided below, using roadway classifications from the Menlo Park General Plan Circulation Element, followed by the Federal Highway Administration (FHWA) category.

[1] Hexagon Transportation Consultants, Inc. 2024. *Vehicle-Miles Traveled Analysis for Parkline in Menlo Park, CA*. June 12.
[2] Fehr & Peers. 2024. *Draft Parkline Transportation Demand Management (TDM) Plan.* June 10.
[3] The Parkline TIA will be appended to the Final EIR prepared for the Proposed Project.



Source: Hexagon, 2024.

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Figure 3.3-1
Existing Roadway Network and Study Intersections
Parkline

Bayshore Freeway (U.S. 101) is a north–south freeway with a posted speed limit of 65 miles per hour (mph). U.S. 101 extends northward through San Francisco and southward through San José. Within Menlo Park, U.S. 101 has three general-purpose travel lanes, one high-occupancy vehicle (HOV) lane, and one auxiliary lane in each direction. Access to and from the Project Site is provided via full-access interchanges at Willow Road and at Marsh Road. The Willow Road interchange is partly in Menlo Park and East Palo Alto.

Interstate 280 (I-280) is a north-south freeway with a posted speed limit of 65 miles per hour (mph). I-280 extends northward to San Francisco and southward to San José. Near Menlo Park, I-280 has four general-purpose travel lanes in each direction. Access to and from the Project Site is provided via full-access interchanges at Sand Hill Road and at Alpine Road.

El Camino Real (State Route [SR] 82) is a north–south four- to six-lane boulevard (Primary Arterial) that extends northward through Daly City and southward through Santa Clara. It is part of a state highway. Within Menlo Park, El Camino Real has four travel lanes north of Roble Avenue and six travel lanes south of Roble Avenue. The posted speed limit within the Study Area is 35 mph. El Camino Real has continuous sidewalks along both sides of the street, on-street parking along most street segments, and a landscaped center median with left-turn pockets at major intersections (except at Santa Cruz Avenue).

Willow Road is an east–west two-lane neighborhood collector (Collector) between Alma Street and Middlefield Road, a two- to three-lane avenue – mixed-use facility (Minor Arterial) between Middlefield Road and Bay Road, and a four-lane boulevard (Primary Arterial) between Bay Road and Bayfront Expressway. Bike lanes and continuous sidewalks are provided along Willow Road, as is on-street parking. Willow Road has a posted speed limit of 25 mph.

Middlefield Road is a north–south two- to four-lane avenue – mixed-use facility (Minor Arterial). Middlefield Road extends from Jefferson Avenue to the north to San Antonio Road to the south. Bike lanes are provided along Middlefield Road; on-street parking is prohibited. Sidewalks are generally present south of Ravenswood Avenue. Middlefield Road has a posted speed limit of 35 mph. Direct access to the Project Site is provided from Middlefield Road.

Ravenswood Avenue is an east–west two- to four-lane avenue – mixed-use facility (Minor Arterial). It extends from El Camino Real to the west to Middlefield Road to the east. Bike lanes are provided along westbound Ravenswood Avenue from Middlefield Road to Alma Street and along eastbound Ravenswood Avenue from Noel Drive to Middlefield Road. Bike routes are present on the remaining portions of Ravenswood Avenue. Continuous sidewalks are provided along the south side of Ravenswood Avenue. There is no sidewalk on the north side of Ravenswood Avenue between Marcussen Drive and Middlefield Road (located in Atherton jurisdiction) or between Merrill Street and El Camino Real. On-street parking is prohibited. Ravenswood Avenue has a posted speed limit of 30 mph. Direct access to the Project Site is provided from Ravenswood Avenue.

Ringwood Avenue is an east–west two-lane neighborhood collector (Collector). It extends from Middlefield Road in the west to Bay Road in the east. Bike lanes are provided along Ringwood Avenue. West of Arlington Avenue, continuous sidewalks are provided along both sides of the street. East of Arlington Avenue (located in San Mateo County jurisdiction), sidewalks are absent on both sides of the street and on-street parking is allowed. Ringwood Avenue has a posted speed limit of 30 mph. Direct access to the Project Site is provided from Ringwood Avenue.

Laurel Street is a north-south two-lane neighborhood collector (Collector). It extends from Willow Road to the south to Encinal Road to the north. Bike lanes are provided along Laurel Street, and sidewalks are

provided south of Glenwood Avenue. On-street parking is allowed north of Glenwood Avenue on both sides of the street and south of Glenwood Avenue on the west side of the street. Laurel Street has a posted speed limit of 25 mph. Direct access to the Project Site is provided from Laurel Street.

Burgess Drive is an east–west two-lane local street. It begins at Alma Street to the west, continues through the south side of Burgess Park, then terminates to the east at the Project Site. Sidewalks are missing along certain segments. On-street parking is allowed along most street segments. There is no speed limit sign on Burgess Drive.

Seminary Drive is an east–west two-lane local street. It begins just west of Middlefield Road, wraps around the St. Patrick's Seminary & University, and terminates at Santa Monica Avenue. Sidewalks are missing along certain segments. On-street parking is not allowed along this street. There is no speed limit sign on Seminary Drive. Direct access to the Project Site is provided from Seminary Drive.

Pine Street is a north–south two-lane local street. It extends from Oak Grove Avenue to the north to Ravenswood Avenue to the south. Sidewalks are provided along both sides of the street, as is on-street parking. There is no speed limit sign on Pine Street.

Santa Cruz Avenue is an east–west two-lane main street (Minor Arterial) between the Caltrain tracks and University Avenue and a neighborhood collector (Collector) west of University Avenue. It extends from the Caltrain tracks to Sand Hill Road. Continuous sidewalks are present on both sides of the street, as is on-street parking. Santa Cruz Avenue has a posted speed limit of 25 mph.

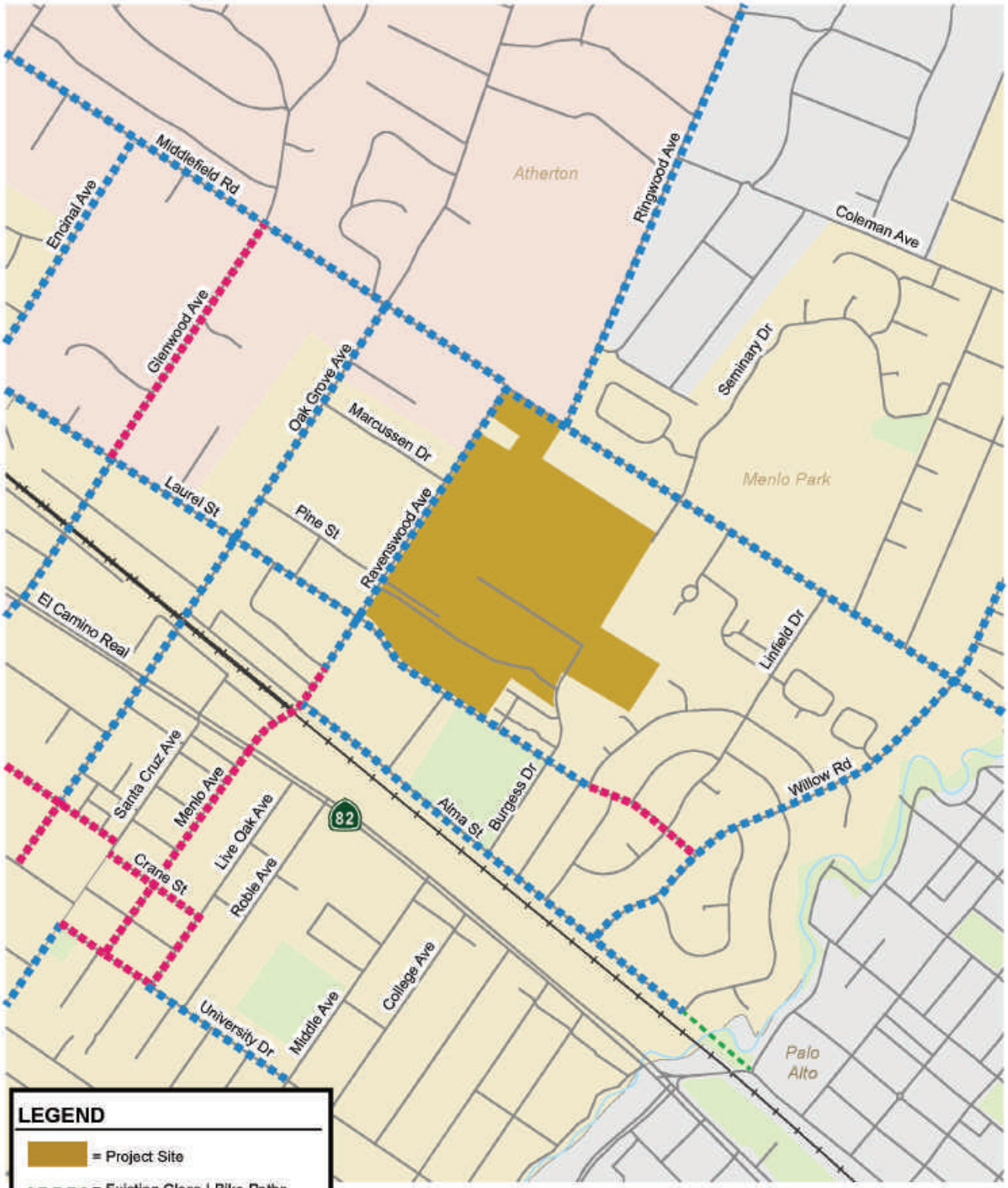
Alma Street is a north–south two-lane neighborhood collector (Collector). It extends from Oak Grove Avenue to the north to Palo Alto to the south. Bike lanes are provided along Alma Street. However, continuous sidewalks are missing on both sides of the street between Ravenswood Avenue and Burgess Drive and missing on the west side south of Burgess Drive. On-street parking is allowed on Alma Street north of Ravenswood Avenue and south of Burgess Avenue. Alma Street has a posted speed limit of 25 mph.

Existing Bicycle and Pedestrian Facilities

The city's existing bicycle facilities are classified according to the state's system, as outlined in the Menlo Park General Plan Circulation Element.

- Class I (bike path) – A Class I bicycle facility is completely separated from vehicles on a paved right-of-way and commonly known as a bike path. A Class I bicycle facility allows both bicyclists and pedestrians to use the facility.
- Class II (bike lane) – A Class II bicycle facility is a striped and stenciled lane on an existing right-of-way that is shared with vehicles; it is commonly known as a bike lane.
- Class III (bike route) – A Class III bicycle facility is identified through signage and/or pavement markings called "sharrows," indicating that bicyclists and drivers share the same travel lane; it is commonly referred to as a bike route.
- Class IV (protected bike lane) – A Class IV bicycle facility is a striped lane with vertical physical separation, such as parked cars or bollards, between it and the travel lane; it is commonly referred to as a protected bike lane.

Existing bicycle facilities near the Project Site are shown in Figure 3.3-2.



Source: Hexagon, 2024.

Figure 3.3-2
Existing Bicycle Facilities
Parkline

A north–south Class I bike path connects segments of Alma Street in Menlo Park and in Palo Alto across San Francisquito Creek.

Class II bike lanes are provided on Middlefield Road, Willow Road between Alma Street and Durham Street, Ringwood Avenue between Middlefield Road and Bay Road, Ravenswood Avenue between Middlefield Road and El Camino Real, Laurel Street between Encinal Avenue and Burgess Drive, Alma Street between Ravenswood Avenue and East Creek Drive, Glenwood Avenue/Valparaiso Avenue between Laurel Street and Alameda de las Pulgas, Santa Cruz Drive between University Drive and Orange Avenue, and Oak Grove Avenue between Middlefield Road and Crane Street.

Class III bike routes are provided on Laurel Street between Burgess Drive and Willow Road, Menlo Avenue between El Camino Real and University Drive, Crane Street between Valparaiso Avenue and Live Oak Avenue, and Live Oak Avenue between Crane Street and University Drive.

The Project Site is in an area with a mix of commercial and residential land uses. Pedestrian facilities consist of sidewalks, crosswalks, and pedestrian signals at signalized intersections. Crosswalks are found on two or more approaches at all of the signalized study intersections. Most streets providing access to the Project Site have pedestrian facilities. However, sidewalks are absent from the north side of Ravenswood Avenue between Marcussen Drive and Middlefield Road (located in Atherton jurisdiction), between Merrill Street and El Camino Real, along both sides of Ringwood Avenue east of Arlington Avenue (located in San Mateo County jurisdiction), along both sides of Laurel Street north of Glenwood Avenue (east side is located in Atherton jurisdiction), along both sides of Alma Street between Ravenswood Avenue and Burgess Drive, and on the west side of Alma Street south of Burgess Drive. Crosswalks are available at unsignalized and signalized intersections in the vicinity of the Project Site. The signalized intersection of Middlefield Road and Ravenswood Avenue has crosswalks on the south and west legs, the intersection of Laurel Street and Ravenswood Avenue has crosswalks on all legs, and the intersection of El Camino Real and Ravenswood Avenue has crosswalks on the north, east, and west legs. The two-way, stop-controlled intersection at Alma Street and Ravenswood Avenue has crosswalks on the north, east, and south legs.

Existing Transit Service

Transit service to the Study Area is provided by San Mateo County Transit District (SamTrans) bus service, the Menlo Park community shuttle service, and the Caltrain commuter rail service. The bus and shuttle routes that provided service near the Project Site as of October 2023, as well as Caltrain services, are described in Table 3.3-1 and shown in Figure 3.3-3. Bus and shuttle services have a stop within 0.25 mile of the Project Site. The downtown Menlo Park Caltrain station is within 0.5 mile of a significant portion of the Project Site, which is considered a typical walking distance for transit services.

Regulatory Setting

Federal

Federal Highway Administration

FHWA is the agency of the U.S. Department of Transportation responsible for the federally funded roadway system, including the interstate highway network and portions of the primary state highway network, such as Interstate 280 (I-280) and U.S. 101.

Table 3.3-1. Existing Transit Services

Route	Route Description	Traveled Roadways	Weekday Hours of Operation[a]	Headway[a]
SamTrans Route 81	Menlo-Atherton High School to Clarke and Bayshore	Middlefield Road, Willow Road, University Avenue, Pulgas Avenue, Kavanaugh Drive, Hamilton Avenue	7:25 a.m.–8:15 a.m. 4:05 p.m.–4:30 p.m.	N/A
SamTrans Route 82	Bay/Marsh – Hillview School	Bay Road, Ringwood Avenue, Coleman Avenue, Santa Monica Avenue, Willow Road, Middlefield Road, Ravenswood Avenue, Laurel Street, Valparaiso Avenue, Santa Cruz Avenue	7:40 a.m.–8:10 a.m. 3:20 p.m.–3:50 p.m. (M, T, F) 2:40 p.m.–3:15 p.m. (W, Th)	N/A
SamTrans Route 83	Hillview School – Bay/Marsh	Bay Road, Willow Road, Laurel Street, Valparaiso Avenue, Santa Cruz Avenue	7:40 a.m.–8:10 a.m. 3:20 p.m.–4:05 p.m. (M, T, F) 2:45 p.m.–3:25 p.m. (W, Th)	N/A
SamTrans Route 296	Redwood City Transiter Center – Palo Alto Transit Center	El Camino Real, Middlefield Road, Ringwood Avenue, Willow Road, Bay Road, Pulgas Avenue, Runnymede Street, Clarke Avenue, Donohoe Street, Bayshore Road	5:15 a.m.–10:40 p.m.	20 minutes
SamTrans Route 397 OWL	San Francisco – Palo Alto Transit Center	Mission Street, Bayshore Road, Airport Boulevard, El Camino Real, Middlefield Road, University Ave, Bay Road	1:05 a.m.–6:45 a.m.	40–60 minutes
SamTrans Route ECR	Daly City Bay Area Rapid Transit [BART] – Palo Alto Transit Center	El Camino Real	4:05 a.m.–2:00 a.m.	10–20 minutes
M1 Crosstown Shuttle	Downtown Menlo Park to Sharon Heights and downtown Palo Alto	Terminal Avenue, Ivy Drive, Willow Road, Middlefield Road, Linfield Drive, Alma Street, Ravenswood Avenue, Glenwood Avenue, El Camino Real	8:15 a.m.–5:50 p.m.	60–90 minutes
M3 Marsh Road Shuttle	Menlo Park Caltrain Station to Marsh Road business parks	Oak Grove Avenue, Middlefield Road, Marsh Road, Bohannon Road, Constitution Drive	6:40 a.m.–10:10 a.m. 3:55 a.m.–6:25 p.m.	60 minutes

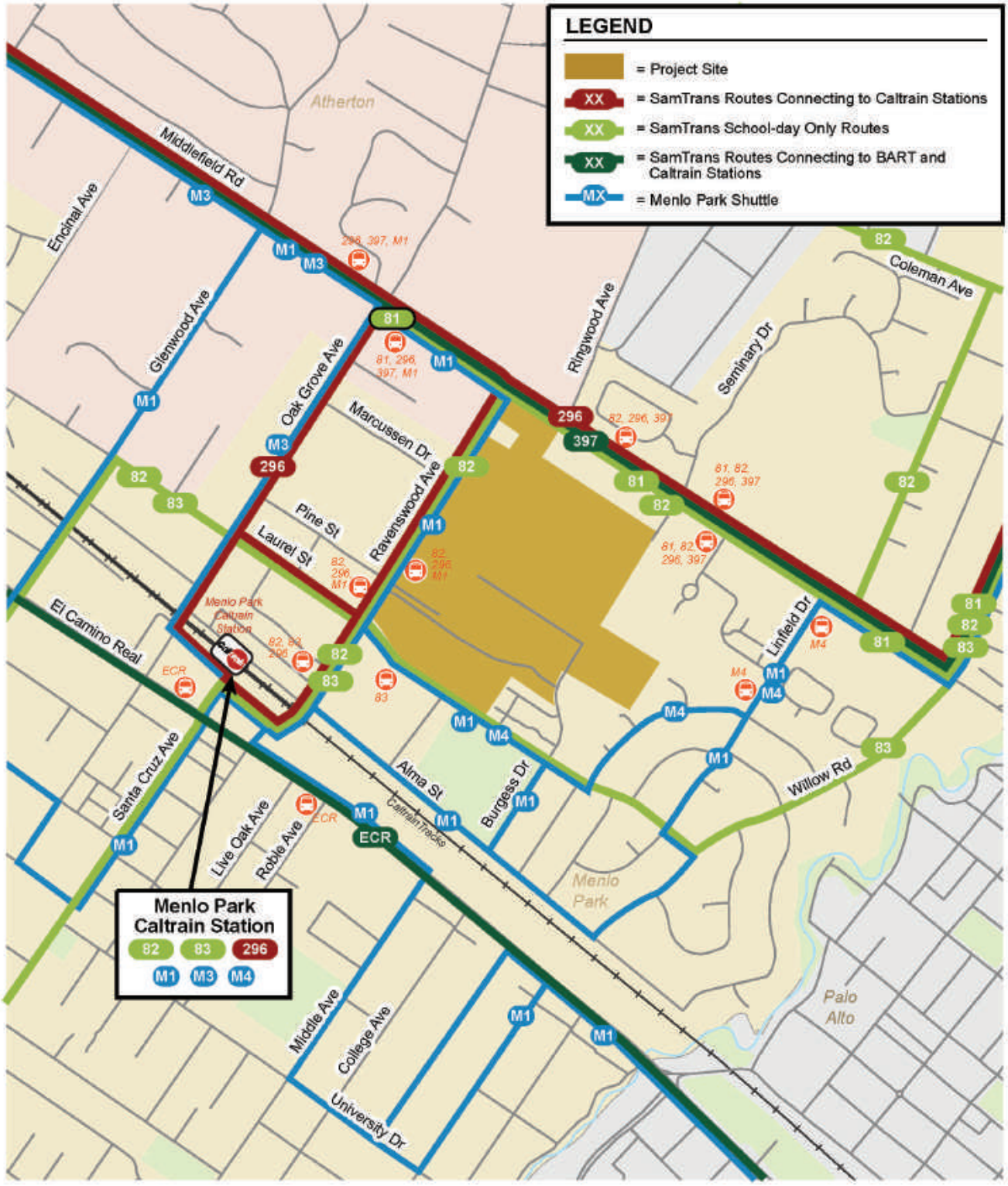
Route	Route Description	Traveled Roadways	Weekday Hours of Operation[a]	Headway[a]
M4 Willow Road Shuttle	Menlo Park Caltrain Station to Adams Court	Willow Road, O'Brien Drive, Hamilton Avenue, Hamilton Court, Adams Court	6:40 a.m.–10:05 a.m. 4:05 p.m.–6:30 p.m.	60 minutes
Caltrain Limited (not Baby Bullet)	Stops at limited stations between San Francisco and Gilroy	N/A	5:00 a.m.–9:35 p.m.	60 minutes
Caltrain Local	Stops all stations between San Francisco and Gilroy	N/A	4:20 a.m.–1:45 a.m.	60 minutes

Source: The *Parkline Draft Transportation Analysis*, which was prepared by Hexagon Transportation Consultants for the Proposed Project and will be appended to the Final EIR.

Notes:

N/A = Not Applicable

a. Approximate weekday hours of operation and headways during peak commute periods in the Study Area as of October 2023.



Source: Hexagon, 2024.

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Figure 3.3-3
Existing Transit Services
Parkline

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) of 1990 provides comprehensive rights and protections to individuals with disabilities. The goal of the ADA is to ensure equality of opportunity, full participation, independent living, and economic self-sufficiency for people with disabilities. To implement this goal, the US Access Board, an independent federal agency created in 1973 to ensure accessibility for people with disabilities, has created accessibility guidelines for public rights-of-way. The guidelines, finalized in August 2023, address various issues, including roadway design practices, slope and terrain issues, and pedestrian access to streets, sidewalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way. These guidelines would apply to proposed roadways in the Study Area.

State

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for the planning, design, construction, and maintenance of all interstate freeways and state routes. Caltrans sets design standards for state roadways that may be used by local governments. Caltrans requirements are described in the agency's *Transportation Impact Study Guide,*[4] which identifies the information needed for Caltrans to review impacts on state highway facilities, including freeway segments, on- and off-ramps, and signalized intersections.

Senate Bill 375

As a means for achieving the statewide emission reduction goals set by Assembly Bill (AB) 32 (The California Global Warming Solutions Act of 2006), SB 375 (The Sustainable Communities and Climate Protection Act of 2008) directs the California Air Resources Board (CARB) to set regional targets for reducing greenhouse gas (GHG) emissions from cars and light trucks. Using the template provided by the state's regional blueprint program, SB 375 seeks to align transportation and land use planning to reduce VMT through modified land use patterns.

SB 375 has five basic directives:

1. Create regional targets for GHG emissions reductions that are tied to land use,
2. Require regional planning agencies to create a sustainable communities strategy (SCS) to meet the targets (or an alternative planning strategy if the strategies in the SCS fail to reach the target set by CARB),
3. Require regional transportation funding decisions to be consistent with the SCS,
4. Require Regional Housing Needs Allocation numbers for municipal general plan housing element updates to conform to the SCS, and
5. Provide CEQA exemptions and streamlining for projects that conform to the SCS.

[4] California Department of Transportation. 2020. *Transportation Impact Study Guide*. May.

The implementation mechanism for SB 375 that applies to land uses in Menlo Park is Plan Bay Area 2050, which was jointly adopted by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) in 2021,[5] as described below.

Senate Bill 743

SB 743 (Public Resources Code Section 21099[b][1]) required OPR to develop revisions to the CEQA Guidelines and establish criteria for determining the significance of transportation impacts from projects that "promote a reduction in greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." CEQA Section 21099(b)(2) states that, upon certification of the revised guidelines for determining transportation impacts, pursuant to CEQA Section 21099(b)(1), automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA.

In January 2016, OPR published for public review and comment its *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA,* recommending that the transportation impacts of projects be measured using a VMT metric.[6] In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, including the section implementing SB 743 (Section 15064.3). In addition, OPR developed the Technical Advisory on Evaluating Transportation Impacts in CEQA, which contains OPR's technical recommendations regarding the assessment of VMT, thresholds of significance, and mitigation measures.[7]

Regional

Metropolitan Transportation Commission

MTC is responsible for planning, coordinating, and financing transportation projects in the nine-county Bay Area. The local agencies that make up the nine counties help the MTC prioritize projects, based on need, feasibility, and conformance with federal and local transportation policies. In addition to coordinating with local agencies, the MTC distributes state and federal funding through the Regional Transportation Improvement Program (RTIP).

Plan Bay Area

Plan Bay Area 2050 is a state-mandated, integrated long-range transportation and land use plan. As required by SB 375, all metropolitan regions in California must complete an SCS as part of a regional transportation plan. This strategy integrates transportation, land use, and housing to meet GHG reduction targets set by CARB. The plan meets those requirements. In addition, the plan sets a roadmap for future transportation investments and identifies what it would take to accommodate expected growth. The plan neither funds specific transportation projects nor changes local land use policies.

Under Plan Bay Area 2050's strategies, just under half of all Bay Area households would live within 0.5 mile of frequent transit by 2050, with the share increasing to more than 70 percent for households with low incomes. Transportation and environmental strategies that support active and shared modes,

[5] Association of Bay Area Governments and Metropolitan Transportation Commission. 2021. *Plan Bay Area 2050*. Available: https://mtc.ca.gov/sites/default/files/documents/2021-11/Plan_Bay_Area_2050_October_2021.pdf. Accessed: June 7, 2024.

[6] Office of Planning and Research. 2016. *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*. Implementing Senate Bill 743 (Steinberg 2013). January 20.

[7] Governor's Office of Planning and Research. 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available: https://opr.ca.gov/ceqa/docs/20190122-743_Technical_Advisory.pdf. Accessed: June 7, 2024.

combined with a transit-supportive land use pattern, are forecast to lower the share of Bay Area residents who drive to work alone from 50 percent in 2015 to 33 percent in 2050. GHG emissions from transportation would decrease significantly as a result of these transportation and land use changes, and the Bay Area would meet the state mandate that calls for a 19 percent reduction in per capita GHG emissions by 2035.

City/County Association of Governments of San Mateo County Congestion Management Program

The purpose of the Congestion Management Program (CMP),[8] which is adopted biennially, is to identify strategies that respond to future transportation needs, develop procedures that alleviate and control congestion, and promote countywide transportation solutions. The CMP is required to be consistent with the MTC planning process, which includes regional goals, policies, and projects for the RTIP. In order to monitor attainment of the CMP, the City/County Association of Governments of San Mateo County (C/CAG) adopted roadway LOS standards. The LOS standards established for San Mateo County vary by roadway segment. They conform to current land use plans and reflect development differences among the coast, bayside, older downtown, and other areas of San Mateo County. Although the intersections associated with development of the Proposed Project are monitored by C/CAG for compliance with CMP standards, most of the intersections are within Menlo Park and East Palo Alto city limits and subject to the more stringent standards implemented by those cities.

The CMP also requires new developments that are projected to generate 100 or more daily trips to implement TDM measures to reduce trips. At the time of this study, the city of Menlo Park is in the process of updating its TDM requirements to be consistent with C/CAG's TDM requirements.

San Mateo County Comprehensive Bicycle and Pedestrian Plan 2021

San Mateo County Comprehensive Bicycle and Pedestrian Plan 2021[9] was developed by C/CAG, with support from the San Mateo County Transportation Authority, to address issues regarding the planning, design, funding, and implementation of bicycle and pedestrian projects countywide. The following are relevant goals and policies for the Proposed Project:

Goal 2: Promote More People Riding and Walking for Transportation and Recreation

> **Policy 2.4**: Promote the integration of bicycling- and walking-related services and activities into broader countywide transportation demand management and commute alternative programs. This could include encouraging local jurisdictions and major employers to provide locker rooms, showers, and other amenities for changing and storing clothes and equipment to support bicycling and walking.

Goal 4: Advance Complete Streets Principles and the Accommodation of All Roadway Users

> **Policy 4.1**: Comply with the complete streets requirements of Caltrans and the Metropolitan Transportation Commission concerning safe and convenient access for bicyclists and pedestrians and assist local implementing agencies in meeting their responsibilities under the policy.

[8] City/County Association of Governments of San Mateo County. 2021. *Congestion Management Program.* Final report. Available: https://ccag.ca.gov/wp-content/uploads/2022/01/258-018-San-Mateo-CMP-Report_Final.pdf. Accessed: June 7, 2024.

[9] City/County Association of Governments of San Mateo County. 2021. *San Mateo County Comprehensive Bicycle and Pedestrian Plan 2021.* Available: https://ccag.ca.gov/wp-content/uploads/2021/06/San-Mateo-County-Comprehensive-Bicycle-and-Pedestrian-Plan-Update-Final-Plan.pdf. Accessed: June 7, 2024.

Policy 4.5: Encourage local agencies to adopt policies, guidelines, standards, and regulations that result in truly bicycle-friendly and pedestrian-friendly land use developments and provide them technical assistance and support in this area.

Policy 4.6: Discourage local agencies from removing, degrading, or blocking access to bicycle and pedestrian facilities without providing a safe and convenient alternative.

Local

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with transportation.

The following goals and policies from the Circulation Element related to transportation were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal CIRC-1: Provide and maintain a safe, efficient, attractive, user-friendly circulation system that promotes a healthy, safe, and active community and quality of life throughout Menlo Park.

Policy CIRC-1.7: Bicycle Safety. Support and improve bicyclist safety through roadway maintenance and design efforts.

Policy CIRC-1.8: Pedestrian Safety. Maintain and create a connected network of safe sidewalks and walkways within the public right-of-way, ensuring that appropriate facilities, traffic controls, and street lights are provided for pedestrian safety and convenience, including for sensitive populations.

Goal CIRC-2: Increase accessibility for and use of streets by bicyclists, pedestrians, and transit riders.

Policy CIRC-2.1: Accommodating All Modes. Plan, design, and construct transportation projects that safely accommodate the needs of bicyclists, pedestrians, transit riders, motorists, people with mobility challenges, and persons of all ages and abilities.

Policy CIRC-2.2: Livable Streets. Ensure transportation projects to preserve and improve the aesthetics of the city.

Policy CIRC-2.3: Street Classification. Utilize measurements of safety and efficiency for all travel modes to guide the classification and design of the circulation system, with an emphasis on providing "complete streets" sensitive to neighborhood context.

Policy CIRC-2.4: Equity. Identify low-income and transit-dependent districts that require bicycle and pedestrian access to, from, and within their neighborhoods.

Policy CIRC-2.7: Walking and Biking. Provide for the safe, efficient, and equitable use of streets by bicyclists and pedestrians through appropriate roadway design and maintenance, effective traffic law enforcement, and implementation of the city's Transportation Master Plan (following completion; until such time, the Comprehensive Bicycle Development Plan, Sidewalk Master Plan, and the El Camino Real/Downtown Specific Plan represent the city's proposed bicycling and walking networks).

Policy CIRC-2.8: Pedestrian Access at Intersections. Support full pedestrian access across all legs of signalized intersections.

Policy CIRC-2.9: Bikeway System Expansion. Expand the citywide bikeway system through appropriate roadway design, maintenance, effective traffic law enforcement, and implementation of the city's Transportation Master Plan (following completion; until such time, the Comprehensive Bicycle Development Plan and El Camino Real/Downtown Specific Plan represent the city's proposed bicycle network).

Policy CIRC-2.11: Design of New Development. Require new development to incorporate a design that prioritizes safe bicycle and pedestrian travel and accommodates senior citizens, people with mobility challenges, and children.

Policy CIRC-2.14: Impacts of New Development. Require new development to mitigate its impacts on the safety (e.g., collision rates) and efficiency (e.g., vehicle miles traveled [VMT] per service population or other efficiency metric) of the circulation system. New development should minimize cut-through and high-speed vehicle traffic on residential streets; minimize the number of vehicle trips; provide appropriate bicycle, pedestrian, and transit connections, amenities, and improvements in proportion to the scale of proposed projects; and facilitate appropriate or adequate response times and access for emergency vehicles.

Goal CIRC-3: Increase mobility options to reduce traffic congestion, greenhouse gas emissions, and commute travel time.

Policy CIRC-3.1: Vehicle Miles Traveled. Support development and transportation improvements that help reduce per service population (or other efficiency metric) vehicle miles traveled.

Policy CIRC-3.3: Emerging Transportation Technology. Support efforts to fund emerging technological transportation advancements, including connected and autonomous vehicles, emergency vehicle pre-emption, sharing technology, electric-vehicle technology, electric bikes and scooters, and innovative transit options.

Goal CIRC-4: Improve Menlo Park's overall health, wellness, and quality of life through transportation enhancements.

Policy CIRC-4.1: Global Greenhouse Gas Emissions. Encourage the safer and more widespread use of nearly zero-emission modes, such as biking and walking, and lower emission modes, like transit, to reduce greenhouse gas emissions.

Policy CIRC-4.2: Local Air Pollution. Promote non-motorized transportation to reduce exposure to local air pollution, thereby reducing risks of respiratory diseases, other chronic illnesses, and premature death.

Policy CIRC-4.3: Active Transportation. Promote active lifestyles and active transportation, focusing on the role of bicycling and walking, to improve public health and lower obesity.

Policy CIRC-4.4: Safety. Improve traffic safety by reducing speeds and making drivers more aware of other roadway users.

Goal CIRC-5: Support local and regional transit that is efficient, frequent, convenient, and safe.

Policy CIRC-5.2: Transit Proximity to Activity Centers. Promote the clustering of as many activities as possible within easy walking distance of transit stops, and locate any new transit stops as close as possible to housing, jobs, shopping areas, open space, and parks.

Goal CIRC-6: Provide a range of transportation choices for the Menlo Park community.

Policy CIRC-6.1: Transportation Demand Management. Coordinate Menlo Park's transportation demand management efforts with other agencies providing similar services within San Mateo and Santa Clara Counties.

Policy CIRC-6.3: Shuttle Service. Encourage increased shuttle service between employment centers and the downtown Menlo Park Caltrain station.

Policy CIRC-6.4: Employers and Schools. Encourage employers and schools to promote bicycling, walking, carpooling, shuttles, and transit use.

Complete Streets Policy

The Complete Streets Policy, was adopted by the city in 2013, confirms the city's commitment to safe, comfortable, and convenient travel along and across streets for all users. Complete Streets infrastructure should be considered for incorporation into all significant planning, funding, design, approval, and implementation processes for new construction, maintenance, and retrofit construction.

Neighborhood Traffic Management Plan

The Neighborhood Traffic Management Plan was developed to mitigate the adverse effects of increased vehicle speeds and vehicle volumes on neighborhood streets. The primary goal of this plan is to correct unsafe conditions at prioritized locations with higher incidences and higher speeds. The plan recommends two levels of measures, Level I "Express" and Level II. Level I "Express" measures include education and enforcement initiatives. Level II measures are traffic management features that can be implemented to divert traffic and restrict access to certain properties. The traffic management measures that need to be implemented are recommended by city staff members at the request of the community.

Transportation Master Plan

The Transportation Master Plan identifies appropriate projects that will enhance the transportation network. It prioritizes projects according to the need for implementation. It also includes an update to the city's Bicycle and Sidewalk Plans.

Transportation Impact Fee

The city of Menlo Park initiated a Transportation Impact Fee (TIF), as codified in Menlo Park Municipal Code Chapter 13.26, to help fund transportation improvements as new development occurs in the city. New development and redevelopment projects are subject to the TIF and, therefore, contribute to the cost of new transportation infrastructure associated with development. The types of developments that are subject to the TIF are:

- All new development in all land use categories identified in the city's zoning ordinance,
- Any construction adding additional floor area to a lot with an existing building,
- New single-family and multi-family dwelling units, and
- Changes in use from one land use category to a different land use category that requires Planning Commission approval.

The TIF provides a mechanism for modernizing the city's fee program and collecting funds for construction of the improvements identified and prioritized in the Transportation Master Plan.

Transportation Impact Analysis Guidelines

The city's TIA Guidelines specify which projects must complete a TIA prior to obtaining approval from the city. The city requires a TIA to be prepared by a qualified consultant, who will be selected by the city and paid for by a project applicant. The TIA Guidelines specify the requirements for the analyses that must be included in a TIA. The TIA Guidelines require analysis of both VMT and LOS transportation metrics independently, using the methodologies approved by the city for all projects, except those meeting established exemption criteria. At the time of this study, the city of Menlo Park is in the process of updating its TIA guidelines. However, the Parkline TIA followed the current TIA guidelines.

Environmental Impacts

This section describes the impact analysis related to transportation for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Exceed an applicable VMT threshold of significance;
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

Methods for Analysis

For purposes of disclosing potential transportation impacts, projects in the city of Menlo Park rely on the city's current TIA Guidelines to ensure compliance with both state and local requirements.[10] Until July 1, 2020, the city's TIA Guidelines used roadway congestion, or LOS, as the primary study metric for planning and environmental review purposes. However, SB 743 required OPR to establish a new metric for identifying and mitigating transportation impacts within CEQA in an effort to meet the state's goals to reduce GHG emissions, encourage infill development, and improve public health through use of more active transportation (non-driving transportation modes such as bicycling and walking). CEQA Section 21099(b)(2) states that, upon certification of the revised guidelines for determining transportation impacts, pursuant to CEQA Section 21099(b)(1), automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA. OPR identified VMT as the required transportation metric for determining

[10] Menlo Park, City of. 2022. *Transportation Impact Analysis Guidelines Update, Staff Report*. Pages 227–255. Available: https://menlopark.gov/files/sharedassets/public/v/4/agendas-and-minutes/city-council/2022-meetings/agendas/20220111-city-council-agenda-packet.pdf. Accessed: June 7, 2024.

potentially significant environmental impacts.[11] VMT is the total number of miles of travel by personal motorized vehicle (car or light truck) that a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle trips originating or ending within a particular project location. Heavy-duty trucks are not included in VMT modeling. According to OPR guidelines, VMT for heavy-duty trucks can be excluded from analysis under SB 743. In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, including the section that implemented SB 743 (CEQA Guidelines Section 15064.3). OPR subsequently developed technical recommendations regarding the assessment of VMT, thresholds of significance, and mitigation measures.[12]

Adoption of a local VMT threshold requires City Council approval. On June 23, 2020, the City Council of Menlo Park approved local VMT thresholds for incorporation into the updated TIA Guidelines. The City Council, however, retained the requirement that calls for the TIA to also analyze LOS for local planning purposes. On January 11, 2022, the City Council approved changes to the local VMT thresholds. This Draft Environmental Impact Report (Draft EIR) uses the updated thresholds. Per the TIA Guidelines, the Transportation Impact Report for the Proposed Project includes both an assessment of VMT impacts, using the current local VMT thresholds included in the updated TIA Guidelines for purposes of determining potentially significant environmental impacts pursuant to CEQA, and a summary of the LOS analysis for an assessment of local congestion for planning purposes. However, in accordance with SB 743, for purposes of determining potentially significant environmental impacts, this Draft EIR addresses only VMT as the threshold of significance.

The information in this section is based on the travel demand modeling and other technical analysis developed by Hexagon Transportation Consultants, Inc. and conducted in accordance with the current standards and methodologies required by law and set forth by the city of Menlo Park (in the TIA Guidelines) and the City/County Association of Governments of San Mateo County (C/CAG). The technical analysis is included in the Parkline TIA, which provides the LOS analysis summary, turning movement volumes, intersection lane configurations, and intersection and roadway LOS results.

The Proposed Project's VMT was estimated using the city's travel demand model. The model estimates the Proposed Project's effect on total daily VMT, in accordance with the city's TIA Guidelines. The evaluated daily VMT accounts for the entire distance of a trip associated with the Proposed Project. For example, the entire length of a trip made by an employee coming from and returning to home would be captured in the daily VMT analysis. The model is used to estimate average daily VMT within the city's transportation analysis zones (TAZs) and determine VMT thresholds for residential and commercial land uses identified in the city's TIA Guidelines. Per the city VMT guidelines, each component of a mixed-use project is analyzed independently against the appropriate thresholds. As recommended in OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*, internal capture (i.e., the portion of trips generated by a mixed-use development which both begin and end within the project) will be credited for mixed-use projects. The Proposed Project includes a mix of office, research-and-development (R&D), residential, and open space land uses.

The Menlo Park travel demand model encompasses the nine Bay Area counties, which are divided into thousands of TAZs. Each TAZ is comprised of several streets, neighborhoods, or city blocks, depending on the geographical features and surrounding land uses. There are 81 TAZs within the boundaries of Menlo

[11] Governor's Office of Planning and Research. 2016. *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA.* Implementing Senate Bill 743 (Steinberg 2013).

[12] Governor's Office of Planning and Research. 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available: https://opr.ca.gov/ceqa/docs/20190122-743_Technical_Advisory.pdf. Accessed: June 7, 2024.

Park. As such, when adding or subtracting a project from a TAZ, the internal interactions within the model affect the entire TAZ as well as surrounding TAZs.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact, in which case the analysis does not identify a "worst-case" scenario.

Table 3.3-2 lists, by impact number, the buildout scenario assumed in the transportation analysis and provides an explanation as to why the buildout scenario was evaluated for each impact.

Table 3.3-2. Buildout Scenario Analyzed for Each Transportation Impact

Impact	Scenario Evaluated	Explanation
TRA-1: Conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	100 percent R&D scenario	**Circulation System and Bicycle/Pedestrian Facilities.** Although office uses generate more peak-hour vehicular trips than R&D uses, R&D uses generate more daily vehicular trips (10,036 net new daily trips compared to 9,984 net new daily trips [see Tables 3.3-3 and 3.3-4, below]). Therefore, when considering impacts related to conflicts with plans or policies due to an increase in daily vehicular trips, the most conservative scenario is the 100 percent R&D scenario. An increase in daily vehicular trips could affect the existing circulation system, roadways, and bicycle and pedestrian facilities.
	100 percent office scenario	**Transit Facilities.** The 100 percent office scenario would generate more employees than the 100 percent R&D scenario (5,522 employees compared to 3,248 employees) and could result in a greater impact on transit facilities. Therefore, the 100 percent office scenario is analyzed when considering impacts related to conflicts with plans or policies due to an increase in transit ridership. **C/CAG CMP Consistency.** C/CAG's CMP consistency is required if the project generates more than 100 peak hour trips. Since the 100 percent office scenario would generate more peak hour trips, the 100 percent office scenario is analyzed when considering impacts related to conflicts with the C/CAG CMP.

Impact	Scenario Evaluated	Explanation
TRA-2: Exceed an applicable VMT threshold of significance.	Either scenario	The majority of the Project Site—specifically, the portion that would include the proposed buildings—is within 0.5 mile of a major transit stop (i.e., Caltrain) and therefore within a transit priority area. Ordinarily, that would mean that the Proposed Project would be "screened out" for VMT purposes. However, the Project Site is not within a low VMT area, per the city's model and the city's TIA Guidelines, and it cannot therefore be assumed the Proposed Project would have a less-than-significant VMT impact. To comply with the city's TIA requirements, a quantitative discussion of the city's VMT method, using either scenario is included in the EIR. The VMT analysis for both office and R&D land uses rely on an efficiency metric of home-to-work VMT per employee. The trip making characteristics for an employee would be the same regardless of the land use. Therefore, the VMT analysis is the same for either scenario.
TRA-3: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Either scenario	The site plan is the same under either scenario, with the same egress and ingress and the same internal circulation. Therefore, either scenario will result in the same impact related to hazards due to a geometric design feature.
TRA-4: Result in inadequate emergency access.	Either scenario	The site plan is the same under either scenario. Emergency access to the Project Site will not be altered under either scenario. Therefore, the same impacts related to emergency access would occur under either scenario.

Project Traffic Estimates

Trip generation estimates for mixed-use development are based on standard trip generation rates published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual*, 11th edition. A general discussion of the methodology for an estimation of trip generation is provided below. Detailed trip generation analysis is provided in the Parkline TIA. Table 3.3-3 shows the trip generation estimates for the 100 percent office scenario, and Table 3.3-4 shows the trip generation estimates for the 100 percent R&D scenario.

Gross Proposed Project Trips

The sources for the trip generation rates for each land use are provided below.

- ***Office.*** Initial trip estimates for office and amenity uses[13] are based on ITE land use code 710, General Office Building.

[13] Amenity uses could include a food service facility, dining areas, or a fitness center or tenant conference area in the commercial amenity building and community-serving retail uses, which may include a bicycle repair shop, a juice bar, or publicly accessible restrooms, in the community amenity building.

- ***R&D.*** Initial trip estimates for R&D and amenity uses are based on ITE land use code 760, Research and Development Center.
- ***Market-Rate Multi-family Residential.*** Initial trip estimates are based on ITE land use code 221, Multi-family Housing (Mid-Rise), which includes apartments and condominiums located within the same building with four to 10 levels.
- ***Market-rate Townhouse.*** The Proposed Project would include three-bedroom townhouses. Initial trip estimates for the townhouses are based on ITE land use code 215, Single-Family Attached Housing, which includes townhouses/rowhouses.

Table 3.3-3. Trip Generation Estimates – 100 Percent Office Scenario

Land Use	ITE Land Use Code[a]	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
				Rate[a]	Total	Rate[a]	IN	OUT	Total	Rate[a]	IN	OUT	Total
Office	710	1,094	ksf	10.84	11,855	1.52	1,462	200	1,662	1.44	268	1,307	1,575
Market-rate multi-family residential	221	431	du	4.54	1.957	0.37	37	122	159	0.39	102	66	168
Market-rate townhouse [b]	215	19	du	7.20	137	0.48	2	7	9	0.57	6	5	11
Affordable BMR housing	223	100	du	4.81	481	0.50	15	35	50	0.46	27	19	46
Publicly accessible park [c]	488	1	field	71.33	71	0.99	1	0	1	16.43	11	5	16
Gross Project trips (before any reductions)					14,501		1,517	364	1,881		414	1,402	1,816
Gross Project trips after internal capture reduction					13,822		1,471	353	1,824		396	1,358	1,754
Total Project Trips after TDM Reduction [d]					**10,026**		**1,061**	**258**	**1,319**		**289**	**981**	**1,270**
Existing trip generation credit [e]					(518)		(38)	(8)	(46)		(11)	(32)	(43)
Net New Trips Generated on Roadway Network					**9,508**		**1,023**	**250**	**1,273**		**278**	**949**	**1,227**

Source: Hexagon Transportation Consultants, Inc. 2024. *Vehicle-Miles Traveled Analysis for Parkline in Menlo Park, CA*. June 12.

Notes:

ksf = thousand square feet; du = dwelling unit

a. Daily, AM, and PM peak-hour average rates published in the 2021 ITE *Trip Generation Manual*, 11th edition, were used for each land use.

b. Trip estimates for the townhouses are based on the ITE land use "Single-Family Attached Housing," which includes townhouses/rowhouses.

c. The Proposed Project would include active recreational areas in the Ravenswood Avenue parklet. The programmatic design of the park has not been determined. The ITE land use "Soccer Complex" is analyzed as a proxy. In order to provide a conservative estimate of potential traffic generation, it is assumed that the park would have play structures and open field areas for warm-ups or casual play. The number of soccer fields at the park was estimated, based on the size of a standard soccer field.

d. As discussed under *Transportation Demand Management* in Chapter 2, *Project Description*, the Proposed Project would include a project-specific TDM plan for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project. The Proposed Project is considered a transit-oriented development (TOD) because of the Project Site's proximity to the Menlo Park Caltrain station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Project Variant by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization.

e. Existing-use trip estimates are based on driveway counts conducted by Fehr & Peers in 2021. Of the 1,100 employees onsite, 700 employees were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned, based on employees.

Table 3.3-4. Trip Generation Estimates – 100 Percent R&D Scenario

Land Use	ITE Land Use Code[a]	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
				Rate[a]	Total	Rate[a]	IN	OUT	Total	Rate[a]	IN	OUT	Total
R&D	760	1,094	ksf	11.08	12,117	1.03	923	203	1,126	0.98	172	900	1,072
Market-rate multi-family residential	221	431	du	4.54	1.957	0.37	37	122	159	0.39	102	66	168
Market-rate townhouse[b]	215	19	du	7.20	137	0.48	2	7	9	0.57	6	5	11
Affordable BMR housing	223	100	du	4.81	481	0.50	15	35	50	0.46	27	19	46
Publicly accessible park[c]	488	1	field	71.33	71	0.99	1	0	1	16.43	11	5	16
Gross Project trips (before any reductions)					14,763		978	367	1,345		318	995	1,313
Gross Project trips after internal capture reduction					14,072		948	356	1,304		304	963	1,267
Total Project Trips after TDM Reduction[d]					**10,206**		**684**	**261**	**945**		**223**	**696**	**919**
Existing trip generation credit[e]					(518)		(38)	(8)	(46)		(11)	(32)	(43)
Net New Trips Generated on Roadway Network					**9,688**		**646**	**253**	**899**		**212**	**664**	**876**

Source: Hexagon Transportation Consultants, Inc. 2024. *Vehicle-Miles Traveled Analysis for Parkline in Menlo Park, CA*. June 12.

Notes:

ksf = thousand square feet; du = dwelling unit

a. Daily, AM, and PM peak-hour average rates published in the 2021 ITE *Trip Generation Manual*, 11th edition, were used for each land use.

b. Trip estimates for the townhouses are based on the ITE land use "Single-Family Attached Housing," which includes townhouses/rowhouses.

c. The Proposed Project would include active recreational areas in the Ravenswood Avenue parklet. The programmatic design of the park has not been determined. ITE land use "Soccer Complex" is analyzed as a proxy. In order to provide a conservative estimate of potential traffic generation, it is assumed that the park would have play structures and open field areas for warm-ups or casual play. The number of soccer fields at the park was estimated, based on the size of a standard soccer field.

d. As discussed under *Transportation Demand Management* in Chapter 2, *Project Description*, the Proposed Project would include a project-specific TDM plan for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project. The Proposed Project is considered a transit-oriented development (TOD) because of the Project Site's proximity to the Menlo Park Caltrain station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Project Variant by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization.

e. Existing-use trip estimates are based on driveway counts conducted by Fehr & Peers in 2021. Of the 1,100 employees onsite, 700 employees were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned, based on employees.

- ***Affordable BMR Housing.*** Initial trip estimates are based on ITE land use code 223, Affordable Housing.
- ***Publicly Accessible Park.*** The Proposed Project would include active recreational areas in the Ravenswood Avenue parklet on the northern edge of the Project Site. Trip estimates are based on ITE land use code 488, Soccer Complex. As of the writing of this Draft EIR, the specific design and the supported functions and programs of the proposed park have not been finalized, and are anticipated to be programmed as part of a future city-led process. To provide a conservative estimate of potential traffic generation and allow for flexible programming for the Proposed Project through the project review process, it is assumed that the park would have play structures and open field areas for warm-ups or casual play.

Trip Reductions from Internal Capture

Because the Proposed Project is a mixed-use development in nature, a portion of the trips generated by the Proposed Project would both begin and end within the development; this is referred to as *internal capture*. Internal-capture trip estimates were made for each of the Proposed Project's land uses, based on the specific mix of uses, the sizes, and the locations within the Project Site. The Proposed Project's overall internal capture trip reduction would be approximately 4.7% of the gross trip estimates based on Hexagon Transportation Consultants Inc.'s analysis.

Transportation Demand Management

The Proposed Project would include a project-specific TDM plan, which is included as an appendix to the Parkline VMT Memorandum, for both the residential and commercial uses to reduce the total number of vehicle trips. The Proposed Project is considered a Transit Oriented Development (TOD) given the Project Site's proximity to the Menlo Park Caltrain station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Proposed Project by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization. The TDM plan estimates that vehicle trips could be reduced by between 30 and 45 percent, depending on whether transit passes or subsidies are provided.

Net Project Trip Generation

As shown in Table 3.3-3, under the 100 percent office scenario, trips generated by the proposed land uses, after accounting for internal capture and the proposed TDM plan, would amount to 10,026 daily trips, 1,319 AM peak-hour trips, and 1,270 PM peak-hour trips.

As shown in Table 3.3-4, under the 100 percent R&D scenario, trips generated by the proposed land uses, after accounting for internal capture and the proposed TDM plan, would amount to 10,206 daily trips, 945 AM peak-hour trips, and 919 P.M. peak-hour trips.

Net trip generation associated with the Proposed Project represents the number of new trips added to the surrounding roadway network. The trips generated by the existing uses are credited from Project-generated trips to derive net trip generation for the Proposed Project. Trips associated with existing uses on the Project Site were credited against the new trip generation. The estimate of trips generated by existing buildings on the SRI International Campus was based on driveway counts conducted over 3 days in October 2021 by Fehr & Peers. Of the 1,100 employees on the SRI International Campus, 700 employees

were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned and based on the number of employees. Therefore, it was assumed that existing buildings on the Project Site generated an average of 518 daily trips, including 46 trips in the AM peak hour and 43 trips in the PM peak hour.

As shown in Table 3.3-3, under the 100 percent office scenario, net new trips on the roadway network generated by Proposed Project would amount to 9,508 daily trips, including 1,273 AM peak-hour trips and 1,227 PM. peak-hour trips.

As shown in Table 3.3-4, under the 100 percent R&D scenario, net new trips on the roadway network generated by Proposed Project would amount to 9,688 daily trips, including 899 AM peak-hour trips and 876 PM peak-hour trips.

Impacts and Mitigation Measures

Impact TRA-1: Conflict with an Applicable Plan, Ordinance, or Policy Addressing the Circulation System, including Transit, Roadway, Bicycle, and Pedestrian Facilities. The Proposed Project would not conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (LTS)

This impact discusses the Proposed Project's impacts related to conflicts with applicable plans, ordinances, and policies. Additionally, as part of the city's entitlement process, the Proposed Project would be required to comply with existing policies and regulations, including Menlo Park General Plan policies and the zoning ordinance (Table 3.3-5). The Proposed Project would be reviewed in accordance with the city's Public Works Department Transportation Division standards and guidelines. The department would provide oversight during the engineering review to ensure that the Proposed Project is constructed according to city specifications.

The Project proposes multiple bicycle and pedestrian connections between the Project Site and the surrounding roadway network as well as within the Project Site.

- Class I multi-use path along the Project frontage on Ravenswood Avenue.
- Class I multi-use path to connect Laurel Street and the loop road north of the proposed townhomes.
- Class I multi-use path along the southern Project boundary, and transitions into a Class II or Class III bicycle facility running west along Burgess Drive to Laurel Street.
- Class II bicycle lanes along all roadways inside the Project Site.
- Class IV bicycle facility along Laurel Street from Burgess Drive to Ravenswood Avenue.

The proposed multimodal improvements would represent an overall improvement for the bicycle and pedestrian facilities in the immediate Project Vicinity. Bicycle facilities and pedestrian walkways would be incorporated within the Project Site.

The Proposed Project would promote bicycle use by providing long- and short-term bicycle parking spaces as well as showers/changing rooms. The Proposed Project would meet zoning ordinance requirements for vehicle and bicycle parking and implement TDM measures in an effort to reduce project-generated vehicle trips and encourage travel by other modes. Also, the Proposed Project would provide electric-vehicle charging stations on-site.

Table 3.3-5. Project Compliance with Applicable Transportation-Related Plans, Ordinances, and Policies

Plan/Ordinance/Policy	Consistency Analysis
Plan Bay Area 2050[14]	CONSISTENT. The Proposed Project would be consistent with Plan Bay Area 2050 goals and performance targets for transportation system effectiveness. Specifically, the Proposed Project would increase non-auto mode share. The Proposed Project would be a mixed-use development with new office, residential, retail, and hotel uses, along with a public park. It would reduce the demand for travel by single-occupancy vehicles. The Proposed Project would also develop and implement a TDM plan (see Chapter 2 for details) that would provide trip reduction measures and reduce vehicle traffic in and around the Project Site. In addition, the Study Area is served by public transit facilities as well as bicycle and pedestrian facilities, which also help to reduce the demand for travel by single-occupancy vehicles.
C/CAG Congestion Management Program	CONSISTENT. The Proposed Project is evaluated in this section for compliance with the C/CAG CMP roadway LOS and freeway segment capacity standard. As summarized in the Parkline TIA, the Proposed Project would contribute to deficiencies at CMP intersections and freeway segments near the Project Site. The Proposed Project would pay TIF and fair-share payments to address its contribution to these deficiencies. However, these are no longer CEQA thresholds related to congestion. Additionally, the Proposed Project would generate more than 100 daily trips. Therefore, it would be required under C/CAG policies to implement a TDM plan, which it has proposed to do (see Chapter 2 for details), as shown in Table 3.3-6 and Table 3.3-7.
San Mateo County Comprehensive Bicycle and Pedestrian Plan	
Policy 2.4: Promote integration of bicycle and walking-related services and activities into broader countywide transportation demand management and commute alternatives programs. This could include encouraging local jurisdictions and major employers to provide locker rooms, showers, and other amenities for changing and storing clothes and equipment to support walking and bicycling.	CONSISTENT. The Proposed Project would implement a TDM plan that would include a commute assistance center/information kiosk, carpool/vanpool matching program, bike storage and lockers, showers/changing rooms, and onsite amenities to reduce the number of trips offsite. As such, the Proposed Project would serve as a resource for employers and residents by providing promotional information and resources related to bicycling and walking.
Policy 4.1: Comply with the complete streets policy requirements of Caltrans and the Metropolitan Transportation Commission concerning safe and convenient access for bicyclists and pedestrians and assist local implementing agencies in meeting	CONSISTENT. The Proposed Project would provide safe and convenient access for bicyclists and pedestrians and comply with the complete streets policy requirements of Caltrans and MTC.

[14] Plan Bay Area 2050 was adopted by MTC and ABAG in October 2021.

Plan/Ordinance/Policy	Consistency Analysis
their responsibilities under the policy	
Policy 4.5: Encourage local agencies to adopt policies, guidelines, standards, and regulations that result in truly bicycle-friendly and pedestrian-friendly land use developments, and provide them technical assistance and support in this area such as through transportation demand management strategies or model policy or ordinance language.	CONSISTENT. The Proposed Project would include elements and improvements that would make it bicycle friendly and pedestrian friendly (e.g., new pathways and lighting, frontage improvements, bicycle storage); it would also include a TDM plan.
Policy 4.6: Discourage local agencies from removing, degrading, or blocking access to bicycle and pedestrian facilities without providing a safe and convenient alternative, especially in construction zones.	CONSISTENT. The Proposed Project would provide safe and convenient access for bicyclists and pedestrians safety through design efforts. The Proposed Project may require an encroachment permit from the Department of Public Works, which would ensure bicycle and pedestrian safety in the public right-of-way, as applicable (Menlo Park Municipal Code Ch. 13.18.030).
City of Menlo Park Circulation Element of the General Plan	
Policy CIRC-1.7: Bicycle Safety. Support and improve bicyclist safety through roadway maintenance and design efforts.	CONSISTENT. The Proposed Project would provide safe and convenient access for bicyclists and improve bicyclist safety through design efforts, including provisions for secure short- and long-term onsite bicycle parking.
Policy CIRC-1.8: Pedestrian Safety. Maintain and create a connected network of safe sidewalks and walkways within the public right-of-way and ensure that appropriate facilities, traffic controls, and street lighting are provided for pedestrian safety and convenience, including for sensitive populations.	CONSISTENT. The Proposed Project would provide safe and convenient access for pedestrians and improve pedestrian safety through design efforts. Within the Project Site, pedestrian walkways would be incorporated around buildings to connect the Project Site with public streets.
Policy CIRC-2.1: Accommodating All Modes. Plan, design, and construct transportation projects to safely accommodate the needs of pedestrians, bicyclists, transit riders, motorists, people with mobility challenges, and persons of all ages and abilities.	CONSISTENT. The Proposed Project would plan, design, and construct site access and circulation elements that would provide safe and convenient access for bicyclists, pedestrians, transit riders, drivers, people with mobility challenges, and people of all ages and abilities. The Proposed Project would construct bicycle and pedestrian facilities along the perimeter of the Project Site and throughout the interior to create east–west bicycle and pedestrian linkages that would connect the Project Site to Burgess Park, the future Caltrain undercrossing, and the Menlo Park downtown area. The Proposed Project would include a Class I multi-use bicycle and pedestrian path on the north side of the Project Site, along Ravenswood Avenue; a Class I multi-use bicycle and pedestrian path from Laurel Street at Burgess Drive, which would pass through Burgess Drive and the south side of the Project Site and continue to Middlefield Road at Seminary Drive; and a Class IV exclusive-use bicycle facility along Laurel Street from Ravenswood Avenue to

Plan/Ordinance/Policy	Consistency Analysis
	Burgess Drive. A proposed loop road would incorporate Class II or Class III bicycle facilities as well as pedestrian walkways into the overall design. All pedestrian designs will be reviewed by city staff to ensure ADA compliance. The Proposed Project would make no changes to existing public transit facilities. However, by adding vehicle trips and increasing delay at intersections along bus routes, it would increase bus travel time. The bus services that would be affected in the vicinity of the Project Site include SamTrans Routes 81, 82, 83, 296, and 397 and Menlo Park Shuttle Routes M1, M3, and M4 along Ravenswood Avenue and Middlefield Road. As summarized in the Parkline TIA, the Proposed Project would pay the TIF and fair-share payments and/or construct improvements to address its contribution to intersection deficiencies. However, bus delay would still be higher than under existing conditions. SamTrans and the city of Menlo Park do not have any standards for transit delay.
Policy CIRC-2.2: Livable Streets. Ensure that transportation projects preserve and improve the aesthetics of the city.	CONSISTENT. The Proposed Project would plan, design, and construct site improvements that would preserve and improve the aesthetics of the Project Site, as evaluated in Appendix 3.1-1 of this EIR, which includes a discussion of the Proposed Project's potential aesthetics impacts for informational purposes.
Policy CIRC-2.3: Street Classification. Utilize measurements of safety and efficiency for all travel modes to guide the classification and design of the circulation system, with an emphasis on providing "complete streets" sensitive to neighborhood context.	CONSISTENT. The Proposed Project would provide on-site and off-site improvements to improve bicycle and pedestrian safety and accessibility, as discussed above for Policy CIRC-2.1 and below for Policy CIRC-2.7.
Policy CIRC-2.4: Equity. Identify low-income and transit-dependent districts that require bicycle and pedestrian access to, from, and within their neighborhoods.	CONSISTENT. The Proposed Project includes affordable housing units. The Proposed Project would also provide off-site improvements to improve bicycle and pedestrian safety and accessibility from the affordable housing units to the nearby Caltrain station.
Policy CIRC-2.7: Walking and Biking. Provide for the safe, efficient, and equitable use of streets by bicyclists and pedestrians through appropriate roadway design and maintenance, effective traffic law enforcement, and implementation of the Transportation Master Plan.	CONSISTENT. The Proposed Project would provide for the safe, efficient, and equitable use of streets by bicyclists and pedestrians through appropriate design and maintenance. The Proposed Project would provide safe and convenient access for bicyclists and improve bicyclist safety through design efforts that include the provision of short- and long-term onsite bicycle parking. The Proposed Project would provide safe and convenient access for pedestrians and improve pedestrian safety through design efforts. Within the Project Site, a proposed loop road would incorporate Class II or Class III bicycle facilities and pedestrian walkways for access to Menlo Park's existing bicycle facilities on the west, north, and east sides of the Project Site.
Policy CIRC-2.8: Pedestrian Access at Intersections. Support full pedestrian access across all legs of signalized intersections.	CONSISTENT. The Proposed Project would not introduce features that would preclude or interfere with pedestrian access at signalized intersections.

Plan/Ordinance/Policy	Consistency Analysis
Policy CIRC-2.9: Bikeway System Expansion. Expand the citywide bikeway system through appropriate roadway design, maintenance, effective traffic law enforcement, and implementation of the city's Transportation Master Plan.	CONSISTENT. The Proposed Project would not conflict with the city's Transportation Master Plan. The Proposed Project would provide on-site and off-site improvements to enhance the citywide bikeway system's safety and connectivity.
Policy CIRC-2.11: Design of New Development. Require new development to incorporate a design that prioritizes safe bicycle and pedestrian travel and accommodates senior citizens, people with mobility challenges, and children.	CONSISTENT. The Proposed Project would plan, design, and construct site access and circulation improvements that would provide safe and convenient access for pedestrians, bicyclists, transit riders, drivers, people with mobility challenges, and people of all ages and abilities.
Policy CIRC-2.14: Impacts of New Development. Require new development to mitigate its impacts on the safety (e.g., collision rates) and efficiency (e.g., VMT per service population or other efficiency metric) of the circulation system. New development should minimize cut-through and high-speed vehicle traffic on residential streets; minimize the number of vehicle trips; provide appropriate bicycle, pedestrian, and transit connections, amenities, and improvements in proportion with the scale of proposed projects; and facilitate appropriate or adequate response times and access for emergency vehicles.	CONSISTENT. The Proposed Project has been evaluated in this EIR for impacts on safety through an assessment of site access and circulation for all modes as well as impacts on VMT and emergency response times. As discussed under Impact TRA-2, impacts from VMT would be considered less than significant. Impacts on safety would be considered less than significant. The Proposed Project would implement a TDM plan to provide trip reduction measures and reduce vehicle traffic in and around the Project Site. The Proposed Project would provide bicycle and pedestrian facilities, which would also help to reduce the demand for travel in single-occupancy vehicles.
Policy CIRC-3.1: Vehicle Miles Traveled. Support development and transportation improvements that help reduce per service population (or other efficiency metric) vehicle miles traveled.	CONSISTENT. The Proposed Project would be mixed-use development that would locate employees near residential and commercial uses, thereby reducing the demand for travel in single-occupancy vehicles. The Proposed Project would also develop and implement a TDM plan to provide trip reduction measures and reduce vehicle traffic in and around the Project Site. In addition, the Proposed Project would provide bicycle and pedestrian facilities, which would also help to reduce the demand for travel in single-occupancy vehicles.

Plan/Ordinance/Policy	Consistency Analysis
Policy CIRC-3.3: Emerging Transportation Technology. Support efforts to fund emerging technological transportation advancements, including connected and autonomous vehicles, emergency vehicle pre-emption, sharing technology, electric-vehicle technology, electric bikes and scooters, and innovative transit options.	CONSISTENT. The Proposed Project would provide electric-vehicle charging stations onsite, in compliance with Menlo Park Municipal Code Chapter 5, Section 5.106.5.3, and Chapter 16, Section 16.72.010, and Policy OSC-4.4 of the Menlo Park General Plan. The Project would incorporate adequate EV-ready parking spaces within both the office/R&D area and the residential area to meet code requirements pursuant to CALGreen Tier 2 electric vehicle (EV) charging requirements and would provide 100% carbon-free electricity at the EV charging stations
Policy CIRC-3.4: Level of Service. Strive to maintain level of service (LOS) D at all city-controlled signalized intersections during peak hours, except at the intersection of Ravenswood Avenue and Middlefield Road and at intersections along Willow Road from Middlefield Road to U.S. 101. The city shall work with Caltrans to ensure that average stopped delay on local approaches to state-controlled signalized intersections does not exceed LOS E.	CONSISTENT. The Proposed Project has been evaluated for compliance with LOS policy. As summarized in the Parkline TIA, some intersections surrounding the Project Site would exceed the applicable LOS under existing, near-term, near-term plus-Project, and cumulative conditions. However, the Proposed Project would pay TIF and fair-share payments and/or construct improvements to address its contribution to the deficiencies. Furthermore, LOS is no longer a CEQA threshold.
Policy CIRC-4.1: Global Greenhouse Gas Emissions. Encourage the safer and more widespread use of nearly zero-emission modes, such as walking and biking, and lower emission modes, like transit, to reduce greenhouse gas emissions.	CONSISTENT. The Proposed Project would develop and implement a TDM plan and provide bicycle and pedestrian facilities to encourage more widespread use of nearly zero-emission modes, such as biking and walking, and lower-emission modes, such as transit, to reduce GHG emissions.
Policy CIRC-4.2: Local Air Pollution. Promote non-motorized transportation to reduce exposure to local air pollution, thereby reducing risks of respiratory diseases, other chronic illnesses, and premature death.	CONSISTENT. The Proposed Project would develop and implement a TDM plan and provide bicycle and pedestrian facilities to promote non-motorized transportation and reduce the exposure to local air pollution, thereby reducing risks of respiratory diseases, other chronic illnesses, and premature death.
Policy CIRC-4.3: Active Transportation. Promote active lifestyles and active transportation, focusing on the role of walking and bicycling, to improve public health and lower obesity.	CONSISTENT. The Proposed Project would develop and implement a TDM plan and provide bicycle and pedestrian facilities to promote active lifestyles and active transportation, focusing on the role of bicycling and walking to improve public health and lower obesity.

Plan/Ordinance/Policy	Consistency Analysis
Policy CIRC-4.4: Safety. Improve traffic safety by reducing speeds and making drivers more aware of other roadway users.	CONSISTENT. The Proposed Project would include multiple bicycle and pedestrian connections. In addition, it would include a network of new paths for pedestrian access throughout the Project Site, including sidewalks, pedestrian paths, and internal intersection crossings. The bicycle facilities and pedestrian walkways would be incorporated around the Project Site to connect to public streets. They would be constructed so as to increase the visibility of people walking and improve traffic safety.
Circ-5.2: Transit Proximity to Activity Centers. Promote the clustering of as many activities as possible within easy walking distance of transit stops, and locate any new transit stops as close as possible to housing, jobs, shopping areas, open space, and parks.	CONSISTENT. The Proposed Project, as a mixed-use development, would develop new office/R&D, residential, and public park uses. Bus and shuttle stops are within 0.25 mile of the Project Site, and the Menlo Park Caltrain station is 0.5 mile west of the Project Site. These are considered typical walking distances to transit services.
Circ-6.1: Transportation Demand Management. Coordinate Menlo Park's transportation demand management efforts with other agencies that provide similar services within San Mateo and Santa Clara Counties.	CONSISTENT. The Proposed Project would develop and implement a TDM plan with TDM measures, as shown in Table 3.3-6 and Table 3.3-7, that would meet C/CAG TDM trip reduction requirements.
Circ 6.3: Shuttle Service. Encourage increased shuttle service between employment centers and the downtown Menlo Park Caltrain station.	CONSISTENT. The Proposed Project would develop and implement a TDM plan that would provide trip reduction measures and encourage the use of public transit and shuttles.
Circ-6.4: Employers and Schools. Encourage employers and schools to promote walking, bicycling, carpooling, shuttles, and transit use.	CONSISTENT. The Proposed Project would develop and implement a TDM plan that would include measures to encourage employees to bike, walk, carpool, and use transit.
City of Menlo Park Transportation Master Plan	CONSISTENT. The Proposed Project would not include any modifications that would conflict with projects and recommendations identified in the Transportation Master Plan. At locations where the proposed project would cause an intersection to operate in non-compliance with Menlo Park General Plan Policy CIRC-3.4, modifications are identified consistent with recommendations identified in the Transportation Master Plan.
City of Menlo Park Transportation Impact Fee	CONSISTENT. The Proposed Project would be subject to the TIF and contribute to the cost of new transportation infrastructure for the development.

Table 3.3-6. C/CAG Checklist: Large Non-Residential (Office) Transit-Oriented Development

Measure	C/CAG-Estimated Trip Reduction
Required TDM Measures	
Free/preferential parking for carpools	1%
TDM coordinator/contact person	0.5%
Active participation in Commute.org or Transportation Management Association equivalent	6.5%
Carpool or vanpool program	2%
Transit or ridesharing passes/subsidies	10%
Pre-tax transportation benefits	1%
Secure bicycle storage	1%
Street design that encourages bike/pedestrian access	1%
Showers, lockers, and changing rooms for cyclists	2%
Total from Required Measures	**25%**
Additional TDM Measures	
Flex time, compressed work week, telecommuting	5%
Carshare onsite	1%
Land dedication or capital improvement for transit	4%
Gap closure	7%
Bike repair station	0.5%
Pedestrian oriented uses and amenities on ground floor	3%
Total from Additional Measures	**20.5%**
Total from All Measures As Calculated by C/CAG Checklist	**45.5%**
C/CAG Trip Reduction Target	**25%**[a]
Project Meets C/CAG Trip Reduction Target?	**Yes**

Notes:

a. The Proposed Project would include a project-specific TDM plan (included as an appendix to the Parkline VMT Memorandum) for both the residential and commercial uses to reduce the total number of vehicle trips. The Proposed Project is considered a Transit Oriented Development (TOD) given the Project Site's proximity to the Menlo Park Caltrain Station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Proposed Project by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization.

Table 3.3-7. C/CAG Checklist: Large Residential Transit-Oriented Development

Measure	C/CAG-Estimated Trip Reduction
Required TDM Measures	
Orientation, education, promotional programs and/or materials	1%
TDM coordinator/contact person	0.5%
Active participation in Commute.org or Transportation Management Association equivalent	5%
Transit or ridesharing passes/subsidies	10%
Secure bicycle storage	1%
Street design that encourages bike/pedestrian access	1%
Total from Required Measures	**18.5%**
Additional TDM Measures	
Family-supportive amenities	3%
Car share on-site	1%
Land dedication or capital improvement for transit	4%
Bike/scooter share onsite	1%
Active transportation subsidies	2%
Gap closure	7%
Bike repair station	0.5%
Pedestrian oriented uses and amenities on ground floor	3%
Total from Additional Measures	**21.5%**
Total from All Measures As Calculated by C/CAG Checklist	**40%**
C/CAG Trip Reduction Target	**25%**[a]
Project Meets C/CAG Trip Reduction Target?	**Yes**

Notes:

a. The Proposed Project would include a project-specific TDM plan (included as an appendix to the Parkline VMT Memorandum) for both the residential and commercial uses to reduce the total number of vehicle trips. The Proposed Project is considered a Transit Oriented Development (TOD) given the Project Site's proximity to the Menlo Park Caltrain Station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Proposed Project by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization.

The Project Site is within biking/walking distance of the Menlo Park Caltrain station. The Proposed Project is expected to generate an increase in transit demand, which could be accommodated by the available capacity of the SamTrans bus service. The SamTrans routes 81, 82, 83, 296, 397, ECR, M1 Crosstown Shuttle, M3 Marsh Road Shuttle, and M4 Willow Road Shuttle serve the immediate vicinity of the Project Site during the AM and PM peak commute hours. Bus stops are within a typical walking distance (0.25 mile, or 5 minutes at a 20 minute per mile walking speed) of the Project Site. The Proposed Project would make no change to existing public transit facilities. However, by adding vehicle trips and increasing delays at intersections along bus routes, it would increase bus travel time. Intersection improvements to reduce intersection delay, as discussed in the Parkline TIA, would help to reduce some bus delay along these routes.

The Caltrain electrification project would enable Caltrain to provide more frequent train service at the Menlo Park, Palo Alto, and Redwood City Caltrain stations. Caltrain predicts an initial overall capacity increase of more than 30 percent due to increased service. Caltrain's current ridership is roughly 40% of its pre-pandemic levels. With the Caltrain electrification project, it is expected that the potential increase in transit ridership generated by the Proposed Project would be accommodated.

For these reasons, the Proposed Project would be consistent, for CEQA purposes, with applicable plans, ordinances, and policies addressing the circulation system and this impact would be ***less than significant***. No mitigation is required.

Impact TRA-2: Exceed an Applicable VMT Threshold of Significance. The Proposed Project would not exceed an applicable VMT threshold of significance. (LTS)

The Proposed Project includes a mix of office, R&D, and residential land uses. Per the city of Menlo Park TIA Guidelines, adopted in July 2020 and updated in January 2022, each component of mixed-use projects is analyzed independently against the appropriate thresholds. As discussed in more detail below, implementation of the Proposed Project, as modeled for the transportation analysis, would not exceed the applicable residential VMT threshold of significance or office VMT threshold of significance. Project VMT is defined as the total distance traveled by vehicles going to and from a project site over a typical day.

According to OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA,* VMT analysis for a mixed-use project should account for internal capture. Internal capture is defined as bicycling, walking, and tram trips between the various types of land use within a project site. By reducing the number of external vehicle trips, internal capture reduces VMT for mixed-use projects compared with single-use developments.

The VMT thresholds of significance for the Proposed Project's land uses are listed below.

- An office project is considered to have a significant impact on VMT if the project's VMT exceeds a threshold of 15 percent below regional average VMT per employee.
- A residential project is considered to have a significant impact on VMT if the project's VMT exceeds a threshold of 15 percent below regional average VMT per capita.

Travel Demand Model

In order to estimate VMT for various land use components, the citywide travel demand forecast model was used. The citywide model is the best available model for modeling travel within the city of Menlo Park. It serves as the primary forecasting tool for the city. The model is a mathematical representation of travel within the nine Bay Area counties as well as Santa Cruz, San Benito, Monterey and San Joaquin Counties. The base model structure was developed by the MTC and further refined by the C/CAG and Santa Clara Valley Transportation Authority for use within San Mateo County and Santa Clara County. The city further refined the model for applications within Menlo Park to add more detail to the zone structure and transportation network. The model has a base year of 2019.

There are four main components to the travel demand forecast model: 1) trip generation, 2) trip distribution, 3) mode choice, and 4) trip assignment. The model uses socioeconomic inputs (i.e., population, income, employment) that are aggregated into geographic areas, called TAZs, to estimate travel within the model area. The 81 TAZs within the model represent the city of Menlo Park. The model was used to estimate the Proposed Project's effect on VMT, in accordance with the city's TIA Guidelines.

VMT Evaluation

According to the city's TIA Guidelines, the evaluation of an office land use is based on a daily VMT per employee metric, which would be the same whether the land use is office or R&D or a mix of both. For the purpose of maintaining consistency with the trip generation evaluation, the VMT analysis in the Parkline VMT Memorandum assumed that the office and R&D component of the Proposed Project is 100 percent office. This metric is calculated for only home-based work trips, per OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*. According to the latest citywide travel demand model, regional average office VMT totals 15.9 per employee. Therefore, the city's office VMT impact threshold, at 15 percent below the regional average, would be 13.6 for daily VMT per employee.

According to the city's TIA Guidelines, the evaluation of residential land use is based on a daily VMT per capita metric. This metric is calculated for only home-based trips, per OPR's technical advisory. According to the latest citywide travel demand model, regional average residential VMT totals 13.1 per capita. Therefore, the city's residential VMT impact threshold, at 15 percent below the regional average, would be 11.2 for daily VMT per capita.

Office/R&D and residential land uses were evaluated using the citywide model. The Proposed Project would include a project-specific TDM plan for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project. The Proposed Project is considered a Transit Oriented Development (TOD) because of the Project Site's proximity to the Menlo Park Caltrain station. For projects of this type, City/County Association of Governments (C/CAG) requires a 25 percent trip reduction. For mixed-use projects such as the Proposed Project, this 25 percent trip reduction would be applied to the net trip generation after accounting for internalization. The Proposed Project's TDM plan would meet the C/CAG trip reduction requirement, as it would provide for at least a 25 percent trip reduction for the proposed residential uses and at least a 28 percent trip reduction for the proposed office/R&D uses.

As discussed in the *Net Project Trip Generation* section, above, the Proposed Project's daily internalization is estimated at 4.7 percent. Per ITE's *Trip Generation Handbook,* third edition (page 38), baseline trip generation rates, as used for this analysis, generally assume a non-driving mode share of 5 percent or less. Accordingly, the 5 percent non-driving mode share inherent to the ITE trip generation rates has been incorporated in the analysis for the Proposed Project. Therefore, the Project's proposed total TDM-based reduction in gross ITE trip generation rates (after crediting internalization) is equivalent to a driving mode split of approximately 65.2 percent for the proposed office/R&D land uses and 67.9 percent for the proposed residential land uses.[15]

As shown in Table 3.3-8, the travel demand model, accounting for the Proposed Project's TDM plan, showed that the Proposed Project's office land use would generate VMT at 13.5 per employee, below the city's office VMT impact threshold of 13.6 per capita. Therefore, VMT impacts associated with office land uses would be ***less than significant***. The Proposed Project's residential land use would generate VMT at 9.7 per capita, below the city's residential VMT impact threshold of 11.2 per capita. Therefore, VMT impacts associated with residential land uses would be ***less than significant***. No mitigation is required.

[15] (1 - 5 percent of inherent non-driving mode) x (1 - 4.7 percent of internalization) x (1 - 28 percent of TDM reduction) = 65.2 percent for the office/R&D land use.
(1 - 5 percent of inherent non-driving mode) x (1 - 4.7 percent of internalization) x (1 - 25 percent of TDM reduction) = 67.9 percent for the residential land use.

Table 3.3-8. Office/R&D and Residential VMT Analysis Summary

Land Use	Regional Average	VMT Threshold	Project VMT	Higher than VMT Threshold?
Office/R&D[a]	15.9	13.6	13.5	No
Residential[b]	13.1	11.2	9.7	No

Impact TRA-3: Substantially Increase Hazards due to a Geometric Design Feature or Incompatible Uses. The Proposed Project would not substantially increase hazards due to a design feature or incompatible uses. (LTS)

For purposes of CEQA, *hazards* are the engineering aspects of a project (e.g., speed, turning movements, designs, distances between street crossings, sight lines) that may increase the risk, compared with a typical project, of collision and result in serious or fatal physical injuries. This analysis focuses on hazards that could reasonably stem from the Proposed Project itself, beyond the collisions that may result from non-engineering aspects or the transportation system as a whole. Therefore, the methodology qualitatively assesses the Proposed Project's potential to exacerbate an existing hazardous condition, or create a new hazard, for people bicycling, walking, or driving or for public transit operations.

The Proposed Project would not involve any changes to the roadway network outside the Project Site. Furthermore, the Proposed Project would not include any design features that could cause potentially hazardous conditions. The Proposed Project would remove West Fourth Street, which is slightly west of Pine Street, within the Project Site and add a new residential driveway on Ravenswood Avenue opposite Pine Street. This would improve access on Ravenswood Avenue by consolidating the access points on the street. The Proposed Project would provide driveways on Ravenswood Avenue and Laurel Street as well as the internal roads that connect to the existing driveways on Middlefield Road opposite Ringwood Avenue and Seminary Drive. The driveway designs would comply with applicable standards and therefore would not present hazards. It should be noted that the Project Sponsor is working with city personnel to improve the geometric design and simplify intersection operations at this location.

As discussed under Impact TRA-1, the Project proposes multiple bicycle and pedestrian facility improvements within the Project Site and along its frontage roadways. The Proposed Project would provide adequate bicycle and pedestrian infrastructure and represent an overall improvement with respect to bicyclist and pedestrian access and circulation. In addition, any off-site transportation improvements required for the Proposed Project would not be expected to require substantial work (e.g., major roadway widening). Rather, it is anticipated that the off-site transportation improvements would likely consist of improvements identified in the city's Traffic Impact Fee program. The Proposed Project would be required to contribute its fair share towards these improvements. The city anticipates that the off-site transportation improvements would not substantially increase hazards due to a geometric design feature or incompatible uses. In addition, the off-site temporary transportation improvements would be subject to the same or similar regulatory requirements as the Proposed Project, as applicable. Thus, the Proposed Project would not generate activities that would create potentially hazardous conditions for people bicycling, walking, or driving or for public transit operations.

Although the dimensions for driveways, parking aisles, parking spaces, and bicycle/pedestrian facilities are not known, as with current practice, the Proposed Project would be designed and reviewed in accordance with the city's Public Works Department Transportation Program. The department would provide oversight during the engineering review to ensure that the Proposed Project is constructed

according to city specifications. For these reasons, the Proposed Project would have a ***less-than-significant*** impact with respect to design features or incompatible uses. No mitigation is required.

Impact TRA-4: Result in Inadequate Emergency Access. The Proposed Project would not result in inadequate emergency access. (LTS)

Emergency access to the Project Site would be similar to access under existing conditions. Menlo Park Fire Protection District Station 1 on Middlefield Road and Station 6 on Oak Grove Avenue are approximately 0.3 and 0.6 mile south and west of the Project Site, respectively. Although there would be a general increase in vehicle traffic from the Proposed Project, it would not inhibit emergency access to the Project Site or materially affect emergency vehicle response from a fire station. The proposed development on the Project Site, with associated increases in bicycle, pedestrian, and vehicle travel, would not substantially affect emergency vehicle response times or access to other buildings or land uses in the area, including hospitals. The Proposed Project would be designed and built according to local fire district standards and state building codes. Building and site plans would be reviewed by city Planning, Engineering, and Building Services Departments as well as the Menlo Park Fire Protection District for compliance with the zoning ordinance and building code, the fire code, and engineering standards. This would ensure that the Proposed Project would not impair emergency access for fire or emergency services. City staff would also review the Proposed Project's construction management plan to ensure the Proposed Project's construction will follow city standards and do not inhibit emergency services. For these reasons, the Proposed Project would have a ***less-than-significant*** impact with respect to emergency access and circulation. No mitigation is required.

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*.

Impact C-TRA-1: Cumulative Impacts Related to Conflicts Addressing the Circulation System. Cumulative development would not result in a significant environmental impact related to conflicts with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Future development in the city would be required to comply with existing regulations, including Menlo Park General Plan policies and zoning regulations that have been enacted to minimize impacts related to transportation and circulation. The city, throughout the 2040 buildout horizon, would implement Menlo Park General Plan programs that would require the city to update its Capital Improvement Program annually to reflect city and community priorities for physical projects related to transportation involving all travel modes. Data regarding the travel patterns of all modes would be updated bi-annually to measure circulation system efficiency (e.g., VMT per capita, traffic volumes) and safety standards (e.g., collision rates), along with other metrics. Furthermore, future projects developed in compliance with zoning regulations that call for adequate facilities and access to transportation would be consistent with the city's Transportation Master Plan. Based on the analysis above, the cumulative impacts with respect to conflicts with adopted plans, ordinances, or policies regarding bicycle, pedestrian, or public transit facilities would be ***less than significant***. No mitigation is required.

Impact C-TRA-2: Cumulative Impacts Related to VMT. Cumulative development could result in a significant environmental impact related to VMT; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Consistent with OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*,[16] the evaluation of a project's cumulative impact is based on whether the incremental effects are "considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. An efficiency-based threshold applies to a proposed project without regard to VMT generated by an existing land use. As discussed under Impact TRA-2, VMT generated by the Proposed Project would be below the city's VMT thresholds. Based on the analysis above, the Proposed Project's contribution to cumulative impacts on VMT would be ***less than cumulatively considerable***. No mitigation is required.

Impact C-TRA-3: Cumulative Impacts Related to Hazards due to a Design Feature or Incompatible Uses. Cumulative development would not result in a significant environmental impact related to substantially increasing hazards due to a design feature or incompatible uses; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Similar to the Proposed Project, other land use development and transportation projects would also promote accessibility for people traveling to or through a project site by conforming to Menlo Park General Plan policies and zoning regulations and adhering to planning principles that provide convenient connections and safe routes for bicycling, walking, driving, or taking transit. In addition, as per current practice, other projects would be designed and reviewed in accordance with the city's Public Works Department Transportation Program. The department would provide oversight during the engineering review to ensure that other projects are constructed according to city specifications. As a result, other projects would not involve activities that would increase hazards due to a design feature or incompatible use. Therefore, cumulative impacts related to hazards due to a design feature or incompatible use would be ***less than significant***. No mitigation is required.

Impact C-TRA-4: Cumulative Impacts Related to Inadequate Emergency Access. Cumulative development would not result in a significant environmental impact related to inadequate emergency access; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

As part of the city's project approval process, future development would be required to comply with existing regulations, including Menlo Park General Plan policies and zoning regulations that have been enacted to minimize impacts related to emergency access. The city, throughout the 2040 buildout horizon, would implement Menlo Park General Plan programs that require the city's continued coordination with Menlo Park Police Department and Menlo Park Fire Protection District to establish circulation standards, adopt emergency response route maps, and equip all new traffic signals with pre-emptive devices for emergency services. Furthermore, implementation of the zoning regulations would help minimize traffic congestion that could affect emergency access. Therefore, cumulative impacts related to inadequate emergency access would be ***less than significant***. No mitigation is required.

[16] Governor's Office of Planning and Research. 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available: https://opr.ca.gov/ceqa/docs/20190122-743_Technical_Advisory.pdf. Accessed: June 7, 2024.

3.4 Air Quality

This section identifies and evaluates the Proposed Project's potential impacts on air quality. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California* (Parkline Air Quality Technical Report)[1]; and
- Model assumptions and inputs for construction and operational air quality emissions calculations.

The technical documentation listed above prepared for the Proposed Project by Ramboll was peer reviewed by ICF. The existing setting and Project analysis outlined in the technical documentation are incorporated throughout this section. The Parkline Air Quality Technical Report, including the model assumptions and inputs for construction and operational air quality emissions calculations, is included in Appendix 3.4-1 of this EIR.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. Comments pertained to the potential for the Proposed Project to result in significant impacts on air quality and health risks.

Existing Conditions

Environmental Setting

Regional Climate and Meteorology

Menlo Park is in the southern part of the San Francisco Bay Area Air Basin (SFBAAB), a large, shallow air basin ringed by hills that taper into a number of sheltered valleys around the perimeter. The air basin comprises the Study Area for the Proposed Project. The city is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), which regulates air quality in the San Francisco Bay Area. Air quality is a function of both local climate and local sources of air pollution. Air quality is the balance of the natural dispersal capacity of the atmosphere and emissions of air pollutants from human uses or the environment. Two meteorological factors affect air quality in Menlo Park: wind and temperature. Winds affect the direction of transport for air pollution emissions; wind also controls the volume of air into which pollution is mixed over a given period of time. Although winds govern horizontal mixing processes, temperature inversions determine the vertical mixing depth of air pollutants. Neither the California Ambient Air Quality Standards (CAAQS) nor the National Ambient Air Quality Standards (NAAQS) for the following pollutants have been violated in recent decades: nitrogen dioxide (NO_2), sulfur dioxide (SO_2), sulfates, lead, hydrogen sulfide, and vinyl chloride. Exceedances of air quality standards that do occur happen primarily during periods when meteorological conditions are conducive to high levels of pollution, such as cold periods, windless nights, or hot, sunny summer afternoons.

[1] Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February.

Menlo Park is in San Mateo County, which lies in the middle of the San Francisco Peninsula, south of San Francisco County and north of Santa Clara and Santa Cruz Counties. Two primary atmospheric outlets exist.[2] One is the strait known as the Golden Gate, a direct outlet to the Pacific Ocean. The second extends to the northeast, along the West Delta region of the Sacramento and San Joaquin Rivers. San Mateo County is bounded by the Pacific Ocean to the west and San Francisco Bay to the east. Cool, foggy weather is prevalent along the western coast of the peninsula, particularly during the summer. Summertime average daily temperatures are moderate along the western coast and warm on the county's east side. In the winter, average daily temperatures across the county range from mild to moderate. Winds are mild, with the highest wind speeds along the western coast. Rainfall averages about 20 to 25 inches per year at lower elevations and up to 36 inches in the Santa Cruz Mountains.[3]

Ozone (O_3) and fine particle pollution (i.e., particulate matter no more than 2.5 microns in diameter, or $PM_{2.5}$) are the major regional air pollutants of concern in the Bay Area. O_3 is primarily a problem in the summer; fine particle pollution is a problem in the winter.[4] In San Mateo County, O_3 levels almost never exceed health standards. $PM_{2.5}$ concentrations exceed the national standard about 1 day each year. San Mateo County frequently receives fresh marine air from the Pacific Ocean. The air passes over the coastal hills as it moves into the county. In winter, $PM_{2.5}$ may be transported into San Mateo County from other parts of the Bay Area. $PM_{2.5}$ may combine with wood smoke, which may lead to elevated concentrations. However, the concentrations are rarely high enough to exceed health standards.[5]

Pollutants of Concern

Criteria Pollutants

Both state and federal governments have established health-based ambient air quality standards for six criteria air pollutants: carbon monoxide (CO), O_3, NO_2, SO_2, lead, and suspended particulate matter. In addition, the State of California (State) has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O_3 and NO_2, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO_2, and lead are considered local pollutants and tend to accumulate in the air locally.

The primary pollutants of concern in the area of the Project Site are O_3, CO, and suspended particulate matter. Significance thresholds established by an air district are used to manage total regional and local emissions within an air basin, based on the air basin's attainment status for criteria pollutants. The emission thresholds were established for individual development projects that could contribute to regional and local emissions and adversely affect or delay the air basin's projected attainment target goals for nonattainment criteria pollutants. See the *Regional Attainment Status* subsection and Table 3.4-3 for information regarding the attainment status of the Study Area for the Proposed Project.

One individual project that generates emissions that exceed a threshold does not necessarily result in adverse health effects for residents in the vicinity. This condition is especially true when the criteria pollutants that exceed thresholds are those with regional effects, such as O_3 precursors (e.g., nitrogen

[2] An atmospheric outlet is a gap between land formations that allows air to flow in and out of an area.

[3] Bay Area Air Quality Management District. 2019. *Climate and Air Quality in San Mateo County*. Available: https://www.baaqmd.gov/about-the-air-district/in-your-community/san-mateo-county. Accessed: February 6, 2024.

[4] Ibid.

[5] Ibid.

oxides [NO_X] and reactive organic gases [ROGs]). Furthermore, by its very nature, air pollution is largely a cumulative impact. No single project is large enough by itself to result in nonattainment of ambient air quality standards. Instead, in air basins that are in nonattainment for one or more criteria air pollutants, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Because of the conservative nature of the significance thresholds, as well as the basin-wide context of individual development project emissions, there is no direct correlation between a single project and localized air quality–related health effects. In developing thresholds of significance for air pollutants, the air districts have considered the emission levels at which a project's individual emissions would be cumulatively considerable in light of existing air quality. If a project exceeds the identified significance thresholds, its emissions would be significant and a cumulatively considerable contributor to significant cumulative air quality impacts in the region.

Occupants of facilities such as schools, day-care centers, parks and playgrounds, hospitals, and nursing and convalescent homes are considered more sensitive to air pollutants than the general public because of their increased susceptibility to respiratory disease. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas because people generally spend longer periods of time at their residences and have a greater associated exposure to ambient air quality conditions. Recreational uses are also considered sensitive compared with commercial and industrial uses because of the greater exposure to ambient air quality conditions associated with exercise. These populations are referred to as sensitive receptors. Air pollutants and their health effects, as well as other air pollution–related considerations, are summarized in Table 3.4-1 and described in more detail below.

Table 3.4-1. Sources and Health Effects of Air Pollutants

Pollutant	Sources	Primary Effects
Ozone (O_3)	• Precursor sources: motor vehicles, industrial emissions, and consumer products.[a]	• Respiratory symptoms. • Worsening of lung disease, leading to premature death. • Damage to lung tissue. • Crop, forest, and ecosystem damage. • Damage to a variety of materials, including rubber, plastics, fabrics, paints, and metals.
Particulate Matter Less than 2.5 Microns in Aerodynamic Diameter ($PM_{2.5}$)	• Cars and trucks (especially diesel vehicles). • Fireplaces and wood stoves. • Windblown dust from roadways, agriculture, and construction.	• Premature death. • Hospitalization for worsening of cardiovascular disease. • Hospitalization for respiratory disease. • Asthma-related emergency room visits. • Increased symptoms and increased inhaler usage.
Particulate Matter Less than 10 Microns in Aerodynamic Diameter (PM_{10})	• Cars and trucks (especially diesel vehicles). • Fireplaces and wood stoves. • Windblown dust from roadways, agriculture, and construction.	• Premature death and hospitalization, primarily from worsening of respiratory disease. • Reduced visibility and material soiling.

Pollutant	Sources	Primary Effects
Nitrogen Oxides (NO_X)	• Any source that burns fuel, such as cars, trucks, construction and farming equipment, and residential heaters and stoves.	• Lung irritation. • Enhanced allergic responses.
Carbon Monoxide (CO)	• Any source that burns fuel, such as cars, trucks, construction and farming equipment, and residential heaters and stoves.	• Chest pain in patients with heart disease. • Headaches. • Light-headedness. • Reduced mental alertness.
Sulfur Oxides (SO_X)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Worsening of asthma (e.g., increased symptoms, increased medication usage, emergency room visits).
Lead (Pb)	• Contaminated soil. • Lead-based paints.	• Impaired mental functioning in children. • Learning disabilities in children. • Brain and kidney damage.
Toxic Air Contaminants (TACs)	• Cars and trucks (especially diesel vehicles). • Industrial sources, such as chrome platers. • Neighborhood businesses, such as dry cleaners and service stations. • Building materials and products.	• Cancer. • Reproductive and developmental effects. • Neurological effects.

Source: California Air Resources Board. 2024. *Common Air Pollutants*. Available: https://ww2.arb.ca.gov/resources/common-air-pollutants. Accessed: February 6, 2024.

Notes:

[a] O_3 is not generated directly by these sources. Rather, precursor pollutants from these sources (ROG and NO_X) react with sunlight to form O_3 in the atmosphere.

Ozone

O_3, a secondary air pollutant, is produced in the atmosphere through a complex series of photochemical reactions involving ROG and NO_X. The main sources of ROG and NO_X, often referred to as O_3 precursors, are combustion processes, including combustion in motor vehicle engines, and the evaporation of solvents, paints, and fuels. In the Bay Area, automobiles are the largest source of O_3 precursors. O_3 is referred to as a regional air pollutant because its precursors are transported and diffused by wind concurrently with O_3 production through a photochemical reaction process. O_3 causes eye irritation, airway constriction, and shortness of breath and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

CO, an odorless, colorless gas, is usually formed as the result of incomplete combustion in fuels. The largest source of CO is the motor vehicle. CO transport is limited; it disperses with distance from a source under normal meteorological conditions. However, under certain extreme meteorological conditions, CO concentrations near congested roadways or intersections may reach unhealthful levels and adversely affect local sensitive receptors (e.g., residents, schoolchildren, the elderly, hospital patients). Typically, high CO concentrations are associated with roadways or intersections that operate at unacceptable levels of service (LOS) or with extremely high traffic volumes. Exposure to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, and fatigue; impair central nervous system function; and induce angina (chest pain) in persons with serious heart disease. Prolonged exposure to high concentrations of CO can be fatal.

Particulate Matter

Particulate matter is a class of air pollutants that consists of heterogeneous solid and liquid airborne particles from man-made and natural sources. Particulate matter is categorized according to two size ranges: PM_{10} for particles less than 10 microns in diameter and $PM_{2.5}$ for particles less than 2.5 microns in diameter. In the Bay Area, motor vehicles generate about half of the air basin's particulate matter through tailpipe emissions as well as brake wear and tire wear; travel over paved and unpaved roads also results in particulate matter in the form of suspended dust particles. Fireplaces and stoves that burn wood, industrial facilities, and construction involving ground-disturbing activities are other sources of such fine particulates, which are small enough to be inhaled into the deepest parts of the human lung and cause adverse health effects. According to the California Air Resources Board (CARB), studies in the United States and elsewhere have demonstrated a strong link between elevated particulate levels and premature deaths, hospital admissions, emergency room visits, and asthma attacks. Studies of children's health in California have demonstrated that particle pollution may significantly reduce lung function.[6] Statewide attainment of particulate matter standards could reduce the number of premature deaths, hospital admissions for cardiovascular and respiratory disease, asthma-related emergency room visits, and episodes of respiratory illness in California.

Nitrogen Dioxide

NO_2, a reddish-brown gas, is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to O_3 formation, NO_2 also contributes to other pollution problems, including high concentrations of fine particulate matter, poor visibility, and acid deposition. NO_2 may be visible as a coloring component on days with high levels of pollution, especially in conjunction with high O_3 levels. NO_2 decreases lung function and may reduce resistance to infection.

Sulfur Dioxide

SO_2 is a colorless acidic gas with a strong odor. It is produced from the combustion of sulfur-containing fuels such as oil, coal, and diesel. SO_2 has the potential to damage materials and can cause health effects at high concentrations. It can irritate lung tissue and increase the risk of acute and chronic respiratory disease. SO_2 also reduces visibility and the level of sunlight at the ground surface.

[6] California Air Resources Board. 2024. *Inhalable Particulate Matter and Health (PM2.5 and PM10)*. Available: https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health. Accessed: February 6, 2024.

Lead

Lead, a metal, is found naturally in the environment as well as manufactured products. The major sources of lead emissions have historically been mobile and industrial sources. As a result of the phase-out of leaded gasoline, metal processing is currently the primary source of lead emissions. The highest levels of lead in air are generally found near lead smelters. Other stationary sources are waste incinerators, utilities, and lead-acid battery factories. Twenty years ago, mobile sources were the main contributor to ambient lead concentrations in the air. In the early 1970s, the U.S. Environmental Protection Agency (EPA) established national regulations to gradually reduce the lead content in gasoline. In 1975, unleaded gasoline was introduced for motor vehicles equipped with catalytic converters. The EPA banned the use of leaded gasoline in highway vehicles in December 1995. As a result of EPA regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector and levels of lead in the air have decreased dramatically.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. Potential TAC-related health effects include birth defects, neurological damage, cancer, and death. There are hundreds of different types of TACs, with varying degrees of toxicity. Individual TACs vary greatly with respect to the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another.

TACs are not subject to ambient air quality standards but are regulated in other ways by EPA and CARB. In 1998, CARB identified particulate matter from diesel-fueled engines as a TAC. CARB completed a risk management process that identified potential cancer risks for a range of activities and land uses that are affected by the use of diesel-fueled engines.[7] High-volume freeways, stationary diesel engines, and facilities that attract constant and heavy volumes of diesel vehicle traffic (e.g., distribution centers, truck stops) were identified as areas that pose the highest risk for adjacent receptors. Other facilities associated with increased risk include large retail or industrial facilities, high-volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both the concentration and the duration of exposure. BAAQMD regulates TACs with a risk-based approach that uses a health risk assessment (HRA) to determine which sources and which pollutants to control as well as the degree of control. An HRA is an analysis in which human exposure to toxic substances is estimated and considered together with information regarding the toxic potency of the substances to provide a quantitative estimate of health risks.[8] As part of ongoing efforts to identify and assess potential health risks for the public, BAAQMD has collected and compiled air toxics emissions data from industrial and commercial sources of air pollution throughout the Bay Area.

Monitoring data and emissions inventories of TACs help BAAQMD determine health risks to Bay Area residents. Ambient monitoring concentrations of TACs indicate that pollutants emitted primarily from motor vehicles (1,3-butadiene and benzene) account for a substantial portion of the ambient background

[7] California Air Resources Board. 2024. *Summary: Diesel Particulate Health Impacts*. Available: https://ww2.arb.ca.gov/es/resources/summary-diesel-particulate-matter-health-impacts. Accessed: February 6, 2024.

[8] In general, a health risk assessment is required if BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggests a potential public health risk. Such an assessment generally evaluates chronic, long-term effects, including the increased risk of cancer as a result of exposure to one or more TAC.

risk in the Bay Area.[9] According to BAAQMD, ambient benzene levels declined dramatically in 1996 with the advent of reformulated Phase 2 gasoline. Because of this reduction, the calculated average cancer risk, based on monitoring results, has also been reduced.

Unlike TACs emitted from industrial and other stationary sources, most diesel particulate matter (DPM) is emitted from mobile sources, primarily diesel-powered construction and mining equipment, agricultural equipment, truck-mounted refrigeration units, and trucks and buses traveling on freeways and local roadways. Agricultural and mining equipment is not commonly used in the urban parts of the Bay Area, and construction equipment typically operates at various locations for only a limited time. As a result, the readily identifiable locations where DPM is emitted in the Bay Area include high-traffic roadways and other areas with substantial truck traffic. CARB estimated that about 70 percent of the total known cancer related to air toxics is attributable to DPM.[10] Within the Bay Area, BAAQMD found that, of all controlled TACs, emissions of DPM are responsible for about 82 percent of the total ambient cancer risk.[11]

CARB's Diesel Risk Reduction Plan is intended to reduce DPM emissions and associated health risks substantially through the introduction of ultra-low-sulfur diesel fuel, a step that has already been implemented, and cleaner diesel engines.[12] The technology for reducing DPM emissions from heavy-duty trucks is well established, and both State and federal agencies are moving aggressively to regulate engines and emission control systems to reduce and remediate diesel emissions. CARB's plan also established airborne toxic control measures (ATCMs) for mobile sources, including on-road and off-road vehicles and stationary sources. With implementation of ATCMs, statewide DPM concentrations decreased from approximately 1.8 micrograms per cubic meter (μg/m^3) to approximately 0.61 μg/m^3 between 1990 and 2012, resulting in a 66 percent reduction over that period.[13] CARB continues to explore strategies to reduce DPM emissions through engine retrofits, cleaner diesel fuel, advanced engine technologies, and alternative fuels. By 2035, CARB estimates that DPM emissions will be less than half of what they were in 2010.[14]

High-Volume Roadways. Air pollutant exposures and their associated health burdens vary considerably at particular locations in relation to the sources of the air pollutants. Motor vehicle traffic is perhaps the most important source of air pollution in urban areas. Air quality research consistently demonstrates that pollutant levels are substantially higher near freeways and busy roadways, and human health studies have consistently demonstrated that children living within 100 to 200 meters (328 to 656 feet) of freeways or

[9] Bay Area Air Quality Management District. 2022. *2022 California Environmental Quality Act Air Quality Guidelines.* Chapter 5, Project-Level Air Quality Impacts. Available: https://www.baaqmd.gov/~/media/files/ planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-5-project-air-quality-impacts_final-pdf.pdf?rev=de582fe349e545989239cbbc0d62c37a&sc_lang=en. Accessed: February 6, 2024.

[10] California Air Resources Board. 2021. *Overview: Diesel Exhaust and Health*. Available: https://ww2.arb.ca.gov/ resources/overview-diesel-exhaust-and-health. Accessed: February 6, 2024.

[11] Bay Area Air Quality Management District. 2017. *Final 2017 Clean Air Plan*. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed: February 7, 2024.

[12] California Air Resources Board. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. Available: https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/ rrpfinal.pdf. Accessed: February 6, 2024.

[13] California Air Resources Board. 2021. *Overview: Diesel Exhaust and Health*. Available: https://ww2.arb.ca.gov/ resources/overview-diesel-exhaust-and-health. Accessed: February 6, 2024.

[14] Ibid.

busy roadways have reduced lung function and higher rates of respiratory disease.[15] At present, it is not possible to attribute the effects of roadway proximity on non-cancer health effects to one or more specific vehicle type or vehicle pollutant. Exhaust from diesel, gasoline, and other combustion engines is a complex mixture of particles and gases with both collective and individual toxicological characteristics.

Odors

Although offensive odors rarely cause physical harm, they can be unpleasant and lead to considerable distress among the public. This distress often generates citizen complaints to local governments and air districts. According to BAAQMD's California Environmental Quality Act (CEQA) Guidelines and CARB's *Air Quality and Land Use Handbook*, land uses associated with odor complaints typically include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, chemical plants, petroleum refineries, auto body shops, coating operations, fiberglass manufacturing plants, foundries, rendering plants, and livestock operations. BAAQMD provides recommended screening distances for siting new receptors near existing odor sources.

Existing Air Quality Conditions

CARB and EPA, as well as BAAQMD in the Bay Area, maintain ambient air quality monitoring stations in California. The air quality monitoring station closest to the Project Site is the 897 Barron Avenue station in Redwood City, operated by BAAQMD, which is 2.2 miles to the northwest; it monitors criteria air pollutants. The air quality trends from this station are used to represent ambient air quality in the Study Area. Ambient air quality data from 2020 to 2022 (the most recent available data) are shown in Table 3.4-2. The pollutants monitored at the Redwood City station are O_3, CO, NO_2, and $PM_{2.5}$. Air quality trends for PM_{10} are not monitored in San Mateo County; therefore, air quality trends for PM_{10} are from the 158 Jackson Street monitoring station in San José, which is operated by BAAQMD; the station is 16.9 miles southeast of the Project Site.

Table 3.4-2. BAAQMD Monitoring Station Ambient Air Quality Data for the Project Area (2020–2022)

Pollutant Standards	2020	2021	2022
Ozone (O_3) at Redwood City Station			
Maximum 1-hour concentration (ppm)	0.098	0.085	0.079
Maximum 8-hour concentration (ppm)	0.077	0.063	0.061
Fourth highest 8-hour concentration (ppm)	0.054	0.059	0.053
Number of days standard exceeded			
CAAQS 1-hour standard (> 0.09 ppm)	1	0	0
CAAQS 8-hour standard (> 0.070 ppm)	1	0	0
NAAQS 8-hour standard (> 0.070 ppm)	1	0	0

[15] California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April. Available: https://sfmohcd.org/sites/default/files/20%20-%20CARB%2C%20Air%20Quality%20and%20Land%20Use%20Handbook%202005.pdf. Accessed: February 6, 2024.

Pollutant Standards	2020	2021	2022
Carbon Monoxide (CO) at Redwood City Station			
Maximum 1-hour concentration (ppm)	2.1	1.6	1.8
Maximum 8-hour concentration (ppm)	1.5	0.9	1
Number of days standard exceeded			
CAAQS 1-hour standard (≥ 20 ppm)	0	0	0
CAAQS 8-hour standard (≥ 9.0 ppm)	0	0	0
NAAQS 1-hour standard (< 35 ppm)	0	0	0
NAAQS 8-hour standard (≥ 9 ppm)	0	0	0
Nitrogen Dioxide (NO_2) at Redwood City Station			
Maximum state 1-hour concentration (ppm)	0.045	0.040	0.043
Annual average concentration (ppm)	0.008	0.008	0.008
Number of days standard exceeded			
CAAQS 1-hour standard (0.18 ppm)	0	0	0
NAAQS 1-hour standard (0.100 ppm)	0	0	0
Particulate Matter (PM_{10}) at Jackson Street Station			
Maximum state 24-hour concentration (ug/m^3)	137.1	45.1	44.5
Maximum national 24-hour concentration (ug/m^3)	134.9	42.8	41.1
National annual average concentration	24.6	19.6	20.5
Measured number of days exceeded			
CAAQS 24-hour standard (50 ug/m^3)	10	0	0
NAAQS 24-hour standard (150 ug/m^3)	0	0	0
Particulate Matter ($PM_{2.5}$) at Redwood City Station			
Maximum state 24-hour concentration (ug/m^3)	124.1	30.1	27.4
Maximum national 24-hour concentration (ug/m^3)	124.1	30.1	27.4
National annual average concentration	9.8	6.0	6.8
Measured number of days exceeded			
NAAQS 24-hour standard (> 35 ug/m^3)	9	0	0

Sources:

California Air Resources Board. 2024. *iADAM: Air Quality Data Statistics*. Top 4 Summary. Available: https://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed: February 6, 2024.

U.S. Environmental Protection Agency. 2024. *Monitor Values Report*. Available: https://www.epa.gov/outdoor-air-quality-data/monitor-values-report. Accessed: February 6, 2024.

Notes:

CAAQS = California Ambient Air Quality Standards; NAAQS = National Ambient Air Quality Standards; ppm = parts per million; µg/m^3 = micrograms per cubic meter

An exceedance is not necessarily a violation.

Existing Air Quality Conditions

BAAQMD maintains an inventory of health risks associated with all permitted stationary sources within the SFBAAB. The inventory was last updated in 2023 and is available to the public online.[16] Within 1,000 feet of the Project Site, six permitted facilities have a quantified background health risk associated with them. Detailed information on these facilities is included in Appendix 3.4-1 of this EIR. Aside from stationary sources, emissions of TACs around the Project Site are also generated from mobile sources and railways. BAAQMD considers roadways with an average daily traffic (ADT) level of more than 10,000 to be "high-volume roadways" and recommends they be included in the analysis of health risks.

Regional Attainment Status

Local monitoring data are used to designate areas as nonattainment, maintenance, attainment, or unclassified areas for ambient air quality standards. The four designations are defined below. Table 3.4-3 summarizes the attainment status of San Mateo County.

- **Nonattainment**. Assigned to areas where monitored pollutant concentrations consistently violate the standard in question.
- **Maintenance**. Assigned to areas where monitored pollutant concentrations exceeded the standard in question in the past but are no longer in violation of that standard.
- **Attainment**. Assigned to areas where pollutant concentrations meet the standard in question over a designated period of time.
- **Unclassified**. Assigned to areas where data are inadequate for determining whether a pollutant is violating the standard in question.

Table 3.4-3. Federal and State Attainment Status for San Mateo County Portion of the SFBAAB

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-hour standard)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Unclassified/Attainment	Attainment
Particulate Matter (PM_{10})	Unclassified	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Attainment	Nonattainment
Nitrogen Dioxide (NO_2)	Unclassified/Attainment	Attainment
Sulfur Dioxide (SO_2)	Unclassified/Attainment	Attainment
Lead	Unclassified/Attainment	Attainment
Sulfates	(No Federal Standard)	Attainment
Hydrogen Sulfide	(No Federal Standard)	Unclassified
Visibility-Reducing Particles	(No Federal Standard)	Unclassified

Source: California Air Resources Board. 2022. *State and Federal Area Designations.* Appendix C: Maps and Tables of Area Designations for State and National Ambient Air Quality Standards. November. Available: https://ww2.arb.ca.gov/ resources/documents/maps-state-and-federal-area-designations. Accessed: February 6, 2024.

[16] Bay Area Air Quality Management District. 2023. *Stationary-Source Screening Map*. Available: https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3. Accessed: February 6, 2024.

Sensitive Receptors

Sensitive land uses are generally considered to include those where exposure to pollutants could result in health-related risks for sensitive individuals, including children and the elderly. Per BAAQMD, typical receptors include residential dwellings; places of business; schools, colleges, and universities; day-care centers; hospitals; temporary housing, shelters, or encampments; detention centers or correctional facilities; and senior-care facilities.[17] Parks and playgrounds are also considered sensitive receptors.

Sensitive receptors located near the Project Site include onsite and offsite sensitive receptor populations. Residential, worker, and recreational receptors were identified using zoning maps. Residential and recreational areas within 1,000 meters of the Project Site were modeled on a grid with 20-meter (65.6-foot) spacing. Other sensitive receptor locations were identified using a report from Environmental Data Resources (EDR). The EDR report identified schools, day-care centers, nursing homes, and hospitals near the Project Site. These locations were modeled as discrete locations. Figure 3.4-1 depicts the offsite and onsite sensitive receptor locations that were modeled in the HRA.

Regulatory Setting

The federal Clean Air Act (CAA) and its subsequent amendments form the basis for the nation's air pollution control effort. EPA is responsible for implementing most aspects of the CAA. The NAAQS for criteria pollutants are a key element of the CAA, which delegates enforcement of the NAAQS to the states. In California, CARB is responsible for enforcing air pollution regulations and ensuring that the NAAQS and CAAQS under the state-level CAA are met. CARB, in turn, delegates regulatory authority for stationary sources and other air quality management responsibilities to local air agencies. BAAQMD is the local air agency for the Study Area.

The sections that follow provide more detailed information on the federal, State, and local air quality regulations that apply to the Proposed Project.

Federal

Clean Air Act and National Ambient Air Quality Standards

The federal CAA, promulgated in 1963 and amended several times thereafter, including the 1990 CAA amendments, establishes the framework for modern air pollution control in the United States. CAA directs EPA to establish federal air quality standards, known as the NAAQS, and specifies future dates for achieving compliance. EPA has set NAAQS for six criteria pollutants: O_3, CO, PM_{10} and $PM_{2.5}$, SO_2, NO_2, and lead. The NAAQS are divided into primary and secondary standards; the former are set to protect human health with an adequate margin of safety; the latter are set to protect environmental values, such as plant and animal life. Table 3.4-4 summarizes the NAAQS currently in effect for each criteria pollutant. The CAAQS are also provided for reference.

The CAA also mandates that the State submit and implement a State Implementation Plan (SIP) for local areas that fail to meet the standards. The SIP must include pollution control measures that demonstrate how the standards will be met by the dates specified under the CAA.

[17] Bay Area Air Quality Management District. 2023. *California Environmental Quality Act Air Quality Guidelines.* Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?rev=b8917a27345a4a629fc18fc8650951e4&sc_lang=en. Accessed: February 7, 2024.

Source: Ramboll, 2024.

Figure 3.4-1
Offsite and Onsite Sensitive Receptor Locations
Parkline

Table 3.4-4. Federal and State Ambient Air Quality Standards

Criteria Pollutant and Averaging Time	California Standards	National Standards[a]	
		Primary	Secondary
Ozone—1 hour	0.09 ppm	None[b]	None[b]
Ozone—8 hours	0.070 ppm	0.070 ppm	0.070 ppm
Particulate Matter (PM_{10})—24 hours	50 μg/m^3	150 μg/m^3	150 μg/m^3
Particulate Matter (PM_{10})—Annual mean	20 μg/m^3	None	None
Fine Particulate Matter ($PM_{2.5}$)—24 hours	None	35 μg/m^3	35 μg/m^3
Fine Particulate Matter ($PM_{2.5}$)—Annual mean	12 μg/m^3	9.0 μg/m^3	15 μg/m^3
Carbon Monoxide—8 hours	9.0 ppm	9 ppm	None
Carbon Monoxide—1 hour	20 ppm	35 ppm	None
Nitrogen Dioxide—Annual mean	0.030 ppm	0.053 ppm	0.053 ppm
Nitrogen Dioxide—1 hour	0.18 ppm	0.100 ppm	None
Sulfur Dioxide—Annual mean[c]	None	0.030 ppm	None
Sulfur Dioxide—24 hours[c]	0.04 ppm	0.014 ppm	None
Sulfur Dioxide—3 hours	None	None	0.5 ppm
Sulfur Dioxide—1 hour	0.25 ppm	0.075 ppm	None
Lead—30-day average	1.5 μg/m^3	None	None
Lead—Calendar quarter	None	1.5 μg/m^3	1.5 μg/m^3
Lead—3-month average	None	0.15 μg/m^3	0.15 μg/m^3
Sulfates—24 hours	25 μg/m^3	None	None
Visibility-Reducing Particles—8 hours	—[d]	None	None
Hydrogen Sulfide—1 hour	0.03 ppm	None	None
Vinyl Chloride—24 hours	0.01 ppm	None	None

Source: California Air Resources Board. 2016. *Ambient Air Quality Standards*. Available: https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf. Accessed: February 8, 2024.

Notes:

mg/m^3 = micrograms per cubic meter; ppm = parts per million

a. National standards are divided into primary and secondary standards. Primary standards are intended to protect public health, whereas secondary standards are intended to protect public welfare and the environment.

b. The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through June 15, 2005. The revoked standard is referenced because it was employed for such a long period and a benchmark for SIPs.

c. The annual and 24-hour NAAQS for SO_2 apply for only 1 year after designation of the new 1-hour standard to those areas that were previously in nonattainment for the 24-hour and annual NAAQS.

d. The CAAQS for visibility-reducing particles is defined by an extinction coefficient of 0.23 per kilometer (visibility of 10 miles or more due to particles when relative humidity is less than 70 percent).

Vehicle Emission Standards

The National Highway Traffic Safety Administration (NHTSA) and EPA set Corporate Average Fuel Economy (CAFE) standards for passenger cars and for light trucks (collectively, light-duty vehicles) and, separately, set fuel consumption standards for medium- and heavy-duty trucks and engines. The existing CAFE standards require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026; this will be accomplished by increasing fuel efficiency 8 percent in model years 2024 and 2025 and 10 percent in model year 2026. Phase 2 of the Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty

Engines and Vehicles applies to medium- and heavy-duty vehicles from model years 2019 through 2027.

On April 12, 2023, EPA proposed two new federal vehicle standards that build on the existing CAFE and Phase 2 standards. The Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium Duty Vehicles proposes more stringent emission standards for light- and medium-duty vehicles in model years 2027 through 2032 and accelerates the deployment of electric and clean vehicles. The Greenhouse Gas Standards for Heavy-Duty Vehicles—Phase 3 establishes fleet mix performance standards for vocational vehicles (e.g., delivery trucks) and trucks that are typically used to haul freight.

On August 17, 2023, NHTSA published updated CAFE standards for passenger cars and light trucks, including fuel efficiency standards for model years 2027 through 2031 that increase at a rate of 2 percent per year for passenger cars and 4 percent per year for light trucks. The proposal also includes new fuel efficiency standards for heavy-duty pickup trucks and vans in model years 2030 through 2035 that increase at a rate of 10 percent per year.

Mobile-Source Air Toxics and Hazardous Air Pollutants Regulation

Although NAAQS do not exist for mobile-source air toxics or hazardous air pollutants, EPA regulates these pollutants through rules and emission control programs. In 2007, EPA implemented a rule (Control of Hazardous Air Pollutants from Mobile Sources, February 9, 2007) to limit the benzene content of gasoline and reduce toxic emissions from passenger vehicles and gas cans. In addition, EPA is developing programs that will provide additional benefits through further controls on small off-road gasoline engines, diesel locomotives, and marine engines. These regulatory controls will complement existing EPA programs that reduce risks in local communities, including Clean School Bus USA, the Voluntary Diesel Retrofit Program, Best Workplaces for Commuters, and the National Clean Diesel Campaign.

State

California Clean Air Act and California Ambient Air Quality Standards

In 1988, the California Legislature adopted the California CAA, which established a statewide air pollution control program. The California CAA requires all air districts in the state to endeavor to meet the CAAQS by the earliest practical date. Unlike the federal CAA, the California CAA does not set precise attainment deadlines. Instead, the California CAA establishes increasingly stringent requirements for areas that require more time to achieve the standards. The CAAQS are generally more stringent than the NAAQS and incorporate additional standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride. The CAAQS and the NAAQS are listed together in Table 3.4-4.

CARB and local air districts bear responsibility for achieving California's air quality standards, which are to be achieved through the district-level air quality management plans incorporated into the SIP. In California, EPA has delegated the authority to prepare SIPs to CARB, which, in turn, has delegated that authority to individual air districts. Traditionally, CARB has established air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved SIPs.

The California CAA substantially adds to the authority and responsibilities of air districts. The California CAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts the authority to implement transportation control measures. The California CAA also emphasizes the control of "indirect and area-wide sources" of air pollutant emissions.

An indirect source is a facility or land use that attracts or generates motor vehicle traffic. The California CAA gives local air pollution control districts explicit authority to regulate indirect sources of air pollution and establish traffic control measures.

State Tailpipe Emission Standards

CARB established a series of increasingly strict emission standards for new off-road diesel equipment, on-road diesel trucks, and harbor craft. Construction equipment used for the Proposed Project, including heavy-duty trucks and off-road construction equipment, will be required to comply with the standards applicable to the model year of manufacture.

CARB has established emissions standards for on-road vehicles as well and is responsible for the certification and production audit of new passenger vehicles and heavy-duty vehicles. Vehicles are not legal for sale in California until certified by CARB. Violation of the requirement for certification can subject vehicle manufacturers and/or dealers to enforcement actions, including a fine of up to $37,500 per vehicle.

Carl Moyer Memorial Air Quality Standards Attainment Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) is a voluntary program that offers grants to owners of heavy-duty vehicles and equipment. The program is a partnership between CARB and the local air districts throughout the state to reduce air pollution emissions from heavy-duty engines. Locally, the air districts administer the Carl Moyer Program.

Toxic Air Contaminant Regulation

California regulates TACs (equivalent to hazardous air pollutants at the federal level) primarily through the Toxic Air Contaminant Identification and Control Act (Tanner Act) of 1983 and the Air Toxics Hot Spots Information and Assessment Act of 1987 (Hot Spots Act). In the early 1980s, CARB established a statewide comprehensive program, the Tanner Act, to reduce exposure to air toxics. The Hot Spots Act supplements the Tanner Act by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks. In August 1998, CARB identified DPM from diesel-fueled engines as a TAC.

Air Pollution and Health and Equity Regulation

California has advanced several policies and regulations to address issues related to health and equity as part of public planning. Many of these regulations have a nexus with air quality. Senate Bill (SB) 535 recognizes that environmental pollution has had a disproportionate effect on disadvantaged communities. The bill requires such areas to be prioritized for emission reduction projects funded by California's cap-and-trade program. Assembly Bill (AB) 1550 expanded funding prioritization from cap-and-trade proceeds to include low-income communities. AB 617 requires the State to monitor and report criteria pollutant and TAC emissions for certain stationary sources. The bill also requires development of a statewide plan to reduce such emissions in communities with a high cumulative exposure burden. In response to AB 617, CARB developed the Community Air Protection Program, which includes air monitoring and emissions reductions programs that were initially focused on 10 designated communities in California.

Local

Bay Area Air Quality Management District

BAAQMD seeks to attain and maintain air quality conditions in the SFBAAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and education. Its clean air strategy includes preparation of plans for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources.[18] BAAQMD also inspects stationary sources and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations, as required by law.

2017 Bay Area Clean Air Plan

The 2017 Bay Area Clean Air Plan (Clean Air Plan) guides the region's air quality planning efforts to attain the CAAQS.[19] The current plan, adopted on April 19, 2017, by the BAAQMD Board of Directors, contains district-wide control measures to reduce O_3 precursor emissions (e.g., ROGs and NO_X), particulate matter, and greenhouse gas (GHG) emissions. Specifically, the Clean Air Plan:

- Describes the BAAQMD plan for attaining all State and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities;
- Defines a vision for transitioning the region to the post-carbon economy needed to achieve ambitious GHG reduction targets for 2030 and 2050;
- Provides a regional climate protection strategy that will put the Bay Area on a pathway to achieving GHG reduction targets; and
- Includes a wide range of control measures to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, O_3, and TACs; reduce emissions of methane and other GHGs with high global warming potential that are potent climate pollutants in the near term; and decrease emissions of CO by reducing fossil fuel combustion.

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the City adopted ConnectMenlo, which contained the City's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The City also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with air quality.

The following goals and policies from the Open Space and Conservation Element related to air quality were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal OSC4: Promote Sustainability and Climate Action Planning. Promote a sustainable energy supply and implement the City's Climate Action Plan to reduce greenhouse gas emissions and improve the

[18] BAAQMD recently adopted Regulation 9, Rules 4 and 6, restricting nitrogen oxide emissions from natural gas-fired furnaces and natural gas-fired water heaters, respectively.

[19] Bay Area Air Quality Management District. 2017. *Final 2017 Clean Air Plan*. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?rev=8c588738a4fb455b9cabb27360409529. Accessed: February 7, 2024.

sustainability of actions by City government, residents, and businesses in Menlo Park. This includes promoting land use patterns that reduce the number and length of motor vehicle trips, and encouraging recycling, reduction and reuse programs.

Goal OSC5: Ensure Healthy Air and Water Quality. Enhance and preserve air quality in accord with State and regional standards, and encourage the coordination of total water quality management including both supply and wastewater treatment.

> **Policy OSC5.1: Air and Water Quality Standards.** Continue to apply standards and policies established by BAAQMD, the San Mateo Countywide Water Pollution Prevention Program, and city of Menlo Park Climate Action Plan through the CEQA process and other means, as applicable.
>
> **Policy CIRC4.2: Local Air Pollution.** Promote non-motorized transportation to reduce exposure to local air pollution, thereby reducing risks of respiratory diseases, other chronic illnesses, and premature death.

Environmental Impacts

This section describes the impact analysis related to air quality for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in nonattainment status under an applicable federal or State ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) that adversely affect a substantial number of people.

Local Air District Thresholds

Regional Thresholds for Air Basin Attainment of State and Federal Ambient Air Quality Standards

BAAQMD has adopted thresholds for regional air pollutants to assist lead agencies in determining the significance of environmental effects with respect to local attainment of State and federal ambient air quality standards. (As discussed above, ROG and NO_X are regional pollutants, whereas particulate matter is both a regional and local pollutant.) The thresholds are based on emissions levels identified under the New Source Review (NSR) program, a permitting program established by Congress as part of the CAA amendments of 1990 to ensure that air quality is not significantly degraded (i.e., under a worsened nonattainment status) by new sources of emissions. The NSR program requires stationary sources to receive permits before construction and/or the use of equipment. By permitting large stationary sources, the NSR program ensures that new emissions will not slow regional progress toward attaining the NAAQS.

BAAQMD concluded that the stationary pollutants described under the NSR program are equal in significance to those generated with land use projects.

BAAQMD's regional thresholds identified in Table 3.4-5 were set as total emission thresholds associated within the NSR program to help attain the NAAQS.[20]

Table 3.4-5. BAAQMD Project-Level Regional Criteria Pollutant Emission Thresholds

Analysis	Thresholds
Regional Criteria Pollutants (Construction)	ROG: 54 lbs/day NO_X: 54 lbs/day PM_{10}: 82 lbs/day (exhaust only); compliance with best management practices (fugitive dust) $PM_{2.5}$: 54 lbs/day (exhaust only); compliance with best management practices (fugitive dust)
Regional Criteria Pollutants (Operation)	ROG: 54 lbs/day or 10 tons/year NO_X: 54 lbs/day or 10 tons/year PM_{10}: 82 lbs/day or 15 tons/year (exhaust plus fugitive dust) $PM_{2.5}$: 54 lbs/day or 10 tons/year (exhaust plus fugitive dust)

Source: Bay Area Air Quality Management District. 2023. *California Environmental Quality Act Air Quality Guidelines*. Chapter 3: Thresholds of Significance. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-3-thresholds_final_v2-pdf.pdf?rev=a976830cce0c4a6bb624b020f72d25b3. Accessed: February 7, 2024.

Notes: lbs = pounds; NO_X = nitrogen oxide; PM_{10} = particulate matter of 10 microns or less in diameter; $PM_{2.5}$ = particulate matter of 2.5 microns or less in diameter; ROG = reactive organic gas

Health-Based Thresholds for Regional Project-Generated Criteria Pollutants of Human Health Concern

The California Supreme Court's decision in *Sierra Club v. County of Fresno*, 6 Cal. 5th 502 (2018), referred to as the Friant Ranch Decision, speaks to the scope of the long-term regional air quality analysis required under CEQA. The court found that the EIR's air quality analysis was inadequate because it failed to provide enough detail "for the public to translate the bare [criteria pollutant emissions] numbers provided into adverse health impacts or to understand why such a translation is not possible at this time." The court's decision notes that environmental documents must attempt to connect a project's air quality impacts to specific health effects or explain why it is not technically feasible to perform such an analysis.

All criteria pollutants that would be generated by the Proposed Project are associated with some form of health risk (e.g., asthma, lower respiratory problems). Criteria pollutants can be classified as either regional pollutants or localized pollutants. Regional pollutants can be transported over long distances and affect ambient air quality far from the emissions source. Localized pollutants affect ambient air quality near the emissions source. O_3 is considered a regional criteria pollutant, whereas CO, NO_2, SO_2, and lead are localized pollutants. Particulate matter can be both a local and a regional pollutant, depending on its composition. The primary criteria pollutants of concern generated by the Proposed Project would be O_3 precursors (ROG and NO_X), CO, and particulate matter, including DPM.

[20] Bay Area Air Quality Management District. 2023. *California Environmental Quality Act Air Quality Guidelines*. Appendix A: Thresholds of Significance Justification. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-a-thresholds-of-significance-justification_final-pdf.pdf?rev=d35960ec035546629124ae2a25fb1df9. Accessed: February 7, 2024.

The sections that follow discuss thresholds and analysis considerations for regional and local Project-generated criteria pollutants with respect to their human health implications.

Regional Project-Generated Criteria Pollutants (Ozone Precursors and Regional Particulate Matter)

Adverse health effects from regional criteria pollutant emissions, such as O_3 precursors and particulate matter, generated by the Proposed Project are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, gender]). Therefore, O_3 precursors (ROG and NO_X) contribute to the formation of ground-level O_3 on a regional scale. Emissions of ROG and NO_X generated in an area may not correlate to a specific O_3 concentration in that same area. Similarly, some types of particulate matter may be transported over long distances or formed through atmospheric reactions. As such, the magnitude and locations of specific health effects from exposure to increased O_3 or regional particulate matter concentrations are the product of emissions generated by numerous sources throughout a region. Moreover, exposure to regional air pollution does not guarantee that an individual will experience an adverse health effect. As discussed above, there are large individual differences in the intensity of symptomatic responses to air pollutants. These differences are influenced, in part, by the underlying health condition of an individual, which cannot be known.

Models and tools have been developed to correlate regional criteria pollutant emissions to potential community health impacts. Although models are capable of quantifying O_3 and any secondary particulate matter formation and associated health effects, these tools were developed to support large regional planning and policy analysis and have limited sensitivity to small changes in criteria pollutant concentrations induced by individual projects.

The technical limitations of existing models for correlating Project-level regional emissions to specific health consequences are recognized by air quality management districts throughout the state, including the San Joaquin Valley Air Pollution Control District (SJVAPCD) and South Coast Air Quality Management District (SCAQMD), which provided amici curiae briefs for the Friant Ranch Project's legal proceedings. In its brief, the SJVAPCD acknowledged that HRAs for localized air toxics, such as DPM, are common; however, the SJVAPCD stated that "it is not feasible to conduct a similar analysis for criteria air pollutants because currently available computer modeling tools are not equipped for this task."[21] The SJVAPCD further noted that emissions solely from the Friant Ranch Project, which equated to less than one-tenth of 1 percent of total NO_X and volatile organic compounds in the valley, were not likely to yield valid information and that any such information would not be "accurate when applied at the local level." SCAQMD presents similar information in its brief, stating that "it takes a large amount of additional precursor emissions to cause a modeled increase in ambient O_3 levels."[22,23] As of February 2024, BAAQMD had not yet approved or recommended a quantitative method for accurately correlating criteria pollutant

[21] San Joaquin Valley Air Pollution Control District. 2015. *Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party in Interest and Respondent, Friant Ranch, L.P.* Available: https://www.courts.ca.gov/documents/7-s219783-ac-san-joaquin-valley-unified-air-pollution-control-dist-041315.pdf. Accessed: February 7, 2024.

[22] South Coast Air Quality Management District. 2015. *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and [Proposed] Brief of Amicus Curiae.* Available: https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf. Accessed: February 7, 2024.

[23] For example, SCAQMD's analysis of its 2012 air quality attainment plan showed that the modeled NO_X and ROG reductions of 432 and 187 tons per day, respectively, reduced ozone levels by only 9 parts per billion.

emissions generated by an individual project to specific health outcomes or changes in nonattainment days.

As discussed above, air districts develop region-specific CEQA thresholds of significance in consideration of existing air quality concentrations as well as attainment or nonattainment designations under the NAAQS and CAAQS. The NAAQS and CAAQS are informed by a wide range of scientific evidence that demonstrates that there are known safe concentrations of criteria pollutants. Although recognizing that air quality is a cumulative problem, air districts typically consider projects that generate criteria pollutant and O_3 precursor emissions that are below the thresholds to be minor in nature. Such projects would not adversely affect air quality or exceed the NAAQS or CAAQS. Emissions generated by the Proposed Project could increase photochemical reactions and the formation of tropospheric O_3 and secondary particulate matter, which, at certain concentrations, could lead to increased incidences of specific health consequences. Although these health effects are associated with O_3 and particulate matter, the effects are a result of cumulative and regional emissions. A qualitative correlation of Project-generated regional criteria pollutant emissions to specific human health impacts is included in this analysis, as described further under Impact AQ-3.

Localized Project-Generated Criteria Pollutant Emissions (CO and Particulate Matter) and Air Toxics (TACs and Asbestos)

Localized pollutants generated by a project can affect populations near the emissions source. Because these pollutants dissipate with distance, emissions from individual projects can result in direct and material health impacts on adjacent sensitive receptors. The localized pollutants of concern that would be generated by the Proposed Project are CO, particulate matter, DPM, asbestos, ethylbenzene, toluene, hexane, xylenes, benzene, styrene, 1,3-butadiene, acrolein, propylene, formaldehyde, methanol, acetaldehyde, methyl ethyl ketone, and naphthalene. The applicable thresholds used to consider the impacts of these pollutants are described below.

Localized Carbon Monoxide Concentrations

Heavy traffic congestion can contribute to high levels of CO, and individuals exposed to such hot spots may have a greater likelihood of developing adverse health effects. BAAQMD has adopted screening criteria that provide a conservative indication of whether Project-generated traffic would cause a potential CO hot spot. If the screening criteria are not met, quantitative analysis, through site-specific dispersion modeling of Project-related CO concentrations, is not necessary; the Proposed Project would not cause localized violations of the CAAQS for CO. Projects that do not generate CO in concentrations in excess of the health-based CAAQS would not contribute a significant level of CO that would substantially degrade localized air quality and human health. BAAQMD's CO screening criteria are summarized below.

1. Project traffic would not increase traffic volumes at affected intersections beyond 44,000 vehicles per hour.
2. Project traffic would not increase traffic volumes at affected intersections beyond 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., a tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).
3. The project would be consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, a regional transportation plan, and local congestion management agency plans.

Localized Particulate Matter Concentrations

BAAQMD adopted an incremental $PM_{2.5}$ concentration-based significance threshold that defines a "substantial" contribution at the project level for an individual source as the total $PM_{2.5}$ concentration (i.e., exhaust and fugitive) exceeding 0.3 μg/m^3. This is the same threshold used to evaluate the locations of new receptors that would be exposed to individual $PM_{2.5}$ emissions sources. In addition, BAAQMD considers projects to have a cumulatively considerable $PM_{2.5}$ impact if sensitive receptors within 1,000 feet are exposed to $PM_{2.5}$ concentrations from local sources, including existing sources, project-related sources, and reasonably foreseeable future sources, that exceed 0.8 μg/m^3.

BAAQMD has not established PM_{10} thresholds of significance for localized PM10 concentrations. BAAQMD's localized $PM_{2.5}$ concentration thresholds apply to new sources. However, BAAQMD considers fugitive PM_{10} from earthmoving activities to be less than significant with application of BAAQMD's best management practices (BMPs).

Localized Toxic Air Contaminant Concentrations

DPM has been identified as a TAC. DPM is particularly concerning because long-term exposure can lead to cancer, birth defects, and damage to the brain and nervous system. Other common TACs are in the form of ethylbenzene, toluene, hexane, xylenes, benzene, styrene, 1,3-butadiene, acrolein, propylene, formaldehyde, methanol, acetaldehyde, methyl ethyl ketone, and naphthalene. BAAQMD has adopted incremental cancer and hazard thresholds to evaluate receptor exposure to single sources of TAC emissions. The "substantial" TAC threshold, as defined by BAAQMD, is exposure of a sensitive receptor to an individual emissions source that results in an excess cancer risk level of more than 10 in 1 million or a non-cancer (i.e., chronic or acute) hazard index (HI) greater than 1.0.

The air district considers projects to have a cumulatively considerable TAC impact if they contribute TAC emissions that, when combined with cumulative sources within 1,000 feet of sensitive receptors, result in excess cancer risk levels of more than 100 in 1 million or an HI greater than 10.0. BAAQMD considers a project to have a significant cumulative impact if the project introduces new receptors at a location where the combined exposure to all cumulative sources within 1,000 feet is in excess of the cumulative thresholds.

Asbestos

BAAQMD considers a project to have a significant impact if it fails to comply with the applicable regulatory requirements outlined in Regulation 11, Rule 2, Asbestos Demolition, Renovation, and Manufacturing.

Methods for Analysis

Air quality impacts associated with construction and operation of the Proposed Project were assessed and quantified using standard and accepted software tools, calculations, and emission factors. A summary of the methodology is provided below.

To provide a conservative assessment of Project operational emissions, this report evaluated which land use scenario (i.e., either 100 percent office or 100 percent R&D) would result in higher emissions for each emissions category. Both land use scenarios would result in similar emissions for the landscaping, architectural coatings, and consumer products categories. The 100 percent R&D land use scenario would result in higher emissions for on-road mobile sources, stationary sources, and laboratories, based on activity data provided. Therefore, emissions are based on the 100 percent R&D scenario. This scenario

represents a conservative estimate because the Proposed Project would most likely incorporate a mix of office and R&D land uses when built out.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of the Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, both scenarios would result in the same level of impact; in those cases, the analysis does not identify a "worst-case" scenario.

Table 3.4-6 lists, by impact number, the buildout scenario assumed in the air quality analysis and provides an explanation as to why the buildout scenario was evaluated for each impact.

Table 3.4-6. Buildout Scenario Analyzed for Each Air Quality Impact

Impact	Scenario Evaluated	Explanation
Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan.	Either scenario	Given the similarities between the two scenarios, consistency with the applicable air quality plan is evaluated for the Proposed Project in general, referencing the impact determinations below as needed.
Impact AQ-2 (Construction): Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in nonattainment status under an applicable federal or State ambient air quality standard.	Either scenario	The same construction activities occur under either scenario, along with the same construction phasing, duration, hours, and equipment. The architectural coatings, paving materials in streets and parking lots, and consumer products used during construction are the same regardless of the scenario. Therefore, either scenario results in the same impacts related to increases in criteria pollutants during construction.
Impact AQ-2 (Operation): Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is in nonattainment status under an applicable federal or State ambient air quality standard.	100 percent R&D scenario	Stationary Sources. Both scenarios involve decommissioning the existing natural gas cogeneration power plant and removing select stationary sources onsite. During operation, both scenarios have the same number of generators. However, the 100 percent R&D scenario has a higher energy consumption rate (in terms of kilowatt hours per square foot of space) and require higher horsepower for emergency diesel generators, which is more emissions intensive. Area Sources. The 100 percent R&D scenario and the 100 percent office scenario generate approximately the same level of impact related to area-source emissions because California Emissions Estimator Model (CalEEMod) default methodologies do not differentiate between the two land uses. Criteria pollutant emissions from area sources, such

Impact	Scenario Evaluated	Explanation
		as landscaping equipment, consumer products, and architectural coatings, are estimated using CalEEMod default values and equivalent methodologies, based on the type and size of the land uses associated with the Proposed Project. Mobile Sources. The 100 percent R&D scenario results in more daily vehicular trips than the 100 percent office scenario, resulting in more mobile-source emissions. Estimates of TAC concentrations from diesel and gasoline vehicle operation are based on the land use scenario that generate the highest volume of traffic. Therefore, the 100 percent R&D scenario is analyzed. When considering both stationary and mobile sources, the 100 percent R&D scenario results in a greater cumulatively considerable net increase in criteria pollutants. However, as stated above, area sources results in the same impacts under either scenario.
Impact AQ-3: Expose sensitive receptors to substantial pollutant concentrations.	100 percent R&D scenario	The existing sensitive receptors are the same under either scenario. Based on a review of the site plans, it appears that the mechanical equipment and generators are in the same locations under either scenario. Therefore, it is assumed that the equipment-to-receptor distances are the same for either scenario. However, as discussed above, the 100 percent R&D scenario would result in more pollutant concentrations. Because of the laboratory uses, TACs are higher for the 100 percent R&D scenario, which is reflected in the HRA for the Proposed Project as well. Therefore, the 100 percent R&D scenario results in greater exposure to pollutant concentrations for sensitive receptors.
Impact AQ-4: Result in other emissions (such as those leading to odors) that adversely affect a substantial number of people.	100 percent R&D scenario	Odors during construction could be emitted from diesel exhaust, asphalt paving material, and architectural coatings. Because construction is the same under either scenario, odors during construction are the same. However, during operation, odors could emanate from vehicle exhaust; intermittent use of the backup generator during emergencies and testing, if a diesel generator is proposed; and the reapplication of architectural coatings. The 100 percent R&D scenario would result in more vehicular trips and more generator exhaust than the 100 percent office scenario. Therefore, the 100 percent R&D scenario results in odor emissions.

Construction

Construction of the Proposed Project is estimated to have a duration of approximately 6 years. This analysis assumes that construction phases at specific buildings will overlap (i.e., multiple buildings under construction simultaneously). It also assumes that complete buildout will occur in roughly 6 years and that the buildings will be occupied and fully operational as soon as construction at each building is completed. This is a conservative analysis because occupancy and operations at each building would very likely ramp up over time rather than immediately upon completion of construction. The analysis also

assumes that operational emissions from completed buildings would overlap with construction emissions at buildings that are still under construction.

Construction would generate ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions that could result in short-term air quality effects during the construction period. Emissions would be associated with exhaust from off-road equipment; exhaust from construction workers' vehicles and haul trucks; fugitive dust from demolition, site grading, and earthmoving; suspended road dust from vehicle travel; and off-gassing from architectural coatings and paving. BAAQMD regional construction thresholds require evaluation of only exhaust emissions; however, the air quality analysis also estimated fugitive dust emissions for the localized $PM_{2.5}$ analysis. Emissions were estimated using a combination of emission factors and methodologies from the California Emissions Estimator Model (CalEEMod), version 2022.1; CARB's EMission FACtor 2021 (EMFAC2021) model; and EPA's AP-42: Compilation of Air Pollutant Emission Factors. The estimates relied on CalEEMod default data values as well as Project-specific information (e.g., construction schedule, construction equipment types, hours of operation) provided by the Project Sponsor. A detailed description of model input and output parameters and assumptions is provided in Appendix 3.4-1 of this EIR.

Operation

Operation of the Proposed Project would generate emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions that could result in long-term air quality effects during operations. Criteria pollutant emissions from motor vehicles associated with development of the Proposed Project were evaluated using CalEEMod emission calculation methodologies and emission factors from CARB's EMFAC2021,[24] along with trip generation rates and trip lengths provided by Hexagon Transportation Consultants for the Proposed Project. Area-, energy-, and stationary-source emissions associated with the Proposed Project were also estimated using CalEEMod methodologies and included in Appendix 3.4-1. Area-source emissions would result from the reapplication of architectural coatings as part of ongoing building maintenance, the use of consumer products, and the use of landscaping equipment. Energy-source emissions would result from indirect emissions associated with the electricity used in the buildings. Stationary-source emissions would result from the maintenance and testing of the diesel emergency generators that would conservatively be assumed to operate 50 hours per year. Wet laboratories may occupy the Proposed Project's commercial buildings; these would emit ROGs and TACs.

The first operational phase of the Proposed Project is assumed to be in 2029; the Proposed Project would be fully operational by 2031. A detailed description of model input and output parameters as well as assumptions is provided in Appendix 3.4-1.

Health Risk Analysis

An HRA was prepared to quantify the levels of exposure at nearby sensitive receptors from emissions of TACs and $PM_{2.5}$ generated during both construction and operation of the Proposed Project. The HRA is included in Appendix 3.4-1 of this EIR.

Toxic Air Contaminants and PM2.5

The Proposed Project would generate DPM, $PM_{2.5}$, and TAC emissions from gasoline combustion during construction and operation. Because the Proposed Project would introduce TACs and $PM_{2.5}$ emissions in

[24] California Air Resources Board. 2024. *California Emission FACtor Model.* Available: https://arb.ca.gov/emfac/. Accessed: February 15, 2024.

an area near existing sensitive receptors, an HRA was conducted. The HRA used EPA's air dispersion model, AERMOD (version 22112), and cancer and chronic risk assessment values for DPM provided by the Office of Environmental Health Hazard Assessment (OEHHA).[25] The methodologies used to evaluate emissions for the Proposed Project and cumulative HRA are based on the most recent BAAQMD CEQA Air Quality Guidelines,[26] the most recent *Air Toxics Hot-Spots Program Risk Assessment Guidelines*,[27] and BAAQMD's HRA guidelines.[28][29] The HRA consists of three parts: an emissions inventory, air dispersion modeling, and risk calculations. A description of each of these parts follows.

Emissions Inventory

The emissions inventory includes DPM and $PM_{2.5}$ emissions from construction and operations. During construction, DPM emissions would be generated by off-road equipment and on-road travel by heavy-duty trucks. The construction $PM_{2.5}$ inventory consists of $PM_{2.5}$ exhaust and fugitive dust emissions from off-road equipment, onsite soil movement, and on-road travel by heavy-duty trucks and workers' vehicles. The emissions of TACs from light-duty gasoline powered worker vehicles would be negligible compared to the DPM emissions of larger diesel-powered trucks; therefore, the HRA only considers $PM_{2.5}$ emission from construction worker vehicles.

The operational TAC inventory includes emissions from maintenance and testing of the 17 emergency generators, on-road travel by vehicles, and laboratories. Thirteen emergency generators are proposed to be installed at the Project Site.[30] The operational $PM_{2.5}$ inventory consists of $PM_{2.5}$ exhaust emissions from the emergency generators and $PM_{2.5}$ exhaust and fugitive dust emissions from on-road travel by vehicles associated with operations.

Air Dispersion Modeling

The HRA uses EPA's AERMOD model, version 22112, to model annual average DPM and $PM_{2.5}$ concentrations at nearby receptors. Modeling inputs, including emission rates in grams of pollutant emitted per second, and source characteristics (e.g., release height, stack diameter, plume width) were

[25] On October 10, 2023, EPA released a new version of AERMOD (version 23132). Considering the bug fixes and model upgrades that were released in the newest version, no updates were made to the program that would cause the Project's model results to change if version 23132 were used instead of version 22112.

[26] Bay Area Air Quality Management District. 2023. *2022 California Environmental Quality Act Air Quality Guidelines.* April. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed: February 6, 2024.

[27] Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot-Spots Program Risk Assessment Guidelines.* Guidance Manual for Preparation of Health Risk Assessments. February. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: February 7, 2024.

[28] Bay Area Air Quality Management District. 2023. *California Environmental Quality Act Air Quality Guidelines.* Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?la=en. Accessed: February 7, 2024.

[29] Bay Area Air Quality Management District. 2011. *Recommended Methods for Screening and Modeling Local Risks and Hazards.* Tables 14 and 15. May. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/baaqmd-modeling-approach.pdf. Accessed: February 7, 2024.

[30] Six generators, along with a cogeneration power facility, are in place today; one additional generator is proposed to be installed by SRI in connection with its separate tenant improvements prior to Parkline buildout (subject to separate city review and approval). Parkline would remove three of the six existing SRI generators, along with the cogeneration power facility, would install 13 new generators onsite, yielding a total of 17 generators at buildout, inclusive of the one additional generator proposed to be installed by SRI in connection with its separate tenant improvements.

based on guidance provided by OEHHA, BAAQMD, SCAQMD, and Yorke Engineering. CARB provided meteorological data from the Palo Alto Airport and San Carlos Airport monitoring stations, the closest monitoring stations to the Project Site (3.4 miles east and 5.4 miles northwest, respectively).

Construction

For construction, area sources were used to represent onsite activity in AERMOD. The onsite construction sources were modeled with a release height of 5 meters and an initial vertical dimension of 1.16 meters.[31] Fugitive dust sources from grading, demolition, and hauling during construction were modeled with a release height of 0 meter and an initial vertical dimension of 1 meter.[32]

Emissions from heavy-duty haul and vendor trucks on roadways were modeled using volume sources in a line. Each volume source width was the width of the road plus six meters, the modeled release height was 2.55 meters, and the initial vertical dimension was 2.37 meters, consistent with EPA's haul road workgroup recommendations.[33,34] Table 48 from Appendix 3.4-1 of this EIR summarizes the construction modeling parameters that were used in AERMOD.

The modeling of emissions from construction activities was based on the number of hours construction would be permitted to occur and the number of days (i.e., 11 hours per day, 7 days per week). These assumptions were used to derive accurate averages; construction activities may not actually occur on this schedule. For further details regarding modeling assumptions, refer to Appendix 3.4-1 of this EIR. The urban dispersion option was used in the analysis because the Project Site is in an urbanized area of the city. San Mateo County's 2021 population of 737,888 was used.[35] Residential and recreational areas within 1,000 meters of the Project Site were modeled on a grid with 20-meter (65.6-foot) spacing. Although not required by CEQA, this section describes health risks for Project users and residents during construction because onsite residential land uses may be occupied during late-stage Project construction. Both offsite and onsite receptors were modeled at the breathing height of ground-floor receptors, assuming a breathing height of 1.5 meters, consistent with the BAAQMD guidance.[36] Other sensitive receptor locations were identified using a report from EDR. The report identified schools, day-care centers, nursing homes, and hospitals near the Project Site. These locations were modeled as discrete locations.

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31 U.S. Environmental Protection Agency. 2022. *User's Guide for the AMS/EPA Regulatory Model (AERMOD).* U.S. Environmental Protection Agency Office of Air Quality Planning and Standards, Research Triangle Park, NC. Available: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_userguide.pdf. Accessed: February 7, 2024.

32 South Coast Air Quality Management District. 2008. *Localized Significance Threshold Methodology*. July. Available: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed: February 7, 2024.

33 U.S. Environmental Protection Agency. 2012. *Haul Road Workgroup Final Report Submission to EPA-OAQPS.* March. Available: https://www.epa.gov/sites/default/files/2020-10/documents/haul_road_workgroup-final_report_package-20120302.pdf. Accessed: February 7, 2024.

34 Ramboll modeled construction hauling routes in AERMOD before the 2022 BAAQMD guidelines were released. Therefore, modeling parameters used were obtained from EPA guidance. The modeling parameters were not updated after the BAAQMD CEQA guidance update because the EPA parameters were more conservative.

35 U.S. Census Bureau, 2023. *Quick Facts, San Mateo County, California*. Available: https://www.census.gov/quickfacts/sanmateocountycalifornia. Accessed: February 8, 2024.

36 Bay Area Air Quality Management District. 2023. California Environmental Quality Act Air Quality Guidelines, Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?la=en. Accessed: February 7, 2024.

Operations

Operations would generate TACs and $PM_{2.5}$ emissions from vehicle travel, laboratory use, and testing and maintenance of the emergency generators. All on-road traffic sources were characterized as line volume sources with a release height of 1.3 meters. To account for plume rise associated with mechanically generated air turbulence from operational emissions sources for the AERMOD run, the initial vertical dimensions for the line volume sources was 1.21 meters. Laboratory emissions are assumed to exhaust through one vent in each building. The stack heights varied, depending on the heights of the five office/R&D buildings. Other source parameters, such as temperature and velocity, were assumed, based on the values used in the HRA for the University of California, Davis Long-Range Development Plan, because information was not yet available for the Proposed Project with the level of design detail needed.[37] At each building, the modeled stack height was the specific building height plus 3.05 meters. The emergency generators, which would generate both DPM and $PM_{2.5}$ emissions, were represented as point sources, with a release height of 3.66 meters, exit temperature of 739.8 Kelvin, and exit velocity of 45.3 meters per second.[38] Similar to construction, the urban dispersion option was used. For operations, sensitive receptors were placed at the same locations and the same heights as those used in the construction analysis. A complete list of dispersion modeling inputs is provided in Appendix 3.4-1 of this EIR.

Risk Calculations

The risk calculations incorporate OEHHA's age sensitivity factors, which account for increased sensitivity to carcinogens during early-in-life exposure. The approach for estimating cancer risk from long-term inhalation, including exposure to carcinogens, requires calculating a range of potential doses and multiplying by cancer potency factors in units corresponding to the inverse dose to obtain a range of cancer risks. For cancer risk, the risk for each age group is calculated using the appropriate daily breathing rates, age sensitivity factors, and exposure durations. The cancer risks calculated for individual age groups are summed to estimate the cancer risk for each receptor. Chronic cancer and hazard risks were calculated using values from OEHHA's 2015 HRA guidance.[39] In accordance with BAAQMD guidance, residential cancer risks assumed a 30-year exposure duration.

Four cancer risk scenarios were evaluated for the Proposed Project. The four exposure scenarios were developed to capture the maximum risks from Project construction and operations. Because of the complex timing of Project construction, the selection of exposure scenarios took into consideration the magnitude of potential activity associated with each year. Scenario 1 starts at the beginning of construction. Scenario 2 starts at the beginning of Phase 2 construction and captures overlapping construction and operational impacts on onsite and offsite receptors. Scenario 3 starts at the beginning of Phase 3 construction and captures overlapping construction and operational impacts on onsite and offsite receptors. Lastly, Scenario 4 captures the fully operational Project once construction has concluded. The

[37] Yorke Engineering, LLC. 2018. *Health Risk Assessment for the University of California, Davis Long-Range Development Plan*. January.

[38] Bay Area Air Quality Management District. 2023. *California Environmental Quality Act Air Quality Guidelines.* Appendix E: Recommended Methods for Screening and Modeling Local Risks and Hazards. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?la=en. Accessed: February 7, 2024.

[39] Office of Environmental Health Hazard Assessment. 2015. *Air Toxics Hot-Spots Program Guidance Manual for the Preparation of Risk Assessments.* February. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: February 7, 2024.

four exposure scenarios capture the maximum amount of health risk for onsite and offsite receptors from construction and operations. Refer to Appendix 3.4-1 of this EIR for the health risk results, calculations, and additional assumptions.

Impacts and Mitigation Measures

Impact AQ-1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan. The Proposed Project would not conflict with or obstruct implementation of the applicable air quality plan. (LTS/M)

A project is considered to be consistent with the Clean Air Plan when it 1) supports the goals of the Clean Air Plan, 2) includes applicable control measures from the Clean Air Plan, and 3) does not disrupt or hinder implementation of any control measure included in the Clean Air Plan. The sections below provide an evaluation of the Proposed Project's consistency with each of the criteria.

Clean Air Plan Goals

As discussed above, the primary goals of the 2017 Clean Air Plan are to attain air quality standards, reduce the population's exposure to pollutants, protect public health in the Bay Area, reduce GHG emissions, and protect the climate. BAAQMD's 2022 CEQA Air Quality Guidelines recommend project-level thresholds of significance for air quality impacts, health risk impacts, and GHG emissions. The criteria pollutants' emissions thresholds of significance were established to determine whether emissions associated with construction or operation of a project would represent a cumulatively considerable contribution to adverse air quality in the SFBAAB and conflict with planning efforts to attain or maintain ambient air quality standards. The health risk thresholds were established to protect the health of local communities. As discussed under Impact AQ-2, unmitigated emissions from construction and operation of the Proposed Project would exceed the thresholds of significance for construction-related fugitive dust and operational ROG emissions. However, mitigated emissions from construction and operation of the Proposed Project would not exceed the thresholds of significance for criteria air pollutant emissions. As discussed under Impact AQ-3, unmitigated emissions from construction and operation of the Proposed Project would not exceed the thresholds of significance for local air quality health risks impacts.

Development of the 2017 Clean Air Plan strategy was based on regional population and employment projections for the Bay Area compiled by the Association of Bay Area Governments (ABAG) during preparation of Plan Bay Area. Demographic trends incorporated into Plan Bay Area were used to determine vehicle miles traveled (VMT) in the Bay Area; BAAQMD uses the trends to forecast future air quality. The SFBAAB is currently designated a nonattainment area for O_3 (federal and State ambient air quality standards), $PM_{2.5}$ (federal and State ambient air quality standards), and PM_{10} (State ambient air quality standards only). Section 3.14, *Population and Housing*, notes that the Proposed Project would align with future regional growth projections promulgated by ABAG. Therefore, the Project would not conflict with the goals of the 2017 Clean Air Plan to attain air quality standards.

Clean Air Plan Control Measures

Control strategies in the Clean Air Plan include measures in the following categories: Stationary-Source Control Measures, Transportation Control Measures, Energy Control Measures, Building Control Measures, Agriculture Control Measures, Natural and Working Lands Control Measures, Waste Management Control Measures, and Water Control Measures. The Proposed Project's consistency with each of these strategies is discussed below. The Project's consistency with individual control measures is provided in Appendix A of Appendix 3.4-1 of this EIR.

Stationary-Source Control Measures

The stationary-source control measures, which are designed to reduce emissions from stationary sources such as metal melting facilities, cement kilns, refineries, and glass furnaces, are incorporated into rules adopted by BAAQMD and then enforced by BAAQMD permit and inspection programs. The Proposed Project would include installation of 13 new diesel-powered emergency generators, which would require permits from BAAQMD to operate. As part of the permit review process, operation of the emergency generators would be required to comply with BAAQMD permitting requirements, which incorporate stationary-source control measures from the Clean Air Plan; therefore, the Proposed Project would be consistent with the stationary-source control measures of the Clean Air Plan.

Transportation Control Measures

As part of the Clean Air Plan, BAAQMD identifies transportation control measures to decrease emissions of criteria pollutants, TACs, and GHGs by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment. The Proposed Project would include a new office/R&D campus; up to 550 new rental dwelling units, new bicycle and pedestrian connections, and open space. As discussed under *Transportation Demand Management* in Chapter 2, *Project Description*, the Proposed Project would include a project-specific transportation demand management (TDM) plan for both residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization. In addition, the Proposed Project would not exceed the city's VMT thresholds. Furthermore, the Proposed Project would provide adequate bicycle and pedestrian infrastructure and represent an overall improvement with respect to bicycle and pedestrian access and circulation. Within the Project Site, pedestrian walkways would be incorporated around the buildings. The Proposed Project would also be subject to regulatory programs related to fuel and vehicle efficiency as well as vehicle electrification, all of which would result in emissions reductions. Therefore, the Proposed Project would promote BAAQMD initiatives to reduce vehicle trips and VMT and increase the use of alternative means of transportation. The Proposed Project would be consistent with the applicable transportation control measures of the Clean Air Plan.

Energy Control Measures

The Clean Air Plan also includes energy control measures, which are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area as well as the carbon intensity of electricity by using less GHG-intensive fuel sources for electricity generation. Because these measures apply to electrical utility providers and local government agencies, and not individual projects, the energy control measures of the Clean Air Plan are not applicable to the Proposed Project. However, as a component of compliance with Sections 16.43.140 (Office) and 16.45.130 (Residential Mixed Use) of the Menlo Park Municipal Code, the Proposed Project on the main Project Site would meet 100 percent of its energy demand by purchasing renewable electricity through either Peninsula Clean Energy or Pacific Gas and Electricity Company. The Proposed Project would replace old buildings that were constructed under building codes that required less energy efficiency with new all-electric buildings. All electricity would be 100 percent carbon free. The Proposed Project would also decommission a natural gas–fired cogeneration facility. The Proposed Project is exploring the use of solar arrays and energy storage as a strategy for generating power onsite, which would power electric-vehicle

(EV) charging stations and offset energy use from each building. The Proposed Project may use purchased renewable energy credits and/or participate in a comparable clean energy program to offset any non-renewable energy used at the Project Site, per the anticipated requirements in the proposed zoning. As further discussed in Section 3.6, *Greenhouse Gas Emissions*, of the Draft EIR, the Proposed Project would meet a net-zero GHG emissions threshold with respect to building operations. Therefore, the Proposed Project would be consistent with applicable local energy control measures that support the energy control measures in the Clean Air Plan.

Building Control Measures

BAAQMD has authority to regulate emissions from certain sources in buildings, such as boilers and water heaters, but has limited authority to regulate the actual buildings. Therefore, the strategies in the control measures for this sector focus on working with local governments that do have authority over local building codes to facilitate adoption of best management practices and policies related to GHGs. Therefore, the building control measures of the Clean Air Plan are not applicable to the Proposed Project. However, the Proposed Project would comply with California Green Building Standards Code (CALGreen) standards and other code amendments, such as the intent of the city's adopted Reach Code.[40] In addition, the Proposed Project is anticipated to incorporate a range of Leadership in Energy and Environmental Design (LEED) certification strategies or equivalent standards across the residential area and the office/R&D area. Therefore, the Proposed Project would be consistent with the applicable building control measures of the Clean Air Plan.

Agriculture Control Measures

The agriculture control measures are designed primarily to reduce emissions of methane. Because the Proposed Project would not include any agricultural activities, the agriculture control measures of the Clean Air Plan are not applicable to the Proposed Project.

Natural and Working Lands Control Measures

The natural and working lands control measures focus on increasing carbon sequestration on rangelands and wetlands. They also encourage local governments to adopt ordinances that promote urban tree planting. Because the Proposed Project would not disturb rangelands or wetlands and would increase the total number of trees on the Project Site, the Proposed Project would be consistent with the applicable natural and working lands measures of the Clean Air Plan.

Waste Management Control Measures

The waste management control measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. The Proposed Project would comply with local requirements for waste management (e.g., recycling and composting), including preparation of zero-waste plans to increase diversion rates during the occupancy phase of each building, per the requirements of the city's Zoning Ordinance. Therefore, the Proposed Project would be consistent with the waste management control measures of the Clean Air Plan.

[40] In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

Water Control Measures

The water control measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works, and promoting the use of biogas recovery systems. Because these measures apply to publicly owned treatment works and local government agencies, and not individual projects, the water control measures are not applicable to the Proposed Project. However, the Proposed Project is anticipated to incorporate a range of LEED certification strategies or equivalent standards across the residential area and the office/R&D area. In doing so, the Proposed Project would implement features that would reduce water consumption. Also, the Proposed Project would demolish existing inefficient buildings onsite, with the exception of Buildings P, S, and T, and replace them, including the existing cogeneration plant, with new sustainable and water-efficient buildings.

To responsibly manage and reduce potable water use, the Proposed Project would comply with all applicable State and local codes and regulations regarding water usage and, where feasible, incorporate low-flow fixtures, options for greywater use, and recycled water for landscape irrigation, among other strategies. Native drought-tolerant plants and low-flow drip irrigation systems would be installed to minimize potable water consumption for landscaping. Therefore, the Proposed Project would be consistent with the water control measures of the Clean Air Plan.

Conclusion

As discussed above, the agriculture control measures, natural and working lands control measures, and water control measures of the Clean Air Plan would not be applicable to the Proposed Project. The Proposed Project would be consistent with the applicable stationary-source control measures, energy control measures, building control measures, transportation control measures, and waste control measures included in the Clean Air Plan. However, as discussed further in Impact AQ-2, the Proposed Project's unmitigated operational ROG emissions would exceed BAAQMD's threshold, as shown in Summary Table B on page 22 of the Parkline Air Quality Technical Report (Appendix 3.4-1). In addition, unmitigated construction-related fugitive dust emissions would be significant without implementation of BAAQMD BMPs for construction fugitive dust control. Therefore, as discussed above under the subsection *Clean Air Plan Goals*, the Proposed Project could conflict with the goals of the Clean Air Plan. This would be considered a ***potentially significant*** impact.

MITIGATION MEASURES. Implementation of Mitigation Measures AQ-1.1, AQ-1.2, and AQ-1.3 would reduce criteria pollutant emissions. Mitigation Measures AQ-1.1 and AQ-1.2 reduce operational ROG emissions by replacing fossil-fueled landscaping equipment with electrically-powered equipment and by using architectural coatings with a volatile-organic-compound (VOC) content of less than 5 grams per liter of material, respectively. Mitigation Measure AQ-1.3 reduces construction-related particulate matter emissions from material movement, soil disturbance, and vehicle idling. As shown on Table 42 on page 102 of the Parkline Air Quality Technical Report (Appendix 3.4-1), implementation of these mitigation measures would reduce potentially significant impacts related to conflicts with air quality plans to ***less than significant with mitigation***.

AQ-1.1: Landscaping Equipment

Contractor(s) and sub-contractor(s) responsible for landscaping shall, as a condition of contract, use all-electric landscaping equipment, which eliminates all criteria air pollutant emissions associated with landscaping activities.

AQ-1.2: Architectural Coatings

The Project Sponsor shall use super-compliant architectural coatings during construction and operation of all buildings, which shall have a volatile-organic-compound (VOC) content that meets SCAQMD Rule 1113, Architectural Coatings, as revised on February 5, 2016.

AQ-1.3: Construction Fugitive Dust Emissions

The Project construction contractor(s) and sub-contractor(s) shall implement the following BAAQMD BMPs for fugitive dust control, which are required for all construction activities within the San Francisco Bay Area Air Basin. These measures would reduce fugitive dust emissions primarily during soil movement and grading but also during vehicle and equipment movement on unpaved project sites.

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All streets, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- A publicly visible sign shall be posted with the telephone number and name of the person to contact regarding dust complaints. This person shall respond and take corrective action, if necessary, within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

Impact AQ-2: Cumulatively Considerable Net Increase in Criteria Pollutants. The Proposed Project would not result in a cumulative net increase in a criteria pollutant for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard. (LTS/M)

According to the BAAQMD CEQA Air Quality Guidelines, to meet air quality standards for criteria air pollutant and air precursor impacts, the Proposed Project must not:

- Contribute to CO concentrations that exceed the State ambient air quality standards;
- Generate daily construction emissions of ROG, NO_X, or $PM_{2.5}$ (exhaust) greater than 54 pounds per day or PM_{10} exhaust emissions greater than 82 pounds per day; or

- Generate operational emissions of ROG, NO_X, or $PM_{2.5}$ greater than 10 tons per year, or 54 pounds per day, or PM_{10} emissions greater than 15 tons per year, or 82 pounds per day.

Construction

Construction activities would generate criteria pollutant emissions from off-road equipment exhaust, construction workers' vehicles and heavy-duty trucks traveling to and from the Project Site and offsite utility installation areas, the application of architectural coatings, and paving activities. Fugitive PM_{10} and $PM_{2.5}$ dust would also be generated during soil movement and disturbance. The emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring simultaneously. Average daily emissions estimates were calculated to assess construction impacts, accounting for onsite and offsite construction activities. The average daily criteria air pollutant emissions that would be generated during Proposed Project construction are shown in Table 3.4-7. Refer to Appendix 3.4-1 of this EIR for detailed assumptions, daily construction-related emissions estimates, and air quality emissions calculations.

Table 3.4-7. Estimated Average Daily Construction Emissions of Criteria Pollutants and Precursors

	Average Daily Emissions (lb/day)[a]			
Construction Year	**ROG**	**NO_X**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
2025	0.4	5.9	0.2	0.1
2026	0.9	11	0.5	0.3
2027	1.7	13	0.6	0.3
2028	36	5.9	0.3	0.2
2029	14	5.0	0.2	0.1
2030	22	6.3	0.3	0.2
2031	16	1.7	0.1	< 0.1
Maximum Average Daily Emissions	**36**	**13**	**0.6**	**0.3**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 14.

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

a. BAAQMD construction thresholds for PM_{10} and $PM_{2.5}$ evaluate only exhaust emissions. Fugitive dust emissions would be controlled using best management practices.

As shown in Table 3.4-7, construction of the Proposed Project would result in emissions that would be below all applicable BAAQMD criteria pollutant thresholds. Therefore, Project-related construction activities would not result in a cumulatively considerable net increase in any criteria air pollutant for which the SFBAAB is designated as a nonattainment area with respect to federal or State ambient air quality standards. In addition, any off-site transportation improvements required for the Proposed Project would not be expected to require substantial work (e.g., major roadway widening). Rather, it is anticipated that the off-site transportation improvements would very likely consist of improvements identified in the city's Traffic Impact Fee program. The Proposed Project would be required to contribute its fair share toward these improvements. The city anticipates that construction of the off-site transportation improvements would not result in significant temporary air quality impacts related to the use of heavy construction equipment, demolition, excavation, hauling, or construction activities. In

addition, construction of the off-site temporary transportation improvements would be subject to the same or similar regulatory requirements as the Proposed Project, as applicable. This impact would be ***less than significant***. No mitigation is required.

BAAQMD's CEQA Air Quality Guidelines consider fugitive dust impacts to be less than significant with application of BMPs. The BMPs require applicants for future development projects to comply with BAAQMD's basic control measures for reducing construction emissions of particulate matter. Because BMPs are not included as part of the Proposed Project, fugitive dust impacts would be ***potentially significant***.

MITIGATION MEASURES. Implementation of Mitigation Measure AQ-1.3, presented in Impact AQ-1, would reduce potential fugitive dust impacts by requiring implementation of BMPs. BAAQMD considers fugitive dust emissions to be less than significant with implementation of BMPs. Implementation of this mitigation measure would reduce the impacts of potentially significant fugitive dust emissions to ***less than significant with mitigation***.

Operation

The criteria pollutant emissions that would be generated during Project operations were quantified using CalEEMod methodologies and EMFAC2021. Long-term emissions would be caused by vehicle trips, area sources (e.g., cleaning supplies, architectural coatings, landscape maintenance equipment), and the laboratories. In addition, stationary-source emissions would be associated with intermittent use of the Proposed Project's 13 new diesel-powered emergency generators, with horsepower ratings ranging from 268 to 2,012; each would be conservatively assumed to be tested 50 hours per year. As described in Table 3.4-6, the 100 percent R&D scenario is conservatively analyzed for Project operational criteria pollutant emissions. Net Project emissions are calculated by subtracting existing-year (2022) operational criteria pollutant emissions from full buildout-year (2031) conditions.

The Proposed Project's estimated unmitigated daily operational emissions for the existing year (2022) and full buildout year (2031) as well as net emissions are presented in Tables 3.4-8, 3.4-9, and 3.4-10, respectively, and compared to BAAQMD's recommended mass emission thresholds. Net emissions consider new operational emissions of the Proposed Project but also credit existing emissions on the site that would be removed. Refer to Appendix 3.4-1 of this EIR for detailed assumptions, daily operational emissions estimates, and air quality emissions calculations. As shown in Table 3.4-10 net operation of the Proposed Project would not generate levels of NO_X or particulate matter that would exceed BAAQMD-recommended mass emission thresholds. However, operation of the Proposed Project would generate levels of ROG that would exceed BAAQMD's ROG threshold. ROG emissions from consumer products and laboratories constitute the majority of operational ROG emissions associated with the Proposed Project. Fossil-fueled landscaping equipment and architectural coatings would contribute fewer ROG emissions than consumer products and laboratories to the ROG exceedance. Therefore, unmitigated operation of the Proposed Project would result in a cumulatively considerable net increase in a criteria air pollutant for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards. This impact would be ***potentially significant***.

Table 3.4-8. Estimated Unmitigated Average Daily Operational Emissions, Existing Conditions/Baseline (2022)

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Mobile	1.2	1.6	1.3	0.2
Laboratories	11	N/A	N/A	N/A
Emergency Generators	0.1	1.7	0.1	0.1
Natural Gas Use – PG&E	< 0.1	< 0.1	< 0.1	< 0.1
Natural Gas Use – Cogen	2.6	124	8.3	8.3
Natural Gas Use – Buildings P, S, & T	-0.1	-1.9	-0.1	-0.1
Landscaping	6.3	0.4	0.1	0.1
Architectural Coatings	3.3	N/A	N/A	N/A
Consumer Products	20	N/A	N/A	N/A
Total	**44**	**126**	**10**	**8.5**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 41.

Notes:

cogen = cogeneration plant; lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas; PG&E = Pacific Gas and Electric Company

[a] BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

Table 3.4-9. Estimated Unmitigated Average Daily Operational Emissions, Full Buildout Conditions (2031)

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Mobile	17	16	26	4.7
Laboratories	28	N/A	N/A	N/A
Emergency Generators	0.5	3.4	0.1	0.1
Landscaping	15	0.9	0.2	0.2
Architectural Coatings	8.8	N/A	N/A	N/A
Consumer Products	32	N/A	N/A	N/A
Total	**101**	**21**	**26**	**5.0**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 41.

Notes:

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

[a] BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

Table 3.4-10. Estimated Net Unmitigated Average Daily Operational Emissions (Full Buildout Emissions minus Baseline Emissions)

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Full Buildout Conditions (2031 [Table 3.4-9])	101	21	26	5.0
Existing Conditions (2022 [Table 3.4-8])	44	126	10	8.5
Total Net Operational Emissions	**56**	**-105**	**16**	**-3.5**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**Yes**	**No**	**No**	**No**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 41.

Notes:

Values may not add due to rounding.

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

[a] BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

MITIGATION MEASURES. Implementation of Mitigation Measures AQ-1.1 and 1.2 presented in Impact AQ-1 would decrease the Proposed Project's operational ROG emissions at full buildout, as shown in Table 3.4-11. Mitigation Measure AQ-1.1 requires the Project Sponsor to use all-electric landscaping equipment, and Mitigation Measure AQ-1.2 requires the Project Sponsor to use low-VOC architectural coatings for all Project buildings. As a result, as shown in Table 3.4-12, net mitigated operational ROG emissions would be below BAAQMD's ROG threshold. As discussed in Section 3.3, *Transportation*, the Proposed Project would comply with the city's VMT threshold. Therefore, mitigated operation of the Proposed Project would not result in a cumulatively considerable net increase in any criteria air pollutant for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards. Implementation of these mitigation measures would reduce potentially significant impacts to ***less than significant with mitigation***.

Table 3.4-11. Estimated Mitigated Average Daily Operational Emissions, Full Buildout Conditions (2031)

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Mobile	17	16	26	4.7
Laboratories	28	N/A	N/A	N/A
Emergency Generators	0.5	3.4	0.1	0.1
Landscaping	N/A	N/A	N/A	N/A
Architectural Coatings	3.5	N/A	N/A	N/A
Consumer Products	32	N/A	N/A	N/A
Total	**81**	**20**	**26**	**4.8**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 42.

Notes:

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

[a] BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

Table 3.4-12. Estimated Net Mitigated Average Daily Operational Emissions

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Full Buildout Conditions (2031)	81	20	26	4.8
Existing Conditions (2022)	44	126	10	8.5
Total Net Operational Emissions	**36**	**-106**	**16**	**-3.7**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**No**	**No**	**No**	**No**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 42.
Values may not add due to rounding.
lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas
[a] BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

Construction plus Operations

Construction is expected to occur concurrently during the early years of partial Project operation because the Project would be constructed over a period of several years. In years when construction is scheduled to coincide with Project operation, construction emissions were combined with operational emissions. This analysis conservatively assumed that the buildings constructed in each year of the construction program would be occupied and fully operational upon completion. This is conservative because occupancy and operation of each phase would most likely ramp up over time. Combined construction and operational emissions were compared with average daily emissions thresholds, using 365 days per year to average annual emissions for both construction and operations, as shown in Table 3.4-13 and Table 3.4-14. Refer to Appendix 3.4-1 of this EIR for detailed assumptions, daily construction-related emissions estimates, and criteria pollutant emissions calculations.

Table 3.4-13. Estimated Unmitigated Average Daily Construction plus Operational Emissions of Criteria Pollutants and Precursors

	Average Daily Emissions (lb/day)[a]			
Construction Year	**ROG**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
2025	-44	-124	-9	-8.5
2026	-44	-118	-9.2	-8.3
2027	-43	-117	-9.1	-8.3
2028	-19	-122	-9.3	-8.4
2029	-6.3	-116	-2.6	-7.1
2030	19	-111	2.3	-6.1
2031	34	-108	11	-4.6
Full Buildout	56	-105	16	-3.5
Maximum Average Daily Emissions	**56**	**-105**	**16**	**-3.5**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**Yes**	**No**	**No**	**No**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 44.
lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas
[a] Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout.

As shown in Table 3.4-13, construction plus operation of the Proposed Project would result in unmitigated emissions that would exceed BAAQMD's ROG threshold but be below all other applicable BAAQMD criteria pollutant thresholds. Therefore, the ROG impact in this scenario would be ***potentially significant***.

Table 3.4-14. Estimated Mitigated Average Daily Construction plus Operational Emissions of Criteria Pollutants and Precursors

	Average Daily Emissions (lb/day)[a]			
Construction Year	**ROG**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
2025	-44	-124	-9	-8.5
2026	-44	-118	-9.2	-8.3
2027	-43	-117	-9.1	-8.3
2028	-19	-122	-9.3	-8.4
2029	-12	-116	-2.6	-7.1
2030	9.2	-111	2.3	-6.2
2031	21	-109	10	-4.7
Full Buildout	36	-106	16	-3.7
Maximum Average Daily Emissions	**36**	**-106**	**16**	**-3.7**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**No**	**No**	**No**	**No**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 45.

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

[a] Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout.

MITIGATION MEASURES. As shown in Table 3.4-14, after implementation of Mitigation Measures AQ-1.1 and AQ-1.2 presented in Impact AQ-1, construction plus net operational emissions would be below all applicable BAAQMD thresholds. Therefore, construction plus operation of the Proposed Project would not result in a cumulatively considerable net increase in any criteria air pollutant for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards. Implementation of these mitigation measures would reduce potentially significant impacts to ***less than significant with mitigation***.

Impact AQ-3: Expose Sensitive Receptors to Substantial Pollutant Concentrations. The Proposed Project would not expose sensitive receptors to substantial pollutant concentrations. (LTS)

Sensitive land uses are generally considered to include those land uses where exposure to pollutants could result in health-related risks for sensitive individuals, including children and the elderly. Per BAAQMD, typical receptors include residential dwellings; places of business; schools; colleges and universities; day-care centers; hospitals; temporary housing, shelters, or encampments; detention centers or correctional facilities; and senior-care facilities. Parks and playgrounds are also considered sensitive receptors.

The primary pollutants of concern with regard to health risks for sensitive receptors are criteria pollutants—specifically, CO at potential intersection hot spots, asbestos, DPM, and localized $PM_{2.5}$. Each of these topics is analyzed in the paragraphs that follow.

Localized Carbon Monoxide Hot Spots

Continuous engine exhaust may elevate localized CO concentrations, resulting in hot spots. Receptors exposed to these CO hot spots may have a greater likelihood of developing adverse health effects. CO hot spots are typically observed at heavily congested intersections where a substantial number of gasoline-powered vehicles idle for prolonged durations.

Peak-hour traffic volumes on all roadways in the vicinity were analyzed to determine whether CO emitted by Project-generated traffic would exceed BAAQMD screening criteria. Maximum traffic volumes at the intersections under all scenarios would be less than BAAQMD's recommended screening criterion of 44,000 vehicles per hour. Also, intersection traffic volumes under all scenarios would not exceed the screening criterion of 24,000 vehicles per hour that BAAQMD recommends for areas where vertical and/or horizontal mixing is substantially limited. In addition, the Proposed Project would be consistent with the TDM requirements of the City/County Association of Governments' congestion management program, as discussed in Section 3.2.8 of the Parkline Air Quality Technical Report.

Emergency generators would also emit CO. Emergency generators are subject to permitting by BAAQMD as well as federal and State emissions standards. BAAQMD permitting procedures require emergency generators larger than 50 brake horsepower to demonstrate, through manufacturer's specification, that CO emissions would not exceed emission standards. The procedures also require generators to be installed in separate enclosures with good ventilation. Emissions standards for generators are developed to reduce concentrations of emissions so that the use of emergency generators as part of a land use project would not be likely to cause CO hot spots.

The Proposed Project would not result in, or contribute to, a localized concentration of CO that would exceed the applicable NAAQS or CAAQS. This impact related to localized carbon monoxide hot spots would be ***less than significant***. No mitigation is required.

Toxic Air Contaminants

Asbestos

Asbestos is a naturally occurring mineral that was previously used in building construction because of its heat resistance and strong insulating properties. Exposure to asbestos, however, has been shown to cause many disabling and fatal diseases, including lung cancer, mesothelioma, and pleural plaques. Demolition of the existing hardscape (i.e., asphalt and concrete) and buildings on the Project Site may expose workers and nearby receptors to asbestos if the material was used during construction of the original hardscape and buildings. However, the Proposed Project would comply with BAAQMD Regulation 11, Rule 2, Asbestos, Demolition, Renovation, and Manufacturing. The purpose of this rule is to control emissions of asbestos to the atmosphere during demolition and building renovation. Because the applicant would be required to control asbestos emissions according to BAAQMD regulations, receptors would not be exposed to substantial asbestos risks, and impacts associated with asbestos emissions would be ***less than significant***. No mitigation is required.

Criteria Air Pollutants

Some individuals who are exposed to high concentrations of ozone or particulate matter may experience certain health effects, including an increased incidence of cardiovascular and respiratory ailments. As discussed under Impact AQ-2, construction and operation of the Proposed Project would generate short-term ozone precursor and particulate matter emissions. However, as shown in Tables 3.4-7, 3.4-12, and 3.4-14, predicted emissions levels would not exceed BAAQMD's criteria pollutant thresholds. BAAQMD's

thresholds are derived from regionally specific modeling that demonstrates that the air basin can accommodate emissions below the threshold levels without attainment of the NAAQS or CAAQS being affected, as required by local air quality plans. The NAAQS and CAAQS are set to protect public health and the environment with an adequate margin of safety. Accordingly, projects that do not exceed BAAQMD's thresholds would not adversely affect regional air quality or exceed the NAAQS or CAAQS. The analysis presented in Impact AQ-2 demonstrates that construction and operation of the Proposed Project would not exceed BAAQMD's regional thresholds and therefore would not contribute a significant level of air pollution that could degrade regional air quality within the SFBAAB. This impact related to criteria air pollutants would be ***less than significant***. No mitigation is required.

Toxic Air Contaminants and Localized PM2.5

DPM is a carcinogen contained in the exhaust of diesel internal-combustion engines. Project-related construction activities would generate DPM (PM_{10} exhaust)[41] from off-road equipment and heavy-duty trucks. $PM_{2.5}$ exhaust and fugitive dust emissions would be generated from off-road equipment, onsite soil movement, demolition, and on-road travel of heavy-duty trucks and workers' vehicles.

Operational activities would generate TACs from vehicles and the emergency generators. DPM would be released from emergency generators during testing and maintenance as well as the use of diesel-fueled vehicles. Other TACs, in the form of ethylbenzene, toluene, hexane, xylenes, benzene, styrene, 1,3-butadiene, acrolein, propylene, formaldehyde, methanol, acetaldehyde, methyl ethyl ketone, and naphthalene, would be released from gasoline-fueled vehicles. Laboratories would emit 1,4-dioxane, toluene, hexane, xylenes, benzene, acrylamide, carbon tetrachloride, chloroform, dimethyl formamide, formaldehyde, methanol, ethylene dichloride, hydrochloric acid, hydrogen fluoride, hydrazine, isopropyl alcohol, methyl bromide, methylene chloride, perchloroethylene, trichloroethylene, and triethylamine. $PM_{2.5}$ exhaust and fugitive dust emissions would also be generated from Project vehicles as well as the emergency generators. These activities could expose offsite receptors to incremental increases in health risks.

Health impacts from exposure to DPM include cancer risks and chronic non-cancer risks. The HRA for the Proposed Project included an evaluation of annual concentrations of $PM_{2.5}$ from exhaust and fugitive dust sources. As discussed previously, the cancer risk was evaluated under four scenarios: Scenario 1 starts at the beginning of construction. Scenario 2 starts at the beginning of Phase 2 construction and captures overlapping construction and operational impacts on onsite and offsite receptors. Scenario 3 starts at the beginning of Phase 3 construction and captures overlapping construction and operational impacts on onsite and offsite receptors. Lastly, Scenario 4 captures the fully operational Project once construction has concluded.

Table 3.4-15 presents the maximum unmitigated health risks for sensitive receptors near the Project Site. The evaluation of cancer risk was based on a total exposure duration of 30 years. The health impacts associated with Project construction and operation at onsite sensitive receptors is also presented. As shown in Table 3.4-15, the unmitigated health risk results would not exceed BAAQMD's recommended health risk thresholds for the cancer risk, non-cancer hazard index, and $PM_{2.5}$ concentration. Therefore, impacts related to health risks would be ***less than significant***. No mitigation is required.

Note that, even though it is not required for this impact, implementation of Mitigation Measure AQ-1.3 would reduce $PM_{2.5}$ concentrations from construction activities. Mitigated $PM_{2.5}$ concentration results are found in Table 57 of Appendix 3.4-1 of this EIR.

[41] Per BAAQMD guidance, PM_{10} exhaust is used as a surrogate for DPM.

Table 3.4-15. Estimated Unmitigated Project-Level Health Risk Results from Construction plus Operations

Scenario	Cancer Risk (cases per million)[a]	Non-Cancer Chronic Risk[b]	Non-Cancer Acute Risk[c]	Annual PM2.5 Concentrations (ug/m^3)[d]
Construction plus Operations (offsite)	4.1	0.01	0.06	0.15
Construction plus Operations (onsite)	6.0	0.02	0.08	0.08
BAAQMD Significance Threshold	10.0	1.0	1.0	0.3
Exceeds Threshold?	No	No	No	No

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Tables 54–57.

Notes:

µg/m^3 = micrograms per cubic meter; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less

a. Maximum cancer risk for the onsite and offsite maximally exposed individual receptor (MEIR) is associated with Scenario 2.

b. Maximum chronic risk for the onsite MEIR is associated with Scenario 3. Maximum chronic risk for the offsite MEIR is associated with Scenario 1.

c. Maximum acute risk for the onsite MEIR is associated with Scenario 3. Maximum acute risk for the offsite MEIR is associated with Scenario 1.

d. Maximum $PM_{2.5}$ concentrations for the onsite MEIR is associated with Scenario 2. Maximum $PM_{2.5}$ concentrations for the offsite MEIR is associated with Scenario 1.

Impact AQ-4: Other Air Emissions. The Proposed Project would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. (LTS)

Although offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and air districts. According to BAAQMD, land uses associated with odor complaints typically include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants.[42] Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, and schools, warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, work sites, and commercial areas.

Potential odor emitters during construction include diesel exhaust and evaporative emissions generated by asphalt paving and the application of architectural coatings. Construction-related activities near existing receptors would be temporary in nature and would not result in nuisance odors. Potential odor emitters during operations would include exhaust from vehicles, fumes from the reapplication of architectural coatings, fumes from laboratories, and paving activities. Odor impacts would be limited to circulation routes, parking areas, areas immediately adjacent to recently painted structures, and laboratories. Although such brief exhaust- and paint-related odors may be considered adverse, they would not be atypical of developed urban areas. Consequently, Project-related odors would not adversely affect a substantial number of people, and impacts would be considered ***less than significant***. No mitigation is required.

[42] Bay Area Air Quality Management District. 2023. *California Environmental Quality Act Air Quality Guidelines.* Chapter 5: Project-Level Air Quality Impacts. April. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-5-project-air-quality-impacts_final-pdf.pdf?rev=de582fe349e545989239cbbc0d62c37a&sc_lang=en. Accessed: February 8, 2024.

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*.

Impact C-AQ-1: Cumulative Air Quality Impacts. Cumulative development could result in a significant environmental impact on air quality; the Proposed Project would not be a cumulatively considerable contributor to a significant environmental impact. (LTS/M)

Criteria Pollutants

The geographic context for cumulative air quality impacts with the Proposed Project includes the SFBAAB. Air pollution in its nature is largely a cumulative impact. No single project is large enough by itself to result in nonattainment of ambient air quality standards. Instead, in air basins that are in nonattainment for one or more criteria air pollutants, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Because of the conservative nature of the significance thresholds, as well as the basin-wide context of individual development project emissions, there is no direct correlation between a single project and localized air quality–related health effects. In developing thresholds of significance for air pollutants, the air districts have considered the emission levels at which a project's individual emissions would be cumulatively considerable in light of existing air quality. If a project exceeds the identified significance thresholds, its emissions would be significant and a cumulatively considerable contributor to significant cumulative air quality impacts in the region.

Development of past, current, and future projects in the SFBAAB could contribute to the nonattainment of ambient air quality standards. Thus, there would be potential for cumulative impacts related to criteria pollutants.

As noted under Impact AQ-2, construction as well as construction plus operation of the Proposed Project would not result in a cumulatively considerable net increase in any criteria air pollutant, except construction-related fugitive particulate matter and operational ROG, for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards; the impact would be less than significant. For construction-related fugitive dust emissions, the Proposed Project would generate significant unmitigated emissions. With implementation of Mitigation Measure AQ-1.3, the impact would be less than significant with mitigation. For operational ROG emissions, the Proposed Project would generate significant unmitigated emissions. With implementation of Mitigation Measures AQ-1.1 and AQ-1.2, the impact would be less than significant. Therefore, the Proposed Project would not result in a cumulatively considerable net increase in any criteria air pollutant for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards after implementation of Mitigation Measures AQ-1.1, AQ-1.2, and AQ-1.3. Based on the analysis above, the Proposed Project's contribution to cumulative impacts on criteria pollutants would be ***less than cumulatively considerable with mitigation***. No additional mitigation is required.

Toxic Air Contaminants and $PM_{2.5}$

According to BAAQMD's CEQA Air Quality Guidelines, combined risk levels should be determined for all TAC sources within 1,000 feet of a project site and compared to BAAQMD's cumulative health risk thresholds.[43]

[43] Ibid.

Nearby TAC sources as well as the Proposed Project's construction and operational emissions could contribute to a cumulative health risk for sensitive receptors near the Project Site. BAAQMD's inventory of stationary health risks was used to estimate the health risk from existing stationary sources in combination with the Proposed Project. Geographic information system (GIS) raster files provided by BAAQMD were used to estimate roadway and railway emissions.[44] The methods used to estimate Project-related TAC emissions are described under Impact AQ-3 and in Appendix 3.4-1 of this EIR. The results of the cumulative impact assessment are summarized in Tables 3.4-16 and 3.4-17. This table shows the health risk values for the Proposed Project's maximally affected receptors and the health risk contributions from existing sources. The sum of the Proposed Project's health risk results and the existing background health risks were compared to BAAQMD cumulative thresholds. Individual background contributions from existing sources are included in Appendix 3.4-1.

As shown in Tables 3.4-16 and 3.4-17, the combined level of health risk from the Proposed Project and other local sources of TACs would be less than all BAAQMD-recommended cumulative health risk thresholds. Therefore, the level of health risk associated with TACs emitted by the Proposed Project in combination with the level of health risk associated with other nearby TAC sources would not result in a significant cumulative local health risk at any nearby sensitive land uses. The cumulative impact related to TACs and $PM_{2.5}$ would be ***less than significant***. No mitigation is required.

Table 3.4-16. Maximum Unmitigated Cumulative Health Risks (onsite)

Scenario	Cancer Risk (cases per million)[b]	Non-Cancer Chronic Risk[c]	Annual PM2.5 Concentrations (ug/m^3)[d]
Stationary Sources	1.2	0	0
SRI Continued Operations	0.1	< 0.01	< 0.01
Roadways	7.5	0.02	0.13
Railways	29	< 0.01	0.02
Foreseeable Future Cumulative Development Projects[a]	N/A	N/A	N/A
Net Project	6.0	0.02	0.08
Total	**43**	**0.04**	**0.22**
BAAQMD Significance Threshold	100	10	0.8
Exceeds Threshold?	**No**	**No**	**No**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 59.

Notes:

µg/m^3 = micrograms per cubic meter; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less

a. A list of foreseeable future development was provided by the city of Menlo Park. No foreseeable future developments were within a 1,000-foot buffer from the Project Site; therefore, there would be no health risk impacts from future development.

b. Maximum cancer risk for the onsite MEIR is associated with a Phase 1 Resident.

c. Maximum chronic risk for the onsite MEIR is associated with a Phase 2 Worker.

d. Maximum $PM_{2.5}$ concentrations for the onsite MEIR is associated with a Phase 1 Worker.

[44] Bay Area Air Quality Management District. 2022. *Mobile-Source Screening Map*. Available: https://mtc.maps.arcgis.com/apps/instant/sidebar/index.html?appid=c5f9b1a40326409a89076bdc0d95e429. Accessed: February 9, 2024.

Table 3.4-17. Maximum Unmitigated Cumulative Health Risks (offsite)

Scenario	Cancer Risk (cases per million)[b]	Non-Cancer Chronic Risk[c]	Annual PM2.5 Concentrations (ug/m^3)[d]
Stationary Sources	2.1	0.01	0
SRI Continued Operations	< 0.1	< 0.01	< 0.01
Roadways	10	0.02	0.13
Railways	23	< 0.01	0.02
Foreseeable Future Cumulative Development Projects[a]	N/A	N/A	N/A
Net Project	4.1	0.01	0.07
Total	**40**	**0.04**	**0.25**
BAAQMD Significance Threshold	100	10	0.8
Exceeds Threshold?	**No**	**No**	**No**

Sources: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 59.

Notes:

$\mu g/m^3$ = micrograms per cubic meter; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less

a. A list of foreseeable future development was provided by the city of Menlo Park. No foreseeable future developments were within a 1,000-foot buffer from the Project Site; therefore, there would be no health risk impacts from future development.

b. Maximum cancer risk for the offsite MEIR is associated with a Resident.

c. Maximum chronic risk for the offsite MEIR is associated with a Worker.

d. Maximum $PM_{2.5}$ concentrations for the offsite MEIR is associated with a Worker.

3.5 Energy

This section identifies and evaluates the Proposed Project's potential impacts on energy, including the wasteful, inefficient, or unnecessary consumption of energy resources and conflicts with renewable energy or energy efficiency plans. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Assessment of Energy Use for the Parkline Project, Menlo Park, CA;*[1]
- *Preliminary Building Energy Estimate [Update]*;[2] and
- Model assumptions and inputs for construction and operational energy use.

The technical documentation listed above prepared for the Proposed Project by Ramboll and PAE was peer reviewed by ICF. The existing setting and Project analysis outlined in the technical documentation are incorporated throughout this section. The *Assessment of Energy Use for the Parkline Project, Menlo Park, CA,* including the model assumptions and inputs for construction and operational energy use, is included in Appendix 3.5-1 of this EIR, and the *Preliminary Building Energy Estimate [Update]* is included in Appendix 3.5-2 of this EIR.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. No questions or concerns related to energy were raised in the responses to the NOP.

Existing Conditions

Environmental Setting

Energy resources in California include natural gas, along with electric, water, wind, oil, coal, solar, geothermal, and nuclear resources. Energy production and energy use both result in the depletion of nonrenewable resources, such as oil, natural gas, and coal, and emissions of pollutants.

State Energy Resources and Use

California's diverse portfolio of energy resources produced approximately 2,152.5 trillion British thermal units (Btu) in 2021.[3] According to the California Energy Commission (CEC), total electric generation for California in 2021 (the most recent year from which data were available) was approximately 277,764 gigawatt hours. California's non-carbon-dioxide-emitting electric generation categories, including nuclear, large hydroelectric, and renewable generation, accounted for more than 49 percent of total in-state generation in 2021, which is a 2 percent decrease from 2020 due to impacts on hydroelectric power and

1 Ramboll. 2024. *Assessment of Energy Use for the Parkline Project, Menlo Park, CA*. January 26.

2 PAE. 2024. *Preliminary Building Energy Estimate [Update]*. February 20.

3 U.S. Energy Information Administration. 2023. *Table P5B—Primary Energy Production Estimates, Renewable and Total Energy, in Trillion Btu, Ranked by State, 2021*. Available: https://www.eia.gov/state/seds/sep_prod/pdf/P5B.pdf. Accessed: August 9, 2023.

other forms of renewable energy from California's ongoing drought. California's in-state electric generation was approximately 194,127 gigawatt hours.[4] Excluding offshore areas, the state ranked seventh in the nation in crude oil production in 2021 (the most recent year from which data were available), producing the equivalent of approximately 765.9 trillion Btu.[5] Other energy sources in the state include natural gas (160.8 trillion Btu), nuclear (172.1 trillion Btu), and biofuel (36.7 trillion Btu) sources.[6,7,8]

With a relatively mild Mediterranean climate and strict energy efficiency requirements, California has lower energy consumption rates than other parts of the United States. According to the U.S. Energy Information Administration, California consumed approximately 7,387.9 trillion Btu of energy in 2021.[9,10] California's per capita energy consumption rate of approximately 188.7 million Btu (MMBtu) was ranked one of the lowest in the nation (48th) as of 2021.[11]

In 2021, the transportation sector consumed the greatest amount of energy (2,785.1 trillion Btu, or 38 percent), followed by the industrial (1,704.4 trillion Btu, or 23 percent), residential (1,473.2 trillion Btu, or 20 percent), and commercial (1,396.7 trillion Btu, or 19 percent) sectors.[12] Natural gas accounted for the majority of energy consumption (2,172.8 trillion Btu, or 29 percent), followed by gasoline (1,494.9 trillion Btu, or 20 percent); renewable energy, including nuclear electric power, hydroelectric power, biomass, and other renewables (1,506.2 trillion Btu, or 20 percent); distillates and jet fuel (950.2 trillion Btu, or 13 percent); and interstate electricity (698.6 trillion Btu, or 9 percent), with the remaining 8 percent coming from a variety of other sources.[13] Of the natural gas consumed, industrial uses consumed approximately 33 percent, followed by residential uses (21 percent) and commercial uses (11 percent), among many other uses.[14]

Per capita energy consumption, in general, is declining because of improvements in energy efficiency and designs. However, despite this reduction in per capita energy use, the state's total overall energy

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4 California Energy Commission. 2023. *2021 Total System Electric Generation*. Available: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2021-total-system-electric-generation. Accessed: August 9, 2023.

5 U.S. Energy Information Administration. 2023. *Table P5A—Primary Energy Production Estimates, Fossil Fuels and Nuclear Energy, in Trillion Btu, Ranked by State, 2021*. Available: https://www.eia.gov/state/seds/sep_prod/pdf/P5A.pdf. Accessed: August 10, 2023.

6 No coal production occurs in California.

7 U.S. Energy Information Administration. 2023. *Table P5B—Primary Energy Production Estimates, Renewable and Total Energy, in Trillion Btu, Ranked by State, 2021.*

8 U.S. Energy Information Administration. 2023. *Table P5A—Primary Energy Production Estimates, Fossil Fuels and Nuclear Energy, in Trillion Btu, Ranked by State, 2021.*

9 One Btu is the amount of energy required to heat 1 pound of water by 1°F at sea level. Btu is the standard unit of energy used in the United States and based on the English system of units (foot-pound-second system).

10 U.S. Energy Information Administration. 2023. *Table C11—Energy Consumption Estimates by End-Use Sector, Ranked by State, 2021.* Available: https://www.eia.gov/state/seds/sep_sum/html/rank_use.html. Accessed: August 10, 2023.

11 U.S. Energy Information Administration. 2023. *Table C14—Energy Consumption Estimates per Capita by End-Use Sector, Ranked by State, 2021.* Available: https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_sum/html/rank_use_capita.html&sid=US. Accessed: August 10, 2023.

12 U.S. Energy Information Administration. 2023. *Table C11—Energy Consumption Estimates by End-Use Sector, Ranked by State, 2021.*

13 U.S. Energy Information Administration. 2023 *California State Energy Profile*. Available: https://www.eia.gov/state/print.php?sid=CA. Accessed: August 10, 2023.

14 U.S. Energy Information Administration. 2023. *Natural Gas Consumption by End Use—California*. Available: https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm. Accessed: August 10, 2023.

consumption (i.e., non-per capita energy consumption) is anticipated to grow over the next several decades as a result of increases in population, jobs, and vehicle miles traveled (VMT).

Regional Energy Resources and Use

Electricity

On January 26, 2016, the Menlo Park City Council joined Peninsula Clean Energy (PCE) to procure greenhouse gas– (GHG-) free power for the community.[15] PCE's power comes from a mix of clean energy sources, including solar, wind, geothermal, biomass and biowaste, and hydroelectric generation resources. PCE delivers power to its customers through existing Pacific Gas and Electric Company (PG&E) utility infrastructure.[16]

PCE offers its customers 100 percent GHG-free electricity with a higher percentage of energy from renewable sources. PG&E customers in Menlo Park are automatically enrolled in PCE; however, customers may opt out and continue to purchase electricity from PG&E should they want to. Furthermore, PCE allows customers to choose between two different electricity product operations: ECOplus (approximately 50 percent renewable electricity sources and 100 percent carbon-free sources) and ECO100 (100 percent renewable and carbon-free sources).[17,18]

Although PCE provides electricity to most residents and businesses in Menlo Park, it uses PG&E's distribution system to serve its customers. Historically PG&E has provided natural gas and electricity services to the vast majority of Northern California, including Menlo Park and the Project Site. PG&E is a publicly traded utility company that, under contract with the California Public Utilities Commission (CPUC), generates, purchases, and distributes energy. PG&E's service area covers 70,000 square miles, roughly extending north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines.[19]

PG&E's electricity is generated from a combination of traditional sources, such as coal-fired plants, nuclear power plants, and hydroelectric dams, as well as newer sources of energy, such as wind turbines and photovoltaic plants, or "solar farms." The "grid," or bulk electric grid, is a network of high-voltage transmission lines that link power plants to the PG&E system. The distribution system, comprising lower-

[15] On January 26, 2016, the Menlo Park City Council approved a motion to join Peninsula Clean Energy and receive additional renewable power. Peninsula Clean Energy is part of a Community Choice Energy program, a locally controlled community organization that enables local residents and businesses to have a choice as to where their energy comes from. Community Choice Energy programs allow local governments to pool the electricity demands of their communities, purchase power with higher renewable content, and reinvest in local infrastructure.

[16] PCE charges each of its customers a delivery charge for maintenance of PG&E's wires and infrastructure and the delivery of electricity to customers.

[17] Peninsula Clean Energy. 2023. *Energy Choices.* Available: https://www.peninsulacleanenergy.com/energy-choices/. Accessed: December 15, 2023.

[18] Renewable energy is produced from resources that are naturally replenished as they are used, while carbon-free energy is produced from resources that do not emit GHGs into the atmosphere. Many resources are both renewable and carbon free (such as wind and solar, and can be referred to as renewable and carbon-free energy), some resources are renewable but not carbon free (such as biomass, and can be referred to as clean energy), and others are carbon free but not renewable (such as nuclear, and can be referred to as carbon-free energy).

[19] Pacific Gas & Electric Company. 2024. *Company Profile*. Available: https://www.pge.com/en/about/company-information/company-profile.html. Accessed: January 29, 2024.

voltage secondary lines, is at the street and neighborhood level. It consists of overhead or underground distribution lines, transformers, and individual service "drops" that connect to individual customers.

In addition to its base plan, PG&E has three plan options that give customers the option of purchasing energy from solar resources. The first option, "50% Solar Choice," provides up to 50 percent of a customer's energy from solar resources, while a second option, "100% Solar Choice," provides up to 100 percent of a customer's energy from solar resources. The third option, "Green Saver," provides income-qualified customers with energy from 100 percent solar resources.

In 2022, San Mateo County consumed approximately 4,177.4 million kilowatts of electricity. In San Mateo County, electricity was consumed primarily by the non-residential sector (62 percent), followed by the residential sector (38 percent).[20] Electricity usage for different land uses varies substantially by the types of uses in a building, the types of construction materials used, and the efficiency of the electricity-consuming devices.

Table 3.5-1 outlines PG&E's and PCE's power mix from the most recent year available (i.e., 2021 and 2022) and compares it to the California power mix. The table also identifies the renewable and non-renewable energy sources for PCE and PG&E. Some GHG-free sources are not considered renewable (e.g., nuclear is GHG free but not renewable).

Table 3.5-1. PG&E, PCE, and California Power Mix from the Most Recent Year Available

Energy Resources	PG&E Base Plan: (2021)	PG&E Option: 50% Solar Choice (2021)	PG&E Option: 100% Solar Choice (2021)	PG&E: Green Saver (2021)	PCE Option: ECOplus (2022)	PCE Option: ECO100 (2022)	California Power Mix (2021)
Eligible Renewable	**47.8%**	**70.9%**	**93.9%**	**89.9%**	**51.8%**	**100%**	**33.6%**
Biomass and waste	*4.2%*	*2.1%*	*0%*	*0%*	*8.2%*	*0%*	*2.3%*
Geothermal	*5.2%*	*2.6%*	*0%*	*0%*	*4.9%*	*0%*	*4.8%*
Eligible hydroelectric	*1.8%*	*0.9%*	*0%*	*0%*	*0.8%*	*0%*	*1.0%*
Solar	*25.7%*	*59.8%*	*93.9%*	*89.9%*	*18.5%*	*50%*	*14.2%*
Wind	*10.9%*	*5.5%*	*0%*	*0%*	*19.3%*	*50%*	*11.4%*
Non-Renewable	**52.2%**	**29.1%**	**6.1%**	**10.1%**	**48.2%**	**0%**	**66.4%**
Coal	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*3.0%*
Large hydroelectric	*4.0%*	*2.0%*	*0%*	*0%*	*48.2%*	*0%*	*9.2%*
Natural gas	*8.9%*	*7.4%*	*0%*	*0%*	*0%*	*0%*	*37.9%*
Nuclear	*39.3%*	*19.7%*	*0%*	*0%*	*0%*	*0%*	*9.3%*
Other	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0.2%*
Unspecified[a]	*0%*	*0%*	*6.1%*	*10.1%*	*10%*	*0%*	*6.8%*
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Pacific Gas and Electric Company. 2022. *2021 Power Content Label—Pacific Gas and Electric Company.* Available: https://www.pge.com/content/dam/pge/docs/account/billing-and-assistance/bill-inserts/1022-Power-Content-Label.pdf. Accessed: December 15, 2023.

Peninsula Clean Energy. 2023. *Power Mix*. Available: https://www.peninsulacleanenergy.com/power-mix/. Accessed: December 15, 2023.

a. Electricity from transactions that are not traceable to specific generation sources are classified as unspecified sources of power.

[20] California Energy Commission. n.d. *Electricity Consumption by County—San Mateo, 2022*. Available: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed: December 15, 2023.

Natural Gas

PG&E is the natural gas service provider for Menlo Park and the larger San Mateo County. PG&E's natural gas delivery system includes 42,141 miles of natural gas distribution pipelines and 6,438 miles of transmission pipelines. PG&E's gas transmission system serves approximately 16 million energy customers in California.[21] The system is operated under an inspection and monitoring program in real time on a 24-hour basis, with leak inspections, surveys, and patrols continuously taking place along the pipelines. Gas delivered by PG&E originates in gas fields in California, the Southwest, the Rocky Mountains, and Canada. Transmission pipelines send natural gas from the fields and storage facilities. The smaller distribution pipelines deliver gas to individual businesses or residences.[22]

In San Mateo County, approximately 204.2 million therms of natural gas were consumed in 2022 (the most recent year from which data are available). In 2022, natural gas in San Mateo County was consumed primarily by the residential sector (56 percent), followed by the non-residential sector (44 percent).[23]

Project Site Resources and Use

Table 3.5-2 shows existing energy usage at the Project Site. The Project Site includes a cogeneration plant that serves the existing campus. The 6-megawatt natural gas power facility currently generates power and steam for the Project Site. Generated power is delivered to campus buildings. Generated steam is distributed throughout the SRI International campus for various uses, including the production of chilled water through centralized steam absorption chillers for building cooling. The steam also supports building heating systems, hot-water heat-exchange systems, and lab processes. During periods when the cogeneration plant is out of operation, steam is produced by an auxiliary boiler in the cogeneration plant. Alternative standby power is delivered to the SRI International campus by the electric utility providers (i.e., PCE and PG&E). Natural gas pipelines are located below ground in adjacent public rights-of-way along Seminary Drive and Middlefield Road.[24]

Table 3.5-2. Existing Energy Consumption at the Project Site

Energy	Existing Usage
Electricity	-3,182 MWh/year[a]
Natural Gas	450,956 MMBtu/year
Gasoline	65,283 gallons/year
Diesel	9,164 gallons/year

Source: Ramboll. 2024. *Assessment of Energy Use for the Parkline Project, Menlo Park, CA*. January 26.
MWh = megawatt hour; MMBtu= million British thermal units

a. Under existing conditions, the Project Site exports surplus electricity to the PG&E grid when the onsite cogeneration plant generates excess electricity.

[21] Pacific Gas & Electric Company. 2023. *Company Profile*. Available: https://www.pge.com/en/about/company-information/company-profile.html. Accessed: January 29, 2024.

[22] Pacific Gas and Electric Company. 2023. *Core Gas Supply*. Available: https://www.pge.com/en/about/doing-business-with-pge/core-gas-supply.html. Accessed: December 15, 2023.

[23] California Energy Commission. n.d. *Gas Consumption by County—San Mateo County 2022*. Available: https://www.ecdms.energy.ca.gov/gasbycounty.aspx. Accessed: December 15, 2023.

[24] U.S. Department of Transportation. n.d. *NPMS Public Viewer—Gas Transmission Pipelines, San Mateo County*. Available: https://pvnpms.phmsa.dot.gov/PublicViewer/. Accessed: December 19, 2023.

Regulatory Setting

Federal

As discussed in Sections 3.4, *Air Quality*, and 3.6, *Greenhouse Gas Emissions*, the National Highway Traffic Safety Administration (NHTSA) sets Corporate Average Fuel Economy (CAFE) standards to improve average fuel economy (i.e., reduce fuel consumption) and reduce GHG emissions generated by passenger cars and light-duty trucks (collectively, light-duty vehicles) and medium- and heavy-duty trucks and engines. The existing CAFE standards require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026; this will be accomplished by increasing fuel efficiency by 8 percent in model years 2024 and 2025 and 10 percent in model year 2026. Phase 2 of the Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles applies to medium- and heavy-duty vehicles from model years 2019 through 2027. On April 12, 2023, EPA proposed two new federal vehicle standards that will build on the existing CAFE and Phase 2 standards. The Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium Duty Vehicles proposes more stringent emission standards for light- and medium-duty vehicles in model years 2027 through 2032 and accelerates the deployment of electric and clean vehicles. The Greenhouse Gas Standards for Heavy-Duty Vehicles—Phase 3 establishes fleet mix performance standards for vocational vehicles (e.g., delivery trucks) and trucks that are typically used to haul freight.

On August 17, 2023, NHTSA published updated CAFE standards for passenger cars and light trucks, including fuel efficiency standards for model years 2027 through 2031 that increase at a rate of 2 percent per year for passenger cars and 4 percent per year for light trucks. The proposal also includes new fuel efficiency standards for heavy-duty pickup trucks and vans in model years 2030 through 2035 that increase at a rate of 10 percent per year.

State

California has adopted statewide legislation to address various aspects of climate change and GHG emissions, which often pertain directly or indirectly to energy resources and uses. This section focuses on state legislation that specifically mentions energy use or energy resources. For other state legislation that focuses mainly on GHG reductions and climate change, refer to Section 3.6, *Greenhouse Gas Emissions*.

Assembly Bill 1493, Pavley Rules (2002 and 2009 amendments)/Advanced Clean Cars (2011)

Known as Pavley I, Assembly Bill (AB) 1493 provided the nation's first GHG standards for automobiles. AB 1493 required the California Air Resources Board (CARB) to adopt vehicle standards that would lower GHG emissions from automobiles and light-duty trucks to the maximum extent feasible beginning in 2009. In 2012, strengthening of the Pavley standards (referred to previously as Pavley II but now referred to as the Advanced Clean Cars measures) was adopted for vehicle model years 2017 through 2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025. The increase in fuel economy will help lower the demand for fossil fuels.

In August 2022, CARB board members voted to approve the Advanced Clean Cars II proposal, which aimed to dramatically reduce emissions from passenger cars (model years 2026 through 2035). This will require an increasing proportion of new vehicles to be zero-emission vehicles. The goal is to have 100 percent of new vehicles sold by 2035 classified as zero-emission vehicles.

CARB also adopted the Advanced Clean Truck Regulation to accelerate a large-scale transition to zero-emission medium- and heavy-duty vehicles. The regulation requires zero-emission medium- and heavy-

duty vehicles to make up an increasing percentage of total annual vehicle sales in California between 2024 and 2035. By 2035, zero-emission truck/chassis sales would need to amount to 55 percent of Class 2b–3 truck sales, 75 percent of Class 4–8 straight truck sales, and 40 percent of truck tractor sales. By 2045, every new medium- and heavy-duty truck sold in California will be a zero-emission vehicle. Large employers, including retailers, manufacturers, brokers, and others, will be required to report information about shipments and shuttle services to ensure that fleets purchase available zero-emission trucks.

Senate Bill 1020, The Clean Energy, Jobs, and Affordability Act of 2022

Senate Bill (SB) 1020 requires eligible renewable energy resources and zero-carbon resources to supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035; 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040; and 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045. In addition, 100 percent of electricity procured to serve state agencies must be provided by eligible renewable energy resources and zero-carbon resources by December 31, 2035.

Senate Bill 1389, Chapter 58, Statutes of 2002

The CEC is responsible for, among other things, forecasting future energy needs of the state and developing renewable energy resources and alternative renewable energy technologies for buildings, industry, and transportation. SB 1389 (Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors. The report is also intended to provide policy recommendations to conserve resources, protect the environment, and ensure reliable, secure, and diverse energy supplies. The 2023 Integrated Energy Policy Report, the most recent report required under SB 1389, was adopted in February 2024.

California Energy Efficiency Standards for Residential and Nonresidential Buildings—California Green Building Standards Code (2011), Title 24 Updates

The California Green Building Standards Code (Part 11, Title 24), or CALGreen, was adopted as part of the California Building Standards Code (24 California Code of Regulations). CALGreen, which applies to the planning, design, operation, construction, use, and occupancy of newly constructed buildings, required energy- and water-efficient indoor infrastructure to be installed in all new projects, beginning January 1, 2011. The Building Energy Efficiency Standards are updated every 3 years. The current Building Energy Efficiency Standards were adopted in 2022 and took effect on January 1, 2023. It is anticipated that the 2025 Building Energy Efficiency Standards will be adopted sometime in 2024 and will become effective January 1, 2026.

Executive Order B-16-12 (2012)

Executive Order (EO) B-16-12 orders state entities, under the direction of the governor, including CARB, the CEC, and the CPUC, to support rapid commercialization of zero-emission vehicles. It also directs these entities to achieve various benchmarks related to zero-emission vehicles.

Executive Order N-79-20 (2020)

On September 23, 2020, Governor Newsom issued EO N-70-20, directing the state to require all new cars and passenger trucks sold in California be zero-emission vehicles by 2035. The EO also directs state agencies to develop strategies for building an integrated transit network that provides affordable multimodal transportation options for all.

Senate Bill 350, Chapter 547, Clean Energy and Pollution Reduction Act of 2015

SB 350 (DeLeon), also known as the Clean Energy and Pollution Reduction Act of 2015, was approved by the California Legislature in September 2015 and signed by Governor Brown in October 2015. Its key provisions require the following by 2030: (1) achieving a Renewables Portfolio Standard (RPS)[25] of 50 percent and (2) doubling statewide energy efficiency savings for natural gas and electricity end uses. To meet the provisions, the bill requires large utilities to develop and submit integrated resource plans that detail how the utilities will reduce GHG emissions and increase the use of clean energy resources while meeting customers' needs.

Senate Bill 100—The 100 Percent Clean Energy Act of 2018 (2018)

SB 100 builds on the Clean Energy and Pollution Reduction Act of 2015. SB 100 increases the 2030 RPS target set in SB 350 to 60 percent and requires 100 percent of retail sales of electricity to California end-user customers and 100 percent of electricity procured to serve state agencies to be from renewable and other zero-carbon resources by 2045.

California Energy Action Plan

The CEC is responsible for preparing the State Energy Action Plan, which identifies emerging trends related to the energy supply, demand, conservation, public health and safety, and maintenance of a healthy economy. The State Energy Action Plan calls for the state to assist in the transformation of its transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental costs. The first-priority actions to address California's increasing energy demands are energy efficiency and demand response (i.e., reductions in customer electricity usage during peak periods to support system reliability and the best use of energy infrastructure). Additional priorities include the use of renewable sources of power and distributed generation (i.e., the use of relatively small power plants near or at centers of high demand). To further this policy, the State Energy Action Plan identifies several strategies, including aiding public agencies and fleet operators.

Regional

PCE 2022 Integrated Resource Plan

PCE is a Community Choice Aggregation energy program that serves the entirety of San Mateo County, including Menlo Park. PCE adopted the 2022 Integrated Resource Plan (IRP) on November 1, 2022, to provide guidance for serving the electricity needs of the residents and businesses in the county while fulfilling regulatory requirements, along with achieving PCE's overall goal of providing 100 percent GHG-free electricity on a 24/7 basis by 2025.[26] The plan contains the following strategic goals that are relevant to the Proposed Project:

- Secure sufficient, low-cost clean sources of electricity that achieve PCE's priorities while ensuring reliability and meeting regulatory mandates;
- Strongly advocate for public policies that support PCE's organizational priorities; and

[25] The RPS is one of California's key programs for promoting renewable energy use within the state. The program sets forth continuous procurement of renewable energy for load-serving entities within California (California Energy Commission 2023).

[26] Peninsula Clean Energy. 2021. *Our Path to 24/7 Renewable Energy by 2025*. Available: https://www.peninsulacleanenergy.com/wp-content/uploads/2021/11/Whitepaper-OUR-PATH-TO-247-RENEWABLE-ENERGY-BY-2025.pdf. Accessed: January 5, 2024.

- Implement robust energy programs that reduce GHG emissions, align energy supply and demand, and provide benefits to community stakeholders.

PG&E 2022 Integrated Resource Plan

PG&E adopted the 2022 IRP on November 1, 2022, to provide guidance for serving the electricity and natural gas needs of residents and businesses within its service area while fulfilling regulatory requirements. As mentioned previously, because electric customers in Menlo Park purchase most of their electricity through PCE, this plan is more applicable to natural gas customers in Menlo Park. The summary is provided here for reference because some electric customers continue to purchase energy from PG&E. The IRP contains the following objectives that are relevant to the Proposed Project:

- **Clean Energy**: In 2021, PG&E delivered nearly 48 percent of its electricity from RPS-eligible renewable resources, such as solar, wind, geothermal, biomass, and small hydropower. In addition, PG&E's GHG-free energy production, which includes renewable resources, large hydropower, and nuclear energy generation, satisfied 91 percent of PG&E's bundled retail sales in 2021;
- **Reliability**: PG&E's IRP analysis includes PG&E's contribution to system and local reliability, in compliance with the CPUC's resource adequacy requirements, especially as California transitions toward higher shares of GHG-free generation resources; and
- **Affordability**: PG&E's IRP analysis selects resources that meet the state's clean energy and reliability goals and provides a system average rate forecast in compliance with the CPUC's requirements for investor-owned utilities.

Local

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with energy.

The following goals and policies from the Land Use Element related to energy were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal LU-4: Promote and encourage existing and new businesses to be successful and attract entrepreneurship and emerging technologies for providing goods, services, amenities, local job opportunities, and tax revenue for the community while avoiding or minimizing potential environmental and traffic impacts.

> **Policy LU-4.5: Business Uses and Environmental Impact.** Allow modifications to business operations and structures that promote revenue-generating uses for which potential environmental impacts can be mitigated.
>
> **Policy LU-4.6: Employment Center Walkability**. Promote local-service retail and personal uses in employment centers and transit areas that support walkability and reduce auto trips.

Goal LU-7: Promote the implementation and maintenance of sustainable development, facilities, and services to meet the needs of Menlo Park's residents, businesses, workers, and visitors.

Policy LU-7.1: Sustainability. Promote sustainable site planning, development, landscaping, and operational practices that conserve resources and minimize waste.

Policy LU-7.9: Green Building. Support sustainability and green building best practices through the orientation, design, and placement of buildings and facilities to optimize their energy efficiency in preparation of state zero-net energy requirements for residential construction in 2020 and commercial construction in 2030.

Program LU-7.A: Green Building Operation and Maintenance. Employ green building and operation and maintenance best practices, including increased energy efficiency, use of renewable energy and reclaimed water, and drought-tolerant landscaping for all projects.

Program LU-7.C: Sustainability Criteria. Establish sustainability criteria and metrics for resource use and conservation and monitor performance of projects of a certain minimum size.

Program LU-7.D: Performance Standards. Establish performance standards in the zoning ordinance that require new development to employ environmentally friendly technology and design to conserve energy and water and minimize the generation of indoor and outdoor pollutants.

Program LU-7.E: Greenhouse Gas Emissions. Develop a GHG standard for development projects that would help reduce communitywide GHG emissions to meet city and statewide reduction goals.

The following goal and policies from the Open Space/Conservation Element related to energy were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal OSC4: Promote Sustainability and Climate Action Planning. Promote a sustainable energy supply and implement the city's Climate Action Plan to reduce greenhouse gas emissions and improve the sustainability of actions by city government, residents, and businesses in Menlo Park. This includes promoting land use patterns that reduce the number and length of motor vehicle trips, and encouraging recycling, reduction and reuse programs.

Policy OSC4.1: Sustainable Approach to Land Use Planning to Reduce Resource Consumption. Encourage, to the extent feasible, (1) a balance and match between jobs and housing, (2) higher-density residential and mixed-use development to be located adjacent to commercial centers and transit corridors, and (3) retail and office areas to be located within walking and biking distance of transit or existing and proposed residential developments.

Policy OSC4.2: Sustainable Building. Promote and/or establish environmentally sustainable building practices or standards in new development that would conserve water and energy, prevent stormwater pollution, reduce landfilled waste, and reduce fossil fuel consumption from transportation and energy activities.

Policy OSC4.3: Renewable Energy. Promote the installation of renewable energy technology at residences and businesses by encouraging education, employing social marketing methods, establishing standards, and/or providing incentives.

Policy OSC-4.4: Vehicles Using Alternative Fuel. Explore the potential for installing infrastructure for vehicles that use alternative fuel, such as electric plug-in recharging stations.

Policy OSC4.5: Energy Standards in Residential and Commercial Construction. Encourage projects to achieve a high level of energy conservation, exceeding standards set forth in the California Energy Code for Residential and Commercial development.

The following goals and policies from the Circulation Element related to energy were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal CIRC-1: Provide and maintain a safe, efficient, attractive, user-friendly circulation system that promotes a healthy, safe, and active community and quality of life throughout Menlo Park.

Goal CIRC-2: Increase accessibility for and use of streets by pedestrians, bicyclists, and transit riders.

Policy CIRC-2.11: Design of New Development. Require new development to incorporate designs that prioritize safe pedestrian and bicycle travel and accommodate senior citizens, people with mobility challenges, and children.

Policy CIRC-2.14: Impacts of New Development. Require new development to mitigate its impacts on the safety (e.g., collision rates) and efficiency (e.g., vehicle miles traveled [VMT] per service population or other efficiency metric) of the circulation system. New development should minimize cut-through and high-speed vehicle traffic on residential streets; provide appropriate bicycle, pedestrian, and transit connections, amenities, and improvements in proportion with the scale of proposed projects; and facilitate appropriate or adequate response times and access for emergency vehicles.

Goal CIRC-3: Increase mobility options to reduce traffic congestion, greenhouse gas emissions, and commute travel time.

Policy CIRC-3.1: Vehicle Miles Traveled. Support development and transportation improvements that help reduce per service population (or other efficiency metric) vehicle miles traveled.

Policy CIRC-3.2: Greenhouse Gas Emissions. Support development, transportation improvements, and emerging vehicle technology that help reduce per capita (or other efficiency metric) greenhouse gas emissions.

Goal CIRC-4: Improve Menlo Park's overall health, wellness, and quality of life through transportation enhancements.

Policy CIRC-4.1: Global Greenhouse Gas Emissions. Encourage the safer and more widespread use of nearly zero-emission modes, such as walking and biking, and lower emission modes, like transit, to reduce greenhouse gas emissions.

Goal CIRC-5: Support local and regional transit that is efficient, frequent, convenient, and safe.

Policy CIRC-5.1: Transit Service and Ridership. Promote improved public transit service and increased transit ridership, especially to employment centers, commercial destinations, schools, and public facilities.

Policy CIRC-5.2: Transit Proximity to Activity Centers. Promote the clustering of as many activities as possible within easy walking distance of transit stops, and locate any new transit stops as close as possible to housing, jobs, shopping areas, open space, and parks.

Goal CIRC-6: Provide a range of transportation choices for the Menlo Park community.

Policy CIRC-6.3: Shuttle Service. Encourage increased shuttle service between employment centers and the downtown Menlo Park Caltrain station.

The following goals and policies from the Housing Element related to energy were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal H6. Sustainable Housing: Implement sustainable and resilient housing development practices.

Policy H6.3: Renewable Energy/Energy Conservation in Housing. Encourage energy efficiency and/or renewable energy in both new and existing housing and require all-electric fuel sources, energy conservation measures and renewable energy in the design of all new buildings. Promote energy conservation and/or renewable energy and weatherization features in existing homes. In addition, the city will support the actions contained in the city's Climate Action Plan (CAP).

Policy H6.4: Promote Energy Efficient/Renewable Programs. Implement local policies and programs that promote and/or increase energy efficiency/renewable energy in the community, including participation in Peninsula Clean Energy. Promote county, state (Energy Upgrade California), federal and PG&E energy conservation programs for energy assessments and improvements. Seek grants and other funding to supplement city energy conservation/renewable activities.

Policy H6.6: Reduce Personal Automobile Usage. Encourage residents to reduce reliance on personal automobiles for transportation and encourage use of public transit and other alternative forms of mobility.

Menlo Park Municipal Code

As discussed in Chapter 2, Project Description, the Project Site is located within the C-1 (X) (Administrative and Professional District, Restrictive) and P (Parking) zoning districts. Title 16 of the Menlo Park Municipal Code includes the following residential green and sustainable building requirements for the C-1 zoning district that would be applicable to the Proposed Project. The discretionary approvals required for implementation of the Proposed Project will include rezoning of the Project Site to create a single mixed-use district; such rezoning will retain the city's standard residential green and sustainable building requirements, as applicable to residential uses and set forth below, and apply these requirements to non-residential uses in a manner similar to that found in Section 16.43.140 of the Menlo Park Municipal Code.

Section 16.30.050 Residential Green and Sustainable Building.

In addition to meeting all applicable regulations specified in Title 12 (Buildings and Construction), the following provisions shall apply to construction of any new building incorporating residential uses, residential additions to any existing building, and alterations of residential buildings. Implementation of these provisions may be subject to separate discretionary review and environmental review pursuant to CEQA.

1. **Green Building**. Any new construction, addition or alteration of a building with residential uses shall be required to comply with Table 16.30.050(1)(B) (These tables summarize green building requirements for new construction or alternations to residential buildings. The requirements vary, based on the size of the building. Buildings more than 100,000 gross square feet would be required to meet Leadership in Energy and Environmental Design (LEED) Gold requirements for Building Design and Construction. Buildings of 10,000 to 100,000 square feet would be required to meet LEED Silver requirements; buildings of less than 10,000 square feet would not require LEED certification. LEED credits could include installing prewiring for electric-vehicle (EV) charging stations, installing EV charging stations, enrolling in EPA's Energy Star Portfolio Manager, and submitting documentation of compliance, as required by the city).

2. **Energy.**

   a. For all new construction, the project will meet one hundred percent (100 percent) of energy demand (electricity and natural gas) through any combination of the following measures:

      i. On-site energy generation;

      ii. Purchase of one hundred percent (100 percent) renewable electricity through Peninsula Clean Energy or Pacific Gas and Electric Company in an amount equal to the annual energy demand of the project;

      iii. Purchase and installation of local renewable energy generation within the city of Menlo Park in an amount equal to the annual energy demand of the project;

      iv. Purchase of certified renewable energy credits and/or certified renewable energy offsets annually in an amount equal to the annual energy demand of the project.

      If a local amendment to the California Energy Code is approved by the California Energy Commission (CEC), the following provision becomes mandatory:

      The project will meet one hundred percent (100 percent) of energy demand (electricity and natural gas) through a minimum of thirty percent (30 percent) of the maximum feasible on-site energy generation, as determined by an on-site renewable energy feasibility study and any combination of the measures in subsections (2)(A)(ii) to (iv). The on-site renewable energy feasibility study shall demonstrate the following cases at a minimum:

      a. Maximum on-site generation potential.

      b. Solar feasibility for roof and parking areas (excluding roof-mounted HVAC equipment).

      c. Maximum solar generation potential solely on the roof area.

   b. Alterations and/or additions of ten thousand (10,000) square feet or larger where the building owner elects to update the core and shell through the option presented in Table 16.30.050(1)(B):

      The project will meet one hundred percent (100 percent) of energy demand (electricity and natural gas) through any combination of the measures listed in subsections (2)(A)(i) to (iv).

Menlo Park Reach Code

The 2022 California Building Standards Code and the California Code of Regulations took effect on January 1, 2023. The city of Menlo Park adopted local amendments to the California Building Standards Code that require electricity to be the only fuel source for new buildings (not natural gas). On April 17, 2023, a three-judge panel of the United States District Court, Northern District of California, held an ordinance enacted by the city of Berkeley, of similar effect as the city's adopted Reach Code, to be expressly preempted by the Energy Policy and Conservation Act, 42 U.S.C. § 6297(c). *California Restaurant Association v City of Berkeley*, No. 21-16278, 2023 WL 2962921 (Apr. 17, 2023). On May 31, 2023, the city of Berkeley filed a petition for rehearing en banc before the U.S. Court of Appeals for the Ninth Circuit. On January 2, 2024, the Ninth Circuit denied the petition for rehearing. In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of*

Berkeley ruling, enforcement of the city of Menlo Park's Reach Code has been paused.[27] The foregoing notwithstanding, the Proposed Project intends to conform to the requirements of the city's adopted Reach Code and be subject to Reach Code requirements.

The Reach Code applies only to newly constructed buildings (i.e., from the ground up) and does not include additions or remodeling. Specifically, it would require:

1. New low-rise residential buildings (three stories or less) to have electric fuel source for space heating, water heating, and clothes dryers. Stoves may still use natural gas, if desired. Pre-wiring for electric appliances is required where natural gas appliances are used.
2. New nonresidential and high-rise residential buildings to be all-electric buildings, with some exceptions, and produce a minimum amount of onsite solar, based on square footage.
    - Exceptions include:
        - Life science buildings may use natural gas for space heating (if all electric is deemed infeasible by the building official).
        - Public agency–owned and –operated emergency operations centers (such as fire stations and police stations) may use natural gas.
        - Nonresidential kitchens (such as for-profit restaurants and cafeterias) may apply to use natural gas stoves.
        - For all exceptions that are granted, natural gas appliance locations must be electrically pre-wired for future electric appliance installation.
    - Solar requirements:
        - Less than 10,000 square feet requires a minimum of a 3-kilowatt photovoltaic system.
        - Greater than or equal to 10,000 square feet requires a minimum of a 5-kilowatt photovoltaic system.

Electric-Vehicle Charger Requirements and Section 12.18.040: Multifamily dwellings with residential parking facilities

The city of Menlo Park adopted amendments to the CALGreen EV charging requirements within the California Building Standards Code on October 23, 2018, and most recently updated in 2022. The EV requirements are intended to:

- Increase the availability of EV charging infrastructure within the city,
- Provide for residents and employees with EVs, and
- Lower barriers for those looking to shift from fossil fuel vehicles to EVs.

New multi-family residential developments and non-residential developments that are approximately 10,000 square feet or larger are required to comply with local amendments to the CALGreen code, install EV chargers, and prepare for future installations. With respect to new construction, in accordance with *Section 12.18.040, Amendment of Section 4.106.4.2—Multifamily Dwellings with Residential Parking Facilities*, of the city's Municipal Code, at least 15 percent of dedicated parking spaces for any project shall

[27] City of Menlo Park. 2024. *Reach Codes*: Available: https://menlopark.gov/Government/Departments/City-Managers-Office/Sustainability/Reach-codes. Accessed: January 5, 2024.

be electric-vehicle charging station (EVCS) spaces, with a minimum being Level 2 EV ready. An Automatic Load Management System (ALMS) shall be permitted to reduce loads when multiple vehicles are charging. All remaining dedicated parking spaces required for a project shall, at a minimum, meet requirements for consideration as a low-power Level 2 EV-ready space. In addition, the EVCS spaces shall comply with the accessibility provisions for EV chargers, in accordance with the California Building Code, Chapter 11B, and the EV-ready spaces and EVCS spaces in multifamily developments shall comply with California Building Code Chapter 11A, Section 1109A. Furthermore, in accordance with the municipal code requirement, the total number of EV parking spaces shall be 100 percent of the number of dwelling units or 100 percent of the number of parking spaces, whichever is less.

Climate Action Plan

The city's 2030 CAP includes actions to reduce Menlo Park's GHG emissions. The city's CAP was adopted with the purpose of reducing GHGs community-wide and meeting the reduction target (i.e., carbon neutrality by 2030).[28] The city has identified GHG reduction measures related to the transportation, energy, and land use sectors that can be coupled with state and existing local actions to reduce GHG emissions. GHG emissions largely involve energy consumption (i.e., fossil-fuel usage). The CAP identifies the following strategies to reach carbon neutrality by 2030:

1. Explore policy/program options to convert 95 percent of existing buildings to all electric by 2030,
2. Set citywide goals for increasing EVs to 100 percent of new vehicles by 2025 and decreasing gasoline sales 10 percent a year from a 2018 baseline,
3. Expand access to EV charging for multi-family and commercial properties,
4. Reduce VMT by 25 percent or an amount recommended by the Complete Streets Commission,
5. Eliminate the use of fossil fuels from municipal operations, and
6. Develop a climate adaption plan to protect the community from sea-level rise and flooding.

The most recent update to the city's CAP, the 2030 CAP, was adopted in April 2021.[29] The 2030 CAP updated emissions inventories and adopted a climate goal that calls for net-zero carbon by 2030.

Environmental Impacts

This section describes the impact analysis related to energy use for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

[28] Through its adoption of the city's 2030 CAP, the City Council adopted a climate goal that calls for zero carbon by 2030. This will be achieved through a 90 percent reduction in carbon dioxide equivalent (CO_2e) emissions from 2005 levels and elimination of the remaining 10 percent of CO_2e through direct carbon-removal measures.

[29] City of Menlo Park Environmental Quality Commission. 2021. *2030 Climate Action Plan*. Adopted April 20, 2021 (Resolution No. 6621).

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Result in potentially significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Methods for Analysis

Energy impacts associated with construction and operation of the Proposed Project were assessed and quantified, using standard and accepted software tools and techniques. The analysis also considered the list of energy impact possibilities and the potential conservation measures included in Appendix F of the CEQA Guidelines for determining whether a project would result in the wasteful, inefficient, or unnecessary consumption of energy resources.

Construction

Construction of the Proposed Project would use energy, such as electricity for off-road construction equipment and fuel for off-road construction equipment, haul trucks, vendor trips, and workers' trips. The construction schedule, equipment operating details, trip numbers and lengths, and material quantities were provided by the Project Sponsor. The calculation of energy consumption from vehicles, in the form of fuel use, was based on the number of trips and VMT, along with fuel efficiency data from EMissions FACtor 2021 Model (EMFAC2021). Trip counts for hauling and trips by workers and vendors were provided by the Project Sponsor. California Emissions Estimator Model (CalEEMod) defaults were used for the length of workers' trips; Project-specific information was provided for vendor and hauling trips. The estimate of fuel use from off-road construction equipment was consistent with EPA AP-42, as it pertains to diesel fuel. Project-specific information provided by the Project Sponsor was used for the estimate.

For ease of comparison across all types of energy consumption, gallons of diesel and gallons of gasoline were converted to MMBtu, assuming a factor of 0.14 MMBtu per gallon of diesel and 0.12 MMBtu per gallon of gasoline. In addition, electricity usage was converted to MMBtu, assuming a factor of 3.412 MMBtu per mega-watt hour of electricity. Detailed model assumptions and inputs for the Proposed Project's construction and operational energy use are provided in Appendix 3.5-1 of this EIR.

Operation

Fuel consumption was estimated with use of EMFAC2021 to calculate on-road VMT by residents, employees, and visitors. Trip generation rates and total VMT numbers for each land use were provided by Hexagon. The data were used to estimate energy consumption associated with motor vehicles traveling to and from the Project Site.

Energy consumption associated with the Project Site includes electricity usage, which includes the electricity used to convey water to the Project Site. In an effort to reduce GHG emissions, the Proposed Project would be entirely electrically powered, with the exception of natural gas usage for existing Buildings P and T, which would retain natural gas for continued laboratory and R&D purposes. In addition, the existing natural gas cogeneration plan would be decommissioned as part of the Proposed Project. However, for purposes of this analysis, the natural gas used by existing Buildings P and T are not

considered to be a part of the Proposed Project, and are therefore not evaluated as part of the energy impact analysis. Energy use totals for the Project Site are based on Project-specific electricity studies, as provided by the Project Sponsor. Energy consumption associated with the Proposed Project was estimated and presented under existing (2022)[30] and future (2031) conditions. Energy associated with water conveyance was estimated using CalEEMod and added to the energy usage of the respective components.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of the Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact; in those cases, the analysis does not identify a "worst-case" scenario.

Table 3.5-3 lists, by impact number, the buildout scenario assumed in the energy analysis and provides an explanation as to why the buildout scenario was evaluated for each impact.

Table 3.5-3. Buildout Scenario Analyzed for Each Energy Impact

Impact	Scenario Evaluated	Explanation
EN-1 (Construction): Result in potentially significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.	Either scenario	The same construction activities would occur under either scenario, including, but not limited to, phasing, duration, hours, and equipment. Therefore, either scenario would result in the same impacts related to the consumption of energy resources during construction.
EN-1 (Operation): Result in potentially significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.	100 percent R&D scenario	As discussed in Section 3.4, *Air Quality*, mechanical equipment and generators for R&D uses typically use more power than office uses. In addition, R&D uses may require additional energy for laboratory equipment, such as fume hoods and refrigeration units, compared to general office uses. This would result in potentially higher energy consumption during operation under the 100 percent R&D scenario.
EN-2: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Either scenario	Given the similarities between the two scenarios, consistency with state or local plans for renewable energy or energy efficiency would be evaluated for the Proposed Project in general, referencing the impact determinations above as needed.

[30] Energy use for existing conditions was based on utility statements and cogeneration electricity logs between September 2021 and August 2022.

Impacts and Mitigation Measures

Impact EN-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources. The Proposed Project would not result in significant environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. (LTS)

Construction

Construction activities would include demolition of all buildings on SRI International's research campus, except for Buildings P, S, and T, which would remain onsite and operated by SRI International and its tenants, and decommissioning of the natural gas cogeneration plant. In its place, the Proposed Project would construct new buildings, establish various open spaces, and install related infrastructure. In order to provide a conservative analysis, the Proposed Project would be constructed in three phases, beginning in mid-2025 and ending in late 2031, a period of approximately 6.5 years. Phase 1 of the Proposed Project would include site preparation, grading, and some construction, including portions of the office/R&D and residential areas, along with utility work as well as roadway and landscape improvements. Demolition and removal of the electrical substation adjacent to Laurel Street, the natural gas cogeneration plant, and the majority of the buildings would also occur during Phase 1. During Phase 2 of the Proposed Project, the remaining portions of the office/R&D area would be built and minor demolition work would occur; construction in the residential area would not occur during Phase 2. The remaining portions of the residential area would be built during Phase 3 of the Proposed Project; minor demolition work would also occur.

Construction-related energy usage would include the electricity needed to power electric construction equipment, the gasoline and diesel fuel used for transporting workers and materials to and from the construction site, and the fuel used for operation of off-road equipment. Construction-related energy usage and consumption would vary throughout the course of Project buildout and depend on the level of activity, the length of the construction period, the specific construction operations, the types of equipment, and the number of workers. Table 3.5-4 provides an estimate of the energy consumption of the Project during construction. As shown, Project construction would result in approximately 71,631 MMBtu being consumed over the approximately 6.5-year construction period.

Table 3.5-4. Estimated Construction Energy Consumption from the Proposed Project

Source		Usage (units vary)	Usage (MMBtu)
Electricity	Off-Road Construction Equipment	122	417
	Electricity Total (MWh)	**122 MWh**	**417**
Diesel	On-Road Construction Trips (gallons)	178,538	24,528
	Off-Road Construction Equipment (gallons)	216,540	29,748
	Diesel Total (gallons)	**395,078 gallons**	**54,276**
Gasoline	On-Road Construction Trips (gallons)	140,814	16,938
	Gasoline Total (gallons)	**140,814 gallons**	**16,938**
Total Project Construction Energy Consumption		***71,631***	

Source: Ramboll. 2024. *Assessment of Energy Use for the Parkline Project, Menlo Park, CA.* January 26.
MWh = megawatt hours; MMBtu = million British thermal units

The Proposed Project's construction-related energy consumption would be temporary. Furthermore, construction equipment would use higher-tier engines (Tier 4) or would be electric. Throughout construction, waste would be source separated and tracked to divert it away from landfills, with a target of recycling more than 80 percent of construction and demolition waste. Therefore, construction of the Project would result in ***less-than-significant*** impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources. No mitigation is required.

Operation

Operation of the Proposed Project would result in the consumption of electricity, diesel, and gasoline (e.g., for emergency generator testing and maintenance, water conveyance, mobile uses). Operational energy consumption was evaluated under existing-year (2022) and buildout-year (2031) conditions. The Proposed Project would implement a number of strategies to reduce energy consumption (e.g., by earning Leadership in Energy and Environmental Design [LEED] and Fitwel certification, complying with the increasingly stringent Title 24 Building Energy Efficiency and Green Building standards, complying with the Menlo Park Municipal Code, and being consistent with the intent of the city's adopted Reach Code).31 The amount of fuel for mobile uses would be reduced through an extensive Transportation Demand Management (TDM) plan. In addition, some use of gasoline and diesel would be displaced as EV charging stations are incorporated under the Proposed Project. The amount of energy used related to solid waste would be reduced through diversion, recycling, and composting programs. The Proposed Project would also incorporate water and waste reduction measures, including low-flow drip irrigation systems, drought-tolerant plants, low-flow fixtures, and options for greywater and recycled water for landscape irrigation. In addition, the Proposed Project is exploring the use of solar arrays and energy storage as a strategy for achieving compliance with the intent of the city's adopted Reach Code and generating power onsite. This would offset energy use at each building and power the EV charging stations. The analysis does not quantify all of the Proposed Project's energy-saving measures. Therefore, the analysis is a conservative analysis. Table 3.5-5 provides an estimate of the energy consumption of the Project during operation. The Proposed Project's net energy consumption is the difference in operational energy consumption between existing (2022) conditions at the Project Site and 2031 with-Project conditions.

As shown in Table 3.5-5, below, buildout of the Proposed Project would decrease operational energy consumption on the Project Site by approximately 98,372 MMBtu per year compared with existing conditions. Similarly, energy use per square foot would decrease to 0.20 MMBtu per square foot compared with existing conditions (i.e., 0.33 MMBtu per square foot), despite the increase in overall building area. This decrease in energy usage is largely attributable to the removal of the existing cogeneration plant, which currently provides the Project Site with natural gas as a source of energy, as well as the energy efficiency measures incorporated into the Proposed Project, which are described below.

[31] In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

Table 3.5-5. Estimated Operational Energy Consumption of the Proposed Project

Condition/Source	MMBtu/Year
Existing (2022)	
Electricity (building + water + mobile)	-10,859
Natural Gas (building)	450,956
Gasoline (mobile)	7,849
Diesel (mobile + stationary sources)	1,259
Total[a]	**449,206**
Proposed Project (2031)	
Electricity (building + water + mobile)	199,261
Natural Gas	0
Gasoline (mobile)	133,149
Diesel (mobile + stationary sources)	18,424
Total[a]	**350,834**
Net Decrease with Proposed Project	
2031 v. Existing	-98,372
Energy per Square Foot (MMBtu/sf)	
Existing (2022)	0.33
With-Project Conditions (2031)	0.20

Source: Source: Ramboll. 2024. *Assessment of Energy Use for the Parkline Project, Menlo Park, CA.* January 26.
[a] Totals may not add up because of rounding.
MMBtu = million British thermal units; sf = square foot

During operation of the Proposed Project, the existing cogeneration plant would no longer provide energy in the form of natural gas to the Project Site. As a result, operational natural gas usage under the Proposed Project would be reduced to none, resulting in a decrease in approximately 450,956 MMBtu of natural gas per year compared to existing conditions. The Proposed Project is anticipated to incorporate a range of LEED certification strategies or equivalent standards across the residential area and the office/R&D area, which would further reduce energy consumption during Project operations. In addition, the proposed buildings within the office/R&D area would be designed to promote occupant health through achievement of Fitwel certification, which is a green building program developed by the Centers for Disease Control that focuses on improving and enhancing the health and well-being of tenants by incorporating various design and operational policies. Such policies would be incorporated by the Proposed Project into overall building designs to reduce energy consumption. Furthermore, the Proposed Project would also be consistent with the intent of the city's adopted Reach Code[32] and EV charging requirements for all new buildings.

As mentioned above, the Proposed Project is exploring the use of solar arrays as a strategy for generating power onsite. This would offset the energy used at each proposed building and provide power to the EV charging stations. In addition, the Proposed Project would reduce potable water use and, where feasible,

[32] In 2019, the city of Menlo Park adopted local amendments to the California Building Standards Code that require electricity to be the only fuel source for new buildings (not natural gas). This ordinance (Menlo Park Municipal Code Chapter 12.16) applies only to newly constructed buildings and does not include additions or remodeled buildings. In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

incorporate low-flow fixtures, options for greywater use, and recycled water for landscape irrigation. Native drought-tolerant plants and low-flow drip irrigation systems would also be incorporated. In addition, the Proposed Project would implement low-impact development and green infrastructure strategies to manage stormwater runoff and rainwater onsite. Furthermore, the Proposed Project would implement a robust TDM plan for both commercial and residential uses. This would encourage alternative modes of transportation to reduce single-occupant vehicle use as well as fuel consumption. The Proposed Project's TDM plan would include, as appropriate for the applicable use, programs that would support carpool and vanpool parking, long-term bicycle storage, showers and changing rooms, pedestrian network improvements, a commute assistance center/information kiosk, Transportation Management Association participation, a guaranteed ride home for emergency situations, and electric-powered shuttles to and from the Caltrain station and the city's downtown area, which would reduce VMT and, consequently, the amount of energy (i.e., gasoline and diesel) consumed. Furthermore, as discussed in Section 3.3, *Transportation*, the city has a Transportation Impact Fee (TIF) program to ensure a funding mechanism for future pedestrian and bicycle improvements and mitigate impacts from future projects. This would reduce the number of vehicle trips, which would reduce the Proposed Project's annual gasoline and diesel usage. The Proposed Project would be subject to the TIF and would contribute to the cost of new transportation infrastructure associated with the development. Should the improvements funded by the TIF be implemented, the Proposed Project's energy usage is anticipated to be less than the amount presented in Table 3.5-5.

Based on the above analysis, operation of the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources, and this impact would be ***less than significant***. No mitigation is required.

Impact EN-2: Conflict with Energy Plan. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (LTS)

State and local renewable energy and energy efficiency plans applicable to the Proposed Project are discussed above under *Regulatory Framework.* State plans include the AB 1493 Pavley Rules, California Title 24 energy efficiency standards, EO B-16-12, EO N-79-20, SB 350, SB 1020, and SB 100. Each contains required standards related to energy efficiency and renewable energy development. Local plans that address energy efficiency to achieve the state's RPS mandates include PG&E's and PCE's 2022 IRPs and the city's CAP. The city's General Plan and Municipal Code also include goals, policies, and requirements related to energy use and energy reductions.

As discussed above under Impact EN-1, the Proposed Project would incorporate sustainability and transportation demand management features. Under the Proposed Project, energy use by square foot on the Project Site would decrease compared to existing conditions, despite the increase in overall building area that would occur. The Proposed Project is anticipated to incorporate a range of LEED certification strategies or equivalent standards across the residential area and the office/R&D area. The Proposed Project would be consistent with the intent of the city's adopted Reach Code[33] and EV charging requirements. Under the city's adopted Reach Code, natural gas usage would be limited to commercial cooking facilities in for-profit businesses that would be open to the public and would require approval by the Environmental Quality Commission, the current City Council–appointed body for reviewing exception requests. The Proposed Project would include the removal of the existing cogeneration plant that provides

[33] In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

energy in the form of natural gas to the Project Site. With the removal of the cogeneration plant, overall energy consumption would be reduced and operational natural gas usage under the Proposed Project would be reduced to none, consistent with the adopted Reach Code. Furthermore, the Proposed Project would incorporate TDM programs for both the residential and commercial uses on the Project Site to reduce energy consumption (i.e., gasoline and diesel usage), as well as incorporate low-flow fixtures, drought-tolerant plants, and low-impact development.

The Proposed Project would be required to comply with state and local renewable energy and energy efficiency plans. As a result, it would benefit from renewable energy development and increases in energy efficiency. Energy usage from VMT and the number of average daily trips in the area is expected to become more efficient under regulations included in Pavley, EO N-79-20, and EO B-16-12, which address average fuel economy and commercialization of zero-emission vehicles. Building energy efficiency is also expected to increase as a result of compliance with Title 24 building codes, which are expected to move toward zero net energy for new construction and 100 percent renewable energy under SB 350, SB 1020, and SB 100 regulations. With implementation of the Proposed Project, PG&E and PCE would continue to pursue the procurement of renewable energy sources to meet their RPS portfolio goals and comply with state regulations. Therefore, the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and this impact would be ***less than significant***. No mitigation is required.

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. The geographic context for cumulative impacts related to natural gas and electricity demand is the service area of PG&E, which comprises the larger Northern California area and the PCE service area.

Impact C-EN-1: Cumulative Energy Impacts. Cumulative development would result in a less-than-significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Continued growth throughout PG&E's service area could contribute to ongoing increases in demand for electricity and natural gas. These anticipated increases would be countered, in part, as state and local requirements related to renewable energy become more stringent and energy efficiency increases. The extent to which cumulative development through 2031, the Proposed Project's buildout year, could result in the wasteful, inefficient, or unnecessary consumption of energy resources would depend on the specific characteristics of new development, which are not known at this time. As discussed previously, SB 100 obligates utilities to supply 100 percent carbon-free electricity by 2045. PG&E reached California's 2020 renewable energy goal 3 years ahead of schedule and is currently projected to meet the new SB 100 goal, which calls for 100 percent clean energy by 2045. Similarly, the Pavley standards are expected to lower the demand for fossil fuels by requiring 100 percent of new vehicles sold by 2035 to be zero-emission vehicles. Therefore, it is anticipated that future energy users will become more efficient and less wasteful over time.

As stated above, buildout of the Proposed Project would decrease operational energy consumption on the Project Site by approximately 98,372 MMBtu compared with existing conditions, even with the increase in overall building square footage. Similarly, energy use would decrease to approximately 0.20 MMBtu per square foot compared with existing conditions (i.e., 0.33 MMBtu per square foot). This

is attributable to the expected energy efficiency of future buildings and vehicles, which would be subject to increasingly robust regulations over time to meet the state's renewable energy and energy efficiency mandates. The Proposed Project would encourage building designs that would reduce energy consumption and promote increased energy efficiency. Because buildout under the Proposed Project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources and cumulative development would be subject to increasingly robust standards regarding energy efficiency, the cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-EN-2: Cumulative Conflicts with Energy Plans. Cumulative development would not conflict with or obstruct implementation of a state or local plan for renewable energy or energy efficiency and would result in a less-than-significant environmental impact; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Cumulative development would be required to comply with all adopted state and local renewable energy and energy efficiency plans and regulations. Therefore, the cumulative impact would be ***less than significant***. No mitigation is required.

3.6 Greenhouse Gas Emissions

This section identifies and evaluates the Proposed Project's potential impacts related to greenhouse gases (GHGs). This includes the Proposed Project's potential to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs. This section also describes existing conditions in the Study Area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California* (Parkline Air Quality Technical Report);[1] and
- Model assumptions and inputs for construction and operational air quality emissions calculations.

The technical documentation listed above prepared for the Proposed Project by Ramboll was peer reviewed by ICF. The existing setting and Project analysis outlined in the technical documentation are incorporated throughout this section. The Parkline Air Quality Technical Report, including the model assumptions and inputs for construction and operational air quality emissions calculations, is included in Appendix 3.4-1 of this EIR.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. No questions or concerns related to GHGs were raised in the responses to the NOP.

Existing Conditions

Environmental Setting

The principle anthropogenic (human-made) GHGs that contribute to global warming are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated compounds, including sulfur hexafluoride, hydrofluorocarbons (HFCs), and perfluorocarbons. Water vapor, the most abundant GHG, is not included in this list because its natural concentrations and fluctuations far outweigh its anthropogenic sources.

The primary GHGs of concern associated with the Proposed Project are CO_2, CH_4, N_2O, and HFCs. The sections that follow discuss principal characteristics of these pollutants. Sulfur hexafluoride and perfluorocarbons are not discussed because these gases are generated primarily by industrial and manufacturing processes or used as insulation in electric transmission facilities, neither of which is associated with the Proposed Project.

Methods have been set forth to describe emissions of GHGs in terms of a single gas to simplify reporting and analysis. The most accepted method for comparing GHG emissions is the global warming potential (GWP) methodology defined in Intergovernmental Panel on Climate Change (IPCC) reference documents. IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in

[1] Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February.

terms of carbon dioxide equivalent (CO_2e), which compares the gas in question to that of the same mass of CO_2 (CO_2 has a GWP of 1 by definition).

Table 3.6-1 lists the GWP of CO_2, CH_4, N_2O, and HFCs and their lifetimes in the atmosphere. The GWPs are from the IPCC's Fourth Assessment Report, consistent with statewide GHG emissions reporting protocol.[2]

Table 3.6-1. Lifetimes and Global Warming Potentials of Key Greenhouse Gases

Greenhouse Gas	Global Warming Potential (100 years)	Lifetime (years)
CO_2	1	—
CH_4	25	12
N_2O	298	114
HFCs	124–14,800	1–270

Source: California Air Resources Board. 2023. *GHG Global Warming Potentials*. Available: https://ww2.arb.ca.gov/ghg-gwps. Accessed: February 9, 2024.
CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; HFCs = hydrofluorocarbons

All GWPs used in the California Air Resources Board's (CARB's) GHG inventory, as well as for assessment of attainment of the State of California's (State's) GHG reduction targets, are considered over a 100-year timeframe (as shown in Table 3.6-1). However, CARB recognizes the importance of reducing emissions of short-lived climate pollutants (SLCP) to achieve the State's overall climate change goals. SLCPs have atmospheric lifetimes on the order of a few days to a few decades. Their relative climate-forcing impacts, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO_2.[3] Recognizing their short-term lifespan and warming impact, SLCPs are measured in terms of CO_2e over a 20-year time period. The use of GWPs with a time horizon of 20 years captures the importance of SLCPs and gives a better perspective on the speed at which SLCP emissions controls affect the atmosphere relative to CO_2 emissions controls. The SLCP Reduction Strategy addresses the three primary SLCPs—CH_4, HFC gases, and anthropogenic black carbon. CH_4 has a lifetime of 12 years and a 20-year GWP of 72. HFC gases have lifetimes of 1.4 to 52 years and 20-year GWP of 437 to 6,350. Anthropogenic black carbon has a lifetime of a few days to weeks and a 20-year GWP of 3,200.[4]

Carbon Dioxide

CO_2 accounts for more than 80 percent of all GHG emissions emitted in California.[5] CO_2 enters the atmosphere through fossil fuel (i.e., oil, natural gas, coal) combustion, solid waste decomposition, plant and animal respiration, and chemical reactions (e.g., those associated with cement manufacturing). CO_2 is also removed from the atmosphere, or "sequestered," when it is absorbed during photosynthesis by plants as part of the carbon cycle.

[2] California Air Resources Board. 2023. *GHG Global Warming Potentials.* Available: https://ww2.arb.ca.gov/ghg-gwps. Accessed: February 9, 2024.

[3] California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan*. November. Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents. Accessed: February 9, 2024.

[4] Ibid.

[5] California Air Resources Board. 2023. *GHG Descriptions and Sources in California*. Available: https://ww2.arb.ca.gov/ghg-descriptions-sources. Accessed: February 9, 2024.

Methane

CH_4, the main component of natural gas, is the second most abundant GHG and has a GWP of 25.[6] Anthropogenic emissions of CH_4 come from growing rice, raising cattle, using natural gas, and mining coal, along with landfill outgassing. Certain land uses also function as both a source and sink for CH_4. For example, wetlands are a terrestrial source of CH_4, whereas undisturbed aerobic soils act as a CH_4 sink (i.e., they remove CH_4 from the atmosphere).

Nitrous Oxide

Anthropogenic sources of N_2O include agricultural processes (e.g., fertilizer applications), nylon production, fuel-fired power plants, nitric acid production, and vehicle exhaust. N_2O also is used in rocket engines, racecars, and aerosol sprays. Natural processes, such as nitrification and denitrification, can also produce N_2O, which can be released to the atmosphere by diffusion.

Hydrofluorocarbons

HFCs are human-made chemicals used in commercial, industrial, and consumer products. HFCs, which have high GWPs, are generally used as substitutes for ozone-depleting substances in automobile air-conditioners and refrigerants. In the transportation sector, HFCs from refrigeration and air-conditioning units represented about 3 percent of total on-road emissions in California in 2020.[7]

Global Climate Change

The process known as the *greenhouse effect* keeps the atmosphere near Earth's surface warm enough for the successful habitation by humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted back toward the surface by GHGs in the atmosphere and some of which results in warming of the atmosphere. Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thus enhancing the greenhouse effect and amplifying the warming of Earth.

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution.[8] Rising atmospheric concentrations of GHGs in excess of natural levels result in increasing global surface temperatures—a process commonly referred to as *global warming*. Higher global surface temperatures, in turn, result in changes to Earth's climate system, including increased ocean temperature and acidity, reduced sea ice, variable precipitation, and the increased frequency and intensity of extreme weather events.[9] Large-scale changes to Earth's system are collectively referred to as *climate change.*

The IPCC was established by the World Meteorological Organization and United Nations Environment Programme to assess scientific, technical, and socioeconomic information relevant to understanding

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6 Ibid.

7 California Air Resources Board. 2022. *California High GWP Gases Inventory 2000–2020, by Sector and Activity.* Last revised: October 26, 2022. Available: https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/ghg_inventory_sector_sum_2000-20hgwp.pdf. Accessed: February 9, 2024.

8 Intergovernmental Panel on Climate Change. 2018. *Global Warming of 1.5°C.* Chapter 1, Framing and Context. Summary for Policymakers. M.R. Allen, O.P. Dube, W. Solecki, F. Aragón-Durand, W. Cramer, S. Humphreys, M. Kainuma, J. Kala, N. Mahowald, Y. Mulugetta, R. Perez, M. Wairiu, and K. Zickfeld.

9 Ibid.

climate change, its potential impacts, and options for adaptation and mitigation. The IPCC estimates that human-induced warming reached approximately 1 degree Celsius above preindustrial levels in 2017, increasing at 0.2 degree Celsius per decade. Under the existing nationally determined contributions of mitigation from each country until 2030, global warming is expected to rise 3 degrees Celsius by 2100, with warming to continue afterward.[10] Large increases in global temperatures could have substantial significant impacts on the natural and human environments worldwide and in California.

Emissions Inventories

Greenhouse Gases

Like criteria pollutant inventories, a GHG inventory is a quantification of all GHG emissions and sinks in a selected physical and/or economic boundary. GHG inventories can be performed on a large scale (i.e., for global and national entities) or on a small scale (i.e., for a building or person). Although many processes are difficult to evaluate, several agencies have developed tools to quantify emissions from certain sources. Table 3.6-2 outlines the most recent global, national, and statewide GHG inventories to help contextualize the magnitude of potential Project-related emissions.

Table 3.6-2. Global, National, and State GHG Emissions Inventories

Year and Area	CO_2e (metric tons)
2019 Global	59,000,000,000
2021 United States	6,340,200,000
2021 California	381,300,000

Sources: Intergovernmental Panel on Climate Change. 2022. *Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. \doi: 10.1017/9781009157926.001.

U.S. Environmental Protection Agency. 2023c. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2021*. EPA 430-R-23-002.

California Air Resources Board. 2024. *Current California GHG Emission Inventory Data*. Available: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed: February 9, 2024.

CO_2e = carbon dioxide equivalent

Regulatory Setting

This section summarizes the federal, State, regional, and local regulations related to GHG emissions that are applicable to the Proposed Project. Relevant regulatory agencies include CARB, the U.S. Environmental Protection Agency (EPA), and the Bay Area Air Quality Management District (BAAQMD).

Federal

Vehicle Emission Standards

The National Highway Traffic Safety Administration (NHTSA) and EPA set Corporate Average Fuel Economy (CAFE) standards for passenger cars and for light trucks (collectively, light-duty vehicles) and,

[10] Ibid.

separately, set fuel consumption standards for medium- and heavy-duty trucks and engines. The existing CAFE standards require an industry-wide fleet average of approximately 49 miles per gallon for passenger cars and light trucks in model year 2026; this will be accomplished by increasing fuel efficiency by 8 percent in model years 2024 and 2025 and 10 percent in model year 2026. Phase 2 of the Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles applies to medium- and heavy-duty vehicles from model years 2019 through 2027.

On April 12, 2023, EPA proposed two new federal vehicle standards that will build on the existing CAFE and Phase 2 standards. The Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium Duty Vehicles proposes more stringent emission standards for light- and medium-duty vehicles in model years 2027 through 2032 and accelerates the deployment of electric and clean vehicles. The Greenhouse Gas Standards for Heavy-Duty Vehicles—Phase 3 establishes fleet mix performance standards for vocational vehicles (e.g., delivery trucks) and trucks that are typically used to haul freight.

On August 17, 2023, NHTSA published updated CAFE standards for passenger cars and light trucks, including fuel efficiency standards for model years 2027 through 2031 that increase at a rate of 2 percent per year for passenger cars and 4 percent per year for light trucks. The proposal also includes new fuel efficiency standards for heavy-duty pickup trucks and vans in model years 2030 through 2035 that increase at a rate of 10 percent per year.

Executive Action on Greenhouse Gas Emissions

There is currently no federal law or legislatively mandated national GHG reduction target. However, several federal executive orders (EOs) related to GHG emissions and climate resiliency have been signed by President Biden. EO 13990, signed in January 2021, set a national goal to achieve a 50 to 52 percent reduction in economy-wide net GHG pollution from 2005 levels by 2030. In addition, EO 14057, signed in December 2021, requires federal agencies to develop strategic processes for achieving, among other things, carbon-free electricity by 2030 and 100 percent zero-emission vehicle acquisitions by 2035.

State

California has adopted statewide legislation to address various aspects of climate change and GHG emissions mitigation. Much of this legislation establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program, as summarized below.

State Legislative Reduction Targets

Senate Bill (SB) 32 requires the State to reduce emissions to 40 percent below the 1990 level by 2030. Assembly Bill (AB) 1279 requires California to achieve net-zero GHG emissions (i.e., reach a balance between the GHGs emitted and removed from the atmosphere) no later than 2045 and maintain net-negative GHG emissions from then on. It also mandates an 85 percent reduction in statewide anthropogenic GHG emissions (from 1990 levels) by 2045. AB 1279 requires State agencies to achieve net-zero GHG emissions resulting from their operations no later than 2035, or as soon thereafter as feasible.

The State's plan to reach the aforementioned targets is presented in periodic scoping plans. CARB[11] adopted the 2017 Climate Change Scoping Plan in November of that year to meet the GHG reduction

[11] California Air Resources Board. 2017. *California's 2017 Climate Change Scoping Plan*. November. Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents. Accessed: February 9, 2024.

requirement set forth in SB 32. It proposed continuing the major aspects of the previous scoping plan, including cap-and-trade regulation; low-carbon fuel standards; more efficient cars and trucks, as well as freight operations; and the Renewables Portfolio Standard. Reductions in CH_4 emissions from agricultural and other wastes were also proposed. CARB completed the 2022 Scoping Plan Update[12] in November of that year to identify a technologically feasible, cost-effective, and equity-focused path for achieving carbon neutrality by 2045, pursuant to AB 1279. The plan also assesses the State's progress toward meeting the GHG emissions reduction goal called for in SB 32.

Vehicle Efficiency and Zero-Emissions Standards

AB 1493 (Pavley I) required CARB to develop and implement regulations to reduce GHG emissions from automobiles and light trucks. These stricter emissions standards began with the 2009 model year. Additional strengthening of the Pavley standards (referred to previously as *Pavley II* and now referred to as the *Advanced Clean Cars* measure) was adopted for vehicle model years 2017 through 2025 in 2012. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon by 2025.

In August 2022, the CARB board members voted to approve the Advanced Clean Cars II proposal, which should dramatically reduce emissions from passenger cars in model years 2026 through 2035. This will require an increasing proportion of new vehicles to be zero-emission vehicles, with the goal being to have 100 percent of new vehicles sold by 2035 to be zero-emission vehicles.

CARB also adopted the Advanced Clean Truck Regulation to accelerate a large-scale transition to zero-emission medium- and heavy-duty vehicles. The regulation requires zero-emission medium- and heavy-duty vehicles to be an increasing percentage of total annual vehicle sales in California between 2024 and 2035. By 2035, zero-emission truck/chassis sales will need to be 55 percent of Class 2b and 3 truck sales, 75 percent of Class 4 through 8 straight truck sales, and 40 percent of truck tractor sales. By 2045, every new medium- and heavy-duty truck sold in California will need to be a zero-emission truck. Large employers, including retailers, manufacturers, brokers, and others, are required to report information about shipments and shuttle services to ensure they purchase available zero-emission trucks for their fleets.

Low-Carbon Fuel Standard

Governor Schwarzenegger set forth the low-carbon fuel standard for California in 2007 under EO S-01-07. This EO requires the carbon intensity of California's transportation fuels to be reduced by at least 20 percent by 2030.

Sustainable Land Use Planning and Vehicle Miles Traveled

SB 375 provides a planning process that coordinates land use planning, regional transportation plans (RTPs), and funding priorities to help California meet GHG reduction goals. SB 375 requires RTPs developed by metropolitan planning organizations to include a sustainable communities strategy (SCS). The goal of the SCS is to reduce regional vehicle miles traveled (VMT) through land use planning and consequent transportation patterns. CARB released the regional targets in September 2010, then updated them in March 2018.

[12] California Air Resources Board. 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. November. Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: February 9, 2024.

SB 743 requires revisions to the California Environmental Quality Act (CEQA) Guidelines to establish new impact analysis criteria for the assessment of a project's transportation impacts. The intent behind SB 743, as well as the revisions to the State CEQA Guidelines, is to integrate and balance congestion management, infill development, and active transportation with GHG emissions reductions.

Electricity Generation and Building Efficiency

The State passed legislation that requires increasing use of renewables to produce electricity for consumers. California utilities are required to generate 44 percent of their electricity from renewables by 2024 (SB 100), 50 percent by 2026 (SB 100), 52 percent by 2027 (SB 100), 60 percent by 2030 (SB 100), 90 percent by 2035 (SB 1020), 95 percent by 2040 (SB 1020), and 100 percent by 2045 (SB 100/SB 1020). SB 1020 also requires State agencies to rely on 100 percent renewable energy and zero-carbon resources for their own facilities by 2035.

California has also adopted aggressive energy efficiency standards for new buildings and is continuously updating the standards. In 2008, the California Building Standards Commission adopted the nation's first "green" building standards, which included standards for many aspects of the built environment apart from energy efficiency. The existing standards were adopted on August 1, 2022, and became effective January 1, 2023.

Solid Waste Diversion Regulations

To minimize the amount of solid waste disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Through other statutes and regulations, this 50 percent diversion rate also applies to State agencies. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal.

In 2011, AB 341 modified the California Integrated Waste Management Act and directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. As of July 1, 2012, mandatory commercial recycling required certain businesses that generate 4 cubic yards or more of commercial solid waste per week to arrange for recycling services. To comply with this requirement, businesses could either separate recyclables and self-haul them or hire a recycling service with mixed-waste processing. AB 341 also established a statewide recycling goal of 75 percent; under AB 939, the 50 percent disposal reduction mandate still applied to cities and counties.

Short-Lived Climate Pollutant Reduction Strategy

In 2014, SB 605 directed CARB, in coordination with other State agencies and local air districts, to develop a comprehensive SLCP Reduction Strategy. In 2016, SB 1383 directed CARB to approve and implement the SLCP Reduction Strategy to achieve the following reductions in SLCPs:

- 40 percent reduction in CH_4 relative to 2013 levels by 2030,
- 40 percent reduction in HFC gases relative to 2013 levels by 2030, and
- 50 percent reduction in anthropogenic black carbon relative to 2013 levels by 2030.

SB 1383 also establishes the following targets for reducing organic waste in landfills as well as CH_4 emissions from dairy and livestock operations, as follows:

- 50 percent reduction in organic waste disposal relative to 2014 levels by 2020,
- 75 percent reduction in organic waste disposal relative to 2014 levels by 2025, and
- 40 percent reduction in CH_4 emissions from livestock and dairy manure management operations relative to the livestock and dairy sectors' 2013 levels by 2030.

CARB and CalRecycle are currently developing regulations to achieve the organic waste reduction goals of SB 1383. In November 2020, CalRecycle finalized new and amended regulations to California Code of Regulations Title 14 and Title 27. Among other things, the regulations set forth minimum standards for organic waste collection, hauling, and composting. The final regulations are currently in effect. CARB adopted the SLCP Reduction Strategy in March 2017 as a framework for achieving the CH_4, HFC, and anthropogenic black carbon reduction targets set by SB 1383. The SLCP Reduction Strategy includes 10 measures to reduce SLCPs, which fit within a wide range of ongoing planning efforts throughout the state, including proposed rulemaking from CARB and CalRecycle on organic waste diversion, as discussed above.

Water Conservation Act of 2009

The overall goal of SB X7-7, the Water Conservation Act of 2009, was to reduce per capita urban water use by 20 percent as of December 31, 2020. The State was required to make incremental progress toward this goal by reducing per capita water use by at least 10 percent by December 31, 2015. This act is an implementing measure of the 2017 Scoping Plan that will continue to be implemented beyond 2020. Reductions in water consumption reduce the amount of energy, as well as the emissions, associated with conveying, treating, and distributing the water; emissions from wastewater treatment are also reduced.

Regional

Metropolitan Planning Organizations

The Metropolitan Transportation Commission (MTC) is the metropolitan planning organization for the nine counties that make up the San Francisco Bay Area and the San Francisco Bay Area Air Basin (SFBAAB), which includes Menlo Park. The first per capita GHG emissions reduction targets for the SFBAAB were 7 percent by 2020 and 15 percent by 2035 relative to 2005 levels. In 2013, MTC adopted an SCS as part of its RTP for the SFBAAB. This was known as Plan Bay Area. The plan goes beyond regional per capita targets and calls for 10 and 16 percent reductions in per capita GHG emissions by 2020 and 2035, respectively.[13] On July 26, 2017, the strategic update to this plan, known as Plan Bay Area 2040, was adopted by the Association of Bay Area Governments (ABAG) and MTC. As a limited and focused update, Plan Bay Area 2040 builds upon the growth pattern and strategies developed in the original Plan Bay Area but with updated planning assumptions that incorporate key economic, demographic, and financial trends since 2013.[14] As required by SB 375, CARB updated the per capita GHG emissions reduction targets in 2018. The new targets (i.e., reductions in per capita GHG emissions of 10 percent by 2020 and 19 percent by 2035 relative to 2005 levels) are addressed in the latest update to Plan Bay Area, Plan Bay Area 2050,

[13] Metropolitan Transportation Commission and Association of Bay Area Governments. 2013. *Plan Bay Area.* Adopted: July 18. Available: http://files.mtc.ca.gov/library/pub/28536.pdf. Accessed: February 9, 2024.

[14] Metropolitan Transportation Commission and Association of Bay Area Governments. 2017. *Plan Bay Area 2040.* Adopted: July 26. Available: http://2040.planbayarea.org/files/2020-02/Final_Plan_Bay_Area_2040.pdf. Accessed: February 9, 2024.

which was approved by ABAG and MTC in October 2021. Plan Bay Area 2050 carries forward many of the development and funding strategies of Plan Bay Area 2040. Plan Bay Area 2050 is a 30-year plan that outlines thirty-five integrated strategies focused on four key interrelated elements – housing, the economy, transportation, and the environment – to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. The Plan's strategies chart a course to make the Bay Area more affordable, connected, diverse, healthy, and vibrant for all residents, while also achieving the aforementioned regional GHG reduction targets established by CARB.

Bay Area Air Quality Management District

BAAQMD is the primary agency responsible for addressing air quality concerns in the San Francisco Bay Area, including San Mateo County. Its role is discussed further in Section 3.4, *Air Quality*. BAAQMD recommends methods for analyzing project-related GHGs in CEQA analyses as well as multiple GHG reduction measures for land use development projects. BAAQMD developed thresholds of significance that align with the statewide GHG target mandated by AB 32 to provide a uniform scale for determining the CEQA significance of GHG emissions associated with land use and stationary-source projects. In developing GHG thresholds, BAAQMD's goals included ease of implementation, the use of standard analysis tools, and emissions mitigation that would be consistent with AB 32 of 2006.

BAAQMD adopted CEQA thresholds for evaluating the significance of climate impacts from land use projects and plans on April 20, 2022.[15] The updated GHG thresholds of significance provide two thresholds for land use projects, based on either 1) specific project design elements or 2) consistency with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b). Although the city adopted the updated 2030 Climate Action Plan (CAP) in April 2021, the CAP is intended to serve as only a policy framework for future actions; approval of the CAP was exempt from preparation of a CEQA document under Section 15262 of the State CEQA Guidelines. Therefore, the CAP does not satisfy the tiering requirement established in Section 15183.5. The Proposed Project would need to demonstrate less-than-significant climate impacts with respect to implementation of the specific design elements discussed below.

Per BAAQMD's CEQA Air Quality Guidelines, land use development projects must include, at a minimum, the following project design elements:

1. Buildings
    a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
    b. The project will not result in any wasteful, inefficient, or unnecessary energy usage, as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
2. Transportation
    a. Achieve a reduction in project-generated VMT to a level below the regional average, consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent), or meet a locally adopted SB 743 VMT target, reflecting the recommendations provided in the

[15] Bay Area Air Quality Management District. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts.* Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en. Accessed: February 9, 2024.

Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*:

- Residential projects: 15 percent below existing VMT per capita.
- Office projects: 15 percent below the existing VMT per employee.
- Retail projects: no net increase in existing VMT

b. Achieve compliance with off-street electric-vehicle requirements in the most recently adopted version of the California Green Building Standards Code (CALGreen), Tier 2.

Local

Menlo Park Climate Action Plan

The city of Menlo Park 2030 CAP includes actions to reduce Menlo Park's GHG emissions. The city's CAP was adopted with the purpose of reducing GHGs community-wide and meeting the reduction target (i.e., carbon neutrality by 2030). The city has identified GHG reduction measures related to the transportation, energy, and land use sectors that can be coupled with State and existing local actions to reduce GHG emissions. The CAP identifies the following strategies to reach carbon neutrality by 2030:

- Explore policy/program options to convert 95 percent of existing buildings to all-electric buildings by 2030,
- Set citywide goals for increasing electric vehicles to 100 percent of new vehicles by 2025 and decreasing gasoline sales 10 percent a year from a 2018 baseline,
- Expand access to electric-vehicle (EV) charging for multi-family and commercial properties,
- Reduce VMT by 25 percent or an amount recommended by the Complete Streets Commission,
- Eliminate the use of fossil fuels from municipal operations, and
- Develop a climate adaption plan to protect the community from sea-level rise and flooding.

The most recent update to the city's CAP, the 2030 CAP, was adopted in April 2021.[16] The 2030 CAP updated emissions inventories and adopted a climate goal that calls for zero carbon by 2030. The CAP also aims for a 90 percent reduction in CO_2e emissions from 2005 levels by 2030. Table 3.6-3 highlights the city's GHG emissions inventory for 2005, 2017, and 2030.

[16] City of Menlo Park. 2021. *2030 Climate Action Plan*. Prepared by the Environmental Quality Commission. Adopted by City Council: July 2020 (Resolution No.6575). Amended: April 20, 2021 (Resolution No. 6621). Available: https://menlopark.gov/files/sharedassets/public/v/1/city-managers-office/documents/ sustainability/2030-climate-action-plan-amended-2021.pdf. Accessed: February 9, 2024.

Table 3.6-3. City of Menlo Park Community Greenhouse Gas Emissions Inventory ($MTCO_2e$)

Emissions Sources	2005	2017	2030
Vehicle Travel (mobile source)	137,628	158,686	18,373
Natural Gas Combustion	102,295	95,742	13,656
Electricity Consumption	87,617	21,528	—
Solid Waste Generation	21,745	8,424	2,903
Total Greenhouse Gas Emissions ($MTCO_2e$)	**349,285**	**284,380**	**34,933**

Source: City of Menlo Park. 2020. *Climate Change Action Plan*. Available: https://menlopark.gov/files/sharedassets/ public/v/1/city-managers-office/documents/sustainability/2030-climate-action-plan-amended-2021.pdf. Accessed: February 9, 2024.
Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent

CEQA authorizes reliance on a previously approved GHG emissions reduction plan (e.g., a CAP) that was prepared as a "plan for the reduction of greenhouse gas emissions," per Section 15183.5 of the State CEQA Guidelines. This section of the State CEQA Guidelines establishes opportunities for CEQA tiering when projects are consistent with adopted GHG emissions reduction plans and their impacts can be determined to be less than significant, provided the GHG emissions reduction plans meet specific criteria established under Section 15183.5, including adoption in a public process following environmental review.

The city adopted the CAP in April 2021; however, the CAP does not meet the requirements for tiering because the city determined that the draft 2030 CAP was intended to serve as a policy framework for future actions and, therefore, was exempt from environmental review.[17,18] Consequently, because the city's 2030 CAP does not satisfy the tiering requirements established in Section 15183.5 of the State CEQA Guidelines, it cannot be used to determine the significance of an individual project's GHG emissions. However, the 2030 CAP is a relevant plan for the purpose of reducing GHG emissions within Menlo Park; therefore, consistency with applicable 2030 CAP policies is analyzed in Impact GHG-2.

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with GHGs.

The following goal and policies from the Open Space and Conservation Element related to GHGs were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

[17] Ibid.

[18] State CEQA Guidelines Section 15262 specifically states the following: "A project involving only feasibility or planning studies for possible future actions that the agency, board, or commission has not approved, adopted, or funded does not require the preparation of an EIR or negative declaration but does require consideration of environmental factors. This section does not apply to the adoption of a plan that will have a legally binding effect on later activities."

Goal OSC4: Promote Sustainability and Climate Action Planning. Promote a sustainable energy supply and implement the city's Climate Action Plan to reduce greenhouse gas emissions and improve the sustainability of actions by city government, residents, and businesses in Menlo Park. This includes promoting land use patterns that reduce the number and length of motor vehicle trips, and encouraging recycling, reduction and reuse programs.

Policy OSC4.1: Sustainable Approach to Land Use Planning to Reduce Resource Consumption. Encourage, to the extent feasible, (1) a balance and match between jobs and housing, (2) higher-density residential and mixed-use development adjacent to commercial centers and transit corridors, and (3) retail and office areas within walking and biking distance of transit or existing and proposed residential developments.

Policy OSC4.2: Sustainable Building. Promote and/or establish environmentally sustainable building practices or standards in new development that would conserve water and energy, prevent stormwater pollution, reduce landfilled waste, and reduce fossil fuel consumption from transportation and energy activities.

Policy OSC4.3: Renewable Energy. Promote the installation of renewable energy technology, such as in residences and businesses, by supporting education, employing social marketing methods, establishing standards, and/or providing incentives.

Policy OSC4.4: Vehicles Using Alternative Fuel. Explore the potential for installing infrastructure for vehicles that use alternative fuel, such as electric plug-in recharging stations.

Policy OSC4.5: Energy Standards in Residential and Commercial Construction. Encourage projects to achieve a high level of energy conservation, exceeding standards set forth in the California Energy Code for residential and commercial development.

Policy OSC4.6: Waste Reduction Target. Strive to meet the California State Integrated Waste Management Board per-person target of waste generation per person per day through source reduction, reuse, and recycling programs.

Policy OSC4.8: Waste Diversion. Develop and implement a zero-waste policy or implement standards, incentives, or other programs that would lead the community toward a zero-waste goal.

The following goal and policies from the Land Use Element related to GHGs were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal LU-7: Promote the implementation and maintenance of sustainable development, facilities, and services to meet the needs of Menlo Park's residents, businesses, workers, and visitors.

Policy LU-7.1: Sustainability. Promote sustainable site planning, development, landscaping, and operational practices that conserve resources and minimize waste.

Policy LU-7.5: Reclaimed Water Use. Implement use of adequately treated "reclaimed" water (i.e., recycled/nonpotable water sources, including graywater, blackwater, rainwater, stormwater, foundation drainage, etc.) through dual plumbing systems for outdoor and indoor uses, as feasible.

Policy LU-7.9: Green Building. Support sustainability and green building best practices through the orientation, design, and placement of buildings and facilities to optimize their energy efficiency in preparation of State zero-net-energy requirements for residential construction in 2020 and commercial construction in 2030.

Program LU-7.A: Green Building Operation and Maintenance. Employ green building as well as operation-and-maintenance best practices, such as increasing energy efficiency, using renewable energy and reclaimed water, and installing drought-tolerant landscaping, for all projects.

Program LU-7.C: Sustainability Criteria. Establish sustainability criteria and metrics for resource use and conservation and monitor performance of projects of a certain minimum size.

Program LU-7.D: Performance Standards. Establish performance standards in the zoning ordinance that require new development to employ environmentally friendly technology and design to conserve energy and water and minimize the generation of indoor and outdoor pollutants.

Program LU-7.E: Greenhouse Gas Emissions. Develop a greenhouse gas (GHG) standard for development projects that would help reduce communitywide GHG emissions to meet city and statewide reduction goals.

The following goals and policies from the Circulation Element related to GHGs were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal CIRC-3: Increase mobility options to reduce traffic congestion, greenhouse gas emissions, and commute travel time.

Policy CIRC-3.1: Vehicle Miles Traveled. Support development and transportation improvements that help reduce per-service-population (or other efficiency metric) vehicle miles traveled.

Policy CIRC-3.2: Greenhouse Gas Emissions. Support development, transportation improvements, and emerging vehicle technology that help reduce per capita (or other efficiency metric) greenhouse gas emissions.

Goal CIRC-4: Improve Menlo Park's overall health, wellness, and quality of life through transportation enhancements.

Policy CIRC-4.1: Global Greenhouse Gas Emissions. Encourage the safer and more widespread use of nearly zero-emission modes, such as walking and biking, and lower-emission modes, such as transit, to reduce greenhouse gas emissions.

Goal CIRC-5: Support local and regional transit that is efficient, frequent, convenient, and safe.

Policy CIRC-5.1: Transit Service and Ridership. Promote improved public transit service and increased transit ridership, especially to employment centers, commercial destinations, schools, and public facilities.

The following goal and policies from the Housing Element related to GHGs were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal H-2: Maintain, protect, and enhance existing housing and neighborhoods.

Policy H-2.6: Renewable Energy/Energy Conservation in Housing. Encourage energy efficiency and/or renewable energy in both new and existing housing and promote energy conservation and/or renewable energy in the design of all new residential structures and promote incorporation of energy conservation and/or renewable energy and weatherization features in existing homes. In addition, the city will support the actions contained in the city's CAP.

Menlo Park Reach Code

The 2022 California Building Standards Code and the California Code of Regulations took effect on January 1, 2023. The city of Menlo Park adopted local amendments to the State Building Code that would require electricity to be the only fuel source for new buildings (not natural gas). On April 17, 2023, a three-judge panel of the United States District Court, Northern District of California, held an ordinance enacted by the city of Berkeley, of similar effect as the city of Menlo Park's adopted Reach Code, to be expressly preempted by the Energy Policy and Conservation Act, 42 U.S.C. § 6297(c). *California Restaurant Association v City of Berkeley*, No. 21-16278, 2023 WL 2962921 (Apr. 17, 2023). On May 31, 2023, the city of Berkeley filed a petition for rehearing en banc before the U.S. Court of Appeals for the Ninth Circuit. On January 2, 2024, the Ninth Circuit denied the petition for rehearing. In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.[19] The foregoing notwithstanding, the Proposed Project intends to conform to the requirements of the city's adopted Reach Code and be subject to Reach Code requirements.

The Reach Code applies only to newly constructed buildings (i.e., from the ground up) and does not include additions or remodeling. Specifically, it would require:

1. New low-rise residential buildings (three stories or less) to have an electric fuel source for space heaters, water heaters, and clothes dryers. Stoves may still use natural gas, if desired. Pre-wiring for electric appliances is required where natural gas appliances are used.
2. New nonresidential and high-rise residential buildings to be all-electric buildings, with some exceptions, and produce a minimum amount of onsite solar, based on square footage.
    - Exceptions include:
        - Life science buildings may use natural gas for space heating (if all electric is deemed infeasible by the building official).
        - Public agency–owned and –operated emergency operations centers (such as fire stations and police stations) may use natural gas.
        - Nonresidential kitchens (such as for-profit restaurants and cafeterias) may appeal to use natural gas stoves.
        - For all exceptions that are granted, natural gas appliance locations must be electrically pre-wired for future electric appliance installation.
    - Solar requirements:
        - Less than 10,000 square feet requires a 3-kilowatt (minimum) photovoltaic system
        - Greater than or equal to 10,000 square feet requires a 5-kilowatt (minimum) photovoltaic system

[19] City of Menlo Park. 2024. *Reach Codes*: Available: https://menlopark.gov/Government/Departments/City-Managers-Office/Sustainability/Reach-codes. Accessed: January 5, 2024.

Electric-Vehicle Charger Requirements and Section 12.18.040: Multifamily dwellings with residential parking facilities

The city of Menlo Park adopted amendments to the CALGreen EV charging requirements within the California Building Standards Code on October 23, 2018, and most recently updated in 2022. The EV requirements are intended to:

- Increase the availability of EV charging infrastructure within the city,
- To provide for residents and employees with EVs, and
- Lower barriers for those looking to shift from fossil-fuel vehicles.

New multi-family residential developments and non-residential developments that are approximately 10,000 square feet or larger shall be required to comply with local amendments to the CALGreen code, install EV chargers, and prepare for future installations. With respect to new construction, in accordance with Section 12.18.040, *Amendment of Section 4.106.4.2—Multifamily Dwellings with Residential Parking Facilities*, of the city's Municipal Code, at least 15 percent of dedicated parking spaces for any project shall be electric-vehicle charging station (EVCS) spaces, with a minimum being Level 2 EV ready. An Automatic Load Management System (ALMS) shall be permitted to reduce loads when multiple vehicles are charging. All remaining dedicated parking spaces required for a project shall, at a minimum, meet the requirements for consideration as a low-power Level 2 EV-ready space. In addition, the EVCS spaces shall comply with the accessibility provisions for EV chargers, in accordance with the California Building Code, Chapter 11B, and the EV-ready spaces and EVCS spaces in multifamily developments shall comply with California Building Code Chapter 11A, Section 1109A. Furthermore, in accordance with municipal code requirements, the total number of EV parking spaces shall be 100 percent of the number of dwelling units or 100 percent of the number of parking spaces, whichever is less.

Environmental Impacts

This section describes the impact analysis related to GHGs for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases.

State CEQA Guidelines Section 15064.4(b) also states that, when assessing the significance of impacts from GHG emissions, a lead agency should consider 1) the extent to which a project may increase or reduce GHG emissions compared with existing conditions, 2) whether a project's GHG emissions would exceed a threshold of significance that the lead agency has determined to be applicable to the project, and 3) the

extent to which a project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Construction-Generated Emissions of Greenhouse Gases

BAAQMD's adopted CEQA Air Quality Guidelines (2022) do not identify a GHG threshold for construction-related emissions. Instead, BAAQMD recommends that GHG emissions from construction be quantified and disclosed and that a determination regarding the significance of the GHG emissions be made with respect to whether a project would be consistent with emission reduction goals in AB 32. Note that AB 32 has been superseded by SB 32, which includes targets to be met through implementation of the programs in the CARB scoping plan. BAAQMD further recommends incorporation of best management practices (BMPs) to reduce GHG emissions during construction, as feasible and practical. This approach is used to evaluate construction-generated emissions.

Operational Emissions of Greenhouse Gases

As described above, BAAQMD adopted CEQA thresholds for evaluating the significance of climate impacts from land use projects and plans on April 20, 2022.[20] The Proposed Project would need to demonstrate less-than-significant climate impacts through the implementations of specific project design elements, discussed above.

The GHG analysis also includes a qualitative assessment of whether the Proposed Project would conflict with applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The primary focus of this qualitative assessment is whether the Proposed Project would conflict with CARB's 2022 Scoping Plan, which, as explained in the Regulatory Setting, above, outlines the main strategies California will implement to achieve the legislated GHG emissions target for 2030 and carbon neutrality by 2045.[21] Where applicable, guidance from CARB, OPR, and other agencies related to long-term emissions reduction requirements is considered in the analysis. Project consistency with local GHG reduction strategies is also analyzed. As discussed above, consistency with the city's 2030 CAP is analyzed in Impact GHG-2.

Methods for Analysis

The level of GHG emissions associated with construction and operation of the Proposed Project was assessed and quantified using the California Emissions Estimator Model (CalEEMod), version 2022.1, and CARB's 2021 EMission FACtor (EMFAC) model, consistent with BAAQMD guidance. A summary of the methodology is provided below. A full list of assumptions regarding modeling input parameters is provided in Appendix 3.4-1 of this EIR.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not

[20] Bay Area Air Quality Management District. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts.* Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en. Accessed: February 9, 2024.

[21] California Air Resources Board. 2022. *2022 Scoping Plan for Achieving Carbon Neutrality*. November. Available: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: February 9, 2024.

been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of the Build-out Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, both scenarios would result in the same level of impact; in those cases, the analysis does not identify a "worst-case" scenario.

Table 3.6-4 lists, by impact number, the buildout scenario assumed in the GHG emissions analysis and provides an explanation as to why the buildout scenario was evaluated for each impact.

Table 3.6-4. Buildout Scenario Analyzed for Each GHG Impact

Impact	Scenario Evaluated	Explanation
GHG-1: (Construction) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Either scenario	The same construction activities occur under either scenario, along with the same construction phasing, duration, hours, and equipment. Therefore, both scenarios result in the same impacts related to the generation of GHG emissions during construction.
GHG-1: (Operation) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	100 percent R&D scenario (all impacts except emissions from solid waste generation)	In an effort to reduce GHG emissions, both scenarios would be entirely electrically powered and would purchase 100 percent carbon free electricity, consistent with code requirements. In addition, both scenarios involve decommissioning the existing natural gas cogeneration power plant and removing select stationary sources onsite. However, when looking at the individual GHG emission sectors, the 100 percent R&D scenario is the most impactful scenario, as discussed below. **Energy.** Mechanical equipment and generators for R&D uses typically require more power and are more intense than office uses. In addition, R&D uses require additional energy for laboratory equipment, such as fume hoods and refrigeration, compared to general office uses. This results in higher GHG emissions during operation under the 100 percent R&D scenario. For further details, please refer to Section 3.5, *Energy*. **Area Sources.** Area sources include landscaping equipment, consumer products, and architectural coatings. Both scenarios generate approximately the same level of impacts related to area-source emissions because CalEEMod default methodologies do not differentiate for these two land uses. **Water and Wastewater.** The maximum impact scenario for water and wastewater disposal emissions is the 100 percent R&D scenario because R&D land uses require additional water uses and wastewater generation for laboratory operations compared to general office uses.

Impact	Scenario Evaluated	Explanation
		Solid Waste. For solid waste emissions, because the 100 percent office scenario results in more employees than the 100 percent R&D scenario, the 100 percent office scenario is considered the conservative scenario. For further details, please refer to Section 3.16, *Utilities and Service Systems*.
GHG-2: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Either scenario	Both scenarios would require the same general plan amendments and zoning amendments, resulting in the same impacts. However, when considering consistency with plans and policies adopted for the purpose of reducing GHG emissions, both scenarios are considered, referencing the impact determinations above as needed. This depends on the individual plans and policies and which scenario could result in potential policy inconsistencies, thereby triggering an environmental impact. The plans and policy consistency analyses for each scenario are not duplicated because many consistency determinations would be the same for both scenarios. However, where there are nuances between the two scenarios, the analysis describes those nuances.

Construction

Short-term construction-generated GHG emissions were calculated using methodologies consistent with CalEEMod, version 2022.1,[22] as recommended by BAAQMD and other air districts in California. Modeling was based on Project-specific information, such as information regarding demolition, building size, the area to be graded, expected duration of construction, and the area to be paved, where available; assumptions regarding typical construction activities; and default values from CalEEMod, which consider a project's location and land use type.

Detailed model assumptions and inputs for the calculations are provided in Appendix 3.4-1.

Operation

Although GHG emissions from mobile sources are not used in significance determinations for this EIR, GHG emissions emitted by motor vehicles associated with Project-related VMT were estimated with use of the vehicle emission factors from CARB's EMFAC2021;[23] traffic data, including daily VMT and the number of daily trips, from a transportation analysis conducted by Hexagon Transportation Consultants for the Proposed Project; and CalEEMod emission calculation methodologies.

As noted above, for purposes of this EIR, the evaluation of the building-related GHG impacts of the Proposed Project is based on consistency with BAAQMD's building design standards. GHG emissions associated with landscape maintenance and backup diesel generator operation for new and existing

[22] California Air Pollution Control Officers Association. 2022. *CalEEMod*. Version 2022.1. Available: http://www.caleemod.com/. Accessed: February 15, 2024.

[23] California Air Resources Board. 2024. *California Emission FACtor Model.* Available: https://arb.ca.gov/emfac/. Accessed: February 15, 2024.

buildings were estimated using the applicable CalEEMod emission calculation methodologies. GHG emissions associated with the consumption of water as well as the generation of wastewater and solid waste were estimated using CalEEMod emission calculation methodologies. The consumption estimates are provided in Appendix 3.4-1. GHG emissions associated with the onsite consumption of electricity were assumed to be zero with implementation of Menlo Park Municipal Code requirements. All GHG calculations and modeling data are provided in Appendix 3.4-1.

Impacts and Mitigation Measures

Impact GHG-1: Generation of GHG Emissions during Construction. Construction of the Proposed Project would not generate GHG emissions that may have a significant impact on the environment. (LTS)

Construction

Project-related construction activities, including parking lot and building demolition, building construction, and other onsite improvements, would generate GHG emissions. Specifically, heavy-duty off-road equipment operation, material transport, and workers' commutes during construction of the Proposed Project would result in GHG emissions from exhaust. Based on modeling conducted with CalEEMod methodologies, it is estimated that Project-related construction would generate approximately 5,093 metric tons of CO_2e over the construction period (2025–2031) (see Appendix 3.4-1 for detailed input parameters and modeling results).

Demolition and construction activities for the Proposed Project would result in the temporary generation of GHG emissions. Emissions would originate from the exhaust of both mobile and stationary construction equipment as well as exhaust from construction workers' vehicles, haul trucks for demolition debris removal, and vendors' trucks for deliveries. Site grading and excavation would be required for building foundations, utility infrastructure installation, and landscaping. Construction-related GHG emissions from each specific source would vary substantially, depending on the level of activity, length of the construction period, specific construction operations, types of equipment, and number of personnel.

As described above, BAAQMD has not established a threshold for assessing construction-related GHG emissions and has not proposed establishing one. Rather, BAAQMD recommends evaluating whether construction activities would conflict with the statewide emission reduction goals in AB 32. AB 32 has been superseded by SB 32, the targets of which will be met by implementing the programs in the scoping plan. However, the scoping plan does not contain any programs that would be directly applicable to construction of the Proposed Project. As discussed in Impact GHG-2, below, the Proposed Project, including construction, would be consistent with the scoping plan's measures to reduce landfill waste through compliance with applicable waste diversion regulations. In addition, the fuel used in construction equipment would comply with statewide low-carbon fuel standards. Therefore, construction GHG emissions would not interfere with the attainment of the GHG reduction targets in SB 32, and impacts would be ***less than significant***. No mitigation is required.

Even though no applicable regulatory authority (BAAQMD or the city) has an adopted threshold for construction GHG emissions, BAAQMD encourages the lead agency to incorporate BMPs to reduce GHG emissions during construction, as applicable. BAAQMD provides some examples of measures to reduce construction GHG emissions but does not have a list of BMPs necessary to meet a construction GHG threshold because BAAQMD does not provide such a threshold. Specifically, BAAQMD states that BMPs may include using alternative-fuel (e.g., biodiesel, electric) construction vehicles/equipment for at least

15 percent of the fleet; using local building materials for at least 10 percent of a project; and recycling or reusing at least 50 percent of construction waste or demolition materials. CARB's 2017 Scoping Plan, Appendix B, also includes examples of potentially feasible measures that could be considered by local agencies to reduce GHG emissions during construction. However, as stated in Appendix B to the scoping plan, "[t]his appendix should be viewed as a general reference document. It should not be interpreted as official guidance or as dictating requirements for a city or county in addressing greenhouse gases (GHGs) in its General Plan or for local project CEQA mitigation."

Consistent with the recommendation in the scoping plan, the Proposed Project would minimize idling times during construction by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes, as required by the California Airborne Toxics Control Measure.[24] Clear signage reflecting this requirement would be provided for construction workers at all access points. In addition, consistent with BAAQMD's suggestion and Menlo Park Municipal Code requirements, the Proposed Project would divert (i.e., salvage, recycle, or compost rather than send to a landfill) at least 65 percent of both inert and non-inert nonhazardous demolition and construction waste, as required by Menlo Park Municipal Code Chapter 12, Sections 12.18 and 12.48.

To further reduce construction GHG emissions, the Project Sponsor would comply with feasible and practical construction-related measures suggested in Appendix B to the 2017 Scoping Plan and BMPs identified by BAAQMD.

The Appendix B scoping plan measures and BAAQMD-recommended BMPs outlined below will be incorporated into the Proposed Project as conditions of approval, subject to review of feasibility and practicality, based on the specifics of the Proposed Project, including but not limited to, the architectural design, availability of technological advances in equipment, and general availability of construction equipment and/or materials. The list of measures below is not an exhaustive list; the city and the Project Sponsor would review the comprehensive list of potential measures in Appendix B of the scoping plan and the BAAQMD recommended BMPs and determine which measures would be feasible and practical for each specific building permit, based on analysis from the Project Sponsor. Documentation of feasible and practical measures would be required as a Project condition for each building permit through the conditional development permit.

- Instead of using fossil fuel–based generators for temporary jobsite power, grid-sourced electricity from Pacific Gas and Electric Company (PG&E) or Peninsula Clean Energy shall be used to power tools (e.g., drills, saws, welders) as well as any temporary office buildings used by construction contractors. This measure shall be required during all construction phases, except demolition, site grubbing, site grading, and the installation of electric, water, and wastewater infrastructure. This measure shall be implemented during building framing and erection for new buildings, all interior work, and the application of architectural coatings. Electrical outlets shall be designed according to PG&E's Greenbook standards and placed in accessible locations throughout the construction site. The Project Sponsor, or its primary construction contractor, shall coordinate with the utility to activate a temporary service account prior to starting construction (with the exception of demolition) to the extent feasible and practical, as determined by the city and based on an analysis by the Project Sponsor.

[24] California Air Resources Board. 2021. *13 CCR 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.* Amended: September 9, 2021. Available: https://ww2.arb.ca.gov/sites/default/files/2022-06/13_CCR_2485_OAL_06222022-2_ADA_06272022_0.pdf. Accessed: February 26, 2024.

- Require diesel equipment fleets to be lower emitting than any current emission standard (statewide average equipment fleet tier) to the extent feasible and practical, as determined by the city and based on an analysis by the Project Sponsor.[25]
- Enforce idling time restrictions for construction vehicles.[26]
- Minimize tree removal, and mitigate indirect GHG emissions increases that occur because of vegetation removal, loss of sequestration, and soil disturbance to the extent feasible and practical, as determined by the city and based on an analysis by the Project Sponsor.[27]
- Use alternative-fuel (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet to the extent feasible and practical, as determined by the city and based on a feasibility analysis by the Project Sponsor.
- Use local building materials for at least 10 percent of all project construction to the extent feasible and practical, as determined by the city and based on a feasibility analysis by the Project Sponsor
- Recycle or reuse at least 50 percent of construction waste or demolition materials.

Operation

BAAQMD's adopted thresholds of significance for GHG are based on whether or not the Proposed Project would incorporate specific design and transportation features. The Proposed Project would be consistent with design elements regarding natural gas usage because the Proposed Project would not support natural gas use in new buildings. The Proposed Project would be consistent with respect to efficient energy usage because, as discussed in Section 3.5, *Energy*, the Proposed Project would result in a reduction in energy usage compared to existing conditions. The Proposed Project would be consistent with the EV charging requirements because it would include EV charging infrastructure, in compliance with the Menlo Park Municipal Code. Within the residential area, the townhouses would have one EV-ready space; the multi-family buildings would have one EV-ready space per unit, 15 percent of which would have EV chargers. Approximately 15 percent of the parking spaces in the Office/R&D area would be EV ready, 10 percent of which would have EV chargers.

As noted above, for purposes of this EIR, the evaluation of the transportation-related GHG impacts of the Proposed Project is based on consistency with the city's VMT threshold. As discussed under *Transportation Demand Management* in Chapter 2, *Project Description*, the Proposed Project would include a project-specific transportation demand management (TDM) plan for both residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization. Various Project features promote transportation efficiency, including its TDM plan, mix of uses, location in an urban area rather than a remote rural area, and proximity to transit. Therefore, the Proposed Project's operational GHG emissions would not constitute a considerable contribution to significant climate change impacts. Therefore, this impact would be ***less than significant***. No mitigation is required.

[25] As shown in Table 3 of Appendix 3.4-1, the diesel equipment fleet to be used for the Proposed Project would satisfy this condition of approval.

[26] Compliance with the California Airborne Toxics Control Measure would satisfy this condition of approval.

[27] The Proposed Project would necessitate tree removals but would comply with the city's tree replacement requirements.

In addition, as shown in Table 3.6-5, the Proposed Project at full buildout would result in a net reduction in operational GHG emissions compared to existing conditions.

Table 3.6-5. Summary of Operational GHG Emissions ($MTCO_2e$/year)

Emissions Source	Existing Conditions	Full Buildout Conditions
Mobile	624	10,583
Laboratory	N/A	N/A
Emergency Generators	32	236
Replaced Exported Electricity Generation	-359	N/A
Electricity Use from PG&E	28	N/A
Natural Gas Use – PG&E	13	N/A
Natural Gas Use – Cogeneration Plant	24,232	N/A
Natural Gas Use – Buildings P, S, & T	-364	N/A
Water Use	65	127
Solid Waste Generation	92	882
Refrigerants	4.6	4.9
Landscaping	23	52
Total Greenhouse Gas Emissions ($MTCO_2e$)	**24,390**	**11,885**
Net Full Buildout GHG Emissions ($MTCO_2e$)		**-12,505**

Source: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Table 43.
Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent

Impact GHG-2: Conflicts with Applicable Plans and Policies. The Proposed Project would not conflict with an applicable plan, policy, or regulation, adopted for the purpose of reducing emissions of GHGs. (LTS)

Statewide Greenhouse Gas Reduction Targets and Plans

AB 32 and SB 32 outline the State's GHG emissions reduction targets for 2020 and 2030, respectively. AB 1279 outlines the State's GHG reduction goal to achieve net-zero GHG emissions (i.e., reach a balance between the GHGs emitted and removed from the atmosphere) no later than 2045. CARB adopted the 2022 Scoping Plan as a framework for achieving AB 1279. The plan outlines a series of technologically feasible, cost-effective, and equity-focused measures to reduce statewide GHG emissions. Many of these actions build on programs of previous scoping plans, including the 2017 Scoping Plan, which CARB adopted to achieve its 2030 GHG reduction target, pursuant to SB 32.

Consistency with the CARB 2022 Scoping Plan

In November 2022, CARB approved California's 2022 Scoping Plan for Achieving Carbon Neutrality (Third Update). This update extends the previous scoping plans and lays out a path for achieving carbon neutrality no later than 2045, as directed by AB 1279. The previous 2017 Scoping Plan identified a technologically feasible and cost-effective path for achieving the 2030 GHG reduction target by leveraging existing programs such as the Renewables Portfolio Standard, Advanced Clean Cars, low-carbon fuel standard, SLCP Reduction Strategy, cap-and-trade program, and a mobile-source strategy that included strategies targeted to increase zero-emission vehicle fleet penetration. The 2022 Scoping Plan looks

toward the 2045 climate goals and the deeper GHG reductions needed to meet the State's statutory carbon neutrality target specified in AB 1279 and EO B-55-18. The 2022 Scoping Plan provides a sector-by-sector roadmap for achieving these goals, focusing on technological feasibility, cost-effectiveness, and equity. The plan's Appendix D makes nonbinding suggestions that local agencies, such as the city of Menlo Park, may consider as they identify significance thresholds and mitigation measures for GHG impacts. The 2022 Scoping Plan suggests, but does not mandate, measures related to renewable energy, the low-carbon fuel standard, cleaner vehicles and fuels, SLCPs, and natural and working lands that could be relevant to the Proposed Project.

As discussed in Section 3.2.3 of Appendix 3.4-1, Appendix D of the 2022 Scoping Plan states that a development project can determine consistency with the scoping plan by using significance criteria from an air district or other lead agency if the criteria align with the State's current GHG emission reduction goals. Because the BAAQMD's current GHG significance criteria were created to determine a project's "fair share" of what is necessary to meet California's 2045 climate goals, the criteria are adequate for determining consistency with the 2022 Scoping Plan. Because the Proposed Project's impacts would be less than significant compared with BAAQMD's CEQA significance criteria for building and transportation design features, the Proposed Project would be consistent with the 2022 Scoping Plan.

Regional Greenhouse Gas Reduction Targets and Plans

Consistency with Plan Bay Area 2050

Plan Bay Area 2050, the RTP/SCS for the San Francisco Bay Area, was prepared by the MTC pursuant to the requirements of SB 375, as discussed in the Regulatory Setting, above. Plan Bay Area 2050 is a state-mandated, integrated long-range transportation and land use plan that demonstrates reductions in emissions from passenger cars and light-duty trucks.[28] Plan Bay Area 2050 carries forward many of the development and funding strategies of Plan Bay Area 2040. As explained in Section 3.3, *Transportation*, the Proposed Project would be consistent with Plan Bay Area 2050 goals and performance targets for transportation system effectiveness. Specifically, the Proposed Project would increase the mode share for non-auto forms of transportation.

Plan Bay Area 2050 is a 30-year plan that outlines thirty-five integrated strategies focused on four key interrelated elements – housing, the economy, transportation, and the environment – to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. The Plan's strategies chart a course to make the Bay Area more affordable, connected, diverse, healthy, and vibrant for all residents, while also achieving regional GHG reduction targets established by CARB pursuant to the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill (SB) 375, Statutes of 2008). The Plan serves as the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) for the Bay Area. An RTP/SCS is required by State and Federal laws to be updated every four years. The Plan covers the Bay Area's nine counties, including San Mateo County. Environmental Strategies EN1, EN4, EN7, EN8 and EN9 are strategies recommended to reduce climate change impacts. Project consistency with the applicable Plan Bay Area Strategies is discussed in Table 3.6-6. As discussed in Table 3.6-6, the Proposed Project would be consistent with the goals of Plan Bay Area 2050.

[28] California Air Resources Board. 2018. *SB 375 Regional Greenhouse Gas Emissions Reduction Targets.* Approved: March 22, 2018. Available: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: February 15, 2024.

Table 3.6-6. Consistency of the Project with Plan Bay Area 2050

Environmental Strategy	Project Consistency
Allow a greater mix of housing densities and types in Growth Geographies	CONSISTENT. The Project is located within the Growth Geography area and supports a greater mix of housing densities and types as the Project would include market-rate residential dwelling units as well as affordable housing.
Build adequate affordable housing to ensure homes for all	CONSISTENT. The Project would include affordable housing both through compliance with the city's local inclusionary requirements along with providing land to be dedicated to an affordable housing developer for development of additional affordable housing units.
Integrate affordable housing into all major housing projects	CONSISTENT. The Project would include affordable housing both through compliance with the city's local inclusionary requirements along with providing land to be dedicated to an affordable housing developer for development of additional affordable housing units.
Transform aging malls and office parks into neighborhoods	CONSISTENT. The Project would demolish aging office/R&D buildings and would transform the existing aging campus into a modern mixed-use neighborhood.
Allow greater commercial densities in Growth Geographies	CONSISTENT. The Project is located within a Growth Geography area and supports increasing commercial densities by replacing the existing aging office/R&D campus with new modern office/R&D buildings that will attract commercial end users, while maintaining the existing amount of commercial square footage within the Project site.
Build a Complete Streets network	CONSISTENT. The Project would enhance streets to promote walking, biking, and other micro-mobility by improving biking and walking networks and providing bicycle amenities.
Advance regional Vision Zero policy through street design and reduced speeds	CONSISTENT. The Project would comply with city of Menlo Park requirements in support of Vision Zero.
Maintain urban growth boundaries	CONSISTENT. The Project is an infill project that redevelops a site with existing urban development. The Project replaces old buildings with new, efficient mixed-use development. and is near the city center and transit. The Project boundaries are entirely within an existing municipal urban footprint.
Modernize and expand parks, trails and recreation facilities	CONSISTENT. The Project would include approximately 25 acres of open space areas and supporting amenities, including a network of publicly accessible pedestrian and bicycle trails, open spaces and active/passive recreational areas.
Expand commute trip reduction programs at major employers	CONSISTENT. The Project is near transit and, as applicable, employers would be required to comply with the Bay Area Commuter Benefits Program. The Project's TDM plan would include additional measures that disincentivize auto commuters and incentivize the use of alternative modes of transportation.

Environmental Strategy	Project Consistency
Expand clean vehicle initiatives	SUPPORTING. This measure is directed towards public agencies. However, the Project's TDM plan would include a range of potential measures including a commuter shuttle, carsharing, carpool subsidies, and other commuter benefits that may be implemented throughout the Project site. Additionally, the Project is designed to encourage alternative travel modes by providing end-of-trip bicycle facilities and bike paths. The Project would incorporate adequate EV-ready parking spaces within both the office/R&D area and residential area to meet code requirements pursuant to the city of Menlo Park Municipal Code charging requirements and would provide 100% carbon-free electricity at the EV charging stations, which could have the indirect effect of incentivizing EV usage among Project users.
Expand transportation and demand management initiatives	SUPPORTING. This measure is directed towards public agencies. However, the Project's TDM plan would include a range of potential measures to discourage vehicle trips, including a commuter shuttle, carsharing, carpool subsidies, and other commuter benefits that may be implemented throughout the Project Site. The Project is also designed to reduce vehicle trips by limiting parking spaces on-site, and providing end-of-trip bicycle facilities and bike paths.

Source: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Appendix A, Table 2.

Local Greenhouse Gas Reduction Targets and Plans

Consistency with the City of Menlo Park Climate Action Plan

The most recent update to the city's CAP, the 2030 CAP, was adopted in April 2021.[29] The 2030 CAP updated emissions inventories and adopted a climate goal that calls for net-zero carbon by 2030. The CAP also aims for a 90 percent reduction in CO_2e emissions from 2005 levels by 2030. To achieve GHG reductions, the CAP promotes six different goals. Table 3.6-7 discusses the Proposed Project's consistency with the six 2030 CAP goals. As discussed in Table 3.6-7, the Proposed Project would be consistent with the goals of the 2030 CAP.

Table 3.6-7. Consistency of the Project with the City of Menlo Park 2030 Climate Action Plan

Action	Project Consistency
Explore policy/program options to convert 95 percent of existing buildings to all-electric buildings by 2030	NOT APPLICABLE. The Proposed Project would involve the demolition and replacement of several existing buildings that use natural gas with all-electric buildings, in compliance with the intent of the city's adopted Reach Code. The Proposed Project would also remove a cogeneration plant on the Project Site that is powered by natural gas.
Set citywide goals for increasing EVs and decreasing gasoline sales	SUPPORTING. This action is directed toward the city; it concerns establishing goals, not specific projects. However, the Proposed Project would comply with the city of Menlo Park Municipal Code, which would incentivize EV usage among Project users. These charging stations would be powered by 100 percent carbon-free electricity.

[29] City of Menlo Park. 2021. *2030 Climate Action Plan*. Prepared by the Environmental Quality Commission. Adopted by City Council: July 2020 (Resolution No.6575). Amended: April 20, 2021 (Resolution No. 6621). Available: https://menlopark.gov/files/sharedassets/public/v/1/city-managers-office/documents/ sustainability/2030-climate-action-plan-amended-2021.pdf. Accessed: February 9, 2024.

Action	Project Consistency
Expand access to EV charging for multiple-family and commercial properties	CONSISTENT. The Proposed Project would install EV charging infrastructure, consistent with the city of Menlo Park Municipal Code, including in residential and commercial areas on the Project Site, thereby expanding access to EV chargers.
Reduce vehicle miles traveled (VMT) by 25 percent or an amount recommended by the Complete Streets Commission	CONSISTENT. The Proposed Project would include a TDM plan, which would reduce trip generation and VMT by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses.
Eliminate the use of fossil fuels from municipal operations	NOT APPLICABLE. The Proposed Project is a private development. However, the Proposed Project would not include natural gas plumbing or appliances in the buildings and would purchase 100 percent carbon-free electricity.
Develop a climate adaptation plan to protect the community from sea-level rise and flooding	NOT APPLICABLE. This action is directed toward the city rather than specific projects. The Project Site is not within a shoreline community that would be affected by sea-level rise.

Source: Ramboll. 2024. *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Technical Report, Parkline, Menlo Park, California.* February. Appendix A, Table 3.

Consistency with the City of Menlo Park Ordinances, General Plan, and Reach Code

The city's municipal code includes several GHG emissions reduction requirements for mixed-use residential and office zoning districts that are most likely applicable to the Proposed Project. The Proposed Project would purchase 100 percent renewable electricity and provide onsite energy generation by installing solar photovoltaic systems, as required by Title 24. The Proposed Project is exploring the use of solar arrays and energy storage as a strategy for generating power onsite, which would power EVCS spaces and offset energy use from each building. The Proposed Project may use purchased renewable energy credits and/or participate in a comparable clean energy program to offset any non-renewable energy used at the Project Site, per the anticipated requirements in the proposed zoning. The Proposed Project would also comply with Menlo Park Municipal Code Section 12.18.060, which requires 15 percent of all parking spaces to be EV spaces and 10 percent to be designated for electric-vehicle supply equipment (EVSE). The Proposed Project would also divert (i.e., salvage, recycle, or compost rather than send to a landfill) at least 65 percent of both inert and non-inert nonhazardous demolition and construction waste, as required by Menlo Park Municipal Code Title 12, Chapters 12.18 and 12.48.

The Proposed Project is in an area where general plan and zoning ordinance designations for surrounding properties include residential, commercial, public/quasi-public, and parks and recreation. As a part of the Proposed Project, the general plan and the zoning ordinance would be amended to reflect the proposed range of Project-related land uses (i.e., multi-family apartments, public/quasi-public, office, R&D, compatible uses consistent with surrounding uses). The goals and policies adopted in the general plan to avoid or minimize climate change impacts pertain to the Proposed Project and are reflected in the Proposed Project's location and design.

The city adopted local amendments to Title 24 in its Reach Code that would require electricity to be the only fuel source (not natural gas) for newly constructed buildings. As discussed above, the Proposed

Project would comply with the intent of the city's adopted Reach Code[30] by eliminating natural gas plumbing and appliances in the proposed buildings. The Project would follow Menlo Park Municipal Code Chapter 12.16, which requires all newly constructed buildings to meet 100 percent of energy demand (electricity and natural gas) with electricity, which would comply with the intent of the city's adopted Reach Code. The Project would not conflict with the city's plans, policies, and regulations adopted for the purpose of reducing GHG emissions.

Conclusion

In summary, the quantitative efficiency of operations associated with the Proposed Project would be aligned with the statewide GHG target for 2030 mandated by SB 32 as well as Menlo Park Municipal Codes that require onsite or offsite renewable energy generation, the use of 100 percent renewable electricity, and/or renewable energy credits and/or certified renewable energy offsets. The Proposed Project would include the GHG emissions reduction requirements for mixed-use residential zoning. The city's adopted Reach Code prohibits the onsite combustion of natural gas. The Menlo Park Municipal Code requires a minimum of 15 percent of the parking spaces for passenger vehicles to be EV spaces, with another 10 percent designated EVSE, thereby supporting the projected future vehicle fleet. Also, the Proposed Project would be consistent with Plan Bay Area 2050, which is a regional plan to reduce per-service-population VMT in the San Francisco Bay Area. The Proposed Project's VMT would be below the city's VMT thresholds. The Proposed Project would be consistent with all applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions, and this impact would be ***less than significant***. No mitigation is required.

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. Climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where they are emitted. Climate change is the result of the individual contributions of countless past, present, and future sources. Therefore, GHG impacts are inherently cumulative, and the analysis above is inclusive of cumulative impacts.

[30] In March 2024, the California Restaurant Association and the city of Berkeley entered into a settlement agreement, halting enforcement of the city of Berkeley's ban on natural gas piping as the City Council takes steps to repeal the ordinance in compliance with the Ninth Circuit ruling. As a result of the *California Restaurant Association v City of Berkeley* ruling, enforcement of the city of Menlo Park's Reach Code has been paused.

3.7 Noise

This section identifies and evaluates the Proposed Project's potential impacts related to noise and vibration, including construction noise, traffic noise, stationary-source and operational noise, and ground-borne vibration. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project and used in this analysis includes:

- *Parkline – Noise Technical Memorandum*.[1]

The existing setting and Project analysis outlined in the technical documentation are incorporated throughout this section. The *Parkline – Noise Technical Memorandum*, including the model assumptions and inputs for construction and operational noise and vibration calculations, is included in Appendix 3.7-1 of this EIR.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. Comments noted that the EIR should evaluate the effects traffic congestion would have on noise levels—specifically, at Menlo-Atherton High School. Comments also noted that the analysis in the EIR should consider the various impacts that construction and other noise sources may have on schools, including ambient noise levels near Menlo-Atherton High School. In addition, comments expressed concern regarding whether noise effects from the Proposed Project could affect the Sequoia Union High School District's need for new or physically altered school facilities.

Overview of Noise and Sound

A brief description of the noise and vibration concepts and terminology used in this assessment is provided below. Some of these are technical terms used in measuring sound and its effects, which are not easily explained in layman's terms.

- **Sound**. A vibratory disturbance transmitted by pressure waves through a medium such as air or water and capable of being detected by a receiving mechanism, such as the human ear or a microphone. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient (existing) sound level.
- **Noise.** Sound that is loud, unpleasant, unexpected, or otherwise undesirable. Commonly defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health.
- **Decibel (dB).** A unitless measure of sound on a logarithmic scale that indicates the squared ratio of sound pressure amplitude to a reference sound pressure amplitude. The reference pressure is 20 micropascals. Although the decibel scale is used to quantify sound intensity, it does not accurately describe how sound intensity is perceived by human hearing.

[1] ICF. 2024. *Parkline – Noise Technical Memorandum*. June 13.

- **A-weighted Decibel (dBA).** An overall frequency-weighted sound level in decibels that approximates the frequency response of the human ear. The dBA scale is the most widely used scale for environmental noise assessments. Table 3.7-1 summarizes typical A-weighted sound levels for different noise sources.
- **Maximum Sound Levels (L_{max}).** The maximum sound level measured during the measurement period.
- **Minimum Sound Level (L_{min}).** The minimum sound level measured during the measurement period.
- **Equivalent Sound Level (L_{eq})**. The equivalent steady-state sound level that, in a stated period of time, contains the same acoustical energy. The 1hour A-weighted equivalent sound level (L_{eq} 1h) is the energy average of A-weighted sound levels occurring over a 1-hour period.
- **Day-Night Level (L_{dn}).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with a 10 dB penalty added to sound levels between 10:00 p.m. and 7:00 a.m.
- **Community Noise Equivalent Level (CNEL).** The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the sound levels occurring during the period from 7:00 p.m. to 10:00 p.m. and 10 dB added to the sound levels occurring during the period from 10:00 p.m. to 7:00 a.m. L_{dn} and CNEL are typically within 1 dBA of each other and, for all intents and purposes, interchangeable.
- **Vibration Velocity Level (or Vibration Decibel Level, VdB).** The root-mean-square velocity amplitude for measured ground motion, expressed in decibels.
- **Peak Particle Velocity (PPV).** A measurement of ground vibration, defined as the maximum speed at which a particle in the ground is moving and expressed in inches per second (in/sec).
- **Sensitive Receptor.** Noise- and/or vibration-sensitive receptors, including land uses where quiet environments are necessary for enjoyment as well as public health and safety. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, and nursing homes are examples.

Human sound perception, in general, is such that a change in sound level of 1 dB cannot typically be perceived by the human ear, a change in sound level of 3 dB is just noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. A doubling of actual sound energy is required to result in a 3 dB (i.e., barely noticeable) increase in noise; in practice, this means that the volume of traffic on a roadway would typically need to double to result in a noticeable increase in noise.

The decibel level of a sound decreases (or attenuates) exponentially as the distance from the source of that sound increases. For a point source, such as a stationary compressor or construction equipment, sound attenuates at a rate of 6 dB per doubling of distance. For a line source, such as free-flowing traffic on a freeway, sound attenuates at a rate of 3 dB per doubling of distance. Atmospheric conditions, including wind, temperature gradients, and humidity, can change how sound propagates, or spreads, over distance and affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive surface, such as grass, attenuates at a greater rate than sound that travels over a hard surface, such as pavement. The increased attenuation is typically in the range of 1 to 2 dB per doubling of distance. Barriers, such as buildings and topography, that block the line of sight between a source and receiver also increase the attenuation of sound over distance.

Table 3.7-1. Typical A-weighted Sound Levels

Common Outdoor Activities	Sound Level (dBA)	Common Indoor Activities
	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 mph at 50 feet		Food blender at 3 feet
	80	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower at 100 feet	70	Vacuum cleaner at 3 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban area, daytime	50	Dishwasher in next room
Quiet urban area, nighttime	40	Theater, large conference room (background)
Quiet suburban area, nighttime		
	30	Library
Quiet rural area, nighttime		Bedroom at night, concert hall (background)
Rustling of leaves	20	
		Broadcast/recording studio
	10	
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment*. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: February 2, 2024.

Overview of Ground-borne Vibration

Vibration is an oscillatory motion (i.e., a repetitive rhythm) through a solid medium. Vibration can be quantified in terms of velocity or acceleration. Variations in geology and distance result in different vibration levels. In all cases, vibration amplitudes decrease with increased distance. The amplitude of a seismic or sound wave is the maximum displacement, or distance, between the peak and the valley of the wave.

The operation of heavy construction equipment, particularly pile-driving equipment and other impact devices (e.g., pavement breakers), if used during construction, creates seismic waves that radiate along the surface and downward into the ground. Surface waves can be felt as ground vibration. Vibration from the operation of construction equipment can result in effects that range from annoyance for people to damage for structures. However, according to the Federal Transit Administration (FTA), "ground-borne

vibration is almost never a problem outdoors. Although the motion of the ground may be perceived, without the effects associated with the shaking of a building, the motion does not provoke the same adverse human reaction."[2]

Perceptible ground-borne vibration is generally limited to areas within a few hundred feet of construction activities. As seismic waves travel outward from a vibration source, they cause rock and soil particles to oscillate. The actual distance that these particles move is usually only a few ten thousandths to a few thousandths of an inch. The rate or velocity (in inches per second) at which these particles move (in inches per second) is the commonly accepted descriptor of vibration amplitude, referred to as peak particle velocity (PPV). Table 3.7-2 summarizes typical vibration levels generated by construction equipment at a reference distance of 25 feet as well as other distances.

Table 3.7-2. Vibration Source Levels for Construction Equipment

Equipment	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet	PPV at 175 Feet
Pile driver (sonic/vibratory)	0.734	0.2595	0.1413	0.0918	0.0396
Hoe ram	0.089	0.0315	0.0171	0.0111	0.0048
Large bulldozer	0.089	0.0315	0.0171	0.0111	0.0048
Loaded truck	0.076	0.0269	0.0146	0.0095	0.0041
Jackhammer	0.035	0.0124	0.0067	0.0044	0.0019
Small bulldozer	0.003	0.0011	0.0006	0.0004	0.0002

Source: Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: February 2, 2024.

Existing Conditions

Environmental Setting

Existing Noise Sources

The existing ambient noise levels in the vicinity of the Project Site are dominated by traffic on major roadways in the area, including Ravenswood Avenue, Middlefield Road, and El Camino Real. In the residential neighborhoods near the Project Site, noise sources are typical of those in residential areas, with sounds of landscaping equipment, children's voices, music, and car-related noises. In addition, the recreational facilities west of the Project Site (including Menlo Swim and Sport, Burgess Park Tennis Court, and the soccer and baseball fields at Burgess Park) are area sources that result in intermittent noise, such as voices yelling and cheering, water splashing at the public pool, shoes and bouncing balls screeching at the public tennis court, etc. In addition, two rail lines traverse Menlo Park: the Dumbarton Rail Corridor and the Caltrain rail line. The Dumbarton Rail corridor is currently not used and not an active noise source. The Caltrain rail line is active, and the tracks are approximately 800 feet from the Project Site. Caltrain locomotives activate the train horn at every right-of-way

[2] Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment.* Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: February 2, 2024.

crossing in the city. The crossing closest to the Project Site is at Ravenswood Avenue, near Alma Street. The train crossing gates also result in warning-bell noise, although this source of noise is quieter than the train horns.

Surrounding Land Uses and Noise Sensitivity

The existing environment comprises several types of land uses (e.g., noise-sensitive land uses). Such uses are generally defined as locations where people reside or where the presence of unwanted sound can adversely affect use of the land. The vicinity of the Project Site generally consists of residential neighborhoods, public facilities, and office uses. The land uses in the vicinity of the Project Site are described below. Figure 3.7-1 depicts the location of noise- and vibration-sensitive land uses in the vicinity of the Project Site.

North of the Project Site

North of Ravenswood Avenue, there are multiple single-family and multi-family residences. In addition, Trinity Church, also north of the Project Site, is a noise-sensitive land use when church services are occurring. The church campus comprises an early-childhood program and a family service center. For these land uses north of Ravenswood Avenue, the distance from the boundary of the Project Site is approximately 60 feet. At the boundary of the Project Site, there are currently landscaped areas and driveways. Both existing buildings and proposed buildings would be set back from the boundary of the site.

The First Church of Christ, Scientist is also north of the Project Site but adjacent to and surrounded on three sides by the site (the fourth side of the church property borders Ravenswood Avenue). The church site is also home to the Alpha Kids Academy, which is a preschool facility. The distance from the church building to the Project Site boundary is, at the nearest point, approximately 25 feet.

East of the Project Site

East of the Project Site are Menlo-Atherton High School (200 feet to the nearest campus building) and single-family residences (170 feet), all of which are east of Middlefield Road. Adjacent to the Project Site are three unaffiliated office buildings, approximately 40 feet from the nearest boundary. Office buildings are generally not considered noise-sensitive land uses.

South of the Project Site

South of the Project site is a series of office buildings, part of the U.S. Geological Survey campus. The closest building is approximately 50 feet from the Project boundary. Office buildings are generally not considered to be sensitive to noise.

The southern boundary of the Project Site is not a straight line. Single-family residences are adjacent to different sections of the border, including the homes on Waverley Street and Kent Place (i.e., the Linfield Oaks neighborhood) and the homes on Thurlow Street and Barron Street (i.e., the Classics of Burgess Park neighborhood). As noted, the Project boundary is adjacent to these homes, and thus, the backyards of these residential properties share a border with the Project Site. The distance from the Project boundary to the homes is, at the nearest point, approximately 15 feet.

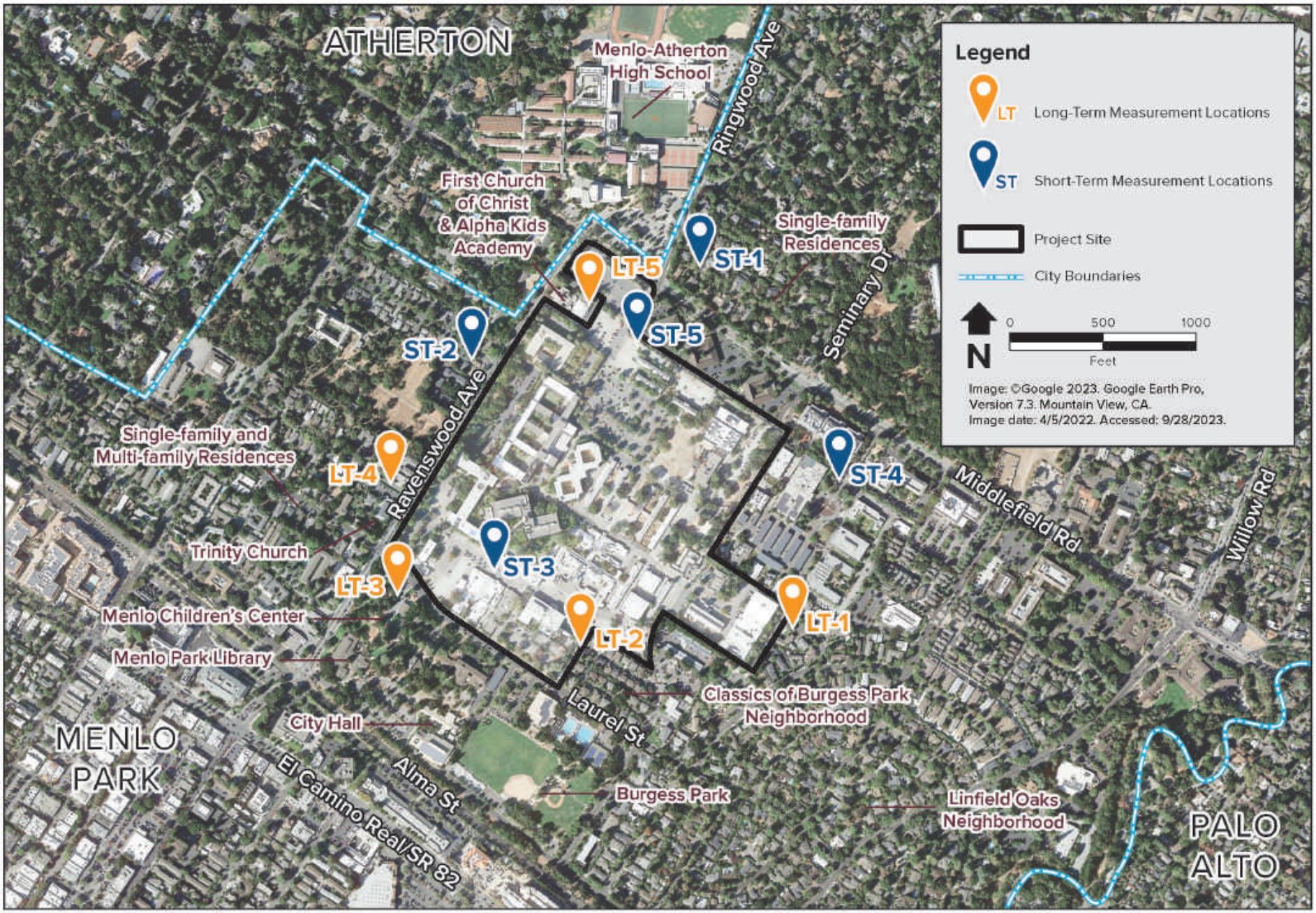

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Figure 3.7-1
Sensitive Receptors and Noise Measurement Locations
Parkline

West of the Project Site

West of the Project Site is a combination of public facilities and other resources, including a public library, the Menlo Children's Center, City Hall, recreational facilities, and Burgess Park. Of these facilities, the Menlo Children's Center is very likely the most noise sensitive, being located approximately 120 feet from the Project Site. The public library is also a noise-sensitive use, located approximately 450 feet from the Project Site. The other facilities in this area are similar to office uses (e.g., City Hall) or are recreational and, thus, less sensitive to noise.

Existing Noise Levels

Ambient noise is often monitored or measured to characterize ambient noise levels in the vicinity of a project. To quantify existing ambient noise levels near the Project Site, measurements were conducted with use of integrating sound-level meters (SLMs) on Wednesday, April 19, and Thursday, April 20, 2023, to document existing noise levels in the area. Included were both short-term (ST) measurements, conducted over a period of 15 minutes, and long-term (LT) noise measurements, which logged hourly data over a period of at least 24 hours. The instrument used to obtain the ST noise measurements was a Type 1 Larson Davis SLM (Model LxT). The instruments used to obtain the LT noise measurements were one Type 2 Piccolo-I SLM and four Type 2 Piccolo-II SLMs. All SLMs were field calibrated by a Larson Davis CAL200 acoustical calibrator prior to each measurement to ensure accuracy.

During the ST measurements, weather conditions were generally clear, with slight cloud cover at times. Wind speeds were approximately 1 to 2 miles per hour and temperatures ranged from approximately 50 to 68 degrees Fahrenheit.

The measurement locations were distributed throughout the area, with an emphasis on locations that were representative of one or more of the noise-sensitive receptors (i.e., residential dwellings) near the Project Site. Figure 3.7-1 depicts the locations for the noise measurements.

Table 3.7-3 summarizes the noise measurement results. Field noise survey sheets and the complete field measurement dataset are included in Appendix 3.7-1 of this EIR. Noise measurements indicate that the hourly ambient noise levels in the vicinity of the Project Site were between 50.2 and 74.1 dBA L_{eq} during the day, between 50.6 and 57.9 dBA L_{eq} during the evening, and between 45.8 and 58.3 dBA L_{eq} during the night. The LT noise measurements indicate that the average daily noise level ranged from approximately 57 to 64 dBA L_{dn} in the Study Area, which includes an approximate 1,000-foot radius around the Project Site.

Regulatory Setting

Federal

No federal laws, regulations, or policies for construction-related noise and vibration apply to the Proposed Project. The State of California (State) and local regulatory framework for noise and vibration is discussed below.

State Regulations

Governor's Office of Planning and Research

The State of California General Plan Guidelines, published and updated by the Governor's Office of Planning and Research, provides guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. These are guidelines for general land use planning that describe noise acceptability categories for different types of land uses considered by the State. California also requires each local government entity to perform noise studies and implement a noise element as part of its general plan. The purpose of the noise element is to limit the exposure of the community to excessive noise levels; the noise element must be used to guide decisions concerning land use. A discussion of relevant noise-related policies in the city of Menlo Park General Plan is included below.

Table 3.7-3. Measured Existing Noise Levels in the Vicinity of the Project Site

Measurement Location Number: Description	Date(s)	Time[a]	Noise Levels, dBA		
			L_{eq} Range (Average)	L_{max} Range	L_{dn}
LT-1: 31 Kent Place	04/19/2023 to 04/20/2023	Daytime	50.2–55.8 (53.5)	67.8–82.9	59
		Evening	50.6–52.4 (51.3)	67.8–70.7	
		Nighttime	47.4–56.9 (51.1)	50.7–65.5	
LT-2: 585 Barron Street	04/19/2023 to 04/20/2023	Daytime	50.2–56.1 (53.7)	66.5–77.2	57
		Evening	50.8–52.5 (51.9)	65.5–70.0	
		Nighttime	45.8–54.5 (49.6)	49.4–65.6	
LT-3: 801 Laurel Street	04/19/2023 to 04/20/2023	Daytime	57.9–62.7 (59.6)	70.6–87.4	62
		Evening	56.8–57.7 (57.2)	69.4–79.5	
		Nighttime	48.6–58.2 (52.8)	64.0–73.0	
LT-4: 1020 Pine Street	04/19/2023 to 04/20/2023	Daytime	56.6–74.1 (65.2)	69.9–89.1	64
		Evening	54.7–57.9 (56.1)	67.2–85.7	
		Nighttime	46.6–58.3 (51.1)	63.7–69.3	
LT-5: 201 Ravenswood Avenue	04/19/2023 to 04/20/2023	Daytime	55.4–63.3 (57.8)	67.8–82.4	59
		Evening	54.0–54.9 (54.4)	71.5–75.1	
		Nighttime	47.4–55.4 (50.7)	63.8–77.1	
ST-1: 200 Gloria Circle	4/19/2023	12:06 p.m.	49.6	66.0	N/A
ST-2: 1025 Marcussen Drive	4/19/2023	11:01 a.m.	55.9	68.7	N/A
ST-3: Onsite (D Street and West 4th Street)	4/19/2023	10:28 a.m.	55.3	67.1	N/A
ST-4: 345 Middlefield Road	4/20/2023	7:42 a.m.	49.3	63.4	N/A
ST-5: 545 Middlefield Road	4/20/2023	11:16 a.m.	52.5	60.8	N/A

Source: ICF. 2024. Parkline – Noise Technical Memorandum. June 13.

Notes:

N/A = not applicable; ST = short term; LT = long term; L_{max} = maximum sound level

[a] Daytime hours are 7:00 a.m. to 7:00 p.m., evening hours are 7:00 p.m. to 10:00 p.m., and nighttime hours are 10:00 p.m. to 7:00 a.m.

California Green Building Standards Code

There are no State noise and vibration standards that apply directly to the Proposed Project. However, Section 5.507.4.1.1 of the California Green Building Standards Code (i.e., non-residential mandatory measures) discusses exterior noise exposure for buildings when noise contour data from an airport, freeway, railroad, industrial source, of fixed guideway source are not readily available. In these situations, the California Green Building Standards Code states that new buildings may be exposed to a 1-hour noise level of 65 dB L_{eq} before additional noise abatement features (e.g., exterior walls, floor/ceiling assemblies, exterior windows) are required to achieve a composite Sound Transmission Class (STC) rating of 45 or a minimum STC of 40 with exterior windows. Implementation of these measures would need to reduce exterior noise to an hourly equivalent noise level (L_{eq} 1h) of 50 dBA in occupied areas during any hour of operation.

California Department of Transportation

As noted below, there are no quantitative local standards that can be used to assess Project-related vibration. Although the Proposed Project would not be subject to California Department of Transportation (Caltrans) oversight, guidance published by the agency nonetheless provides ground-borne vibration criteria that are useful in establishing thresholds for impact determinations. Caltrans' widely referenced *Transportation and Construction Vibration Guidance Manual*[3] provides guidance for two types of potential impact: (1) damage to structures and (2) annoyance to people. Guideline criteria for each are provided in Tables 3.7-4 and 3.7-5.

Table 3.7-4. Caltrans Guidelines for Vibration-Related Damage[4]

	Maximum PPV (in/sec)[a]	
Structure and Condition	**Transient Sources**	**Continuous/ Frequent Intermittent Sources**
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Notes:

a. Transient sources create a single, isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers (impact and vibratory), crack-and-seat equipment, and vibratory compaction equipment.

PPV = peak particle velocity (i.e., vibration level) in inches per second.

3 California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual.* Sacramento, CA: Noise, Division of Environmental Analysis. Available: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf. Accessed: February 24, 2023.

4 Ibid.

Table 3.7-5. Caltrans Guideline for Vibration-Related Annoyance[5]

Human Response	Maximum PPV (in/sec) [a]	
	Transient Sources	Continuous/ Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Notes:

[a] Transient sources create a single, isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers (impact and vibratory), crack-and-seat equipment, and vibratory compaction equipment.

PPV = peak particle velocity (i.e., vibration level) in inches per second.

Local Regulations

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted the General Plan and M-2 Area Zoning Update (ConnectMenlo), which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, along with associated amendments to the Land Use Element and a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with noise and vibration.

The city's General Plan contains general goals, policies, and programs that require local planning and development decisions to consider noise impacts. The Noise and Safety Element sets goals, policies, and implementing programs that work to achieve acceptable noise levels. In addition, the Noise and Safety Element sets land use compatibility noise standards for new developments. The following goal, policies, and implementing programs from the Noise and Safety Element related to noise and vibration were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal N1: Achieve Acceptable Noise Levels.

> **Policy N1.1: Compliance with Noise Standards.** Consider the compatibility of proposed land uses with the noise environment when preparing or revising community and/or specific plans. Require new projects to comply with the noise standards of local, regional, and building code regulations, including, but not limited to, the Menlo Park Municipal Code, Title 24 of the California Code of Regulations, and subdivision and zoning codes.
>
> **Policy N1.2: Land Use Compatibility Noise Standards.** Protect people in new development from excessive noise by applying the city's Land Use Compatibility Noise Standards for New Development to the siting and required mitigation for new uses in existing noise environments [see the city's General Plan Noise Element compatibility standards in Table 4].

5 Ibid.

Policy N1.4: Noise-Sensitive Uses. Protect existing residential neighborhoods and noise-sensitive uses from unacceptable noise levels and vibration impacts. Noise-sensitive uses include, but are not limited to, hospitals, schools, religious facilities, convalescent homes, and businesses with highly sensitive equipment. Discourage the siting of noise-sensitive uses in areas in excess of 65 dBA CNEL [Community Noise Equivalent Level] without appropriate mitigation and locate noise sensitive uses away from noise sources unless mitigation measures are included in development plans.

Policy N1.6: Noise Reduction Measures. Encourage the use of construction methods, state-of-the-art noise abating materials and technology and creative site design, including, but not limited to, open space, earthen berms, parking areas, accessory buildings, and landscaping to buffer new and existing development from noise and reduce potential conflicts between ambient noise levels and noise-sensitive land uses. Use sound walls only when other methods are not practical or when recommended by an acoustical expert.

Policy N1.7: Noise and Vibration from New Non-Residential Development. Design non-residential development to minimize noise impacts on nearby uses. Where vibration impacts may occur, reduce impacts on residences and businesses through the use of setbacks and/or structural design features that reduce vibration to levels at or below the guidelines of the Federal Transit Administration near rail lines and industrial uses.

Policy N1.8: Potential Annoying or Harmful Noise. Preclude the generation of annoying or harmful noise from stationary noise sources, such as construction and property maintenance activity and mechanical equipment.

Policy N1.10: Nuisance Noise. Minimize impacts from noise levels that exceed community sound levels through enforcement of the city's Noise Ordinance. Control unnecessary, excessive, and annoying noises within the city where not preempted by Federal and State control through implementation and updating of the Noise Ordinance.

Program N1.A: Require Acoustical Studies. Require acoustical studies for all new multi-family residential projects within the projected Ldn 60 dB noise contours so that noise mitigation measures can be incorporated into project design and site planning.

Program N1.D: Minimize Construction Activity Noise. Minimize the exposure of nearby properties to excessive noise levels from construction-related activity through CEQA [California Environmental Quality Act] review, conditions of approval and enforcement of the city's Noise Ordinance.

Land use compatibility noise standards are included in the city's General Plan Noise and Safety Element (refer to Table 3.7-6). According to the Noise and Safety Element, noise levels of up to 60 dBA L_{dn} are considered normally acceptable for single-family residential land uses; noise levels are conditionally acceptable up to 70 dBA L_{dn} for such uses as long as noise insulation is included in the design to reduce interior noise levels. For multi-family residential uses and hotels, noise levels of up to 65 dBA L_{dn} are considered normally acceptable; noise levels of 70 dBA L_{dn} are considered conditionally acceptable. For office buildings and commercial uses, noise levels of up to 70 dBA L_{dn} are considered normally acceptable; noise levels of up to 77.5 dBA L_{dn} are considered conditionally acceptable. For industrial uses, noise levels up to 75 dBA L_{dn} are considered normally acceptable; noise levels of up to 80 dBA L_{dn} are considered conditionally acceptable. For schools and churches, playgrounds, and neighborhood parks, noise levels of up to 70 dBA L_{dn} are considered normally acceptable; there are no separate conditionally acceptable noise limits for these uses.

Table 3.7-6. Land Use Compatibility Noise Standards for New Development

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dB)					
	55	60	65	70	75	80
Residential – low density (single family, duplex, mobile home)						
Residential – multi-family						
Transient lodging (motels, hotels)						
Schools, libraries, churches, hospitals, nursing homes						
Auditoriums, concert halls, amphitheaters						
Sports arena, outdoor spectator sports						
Playgrounds, neighborhood parks						
Golf courses, riding stables, water recreation, cemeteries						
Office buildings, business, commercial and professional centers						
Industrial manufacturing, utilities, agriculture						

INTERPRETATION

	Normally Acceptable	Specified land use is satisfactory, based on the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	Conditionally Acceptable	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction; with closed windows, fresh air supply systems or air-conditioning will normally suffice.
	Normally Unacceptable	New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Clearly Unacceptable	New construction or development should not be undertaken.

Menlo Park Municipal Code

In addition to the city'sGeneral Plan, the Menlo Park Municipal Code also contains noise regulations. Chapter 8.06 of the Menlo Park Municipal Code contains noise limitations and exclusions for land uses within Menlo Park. The code focuses on noise that constitutes a disturbance, as measured primarily at residential land uses. The regulations below from the Menlo Park Municipal Code would be applicable to the Proposed Project.

Summary of Analysis in the ConnectMenlo EIR

The ConnectMenlo EIR analyzed the impacts listed below that would result from implementing the updates to the Land Use and Circulation Elements and the M-2 Area Zoning Update.[6] The Proposed Project is not tiering from the ConnectMenlo EIR; however, that document includes thresholds of significance pertaining to vibration-related impacts that are applicable to the Proposed Project because they characterize the levels of significance for physical impacts on the environment. Specifically, according to Mitigation Measure NOISE-2a from the ConnectMenlo EIR, vibration levels must be limited to a PPV of 0.126 in/sec at the nearest workshop, 0.063 in/sec at the nearest office, and 0.032 in/sec at the nearest residence during daytime hours and 0.016 in/sec at the nearest residence during nighttime hours.

Environmental Impacts

This section describes the impact analysis related to noise for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.
- Generate excessive ground-borne vibration or ground-borne noise levels.
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

[6] City of Menlo Park. 2016a. *ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Area Zoning Update for the City of Menlo Park*. June 1. Prepared by Placeworks, Berkeley, CA. Menlo Park, CA. Available: https://menlopark.gov/files/sharedassets/public/v/1/community-development/documents/connectmenloprojectdeir_060116.pdf. Accessed: June 7, 2024;
City of Menlo Park. 2016b. *Response to Comments Document - ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Zoning Update for the City of Menlo Park*. October 10. Prepared by Placeworks, Berkeley, CA. Menlo Park, CA. Available: https://www.menlopark.org/DocumentCenter/View/12063/ ConnectMenloFEIR_101016?bidId=. Accessed: June 7, 2024.

Methods for Analysis

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been developed for purposes of EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of the Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, both scenarios would result in the same level of impact; in those cases, the analysis would not identify a "worst-case" scenario.

Table 3.7-7 lists, by impact number, the buildout scenario assumed in the noise analysis and provides an explanation as to why the buildout scenario was evaluated for each impact.

Table 3.7-7. Buildout Scenario Analyzed for Each Noise and Vibration Impact

Impact	Scenario Evaluated	Explanation
NOI-1: (Construction Noise) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.	Either scenario	The same construction activities would occur under either scenario, including, but not limited to, construction phasing, durations, hours, and equipment. Therefore, either scenario would result in the same impacts related to construction noise levels.
NOI-2: (Operational Noise) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.	100 percent R&D scenario	Traffic Noise: As discussed in Section 3.3, Transportation, R&D uses would be expected to generate more daily trips than office uses. Traffic noise is evaluated using average daily traffic volumes. Therefore, the 100 percent R&D scenario would have greater impacts associated with traffic noise. This analysis assumes that the trip distribution on the roadways is the same between R&D and office uses. Non-Traffic Noise: Based on a review of the site plans, it appears that the mechanical equipment and generators would be in the same locations under either scenario. Therefore, it is assumed that the equipment-to-receptor distances would be the same for either scenario. Mechanical equipment and generators for R&D uses typically use more power and more intense equipment than office uses. However, in practice, noise levels from the equipment do not differ appreciably between the scenarios because the equipment would be operated in a similar manner most of the time. In addition, noise from the Event Pavilion would also need to be considered. Per discussions with the Project Sponsor, either scenario would result in the same frequency or type of events at the Event Pavilion.

Impact	Scenario Evaluated	Explanation
NOI-3: Generate excessive ground-borne vibration or ground-borne noise levels.	Either scenario	The same construction activities would occur under either scenario, including, but not limited to, construction phasing, durations, hours, and equipment. Therefore, either scenario would result in the same impacts related to construction vibration. This analysis also evaluates the vibration impact of proposed generators in proximity to existing and proposed residential units during operation.
NOI-4: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.	Either scenario	The exposure of people residing or working in the Study Area to airport noise would be the same for either scenario because the Proposed Project would not affect airport operations.

Construction Noise – Off-Road Equipment

Phase-specific construction noise modeling was conducted for the loudest phases of construction at the Project Site, using the assumption that the three loudest pieces of equipment per phase of construction would be operating simultaneously and in proximity on the Project Site. Combining the noise level from the three loudest pieces of equipment and assuming proximity during operation results in a reasonably representative worst-case combined noise level. Construction activities are expected to occur between 6:00 a.m. and 3:30 p.m. on weekdays, excluding holidays. Construction would begin at 6:00 a.m. only for concrete pouring, which would occur twice a week for approximately 14 months. Therefore, this analysis compares construction noise to the thresholds that apply during the typical daytime construction hours of 8:00 a.m. to 6:00 p.m. and the early-morning hours of 6:00 a.m. to 8:00 a.m. (i.e., prior to the start of the daytime construction noise exemption period).

In addition to the general noise limits defined in the Menlo Park Municipal Code, and described above, noise from the temporary, occasional, or infrequent use of individual powered equipment between the hours of 8:00 a.m. and 6:00 p.m. Monday through Friday is limited to 85 dBA at a distance of 50 feet. This analysis also determines if the equipment proposed for construction would comply with this threshold.

Despite the exemption for daytime construction noise, construction activities that are exempt from specified noise limitations in the Menlo Park Municipal Code could still result in a significant physical impact on the environment if the noise increase is considered substantial. Therefore, construction noise is compared to the existing ambient noise level at nearby noise-sensitive land uses to estimate the temporary increases in noise that could occur; a threshold of 10 dB is used for that purpose. An evaluation is conducted to determine if an increase of 10 dB or more over the existing ambient noise level, perceived as a doubling of loudness,[7] would be expected to occur at noise-sensitive land uses.

[7] Similarly, a decrease of 10 dB is perceived as a halving of the sound level.

Construction Noise – Haul Trucks

Noise from construction haul trucks has been analyzed separately for the construction noise analysis. The Project Sponsor provided the number of haul truck trips for each construction subphase. The highest truck volumes per day would occur during the grading subphase. To conduct this analysis, the number of haul truck trips for the grading subphase was divided by the number of days for this subphase to estimate a reasonable number of daily haul truck trips during the worst-case phase for hauling. These volumes were modeled relative to existing conditions to determine the potential noise impacts from the addition of construction truck traffic on existing roadways. The construction haul truck route, as indicated by the Project Sponsor, involves trucks exiting either U.S. 101 or State Route (SR) 84 onto Willow Road and traveling south. When reaching Middlefield Road, the trucks would turn west and continue on Middlefield Road until reaching the Project Site. Trucks leaving the Project Site would take a nearly identical route to get to either U.S. 101 or SR-84 but would exit the Project Site on Ravenswood Drive just south of Middlefield Road and then turn east onto Middlefield Road.

For construction haul trucks, the threshold of significance depends on the existing noise level of the area near the roadway. Modeling was conducted to estimate the increase in traffic noise levels by comparing noise from existing conditions to noise from existing conditions plus the Proposed Project's construction trucks to first determine if a 3 dB, or "barely perceptible," increase in noise would occur along any modeled roadway segment in areas where the existing noise levels exceed the "normally acceptable" level, according to the land use compatibility chart. In areas where existing noise levels do not exceed the "normally acceptable" compatibility standard, the analysis identifies roadways where a 5 dB or greater increase would occur. However, an exceedance of these thresholds may not constitute a significant impact in certain circumstances, such as in areas where there are no noise-sensitive land uses as well as areas where the applicable compatibility standard has not been exceeded.

Operational Stationary Equipment and Area-Source Noise

Thirteen new emergency generators are proposed to be installed on the Project Site.[8] Although operating noise from generators is typically exempt in the case of an emergency, periodic testing of generators is not considered to be exempt. During testing, generator noise must meet the allowable noise levels, as established in the Menlo Park Municipal Code. The analysis of generator noise is based on noise levels from manufacturer data for the generator models anticipated to be used at the Project Site, as provided by the Project Sponsor. In addition, anticipated generator locations were provided by the Project Sponsor. Estimated noise levels were compared to the allowable noise levels in Menlo Park, which are 60 dBA during daytime hours and 50 dBA during nighttime hours when measured from any residential property.

Mechanical equipment would be installed throughout the Project Site. Proposed equipment would include rooftop heating, ventilation, and air-conditioning (HVAC) equipment as well as building-specific heating plant equipment. A general list of equipment types was provided by the Project Sponsor. To evaluate the noise levels resulting from operation of the Proposed Project's mechanical equipment, typical noise levels were used for HVAC and mechanical equipment; the information came from

[8] There are six existing generators along with a cogeneration power facility in place today, with one additional generator proposed to be installed by SRI in connection with its separate tenant improvements prior to Parkline project buildout (subject to separate City review and approval). The Parkline Project would remove 3 of the 6 existing SRI generators along with the cogeneration power facility and would install 13 new generators onsite, yielding a total of 17 generators at Project buildout, inclusive of the one additional generator proposed to be installed by SRI in connection with its separate tenant improvements.

manufacturers that specialize in mechanical equipment. Estimated noise levels were then compared to the allowable noise levels in the city of Menlo Park. In addition, noise levels from rooftop equipment were compared to the city zoning ordinance limit of 50 dBA at 50 feet.

The analysis of noise from amplified music or voices at events resulting from implementation of the Proposed Project was based on information about expected future events provided by the Project Sponsor as well as noise-source data from similar events. Estimated noise levels from events were compared to the allowable noise levels in Menlo Park, which are 60 dBA during daytime hours when measured from any residential property.

Operational Traffic Noise

To determine if the Proposed Project would result in a substantial permanent increase in traffic noise, direct noise impacts associated with increased traffic volumes from buildout conditions were quantitatively evaluated for three scenarios:

- Existing year (i.e., the baseline year for purposes of CEQA),
- Background year (i.e., the Proposed Project's buildout year), and
- Cumulative year (i.e., 2040, the horizon year for the City/County Association of Governments-Santa Clara Valley Transportation Authority [C/CAG-VTA] Travel Demand Model).

For the background year and cumulative year, two sub-scenarios were analyzed: with the Proposed Project and without. For the Project-level analysis, traffic noise was evaluated with respect to background-year no-Project conditions to isolate the Proposed Project's contribution to traffic noise. Comparing traffic noise under the with-Project scenario to existing conditions does not isolate the contribution of the Proposed Project because traffic noise will increase in the absence of the Proposed Project because of background growth in region. Thus, comparing with-Project conditions to existing conditions would not allow readers to determine what the Project-only increase in traffic noise would be.

In the analysis of cumulative impacts, the cumulative-year with-Project scenario is compared to existing conditions to determine if a significant cumulative impact exists. Then, the cumulative-year with-Project and no-Project scenarios are compared to determine if the Proposed Project's contribution to the existing cumulative impact would be cumulatively considerable.

Quantitative modeling of traffic noise was conducted using a spreadsheet tool, which is based on the Federal Highway Administration's (FHWA's) Traffic Noise Model (TNM), version 2.5. The spreadsheet calculates the traffic noise level at a fixed distance from the centerline of a roadway, according to traffic volumes, roadway speeds, and the types of vehicles that are predicted to occur under each condition. Traffic volumes for each scenario and the truck volume percentages were provided by Hexagon. Traffic data provided by the traffic engineer included average daily traffic volumes for intersection segments in the vicinity of the Project Site. The data also included volumes by vehicle type and posted speed limits. Traffic volumes with and without the Proposed Project were then compared to determine if traffic increases associated with the Proposed Project would result in noticeable increases in traffic noise. The roadway segments with the greatest increases in volume between the with-Project and no-Project scenarios were selected for modeling using the TNM methods. Appendix 3.7-1 of this EIR provides the traffic volumes for all roadways.

As noted above, a change of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level as it increases or decreases. Consequently, an increase in traffic noise levels of 3 dB or more, which is considered "barely noticeable," along roadway segments is considered a screening threshold for additional analysis. In areas where a 3 dB increase is predicted to occur, additional analysis is conducted to determine if background and resulting noise levels would be above or below the "normally acceptable" land use compatibility standard. If background and resulting noise levels would be below the land use compatibility standard, a noise increase of up to 5 dB is allowed before a significant traffic noise impact is identified. However, an exceedance of these thresholds may not constitute a significant impact in certain circumstances, such as in areas where there are no noise-sensitive land uses as well as areas where the applicable compatibility standard has not been exceeded.

Vibration – Building Damage and Annoyance/Sleep Disturbance

The evaluation of potential vibration-related effects on structures and people from construction of the Proposed Project was based on the construction equipment list provided by the Project Sponsor and the estimated construction equipment vibration levels contained in both the Federal Transit Administration's (FTA's) Transit *Noise and Vibration Impact Assessment* and Caltrans' *Transportation and Construction Vibration Guidance Manual*. Estimated vibration levels at sensitive uses from construction of the Proposed Project were then compared to the Caltrans damage and annoyance vibration criteria to determine if a significant vibration impact would occur.

Airport-Related Noise

To evaluate the potential for airport activities or aircraft to expose people residing or working in the area to excessive noise levels, the Proposed Project's location was compared to the existing noise contours for airports in the vicinity.

Impacts Not Evaluated in Detail

This section describes why the Proposed Project would result in ***no impact*** related to airport noise and no further analysis is required.

Airport Noise. The closest airport to the Project Site is Palo Alto Airport, which is approximately 1.6 miles away. Menlo Park is approximately 6 miles northwest of Moffett Federal Airfield, 14 miles northwest of San José International Airport, 15 miles southeast of San Francisco International Airport, and 18 miles south of Oakland International Airport. In addition, San Carlos Airport is almost 6 miles northwest of the Project Site. According to the ConnectMenlo EIR, although Menlo Park does receive some noise from aircraft that use these facilities, Menlo Park, including the Project Site, does not fall within any airport land use planning areas, runway protection zones, or the 55 dBA CNEL noise contours of any of these airports. In addition, construction of the Proposed Project would not affect the generation of aircraft noise from any of these airports. Consequently, people residing or working in the area would not be exposed to excessive noise levels from airports or aircraft.

Impacts and Mitigation Measures

Impact NOI-1: Construction Noise. Construction of the Proposed Project would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (SU)

Construction Noise – Off-Road Equipment

As described in the "Methods for Analysis" section, the analyses described below were conducted to evaluate the impacts of the Proposed Project's construction activities.

Noise levels from individual pieces of equipment are compared to the noise limit of 85 dBA at 50 feet for powered equipment used on a temporary, occasional, or infrequent basis between the hours of 8:00 a.m. and 6:00 p.m. Monday through Friday. This noise limit is specified in the Menlo Park Municipal Code. Construction noise levels from activities occurring between 6:00 p.m. and 8:00 a.m. (i.e., outside the normal construction hours specified in the Menlo Park Municipal Code) are compared to the Menlo Park Municipal Code noise thresholds of 60 dBA L_{eq}, which applies during daytime hours (7:00 a.m. to 10:00 p.m.), and 50 dBA L_{eq}, which applies during nighttime hours (10:00 p.m. to 7:00 a.m.). Construction noise from activities occurring between the hours of 8:00 a.m. and 6:00 p.m. weekdays, which is considered exempt from the noise limitations in the Menlo Park Municipal Code, is compared to the existing ambient noise level to estimate temporary increases in noise. The temporary increase in noise resulting from construction would be considered substantial if the analysis predicts a 10 dB or greater increase in the ambient noise level compared to the existing ambient noise level. A 1 dB increase would be perceived as a doubling of loudness.

The Proposed Project is anticipated to be constructed in one phase, with site preparation occurring over the course of 12 to 15 months and buildout of site infrastructure and vertical improvements occurring afterward over the course of 30 to 36 months. In total, construction is expected to occur over approximately 51 months. However, the ultimate construction dates may vary because of market conditions, the availability of financing, and tenancy requirements. Therefore, it is possible that the Proposed Project would be constructed in three phases, as discussed in more detail below. Assuming the Proposed Project is constructed in three phases, construction would take approximately 77 months.

During construction of the Proposed Project, working hours would be from 6:00 a.m. to 6:00 p.m. weekdays. The range of construction activity in the early-morning hours would vary, but concrete pours are anticipated to start as early as 6:00 a.m. twice a week (Tuesdays and Thursdays) for approximately 14 months; this would be the only activity occurring in the early-morning hours. No nighttime or weekend construction would be required for the Proposed Project. Construction activities occurring outside the typical construction hours in Menlo Park of 8:00 a.m. to 6:00 p.m. Monday through Friday, such as the aforementioned concrete pours, would be required to comply with the noise levels set forth in Section 8.06.030 of the Menlo Park Municipal Code, whereas construction activities taking place during the typical construction hours noted above are excepted from the application of the noise levels, pursuant to Section 8.06.040 of the Menlo Park Municipal Code.

In addition, any off-site transportation improvements required for the Proposed Project would not be expected to require substantial work (e.g., major roadway widening). Rather, it is anticipated that the off-site transportation improvements would likely consist of improvements identified in the city's Traffic Impact Fee program. The Proposed Project would be required to contribute its fair share toward these improvements. The city anticipates that the construction of the off-site transportation improvements

would not result in significant temporary noise impacts related to the use of heavy construction equipment, demolition, excavation, hauling, and construction activities. Furthermore, the construction of the off-site temporary transportation improvements would be subject to the same or similar regulatory requirements as the Proposed Project, as applicable.

Municipal Code – Powered Equipment Limit

As noted above in Menlo Park Municipal Code, individual pieces of equipment proposed for use during construction would need to comply with the limit of 85 dBA at 50 feet for powered equipment. The noise levels generated by the individual pieces of construction equipment planned for use during the Proposed Project's construction activities are shown in Table 3.7-8. The construction equipment inventory was provided by the Project Sponsor. As shown in Table 3.7-8, noise from the equipment for construction of the Proposed Project would not exceed 85 dBA L_{eq} at a distance of 50 feet. Thus, the Proposed Project would comply with the powered equipment limit from the Menlo Park Municipal Code, and no substantial increase in noise would occur.

Table 3.7-8. Noise Levels from Individual Pieces of Construction Equipment L_{eq}, Based on Standard Utilization Rates[a]

	Equipment Noise Levels (dBA) at 50 Feet		
Equipment	**dBA L_{max}**	**Utilization Factor (%)**	**dBA L_{eq}[a]**
Aerial lifts	75	20%	68
Concrete/industrial saws	90	20%	83
Concrete pump	81	20%	74
Concrete truck	79	40%	75
Cranes	81	16%	73
Drill rigs	84	20%	77
Excavators	81	40%	77
Forklifts	84	40%	80
Generator sets	81	50%	78
Graders	85	40%	81
Industrial saws	90	20%	83
Pavers	77	50%	74
Paving equipment	90	20%	83
Rollers	80	20%	73
Rubber-tired dozers	82	40%	78
Scrapers	84	40%	80
Tractors/loaders/backhoes	84	40%	80
Welders	74	40%	70

Source: Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf. Accessed: March 17, 2023.

a. Based on standard estimated utilization rates from the Federal Highway Administration.

Daytime Construction Noise

To estimate the reasonable worst-case combined noise level at noise-sensitive uses resulting from construction of the Proposed Project, the noise analysis focuses on the three loudest pieces of equipment expected to be used concurrently during construction. Construction noise has been evaluated for three phases of construction (i.e., Phase 1, Phase 2, and Phase 3) and for each sub-phase of construction (e.g., demolition, site preparation). Although the Proposed Project may be constructed in one phase rather than three, the three-phase analysis provides comprehensive information to the reader in the event that three-phase construction proceeds. To analyze construction noise effects, the combined noise levels from simultaneous operation of the three loudest pieces of equipment used during a single construction sub-phase were calculated, similar to the approach recommended by FTA, which recommends evaluating the two loudest pieces of equipment. The combined noise level from the three loudest pieces of equipment represents a conservative worst-case scenario because it assumes all pieces will operate at the same time and in the same location at the edge of the Project perimeter closest to sensitive uses. Realistically, noise levels would typically be lower because it would be unlikely for the loudest pieces of equipment to operate simultaneously and as most construction activities would occur farther from the property line. Combined construction noise levels for each sub-phase of construction were estimated using calculation methods from FHWA's Roadway Construction Noise Model. The modeling results are presented in Table 3.7-9 by construction sub-phase for Phase 1. Tables 3.7-10 and 3.7-11 present the noise levels by sub-phase for Phases 2 and 3, respectively. Appendix 3.7-1 of this EIR includes additional details on the construction noise calculations.

Noise levels at the nearest sensitive land uses that could be affected by Phase 1 of construction are summarized below in Table 3.7-9. Noise-sensitive land uses are identified above in Figure 3.7-1 and presented below in order of distance from the Project Site.

- 15 feet or less from the Project Site – Single-family residences in the Linfield Oaks and Classics of Burgess Park neighborhoods. The noise level would be 94 to 97 dBA L_{eq} at a distance of 15 feet but potentially higher if equipment operates less than 15 feet from the residences. At this worst-case distance, noise would occur for only a short time; at other distances, noise levels would be below this range. For example, it is expected that grading would occur for a maximum of 3 or 4 days within 15 feet of the Linfield Oaks and Classics of Burgess Park neighborhoods. Although equipment could operate less than 15 feet from the property line and, therefore, adjacent to the backyards of the residences, the distance to the actual homes is expected to be no less than 15 feet.
- 25 feet from the Project Site – First Church of Christ, Scientist. The noise level would be 89 to 93 dBA L_{eq}. At this worst-case distance, noise would occur for only a short time; at other distances, noise levels would be below this range.
- 60 feet from the Project Site – Single-family residences, multi-family residences, and the Trinity Church north of Ravenswood Avenue. The noise level would be 82 to 85 dBA L_{eq}.
- 120 feet from the Project Site – Menlo Children's Center, west of the Project Site. The noise level would be 76 to 79 dBA $L_{eq.}$
- 170 feet from the Project Site – Single-family residences, east of Middlefield Road. The noise level would be 73 to 76 dBA $L_{eq.}$
- 200 feet from the Project Site – Menlo-Atherton High School, east of the Project Site. The noise level would be 71 to 75 dBA $L_{eq.}$
- 450 feet from the Project Site – Menlo Public Library, west of the Project Site. The noise level would be 64 to 68 dBA $L_{eq.}$

Table 3.7-9. Phase 1 Noise Levels by Construction Sub-Phase[a]

Distance between Source and Receiver (feet)[b]	Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coatings
Noise Levels – L_{max}[c]						
15	104	99	100	99	104	101
25	99	95	95	95	99	96
50	93	89	89	89	93	90
60	92	87	88	87	92	89
75	90	85	86	85	90	87
100	87	83	83	83	87	84
120	86	81	82	81	86	83
170	83	78	79	78	83	80
200	81	77	77	77	81	78
300	78	73	74	73	78	75
450	74	70	70	70	74	71
500	73	69	69	69	73	70
Noise Levels – L_{eq}[c]						
15	97	95	96	95	97	94
25	93	91	91	91	92	89
50	87	85	85	85	86	83
60	85	83	84	83	85	82
75	83	81	82	81	83	80
100	81	79	79	79	80	77
120	79	77	78	77	79	76
170	76	74	75	74	76	73
200	75	73	73	73	74	71
300	71	69	70	69	71	68
450	68	66	66	66	67	64
500	67	65	65	65	66	63

Source: ICF. 2024. *Parkline – Noise Technical Memorandum*. June 13.

Notes:

a. Refer to Appendix 3.7-1 of this EIR for the list of equipment modeled for each sub-phase of construction.

b. Geometric attenuation based on 6 dB per doubling of distance. This calculation does not include the effects, if any, of local shielding. Distances shown in bold represent the distance between the Project Site and a noise-sensitive use.

c. L_{max} and L_{eq} noise is presented in dBA, which approximate the frequency response of the human ear.

Table 3.7-10. Phase 2 Noise Levels by Construction Sub-Phase[a]

Distance between Source and Receiver (feet)[b]	Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coatings
Noise Levels – L_{max}[c]						
25	97	—	—	95	99	96
50	91	—	—	89	93	90
100	85	—	—	83	87	84
200	79	—	—	77	81	78
250	77	—	—	75	79	76
400	73	—	—	71	75	72
500	71	—	—	69	73	70
575	70	—	—	68	72	69
600	70	—	—	67	72	69
700	68	—	—	66	70	67
800	67	—	—	65	69	66
900	66	—	—	64	68	65
Noise Levels – L_{eq}[c]						
25	91	—	—	91	92	89
50	85	—	—	85	86	83
100	79	—	—	79	80	77
200	73	—	—	73	74	71
250	71	—	—	71	72	69
400	67	—	—	67	68	65
500	65	—	—	65	66	63
575	64	—	—	64	65	62
600	63	—	—	63	65	62
700	62	—	—	62	63	60
800	61	—	—	61	62	59
900	60	—	—	60	61	58

Source: ICF. 2024. *Parkline – Noise Technical Memorandum*. June 13.

Notes:

a. Refer to Appendix 3.7-1 of this EIR for the list of equipment modeled for each sub-phase of construction. For Phase 2 construction, site preparation and grading would not occur.

b. Geometric attenuation based on 6 dB per doubling of distance. This calculation does not include the effects, if any, of local shielding. Distances shown in bold represent the distance between the Project Site and a noise-sensitive use.

c. L_{max} and L_{eq} noise is presented in dBA, which approximate the frequency response of the human ear.

Table 3.7-11. Phase 3 Noise Levels by Construction Sub-Phase[a]

Distance between Source and Receiver (feet)[b]	Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coatings
Noise Levels – L_{max}[c]						
25	97	—	—	95	97	96
50	91	—	—	89	91	90
100	85	—	—	83	85	84
200	79	—	—	77	79	78
300	76	—	—	73	75	75
450	72	—	—	70	72	71
500	71	—	—	69	71	70
600	70	—	—	67	69	69
700	68	—	—	66	68	67
800	67	—	—	65	67	66
900	66	—	—	64	66	65
1,000	65	—	—	63	65	64
Noise Levels – L_{eq}[c]						
25	91	—	—	91	90	89
50	85	—	—	85	84	83
100	79	—	—	79	78	77
200	73	—	—	73	72	71
300	69	—	—	69	68	68
450	66	—	—	66	65	64
500	65	—	—	65	64	63
600	63	—	—	63	62	62
700	62	—	—	62	61	60
800	61	—	—	61	60	59
900	60	—	—	60	59	58
1,000	59	—	—	59	58	57

Source: ICF. 2024. *Parkline – Noise Technical Memorandum*. June 13.

Notes:

a. Refer to Appendix 3.7-1 for the list of equipment modeled for each sub-phase of construction. For Phase 3 construction, site preparation and grading would not occur.

b. Geometric attenuation based on 6 dB per doubling of distance. This calculation does not include the effects, if any, of local shielding. Distances shown in bold represent the distance between the Project Site and a noise-sensitive use.

c. L_{max} and L_{eq} noise is presented in dBA, which approximate the frequency response of the human ear.

The estimated construction noise levels from Phase 1 (shown above) are generally greater than the measured noise levels, as shown in Table 3.7-3, which range from 53.5 to 65.2 dBA L_{eq} during daytime hours.

At the worst-case distance, the receptors closest to construction (i.e., within the Linfield Oaks and Classics of Burgess Park neighborhoods) would experience construction noise for only a short time. Specifically, grading within 15 feet of the Linfield Oaks and Classics of Burgess Park neighborhoods would occur for only 3 or 4 days. At the closest point, construction of the townhomes on the Project Site would be approximately 50 feet from residences on Thurlow Street and Barron Street in the aforementioned neighborhoods.

The noise level at 15 feet, as presented above, would occur for only a short time; most construction would occur at a greater distance. The noise levels shown above represent a conservative analysis, given that not all construction activities would be 15 feet away; the loudest noise-generating phases may occur at greater distances. The activities that do occur at a distance of 15 feet are anticipated to have a duration of 3 or 4 days, which is a small fraction of the total time for construction of the Proposed Project. Noise that occurs for a short duration is less intrusive on noise-sensitive individuals compared with noise that occurs for a prolonged period. Nevertheless, because construction would result in a noise level greater than 10 dB relative to the existing noise level, this would be a ***potentially significant*** impact.

Based on the values in Table 3.7-10, the nearest sensitive land uses that could be affected by Phase 2 construction noise are summarized below. These land uses would also be affected by Phase 1 construction; however, Phase 2 would result in generally lower noise levels because the Phase 2 buildings would be located in only one portion of the Project Site and set back from the site boundary, in some cases.

- 250 feet north of Parking Garage 1 and Office 2 – First Church of Christ, Scientist. The noise level would be 69 to 71 dBA L_{eq}.
- 400 feet east of Parking Garage 2 – Single-family residences east of Middlefield Road;
- 400 feet west of Office 4 – Onsite residences in townhomes. The noise level would be 65 to 67 dBA $L_{eq.}$
- 500 feet southwest of Office 4 – Single-family residences in the Classics of Burgess Park neighborhood. The noise level would be 63 to 66 dBA L_{eq}.
- 575 feet south of Loop Road, near Office 4 – Single-family residences in the Linfield Oaks neighborhood. The noise level would be 62 to 65 dBA L_{eq}.
- 700 feet east of Parking Garage 1 – Menlo-Atherton High School, east of the Project Site. The noise level would be 60 to 63 dBA $L_{eq.}$

As with Phase 1, estimated construction noise levels from Phase 2, shown above, would generally be greater than the measured noise levels in the vicinity of the Project Site. This is a ***potentially significant*** impact.

Based on the values in Table 3.7-11, the nearest sensitive land uses that could be affected by Phase 3 construction noise are summarized below. These land uses would also be affected by Phase 1 and Phase 2 construction; however, Phase 3 would generally result in the lowest noise levels because Phase 3 would be limited to one building, which would be set back from the site boundary.

- 50 feet north and south of Residential Building 4 – Onsite residences in Residential Building 3 and the townhomes. The noise level would be 83 to 85 dBA L_{eq}.
- 300 feet south of Residential Building 4 – Single-family residences in the Classics of Burgess Park neighborhood. The noise level would be 68 to 69 dBA L_{eq}.
- 450 feet northwest of Residential Building 4 – Menlo Children's Center, west of the Project Site. The noise level would be 64 to 66 dBA $L_{eq.}$

As with Phases 1 and 2, the noise levels indicated here would generally be greater than the measured noise levels in the vicinity of the Project Site. This is a ***potentially significant*** impact.

Early-Morning Construction Noise

As indicated above, concrete pours would occur during construction. This activity could start as early as 6:00 a.m. for approximately 14 months. The equipment that may be used during early-morning hours for concrete pours would include a concrete mixer truck and a concrete pump. Construction noise modeling was conducted for concrete pour activities, based on the assumption that the concrete truck and pump would operate simultaneously and at the same location. Early-morning construction noise levels were estimated using calculation methods from FHWA's Roadway Construction Noise Model, which are the same methods used to evaluate daytime construction noise.

Within the Project Site, concrete pours would occur adjacent to the locations where structures would be erected (i.e., parking garages, office and residential buildings), generally within the interior of the Project Site. As such, the analysis for concrete pours uses different distances to sensitive land uses than those used for Phase 1 construction. The daytime distances, which were measured from the site boundary, represent a worst-case scenario. However, concrete pours during the early-morning hours are not represented by that worst-case scenario. Table 3.7-12 presents the noise levels by distance for the concrete pours that would begin during the early-morning hours.

Table 3.7-12. Early-Morning Noise Levels during Construction – L_{max} and L_{eq} (Concrete Pours)

Distance between Source and Receiver (feet)[a]	Noise Levels – L_{max}[b]
50	83
100	77
200	71
300	68
400	65
500	63
Distance between Source and Receiver (feet)[a]	**Noise Levels – L_{eq}[b]**
50	78
100	72
200	66
300	62
400	59
500	58

Notes:

a. Geometric attenuation based on 6 dB per doubling of distance. This calculation does not include the effects, if any, of local shielding. Distances shown in bold represent the distance between the Project Site and a noise-sensitive use.

b. L_{max} and L_{eq} noise is presented in dBA, which approximate the frequency response of the human ear.

Based on the values in Table 3.7-12, the nearest sensitive land uses that could be affected by noise from concrete pour activities are summarized below.

- 100 feet from the concrete pour locations – Single-family residences and the Trinity Church north of Ravenswood Avenue. The noise level would be 72 dBA L_{eq}.
- 200 feet from the concrete pour locations – Single-family residences in the Linfield Oaks and Classics of Burgess Park neighborhoods. The noise level would be 66 dBA L_{eq}.

The noise levels indicated above are greater than the measured noise levels shown in Table 3.7-3, which range from 49.6 to 52.8 dBA L_{eq} during nighttime hours; nighttime hours are used as a proxy for early-morning hours. These noise levels would also exceed the 50 dBA L_{eq} and 60 dBA L_{eq} noise limits that apply to nighttime and daytime hours, respectively. The nighttime limit would apply during the first hour of the concrete pours, from 6:00 a.m. to 7:00 a.m., and the daytime limit would apply during the second hour of the concrete pours, from 7:00 a.m. to 8:00 a.m. (i.e., before the city construction exemption hours begin at 8:00 a.m.). Because the noise limits would be exceeded, this is a ***potentially significant*** impact.

Construction Noise – Haul Trucks

Construction of the Proposed Project would involve the use of haul trucks to move excavated material and deliver materials to the Project Site. Based on the data provided by the Project Sponsor, up to 100 daily haul truck trips could occur during grading for Phase 1. That number could continue for up to 30 days.

The routes used by the haul trucks are described above in the "Methods for Analysis" section. It is assumed that trucks would use Willow Road and Middlefield Road to reach the site. This analysis does not evaluate haul truck noise on highways because traffic noise levels from highways such as U.S. 101 are already elevated. The introduction of haul trucks would most likely not influence the existing noise levels on highways. The construction haul truck noise analysis focuses on potential noise impacts along surface streets.

The temporary addition of up to 100 haul trucks trips per day on the haul route was analyzed to determine if construction truck activity would result in substantial increases in the ambient noise levels. The city does not specify noise thresholds for construction haul truck noise; therefore, in areas where existing noise levels do not exceed the "normally acceptable" land use compatibility standard, an increase of 5 dB or more from construction haul trucks is considered a significant noise increase. In areas where existing noise levels do exceed the "normally acceptable" level, based on the land use compatibility chart, a 3 dB or larger increase from construction haul trucks is considered a significant noise increase.

A 3 dB increase in noise over existing traffic noise levels is generally considered to be "barely perceptible." Modeling was conducted to estimate daily traffic noise levels with and without the addition of construction haul truck trips. Table 3.7-13 shows estimated traffic noise levels along the roadway segments for the existing year and for the existing year with the construction haul truck trips.

Based on the results in Table 3.7-13, below, noise increases from haul truck activity would not result in an increase of 3 dB at any roadways used for hauling. The maximum increase in noise would be 1.4 dB at Ravenswood Avenue west of Middlefield Road. No substantial temporary increase in noise would occur, and this impact would be ***less than significant***. No mitigation is required.

Conclusion

As discussed above, construction equipment proposed for use during daytime hours would be in compliance with the threshold of 85 dBA at 50 feet for individual pieces of powered equipment. Combined construction noise during daytime hours was modeled to result in a noise level that would be more than 10 dB greater than the ambient noise levels at several nearby noise-sensitive land uses, resulting in a potentially significant impact. As noted above, noise during Phase 1, Phase 2, and Phase 3 construction could reach a maximum of 97 dBA L_{eq}, 71 dBA L_{eq}, and 85 dBA L_{eq}, respectively, all of which are 10 dB over the daytime ambient noise levels in the area. In addition, Tables 3.7-9 through 3.7-11 show that noise levels would be 10 dB over the daytime ambient levels at distances beyond the worst-case distance. Furthermore, concrete pour activities during early-morning hours were modeled to result in a noise level of 72 dBA L_{eq} at the nearest sensitive land

use, which would be greater than the applicable noise limit, a potentially significant impact. Construction haul trucks would not result in a noticeable increase in noise on any roadway in the Study Area. Estimated construction noise levels during daytime and early-morning hours would exceed the applicable thresholds, and the overall impact would be ***potentially significant***.

Table 3.7-13. Construction Haul Truck Noise Levels

Roadway	Segment	Existing Traffic Noise Levels (dBA L_{dn})	Existing plus Construction Truck Noise Levels (dBA L_{dn})	Noise Increase (dB)
Willow Road	East of Bay Road	62.0	62.7	0.7
Willow Road	Between Bay Road and Durham Street	60.0	61.1	1.1
Willow Road	Between Durham Street and Coleman Avenue	59.8	61.0	1.2
Willow Road	Between Coleman Avenue and Gilbert Avenue	59.3	60.5	1.3
Willow Road	Between Gilbert Avenue and Middlefield Road	59.3	60.6	1.3
Middlefield Road	Between Willow Road and Seminary Drive	59.5	60.7	1.3
Middlefield Road	Between Seminary Drive and Ringwood Avenue	60.8	61.9	1.1
Middlefield Road	Between Ringwood Avenue and Ravenswood Avenue	61.9	62.7	0.8
Ravenswood Avenue	West of Middlefield Road	58.8	60.2	1.4

MITIGATION MEASURES. Implementation of Mitigation Measures NOI-1.1 and NOI-1.2 would reduce noise during Project construction by requiring a construction noise reduction plan and a noise barrier, respectively. However, these mitigation measures may not be able to ensure that noise would be below the applicable thresholds in all circumstances. For the sensitive land uses at 200 feet (i.e., single-family residences in the Linfield Oaks and Classics of Burgess Park neighborhoods), a noise barrier, as described in Mitigation Measure NOI-1.2, and intervening buildings would most likely reduce noise from the concrete pours such that the noise limit would not be exceeded. However, noise from concrete pours occurring 100 feet from the homes north of Ravenswood Avenue would not be blocked by intervening buildings or a barrier. It is not feasible to add a noise barrier between the homes north of Ravenswood Avenue and the concrete pour location adjacent to Residential Building 1, because a barrier in this location could interfere with construction operations, such as personnel and vehicles accessing the site.

As outlined above, construction would result in noise levels that could be substantially greater than existing levels. The construction noise reduction plan and noise barrier would reduce noise, but because noise levels could be as high as 97 dBA L_{eq}, as conservatively measured without any noise attenuation or reduction measures, it is possible that construction activity may still result in a substantial increase in noise, even with implementation of the noise reduction plan and installation of the noise barrier. Although the substantial increase in noise may be temporary, the increase could nevertheless adversely affect surrounding land uses that are sensitive to noise. Impacts related to construction noise would be ***significant and unavoidable with mitigation***.

NOI-1.1: Implement Noise Reduction Plan to Reduce Construction Noise

Prior to issuance of any demolition, grading, and/or building permits for construction of the Proposed Project, the Project Sponsor and/or contractor(s) shall (i) develop a construction noise control plan to reduce noise levels and demonstrate how the Proposed Project will comply with Menlo Park Municipal Code daytime (i.e., during non-exempt hours) and nighttime noise standards to the extent feasible and practical, subject to review and determination by the Community Development Department, and (ii) provide a note on all development plans, stating that, during ongoing grading, demolition, and construction, the Project Sponsor shall be responsible for requiring contractors to implement measures to limit construction-related noise, as set forth in the plan and in this mitigation measure (NOI-1.1). The plan shall also include measures to reduce noise levels such that a 10-decibel (dB) increase over the ambient noise level does not occur at nearby noise-sensitive land uses to the extent feasible and practical, as determined by the city of Menlo Park. For concrete pouring occurring during early-morning hours, the closest distance that equipment for concrete pouring shall operate to noise-sensitive land uses is 100 feet, which applies to residential properties and the church property on the north side of Ravenswood Avenue. Equipment for concrete pouring shall operate no closer than 200 feet from the property line of residential properties in the Classics of Burgess Park or Linfield Oaks neighborhoods. These distances are based on the anticipated locations for the concrete pouring activities.

The plan shall demonstrate that, to the extent feasible and practical, noise from concrete pouring activities that occur daily between 6:00 a.m. and 8:00 a.m. will comply with the applicable city of Menlo Park noise limit of 50 A-weighted decibels (dBA) from 6:00 a.m. to 7:00 a.m. or 60 dBA from 7:00 a.m. to 10:00 p.m. at the nearest existing residential or noise-sensitive land use. The plan shall also demonstrate that, to the extent feasible and practical, as determined by the city, noise from individual pieces of equipment proposed for use will not exceed the limit for powered equipment (i.e., 85 dBA L_{eq} at 50 feet) and combined noise from construction activities during all hours will not result in a 10 dB or greater increase beyond the ambient noise level at the nearest noise-sensitive land uses. Activities that would produce noise above applicable daytime or nighttime limits shall be scheduled only during normal daytime construction hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday). If it is determined that a particular piece of equipment will not meet the requirements of this mitigation measure, that equipment shall not be used outside normal daytime construction hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday). The plan shall be approved by the city prior to the issuance of building permits to confirm the precise noise minimization strategies that will be implemented and document the strategies that will be employed to the extent feasible and practical.

The measures to reduce noise from construction activity may include, but are not limited to, the following:

- Require all construction equipment to be equipped with mufflers and sound control devices (e.g., intake silencers, ducts, engine enclosures, acoustically attenuating shields, noise shrouds) that are in good condition (i.e., at least as effective as those originally provided by the manufacturer) and appropriate for the equipment.
- Maintain all construction equipment to minimize noise emissions.
- Locate construction equipment as far as feasible from adjacent or nearby noise-sensitive receptors.
- Stockpiling locations shall be as far as feasible from adjacent or nearby noise-sensitive receptors.
- Require all stationary equipment to be located so as to maintain the greatest possible distance from nearby existing buildings, where feasible and practical.

- Require stationary noise sources associated with construction (e.g., generators and compressors) in proximity to noise-sensitive land uses to be muffled and/or enclosed within temporary enclosures and shielded by barriers, to the extent feasible and practical.
- Install noise-reducing sound walls or fencing (e.g., temporary fencing with sound blankets) around noise-generating equipment, to the extent feasible and practical, where no perimeter wall is provided. See also Mitigation Measure NOI-1.2.
- Prohibit the idling of inactive construction equipment for prolonged periods (i.e., more than 2 minutes) during early-morning hours.
- Provide advance notification by mailing/delivering notices to surrounding land uses regarding the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period.
- Provide the name and telephone number of an onsite construction liaison through onsite signage and the notices mailed/delivered to surrounding land uses. If construction noise is found to be intrusive to the community (i.e., if complaints are received), the construction liaison shall take reasonable efforts to investigate the source of the noise and require that reasonable measures be implemented to correct the problem.
- Use electric motors rather than gasoline- or diesel-powered engines to avoid noise associated with compressed air exhaust from pneumatically powered tools, to the extent feasible and practical (as determined by the city). Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust could be used; this muffler can lower noise levels from the exhaust by about 10 dB. External jackets on the tools themselves could be used, which could achieve a reduction of 5 dB.
- Limit the use of public address systems.
- Limit construction traffic to the haul routes established by the city.

The Project Sponsor and/or the contractor(s) shall obtain a permit to complete work outside the normal daytime construction hours outlined in the Menlo Park Municipal Code (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday); this may be incorporated into the conditional development permit for the Proposed Project. Furthermore, the plan shall require verification that construction activities will be conducted at adequate distances or otherwise shielded with sound barriers, as determined through analysis, from noise-sensitive receptors when occurring outside normal daytime construction hours; compliance with the Menlo Park Municipal Code will be verified through measurement.

NOI-1.2: Install Sound Barrier

Prior to issuance of the first construction permit, a permanent or temporary noise barrier shall be erected along the property line immediately south of the townhomes. The temporary barrier shall not be removed until the barrier is no longer needed to reduce noise from construction activities and comply with the thresholds identified in this EIR. The barrier shall start at Laurel Street, then continue perpendicularly to Laurel Street along the property line for a distance of approximately 330 feet. The barrier shall continue parallel to Barron Street along the property line for a distance of approximately 400 feet and end at Burgess Drive. The distances cited here are preliminary and based on the preliminary Project design. The actual distances shall be determined in a more precise manner during the design phase for the noise barrier. The temporary noise barriers shall be at least 12 feet high and constructed from a material with a minimum weight of 2 pounds per square foot, with no gaps of perforations. All noise control barrier walls shall be designed to preclude structural failure due to

such factors as wind, shear, shallow soil failure, earthquake, or erosion. The design and location of the sound barrier shall be supported by a technical analysis of the proposed design and installed prior to demolition/construction. The design of the sound barrier may be incorporated into the noise control plan in Mitigation Measure NOI-1.1 (or, for the Project Variant, Mitigation Measure NOI-1.3).

Impact NOI-2: Operational Noise. Operation of the Proposed Project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (LTS)

Emergency Generators

The Proposed Project would install 13 new emergency generators throughout the Project Site,[9] with power ratings ranging from 200 to 1,500 kilowatts (kW). The emergency generators would result in audible noise during periodic testing, which, in general, would occur for 30 minutes at each generator. Generator testing would occur once a month; it is likely that multiple generators, but not all generators, would be tested on the same day. Thus, generator testing would very likely occur on multiple days each month. Each generator would undergo an additional 90-minute test once a year.

The generators that would remain are part of the existing condition; construction of the Proposed Project would not affect their operation. The generators that would be removed would be replaced by newer generators that are likely to produce lower operational noise levels; thus, in some instances, the replacement of older generators may result in lower noise levels at surrounding land uses. However, the noise levels of the new generators on the Project Site would be evaluated independently, without consideration of the noise levels of the existing generators to be removed. This provides a conservative assessment because new sources must be in compliance with the city's noise limits, regardless of the sources they replace.

Noise from the operation of emergency generators during an emergency is typically considered to be exempt from local noise limits. However, even though the testing of emergency generators is generally a short-term (i.e., 30 minutes per month per generator, except for the 90-minute annual test) and intermittent event, noise resulting from generator testing must be in compliance with local noise limits for operational equipment noise. In Menlo Park, noise levels must be in compliance with Section 8.06.030 of the Menlo Park Municipal Code, which includes maximum allowable noise levels, as measured at a receiving residential property. Noise during daytime hours (7:00 a.m. to 10:00 p.m.) in Menlo Park is generally limited to 60 dBA; noise during nighttime hours (10:00 p.m. to 7:00 a.m.) is generally limited to 50 dBA. Section 8.06.040(b) of the Menlo Park Municipal Code states that noise from powered equipment used on a temporary, occasional, or infrequent basis during the hours of 8:00 a.m. to 6:00 p.m. Monday through Friday shall be limited to 85 dBA at a distance of 50 feet from the source. Emergency generator testing would take place during the weekday daytime hours listed above. Therefore, this analysis assesses the potential for noise from generator testing to exceed the 85 dBA threshold at a distance of 50 feet or the daytime 60 dBA threshold at a residential property line or sensitive-use property line.

[9] There are six existing generators along with a cogeneration power facility in place today, with one additional generator proposed to be installed by SRI in connection with its separate tenant improvements prior to Parkline project buildout (subject to separate City review and approval). The Parkline Project would remove 3 of the 6 existing SRI generators along with the cogeneration power facility and would install 13 new generators onsite, yielding a total of 17 generators at Project buildout, inclusive of the one additional generator proposed to be installed by SRI in connection with its separate tenant improvements.

The analysis of generator noise levels is based on manufacturer data for the models anticipated to be used on the Project Site as well as the anticipated locations for the generators, as provided by the Project Sponsor. The Project Sponsor has confirmed that sound enclosures would be used to reduce generator noise levels; thus, the noise levels in this analysis reflect the inclusion of sound enclosures on the generators.

Generator noise levels vary, depending on the power rating of the generator. At a reference distance of 23 feet, noise levels could be up to 76 dBA for a 600 kW generator. Appendix 3.7-1 of this EIR provides more information on the generator specifications and noise levels.

Table 3.7-14 provides an inventory of the generators for the buildings on the Project Site, the power rating of the generators, the nearest land uses, the corresponding ambient noise level at the nearest land uses, and the estimated noise level from generator operation. The emergency generators would be distributed throughout the Project Site, with most new buildings having at least one accompanying generator.

As shown in Table 3.7-14, below, generator testing would result in noise levels that would be greater than 60 dBA, in some instances (e.g., at Project residential buildings adjacent to the generators). However, none of the generators would exceed the city's threshold of 85 dBA at 50 feet for the temporary, occasional, or infrequent operation of powered equipment.[10] Actual noise levels would be lower with intervening structures and ground attenuation. If a permanent noise barrier is constructed near the residential Classics at Burgess Park area, noise at the residences would be lower than what is shown in Table 3.7-14.

Although there are some instances in which noise-sensitive land uses near future residential buildings could experience generator noise that would be above 60 dBA, in many cases, buildings associated with the Proposed Project, as well as other buildings, would provide shielding and block the line of sight between the generator and the nearest noise-sensitive land use. Therefore, it is very likely that noise levels would be lower because of the shielding provided by intervening buildings.

Without further design considerations, noise from the testing of generators could exceed the city's threshold of 60 dBA at the nearest sensitive land uses. However, the Project Sponsor would be required to adhere to Menlo Park Municipal Code noise limits when operating the generators. The noise limits could be met by using an enclosure, shielding, or other control device for the equipment, or, alternatively, intervening buildings or structures, which cannot be identified at this stage of Proposed Project design, may provide sufficient attenuation to meet the noise limits. Such adherence would be a required condition of approval to construct the Proposed Project, and evidence of adherence would be required during the standard design review and permitting processes for the Proposed Project. The evidence submitted to the city will include documentation of measures and/or site design features that will be implemented to attenuate noise and result in compliance with the noise limits. Therefore, noise from the generators would not be allowed to exceed 60 dBA at noise-sensitive land uses. Furthermore, the Project Sponsor would be required to provide evidence to the city that the equipment on the site is in compliance with Menlo Park Municipal Code noise limits; therefore, to reduce noise levels even further, additional design features for the generators would be needed, after taking site-specific conditions into account (e.g., shielding from walls and buildings, ground attenuation). The additional design features may include screens, barriers, or other measures to reduce generator noise. As such, the required condition of approval to construct the Proposed Project would ensure that noise from emergency generator testing would be in compliance with the noise limits outlined in Chapter 8.06 of the Menlo Park Municipal Code. Operational noise impacts related to emergency generators would be ***less than significant***. No mitigation is required.

[10] Section 8.06.040(b)(1) of Chapter 8.06 of the Menlo Park Municipal Code.

Table 3.7-14. Emergency Generator Inventory, Power Rating, Nearest Land Use, and Corresponding Noise Level for the Proposed Project

Building	Generator Power Rating (kilowatts)	Nearest Land Uses (distance in feet)[a]	Nearest Measurement Site[b]	Ambient Noise Level at Nearest Land Uses (existing noise sources only)	Generator Noise Level (dBA)[c]
Proposed Project					
Office Building 1	1,000 or 1,500	Alpha Kids Academy (240)*	LT-5	59 (L_{dn})	45
		Residences on Ravenswood (330)*	ST-2	55.9 (L_{eq})	42
Office Building 2	1,000 or 1,500	Office Buildings (200)	ST-5	52.5 (L_{eq})	46
		Alpha Kids Academy (360)*	LT-5	59 (L_{dn})	41
Office Building 3	1,000 or 1,500	Office Buildings (320)	ST-5	52.5 (L_{eq})	42
		Residential Backyards at Gloria Circle (650)*	ST-1	49.6 (L_{eq})	36
Office Building 4	1,000 or 1,500	Lab Buildings (175 feet)	ST-4	49.3 (L_{eq})	47
		Onsite Residences, Townhomes (750)*	LT-2	57 (L_{dn})	35
Office Building 5	1,000 or 1,500	Onsite Residences, Residential Building 1 (450)*	ST-3	55.3 (L_{eq})	39
		Residences on Barron Street (675)*	LT-2	57 (L_{dn})	36
Office Amenities	300	Onsite Residences, Townhomes (150)*	LT-2	57 (L_{dn})	60
		Onsite Residences, Residential Building 4 (275)*	ST-3	55.3 (L_{eq})	54
Parking Garage 1	200	Office Buildings (200)	ST-5	52.5 (L_{eq})	55
		Alpha Kids Academy (400)*	LT-5	59 (L_{dn})	49
Parking Garage 2	200	Office Buildings (150)	ST-5	52.5 (L_{eq})	57
		Residential Backyards at Gloria Circle (450)*	ST-1	49.6 (L_{eq})	48
Parking Garage 3	200	City Government Buildings (220)	LT-2	57 (L_{dn})	54
		Residences on Barron Street (400)*	LT-2	57 (L_{dn})	48
Residential Building 1	200	Residential Building 1 (adjacent)*	ST-3	55.3 (L_{eq})	**74**
		Residences on Ravenswood (325)*	LT-4	64 (L_{dn})	51
Residential Building 2	200	Residential Building 2 (adjacent)*	ST-3	55.3 (L_{eq})	**74**
		Menlo Children's Center (210)*	LT-3	62 (L_{dn})	54
Residential Building 3	200	Residential Building 3 (adjacent)*	ST-3	55.3 (L_{eq})	**74**
		Menlo Park City Hall (270)	LT-3	62 (L_{dn})	52
Residential Building 4	200	Residential Building 4 (adjacent)*	ST-3	55.3 (L_{eq})	**74**
		Menlo Park City Hall (440)	LT-3	62 (L_{dn})	48

Notes:

a. The nearest land uses shown here are the nearest offsite land uses, except if the nearest land use is an onsite residential building. Land uses marked with "*" are considered noise sensitive.

b. Refer to Table 3.7-3 for more details on the monitoring locations.

c. The 1,000 and 1,500 kW generator noise levels are based on noise levels from Caterpillar models 3512MUI and 3512B (82 dBA at 1 meter), the 200 kW generator noise levels are based on noise levels from Kohler model 200REOZJF at 100 percent load within a sound enclosure (73.7 dBA at 23 feet), and the 300 and 450 kW generator noise levels are based on noise levels from Kohler model 600REOZVB at 100 percent load within a sound enclosure (76.0 dBA at 23 feet).

Noise levels at each distance are based on geometric attenuation (6 dB per doubling of distance). This calculation does not include the effects, if any, of local shielding. Values that are above the 60 dBA daytime limit are shown with bold text.

Other Mechanical Equipment

The Proposed Project would include both residential and office buildings, which would require various types of HVAC equipment for climate control. Specifically, the equipment is anticipated to include air-handling units, exhaust fans, hot-water pumps, battery energy storage systems, photovoltaic arrays, utility transformers, variable-refrigerant-flow (VRF) equipment, and dedicated outdoor air-system equipment. Most of this equipment would be located on the roof of the buildings; however, some of it, such as the utility transformers, battery energy storage systems, and VRF units, may be located on the ground level. The roof-mounted mechanical and electrical equipment would be enclosed within exterior metal walls that would generally be the same height as the tallest piece of equipment, while ground-mounted mechanical and electrical equipment would be enclosed by walls or vertical landscaping.

The Project Sponsor has identified the types of equipment that are expected to be used for exhaust and HVAC purposes. Based on the anticipated models to be used at the Project Site, exhaust fans would generate noise levels in the range of 68 to 78 dBA at 50 feet. Exhaust fans would be used in kitchens, bathrooms, and laboratories; the hazardous exhaust fan would generate the loudest noise level (78 dBA at 500 feet).

For HVAC equipment, such as air-source heat pumps and chillers, manufacturer data indicate that noise levels would be between 55 and 60 dBA at a distance of 50 feet. In addition, multiple pieces of equipment could occasionally operate simultaneously; the combined noise levels would be louder than the estimates for individual pieces of equipment. Furthermore, as noted above, outdoor equipment would be enclosed by walls, in some instances, which would partially attenuate the noise. Some equipment would be located indoors and, thus, would not be likely to result in audible noise outside at surrounding land uses. Photovoltaic arrays are not known to generate notable noise levels; any operational noise would most likely be minor relative to HVAC equipment noise. Regarding battery energy storage systems, the noise levels generated can vary widely, depending on the size and attributes of the system. Based on manufacturer data, the estimated noise level from one battery energy storage system would be 65 dBA at a distance of 3 feet, or 41 dBA at 50 feet. Appendix 3.7-1 provides more information on equipment noise levels at the Project Site. Although details regarding the utility transformers are not known, the noise level from an electrical substation has been found to be in the range of 52 to 57 dBA at 50 feet, which is below the HVAC equipment noise levels cited previously.[11]

The stationary equipment at the Project Site would be distributed throughout the site, with every new structure having multiple pieces of HVAC equipment and other mechanical equipment. Because of the distribution of equipment across the Project Site, many land uses, both within and external to the site, could be affected by noise from the equipment. For new residents living at the site, mechanical equipment would be in proximity to, or attached to, their residence. The shortest distance between equipment at the Project Site and offsite sensitive land uses is expected to be approximately 50 feet, which is the distance between the townhomes and the single-family houses in the Classics of Burgess Park neighborhood. This estimate is approximate, however, because the location of the equipment has not been precisely determined.

All sources of sound, including stationary sources, are regulated by Chapter 8.06 of the Menlo Park Municipal Code, which limits daytime noise levels to 60 dBA and nighttime noise levels to 50 dBA, as

[11] ICF. 2010. *PG&E Windsor Substation Project Proponent's Environmental Assessment.* Section 12.0, Noise. Available: https://ia.cpuc.ca.gov/Environment/info/aspen/windsorsub/pea/12_noise.pdf.

measured from any residential property.[12] Noise levels from rooftop equipment are limited to 50 dBA at 50 feet, or as otherwise allowed by the Menlo Park Municipal Code. There are many unknown variables in this evaluation of noise from stationary equipment at the Project Site, such as the types of screening and/or shielding present, intervening structures or barriers, and the number of individual pieces of equipment operating simultaneously. However, as noted above in the discussion of emergency generators, the Project Sponsor would be required to adhere to the Menlo Park Municipal Code noise limits when operating equipment. Such adherence would be a required condition of approval to construct the Project; therefore, noise from stationary equipment would not be allowed to exceed the 60 dBA or 50 dBA limits at noise-sensitive land uses. Furthermore, the Project Sponsor would be required to provide evidence to the city, upon request, that the equipment on the site is in compliance with Menlo Park Municipal Code noise limits. To reduce noise levels even further, additional design features for the equipment would be needed, after taking site-specific conditions into account (e.g., shielding from walls and buildings, ground attenuation). The additional design features may include screens, barriers, or other measures to reduce equipment noise. Although both onsite and offsite land uses would very likely be located within 50 feet of HVAC equipment operating during daytime and nighttime hours, the noise levels indicated above for the equipment categories could be feasibly reduced to comply with the noise limits, especially when accounting for building shielding, enclosures, and ground attenuation. As such, the required condition of approval to construct the Proposed Project would ensure that noise from mechanical equipment would be in compliance with the noise limits outlined in Chapter 8.06 of the Menlo Park Municipal Code. Operational noise impacts related to other mechanical equipment would be ***less than significant***. No mitigation is required.

Other Operational Noise Sources

At the Central Commons, outdoor events with 200 to 250 people may occur, at most, four times a year. At the recreational area, a typical use is anticipated to attract 20 to 50 people. These events may result in temporary use of portable audio-visual equipment for amplified sound and music, but no permanent sound equipment would be installed at either the Central Commons or the recreational area. These events would result in noise levels from amplified music and voices that could affect noise-sensitive land uses. The events at the Central Commons would occur within the Project Site, at an approximate distance of 400 feet from onsite residences (Residential Building 1) and 500 feet from the offsite residences north of Ravenswood Avenue. The events in the recreational area would be at the boundary of the site, with the closest noise-sensitive land use being the First Church of Christ, Scientist, approximately 50 feet from the boundary of the recreational area.

Noise levels from small events with amplified voices would generally be lower than noise levels from events with amplified recorded music. For example, voices amplified by a single loudspeaker have been measured in the range of approximately 56 to 58 dBA L_{eq} at 100 feet,[13] whereas sound from a small live band, with a guitar, vocalists, and a single amplifier, has been measured at approximately 65 dBA L_{eq} at 100 feet.[14] Based on these estimated levels, noise from such events at a distance of 50 feet (i.e., the distance to the nearest noise-sensitive land use) would be approximately 62 to 64 dBA for amplified voices and 71 dBA for amplified sound from a small band. These estimates do not account for intervening

[12] Section 8.06.030(a)(1) of Chapter 8.06 of the Menlo Park Municipal Code.

[13] Wedding Noise: Noise measured at approximately 140 feet from an individual officiating over a wedding (i.e., a single speaker) was measured to be between approximately 55 and 56 dBA L_{eq}, equating to a noise level of 58 to 59 dBA L_{eq} at 100 feet.

[14] Acoustic Band Noise: Noise measured at approximately 73 feet from a small live band that included a guitar, vocalists, and a single amplifier was measured to be 67.5 dBA L_{eq}, equating to 64.8 dBA L_{eq} at 100 feet.

buildings or structures that could provide additional shielding and block the line of sight between the events and the nearest noise-sensitive land uses; thus, it is possible that noise levels would be lower than these values. Based on the estimated noise levels, it is possible that noise levels from events may exceed the city's daytime (i.e., 7:00 a.m. to 10:00 p.m.) noise limit of 60 dBA. Smaller events are unlikely to result in noise levels greater than this limit.

In Menlo Park, a special event application must be filed if a proposed gathering would have 150 or more attendees. As noted above, there may be occasional events with more than 150 people; thus, the Project Sponsor or event host would need to obtain a permit on those occasions. For smaller routine events that would not require a special permit, it is reasonable to conclude that event noise would not exceed the limits in the Menlo Park Municipal Code. However, it is possible that larger events could result in noise levels in excess of Menlo Park Municipal Code noise standards at the nearest sensitive land use. Larger events would be required to obtain an event permit and comply with the stipulations of the permit, which include adherence to the applicable Menlo Park Municipal Code limits or measures to reduce noise effects from the event. Furthermore, Menlo Park Municipal Code Section 8.60.050, Review Process, stipulates that the police chief or designee shall issue permits only if it is determined that the events do not present substantial noise hazards. Because larger events with amplified music or voices would be in compliance with the requirements of the applicable permit, noise from such events would be in compliance with local regulations and would not result in substantial noise increases. Operational noise impacts related to other operational noise sources would be ***less than significant***. No mitigation is required.

Traffic Noise

The Proposed Project would result in increased traffic volumes on existing roadways in the area because new residences would be added to the Project Site. Future residents, employees, and visitors would travel to and from the site on existing roadways, thereby increasing traffic noise levels in the area. Traffic noise levels have been estimated for three scenarios: existing year (i.e., the baseline year for purposes of CEQA), background year (i.e., the Project buildout year), and cumulative year (i.e., 2040, the horizon year for the C/CAG-VTA Travel Demand Model). For the Proposed Project's background-year and cumulative-year conditions, two sub-scenarios were analyzed: with Project and no Project. The difference in noise between the no-Project and with-Project scenarios represents the Proposed Project's incremental contribution to noise levels in the area. The results of the cumulative-year analysis are discussed in *Cumulative Impacts* below and not discussed here.

This analysis focuses on the Proposed Project's background-year condition in 2031, which is representative of impacts that would occur when the Proposed Project begins operations. Table 3.7-15 shows the results of the noise modeling analysis for evaluated roadway segments for the background year.

In areas where the background and resulting noise levels (i.e., background with Proposed Project) would not exceed the "normally acceptable" land use compatibility standard, an increase of more than 5 dB is considered a significant traffic noise increase. In areas where the background and background with-Project noise levels would exceed the "normally acceptable" level, based on the land use compatibility chart, a 3 dB or larger increase from baseline to baseline plus-Project conditions is considered a significant traffic noise increase. As shown in Table 3.7-15, a 3 dB increase, or greater, would occur under the Proposed Project at the following segments:

- Pine Street south of Ravenswood Avenue,
- D Street west of Middlefield Road, and
- Seminary Drive west of Middlefield Road.

Table 3.7-15. Project-Level Traffic Noise Impacts for the Proposed Project (2031)

Roadway Segment	Background without Project (L_{dn})	Background with Project (L_{dn})	Increase (dB)	3 dB or Greater Project-Related Increase[a]
Proposed Project				
Middlefield Road north of Willow Road	58.8	60.7	1.9	No
Willow Road east of Coleman Avenue	60.2	61.0	0.8	No
Willow Road east of Gilbert Avenue	58.2	60.5	2.4	No
Willow Road east of Middlefield Road	59.1	61.3	2.2	No
Willow Road between Laurel Street and Middlefield Road	52.9	53.2	0.3	No
Ravenswood Avenue east of Project Driveway B1 East	57.8	58.6	0.9	No
Ravenswood Avenue east of Project Driveway B1 West	57.7	58.6	1.0	No
Ravenswood Avenue east of Pine Street	58.1	59.1	1.1	No
Ravenswood Avenue between Laurel Street and Pine Street	58.3	59.3	1.0	No
Middlefield Road between Ravenswood Avenue and Ringwood Avenue	63.4	63.6	0.2	No
Middlefield Road between Ringwood Avenue and Seminary Drive	61.7	62.5	0.9	No
Middlefield Road south of Seminary Drive	61.4	62.4	1.0	No
Pine Street south of Ravenswood Avenue	**45.8**	**48.9**	**3.2**	**Yes**
Willow Road west of Gilbert Avenue	58.4	60.5	2.1	No
D Street west of Middlefield Road	**48.7**	**55.7**	**7.0**	**Yes**
Seminary Drive west of Middlefield Road	**45.3**	**52.7**	**7.5**	**Yes**
Ravenswood Avenue west of Project Driveway B1 East	59.0	60.0	1.0	No
Ravenswood Avenue west of Project Driveway B1 West	58.9	60.2	1.3	No
Ravenswood Avenue west of Pine Street	59.1	60.2	1.1	No
Ravenswood Avenue west of Laurel Street	59.9	60.3	0.3	No

Notes:

[a] A change of 3 dB or less in traffic noise levels would not constitute a significant impact because such a change would be considered just noticeable. A change of more than 3 dB may be significant, depending on the no-Project noise levels.

At Pine Street south of Ravenswood Avenue, the background with-Project noise level would be approximately 49 dBA L_{dn}, which is below the compatibility standard for all uses in Menlo Park. Thus, the 5 dB increase threshold would apply; the 3.2 dB increase from the Proposed Project would not be considered a significant noise increase.

At D Street west of Middlefield Road and at Seminary Drive west of Middlefield Road, the background with-Project noise level would be less than the compatibility standard for all uses in Menlo Park; however, the increase in noise of 7 and 7.5 dB, respectively, would be greater than the 5 dB threshold. It should be noted that these roadway segments are at the driveway entry points to the Project Site; there are currently no noise-sensitive land uses adjacent to these segments. As such, the increase at these segments is likely to be less of a concern than a noise increase occurring in an area with noise-sensitive land uses. Commercial and office uses are typically less affected by increases in noise than residences or schools. Thus, although the increase in noise is above the identified thresholds, the land use context (i.e., commercial and office uses and no sensitive land uses) should also be taken into consideration. As noted previously, there are certain circumstances where an exceedance of the thresholds may not constitute a significant impact.

Traffic noise levels, in general, can be reduced by reducing the number of vehicles or installing intervening barriers. Reducing vehicle volumes would require changing the proposed land uses; any proposed changes would need to be feasible and consistent with Project objectives. A sound wall would need to be at a height of approximately 8 feet; therefore, it would very likely be visually intrusive. In addition, to effectively reduce exterior noise levels, a sound wall would need to obstruct access to the Project Site driveway, which would not be feasible. Because there are no sensitive land uses near the roadways where the noise increases would be 7 and 7.5 dB, and because these areas would have noise levels that would be below the compatibility standard with Project-generated traffic, this impact would be ***less than significant***. No mitigation is required.

Impact NOI-3: Ground-borne Vibration. The Proposed Project would generate excessive ground-borne vibration or ground-borne noise levels. (SU)

Building Damage

During construction, vibration-generating construction equipment may be operated in proximity to existing buildings and structures. The distance between the construction equipment and the existing buildings would depend on the specific construction activity occurring and the location at the Project Site. For example, demolition activities would occur at the footprints of existing buildings within the campus and thus would be farther from the boundary of the site where existing offsite buildings are located.

The most vibration-intensive pieces of equipment that would operate near existing sensitive land uses during construction of the Proposed Project would be excavators and loaded trucks. Although auger drills may be used in the footprint of proposed buildings, these generate approximately the same vibration level as excavators and would not be operating near the perimeter of the Project Site close to offsite buildings. In addition, pile driving would not occur during construction. Therefore, the vibration analysis focuses on the use of excavators. Typical vibration levels associated with heavy-duty construction equipment at a reference distance of 25 feet are shown in Table 3.7-16, based on the FTA's *Transit Noise and Vibration Impact Assessment Manual.*[15]

[15] Ibid.

Table 3.7-16. Vibration Levels for Construction Equipment at Various Distances[16]

Equipment	PPV at 15 feet	PPV at 25 Feet	PPV at 50 Feet	PPV at 75 Feet	PPV at 100 Feet	PPV at 150 Feet	PPV at 200 Feet
Large bulldozer[a]	0.191	0.089	0.031	0.016	0.011	0.006	0.004
Loaded trucks	0.164	0.076	0.027	0.013	0.010	0.005	0.004

Notes:
PPV = peak particle velocity
a. Representative of an excavator.

Table 3.7-4 presents the damage thresholds for several types of structures. In the vicinity of the Project Site, buildings can be characterized as either older residential structures, newer residential structures, or modern industrial/commercial buildings. As shown in Table 3.7-4, damage thresholds for these types of buildings are 0.3 inch in/sec (i.e., for older residential structures) and 0.5 in/sec (i.e., for newer residential structures, modern industrial/commercial buildings).

The shortest distance between construction equipment and existing buildings is expected to be approximately 15 feet, which could occur in the Linfield Oaks or Classics of Burgess Park neighborhoods. The length of time that equipment would operate within 15 feet of residences in these neighborhoods would be limited because the equipment would also operate in other areas throughout the Project Site and therefore at much greater distances from the residences. Nevertheless, because equipment could be as close as 15 feet, this distance is conservatively used in the vibration evaluation. At that distance, the most vibration-intensive equipment proposed for use (i.e., a large bulldozer) would generate a vibration level of up to approximately 0.191 in/sec, as shown in Table 3.7-16.

The nearby commercial and school structures in this area would be classified as "modern industrial/commercial buildings," which have a Caltrans damage criterion of 0.5 in/sec. Regarding the nearest residences, nearby residential land uses would either be categorized as "new residential structures" or "older residential structures" under the Caltrans guidelines, which have applicable damage criterion of 0.5 and 0.3 in/sec, respectively. It is conservatively assumed that all residential structures in this area would be similar to "older residential structures," which have an applicable damage criterion of 0.3 in/sec. Table 3.7-4 presents the damage thresholds for each building type.

As shown in Table 3.7-16, vibration from construction at the nearest residential land uses (i.e., single-family residences in the Classics of Burgess Park and Linfield Oaks neighborhoods) could have a PPV of up to 0.191 in/sec. This scenario would occur in very limited circumstances, however, because it is anticipated that equipment would be 15 feet from these receptors for only 3 to 4 days during grading for landscaping-related activities. Construction associated with new buildings, which would be longer in duration, would occur at greater distances from existing residential neighborhoods (e.g., 50 feet for the townhomes and 200 feet for the parking garage). The PPV of 0.191 in/sec would thus occur rarely and be less than the applicable damage criterion of 0.3 in/sec that would apply to this structure type. If construction equipment is used within 15 feet of existing commercial structures, vibration would also be below the damage criterion because, as noted above, the threshold is a PPV of 0.5 in/sec. for modern industrial/commercial buildings.

[16] Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment*. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed: February 2, 2024.

Based on the assessment presented above, vibration from construction activities associated with the Proposed Project would not be expected to result in damage effects at buildings near the Project Site. Construction vibration impacts related to building damage would be ***less than significant***. No mitigation is required.

Annoyance/Sleep Disturbance

People are typically considered more sensitive to vibration that occurs during nighttime hours because of potential disturbances during the typical hours of sleep. However, schools and places of work may also be considered sensitive to daytime vibration because it may affect a person's ability to complete work or focus on certain tasks. For this analysis, a significant vibration impact would be considered to occur when construction activities generate vibration levels that are strongly perceptible (i.e., PPV of 0.1 in/sec) at surrounding land uses during daytime or nighttime hours or when vibration levels exceed the criteria outlined in ConnectMenlo EIR Mitigation Measure NOISE-2a. Although the Proposed Project is not tiering from the ConnectMenlo EIR, the thresholds of significance from that document are still applicable to vibration generated during construction because the thresholds characterize the significance of physical impacts on the environment. As discussed above in "Summary of Analysis in the ConnectMenlo EIR," ConnectMenlo EIR Mitigation Measure NOISE-2a specifies that vibration levels must be limited to a PPV of 0.126 in/sec at the nearest workshop, 0.063 in/sec at the nearest office, 0.032 in/sec at the nearest residence during daytime hours, and 0.016 in/sec at the nearest residence during nighttime hours.

During construction, vibration-generating construction equipment may be operated approximately 15 feet from single-family residences. As shown in Table 3.7-16, the use of an excavator could result in a vibration level with a PPV of up to 0.191 in/sec at 15 feet. This vibration level would be above the "strongly perceptible" level (i.e., PPV of 0.1 in/sec) and above the thresholds specified in Mitigation Measure NOISE-2a from the ConnectMenlo EIR (0.032 in/sec at residential uses, during the daytime hours). At a distance of 25 feet, however, the vibration level would be below the strongly perceptible level and considered distinctly perceptible (i.e., PPV of 0.4 in/sec); however, it would still be above the ConnectMenlo EIR threshold of 0.032 in/sec. Most construction activities would occur more than 15 feet from offsite uses because construction along the perimeter of the site would be short term compared to the overall duration of construction. In addition, the vibration levels shown in Table 3.7-16 would occur during daytime hours and not during early-morning or nighttime hours. However, vibration levels from a large bulldozer could be above 0.031 in/sec at a distance of 50 feet, according to Table 3.7-16. Construction involving the use of a large bulldozer or similar equipment would occur within 50 feet of existing residential uses because the proposed townhomes would be within 50 feet of the Classics of Burgess Park neighborhood. This construction vibration impact is ***potentially significant***.

Vibration levels from the early-morning concrete pours would have a PPV of less than 0.191 in/sec because a concrete truck is less vibration intensive than a large bulldozer, and the concrete pours would occur more on the internal portions of the site and less at the perimeter. It is unlikely that a concrete truck would operate within 15 feet of residential structures; thus, vibration levels during early-morning hours would not exceed the Caltrans "strongly perceptible" vibration criterion for annoyance (i.e., PPV of 0.1 in/sec). Other equipment used for the concrete pours would operate within the interior of the Project Site and not near existing residential uses. However, a loaded concrete truck traveling within approximately 70 feet of existing residential uses could generate a vibration level greater than the nighttime threshold specified in the ConnectMenlo EIR of 0.016 in/sec. This scenario would be more likely to occur. Therefore, this construction vibration impact is ***potentially significant***.

MITIGATION MEASURES. Implementation of Mitigation Measure NOI-3.1 would reduce vibration levels from construction activity during daytime and early-morning hours by requiring larger equipment to operate at distances greater than 15 feet from sensitive land uses to the extent feasible and a vibration coordinator to address any vibration-related complaints received. However, it may not be possible to ensure that vibration levels at all times and at all locations would be reduced to a level below the "strongly perceptible" level or below the thresholds identified in the ConnectMenlo EIR because larger equipment may need to operate at closer distances to sensitive land uses. Impacts related to construction vibration would be ***significant and unavoidable with mitigation***.

NOI-3.1: Vibration Control Measures for Annoyance from Construction Activities

Daytime construction activity involving an excavator, or other equipment capable of generating similar vibration levels, shall take place no closer than 50 feet from residential or other sensitive land uses, to the extent feasible and practical, subject to review and approval by the Community Development Department; equipment smaller than an excavator may operate less than 50 feet from residential land uses. Jackhammers shall be further restricted, operating no closer than 30 feet from residential land uses. The 50-foot restriction may be greater for equipment that results in greater vibration levels than an excavator. Maintaining these distances between equipment and the nearest sensitive land uses would ensure that vibration levels would be below a peak particle velocity (PPV) of 0.032 inch per second (in/sec). Early-morning construction activity involving concrete trucks shall occur after 7:00 a.m. when the daytime threshold from ConnectMenlo is applicable (0.032 in/sec) rather than the nighttime threshold (0.016 in/sec).

When construction requires the use of the aforementioned types of equipment closer to nearby sensitive uses or before the allowable hours, reduction measures shall be incorporated, to the extent feasible and practical, such as the use of smaller or less vibration-intensive equipment. The feasibility of reduction measures shall be subject to review and determination by the Community Development Department. In addition, the construction contractor shall appoint a vibration coordinator for the Proposed Project who will serve as the point of contact for vibration-related complaints during construction. Contact information for the vibration coordinator will be posted at the Project Site and on a publicly available website for the Proposed Project. Should complaints be received, the vibration coordinator shall work with the construction team to adjust activities, to the extent feasible and practical, and reduce vibration or reschedule activities for a less sensitive time. The vibration coordinator shall notify the Community Development Department of all vibration-related complaints and actions taken to address the complaints.

Cumulative Impacts

Cumulative impacts are addressed only for those thresholds that would result in a Project-related impact. If the Proposed Project would result in no impact with respect to a particular threshold, it would not contribute to a cumulative impact. Therefore, no analysis is required. As discussed under "Impacts Not Evaluated in Detail," the Proposed Project would result in ***no impact*** related to airport noise, and no further cumulative analysis is required.

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*.

Impact C-NOI-1: Cumulative Construction Noise. Cumulative development would result in a significant environmental impact related to construction noise; the Proposed Project would be a cumulatively considerable contributor to a significant environmental impact. (SU)

As discussed above, because Project construction may result in a 10 dB or greater increase in noise at nearby sensitive uses during daytime hours, the Proposed Project would result in a new significant and unavoidable noise impact. Construction noise is a localized impact that attenuates with distance. Intervening features such as buildings or walls between construction areas and noise-sensitive land uses result in additional attenuation by breaking the line of sight between source and receiver. Therefore, for Project construction noise to combine with noise from other nearby construction projects and expose individual receptors to greater noise levels, the projects would need to be close to one another.

Construction of cumulative projects in proximity to the Project Site, including the 333 Ravenswood Avenue project (No. 35) and the 429 University Avenue project (No. 47), could overlap with Project construction (refer to Figure 3.0-1). These projects could be under construction at the same time; therefore, cumulative construction noise impacts would be ***significant***. Because the Proposed Project on its own would result in a significant impact, its contribution would be cumulatively considerable. Although implementation of Mitigation Measures NOI-1.1 and NOI-1.2 would reduce the Proposed Project's construction noise impacts, such impacts were determined to be significant and unavoidable. Based on the analysis above, the Proposed Project's contribution to cumulative impacts related to construction noise would be ***cumulatively considerable even with mitigation***.

Impact C-NOI-2: Cumulative Operational Noise. Cumulative development would not result in a significant environmental impact related to operational noise; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Emergency Generators

Under cumulative conditions, emergency generators at the Project Site would generate audible noise during testing. However, the emergency generators would be tested only intermittently. Furthermore, noise from generators is exempted during actual emergencies. It is very unlikely that the testing of an emergency generator as part of the Proposed Project would occur concurrently with the testing of a generator at a nearby project. Even if testing were to occur simultaneously, it is not likely that the generators would be close enough to one another for the noise to combine at a given sensitive land use. In addition, all new generators in the city would need to be in compliance with the Menlo Park Municipal Code as a condition of approval to construct. Therefore, cumulative noise impacts related to emergency generator testing would be ***less than significant***. No mitigation is required.

Mechanical Equipment and Other Noise Sources

Because multiple projects may be located close to one another, it is possible that noise from mechanical equipment (e.g., HVAC units, exhaust fans) for the Proposed Project would combine with noise from mechanical equipment at nearby projects and cause a cumulative noise impact at nearby noise-sensitive land uses. However, as discussed in Impact NOI-2, above, all new mechanical equipment in the city would need to be in compliance with the Menlo Park Municipal Code as a condition of approval to construct. For event-related noise, as noted above, all events with more than 150 people would need a permit to ensure compliance with Menlo Park Municipal Code noise limits. Furthermore, it is unlikely that event noise at more than one project site would overlap and combine to affect a given land use. New equipment at project sites must be in compliance with the Menlo Park Municipal Code, and all projects in the vicinity would need to ensure that noise from larger events would be in compliance with applicable local noise limits. The cumulative impact from equipment and event noise would be ***less than significant.*** No mitigation is required.

Traffic Noise

To determine cumulative noise increases as a result of the Proposed Project, existing volumes were compared to cumulative-year with-Project volumes. In addition, cumulative-year no-Project vehicular traffic volumes were compared to cumulative-year with-Project volumes to isolate the effect of the Proposed Project. Table 3.7-17 presents the modeling results of the cumulative traffic noise assessment.

As shown in Table 3.7-17, which presents the results for roadway segments under cumulative conditions, the traffic noise increases between existing-year and cumulative-year with-Project conditions would be a maximum of 7.4 dB. The largest increases would be at D Street west of Middlefield Road and Seminary Drive west of Middlefield Road where the increases would be 6.3 and 7.4 dB, respectively. Although these increases would be considered noticeable, there are no sensitive land uses in proximity to the roadway segments where the increases would occur; the increases at all other segments would be less than 3 dB and, therefore, not noticeable. In addition, for cumulative plus-Project conditions, the noise level at these segments would be a maximum of 55.1 dB L_{dn}, which is within or below the compatibility standard for what is considered "normally acceptable" for all land uses. As such, increases of 6.3 and 7.4 dB are not considered to represent a significant cumulative impact because there are no sensitive land uses near the roadways and the overall noise levels would be below the compatibility standards. The cumulative operational traffic noise impact would be ***less than significant***. No mitigation is required.

Table 3.7-17. Cumulative-Level Traffic Noise Impacts for the Proposed Project

Roadway Segment	Existing (L_{dn})	Cumulative without Project (L_{dn})	Cumulative plus Project (L_{dn})	Increase Relative to Existing (dB)	Increase Relative to Cumulative (dB)	3 dB or Greater Project-Related Increase[a]
Proposed Project						
Middlefield Road north of Willow Road	59.4	60.8	61.7	2.3	0.9	No
Willow Road east of Durham Street	60.1	59.9	60.7	0.6	0.8	No
Willow Road east of Coleman Avenue	59.7	59.7	60.5	0.8	0.8	No
Willow Road east of Gilbert Avenue	59.1	59.0	59.9	0.8	1.0	No
Willow Road east of Middlefield Road	60.0	59.8	60.6	0.6	0.9	No
Ravenswood Avenue east of Project Driveway B1 East	57.7	57.1	58.2	0.5	1.1	No
Ravenswood Avenue east of Project Driveway B1 West	57.7	57.1	58.2	0.5	1.1	No
Ravenswood Avenue east of Pine Street	58.1	57.4	58.6	0.6	1.2	No
Ravenswood Avenue between Laurel Street and Pine Street	58.3	57.8	58.9	0.6	1.1	No
Ravenswood Avenue east of El Camino	57.4	58.4	59.1	1.7	0.7	No

Roadway Segment	Existing (L_{dn})	Cumulative without Project (L_{dn})	Cumulative plus Project (L_{dn})	Increase Relative to Existing (dB)	Increase Relative to Cumulative (dB)	3 dB or Greater Project-Related Increase[a]
Middlefield Road between Ravenswood Avenue and Ringwood Avenue	62.4	62.7	63.6	1.1	0.9	No
Middlefield Road between Ringwood Avenue and Seminary Drive	61.3	61.7	62.7	1.4	0.9	No
Middlefield Road south of Seminary Drive	61.2	61.4	62.4	1.2	1.0	No
Willow Road west of Durham Street	60.2	60.0	60.7	0.5	0.7	No
Willow Road west of Coleman Avenue	59.8	59.8	60.6	0.8	0.8	No
Willow Road west of Gilbert Avenue	59.3	59.5	60.3	1.0	0.8	No
D Street west of Middlefield Road[b]	**48.9**	N/A	**55.1**	**6.3**	N/A	N/A
Seminary Drive west of Middlefield Road[b]	**45.3**	N/A	**52.6**	**7.4**	N/A	N/A
Ravenswood Avenue west of Project Driveway B1 East	58.9	57.5	58.9	0.0	1.3	No
Ravenswood Avenue west of Project Driveways B1 West	58.9	57.1	58.9	0.0	1.8	No
Ravenswood Avenue west of Pine Street	58.9	57.1	58.9	0.0	1.7	No
Ravenswood Avenue west of Laurel Street	59.0	57.9	59.3	0.2	1.4	No

Notes:

a. A change of 3 dB or less in traffic noise levels would not constitute a significant impact because such a change is considered just noticeable. A change of more than 3 dB may be significant, depending on the existing noise levels.

b. For these segments, it is not possible to calculate an increase relative to cumulative no-Project conditions because there would be volumes of zero at these segments.

Impact C-NOI-3: Cumulative Vibration Impacts. Cumulative development would not result in a significant environmental impact related to exposing persons to or generating excessive ground-borne vibration or ground-borne noise levels; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Vibration impacts are based on instantaneous PPV levels. Because PPV is a measure of the peak instantaneous vibration level rather than an average, other sources of vibration that may operate simultaneously (e.g., at other project sites or even on the same project site) would not be expected to combine to raise the overall peak vibration level experienced at sensitive uses in the Study Area. Worst-case ground-borne vibration levels are generally determined by the equipment that generates the highest vibration level at the affected location; therefore, vibration would be dominated by the closest and most vibration-intensive equipment being used at a given time.

In general, vibration from multiple construction sites, even if close to one another, would not combine to raise the maximum PPV level at sensitive uses near the Project Site. For that reason, the cumulative impact of construction vibration from multiple construction projects near or even adjacent to one another would not combine to increase PPV vibration levels. Cumulative vibration impacts would be ***less than significant.*** No mitigation is required.

3.8 Cultural Resources

This section identifies and evaluates the Proposed Project's potential impacts on cultural resources, including archaeological resources and those associated with the built environment. This section also describes existing conditions in the Study Area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *SRI International Campus Historic Resource Evaluation for Parkline Project, City of Menlo Park, San Mateo County*;[1]
- *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*;[2]
- *Parkline Project SRI International Campus Preservation Alternatives Analysis Report for Parkline Project, City of Menlo Park, San Mateo County*;[3] and
- *Archaeological Resources Technical Report, Parkline.*[4]

The technical documentation listed above prepared for the Proposed Project by Page & Turnbull was peer reviewed by ICF. The existing setting, Project analysis, and mitigation measures outlined in the technical documentation are incorporated throughout this section. The *Archaeological Resources Technical Report, Parkline* includes the results from a search of the California Historical Resources Information System at the Northwest Information Center (NWIC). With the exception of the *Archaeological Resources Technical Report, Parkline*, the technical documentation listed above is included in Appendix 3.8 of this EIR. The *Archaeological Resources Technical Report, Parkline* is confidential and not for public release because it contains the locations of archaeological sites which are not within the Project Site but are within the vicinity of the Project Site. Public distribution and access should be restricted.

The following definitions are common terms used to discuss regulatory requirements and the treatment of cultural resources:

- *Cultural resources* is the term used to describe several different types of properties: precontact (Native American) and historical archaeological sites; architectural properties such as buildings, bridges, and infrastructure; and resources of importance to Native Americans or other groups of people.
- *Historic properties* is a term defined by the National Historic Preservation Act (NHPA) as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP), including artifacts, records, and material remains related to such a property.

[1] Page & Turnbull. 2022. *SRI International Campus Historic Resource Evaluation for Parkline Project*, *City of Menlo Park, San Mateo County*. April 21. Refer to Appendix C of the *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*.

[2] Page & Turnbull. 2024. *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*. June 6. Refer to Appendix 3.8-1 of this EIR.

[3] Page & Turnbull. 2024. *Parkline Project SRI International Campus Preservation Alternatives Analysis Report Revised & Restated, City of Menlo Park, San Mateo County*. June 4. Refer to Appendix 3.8-2 of this EIR.

[4] ICF. 2024. *Archaeological Resources Technical Report, Parkline*. June.

- *Historical resources,* as described in the California Environmental Quality Act (CEQA), include buildings, sites, structures, objects, and districts, each of which may have historic, prehistoric, architectural, archaeological, cultural, or scientific importance and be listed in or eligible for listing in the California Register of Historical Resources (CRHR) or a local register of historical resources. The CRHR includes resources listed in or formally determined eligible for listing in the NRHP as well as some California Historical Landmarks and California Points of Historical Interest.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. A comment noted that the EIR should include documentation of the archaeological records search and Native American consultation pursuant to Assembly Bill (AB) 52 and Senate Bill (SB) 18.

Existing Conditions

Regulatory Setting

Federal

National Historic Preservation Act

The NRHP is a federal registration program that was established by the NHPA; it is administered by the National Parks Service. Specifically, it is the nation's official comprehensive inventory of historic resources. Historic properties are districts, sites, buildings, structures, and/or objects that are listed in or eligible for listing in the NRHP (36 Code of Federal Regulations [CFR] Section 800.16[l][1]). A property may be listed in the NRHP if it meets the criteria for significance and integrity described in the NRHP regulations (36 CFR Section 60.4).

Although the Proposed Project is not anticipated to require compliance with Section 106 of the NHPA, the NRHP and federal regulations related to the treatment of cultural resources are relevant for determining whether historically significant cultural resources, as defined by CEQA, are present and guiding the treatment of such resources.

Historic properties possess integrity of location, design, setting, materials, workmanship, feeling, and association. Such properties convey historical significance if they fall under one or more of the following criteria:

A. Are associated with events that have made a significant contribution to the broad patterns of our history; or

B. Are associated with the lives of persons significant in our past; or

C. Embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master or possess artistic value or represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded, or may be likely to yield, information important regarding prehistory or history.

Some property types do not typically qualify for NRHP listing; however, these properties may qualify if they fall under one or more of the criteria considerations below. Property types that require special consideration consist of the following (36 CFR Section 60.4):

A. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

B. A building or structure removed from its original location but significant for its architectural value or being the surviving structure most importantly associated with a historic person or event; or

C. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or

D. A cemetery that derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

E. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan and when no other building or structure with the same association has survived; or

F. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

G. A property achieving significance within the past 50 years if it is of exceptional importance.

Properties that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR and, thus, significant historical resources for the purpose of CEQA (Public Resources Code [PRC] Section 5024.1[d][1]).

State

California Environmental Quality Act (PRC Section 21083.2)

CEQA requires a lead state agency to consider the impacts of a project on historical resources. State CEQA Guidelines Section 15064.5(b) states that project effects that would "cause a substantial adverse change in the significance of a historical resource" are significant effects on the environment. Substantial adverse changes include physical changes to both a historical resource and its immediate surroundings. Substantial adverse changes include physical changes to both the historical resource and its immediate surroundings. CEQA Section 21083.2 and State CEQA Guidelines Section 15064.5(c) provide further definitions and guidance for archaeological sites and their treatment.

State CEQA Guidelines Section 15064.5 provides specific guidance for determining the significance of impacts on historical resources (State CEQA Guidelines Section 15064.5[b]) and unique archaeological resources (State CEQA Guidelines Section 15064.5[c]; PRC Section 21083.2). Under State CEQA Guidelines Section 15064.5(a), the following resources are considered historical resources:

1. A resource listed in or determined by the State Historical Resources Commission to be eligible for listing in the CRHR (PRC Section 5024.1) will be presumed to be historically significant;

2. A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC 5024.1(g), will be presumed to be historically or culturally significant; public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant;

3. Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered

to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record; and

4. The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]), or not identified in a historical resources survey (meeting the criteria in PRC Section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource, as defined in PRC Section 5020.1(j) or 5024.1.

California Register of Historical Resources

PRC Section 5024.1 establishes the CRHR. The CRHR lists all California properties considered to be significant historical resources. The CRHR automatically includes all properties listed in or determined eligible for listing in the NRHP.

Title 14 of the California Code of Regulations, Section 4850, governs eligibility for listing in the CRHR. The regulations set forth the criteria for evaluating significance and the historical integrity of that significance. To be eligible for listing in the CRHR, a resource must have significance at the local, state, or national level under one or more of the following four criteria:

1. Associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
2. Associated with the lives of persons important to local, California, or national history;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; and/or
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

If a resource is found to have significance through application of the four associative criteria, then the integrity of that significance must be evaluated. Integrity is defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance." Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association; it must be judged with reference to its particular criterion or criteria of significance.

Unique Archaeological Resources

State CEQA Guidelines Section 15064.5(c) specifies how CEQA applies to archaeological sites, including archaeological sites that are historical resources, unique archaeological resources, or neither. PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. It contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
2. It has a special and particular quality, such as being the oldest of its type or the best available example of its type; or
3. It is directly associated with a scientifically recognized important prehistoric or historic event or person.

State CEQA Guidelines Sections 15064.5(d) and (e) specify responsibilities regarding the treatment of human remains, including Native American human remains, that are found or likely to be found within a project site.

Tribal Cultural Resources

Analysis of tribal cultural resources was identified as a distinct CEQA environmental category with the adoption of AB 52 (PRC Section 21074). AB 52 sets up an expanded consultation process, following PRC Section 21080.3.1(b). Archaeological sites, including those that qualify as historical resources (PRC Section 21084.1), unique archaeological resources (PRC Section 21083.2[g]), and non-unique archaeological resources (PRC Section 21083.2[h]), may qualify as tribal cultural resources. Tribal cultural resources are analyzed in Section 3.9, *Tribal Cultural Resources*.

Senate Bill 18

California SB 18, established in September 2004, requires local governments to consult with California Native American tribes prior to preparing or amending both general plans (as defined in California Government Code Section 65300 et seq.) and specific plans (as defined in Government Code Section 65450 et seq.). The purpose of this consultation is to include California Native American tribes early in the planning process to allow for the identification and protection of cultural resources. This process also allows cultural resources to be considered during the broad-scale local and regional planning process rather than at a project level. The following includes a sequential list of local government responsibilities:

- Local governments must notify appropriate tribes, as identified by the Native American Heritage Commission (NAHC), prior to the adoption or amendment of a general plan or specific plan;
- Tribes have 90 days from the receipt of notification to request consultation (Government Code Section 65352.3);
- Prior to adoption or substantial amendment of a general plan or specific plan, local governments must refer the proposed action to the appropriate tribes, as identified by the NAHC, regardless of whether previous consultation has taken place;
- Local governments must allow a 45-day comment period (Government Code Section 65352); and
- Local governments must provide notice of a public hearing to all tribes that filed a written request for such notice at least 10 days prior to the hearing (Government Code Section 65092).

Health and Safety Code Section 7050.5: Human Remains

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, Section 7050.5 of the Health and Safety Code states that there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains were discovered has determined whether they are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of this identification.

PRC Section 5097.98: Notification of Most Likely Descendant

PRC Section 5097.98 states that the NAHC, upon notification of the discovery of Native American human remains, pursuant to Health and Safety Code Section 7050.5, shall immediately notify the most likely descendant of the deceased. With permission of the landowner or a designated representative, the most

likely descendant may inspect the remains and any associated cultural materials and make recommendations for treatment or disposition. The most likely descendant shall provide recommendations or preferences for treatment of the remains and associated cultural materials within 48 hours of being granted access to the site.

Native American Historic Resource Protection Act (PRC Section 5097.993)

PRC Section 5097.993 establishes that a person who unlawfully and maliciously excavates, removes, destroys, or defaces a Native American historic, cultural, or scared site that is listed in or may be eligible for listing in the CRHR is guilty of a misdemeanor if the act was committed with specific intent to vandalize, deface, destroy, steal, convert, possess, collect, or sell a Native American artifact, art object, inscription, feature, or site. Civil penalties include imprisonment and fines of up to $50,000 per violation.

Local

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with cultural resources.

The following goals and policies from the Land Use Element related to cultural resources were adopted to avoid or mitigate environmental impacts and are relevant to the Proposed Project:

Goal LU-7: Sustainable Services. Promote the implementation and maintenance of sustainable development, facilities, and services to meet the needs of Menlo Park's residents, businesses, workers, and visitors.

> **Policy LU-7.8: Cultural Resource Preservation.** Promote preservation of buildings, objects, and sites with historic and/or cultural significance.[5]

The following goals and policies from the Open Space/Conservation Element related to cultural resources were adopted to avoid or mitigate environmental impacts and are relevant to the Proposed Project:

Goal OSC-3: Protect and Enhance Historic Resources. Protect and enhance cultural and historical resources for their aesthetic, scientific, educational, and cultural values.

> **Policy OSC-3.1: Prehistoric or Historic Cultural Resources Investigation and Preservation.** Preserve historical and cultural resources to the maximum extent practical.
>
> **Policy OSC-3.2: Prehistoric or Historic Cultural Resources Protection.** Require significant historic or prehistoric artifacts to be examined by a qualified consulting archaeologist or historian for appropriate protection and preservation and ensure compliance with local, state, and federal regulations.

[5] City of Menlo Park. 2016. *ConnectMenlo: Menlo Park Land Use and Mobility Update, City of Menlo Park General Plan*. Adopted: November 29. Available: https://www.menlopark.org/DocumentCenter/View/15014/Land-Use-Element_adopted-112916_final_figures?bidId=. Accessed: October 26, 2023.

Policy OSC-3.3: Archaeological or Paleontological Resources Protection. Protect prehistoric or historic cultural resources, either onsite or through appropriate documentation, as a condition of removal. When a development project has sufficient flexibility, require avoidance or preservation of the resources as the primary form of mitigation, unless the city identifies superior mitigation. If resources are documented, undertake coordination with descendants and/or stakeholder groups, as warranted.

Policy OSC-3.4: Prehistoric or Historic Cultural Resources Found during Construction. If cultural resources, including archaeological or paleontological resources, are uncovered during grading or other onsite excavation activities, require construction to stop until appropriate mitigation is implemented.

Policy OSC-3.5: Consultation with Native American Tribes. Consult with those Native American tribes with ancestral ties to the Menlo Park city limits regarding general plan amendments and land use policy changes.

Policy OSC-3.6: Identification of Potential Historic Resources. Identify historic resources for the historic district in the zoning ordinance and require design review of proposals affecting historic buildings.[6]

Menlo Park Historic Site District (H) Zoning

The city of Menlo Park does not maintain a local register of historic resources. However, Chapter 16.54 of the zoning ordinance in the city of Menlo Park Municipal Code establishes Historic Site District (H) zoning. Historic Site District zoning was implemented for the "protection, enhancement, perpetuation, and use of structures, sites, and areas that are reminders of people, events, or eras or provide significant examples of architectural styles and the physical surroundings in which past generations lived."[7] Chapter 16.54 allows the City Council to designate historic resources or sites for H zoning, and requires that permits for construction, alteration, removal, or demolition of designated resources be in keeping with the architectural controls in Chapter 16.68.

Environmental Setting

The Project Site is located along the southwest edge of San Francisco Bay. Natural habitats on the San Francisco Peninsula prior to historic development included grasslands and pockets of oak woodland that were populated by a variety of mammals, shorebirds, and marine invertebrates, including the native California oyster (*Ostrea lurida*), bay mussel (*Mytilus edulis*), and bent-nosed clam (*Macoma nasuta*), among others.[8] The Project Site and vicinity would have included small freshwater marshes, tidal sloughs, and salt marshes along the bay margin.

The local climate is characterized as Mediterranean, with mild, rainy winters and dry, warm summers. The cold water of the bay creates fog, and relative humidity is high year-round.

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6 City of Menlo Park. 2013. *ConnectMenlo: Menlo Park Land Use and Mobility Update, City of Menlo Park General Plan.* Adopted: May 21. Available: https://menlopark.gov/files/sharedassets/public/v/1/community-development/documents/general-plan/open-space-and-conservation-noise-and-safety-elements.pdf. Accessed: October 26, 2023.

7 City of Menlo Park. n.d. *Menlo Park Municipal Code*. Section 16.54.010. Available: https://www.codepublishing.com/CA/MenloPark/#!/MenloPark16/MenloPark1654.html#16.54. Accessed: June 9, 2024.

8 Broughton, J.M. 1999. Resource Depression and Intensification during the Late Holocene, San Francisco Bay: Evidence from the Emeryville Shellmound Vertebrate Fauna. In *Anthropological Records,* 32:22.

The past or current presence of moist grasslands and riparian forests/willow groves, coupled with tidal marshes in association with existing and former stream channels, appears to be a key element for predicting pre-European contact sites. Researchers have noted that precontact[4] archaeological resources are often within 0.25 mile of flowing water in the Bay Area. The term "precontact," as used here, is synonymous with the term "prehistory," meaning the time prior to Euro-American contact with indigenous tribes of California. The term is exchanged to avoid pejorative implications that have previously been the subject of tribal concerns.

Precontact Setting

Human occupation in Northern California extends back at least 9,000 to 11,500 years, with Native American occupation and use of the Bay Area extending back more than 5,000 to 8,000 years and possibly longer. Rising sea levels about 5,000 to 7,000 years ago and marshland infilling along estuary margins from about 7,000 years ago onward have obscured evidence of early occupation. The extent of shorelines and the locations of marshlands and creeks within the Study Area have changed over the past 6,000 years because of both natural factors and urban development, particularly flood control.

Archaeological research in the Bay Area has been interpreted with the use of several chronological schemes, based on stratigraphic differences and cultural traits. The initial classification sequence used three horizons, Early, Middle, and Late Horizon, to designate both chronological periods and social change, based on stratigraphic patterns and an analysis of grave goods to explain local and regional cultural change from about 4,500 years ago to European contact. This classification scheme has been revised, although the prior nomenclature (Early, Middle, and Late Horizon) is still in common use. [9] Moratto suggests that the Early Horizon dates from circa 3,000/3,500 to 4,500 years ago, the Middle Horizon dates from circa 1,500 to 3,500 years ago, and the Late Horizon dates from circa 250 to 1,500 years ago.[10]

Hylkema has presented a four-period chronological framework for the northern Santa Clara Valley/southern Bay Area and provided details regarding the environment and chronology for selected archaeological sites from the southern Bay Area and peninsula.[11] Early Native American use of the Study Area was heavily influenced by the presence of various seasonal creeks and marshlands around San Francisco Bay as well as the foothills to the east. Creeks provided a year-round source of freshwater and riparian resources, while the foothills provided access to nuts, seeds, game, tool stones, and other resources. San Francisco Bay and seasonal bodies of water would have been sources of fish, waterfowl, and riparian vegetation.

Pre-European contact archaeological sites in the general vicinity represent habitation sites, including villages; temporary campsites; stone tool and other manufacturing areas; quarries for stone procurement; cemeteries, typically associated with large villages; isolated burial sites; rock art locations; bedrock mortars or other milling feature sites; and trails. Sites in the general area appear to have been selected for relative accessibility, protection from seasonal flooding, and proximity to a diversified resource base. Most of the prehistoric shellmounds and associated sites in the area are situated at the ecotone (boundary) between salt marsh and alluvial plain ecozones.

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9 Fredrickson, D.A. 1994. Spatial and Cultural Units in Central California Archaeology. In *Toward a New Taxonomic Framework for Central California Archaeology: Essays by James A. Bennyhoff and David A. Fredrickson*. Richard E. Hughes (ed.), pp. 25–47. Contributions of the University of California Archaeological Research Facility, 52.

10 Moratto, Michael J. 1984. *California Archaeology*. Academic Press, New York, NY.

11 Hylkema, Mark G. 2002. Tidal Marsh, Oak Woodlands, and Cultural Florescence in the Southern San Francisco Bay Region. In *Catalysts to Complexity: Late Holocene Societies of the California Coast*. J.M. Erlandson and T.L. Jones, (eds.), Perspectives in California Archaeology 6:233–262.

Archaeological information suggests a gradual, steady increase in the population over time, with a growing focus on large permanent settlements in later periods. The transition from hunter-collectors to villages with a greater sedentary lifestyle was due to more efficient resource procurement as well as a focus on the exploitation of food staples, greater ability to store food at village locations, and the development of increasingly complex social and political systems, including long-distance trade networks.

Ethnographic Setting

Menlo Park is situated within territory once occupied by the Costanoan, also commonly referred to as Ohlone. Eight Ohlone languages were spoken in the area, from the southern edge of the Carquinez Strait to portions of the Big Sur and Salinas Rivers south of Monterey Bay as well as in areas approximately 50 miles inland from the coast. Menlo Park lies on the approximate ethnolinguistic boundary between the Tamyen and Ramaytush languages. Tamyen, or Santa Clara Costanoan, was spoken around the south end of San Francisco Bay and in the lower Santa Clara Valley; it seems to have had about 1,200 speakers. Ramaytush, or San Francisco Costanoan, was spoken by about 1,400 people in San Mateo and San Francisco Counties.[12]

Ohlone territories were composed of one or more land-holding groups that anthropologists refer to as *tribelets*. The tribelet consisted of a principal village that was occupied year-round; smaller hamlets and resource gathering and processing locations were occupied intermittently or seasonally.[13] The Puichon tribelet was on the western shore of San Francisco Bay, between lower San Francisquito Creek and lower Stevens Creek, now the areas where Menlo Park, Palo Alto, and Mountain View are located.[14]

Seven Spanish missions were founded in Ohlone territory between 1776 and 1797. While living within the mission system, the Ohlone commingled with other groups, including the Yokuts, Miwok, and Patwin. Members of the Puichon tribelet went to Mission San Francisco between 1781 and 1794 and Mission Santa Clara from 1781 to as late as 1805. Mission life was devastating to the Ohlone population. When the first mission was established in Ohlone territory in 1776, the Ohlone population was estimated to be 10,000. By 1832, the Ohlone numbered less than 2,000 as a result of introduced disease, harsh living conditions, and reduced birth rates.[15,16,17]

Ohlone recognition and assertion began to move to the forefront during the early 20th century. This movement was enforced by legal suits brought against the United States government by the Indians of California (1928–1964) for reparation due to them for the loss of traditional lands. The Ohlone participated in the formation of political advocacy groups, which brought attention to the community and resulted in a re-evaluation of the rights due to its members. In recent years, the Ohlone have become increasingly organized as a political unit and developed an active interest in preserving their ancestral

[12] Levy, R. 1978. Costanoan. In *Handbook of North American Indians*, Chapter 8, California, pp. 398–413. W.C. Sturtevant (ed.). Smithsonian Institution, Washington, D.C.

[13] Kroeber, A.L. 1955. Nature of the Land-Holding Group. In *Ethnohistory,* 2:303–314.

[14] Milliken, R. 1995. *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769–1810.* (Ballena Press Anthropological Papers No. 43.) Ballena Press, Novato, CA.

[15] Cook, S.F. 1943b. The Conflict between the California Indians and White Civilization, II: The Physical and Demographic Reaction of the Non-Mission Indians in Colonial and Provincial California. In *Ibero-Americana,* 22. Berkeley, CA.

[16] Ibid.

[17] Levy, R. 1978. Costanoan. In *Handbook of North American Indians*, Chapter 8, California, pp. 398–413. W.C. Sturtevant (ed.). Smithsonian Institution, Washington, D.C.

heritage. Many Ohlone are active in maintaining their traditions and advocating for Native American issues.

Historical Setting[18]

Spanish Period

The Spanish Period in the San Francisco Bay Area began in 1769 with the initial historic exploration of the region and ended in 1821 when the area became part of newly independent Mexico. Between 1769 and 1776, several Spanish expeditions passed through Ohlone territory in the region, including the Fages (1770 and 1772) and Juan Bautista de Anza (1775/1776) expeditions. The route of Anza's 1776 exploration followed the baylands from San Francisquito Creek north to San Mateo Creek, passing through four Ohlone villages in the general vicinity of present-day Menlo Park.[19] A village with about 25 huts was noted on the banks of San Francisquito Creek, near present-day Middlefield Road and north of the Project Site.[20] Government policy in northwestern New Spain focused on the establishment of presidios (forts), missions, and pueblos (secular towns). No Spanish Period structures or features are known to have been present in or adjacent to the Project Site.[21]

Mexican Period

The Mexican Period in the San Francisco Bay Area began in 1822 when Mexico gained control of the region from Spain and ended in 1848 with the conclusion of the Mexican-American War. During the Mexican Period, the present location of Menlo Park was within the former Rancho Los Cochintos, or Cachanigtac, later known as Rancho Las Pulgas. Rancho Las Pulgas was granted to José D. Arguello by Governor Diego de Borica in 1820 as well as Governor Pablo Vincente Sola in 1820 or 1821. On November 27, 1835, a formal grant was made to Luis Antonia Arguello, son of the presidio comandante, by Governor José Castro. On October 2, 1857, Arguello patented Rancho Las Pulgas to his second wife, Maria de la Soledad, et. al. In the intervening years, the property expanded from the original 17,754 acres (4 square leagues) to approximately 35,240.47 acres. It was bounded by San Mateo Creek on the north and San Francisquito Creek on the south. No Mexican Period structures or features are known to have been present in or adjacent to the Project Site.

American Period

California became a United States territory following the conclusion of the Mexican American War in 1848 and the Treaty of Guadalupe Hidalgo. California was admitted as a state in 1850. The gold rush, beginning

[18] This section is excerpted primarily from *SRI International Campus Historic Resource Evaluation for Parkline Project*, *City of Menlo Park, San Mateo County*, by Page & Turnbull (April 2022).

[19] A designated National Historic Trail (National Park Service 1995).

[20] Bolton, H. 1930. *Anza's California Expeditions.* Volume IV: Font's Complete Diary of the Second Anza Expedition. University of California, Berkeley, CA, pp. 325 and 326; Hoover, M.B., H.E. Rensch, and E.G. Rensch. 1966. *Historic Spots in California*. Third edition. Revised by William N. Abeloe. Stanford University Press, Stanford, CA; Milliken, R.T. 1983. *The Spatial Organization of Human Population on Central California's San Francisco Peninsula at the Spanish Arrival*. Unpublished M.A. thesis, Department of Inter-Disciplinary Studies, Sonoma State University, Rohnert Park, CA; Brown, A.K. 1973–1974. Indians of San Mateo County. In *La Peninsula: Journal of San Mateo County Historical Association,* 17(4).

[21] Hendry, G.W., and J.N. Bowman. 1940. *The Spanish and Mexican Adobe and Other Buildings in the Nine San Francisco Bay Counties, 1776 to about 1850*. Manuscript on file, Bancroft Library, University of California, Berkeley, CA; Hoover, M.B, H.E. Rensch, and E.G. Rensch. 1966. *Historic Spots in California*; Beck, W.A., 1974. *Historical Atlas of California*. Third printing. University of Oklahoma Press, Norman, OK.

in 1848, brought a massive influx of immigrants to California, with the estimated population of the territory increasing from fewer than 14,000 (exclusive of Native populations) to 224,000 between 1848 and 1852. San Mateo County was created in 1856 from the southern portion of San Francisco County. The county was expanded in 1868 through annexation of part of Santa Cruz County.

In the period following the initial gold rush and later completion of the transcontinental railroad in 1869, many migrant laborers settled in California as farmers and ranchers, creating a new domestic market for agricultural products. This agricultural market was later broadened through railroad construction and the development of the refrigerator railroad car in the 1880s.

Construction of the San Francisco & San José Railroad (SF&SJRR) between 1861 and 1864 was a significant impetus to the development of towns on the San Mateo Peninsula. The SF&SJRR reached Redwood City in September 1863 and began regular service between San Francisco and Mayfield (now Palo Alto) on October 18, 1863. Service was extended to San José in January 1864. In 1869, SF&SJRR was consolidated into the Southern Pacific Railroad (SPRR), which was acquired by the Central Pacific in 1870. The Caltrain commuter route, located southwest of the Project Site in downtown Menlo Park, follows the alignment of the original SF&SJRR line.

Increased settlement in the Bay Area led to the construction and expansion of local and regional transportation systems during the latter 19th and early 20th centuries. These connected San Francisco to towns in San Mateo County. Notable transportation routes and systems in Menlo Park included El Camino Real, former tolls roads, the SF&SJRR (SPRR), electric streetcar lines, and the Bayshore Highway.[22]

City of Menlo Park

In the 1850s, Irish immigrants Dennis Oliver and Daniel McGlynn bought 1,700 acres along County Road, known today as El Camino Real, on the San Francisco Peninsula, approximately 20 miles south of present-day San Francisco. Oliver and McGlynn gave Menlo Park its name when they established "Menlough," a series of local farms named after their ancestral community of Menlough, County Galway, Ireland. A few years later, Menlo Park became a desirable vacation destination for San Francisco's upper class. Palatial houses were constructed on large parcels in the community. El Camino Real served as a major thoroughfare. Historic downtown Menlo Park developed along this route. Completion of the SPRR route through Menlo Park in 1863, and its connection to San José a year later, exponentially increased Menlo Park's accessibility to city dwellers who were seeking estate sites in a rural environment. By 1874, Menlo Park was incorporated in response to its rapid growth and infrastructure challenges.[23]

Through the late 19th and early 20th centuries, Menlo Park underwent several transformative events. Stanford University opened in 1891 south of Menlo Park, which strengthened the local economy. From 1907 to 1910, the SPRR constructed the Dumbarton Cutoff Line through northern Menlo Park, which provided a 16.4-mile freight connection from the SPRR San Francisco Peninsula mainline to the Alameda County mainline. A bridge built to carry the Dumbarton Cutoff Line across San Francisco Bay was the earliest structure to span the bay. Furthermore, Menlo Park was chosen as the location for Camp Fremont,

[22] Hoover, M.B, H.E. Rensch, and E.G. Rensch. 1966. *Historic Sports in California*; Fickewirth, A.A. 1992. *California Railroads: An Encyclopedia of Cable Car, Common Carrier, Horsecar, Industrial Interurban, Logging, Monorail, Motor Road, Short Lines, Streetcar, Switching and Terminal Railroad in California (1851–1992)*. Golden West Books, San Marino, CA; Hart, J.D. 1987. *A Companion to California, Revised and Expanded*. Oxford University Press, New York, NY.

[23] Placeworks. 2016. *ConnectMenlo.* General Plan Land Use and Circulation Elements and M-2 Area Zoning Update. June 1. Public review draft environmental impact report. Prepared for City of Menlo Park, CA.

a World War I–era military training ground that brought in thousands of temporary inhabitants; Menlo Park's population of approximately 2,000 increased to approximately 40,000 during World War I. Numerous new businesses opened, and city improvements were undertaken during camp operations. These improvements remained to serve the growing city after the camp closed.[24]

During the subsequent decades, Menlo Park developed from a small town to an important part of the increasingly urbanized San Francisco Peninsula region. Menlo Park's population rose from 2,414 residents in 1930 to 26,836 by 1970. In the 1920s and 1930s, Menlo Park's transportation infrastructure began to expand outward from downtown with the growth of its residential neighborhoods. By the late 1930s, El Camino Real expanded to four lanes, which resulted in the demolition, relocation, or closure of several Menlo Park buildings and businesses. Simultaneously, the area became a residential enclave for more than the upper class. The Belle Haven neighborhood, approximately 4 miles north of downtown Menlo Park and adjacent to San Francisco Bay, was developed by David D. Bohannon, with two-bedroom homes selling for as little as $2,950.[25]

Development of the entire San Francisco Peninsula continued during the mid-20th century, and Menlo Park became a suburb of San Francisco. During this period, Menlo Park became a major technology hub, both regionally and globally. The Stanford Research Institute (Project Site) was established in 1946. Beginning in the 1980s, the rapid expansion of the technology sector increased Menlo Park's popularity as a business and residential community. Menlo Park remains a highly sought-after residential community today. Meta Platforms (Meta) continues to expand as a major economic presence in the city, while Silicon Valley, the region that includes northwest Santa Clara County and the southern portion of the San Francisco Peninsula, houses numerous major employers in the information technology industry.[26]

The Study Area for cultural resources comprises the SRI International Campus. The following sections describe historical development patterns that took place specifically within the Study Area, as organized by major periods of development.

Residential Estates Period, 1864–1941

The Project Site was initially developed as part of a residential estate owned by William Eustace Barron between 1864 and 1871.[27] In 1871, Milton Slocum Latham (1827–1882), former U.S. representative and senator and governor of California, purchased the estate and named the former Barron mansion *Thurlow Lodge*. [28] Latham lost his fortune in the depression of 1875 and sold the estate to Mary Hopkins in 1883. Hopkins renamed the estate *Sherwood Hall*. In 1888, Mary Hopkins gifted the property to her adopted son, Timothy Hopkins, and Timothy's wife, Mary C. Hopkins.[29] Hopkins used the 280-acre property to establish the Sherwood Hall Nursery Company, which was renamed the Sunset Seed & Plant Company in 1893 and

[24] Ibid.; P.S. Preservation Services. 1996. *Request for Determination of Eligibility for Inclusion in the National Register of Historic Places, Southern Pacific Railroad Dumbarton Cutoff, Southern Pacific Railroad Dumbarton Bridge, and Southern Pacific Railroad Newark Slough Bridge.* December. Sacramento, CA. Prepared for U.S. Coast Guard.

[25] Placeworks. 2016. *ConnectMenlo*.

[26] Ibid.

[27] Menlo Park City School District. n.d. *Thurlow Estate Becomes Dibble General Hospital Becomes SRI International.* Available: https://district.mpcsd.org/about-mpcsd/history-of-the-district-and-community/history-of-the-menlo-park-city-school-district-our-community/thurlow-estate-becomes-dibble-general-hospital-becomes-sri-international., Accessed: June 10, 2024.

[28] *San Francisco Examiner.* 1891. "Hopkins, the Spendthrift." November 1.

[29] Staiger, Steve. 1999. Timothy Hopkins: The Ironic Journey of Palo Alto's Founder. *Palo Alto Online*. April 28. Available: https://www.paloaltoonline.com/weekly/morgue/spectrum/1999_Apr_28.HISTORY.html. Accessed: June 22, 2021.

became one of the largest seed businesses in the western United States.[30] In 1936, Timothy Hopkins died and divided the income from his estate between his wife and Stanford University. In 1941, Mary C. Hopkins died; the remainder of the estate was left to Stanford University. By that time, most of the orchards and all but one of the greenhouses belonging to the Sunset Seed & Plant Company had been removed from the property, based on review of a 1941 aerial photograph.[31]

Dibble General Hospital, 1943–1946

During World War II, the Project Site was home to Dibble General Hospital. On January 3, 1943, the U.S. War Department acquired approximately 128 acres from the former Hopkins estate, which was owned by Wells Fargo Bank & Union Trust Company, the bank that was apparently managing the trust for Stanford University, and entered into a lease for another 12 acres on the former Hopkins estate that was owned by real estate developer Claude T. Lindsay.[32] The site's location south of San Francisco placed it near a major port of re-entry for military personnel who were returning from the Pacific theater. It was also within the same region as Letterman General Hospital at the Presidio of San Francisco, a facility where personnel were taken before being sent to hospitals for specialized care.[33]

Groundbreaking for Dibble General Hospital occurred on June 15, 1943. On August 17, 1943, the hospital was activated as a U.S. Army general hospital. By October 1943, 94 buildings had been completed and the hospital was deemed ready for "beneficial occupancy."[34] By the end of 1943, additional buildings were constructed on the 140-acre tract. The total number of buildings and structures built for the hospital eventually reached 100, according to a 1945 map published by the hospital.[35] Dibble General Hospital was among 14 general hospitals built to the military's standard "Type A" hospital plan, which called for most buildings to be one story and arranged in a pavilion layout.[36] Pavilion plans were commonly used by the U.S. military, beginning in the mid-19th century. The property was laid out with two bachelor officer quarters (BOQs) and four nurses quarters flanking the administration building. Today, only the administration building and the two BOQ buildings remain from this group. Of the approximately 100 buildings constructed for Dibble General Hospital between 1943 and 1945, 20 remain extant.

In September 1945, the U.S. House of Representatives passed legislation to authorize annexation of the hospital by the city of Menlo Park. Specifically, Stanford University expressed interest because of the demand for postwar student housing, and the city of Menlo Park expressed interest because of the demand for land for a new school and other municipal facilities. The General Services Administration turned over approximately 130 acres to the Federal Public Housing Authority (FPHA) in July 1946.[37]

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30 *Mendocino Coast Beacon.* 1893. "Change of Name." December 16.

31 Fairchild Aerial Surveys. n.d. *Flight C-7065, Frame 128*. University of California, Santa Barbara, Special Collections, FrameFinder Database.

32 Historic California Posts, Camps, Stations, and Airfields. 2016. *Dibble General Hospital (Palo Alto General Hospital).* Corps of Engineers History. April 20. Available: http://www.militarymuseum.org/DibbleGH.html. Accessed: August 10, 2021.

33 Dibble General Hospital. 1946. *Dibble General Hospital: A History*. May 8, pp. 7 and 8.

34 *San Mateo Times*. 1943. "New Dibble Hospital at Menlo Completed." October 29.

35 Dibble General Hospital. 1944. *Life Begins: Dibble General Hospital.* National Library of Medicine Collections, UH 470 A2C2 D5L 1944.

36 Smith, Clarence McKittrick. 1956. *United States Army in World War II.* The Technical Services. The Medical Department: Hospitalization and Evacuation, Zone of Interior. Washington, D.C.: Center of Military History, United States Army, pp. 304–312.

37 Gibson, Weldon B. 1986. *SRI: The Take-Off Days*. Los Altos, CA: Publishing Services Center, p. 227.

Stanford Village, 1946–1969

Stanford Village opened in 1946 on former Dibble General Hospital land that had been leased by Stanford University from the United States government.[38] Between the late 1940s and early 1950s, the university, FPHA, and city of Menlo Park navigated the fluctuating demands for student housing and civic improvements and the U.S. government's terms for selling the land.[39] Although the original terms of the agreement between the FPHA and the university called for the university to use the village for student housing for 2 years after the wartime housing shortage ended, the university's occupancy period was extended to meet periodic surges in the need for additional student housing, with Stanford Village providing overflow housing for veterans and their relatives who could not be accommodated on the main campus. By 1950, occupancy of Stanford Village dropped below 1,000 in the once "brutally over-crowded" facility.[40] In 1952, the village was opened to non-veterans.

In early 1956, the Village Library, a branch of the university's Western Civilization Library was closed and demolished, along with two dormitories, to accommodate development of the Stanford Research Institute.[41] By 1956, a "gentlemen's agreement" between Stanford University's Board of Trustees and the city of Menlo Park was in place. It held that "half of the Village owned by Stanford will see nine more years of use and then will be sold to Menlo Park.[42] It does not appear that any new buildings were constructed during the Stanford Village era; rather, buildings constructed for Dibble General Hospital were repurposed for student housing as well as services that supported student residents.

Stanford Research Institute

In 1946, SRI International was established by the trustees of Stanford University as Stanford Research Institute (SRI), an independent, nonprofit contract research institute whose role was to promote innovation and economic development in the western United States. The institute was engaged primarily in applied research. It aimed to solve practical problems, as opposed to "basic" research, which aims to expand scientific knowledge and discover unknowns—areas that are generally the domain of university researchers.[43] Unlike some institutes, SRI does not have an endowment; instead, it relies on income from contracts and grants from its clients, including government agencies, commercial businesses, and private foundations. When SRI was established, it focused on engineering, science, and economics but, later, expanded into education, government policy, and international development.[44] SRI separated from Stanford University in 1970 and became known as SRI International. Today, SRI International is headquartered in Menlo Park at 333 Ravenswood Avenue, the Project Site, but has additional offices in 19 locations in the United States and Japan. Currently, the institute has about 1,700 employees.[45]

[38] *Stanford Daily*. 1953. "Village to Remain in Present Status." May 6.
[39] Ibid.; *Stanford Daily*. 1952. "Village Available to Non-Veterans." March 31.
[40] *Stanford Daily*. 1950. "Village Has Many Changes Since 1946." January 4.
[41] *Stanford Daily*. 1956. "Village Libe [sic] Closes as SRI Moves In." January 17.
[42] Johnson, Anne. 1956. "Little Left in Fading Farm Village." *Stanford Daily*. October 2.
[43] Nielson, Donald. 2004. *A Heritage of Innovation: SRI's First Half Century.* Menlo Park, CA: SRI International, pp. xv and xvi.
[44] Ibid., pp. 1 and 2.
[45] SRI International. 2023a. *About Us*. Available: https://www.sri.com/about-us/. Accessed: August 22, 2021.

The following section provides a brief history of SRI International as an institute, including some of its most significant innovations, along with a history of the built development on the Menlo Park campus (Project Site).[46]

Early Vision for SRI, 1920s–1945

Although SRI was not established until 1946, the groundwork for the institute was laid in 1925 when Stanford University professor Robert E. Swain proposed the idea of a research institute for the West, most likely thinking of Mellon Institute in Pittsburg for an example. Early efforts to establish an institute were not immediately successful, but they paved the way for the establishment of SRI in 1946.

Founding of SRI and Move to Stanford Village (1946–1969)

Incorporating articles and bylaws were filed with the State of California in November 1946, officially establishing SRI as a nonprofit subsidiary of Stanford University. The goals of SRI were designed to align with the charter of the university but advance scientific knowledge for the benefit of the public at large, not just provide research opportunities for students and faculty. At first, the institute was located at the Physics Corner on the Stanford University quad; however, within 8 months, it moved to the former Dibble General Hospital buildings at Stanford Village in Menlo Park. Initially, SRI moved into Building 100 at Stanford Village in May 1947, sub-leasing the facility from Stanford University. In the ensuing months and years, SRI leased additional buildings as they were "released from housing use" by Stanford Village.[47] This incremental expansion occurred even within single buildings, the practice being "to fix up one office at a time, as the need arose."[48] Stanford Village remained occupied by students, along with their spouses and children, through the late 1960s.[49] In 1955, the Housing and Home Finance Agency sold 79 acres to Stanford University.[50] SRI purchased just over 30 acres from Stanford University in July 1955 and acquired additional parcels from the government and the university throughout the 1950s and 1960s, eventually bringing its total to 79 acres.[51]

Although SRI had been founded to innovate for industry, the institute's first contract involved investigating alternatives to natural rubber for the Office of Naval Research. The institute quickly pivoted to accommodate government work during these early decades; SRI's contracts were approximately 60 percent government work and 40 percent commercial.[52] By the late 1950s, SRI had grown independent of Stanford University in the sense that, although university trustees were SRI's governing body, SRI's staff rarely had joint appointments at the university and rarely shared projects or clients.

SRI Construction in 1950s and 1960s

SRI hired architects Stanton & Stockwell to design the institute's first purpose-built building, which included space for administration, offices, and labs; the new building replaced Building 100 and became

[46] Unless otherwise noted, the information on the development of Stanford Research Institute/SRI International was compiled from Nielson, *A Heritage of Innovation: SRI's First Half Century* (2004); Gibson, *SRI: The Founding Years* (1980); and Gibson, *SRI: The Take-Off Days* (1986).

[47] Gibson, Weldon B. 1986. *SRI: The Take-Off Days*. Los Altos, CA: Publishing Services Center, p. 129.

[48] Ibid.

[49] Bates, Cicely. 1968. "Stanford Village: Old Houses Finally Going." *Stanford Daily.* April 3.

[50] *Stanford Daily*. 1955. "Village: Government Makes Final Proposal." June 3.

[51] Gibson provides an extremely detailed first-hand account of the intricacies of the land negotiations and sales in *SRI: The Take-Off Days*.

[52] Nielson, Donald. 2004. *A Heritage of Innovation: SRI's First Half Century.* Menlo Park, CA: SRI International, pp. 1–3.

the main SRI building. In 1953, when first visiting the site, architect William Stockwell observed that "Stanford Village and SRI were made for each other."[53] Building A was completed in two phases, the first in 1958 and the second in 1961.

After working through an iterative process that involved exploring site plans, Stanton & Stockwell developed a master plan for the campus. The firm's vision for the site was a corporate campus, with some 16 new purpose-built buildings, landscaped quads, covered work areas, and tree-lined surfaced parking. All of the Dibble-era buildings would be demolished, except for the then-functional steam power plant in Building 412. The campus design retained mature oak trees on the site, particularly those around Building A, which most likely dated to the era of the Hopkins estate.[54] Four of the buildings proposed in Stanton & Stockwell's master plan were built as designed: Building A (1958–1961), Building E (1966), Building G (1964), and Building M (1962). A fifth building designed by Stanton & Stockwell, Building L (1967), did not conform to the original master plan. All subsequent buildings constructed on the campus, beginning with the Skidmore Owings & Merrill–designed Building I (1969), were designed by other architects and did not conform to the master plan.

By 1955, SRI also had office outposts and research groups in Los Angeles, Pasadena, Phoenix, Portland, Hawaii, and Washington, D.C.[55]

SRI International Innovations, Advancements, and Achievements

SRI International's innovations included automated banking, personalized computing, the malarial drug halofantrine, and the digital fax machine (adopted by Xerox). SRI was also involved in the planning of Disneyland and the Monterey Bay Aquarium, along with the 9-1-1 emergency call system.[56] Even though SRI International does not have the same household name recognition as Apple, Google, Xerox, or other Silicon Valley companies, the institute has been instrumental in many computing and robotic advancements that have fed innovation in Silicon Valley, including sectors such as business and economics, health, education, and physical sciences. SRI International has at least 4,600 patents to date and has worked on well over 50,000 research-and-development (R&D) projects.[57] In addition to awards from the Institute of Electrical and Electronics Engineers (IEEE) for innovations stemming from the inception of the Advanced Research Projects Agency Network (ARPANET); Shakey, the world's first mobile intelligent robot; and Douglas Engelbart's "Mother of All Demos," a public demonstration of online systems and personal computing, SRI International has also been awarded an Academy Award and nine Emmys for advancements related to television and film technology.[58]

[53] Gibson, Weldon B. 1986. *SRI: The Take-Off Days*. Los Altos, CA: Publishing Services Center, pp. 127 and 139.

[54] Ibid., p. 139.

[55] Ibid., p. 206.

[56] The Institute for Operations Research and the Management Sciences (informs). 2023. *Stanford Research Institute.* Available: https://www.informs.org/Explore/History-of-O.R.-Excellence/Non-Academic-Institutions/Stanford-Research-Institute. Accessed: August 22, 2021; Nielson, Donald. 2004. *A Heritage of Innovation: SRI's First Half Century.* Menlo Park, CA: SRI International, Appendix I-1.

[57] SRI International. 2023a. *About Us*. Available: https://www.sri.com/about-us/. Accessed: August 22, 2021; Nielson, Donald. 2004. *A Heritage of Innovation: SRI's First Half Century.* Menlo Park, CA: SRI International, p. xvi.

[58] SRI International. 2023b. *Timeline of Innovation*. Available: https://www.sri.com/timeline-of- innovation/. Accessed: August 17, 2021.

Although SRI has innovated across a broad range of fields, some of the most widely used and best-known innovations to come out of SRI are related to personal computing and the internet. SRI was integral to development of the internet, from its very beginnings with ARPANET.[59]

SRI employee Dr. Douglas Carl Engelbart (1925–2013) was instrumental in the development of many devices and conventions that are the foundation of personal computing and is widely recognized as the inventor of the computer mouse.[60] In the early 1960s, he began exploring ways to facilitate interactions between humans and computers, eventually patenting an early prototype of the mouse in 1970.[61] SRI licensed the technology to Xerox, Apple, and other computer companies, which eventually led to the mouse being sold commercially in 1984.[62] The Network Information Center, founded by Engelbart and managed by SRI International from 1970 to 1991, assigned website addresses, also known as top-level domain names, to network hosts. Host names with extensions like ".com," ".org," and ".gov" helped direct network traffic and are still integral to internet communication today. The Network Information Center also administered internet protocol addresses.[63] Engelbart's Augmentation Research Center lab was transferred from SRI to Tymshare in the late 1970s. Engelbart retired in 1986.

Charles Rosen founded the Artificial Intelligence Center (AIC) within the Information and Computing Sciences Division of SRI in 1966. Between 1966 and 1972, Rosen and the AIC, funded by the Defense Advanced Research Projects Agency (DARPA), developed Shakey the Robot, the first mobile robot with the ability to perceive and reason and a major advancement in artificial intelligence.[64] The project contributed several significant advancements, including the A* search algorithm, which is used in today's navigation systems (e.g., Google Maps, the Hough transform, and the visibility graph method). Shakey was the precursor to the technology used in current navigation systems, self-driving cars, and drones.[65]

SRI International Construction Since 1970

During the last three decades of the 20th century, SRI International constructed eight new buildings: Building K (1971), Building B (1976), Building P (1980), Building S (1981), Building R (1984), Building U (1986), Building W (1988), and Building 307 (1992). Several buildings were also altered or expanded during this period. In 1973, architects from William L. Pereira & Associates were hired to prepare a site development plan for SRI International's campus. The firm would ultimately design and construct two buildings on the site: Building B (1976) and Building P (1980).[66] Buildings B and P, designed in the Late Modern style, expanded the office and laboratory space on campus. Landscape architects from Eckbo Kay

[59] Engineering and Technology History Wiki (ETHW). 1969. *Milestones: Inception of the ARPANET, 1969*. Available: https://ethw.org/Milestones:Inception_of_the_ARPANET,_1969. Accessed: August 22, 2021.

[60] Doug Engelbart Institute n.d. *Historic Firsts: Father of the Mouse*. Available: https://www.dougengelbart.org/content/view/162/000/. Accessed: August 22, 2021.

[61] SRI International. 2023c. *Computer Mouse and Interactive Computing.* Available: https://www.sri.com/hoi/computer-mouse-and-interactive-computing/. Accessed: August 22, 2021.

[62] Medium. 2020. *75 Years of Innovation: The Computer Mouse*. May 7. Available: https://medium.com/dish/75-years-of-innovation-the-computer-mouse-fef5161ba45d. Accessed: August 22, 2021.

[63] SRI International. 2023d. *Domain Names and the Network Information Center*. Available: https://www.sri.com/hoi/domain-names-the-network-information-center/. Accessed: August 17, 2021.

[64] SRI International. 1969. *Shakey: Experimentation in Robot Learning and Planning*. Filmed in 1969 at Stanford Research Institute, Menlo Park, CA. Available: https://www.youtube.com/watch?v=GmU7SimFkpU.

[65] Institute of Electrical and Electronics Engineers (IEEE). 2019. *IEEE Milestone: Shakey, First Mobile Intelligent Robot.* June 19. Available: https://site.ieee.org/scv/2019/06/06/ieee-milestone-shakey-first-mobile-intelligent-robot/. Accessed: August 22, 2021.

[66] Online Archive of California. n.d. *William L. Pereira & Associates Records*. Collection Number: 0326. Available: https://oac.cdlib.org/findaid/ark:/13030/c8k93f3r/. Accessed: July 26, 2021.

designed the landscaping around Building P and the main employee parking lot. Building P was the last major office building constructed on the campus. Buildings S, R, U, and W are utilitarian in design and function, with Building R used for storage and shipping/receiving, Building U housing the cogeneration plant, and Building W used as a waste storage facility.

Other structures installed on campus since 1970 include a greenhouse (mid- to late 1980s), the Research Field (mid-1980s), Oak Park (early 1990s), M-1 (a prefabricated trailer, c. 2000), and a satellite dish (c. 2000). Several Dibble General Hospital–era buildings were demolished to accommodate the buildings constructed during this period. Other than expansion involving Building T, no major new construction has occurred on the site since 1992 (refer to Appendix B, Historic Aerial Photographs, and Appendix C, Historic Campus Maps).

Separation from Stanford University as SRI International (1970–present)

In the mid-1960s, students protested at university campuses across the country, demonstrating against U.S. involvement in the Vietnam War. Stanford University was no exception. SRI's classified government contracts and research became a target of Stanford University students during their anti–Vietnam War protests. Students saw their institution as complicit in the workings of the United States military-industrial complex. The institutional relationship between Stanford and its research institute could not survive the clamor of the time, as amplified on campus, on the streets, and in the press. The trustees issued a statement on May 13, 1969, laying the groundwork for SRI's separation from the university. However, they put no restrictions on the kind of research SRI could undertake. One onerous aspect of the separation was an agreement to pay the university 0.5 to 1 percent of its gross revenues in perpetuity.[67]

In late 1969, the International Building (Building I) was dedicated on the Menlo Park campus. In 1970, SRI opened a division in London, known as SRI Europe. That same year, SRI separated from Stanford University as a nonprofit contract research institution; it continued to engage in much the same type of work, including contract work for the United States government. The agreement with Stanford University stated that the institute would have to remove "Stanford" from its name.

By March 1977, the institute was using only "SRI" in its internal phonebook; however, it had adopted the name "SRI International" by that September.

Although SRI International continued to grow in the 1970s, the institute struggled financially because of inflation, government fee structures, and the nature of contract R&D work. In 1979, William Miller, the former provost of Stanford University and a former executive at the Mayfield Fund, one of the earliest venture capital funds in Silicon Valley, became SRI International's president and CEO. In 1982, under Miller's leadership, SRI International began licensing SRI's inventions and innovations, providing a new revenue stream by monetizing intellectual property.[68] Then, with the passage of the 1984 Bayh-Doyle Act, SRI International was able to leverage intellectual property developed under government contracts. SRI International began bringing in revenue by "spinning off" start-up companies in the 1980s.[69] In 1988, Miller also negotiated acquisition of RCA Laboratories (later known as the Sarnoff Corporation), an R&D

[67] By 1989, SRI had given more than $25 million to the university in accordance with the separation agreement. In spite of provisions in the agreement for no payment when SRI's financial health was at stake, some of these annual payments amounted to more than SRI's net profit for the year (Nielson, Donald. 2004. *A Heritage of Innovation: SRI's First Half Century.* Menlo Park, CA: SRI International, pp. B-5 to B-7).

[68] Nielson, Donald. 2004. *A Heritage of Innovation: SRI's First Half Century.* Menlo Park, CA: SRI International, p. B-8.

[69] Ibid., pp. 1–3.

company that focused on video, vision, and semiconductor technology, as a subsidiary of SRI International. Sarnoff Corporation was later fully integrated into SRI International in 2011.

In 2004, Nielson observed that "SRI's first 2 decades saw solid growth, followed by 2 decades of relative stability, and then a decade of challenge stemming mainly from the restructuring and subsequent demise of its business consulting group [in the 1990s].[70] Whereas the institute had about 3,000 employees in the mid-1960s, SRI International today has 1,700 employees but continues to work on about 1,000 projects a year. In addition to the Menlo Park headquarters, these employees are spread across 19 additional offices in the United States and Japan, including campuses in Washington, D.C.; Princeton, N.J.; and Harrisonburg, VA, along with several smaller offices."[71]

Present-Day Conditions

Archaeological Resources

ICF conducted archival and background research to identify cultural resources in, or in the vicinity of, the Project Site and assess the potential for subsurface archaeological deposits. Background research consisted of a records search at the NWIC, a review of the Sacred Lands File of the NAHC in Sacramento, a review of archival maps and aerial photographs, and a geoarchaeological literature review.

Northwest Information Center Records Search

A cultural resources records search of the Project Site and a 0.25-mile radius was conducted on December 22, 2022, at the NWIC, located at Sonoma State University in Rohnert Park. The NWIC, an affiliate of the California Office of Historic Preservation, is the official State of California repository for cultural resource studies and records for San Mateo County. The records search included a literature review of the Archaeological Determinations of Eligibility for San Mateo County, along with the most recent updates to the NRHP, California Historical Landmarks, and California Points of Historical Interest. In addition, a Sacred Land Files search request was sent to the NAHC in January 2023. The search radius given encompassed a 0.25-mile area around the Project Site. The NAHC returned a positive result in February 2023 and provided a list of tribal contacts with knowledge of the area for consultation and input. Letters with Project details, a map, and a formal invitation to consult were sent on August 4, 2023, pursuant to PRC § 21080.3.1(i.e., AB 52) and Government Code Section 65352.3 (i.e., SB 18). As of the writing of this Draft EIR, no responses or requests or requests for consultation have been received.

The records search identified 22 cultural resources studies that had previously been conducted within the Project Site or within a 0.25-mile radius of the Project Site. The records search did not identify any previously recorded archaeological resources within the Project Site. The records search identified four previously recorded archaeological resources within 0.25 mile of the Project Site. Table 3.8-1 lists the known archaeological resources identified through the records search.

[70] Ibid., pp. 1 and 2.

[71] SRI International. n.d. *Our Locations*. Available: https://www.sri.com/our-locations/. Accessed: August 22, 2021.

Table 3.8-1. Known Resources within a 0.25-mile Radius of the Project Site

Resource	Description	Resource Type	Date Recorded	Reports
P-41-000279 (CA-SMA-337H)	Refuse deposits and structural features such as posts, post holes, and brick foundations from the 19th and 20th century	Historic-period archaeological resource	1994	This resource was evaluated and assigned a California Historical Resource Status Code (CHRSC) of 6Y: *determined ineligible for NRHP by consensus through Section 106 process; not evaluated for CRHR or local listing*
P-41-000280 (CA-SMA-000338H)	Sheet refuse scatter from the 19th and 20th century and built-environment features associated with the 20th-century U.S. Army Dibble hospital complex	Historic-period archaeological resource	1994	This resource was evaluated and assigned a CHRSC of 6Y: *determined ineligible for NRHP by consensus through Section 106 process; Not evaluated for CRHR or local listing*
P-41-000316 (CA-SMA-336H)	Sheet refuse scatter from the 19th and 20th century and historic landscape features such as bay laurel trees, oak trees, ivy, and shrubs	Historic-period archaeological resource	1994	This resource was evaluated and assigned a CHRSC of 6Y: *determined ineligible for NRHP by consensus through Section 106 process; not evaluated for CRHR or local listing*
P-41-002291	Small shell scatter and shell fragments, including one 4-centimeter-wide abalone shell fragment	Precontact/Native American archaeological resource		A CHRSC has not been assigned to this resource, indicating that it has not been evaluated for the NRHP or the CRHR

Source: NWIC records search, December 22, 2022.

Historic Map Review

This section considers the potential for the Project Site to contain intact historic-period archaeological deposits (e.g., artifact-filled wells or privies). ICF reviewed historical maps to determine the presence of historic-period buildings and/or structures within the Project Site and in the general vicinity to assist in assessing the potential for historic-period archaeological deposits. For this review, areas with land that was undeveloped or minimally developed until the late 20th century will be considered to have *low historical archaeological sensitivity*. Areas that contain, or previously contained, buildings and structures from the middle 20th century or earlier will be considered to have *high historical archaeological sensitivity*. Table 3.8-2 summarizes the results of the archival map and aerial photograph review.

Historic-period maps indicate that El Camino Real, the road that connected the Spanish-era missions, was approximately 0.25 mile southwest of the Project Site. This road became a thoroughfare for incoming newcomers who were part of the gold rush, and stagecoach stops were set up along the way. However, maps indicate that the area surrounding the Project Site remained largely undeveloped until the railroad was built in 1863, at which time the area began to develop more rapidly. Shortly after the railroad was built, in 1864,

capitalist William Eustace Barron built an estate on the Project Site.[24] The estate was sold in 1871 to a politician, Milton Slocum Latham, and sold again in 1883 to Mary Francis Sherwood Hopkins, the widow of railroad executive Mark Hopkins. She gifted it to her son Timothy Hopkins in 1888.[25] In 1893, Timothy Hopkins established the Sunset Seed & Plant Company on the Project Site.[26] After the death of Timothy Hopkins and his wife Mary, the U.S. War Department purchased the land in 1943 and developed it into Palo Alto General Hospital (later Dibble General Hospital), which served wounded veterans of World War II until 1946.

Table 3.8-2. Historic Map Review

Map/Photograph	Results
1834 *El Camino Real*	This map depicts the Project Site on the San Francisco Peninsula, with San Francisco Bay to the west. El Camino Real is depicted within the vicinity of the Project Site.
1852 *Chart of the Farallones, San Francisco Bay*	This map depicts the Project Site north of "Arroyo S. Francisco" (San Francisquito Creek). A road to "Santa Clara and Monterey" (El Camino Real) is depicted southwest of the Project Site.
1856 *Plat of the Pulgas Rancho (South)*	This map depicts the Project Site north of Arroyo de San Francisquito (San Francisquito Creek), within Pulgas Rancho. "County Road" (El Camino Real) is southwest of the Project Site. A bridge is depicted over Arroyo de San Francisquito southeast of the Project Site.
1867 *Map of the Region Adjacent to the Bay of San Francisco*	This map depicts the Project Site north of Arroyo de San Francisquito (San Francisquito Creek), within Pulgas Rancho. The SF&SJRR and County Road (El Camino Real) are depicted southwest of the Project Site.
1868 *Official Map of the County of San Mateo, California*	This map depicts the Project Site north of San Francisquito Creek, within "Rancho de las Pulgas" (Pulgas Rancho). The Project Site is labeled as the "Barron Tract" and bordered by unnamed roads to the northwest and northeast. The SF&SJRR and County Road (El Camino Real) are depicted southwest of the Project Site.
1873 *Map of the Region Adjacent to the Bay of San Francisco*	This map depicts the Project Site north of Arroyo de San Francisquito (San Francisquito Creek), within Pulgas Rancho, in Menlo Park. The Project Site is labeled as the Barron Tract. The SF&SJRR and County Road (El Camino Real) are depicted southwest of the Project Site.
1877 *Official Map of the County of San Mateo, California*	This map depicts the Project Site north of San Francisquito Creek, within Rancho de las Pulgas (Pulgas Rancho), in Menlo Park. The Project Site labeled as the "Latham Tract" and bordered by unnamed roads to the northwest and northeast. The SPRR and County Road (El Camino Real) are depicted southwest of the Project Site.
1894 *Official Map of San Mateo County, California*	This map depicts the Project Site north of San Francisquito Creek, within the "Town of Menlo." The Project Site is labeled as the "Timothy Hopkins Tract" and boarded by Ravenswood Avenue to the northwest and Middlefield Road to the northeast. Buildings associated with the Sunset Seed and Plant Company's nurseries are depicted within the Timothy Hopkins Tract. The SPRR and "Main County Road" (El Camino Real) are depicted southwest of the Project Site.
1897 *Palo Alto, CA* (U.S. Geological Survey [USGS] topographic quadrangle [1":62,500']).	This map depicts the Project Site, in Menlo Park, north of San Francisquito Creek. The Project Site is surrounded by unnamed roads. Unnamed roads, as well as structures, are also depicted within the Project Site. The SPRR and Main County Road (El Camino Real) are depicted southwest of the Project Site.

Map/Photograph	Results
1902 *Santa Cruz, CA* (USGS topographic quadrangle [1":125,000']).	No changes from the 1897 map are depicted.
1941 *Palo Alto, CA.* (USGS topographic quadrangle [1":62,500']).	This map depicts the Project Site, in Menlo Park, north of San Francisquito Creek. The Project Site is surrounded by unnamed roads. Unnamed roads are also depicted within the Project Site, but no structures are depicted within the Project Site. The SPRR and U.S. 101 (El Camino Real) are depicted southwest of the Project Site.
1948 *Palo Alto, CA.* (USGS topographic quadrangle [1":62,500']).	This map depicts the Project Site, in Menlo Park, north of San Francisquito Creek. The Project Site is surrounded by unnamed roads. Numerous buildings are depicted within the Project Site, most likely associated with Dibble General Hospital. The SPRR and U.S. 101 (El Camino Real) are depicted southwest of the Project Site.

Given the frequency of travel on El Camino Real and the length of time it served the area, as well as the road's proximity to the Project Site, it is possible that intact historic-period features associated with its use could be located within the Project Site. In addition, historic-period maps depict structures associated with the Barron, Latham, and Hopkins estates; the Sunset Seed & Plant Company; and Dibble General Hospital. It is possible that intact historic-period archaeological deposits, including artifact-filled wells or privies, associated with these structures, which span the period from the 1860s to the 1940s, could also exist subsurface within the Project Site. Based on the above, the Project Site is considered to have moderate potential for containing intact historic-period archaeological deposits.

Geoarchaeological Sensitivity Analysis

This section considers the Project Site's potential to contain buried precontact archaeological resources. For the purpose of this analysis, the phrase archaeological sensitivity is used to characterize a given area's likelihood to contain buried archaeological resources. For example, if an area is defined as having a high degree of buried archaeological sensitivity, it is considered an area with high likelihood for containing archaeological resources.

ICF reviewed geologic maps and geotechnical studies, which indicate that the Project Site consists of Pleistocene-age alluvium (Qoa), extending to 100 feet below the ground surface.[72,73,74] This alluvial deposit is weathered, unconsolidated to moderately consolidated gravel, sand, and silt. In general, archaeological resources tend to preserve poorly in persistently high-energy alluvial environments (e.g., river channels with a coarse bedload, wave-washed coastlines), and humans tend to not inhabit permanently or regularly inundated environments (e.g., tidal flats). On the other hand, humans frequently inhabit landforms in low-energy alluvial environments that are infrequently inundated, such as floodplains and alluvial fans.

[72] Pampeyan, E.H. 1993. *Geologic Map of the Palo Alto and Part of the Redwood Point 7.5-minute Quadrangles, San Mateo and Santa Clara Counties, California*. U.S. Geological Survey. Available: https://ngmdb.usgs.gov/Prodesc/proddesc_424.htm. Accessed: October 9, 2023.

[73] Graymer, R.W., B.C. Moring, G.J. Saucedo, C.M. Wentworth, E.E. Brabb, and K.L. Knudsen. 2006. *Geologic Map of the San Francisco Bay Region.* U.S. Geological Survey. Available: https://ngmdb.usgs.gov/Prodesc/proddesc_76251.htm. Accessed: October 9, 2023.

[74] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

Although the Project Site is considered a low-energy alluvial environment, as of the writing of this analysis, the general scientific consensus regarding the timing of human occupation in North America is that humans arrived around 13,500 years ago, or just before the end of the Pleistocene epoch. This indicates that landforms created before this period have limited sensitivity with respect to containing buried archaeological resources. Based on the above, the Project Site is considered to have low sensitivity for containing buried precontact archeological resources.

Field Survey

On July 20, 2023, an ICF archaeologist completed an intensive pedestrian survey of the Project Site using 10-meter transects. Several large buildings and parking lots currently cover the majority of the Project Site. Trees are planted around the buildings and throughout the parking lots; some areas of exposed grass and soil exist between buildings. The exposed soil, which has been heavily modified for modern landscaping (e.g., irrigation lines have been installed and new saplings have been planted), was also surveyed. The survey did not identify any archaeological resources.

Historical Resources

This section presents details regarding built-environment resources within the Project Site that have the potential to qualify as historical resources under CEQA. A property is considered a historical resource under CEQA if it is listed in or formally determined eligible for listing in the CRHR, included in an adopted local register, identified as significant in a qualifying historical resource survey, or otherwise determined by the CEQA lead agency to be historically significant. The CRHR automatically includes all properties listed in or determined eligible for listing in the NRHP.

None of the buildings or structures on the Project Site are currently listed in the NRHP or the CRHR individually or as part of a historic district, and the property does not have Menlo Park Historic Site District "H" zoning. Prior to an evaluation by Page & Turnbull in April 2022, it appears that the property had not been evaluated for eligibility with respect to listing in the CRHR as a potential historic district. Furthermore, it does not appear that any of the buildings on the property were evaluated for individual eligibility with respect to the CRHR.

Page & Turnbull found that three buildings on the Project Site are individually eligible for listing in the CRHR: Building A, Building E, and Building 100. These three buildings are therefore historical resources for the purposes of review under CEQA. In addition, Page & Turnbull identified a CRHR-eligible SRI International Campus Historic District, which is eligible under Criterion 1 (events) for its association with SRI International as an innovative R&D institution. The eligible historic district has 26 contributing buildings and two contributing landscape features, along with 13 non-contributing buildings. The CRHR-eligible SRI International Campus Historic District is a historical resource for the purposes of CEQA.

Page & Turnbull also identified a potential Dibble General Hospital Historic District, with significance under Criterion 1 (events) for its association with national planning during World War II and the construction of medical facilities and under Criterion 3 (architecture) as a property whose elements lacked individual distinction but as a district embodied the distinct characteristics of a Type A general hospital, with a pavilion plan built between 1943 and 1945 by prominent local builders G.W. Williams Company (later known as Williams & Burrows). However, this potential district was found to lack the historic integrity needed to support eligibility under either criterion and, as such, is not a historical resource for the purposes of CEQA.

Table 3.8-3 summarizes the historic-age built-environment resources within the Project Site, including the dates of construction and whether a resource appears eligible as a contributing building or feature of a historic district or eligible as an individual resource. Table 3.8-3 also notes which resources do not appear to be historical resources under CEQA.

Table 3.8-3. Historic-Age Built-Environment Resources within the Project Site

Building	Construction Date	Individual Historic Resource Eligible for CRHR?	CRHR-Eligible SRI International Campus Historic District (Contributor or Non-Contributor)	Historical Resource for CEQA?
Building A	1958–1961	Yes – Criteria 1, 3	Contributor	Yes
Building B	1976–1977	No	Contributor	Yes
Building E	1966	Yes – Criteria 1, 2	Contributor	Yes
Building G	1964	No	Contributor	Yes
Building I	1969	No	Contributor	Yes
Building K	1971	No	Non-Contributor	No
Building L	1967	No	Contributor	Yes
Building M	1962	No	Contributor	Yes
Building M-1	c. 2000	No	Non-Contributor	No
Building P	1980–1981	No	Contributor	Yes
Building R	1984	No	Non-Contributor	No
Building S	1981	No	Contributor	Yes
Building T	1962	No	Contributor	Yes
Building U	1986–1987	No	Non-Contributor	No
Building W	1988	No	Non-Contributor	No
Building 100	1943	Yes – Criterion 1	Contributor	Yes
Building 108	1943	No	Contributor	Yes
Building 110	1943	No	Contributor	Yes
Building 201	1943	No	Contributor	Yes
Building 202	1943	No	Contributor	Yes
Building 203	1943	No	Non-Contributor	No
Building 204	1943	No	Contributor	Yes
Building 205	1943	No	Contributor	Yes
Building 301	1943–1944	No	Contributor	Yes
Building 302-CAF	1943–1944	No	Non-Contributor	No
Building 303	1943	No	Non-Contributor	No
Building 304	1943	No	Contributor	Yes
Building 305	1943	No	Non-Contributor	No
Building 306	1943	No	Non-Contributor	No
Building 307	1992	No	Contributor	Yes
Building 309	1943	No	Contributor	Yes

Building	Construction Date	Individual Historic Resource Eligible for CRHR?	CRHR-Eligible SRI International Campus Historic District (Contributor or Non-Contributor)	Historical Resource for CEQA?
Building 320	1943	No	Contributor	Yes
Building 402/404	1943	No	Contributor	Yes
Building 405	c. 1948–1956	No	Contributor	Yes
Building 406	1943	No	Contributor	Yes
Building 408	1943	No	Non-Contributor	No
Building 409	c. 1948–1956	No	Contributor	Yes
Building 412	1943	No	Non-Contributor	No
Greenhouse	c. mid- to late 1980s	No	Non-Contributor	No
Research Field	c. 1981–1989	No	Contributor	Yes
SRI International Monument	c. 1970	No	Contributor	Yes

Source: Page & Turnbull. 2022. *SRI International Campus Historic Resource Evaluation for Parkline Project*, *City of Menlo Park, San Mateo County*. April 21.

Environmental Impacts

This section describes the impact analysis related to cultural resources for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Cause a substantial adverse change in the significance of a historical resource, pursuant to Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

Methods for Analysis

This section analyzes potential impacts on built-environment and archaeological cultural resources, as well as human remains, that may be caused by the Proposed Project. Impacts of the Proposed Project are analyzed for built-environment resources within the Project Site that meet the definition of historical resources, as outlined in PRC Section 21084.1 and State CEQA Guidelines Section 15064.5 and described in the *Environmental Setting*, above. Per State CEQA Guidelines Section 15064.5(b)(2), the analysis

considers the potential for activities associated with the Proposed Project to materially impair the significance of a historical resource by causing direct changes to the physical characteristics of that resource or causing changes to its immediate setting. To assess the Proposed Project's potential to result in a significant impact on built-environment resources, ICF peer reviewed the following reports provided by the Project Sponsor:

- *SRI International Campus Historic Resource Evaluation for Parkline Project, City of Menlo Park, San Mateo County*; and
- *SRI International Campus Historic Resources Technical Report for Parkline Project, City of Menlo Park, San Mateo County.*

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, R&D tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact; in which case the analysis does not identify a "worst-case" scenario.

A project's impacts on cultural resources are site specific. Analysis of the potential impacts related to cultural resources is dependent on a number of factors, including the project location, proposed demolition, the amount of ground that would be disturbed, the type of disturbance, the potential depth of excavation, and other factors. The two buildout scenarios would occur on the same parcels and, therefore, present no difference in location. The two buildout scenarios would also result in the same amount of development and ground disturbance. Therefore, either scenario would likely result in the same impacts on cultural resources.

Impacts and Mitigation Measures

Impact CR-1: Historical Resources. The Proposed Project would cause a substantial adverse change in the significance of historical resources, pursuant to Section 15064.5. (SU)

The Proposed Project would result in the demolition of the individually eligible Building 100, Building A, and Building E. Demolition would render each building ineligible for listing in the CRHR, resulting in a significant adverse change to these historic resources.

The CRHR-eligible SRI International Campus Historic District includes 26 contributing buildings and two contributing landscape features (see Table 3.8-3). The Proposed Project would demolish 23 of the 26 contributing buildings and one of the two contributing landscape features. The three buildings that contribute to the historic district and would remain are Building P, Building S, and Building T. The one landscape feature that contributes to the historic district and would remain is the SRI International Monument. The monument is proposed to be relocated onsite. Thirteen extant buildings and three landscape features that are non-contributing buildings/features to the historic district would be demolished. The number of buildings and landscape features that would be demolished as part of the

Proposed Project would cause the historic district to lose its historic integrity. The three buildings and one landscape feature proposed to be retained are not sufficiently representative of the significance of SRI International's contributions as a R&D institution and are not clustered in a manner that would allow them to be eligible as a historic district. Furthermore, the siting of the buildings and spatial relationships, which convey a sense of a large institutional campus, would be lost. As such, the site would no longer be eligible for listing in the CRHR as a historic district, and a significant impact would occur.

In summary, construction of the Proposed Project would cause a substantial adverse change in the significance of three individual historical resources (i.e., Building 100, Building A, Building E) and one historic district, all of which are historical resources, as defined in State CEQA Guidelines Section 15064.5. Therefore, the impact on historical resources under the Proposed Project would be ***potentially significant***.

MITIGATION MEASURES. Implementation of Mitigation Measures CR-1.1 (including CR-1.1.a, CR-1.1.b, CR-1.1.c), CR-1.2, and CR-1.3 would reduce the potential level of impact on the three individually CRHR-eligible historical resources and the potential impact on the CRHR-eligible SRI International Campus Historic District by requiring documentation and interpretation and/or commemoration of the resources to be demolished and the relocation of a contributing landscape feature of the historic district. However, the demolition of historical resources cannot be mitigated to a less-than-significant level, and impacts on built-environment resources would be ***significant and unavoidable with mitigation***.

CR-1.1: Documentation

Prior to issuance of any demolition, grading, or construction permits for the site, the Project Sponsor shall undertake documentation of all contributing buildings and landscape elements of the SRI International Campus Historic District and the three individually eligible historic resources (Buildings 100, A, and E). The documentation shall be funded by the Project Sponsor and undertaken by a qualified professional who meets the Secretary of the Interior's professional qualification standards for history, architectural history, or architecture (Code of Federal Regulations, Title 36, Part 61, Appendix A). Documentation shall be submitted to the Menlo Park Planning Division, or a qualified historic consultant, for review prior to issuance of demolition permits. The documentation package created shall consist of the items listed below:

- CR-1.1.a: Digital Photography
- CR-1.1.b: Historical Report
- CR-1.1.c: Site Plan and Drawings

The documentation materials shall be submitted to the Northwest Information Center at Sonoma State University, the repository for the California Historical Resources Information System. The documentation shall also be offered to state, regional, and local repositories, including the Menlo Park Public Library, Menlo Park Historical Association, San Mateo County History Museum, Computer History Museum, and SRI International. Materials will be provided in archival digital and/or hard-copy formats, depending on the capacity and preference of the repository. This measure would create a collection of reference materials that would be available to the public and inform future research.

CR-1.1.a: Digital Photography

Digital photographs shall be taken of all contributing buildings and landscape elements. Photographs will capture the overall character and setting of the eligible SRI International Campus Historic District and the three individually eligible historic resources (Buildings 100, A, and E). All digital photography

shall be conducted according to current National Park Service standards, as specified in the National Register Photo Policy Factsheet.[75] The photography shall be undertaken by a qualified professional with demonstrated experience in documentation photography. Large-format negatives are not required.

Photograph views for the data set shall include:

- At least one photograph of each contributing building, which may be the primary façade or an oblique view showing the primary façade and a secondary façade;
- Photographs of all façades of the three individually eligible buildings (Buildings 100, A, and E);
- Detail views of character-defining features of the three individually eligible buildings (Buildings 100, A, and E);
- Representative interior views of the three individually eligible buildings (Buildings 100, A, and E); and
- Contextual views of the site and each contributing landscape element.

All photographs shall be referenced on a photographic key map or site plan. The photographic key shall show the photograph number, with an arrow to indicate the direction of the view. Digital photographs shall be in an uncompressed RAW file format and saved as TIFF files. Each image shall be a minimum of 1,600 by 1,200 pixels, at 300 pixels per inch or larger, and in color. The file name for each electronic image shall correspond with the name in the index of photographs and on the photograph label. If repositories request hard copies, the photographs shall be printed on archival paper.

Drone photographs of the site shall be taken and saved in a digital file format on an archival DVD, then submitted to the repositories with the photographic documentation. The use of digital photography and drone photography is encouraged in CR-1.2: Interpretive Program.

CR-1.1.b: Historical Report

A written historical narrative and report that meets Historic American Buildings Survey (HABS) historical report guidelines shall be produced for the three individually eligible buildings. This HABS-style historical report may be based on documentation provided in the 2022 historic resource evaluation for the site and include historic photographs and drawings, if available. The HABS-style historical report shall follow an outline format, with a statement of significance and a description of the buildings. The HABS-style historical report shall be submitted to the repositories along with the historic resource evaluation (2022), which documents the history of the site and the historic district.

CR-1.1.c: Site Plan and Drawings

An existing-conditions site plan shall be produced, depicting the current configuration and spatial relationships of the contributing buildings and landscape features. The existing-conditions site plan shall be prepared by a professional who meets the Secretary of the Interior's professional qualification standards for architecture or historic architecture and reviewed by the professional retained to prepare the written history. Documentation of plantings is not required, but a depiction of the locations and types of mature trees, as well as designed hardscape and landscape features, shall be included.

[75] National Park Service. 2013. *National Register Photo Policy Factsheet.*

Reasonable efforts shall be made to locate original drawings and/or site plans of the district and contributing buildings from its period of significance. If located, selected representative drawings (e.g., site plans, elevations, sections, relevant key details) shall be photographed or scanned at high resolution, reproduced, and included in the dataset.

Original architectural drawings or as-built drawings of the three individually eligible buildings proposed for demolition shall be submitted as part of the documentation package. Original drawings for Buildings A and E are known to be available in the SRI International records and therefore should be reproduced. Reasonable efforts should be made to locate original drawings for Building 100. If original architectural or construction drawings of Building 100, including floor plans and elevations, cannot be located, measured drawings shall be prepared, according to HABS guidelines, by a professional who meets the Secretary of the Interior's professional qualification standards for architecture or historic architecture and reviewed by the professional retained to prepare the written history.

CR-1.2: Interpretative Program

The Project Sponsor, in consultation with a qualified historian or architectural historian who meets the Secretary of the Interior's professional qualification standards and an experienced exhibit design professional, shall develop an interpretive program for the site. The interpretive program plan shall be reviewed by the Menlo Park Planning Division or a qualified historic consultant prior to the issuance of any permits for demolition, grading, or construction on the site. The plan shall include information regarding the proposed format and location of the content, along with information regarding the high-quality graphics and written narratives that will be incorporated. The interpretive display/feature shall be fully implemented and/or installed prior to issuance of the final certificate of occupancy for Parkline (Proposed Project) and inspected by Menlo Park Planning Division staff members or a qualified historic consultant to confirm its adherence to requirements for mitigation measures.

The Project Sponsor shall provide a robust interpretive program with multiple permanent outdoor displays concerning the history of SRI International. The high-quality interpretive displays shall be installed within the Project Site boundaries; made of durable, all-weather materials; and positioned to allow high public visibility and interactivity. In addition to narrative text, the interpretative displays may include photographs, news articles, memorabilia, and drawings. The interpretive program may use source materials from the historic resource evaluation or materials prepared as part of Mitigation Measure CR-1.1 but should also incorporate other primary and secondary sources, such as existing oral histories, historic photographs, and video footage where available and practicable. In addition to interpreting the overall significance of the SRI International campus as a historic district, the interpretive displays shall feature information on the individual significance of Buildings 100, A, and E, including the specific innovations, significant persons, and architecture associated with those buildings, as applicable.

In addition to interpretive displays in public areas of the site, the Project Sponsor may consider additional means of onsite interpretation, including digital interpretation methods (e.g., websites, mobile applications, interpretive videos, drone footage, virtual- or augmented-reality experiences, artwork inspired by or related to the history of the site). Creative means of interpretation, such as landscape and play features, along with other means of presenting information regarding the history and development of the site, are encouraged.

Although the interpretive program shall include information on the history and development of SRI International, as well as the important persons and innovations associated with the institution, interpretation may also include information on previous eras of site history, such as the residential estate era and Dibble General Hospital era.

CR-1.3: Relocation of SRI Monument

The Project Sponsor, in consultation with a qualified historian or architectural historian who meets or exceeds the Secretary of the Interior's qualifications standards, and a professional conservator shall develop and implement a relocation plan for the SRI International Monument. The receiver site shall retain the relationship between the SRI Monument and the campus setting, the landscape materials, and the immediate setting to the extent feasible. Altering the setting and placing the SRI International Monument along a prominent walkway axis is not recommended as it may negatively impact the historic character of the setting.

The SRI International Monument relocation plan shall include:

i. Identification of a receiver site on the Project Site.

ii. Description of how the receiver site reflects the historic setting of the SRI International Monument south of Building I, on the brick median in the visitor parking lot west of Building A.

iii. Specifications for the removal of the SRI International Monument from its current location, transport to the receiver site, and identification of possible secure, environmentally controlled storage location during construction of the Proposed Project. The specifications shall include protective measures to ensure the monument is not damaged during removal, transport, storage, and re-installation. The specifications shall include a timeline for removal and storage that will occur following the Historic American Buildings Survey (HABS) photographic documentation and prior to the beginning of ground-disturbing construction.

iv. Project plans or drawings that show the SRI International Monument clearly identified on demolition drawings as well as the receiver site on construction plans.

The SRI International Monument relocation plan shall be reviewed by the Menlo Park Planning Division or a qualified historic consultant prior to the issuance of any permits for demolition, grading, or construction on the Project Site. The final SRI International Monument relocation plan shall be submitted to the construction superintendents and confirmation of receipt shall be documented via email.

Impact CR-2: Archaeological Resources. The Proposed Project could cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5. (LTS/M)

It is currently anticipated that the maximum depth of excavation would be 15 feet below the current grade. A total of approximately 281,605 cubic yards of excavated soil would be transported offsite for disposal. No known archaeological resources are present within the Project Site. Therefore, ground disturbance associated with construction of the Proposed Project would not affect known archaeological resources.

A review of historic-period maps indicates that the Project Site has moderate potential for containing intact historic-period archaeological deposits. According to the geoarchaeological sensitivity analysis, the Project Site, which is located within Pleistocene-age alluvium, has low sensitivity for precontact archaeological resources. However, precontact (Native American) archaeological sites are known to exist in the San Francisco Bay Area region. Therefore, although it is unlikely that ground disturbancevari

associated with construction of the Proposed Project would affect unknown archaeological resources, the possibility cannot be eliminated. In the event that previously unknown archaeological resources are encountered during ground disturbance related to construction of the Proposed Project, a substantial adverse change in the significance of an as-yet-unknown historically significant archaeological resource could occur from its demolition, destruction, relocation, or alteration, and the significance of the resource could be materially impaired (State CEQA Guidelines Section 15064.5[b][1]). This would be considered a ***potentially significant*** impact.

MITIGATION MEASURES. Implementation of Mitigation Measures CR-2.1 and CR-2.2 would reduce potential impacts by requiring archaeological resources sensitivity training and allowing early detection of potential conflicts between development and resources. Implementation of these mitigation measures would reduce potentially significant impacts on archeological resources to ***less than significant with mitigation***.

CR-2.1: Train Workers to Respond to the Discovery of Cultural Resources

Prior to the start of ground-disturbing activities, the archaeological consultant or project archaeologist shall conduct archaeological resources sensitivity training for workers and construction superintendents. Training shall be required for all construction personnel participating in ground-disturbing construction to alert them to the archaeological sensitivity of the area and provide protocols to follow in the event of a discovery of archaeological materials. The principal archaeological consultant and project archaeologist shall develop and distribute, for job-site posting, a document ("ALERT SHEET") that summarizes the potential finds that could be exposed, the protocols to be followed, and the points of contact to alert in the event of a discovery. The ALERT SHEET and protocols shall be presented as part of the training. The contractor shall be responsible for ensuring that all workers requiring training are in attendance. Training shall be scheduled at the discretion of the Project Sponsor in consultation with the city. Worker training shall be required for all contractors and sub-contractors and documented for each permit and/or phase of a permit that requires ground-disturbing activities onsite.

CR-2.2: Stop Work if Archaeological Material or Features Are Encountered during Ground-Disturbing Activities

If a potentially significant subsurface cultural resource is encountered during ground-disturbing activities, all construction activities within a 100-foot radius of the find shall cease until a qualified archaeologist (i.e., one who meets the Secretary of the Interior's professional qualifications for archaeology or one under the supervision of such a professional) determines whether the resource requires further study. The archaeological consultant shall review, identify, and evaluate cultural resources that may be inadvertently exposed during construction to determine if a discovery is a historical resource and/or unique archaeological resource under CEQA. Significant resources shall be subject to treatment/mitigation that prevents an adverse effect on the resource, in accordance with PRC Section 15064.5. Mitigation could include avoidance, preservation in place, or the scientific removal, analysis, reporting, and curation of any recovered cultural materials. If the discovery constitutes a tribal cultural resource, consultation shall be undertaken between the city and the tribe(s) to determine appropriate treatment.

All developers in the Project Site shall include a standard inadvertent discovery clause in every construction contract involving ground-disturbing activities to inform contractors of this requirement. Any previously undiscovered resources found during construction activities shall be

recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of CEQA criteria by a qualified archaeologist in accordance with Mitigation Measure CR-2.2.

Impact CR-3: Inadvertent Disturbance of Human Remains. The Proposed Project could result in a significant impact due to the disturbance of human remains, including those interred outside of dedicated cemeteries. (LTS/M)

As stated above, the potential for encountering unknown historic archaeological resources is moderate; the potential for encountering unknown precontact (Native American) archaeological resources is low. However, precontact (Native American) archaeological sites are known to exist in the San Francisco Bay Area region. No known human remains are located on the Project Site, but if human remains are encountered during ground disturbance related to the Proposed Project, the impacts could be significant. This would be considered a ***potentially significant*** impact.

MITIGATION MEASURES. Implementation of Mitigation Measure CR-3.1 would reduce potential impacts by detailing the appropriate procedure if remains are encountered. Implementation of this mitigation measure would reduce potentially significant impacts on human remains to ***less than significant with mitigation***.

CR-3.1: Comply with State Regulations Regarding the Discovery of Human Remains at the Project Site

Procedures of conduct following the discovery of human remains citywide have been mandated by Health and Safety Code Section 7050.5, PRC Section 5097.98, and California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at a site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The San Mateo County Coroner shall be notified immediately. The coroner shall then determine whether the remains are Native American. If the coroner determines the remains are Native American, the coroner shall notify the NAHC within 24 hours, which will, in turn, shall notify the person the NAHC identifies as the MLD in connection with any human remains. Further actions shall be determined, in part, by the desires of the MLD. The Project Sponsor, the Project archaeologist, and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of human remains and associated or unassociated funerary objects, including those associated with known and unknown Native American burial locations (CEQA Guidelines Section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final treatment and disposition of the human remains and associated or unassociated funerary objects. The MLD will have 48 hours to make recommendations regarding the treatment and disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, or the owner does not accept the recommendation of the MLD in accordance with Public Resources Code 5097.98(e), the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*.

Impact C-CR-1: Cumulative Historic Resources Impacts. Cumulative development would not result in a significant environmental impact on historic resources; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Page & Turnbull cross referenced 34 project sites against lists of designated and identified historic resources, including resources from the Menlo Park Historic Site District zoning map; General Plan and M-2 Area Zoning Update (ConnectMenlo),[76] ConnectMenlo Draft EIR,[77] California Office of Historic Preservation Built-Environment Resource Directory for San Mateo County (last updated September 2022), and the Menlo Park El Camino Real/Downtown Specific Plan Final EIR.[78] Of the 34 development projects, two include identified or potential historic resources: 409 Glenwood Avenue (residential development project [approved]) and 1162 El Camino Real (residential development project [under construction]).

The 409 Glenwood Avenue project includes an identified historic residence (Gale House, addressed as 417 Glenwood Avenue) that is proposed to be relocated on the site to accommodate additional new residential construction. The 1162 El Camino Real project involves the demolition of commercial properties—the former Doughty's Meat Market (1162 El Camino Real) and former McCarthy's Groceries (1170 El Camino Real). The two properties were previously identified in a 1990 San Mateo County Historical Association survey; however, through the CEQA process, they were determined to not be eligible for listing in the NRHP or CRHR. Although potentially eligible for local listing, the city of Menlo Park does not maintain a local register of historic resources. As such, neither project appears to have the potential to result in the demolition of a designated or identified historic resource.

Of the 34 development projects, four are located on R&D and/or light industrial sites: 1350 Adams Court (1315 O'Brien Drive), 1075 O'Brien Drive and 20 Kelly Court, 995–1005 O'Brien Drive and 1320 Willow Road, and 1030 O'Brien Drive. None of these four sites include designated historic resources or previously identified eligible historic resources.

None of the 34 development projects are located on or immediately adjacent to the Project Site. Furthermore, none of the 34 development projects include historic resources from the same era as the SRI campus, historic resources with Modernist architectural styles, or historic resources that have an association with technology and innovation. Therefore, the Proposed Project is not anticipated to result in cumulative impacts related to historic resources on a project site or the types of historic resources in Menlo Park. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-CR-2: Cumulative Archaeological Resources and Human Remains Impacts. Cumulative development could result in a significant environmental impact on archeological resources and human remains; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)

The geographic context for the cumulative assessment of archaeological resources and human remains is the immediate vicinity of the Project Site, which is the area where construction activities, including ground-disturbing activities, could encounter archaeological resources and human remains that may be present on or near the site.

[76] City of Menlo Park. 2016. *General Plan and M-2 Area Zoning Update (ConnectMenlo).*

[77] Ibid.

[78] Environmental Science Associates. 2012. *Menlo Park El Camino Real/Downtown Specific Plan Final Environmental Impact Report.* April.

The cumulative projects in the vicinity of the Project Site would be constructed on infill sites in highly disturbed areas. It is likely that the cumulative projects would be constructed on sites where the ground surface has been disturbed and/or covered with fill and gravel. As with the Proposed Project, all cumulative projects would be required to implement best management practices, legal requirements, and/or mitigation measures to ensure that project activities would not result in the inadvertent destruction of an archaeological resource and that discovery procedures pertaining to human remains would be implemented. Nonetheless, cumulative impacts on archaeological resources and human remains are considered potentially significant because the reasonably foreseeable projects would most likely involve ground-disturbing activities that could uncover unknown archaeological resources and/or human remains, similar to the Proposed Project. Implementation of Mitigation Measures CR-2.1 and CR-2.2 would reduce the Proposed Project's impacts by requiring archaeological resources sensitivity training and allowing early detection of potential conflicts between development and resources. In addition, Implementation of Mitigation Measure CR-3.1 would reduce the Proposed Project's impacts by detailing the appropriate procedure if human remains are encountered. Overall, implementation of Mitigation Measures CR-2.1, CR-2.2, and CR-3.1 would reduce the Proposed Project's contribution to the cumulative impact to less-than-significant levels. Based on the analysis above, the Proposed Project's contribution to cumulative impacts on archeological resources and human remains would be ***less than cumulatively considerable with mitigation***. No additional mitigation is required.

3.9 Tribal Cultural Resources

This section identifies and evaluates the Proposed Project's potential impacts on tribal cultural resources. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Archaeological Resources Technical Report, Parkline.*[1]

The *Archaeological Resources Technical Report, Parkline* includes the results from a search of the California Historical Resources Information System (CHRIS) at the Northwest Information Center (NWIC). The *Archaeological Resources Technical Report, Parkline* is confidential and not for public release because it contains the locations of archaeological sites which are not within the Project Site but are within the vicinity of the Project Site. Public distribution and access should be restricted.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. No comments related to tribal cultural resources were raised in response to the NOP.

Existing Conditions

Environmental Setting

Refer to the "Environmental Setting" discussion in Section 3.8 *Cultural Resources*, for a description of the precontact setting and ethnographic setting of the Project area.

Regulatory Setting

State

California Environmental Quality Act

Analysis of tribal cultural resources was identified as a distinct CEQA environmental category with the adoption of Assembly Bill 52 (AB 52) (PRC Section 21074). AB 52 sets up an expanded consultation process, following PRC Section 21080.3.1(b). CEQA requires public agencies to consider the impacts of their actions on tribal cultural resources. Under PRC Section 21084.2, a "project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment."

CEQA defines a *"tribal cultural resource"* as any one of the following (PRC Section 21074):

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either (1) included in or eligible for inclusion in the California Register of Historical Resources or (2) included in a local register of historical resources;

[1] ICF. 2024. *Archaeological Resources Technical Report, Parkline*. June.

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. The lead agency shall consider the significance of the resource to a California Native American tribe; or
- A cultural landscape that meets the requirements listed above and is geographically defined in size and scope.

Archaeological sites, including those that qualify as historical resources (PRC Section 21084.1), unique archaeological resources (PRC Section 21083.2[g]), and non-unique archaeological resources (PRC Section 21083.2[h]), may qualify as tribal cultural resources.

PRC Section 21080.3.1 requires that local agencies formally consult with recognized California Native American tribes during the CEQA process to discuss potential impacts on tribal cultural resources. Prior to the release of a negative declaration, mitigated negative declaration, or EIR, the agency must initiate consultation with tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if (1) a tribe requested of the agency, in writing, to be informed through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe and (2) a tribe responds, in writing, within 30 days of receipt of the formal notification of a proposed project and requests consultation with the agency (PRC Section 21080.3.1[b]).

The Office of Planning and Research's *Tribal Consultation Guidelines* define consultation as "a process in which both the tribe and local government invest time and effort into seeking a mutually agreeable resolution for the purpose of preserving or mitigating impacts to a cultural place, where feasible."[2] Consultation is concluded when the agency and tribe(s) agree to measures to mitigate or avoid significant effects on a tribal cultural resource or if either party concludes that mutual agreement cannot be reached after a good-faith and reasonable effort (PRC Section 21080.3.2[b]).

Senate Bill 18

California SB 18, established in September 2004, requires local governments to consult with California Native American tribes prior to preparing or amending both general plans (as defined in California Government Code Section 65300 et seq.) and specific plans (as defined in Government Code Section 65450 et seq.). The purpose of this consultation is to include California Native American tribes early in the planning process to allow for the identification and protection of cultural resources. This process also allows cultural resources to be considered during the broad-scale local and regional planning process rather than at a project level. The following includes a sequential list of local government responsibilities:

- Local governments must notify appropriate tribes, as identified by the Native American Heritage Commission (NAHC), prior to the adoption or amendment of a general plan or specific plan;
- Tribes have 90 days from the receipt of notification to request consultation (Government Code Section 65352.3);
- Prior to the adoption or substantial amendment of a general plan or specific plan, local governments must refer the proposed action to the appropriate tribes, as identified by the NAHC, regardless of whether previous consultation has taken place;
- Local governments must allow a 45-day comment period (Government Code Section 65352); and
- Local governments must provide notice of a public hearing to all tribes that filed a written request for such notice at least 10 days prior to the hearing (Government Code Section 65092).

[2] California Office of Planning and Research. 2005. *Tribal Consultation Guidelines.*

Local

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes a policy associated with tribal cultural resources.

The following policy from the Open Space/Conservation Element related to tribal cultural resources were adopted to avoid or mitigate environmental impacts and is relevant to the Proposed Project:

> **Policy OSC-3.5: Consultation with Native American Tribes.** Consult with those Native American tribes with ancestral ties to the Menlo Park city limits regarding General Plan amendments and land use policy changes.

Environmental Impacts

This section describes the impact analysis related to tribal cultural resources for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and:
  a) Listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources, as defined in PRC Section 5020.1(k), or
  b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Methods for Analysis

This analysis of tribal cultural resources is based on a cultural resources records search conducted at the CHRIS - NWIC and a Sacred Lands File (SLF) search through the NAHC. In addition, ICF reviewed available archival maps and aerial photographs. A geoarchaeological sensitivity analysis was completed as part of the *Archaeological Resources Technical Report, Parkline*.

On December 6, 2022, the NAHC provided a list of tribes to the city of Menlo Park for consultation for proposed projects in the city under PRC § 21080.3.1 (i.e., AB 52).

On January 13, 2023, ICF submitted a request to the NAHC on behalf of the city requesting a list of tribes that have requested notice of proposed projects in the city, and a search of the SLF for the Project Site. ICF received a response on January 31, 2023, from Cody Campagne, Cultural Resources Analyst, stating, "[a] records search of the NAHC SLF was completed for the information submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for information." The list of tribes provided in response to the NAHC SLF search for the Project Site, which include tribes who, according to the NAHC, may have knowledge of cultural resources in the project area, is the same as the list of tribes provided by the NAHC to the city on December 6, 2022, except that Desiree Vigil of the Ohlone Indian Tribe is also included in the NAHC SLF records search.

To identify additional archaeologically sensitive areas and potential tribal cultural resources within the Project area, the city contacted ten individuals who represent seven local California Native American tribes. Letters with Project details, a map, and a formal invitation to consult were sent on August 4, 2023, pursuant to PRC § 21080.3.1(i.e., AB 52) and Government Code Section 65352.3 (i.e., SB 18). The letters solicited responses from each contact, including questions, comments, or concerns regarding the Proposed Project. The letters were sent to the following local California Native American tribal contacts:

- Irene Zwierlein, Amah Mutsun Tribal Band of Mission San Juan Bautista
- Tony Cerda, Costanoan Rumsen Carmel Tribe
- Ann Marie Sayers, Indian Canyon Mutsun Band of Costanoan
- Kanyon Sayers-Roods, Indian Canyon Mutsun Band of Costanoan
- Monica Arellano, Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Desiree Vigil, The Ohlone Indian Tribe
- Andrew Galvan, The Ohlone Indian Tribe
- Kenneth Woodrow, Wuksache Indian Tribe/Eshom Valley Band
- Johnathan Wasaka Costillas, Tamien Nation
- Quirina Luna Geary, Tamien Nation

As of the writing of this Draft EIR, no responses or requests for consultation have been received. Appendix C of the *Archaeological Resources Technical Report, Parkline* includes the letters sent to tribal contacts.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, R&D tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact; in which case the analysis does not identify a "worst-case" scenario.

The two buildout scenarios would occur on the same parcels. The two buildout scenarios would result in the same amount of development and ground disturbance. Therefore, impacts would be the same regardless of the 100 percent office scenario or 100 percent R&D scenario for purposes of the impact analysis in this section.

Impacts and Mitigation Measures

Impact TCR-1. Tribal Cultural Resources. The Proposed Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and:

a) Listed or eligible for listing in the California Register of Historical Resources or a local register of historical resources, as defined in PRC Section 5020.1(k), or

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (LTS/M)

To identify potential archaeologically sensitive areas and potential tribal cultural resources within the Project Site, a cultural resources records search of the Project Site and a 0.25-mile radius was conducted on December 22, 2022, at the NWIC, located at Sonoma State University in Rohnert Park. The records search included a literature review—specifically, of the *Archaeological Determinations of Eligibility for San Mateo County*— and a review of the most recent updates to the National Register of Historic Places, California Historical Landmarks, and California Points of Historical Interest. The records search identified 22 cultural resources studies previously conducted within the Project Site or within a 0.25-mile radius of the Project Site. The records search did not identify any previously recorded archaeological resource within the Project Site.

In addition, on January 13, 2023, ICF submitted a request to the NAHC on behalf of the city requesting a search of the SLF for the Project Site. ICF received a response on January 31, 2023, from Cody Campagne, Cultural Resources Analyst, stating, "[a] records search of the NAHC SLF was completed for the information submitted for the above referenced project. The results were positive. Please contact the tribes on the attached list for information." The NAHC provided a list of tribal contacts with knowledge of the area whom the city should contact for input. As described above, AB 52/SB 18 notification letters were sent to the tribal contacts on August 4, 2023; however, as of the writing of this Draft EIR, no responses have been received.

No known tribal cultural resources have been identified within the Project Site, although the Cultural Resources Analyst indicated that the SLF search indicated a positive result. As a result, based on available information, it is reasonable to conclude that ground disturbance associated with construction of the Proposed Project would not affect known tribal cultural resources.

However, precontact (Native American) archaeological sites and tribal cultural resources are known to exist in the San Francisco Bay Area region, generally. Therefore, although it is unlikely that ground disturbance associated with construction of the Proposed Project would affect unknown tribal cultural resources, the possibility cannot be eliminated. In the event that previously unknown tribal cultural resources are encountered during ground disturbance related to construction of the Proposed Project, a

substantial adverse change in the significance of an as-yet-unknown tribal cultural resource could occur from its demolition, destruction, relocation, or alteration, and the significance of the resource could be materially impaired (State CEQA Guidelines Section 15064.5[b][1]). This would be considered a ***potentially significant*** impact.

MITIGATION MEASURES. Implementation of Mitigation Measures CR-2.1 (Train Workers to Respond to the Discovery of Cultural Resources) and CR-2.2 (Stop Work if Archaeological Material or Features Are Encountered during Ground-Disturbing Activities), presented in Section 3.8, Cultural Resources, would reduce impacts by requiring archaeological resources sensitivity training, allowing early detection of potential conflicts between development and tribal cultural resources during Project construction, and to stop applicable construction work and consult with the Native American tribes to determine appropriate treatment when a tribal cultural resource is encountered. In addition, implementation of Mitigation Measure CR-3.1 (Comply with State Regulations Regarding the Discovery of Human Remains at the Project Site), presented in Section 3.8, would reduce impacts by establishing appropriate procedures in compliance with applicable regulations if human remains are encountered. Implementation of Mitigation Measure TCR-1 would reduce potential impacts to tribal cultural resources by detailing the appropriate procedure if tribal cultural resources are encountered. Implementation of these mitigation measures would reduce potentially significant impacts on tribal cultural resources to ***less than significant with mitigation***.

TCR-1: Stop Work if Tribal Cultural Resources Are Encountered during Ground-Disturbing Activities

If Native American cultural resources are encountered during ground-disturbing activities, the archaeological consultant shall review, identify, and evaluate the find to determine if the discovery could qualify as a tribal cultural resource, as defined in Public Resources Code Section 21074. Tribal representatives from the city's Assembly Bill 52 notification lists shall be consulted regarding this determination. If the discovery is determined to qualify as a tribal cultural resource, it shall be subject to treatment/mitigation that prevents an adverse effect on the resource, in accordance with Public Resources Code Section 15064.5. Mitigation shall be determined through consultation between the city and the tribe(s).

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*.

For the issue of tribal cultural resources, the geographic context is the area within the city of Menlo Park. Continued development in the city could result in damage to tribal cultural resources.

Impact C-TCR-1: Cumulative Tribal Cultural Resources Impacts. Cumulative development could result in a significant environmental impact on tribal cultural resources; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact on tribal cultural resources. (LTS/M)

Future development within the city of Menlo Park could include ground disturbing activities, construction, or the alteration of the landscape. This has the potential to result in development-related impacts on tribal cultural resources. However, new development would be subject to existing federal, state, and local regulations as well as General Plan goals, policies and programs, which would, to the maximum extent practicable, reduce cumulative development-related impacts on tribal cultural resources. As with the

Proposed Project, future development would be required to adopt mitigation measures to ensure that project activities would not result in the inadvertent destruction of a tribal cultural resource. Nonetheless, cumulative impacts on tribal cultural resources are considered potentially significant because the reasonably foreseeable projects would most likely involve ground-disturbing activities that could uncover unknown tribal cultural resources, similar to the Proposed Project. As described above, no responses to notification letters have been received by the city from Native American tribal representatives. No known tribal cultural resources have been identified on the Project Site. Implementation of Mitigation Measures CR-2.1 and CR-2.2 in Section 3.8, *Cultural Resources*, would reduce impacts by requiring archaeological resources sensitivity training, allowing early detection of potential conflicts between development and resources, and working with Native American tribes to determine appropriate treatment when a tribal cultural resource is encountered. In addition, implementation of Mitigation Measure CR-3.1 in Section 3.8 would reduce impacts by detailing the appropriate procedure if remains are encountered. Implementation of Mitigation Measure TCR-1 would reduce impacts by detailing the appropriate procedure if tribal cultural resources are encountered. Overall, implementation of Mitigation Measures TCR-1, CR-2.1, CR-2.2, and CR-3.1 would reduce the Proposed Project's contribution to the cumulative impact to less-than-significant levels. Based on the analysis above, the Proposed Project's contribution to cumulative impacts on tribal cultural resources would be ***less than cumulatively considerable with mitigation***. No additional mitigation is required.

3.10 Biological Resources

This section identifies and evaluates the Proposed Project's potential impacts related to biological resources. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Parkline Project Biological Resources Report* (Parkline BRR)[1]; and
- *Preliminary Arborist Report* (Arborist Report).[2]

The Parkline BRR was prepared by H.T. Harvey & Associates for the Proposed Project and peer reviewed by ICF. The existing setting, Project analysis, and mitigation measures outlined in the Parkline BRR are incorporated throughout this section. The Parkline BRR includes results of a reconnaissance-level field survey of the Project Site conducted on September 28, 2022, and queries of the California Native Plant Society (CNPS) inventory and California Natural Diversity Database (CNDDB) for the U.S. Geological Survey (USGS) Palo Alto, California, 7.5-minute quadrangle and surrounding eight quadrangles (San Mateo, Redwood Point, Newark, Woodside, Mountain View, La Honda, Mindego Hill, and Cupertino).

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. No comments related to biological resources were raised in response to the NOP.

Existing Conditions

Environmental Setting

The Project Site is located within an urbanized area of San Mateo County near San Francisco Bay (Bay). The approximately 63-acre site consists of an existing research campus owned and operated by SRI International (SRI) that comprises developed/landscaped land. The Project Site is bounded by Ravenswood Avenue to the northwest; Laurel Street, residential development, and commercial development to the southwest; residential and commercial development to the southeast; and Middlefield Road and commercial development to the northeast. The surrounding area is primarily urbanized, consisting of residential neighborhoods and low-intensity commercial areas. The Project Site is located on the USGS Palo Alto 7.5-minute quadrangle.

Elevations on the Project Site range from approximately 54 to 68 feet above sea level. The site is underlain by four soil units: Botella loam, 0 to 5 percent slopes; Botella-urban land complex, 0 to 5 percent slopes; urban land; and urban land-Orthents, cut-and-fill complex, 0 to 5 percent slopes. The Botella loam soil type typically consists of loam to a depth of 36 inches and clay loam from 36 to 60 inches, whereas the Botella-urban land complex consists of clay loam to a depth of 60 inches. Urban land-Orthents is an alluvial

[1] H.T. Harvey & Associates. 2024. *Parkline Project Biological Resources Report.* Los Gatos, CA. Prepared for Lane Partners, Menlo Park, CA. March 12. Refer to Appendix 3.10-1 of this EIR.

[2] HortScience Bartlett Consulting. 2022. *Preliminary Arborist Report.* Berkeley, CA. Prepared for Lane Partners. Menlo Park, CA. November 22.

soil type with a variable profile to a depth of 60 inches. None of the soils that overlay the site are hydric, and all are considered well drained.

Vegetation

The Project Site is developed with commercial buildings, sidewalks, asphalt parking lots, paved roads, and ornamental landscaping. Roadways and sidewalks are lined with ornamental trees, shrubs, and hedges. The dominant tree species on the Project Site is coast live oak, with concentrations of native valley oak (*Quercus lobata*) and coast redwood (*Sequoia sempervirens*) and nonnative London plane tree (*Platanus x acerifolia*), eucalyptus (*Eucalyptus* spp.), and ash (*Fraxinus* spp.) in localized areas. Dominant shrub species on the site include ornamental hedges and shrubs such as Victorian box (*Pittosporum undulatum*), common box (*Buxus sempervirens*), common myrtle (*Myrtus communis*), glossy privet (*Ligustrum lucidum*), and photinia (*Photinia* spp.). The understory is either composed primarily of bare ground, mulch, and ornamental lawns or dominated by nonnative English ivy (*Hedera helix*).

A picnic area along the southeastern boundary of the site is landscaped with large coast live oak (*Quercus agrifolia*) trees, with an understory of Bermuda grass (*Cynodon dactylon*) and other nonnative grass species. Near the eastern corner of the site, there is a large open area where soil has been stockpiled and very little vegetation has grown. On the southern boundary of the site, there is an exposed parking lot area with several succulent (*Echeveria* spp. and *Sedum* spp.) and cactus (*Opuntia* spp. and *Euphorbia* spp.) gardens in planters.

Wildlife

Wildlife species on the Project Site are associated with the developed/landscaped habitat and have adapted to high levels of human disturbance. Mammals that occur on the site include introduced species such as the Virginia opossum (*Didelphis virginianus*), Norway rat (*Rattus norvegicus*), black rat (*Rattus rattus*), and house mouse (*Mus musculus*). Common native species, such as the striped skunk (*Mephitis mephitis*) and raccoon (*Procyon lotor*), also occur on the site. Although California ground squirrels (*Otospermophilus beecheyi*) are common in the region, no burrows of this species were observed during the September 2022 reconnaissance-level survey. Nonnative eastern gray squirrels (*Sciurus carolinensis*) are common on the site.

Native birds that could nest and forage in trees and vegetation on the site include the Nuttall's woodpecker (*Picoides nuttallii*), Anna's hummingbird (*Calypte anna*), brown creeper (*Certhia americana*), Bewick's wren (*Thryomanes bewickii*), California towhee (*Melozone crissalis*), bushtit (*Psaltriparus minimus*), chestnut-backed chickadee (*Poecile rufescens*), dark-eyed junco (*Junco hyemalis*), lesser goldfinch (*Spinus psaltria*), house finch (*Haemorhous mexicanus*), and American crow (*Corvus brachyrhynchos*). Oak trees on the Project Site, in combination with the nearby oak woodland habitat at St. Patrick's Seminary & University to the northeast, provide adequate habitat to support oak-associated bird species such as the acorn woodpecker (*Melanerpes formicivorus*), white-breasted nuthatch (*Sitta carolinensis*), oak titmouse (*Baeolophus inornatus*), western bluebird (*Sialia mexicana*), and California scrub-jay (*Aphelocoma californica*). Building eaves and ledges on the Project Site provide nesting habitat for certain bird species that nest and roost on structures, such as the black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), and mourning dove (*Zenaida macroura*). A number of winter resident and migrant birds could also use the trees and other vegetation on the Project Site for resting and foraging, including the cedar waxwing (*Bombycilla cedrorum*), white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Zonotrichia atricapilla*), yellow-rumped warbler (*Setophaga coronata*), Townsend's warbler (*Setophaga townsendii*), and Say's phoebe (*Sayornis saya*).

Common species of raptors, such as the red-tailed hawk (*Buteo jamaicensis*) and Cooper's hawk (*Accipiter cooperi*), could forage for prey on the Project Site, and large trees, such as eucalyptus and coast redwoods, could provide nesting sites for up to one pair of common raptors. However, old raptor nests were not observed during the September 2022 survey, suggesting that raptors have not nested on the Project Site in recent years.

A few species of common, urban-adapted reptiles, such as the western fence lizard (*Sceloporus occidentalis*), are also common on the Project Site and, in addition to small mammals and passerines, provide a prey base for raptors that may nest in the vicinity of the Project Site. For purposes of this section, the term "vicinity of the Project Site" includes the 5-mile radius surrounding the Project Site.

Buildings on the Project Site, as well as large oaks and eucalyptus trees with cavities and crevices, provide suitable roosting habitat for common species of bats, such as the Yuma myotis (*Myotis yumanensis*), California myotis (*Myotis californicus*), Mexican free-tailed bat (*Tadarida brasiliensis*), and big brown bat (*Eptesicus fuscus*). No evidence of an active bat roost was observed in trees or on building exteriors during the September 2022 reconnaissance-level survey, which focused on the general suitability of habitat on the site for roosting bats; however, focused surveys (e.g., examination of building interiors and acoustic surveys) to determine the presence/absence of roosting bats on the site were not performed.

Wildlife Movement

No aquatic habitats are present on or adjacent to the Project Site that provide movement corridors for fish or other aquatic species. Because of the urbanized nature of the Project Site and the surrounding development, there are currently no well-defined or important movement corridors for mammals, amphibians, or reptiles on or through the Project Site. Wildlife species may move through the area using cover and refugia they find available. However, most dispersal by wildlife species in the vicinity very likely occurs along higher-quality habitats, such as the riparian habitat along San Francisquito Creek, 0.4 mile to the southeast, and along the edges of the Bay, 1.7 miles to the north/northwest.

Large numbers of migratory songbirds are often concentrated at the edge of the Bay and in the Santa Cruz Mountains during spring and fall migration. The Project Site is approximately 1.7 miles from the nearest bayland habitats and approximately 3.5 miles from the foothills of the Santa Cruz Mountains. However, it is not in a landscape position where high numbers of migratory birds would move past the Project Site. In addition, the Project Site is not located between two high-quality habitat areas where birds would be flying past at an altitude as low as the proposed buildings. As a result, there is no expectation that large concentrations of migratory songbirds would be particularly attracted to the habitats in the immediate vicinity of the Project Site or would make heavy use of such habitats. Nevertheless, the presence of mature trees and other landscape vegetation on and adjacent to the Project Site would be anticipated to attract some migrant birds, in addition to the resident species and individuals.

Wetlands and Non-Wetland Waters of the United States

No wetlands and other waters of the United States or waters of the state are present on the Project Site.

Special-Status Species

For purposes of this analysis, "special-status" species meet one or more of the following criteria:

- Listed or proposed for listing under the federal Endangered Species Act (ESA) as threatened or endangered (50 Code of Federal Regulations [CFR] 17.11 [listed animals] and 17.12 [listed plants], along with various notices in the *Federal Register* [FR] [proposed species]).

- Candidates for possible future listing as threatened or endangered under the ESA (87 FR 26152, May 3, 2022).
- Listed under the California Endangered Species Act (CESA) as threatened or endangered (14 California Code of Regulations [CCR] 670.5)
- Defined as rare or endangered under California Environmental Quality Act (CEQA) (State CEQA Guidelines 15380).
- Designated by the California Department of Fish and Wildlife (CDFW) as a California species of special concern.[3]
- Bats identified as medium or high priority on the Western Bat Working Group regional priority species matrix.[4]
- Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Listed in the California Fish and Game Code as fully protected species (fully protected birds are provided in Section 3511, mammals in Section 4700, reptiles and amphibians in Section 5050, and fish in Section 5515).
- Listed by the CNPS as rare, threatened, or endangered in California (California Rare Plant Rank [CRPR] 1A, 1B, and 2).[5]
- Identified by CNPS as species about which more information is needed to determine their status, and plants of limited distribution (California Rare Plant Ranks 3 or 4),[6] which may be included as special-status species, based on local significance or recent biological information.

Special-Status Plant Species

The CNPS (California Native Plant Society 2023) and the CNDDB[7] identify 68 special-status plant species as potentially occurring in at least one of the nine USGS quadrangles containing or surrounding the Project Site (i.e., CRPR 1, 2 3, and 4 species [for CNPS]) and/or within 5 miles of the Project Site (for the CNDDB). All 68 species were determined to be absent from the Project Site for at least one of the following reasons: (1) lack of suitable habitat types; (2) absence of specific microhabitat or edaphic requirements, such as serpentine soils; (3) the elevation range of the species is outside of the range within the Project Site; and/or (4) the species is considered extirpated from the vicinity. Appendix B of the Parkline BRR lists the plants that were determined absent, along with the basis for the determination. Because of the current and historical land use on the Project Site, as well as the surrounding developed land uses, no suitable habitat for special-status plant species is present on the Project Site, and there is minimal potential for special-status plant species to occur.

Figure 3.10-1 depicts CNDDB records of special-status plant species in the vicinity of the Project Site.

[3] California Department of Fish and Wildlife. 2024. Special Animals List. January. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline

[4] Western Bat Working Group. 2017. Regional Bat Species Priority Matrix. Available: http://wbwg.org/matrices/]

[5] California Native Plant Society. 2023. Rare Plant Inventory (online edition, v9.5). Available: CNPS Rare Plant Inventory. Accessed: October 18, 2023.

[6] Ibid.

[7] California Department of Fish and Wildlife. 2023. California Natural Diversity Database, RareFind 5, Version 5.3.0, October 1, 2023 update. Records search of the Palo Alto, San Mateo, Mountain View, Redwood Point, Newark, Woodside, La Honda, Mindego Hill, and Cupertino USGS 7.5-minute quadrangles. Sacramento, CA.

Source: H.T. Harvey & Associates, 2023 and CNDDB, 2023.

Figure 3.10-1
Special-Status Plant Species
Parkline

Special-Status Wildlife Species

The legal status of the special-status wildlife species that are known to occur or potentially occur in the surrounding region, as well as their likelihood of occurrence on the Project Site, is presented in Table 3.10-1. The majority of the special-status species listed in Table 3.10-1 are not expected to occur on the Project Site because it lacks suitable habitat, is outside the known range of the species, and/or is isolated from the nearest known extant populations by development or otherwise unsuitable habitat.

A number of special-status animals that are known to occur in the region are not expected to occur on the Project Site because suitable habitat is absent on the site and in surrounding areas; the Project Site is also outside the range for the species. Because these species have no potential to occur on or near the site, they are not addressed in Table 3.10-1. These include the Bay checkerspot butterfly (*Euphydryas editha bayensis*), San Bruno elfin butterfly (*Callophrys mossii bayensis*), green sturgeon (*Acipenser medirostris*), longfin smelt (*Spirinchus thaleichthys*), foothill yellow-legged frog (*Rana boylii*), California Ridgway's rail (*Rallus obsoletus obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), western snowy plover (*Charadrius nivosus nivosus*), California least tern (*Sternula antillarum browni),* Swainson's hawk (*Buteo swainsoni*), black skimmer (*Rynchops niger*), Alameda song sparrow (*Melospiza melodia pusillula*), salt marsh harvest mouse (*Reithrodontomys raviventris*), and salt marsh wandering shrew (*Sorex vagrans halicoetes*).

Other special-status animal species are present in less urbanized settings in San Mateo and Santa Clara Counties and occur in specialized habitats in the region; they also occurred on or near the Project Site historically but are no longer present.[8] These species, which are absent from the Project Site because of a lack of suitable habitat, restricted ranges, and/or isolation of the site from populations by urbanization, include the Crotch's bumble bee (*Bombus crotchii*), western bumble bee (*Bombus occidentalis*), Central California Coast coho salmon (*Oncorhynchus kisutch*), California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana draytonii*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), bald eagle (*Haliaeetus leucocephalus*), tricolored blackbird (*Agelaius tricolor*), mountain lion (*Puma concolor*), Pacific lamprey (*Entosphenus tridentatus*), northern harrier (*Circus hudsonius*), long-eared owl (*Asio otus*), short-eared owl *(Asio flammeus*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), San Francisco common yellowthroat (*Geothlypis trichas sinuosa*), grasshopper sparrow (*Ammodramus savannarum*), Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), American badger (*Taxidea taxus*), golden eagle (*Aquila chrysaetos*), and American peregrine falcon (*Falco peregrinus anatum*). In addition, a focused survey of the Project Site for nests with San Francisco dusky-footed woodrats (*Neotoma fuscipes annectens*) determined that the species is absent from the site.

[8] Because the Project Site is near the border between San Mateo County and Santa Clara County, the wildlife species that are known to occur in both counties were assessed.

Table 3.10-1. Special-Status Wildlife Species

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
Federal or State Endangered, Rare, or Threatened Species			
Monarch butterfly (*Danaus plexippus)*	FC	Requires milkweeds (*Asclepias* spp.) for egg-laying and larval development, but adults obtain nectar from a wide variety of flowering plants in many habitats; individuals congregate in winter roosts, primarily in Mexico, and in widely scattered locations on the central and southern California coast.	**May Be Present as Nonbreeder**. The monarch butterfly occurs throughout the region, primarily as a migrant. No larval host plants were observed on the Project Site during the September 2022 survey; thus, no suitable breeding habitat for this species is present on the Project Site. Small numbers of individuals may nectar throughout the Project Site, especially during spring and fall migration. However, the site does not provide high-quality foraging habitat for this species. Although ostensibly suitable overwintering habitat for monarchs (e.g., eucalyptus trees) is present on the site, no current or historical overwintering sites are known in the vicinity of the Project Site; the nearest known overwintering location is 12 miles to the north at Coyote Point Park in San Mateo.
Crotch's bumble bee (*Bombus crotchii*)	SC	Occurs in open grassland and scrub habitats, and like most other species of bumble bees, nests primarily underground; generalist foragers that visit a variety of floral resources	**Absent.** Although this species was historically found throughout the southern two-thirds of California, population declines and range contractions (25 percent relative to its historical range) have made this species very scarce in the region. There are no recent (i.e., after 1909) records of the species on the San Francisco Peninsula, and the CNDDB does not include even historical records from San Mateo County. Therefore, this species is not expected to occur on the Project Site.
Western bumblebee (*Bobus occidentalis occidentalis*)	SC	Occurs in meadows and grasslands with abundant floral resources; nests are primarily underground	**Absent**. Although this species was historically found throughout much of central and northern California, including the vicinity of the Project Site, it has been extirpated from much of its former range, and there are no recent records from San Mateo County or nearby areas. Therefore, this species is absent from the Project Site.
Central California Coast steelhead (*Oncorhynchus mykiss*)	FT	Cool streams with suitable spawning habitat and conditions that allow migration between spawning and marine habitats	**Present in Nearby Waters.** No suitable aquatic habitat for steelhead is present on the Project Site; thus, this species is absent from the Project Site. However, steelhead are known to occur in San Francisquito Creek, approximately 0.4 mile to the southeast, and surface runoff from the Project Site drains to this creek. This reach of San Francisquito Creek functions as a migration corridor for individuals traveling between the Bay and spawning and rearing habitat farther upstream.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
Central California Coast coho salmon (*Oncorhynchus kisutch*)	FT, ST	Open ocean, estuaries, and rivers	**Absent.** No suitable aquatic habitat for coho salmon is present on the Project Site. Central California Coast coho salmon may have occurred historically in San Francisquito Creek, approximately 0.4 mile to the southeast, but they have not been observed in San Francisco estuary streams since the early to mid-1980s. Thus, this species is absent from the Project Site and nearby waters in San Francisquito Creek.
California tiger salamander (*Ambystoma californiense*)	FT, ST	Vernal or temporary pools in annual grasslands or open woodlands; adults live terrestrially in small mammal burrows	**Absent.** No suitable aquatic breeding, foraging, or dispersal habitat for California tiger salamanders is present on the Project Site. Historically, California tiger salamander's range on the San Francisco Peninsula barely reached as far northwest as the Project Site. There is a 2002 record of six adults that were trapped in a cistern along San Francisquito Creek, approximately 0.4 mile to the southeast; those individuals were moved to the nearest known breeding population at Lake Lagunita, approximately 2.2 miles to the south (CNDDB 2022). That population is beyond the known dispersal distance of the species and separated from the Project Site by extensive urbanization. No known populations of the species are present along San Francisquito Creek or closer to the Project Site than Lake Lagunita. There are no records of the species within the last 20 years closer to the site than Lake Lagunita. Therefore, this species is determined to be absent.
California red-legged frog (*Rana draytonii*)	FT, CSSC	Streams, freshwater pools, and ponds with emergent or overhanging vegetation	**Absent.** No suitable aquatic breeding, foraging, or dispersal habitat for the California red-legged frog is present on the Project Site. A number of records for this species in Menlo Park are from areas west of Interstate 280, which represents a barrier to dispersal and prevents individuals at these locations from reaching the Project Site. California red-legged frogs are also known to occur in Atherton Channel, east of Interstate 280, approximately 2.8 miles southwest of the Project Site. In addition, a set of historical records (pre-1930) indicate that the species was at Lake Lagunita, approximately 2.2 miles south of the Project Site; however, the species has not been recorded at this well-monitored site since 1930. The distance between the Project Site and all known California red-legged frog occurrences exceeds the species' documented dispersal capabilities. Furthermore, the site is separated from the occurrences east of Interstate 280 by extensive urban development. Thus, this species is determined to be absent.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
San Francisco garter snake (*Thamnophis sirtalis tetrataenia*)	FE, SE, SP	Occurs in a variety of habitats, including riparian areas; requires burrows for hibernation and frogs for a prey base	**Absent.** The San Francisco garter snake occurs on the San Francisco Peninsula from just north of the San Francisco–San Mateo county line south to approximately the San Mateo–Santa Cruz county line. An intergrade zone, composed of hybrids between the San Francisco garter snake and red-sided garter snake (*Thamnophis sirtalis sirtalis*), occurs from Palo Alto north to the Pulgas region near Upper Crystal Springs Reservoir. No suitable aquatic habitat that would support this species is present on the Project Site. San Francisco garter snakes are known to occur in the region, including an established population at Crystal Springs Reservoir approximately 9 miles to the northwest. Additional records of potential intergrades have been detected in aquatic habitats west of Interstate 280, approximately 6.3 and 6.7 miles northwest of the Project Site. However, all known occurrences are separated from the Project Site by Interstate 280, and individuals are not expected to successfully disperse across this busy roadway to reach the Project Site. Thus, this species is determined to be absent.
Bald eagle (*Haliaeetus leucocephalus*)	SE, SP	Occurs mainly along seacoasts, rivers, and lakes; nests in tall trees or on cliffs (occasionally on electrical towers) and feeds mostly on fish	**Absent.** Bald eagles are known to nest of the vicinity of the Project Site at inland reservoirs and along the coast, including at Crystal Springs Reservoir, which is approximately 9 miles north of the Project Site. However, no suitable nesting or foraging habitat for bald eagles is present on the Project Site. Thus, this species is determined to be absent.
Tricolored blackbird (*Agelaius tricolor*)	ST	Nests near fresh water in dense emergent vegetation	**Absent.** In San Mateo County, the tricolored blackbird has bred in only a few scattered locations and is absent from, or occurs only as a nonbreeder in, most of the county. This species typically nests in extensive stands of tall emergent herbaceous vegetation in non-tidal freshwater marshes and ponds. No suitable nesting habitat is present on or near the Project Site because no large patches of emergent vegetation, blackberry (*Rubus* sp.) stands, or other suitable vegetation are present. Furthermore, this species (whose colonies are loud and conspicuous) has never been recorded nesting in the vicinity of the Project Site, and high levels of disturbance have very likely precluded nesting near the site. The site also does not provide suitable foraging habitat for this species. Thus, this species is determined to be absent.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
Mountain lion, Southern California/Central Coast evolutionarily significant unit (ESU) (Puma concolor)	SC	Large home range; occurs in a variety of habitats but natal dens are typically in remote, rugged terrain far from human activity (may occasionally occur in areas near human development, especially during dispersal)	**Absent.** In the region, mountain lions occur primarily in the Santa Cruz Mountains west of the Project Site. Although individuals may occasionally stray into suburban neighborhoods along the urban-wildland interface, they are not expected to occur on the Project Site because of high levels of human activity and the site's separation from more suitable undeveloped habitats because of extensive urbanization. Thus, this species is determined to be absent.
Central Valley fall-run Chinook salmon (*Oncorhynchus tshawytscha*)	CSSC	Cool rivers and large streams that reach the ocean, with shallow, partly shaded pools; riffles; and runs	**May Be Present in Nearby Waters.** No aquatic habitats are present on the Project Site that would provide suitable habitat for Chinook salmon; this species is absent from the Project Site. However, the species may be present in San Francisquito Creek, approximately 0.4 mile southeast of the Project Site. Reliable historical records of the species occurring in South Bay streams are scarce, and the historical presence of the species in San Francisquito Creek is uncertain. However, since the mid-1980s, individuals have been detected more frequently in South Bay streams. Although Chinook salmon is a large-bodied mainstem river spawner and therefore not likely to use San Francisquito Creek for breeding, the possibility exists for a small number of individuals to attempt to spawn in the creek. Thus, this species may be present during spawning migrations as freshwater-rearing juveniles or as outmigrating smolts but always in low abundance.
Pacific lamprey (*Entosphenus tridentatus*)	CSSC	Medium-size and large, low-gradient cold rivers and streams, with a wide range of habitats (e.g., gravel, low-gradient riffles)	**Absent.** No aquatic habitats are present on the Project Site that would provide suitable habitat for Pacific lamprey; this species is absent from the Project Site. Furthermore, this species does not currently occur, nor did it historically occur, in San Francisquito Creek. Thus, this species is determined to be absent.
Central California roach (*Lavinia symmetricus symmetricus*)	CSSC	Generally found in small streams; well adapted to intermittent watercourses (e.g., tolerant of high temperatures and low oxygen levels)	**Present in Nearby Waters.** No aquatic habitat is present on the Project Site that would provide suitable habitat for the Central California roach; this species is absent from the Project Site. Central California roach are known to be present in San Francisquito Creek, which receives surface water from the Project Site. This species occurs widely, often in unshaded pools with warm temperatures. Therefore, it is expected to occur within the reach of the creek 0.4 mile southeast of the Project Site.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
Sacramento hitch (*Lavinia exilicauda exilicauda*)	CSSC	Warm lowland waters, including clear streams, turbid sloughs, lakes, and reservoirs; has a high tolerance for varying stream conditions and water temperatures	**Present in Nearby Waters.** No aquatic habitat is present on the Project Site that would provide suitable habitat for the Sacramento hitch; this species is absent from the Project Site. Sacramento hitch are known to be present in San Francisquito Creek, which receives surface water from the Project Site. This species has a high tolerance of various stream conditions and water temperatures; thus, it is expected to occur within the reach 0.4 mile southeast of the Project Site.
Riffle sculpin (*Cottus gulosus*)	CSSC	Permanent cool headwater streams with an abundance of riffles and rocky substrates	**May Be Present in Nearby Waters.** Riffle sculpin are widespread and locally abundant in the region; they are also native to the San Francisquito Creek watershed. This species is not currently known to be present in San Francisquito Creek, although suitable habitat is present. Because the species is native to the watershed and suitable habitat occurs in San Francisquito Creek, which receives surface water from the Project Site, its presence in the reach near the Project Site cannot be ruled out. However, warmer conditions along the reach near the site most likely preclude the presence of this species; it is more likely to occur in cooler reaches farther upstream.
Western pond turtle (*Actinemys marmorata*)	CSSC	Permanent or nearly permanent water in a variety of habitats	**May Be Present in Nearby Waters.** This species is known to occur in the vicinity of the Project Site west of Interstate 280 as well as an area approximately 0.4 mile southeast of the Project Site in San Francisquito Creek, which receives surface water from the Project Site. An additional record is from an area approximately 3.9 miles south of the Project Site, just downstream from Searsville Reservoir and east of Interstate 280. However, no suitable dispersal, foraging, or nesting habitat for this species is present on the Project Site. Furthermore, all known occurrences are separated from the Project Site by dense urban development. Thus, individuals of this species are not expected to successfully disperse across surrounding urban areas and reach the Project Site.
Northern harrier (*Circus cyaneus*)	CSSC (nesting)	Nests in marshes and moist fields; forages over open areas	**Absent.** This species is known to occur regularly at Stanford University to the southeast and along the Bay to the north. However, no suitable nesting or foraging habitat is present on the Project Site or in the surrounding area, which is entirely developed. Thus, this species is determined to be absent.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
Long-eared owl (*Asio otus*)	CSSC (nesting)	Riparian bottomlands with tall, dense willows and cottonwood stands (also areas with dense live oak and California bay trees along upland streams); forages primarily in adjacent open areas	**Absent.** The long-eared owl occurred historically in developed areas of the peninsula; currently, it is known to occur only inland of the Project Site in the foothills of the Santa Cruz Mountains. No suitable nesting and foraging habitat for long-eared owl is present on the Project Site or in nearby areas. Thus, this species is determined to be absent.
Short-eared owl (*Asio flammeus*)	CSSC (nesting)	Nests in marshes and moist fields; forages over open areas	**Absent.** In San Mateo County, short-eared owls are known to nest only at Greco Island, in the Don Edwards San Francisco Bay National Wildlife Refuge. In Santa Clara County, the species has been recorded nesting in the Palo Alto Flood Control Basin, although nesting has not been confirmed there since the 1970s. Individuals are present along the Bay shoreline in the vicinity of the Project Site through the year. However, no suitable foraging or nesting habitat is present on or adjacent to the site. Thus, this species is determined to be absent.
Burrowing owl (*Athene cunicularia*)	CSSC	Nests and roosts in open grasslands and ruderal habitats with suitable burrows, usually those made by California ground squirrels	**Absent.** No California ground squirrel (*Otospermophilus beecheyi*) burrows are present on the Project Site that would provide nesting and roosting habitat for this species; grasslands that would provide suitable foraging habitat are absent from the site. Furthermore, burrowing owls are not known to occur in the vicinity of the Project Site. Thus, this species is determined to be absent.
Vaux's swift (*Chaetura vauxi*)	CSSC (nesting)	Nests both in small colonies and as single pairs, occupying cavities in large snags, primarily in old-growth forests; also occasionally uses artificial cavities such as chimneys and forage aerially	**May Be Present as Nonbreeder.** Known to nest in eastern San Mateo County. However, no suitable large snags or residential chimneys are present on or near the Project Site; this species is not expected to nest close enough to the Project Site to be affected by activities associated with the Proposed Project. Individuals of the species may forage aerially over the site, especially during migration.
Olive-sided flycatcher (*Contopus cooperi*)	CSSC (nesting)	Breeds in mature, primarily coniferous forests with open canopies; along forest edges in more densely vegetated areas; in recently burned forest habitats; and in selectively harvested landscapes	**May Be Present as Nonbreeder.** Known to nest throughout much of San Mateo County but not in the urban portions of Menlo Park where the Project Site is located. No suitable coniferous forest nesting habitat is present on or adjacent to the Project Site. Occasional non-breeding individuals may forage on the site, especially during migration.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
Loggerhead shrike (*Lanius ludovicianus*)	CSSC (nesting)	Nests in tall shrubs and dense trees; forages in grasslands, marshes, and ruderal habitats	**Absent.** Known to nest in eastern San Mateo County. Suitable nesting and foraging habitat for this species is absent from the Project Site because of the absence of grasslands, marshes, and ruderal habitats. Furthermore, the regional loggerhead shrike population has declined substantially in recent years; this species is not expected to occur on the Project Site or in adjacent open habitats at the Corpus Christi Monastery or St. Patrick's Seminary & University, which are surrounded by development. Thus, this species is determined to be absent.
San Francisco common yellowthroat (*Geothlypis trichas sinuosa*)	CSSC	Occupies wooded riparian areas and nests in herbaceous vegetation, usually in wetlands or moist floodplains	**Absent.** No suitable nesting or foraging habitat for this species is present on the Project Site or in adjacent areas. Thus, this species is determined to be absent.
Yellow warbler (*Setophaga petechia*)	CSSC (nesting)	Nests in riparian woodlands	**May Be Present as Nonbreeder.** No suitable riparian nesting habitat for yellow warblers is present on or adjacent to the Project Site. The species is an abundant migrant throughout the region during the spring and fall when nonbreeding individuals may forage in trees and shrubs on the site.
Yellow-breasted chat (*Icteria virens*)	CSSC (nesting)	Nests in dense stands of willow and other riparian habitat	**May Be Present as Nonbreeder.** This species is a rare breeder and only slightly more regular transient in willow-dominated riparian habitats in the South Bay. No nesting habitat is present on the Project Site. May occur on the Project Site only as a rare nonbreeding transient.
Grasshopper sparrow (*Ammodramus savannarum*)	CSSC (nesting)	Nests and forages in grasslands, meadows, fallow fields, and pastures	**Absent.** Known to nest and occur in the region, primarily in grasslands but less frequently in disturbed agricultural habitats, such as at Stanford University and in the foothills of the Santa Cruz Mountains. No suitable nesting or foraging habitat for this species is present on the Project Site because of the absence of grasslands. Thus, this species is determined to be absent.
Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*)	CSSC	Nests in pickleweed-dominant salt marsh and adjacent ruderal habitat	**Absent.** In the South Bay, nests primarily in short pickleweed-dominated portions of diked/muted tidal salt marsh habitat and adjacent ruderal habitats as well as extensive grasslands in the Santa Cruz Mountains. No suitable nesting or foraging habitat occurs on the Project Site. Thus, this species is determined to be absent.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
Western red bat (*Lasiurus blossevillii*)	CSSC	Roosts in foliage in forest or woodlands, especially in or near riparian habitat	**Low Potential for Occurrence.** Western red bats occur in the vicinity of the Project Site in low numbers as migrants and winter residents; however, this species does not breed in the region. Individual western red bats may roost in the foliage of trees virtually anywhere on the Project Site but are expected to roost primarily in riparian areas elsewhere in the region. Occasional individuals may forage over the Project Site year-round.
Pallid bat (*Antrozous pallidus*)	CSSC	Forages over many habitats and roosts in caves, rock outcrops, buildings, and hollow trees; sensitive to human disturbance at roost sites	**May Be Present.** Historically, pallid bats were most likely present in a number of locations throughout the region, but their populations have declined in recent decades. Although no roosts were observed during the site visit (which did not include a focused survey for roosting bats), suitable roosting habitat for this species is present on the Project Site in unoccupied buildings and mature oak trees with suitable cavities. Although regular human disturbance limits the site's suitability with respect to supporting a maternity colony or day roost, and the presence of a colony of pallid bats on the site is unlikely, individuals from colonies in the region may occasionally forage on the Project Site. Focused surveys would be necessary to conclusively determine whether this species roosts on the Project Site.
Townsend's big-eared bat (*Corynorhinus townsendii*)	CSSC	Roosts in caves and mine tunnels and occasionally in deep crevices in trees, such as redwoods, or in abandoned buildings in a variety of habitats; sensitive to human disturbance at roost sites	**May Be Present.** Townsend's big-eared bats are known to occur in the Santa Cruz Mountains to the southwest. Suitable roosting habitat for this species is present on the Project Site in unoccupied buildings. Although regular human disturbance limits the site's suitability with respect to supporting a maternity colony or day roost, and the presence of a colony of Townsend's big-eared bats on the Project Site is unlikely, individuals from colonies in the region (especially in the Santa Cruz Mountains to the southwest) could occasionally forage over the Project Site. Focused surveys would be necessary to conclusively determine whether this species roosts on the Project Site.
San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)	CSSC	Nests in a variety of habitats, including riparian areas, oak woodlands, and scrub	**Absent.** Suitable habitat for this species is present on the Project Site because of the large number of oak trees. However, no nests of this species were detected on the site during the September 2022 focused survey. Thus, this species is determined to be absent.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site
American badger (*Taxidea taxus*)	CSSC	Burrows in grasslands and occasionally in infrequently disked agricultural areas	**Absent.** Known to occur in the region, primarily in the extensive grasslands and scrub habitats to the west and southwest. No suitable open habitats that would be capable of supporting this species are present on the Project Site. Furthermore, the site is not located on the periphery of open space areas; therefore, individuals would not be expected to traverse the site. Thus, this species is determined to be absent.
State Fully Protected Species			
American peregrine falcon (*Falco peregrinus anatum*)	SP	Forages in many habitats; nests on cliffs as well as tall bridges and buildings	**Absent.** Peregrine falcons are known to nest on Hoover Tower on the Stanford University campus, approximately 1.9 miles south of the Project Site. They are also known to nest on structures around the edges of the South Bay; in recent years (e.g., in 2021), they nested on an electrical tower at Ravenswood, ponds R1 and R2, approximately 3 miles to the northeast. However, peregrine falcons are not known or expected to nest on or adjacent to the Project Site because of a lack of suitable cliff-like habitat for nesting. Furthermore, this species would not forage on the Project Site because of the absence of open habitats and suitable prey. Thus, this species is determined to be absent.
Golden eagle (*Aquila chrysaetos*)	SP	Breeds on cliffs or in large trees (rarely on electrical towers); forages in open areas	**Absent.** No suitable nesting habitat for golden eagles is present on the Project Site, and individuals would not forage on the Project Site because of the absence of open habitats and suitable prey. Thus, this species is determined to be absent.
White-tailed kite (*Elanus leucurus*)	SP	Nests in tall shrubs and trees; forages in grasslands, marshes, and ruderal habitats	**Low Potential for Occurrence.** White-tailed kites are known to occur in low numbers in the surrounding urban areas, especially along San Francisquito Creek to the southeast and at Flood Park to the north. Suitable nesting habitat for this species is present in tall shrubs and trees on the Project Site; up to one pair of white-tailed kites can potentially nest on the Project Site. However, because of the limited availability of open foraging habitat in the surrounding area, white-tailed kites are more likely to nest elsewhere in the vicinity of the Project Site where more extensive areas of open space are present and capable of supporting a nesting pair (e.g., along the Bay to the north or at Stanford University to the southeast). Individual white-tailed kites may forage on the Project Site year-round.

Scientific and Common Name	Status	Habitat	Potential for Occurrence in the Vicinity of the Project Site

Source: H.T. Harvey & Associates. 2024. *Parkline Project Biological Resources Report*. Prepared for Lane Partners, Menlo Park, CA. March 12. (see Table 1 in Appendix 3.10-1).

Notes:

Special-Status Species Code Designations:

CSSC = California species of special concern

FE = federally listed as endangered

FT = federally listed as threatened

SC = state candidate for listing

SE = state listed as endangered

SP = state fully protected species

ST = state listed as threatened

No aquatic habitats that support special-status fish species or western pond turtles (*Actinemys marmorata*) are present on or in the vicinity of the Project Site. However, surface runoff from the Project Site drains to San Francisquito Creek, approximately 0.4 mile southeast of the site. Nearby reaches of San Francisquito Creek support a narrow band of riparian trees and other vegetation and provide flows, at least during the wet season. Although this reach of the creek dries during the summer, water is present during the winter and spring. As a result, the nearby reach of the creek provides suitable habitat for several special-status fish species that are known to occur in San Francisquito Creek, including the Central California Coast steelhead (*Oncorhynchus mykiss*), Central Valley fall-run Chinook salmon (*Oncorhynchus tschawytscha*), Central California roach (*Lavinia symmetricus symmetricus*), Sacramento hitch (*Lavinia symmetricus exilicauda*), and riffle sculpin (*Cottus gulosus*). In addition, the western pond turtle is known to occur along this creek.

Several special-status animal species may occur on the Project Site as nonbreeding transients, foragers, or migrants. These are the monarch butterfly (*Danaus plexippus*), Vaux's swift (*Chaetura vauxi*), yellow warbler (*Setophaga petechia*), olive-sided flycatcher (*Contopus cooperi*), yellow-breasted chat (*Icteria virens*), and western red bat (*Lasiurus blossevillii*). These species are not expected to breed (for all species) or roost (for bats) on or immediately adjacent to the Project Site because of a lack of suitable habitat. In addition, the Vaux's swift, yellow warbler, olive-sided flycatcher, and yellow-breasted chat are bird species that are considered California species of special concern only when nesting; thus, they are not special-status species when they occur as nonbreeding visitors to the Project Site.

The white-tailed kite (*Elanus leucurus*), pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*) could breed on the Project Site.

Figure 3.10-2 depicts CNDDB records of special-status wildlife species in the vicinity of the Project Site.

Sensitive Natural Communities and Habitats

A query of the CNDDB regarding sensitive habitats identified three sensitive natural communities as occurring within the nine 7.5-minute USGS quadrangles within or surrounding the Project Site: northern coastal salt marsh (Rank G3/S3), serpentine bunchgrass (Rank G2/S2), and valley oak woodland (Rank G3/S2.1). No sensitive natural communities occur on the Project Site.

Regulatory Setting

Federal

Clean Water Act Sections 401 and 404

The purpose of the Clean Water Act (CWA) is to maintain and restore the physical, chemical, and biological integrity of waters of the United States, which include, but are not limited to, tributaries to traditionally navigable waters that are currently or were historically used for interstate or foreign commerce, along with adjacent wetlands. Construction activities within waters of the United States are regulated under the CWA by the U.S. Army Corps of Engineers (USACE). The placement of fill into waters of the United States must comply with Section 404 of the CWA permit requirements. The State Water Resources Control Board (State Water Board), together with the Regional Water Quality Control Boards (RWQCBs), is the state agency charged with implementing water quality certification in California through Section 401 of the CWA. However, the Project Site does not contain any waters of the United States; therefore, a USACE Section 404 permit or RWQCB Section 401 water quality certification would not be required.

Source: H.T. Harvey & Associates, 2023 and CNDDB, 2023.

Figure 3.10-2
Special-Status Animal Species
Parkline

Clean Water Act Section 402

CWA Section 402 regulates construction-related stormwater discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES), which is administered by the U.S. Environmental Protection Agency (EPA). In California, the State Water Board is authorized by EPA to oversee the NPDES program through the RWQCBs. Construction projects in California that disturb 1 acre of land or more are required to comply with state regulations that aim to control discharges of stormwater-related pollutants under the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Water Board Order No. 2009-0009-DWQ, as amended and administratively extended). Prior to the start of construction/demolition, a notice of intent must be filed with the State Water Board that describes the project in question. A stormwater pollution prevention plan must be developed and maintained during the project that includes the use of best management practices (BMPs) to protect water quality until the site is stabilized.

Standard conditions under the Construction General Permit require an applicant to use BMPs for onsite sediment control, damp street sweeping, temporary covers over disturbed surfaces to control erosion, and stabilized entrances and/or wash racks, among other measures. In addition, the Construction General Permit does not extend coverage to projects if stormwater-related discharges are likely to jeopardize the continued existence of any federally listed endangered or threatened species or result in take.

In many Bay Area counties, including San Mateo County, projects must also comply with the California RWQCB, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit (Water Board Order No. R2-2015-0049, as amended). This permit requires all projects to implement BMPs and incorporate low-impact development practices into their design to prevent pollution from stormwater runoff, promote infiltration, and hold/slow down the volume of water coming from a site. In order to meet these permit and policy requirements, projects must incorporate the use of green roofs, pervious surfaces, tree planters, grassy swales, and bioretention and/or detention basins, among other requirements.

Federal Endangered Species Act

The ESA protects federally listed wildlife species from harm, or *take,* which is broadly defined as intending to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" or attempting to engage in any such conduct. *Take* can also include habitat modification or degradation that directly results in death or injury of a listed wildlife species. An activity can be defined as *take* even if it is unintentional or accidental. Listed plant species are provided less protection than listed wildlife species. Generally, listed plant species are legally protected from *take* under the ESA only if they occur on federal lands.

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) have jurisdiction over federally listed threatened and endangered species under the ESA. USFWS also maintains lists of proposed and candidate species. Species on these lists are not legally protected under the ESA but may become listed in the near future and are often included in the review of a project. The monarch butterfly, a candidate for listing under the federal ESA, may occur on the Project Site as a migrant and an occasional forager. No other federally listed or candidate plant or animal species occur on the Project Site.

Federal Migratory Bird Treaty Act of 1918

The federal Migratory Bird Treaty Act (MBTA), 16 United States Code Section 703, prohibits the killing, possessing, or trading of migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. The MBTA protects whole birds, parts of birds, and bird eggs and nests, and it

prohibits the possession of all nests of protected bird species, whether they are active or inactive. An active nest is defined as one having eggs or young, as described by USFWS in its June 14, 2018, memorandum "Destruction and Relocation of Migratory Bird Nest Contents." Nest starts (i.e., nests that are under construction but do not yet contain eggs) and inactive nests are not protected from destruction.

In its June 14, 2018, memorandum, USFWS clarified the text regarding destruction of an active nest "while conducting any activity where the intent of the action is not to kill migratory birds or destroy their nests or contents," noting that such conduct is not prohibited under the MBTA. All native bird species that occur on the Project Site are protected under the MBTA.

State

Porter-Cologne Water Quality Control Act

The State Water Board works in coordination with the nine RWQCBs to preserve, protect, enhance, and restore water quality. Each RWQCB makes decisions related to water quality for its region and may approve, with or without conditions, or deny projects that could affect waters of the state. The RWQCB's authority comes from the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne). Porter-Cologne broadly defines waters of the state as "any surface water or groundwater, including saline waters, within the boundaries of the state." Because Porter-Cologne applies to any water, whereas the CWA applies only to certain waters, California's jurisdictional reach may overlap and exceed the boundaries of waters of the United States, pursuant to the CWA. Under Porter-Cologne, the State Water Board and the nine RWQCBs are responsible for granting CWA NPDES permits and waste discharge requirements for certain point-source and nonpoint-source discharges to waters. These regulations limit impacts on aquatic and riparian habitats from a variety of urban sources. However, no waters of the state or riparian habitats regulated by the RWQCB are present on the Project Site; therefore, waste discharge requirements from the RWQCB are not required.

California Endangered Species Act

CESA (California Fish and Game Code, Chapter 1.5, Sections 2050–2116) prohibits the take of any plant or animal listed as endangered, threatened, or a candidate species. In accordance with the CESA, CDFW has jurisdiction over state-listed species (California Fish and Game Code Section 2070). CDFW regulates activities that may result in take of individuals (i.e., intending to "hunt, pursue, catch, capture, or kill" or attempting to "hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of take under the California Fish and Game Code. CDFW, however, has interpreted take to include the "killing of a member of a species that is the proximate result of habitat modification." No state-listed, proposed, or candidate plant or animal species occur on the Project Site.

California Environmental Quality Act

CEQA is a state law that requires state and local agencies to document and consider the environmental implications of their actions and refrain from approving projects with significant environmental effects if feasible alternatives or mitigation measures can substantially lessen or avoid the effects. CEQA requires full disclosure of the environmental effects of agency actions, such as approval of a general plan update, including projects covered by that plan, on resources such as air quality, water quality, cultural resources, and biological resources. A project normally has a significant environmental effect on biological resources if it substantially affects a rare or endangered species or the habitat of that species, substantially interferes with the movement of resident or migratory fish or wildlife, or substantially diminishes habitat for fish, wildlife, or plants. The State Resources Agency promulgated guidelines for implementing CEQA, known

as the State CEQA Guidelines. The State CEQA Guidelines define rare, threatened, and endangered species as those listed under the federal ESA and CESA as well as any other species that meet the criteria of the resource agencies or local agencies (e.g., CDFW-designated species of special concern). The guidelines state that the lead agency preparing an EIR must consult with and receive written findings from CDFW concerning project effects on species that have been listed as endangered or threatened. The effects of a project on such resources are important in determining whether the project would have significant environmental effects under CEQA.

California Fish and Game Code

Ephemeral and intermittent streams, rivers, creeks, dry washes, sloughs, blue-line streams on USGS maps, and watercourses with subsurface flows fall under CDFW jurisdiction. If CDFW determines that proposed activities may substantially adversely affect fish and wildlife resources, a Lake and Streambed Alteration Agreement (LSAA) must be prepared. The Project Site does not support streams or watercourses or any other riparian habitat; therefore, CDFW would not require an LSAA for the Proposed Project.

Certain sections of the California Fish and Game Code describe regulations pertaining to the protection of certain wildlife species. For example, Section 2000 prohibits take of any bird, mammal, fish, reptile, or amphibian, except as provided by other sections of the code.

California Fish and Game Code Sections 3503, 3513, and 3800, as well as other sections and subsections, protect native birds, including their nests and eggs, from all forms of take. CDFW considers disturbance that causes nest abandonment and/or loss of reproductive effort take. Raptors (e.g., eagles, hawks, owls) and their nests are specifically protected in California under Section 3503.5, which states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

Bats and other non-game mammals are protected by California Fish and Game Code Section 4150, which states that all non-game mammals or parts thereof may not be taken or possessed, except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities that result in mortality for non-game mammals (e.g., destruction of an occupied nonbreeding bat roost, resulting in the death of bats) or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young) may be considered take by CDFW.

Most native bird, mammal, and other wildlife species that occur on the Project Site and in the immediate vicinity are protected under the California Fish and Game Code.

Local

Menlo Park Municipal Code

The Menlo Park Municipal Code contains ordinances for Menlo Park. Title 16, Zoning, includes regulations relevant to biological resources on the Project Site, as discussed below.

Bird-Friendly Design

The City has adopted bird-friendly design standards to limit potential harm to birds from striking buildings for individual zoning districts in Title 16, Zoning. The Project Site is currently zoned C-1(X) (Administrative and Professional District, Restrictive); a bird-friendly design is required for residential

uses in this zone. The proposed zoning text amendments and rezoning for the Project Site would also include bird-friendly design requirements for both residential and commercial uses.

Landscape Design Plan

Section 12.44.090(a)(1)(G) of the Menlo Park Municipal Code states that the use of invasive or noxious plant species is strongly discouraged. Invasive species are defined as plants that were not historically found in California. They spread outside of cultivated areas and can damage environmental or economic resources. The term *noxious weed* refers to any weed designated as such under the weed control regulations of the Weed Control Act and identified on a regional district's noxious weed control list. No invasive and/or noxious plant species would be used in the Proposed Project's landscape design plan.

Heritage Trees

Chapter 13.24 of the Menlo Park Municipal Code, Heritage Trees, establishes regulations for the preservation of *heritage trees*, defined as:

- Trees of historical significance, special character, or community benefit—specifically, those designated by resolution of the City Council;
- An oak tree (*Quercus* spp.) that is native to California and has a trunk with a circumference of 31.4 inches (diameter of 10 inches), or more, measured at 54 inches above the natural grade; and
- All trees other than oaks that have a trunk with a circumference of 47.1 inches (diameter of 15 inches), or more, measured 54 inches above the natural grade, with the exception of trees that are less than 12 feet in height, which are exempt.

To protect heritage trees, Section 13.24.025 requires a tree protection plan to be prepared by a certified arborist and submitted for any work performed within a tree protection zone, which is an area 10 times the diameter of the tree. Furthermore, all tree protection plans should be reviewed and approved by the Public Works Director or his or her designee prior to issuance of any permit for grading or construction.

The removal of heritage trees or pruning of more than one-fourth of the branches or roots within a 12-month period requires a permit from the city's Director of Public Works or his or her designee and payment of a fee. The Director of Public Works may issue a permit when removal or major pruning of a heritage tree is reasonable, based on a number of criteria, including the condition of the tree, the need for removal to accommodate proposed improvements, and the ecological and long-term value of the tree, along with feasible alternatives that allow for tree preservation.

There are approximately 1,340 existing trees on the Project Site, including 547 trees that qualify as heritage trees under Menlo Park Municipal Code Chapter 13.24. (This total does not include approximately 58 trees, of which approximately 24 are heritage trees, near Buildings S and T, which are being evaluated separately as part of the entitlement review for proposed tenant improvements in Buildings P, S, and T and associated utility work, including the addition of a combined utility yard.) Approximately 198 existing heritage trees on the Project Site would need to be removed as part of the Proposed Project.[9] Of those, 101 heritage trees would be removed due to poor health or constituting invasive or undesirable species, while 97 would be removed due to conflicts with the Proposed Project's site plan.

[9] Studios Architecture, OJB, Kier+Wright. 2024. *Tree Disposition Plan, Parkline*. May 31. Updated removal and planting information to be finalized prior to issuance of Tree Removal Permit(s) for development within the Project Site, subject to City review and approval.

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the City adopted ConnectMenlo, which contained the City's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The City also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with biological resources.

The following goal and policies from the Land Use Element related to biological resources were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal LU-6: Preserve open space lands for recreation, protect natural resources and air and water quality, and protect and enhance scenic qualities.

> **Policy LU-6.5: Open Space Retention.** Maximize the retention of open space on larger tracts (e.g., portions of the St. Patrick's Seminary and University site) through means such as rezoning consistent with existing uses, clustered development, acquisition of a permanent open space easement, and/or transfer of development rights.
>
> **Policy LU-6.7: Habitat Preservation.** Collaborate with neighboring jurisdictions to preserve and enhance the Bay, shoreline, San Francisquito Creek, and other wildlife habitat and ecologically fragile areas to the maximum extent possible.
>
> **Policy LU-6.8: Landscaping in Development.** Encourage extensive and appropriate landscaping in public and private development to maintain the city's tree canopy and promote sustainability and healthy living, particularly through increased trees and water-efficient landscaping in large parking areas and in the public right-of-way.

The following goal and policies from the Open Space/Conservation Element related to biological resources were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal OSC1: Maintain, protect, and enhance open space and natural resources.

> **Policy OSC1.1: Natural Resources Integration with Other Uses**. Protect Menlo Park's natural environment, and integrate creeks, utility corridors, and other significant natural and scenic features into development plans.
>
> **Policy OSC1.2: Habitat for Open Space and Conservation Purposes.** Preserve, protect, maintain, and enhance water, water-related areas, and plant and wildlife habitat for open space and conservation purposes.
>
> **Policy OSC1.3: Sensitive Habitats.** Require new development on or near sensitive habitats to provide baseline assessments prepared by qualified biologists, and specify requirements relative to the baseline assessments.
>
> **Policy OSC1.4: Habitat Enhancement.** Require new development to minimize the disturbance of natural habitats and vegetation, and require revegetation of disturbed natural habitat areas with native or non-invasive naturalized species.

Policy OSC1.5: Invasive, Non-Native Plant Species. Avoid the use of invasive, non-native species, as identified on the lists of invasive plants maintained by the Cal-IPC [California Invasive Plant Council] and U.S. Department of Agriculture invasive and noxious weeds database, or other authoritative sources, in landscaping on public property.

Policy OSC1.15: Heritage Trees. Protect heritage trees, including during construction activities, through enforcement of the Heritage Tree Ordinance (Chapter 13.24 of the Municipal Code).

Environmental Impacts

This section describes the impact analysis related to biological resources for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to determine whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) or non-wetland waters through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Methods for Analysis

The primary sources of information used in preparing the analysis of biological resources were the Parkline BRR (Appendix 3.10-1 of this EIR) and the Arborist Report. In addition, ICF peer reviewed the Parkline BRR. Unless otherwise noted, the findings in this section were based on information in these and other relevant reports, along with professional judgment.

Prior to conducting fieldwork, H.T. Harvey & Associates ecologists reviewed the project description, plans, and maps provided by Lane Partners; aerial images; a USGS topographic map; the CDFW's CNDDB; and other relevant reports, scientific literature, and technical databases. In addition, H.T. Harvey & Associates

ecologists perused records of birds reported in nearby areas on eBird and Peninsula Birding List-Serve. For purposes of this section, the term "vicinity of the Project Site" includes the 5-mile radius surrounding the Project Site.

For plants, H.T. Harvey & Associates ecologists reviewed all species on current CNPS CRPR 1A, 1B, 2A, and 2B lists occurring in the vicinity of the Project Site by querying species known to occur on the Palo Alto, California, USGS 7.5-minute quadrangle and in the surrounding eight quadrangles (San Mateo, Redwood Point, Newark, Woodside, Mountain View, La Honda, Mindego Hill, Cupertino). In addition, H.T. Harvey & Associates ecologists queried the CNDDB for natural communities of special concern that occur on the Project Site.

A reconnaissance-level field survey of the Project Site was conducted by H.T. Harvey & Associates wildlife and plant ecologists on September 28, 2022.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact; in those cases, the analysis does not identify a "worst-case" scenario.

A project's biological resources impacts are site specific. Analysis of the potential impacts related to special-status species, sensitive natural communities, protected wetlands, the use of a site as a wildlife corridor or nursery site, and local policies or ordinances protecting biological resources is dependent on a number of factors, including a project's location, the amount of existing development, the type of habitat present, the presence of trees, and the type of construction disturbance and activity, among other factors. The two buildout scenarios would occur on the same parcels; therefore, there would be no difference in location that would affect the analysis. In addition, the two buildout scenarios would have the same building footprint and same amount of construction disturbance and activity. Therefore, impacts would be the same, regardless of the 100 percent office scenario or the 100 percent R&D scenario for purposes of the impact analysis in this section.

Impacts Not Evaluated in Detail

This section describes why the Proposed Project would result in ***no impact*** related to riparian habitat and sensitive natural communities, wetlands, or an adopted habitat conservation plan or natural community conservation plan and no further analysis is required.

Riparian Habitat and Sensitive Natural Communities. The Project Site comprises only developed and landscaped land cover and does not support any riparian habitat or sensitive natural communities.

State or Federally Protected Wetlands and Non-Wetland Waters. No wetlands or non-wetland waters of the United States or waters of the state are present on the Project Site; therefore, the Proposed Project

would avoid all direct impacts on state or federally protected wetlands and aquatic habitats. No direct impacts on San Francisquito Creek, which is less than 0.5 mile south of the Project Site, are proposed. However, surface water runoff from the Project Site flows to San Francisquito Creek; indirect impacts on water quality in the creek could occur as a result of activities associated with the Proposed Project occurring upgradient of the creek if runoff were to increase in intensity or frequency. This potential impact on water quality is discussed in Section 3.12, *Hydrology and Water Quality,* under Impact HY-1. Compliance with permit conditions would avoid this potential impact.

Adopted Habitat Conservation Plan or Natural Community Conservation Plan. The Project Site is not located within or near an area covered by an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Impacts and Mitigation Measures

Impact BIO-1: Special-Status Species. The Proposed Project could result in a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. (LTS/M)

Because of its largely developed nature, the Project Site provides relatively low-quality habitat for most species; therefore, it supports relatively small numbers of individuals from any one species. The plant species observed on the Project Site during the reconnaissance-level survey are not regulated under state or federal laws and are not listed as rare by the CNPS. All native plant species found on the Project Site or with potential to occur on the site are regionally abundant and common in California. No special-status plant species are anticipated to occur on the Project Site.

The monarch butterfly, Vaux's swift, olive-sided flycatcher, yellow warbler, yellow-breasted chat, and western red bat potentially occur on the Project Site as nonbreeding migrants, transients, or foragers, but they are not known or expected to breed or occur in large numbers on or near the Project Site. The monarch butterfly, a candidate for listing under the federal ESA, may occur as an occasional forager on the Project Site, but it is not expected to breed there because of the absence of larval host plants (i.e., milkweeds). The Vaux's swift, olive-sided flycatcher, yellow warbler, and yellow-breasted chat (California species of special concern) are not expected to occur on or close to the Project Site as breeders because of the absence of suitable habitat, but individuals may occur occasionally as foragers during the nonbreeding season. The western red bat (also a California species of special concern) may occur on the Project Site as an occasional forager; however, this species does not form large roosts like the bats discussed below and roosts in only small numbers in the trees on the site. The western red bat is not expected to breed on the Project Site because of a lack of suitable habitat and because the Project Site is outside this species' breeding range.

During demolition and construction, vegetation removal, noise, and the operation of heavy equipment would have some potential to affect foraging habitats and/or disturb individual monarch butterflies, along with Vaux's swift, olive-sided flycatcher, yellow warbler, yellow-breasted chat, and western red bat. Construction activities might result in a temporary direct impact through the alteration of foraging patterns (e.g., avoidance of work sites because of increased noise and activity levels during maintenance) but would not result in a loss of individuals because individuals would move away from construction areas or equipment before being injured or killed. Furthermore, the Project Site does not provide important foraging habitat that is used regularly or by large numbers of individuals from any of these species. Foraging habitat for these species is expected to increase following implementation of the Proposed

Project because of the net increase in the number of trees on the Project Site. As a result, the Proposed Project would have minimal impact on species' foraging habitat and no substantive impact on regional populations of these species. Therefore, impacts on monarch butterfly, yellow warbler, yellow-breasted chat, Vaux's swift, olive-sided flycatcher, and western red bat would be ***less than significant***. No mitigation is required.

Pallid bat and Townsend's big-eared bat, which are California species of special concern, can roost in buildings and trees on the Project Site. Although no evidence of a colony of roosting bats was detected in trees or buildings on the site during the September 2022 reconnaissance-level survey, the presence of a moderate-size colony of a common species of roosting bats or a colony of any size of pallid bats or Townsend's big-eared bats cannot be ruled out. Thus, the removal of trees and buildings on the Project Site has the potential to result in the loss of a colony of roosting bats. When buildings or trees containing roosting colonies or individual bats are removed or modified, individual bats can be physically injured or killed, can be subjected to physiological stress from disturbance during torpor, or can face increased predation because of exposure during daylight. In addition, nursing young may be subjected to disturbance-related abandonment by their mothers. Impacts on a moderate-size maternity colony of common species that have potential to occur on the site (i.e., at least 10 big brown bats, 20 Yuma myotis, or at least 100 individuals of other non-special-status bat species) or impacts on a pallid bat or Townsend's big-eared bat roost of any type (i.e., a maternity or non-maternity colony) or any size would be considered a substantial impact on these species because this could have a substantial effect on regional populations, which would be a ***potentially significant*** impact.

MITIGATION MEASURES. Implementation of Mitigation Measures BIO-1.1 through BIO-1.5 would reduce potential impacts by requiring an initial bat habitat survey, maternity season survey, pre-construction activity bat survey, bat exclusion measures, and compensatory mitigation for bat habitat. Implementation of these mitigation measures would reduce potentially significant impacts on roosting bats to ***less than significant with mitigation***.

BIO-1.1: Initial Bat Habitat Survey

A qualified bat biologist shall conduct an initial survey of all buildings and trees on the Project Site that are slated for removal to determine whether suitable habitat for a moderate-size colony of common bat species (i.e., at least 10 big brown bats or at least 20 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size, is present. The locations of trees with suitable cavities and crevices, as well as any buildings with accessible interiors or crevices (e.g., roof tiles or other exterior features) that support suitable roost locations, shall be identified, and potential entry and exit locations shall be mapped. For trees and buildings that are determined, in the qualified biologist's discretion, not to provide suitable habitat for a moderate-size colony of common bat species, or a pallid bat or Townsend's big-eared bat colony of any size, no further surveys shall be required. If the qualified biologist determines that buildings or trees provide suitable habitat, then further surveys under Mitigation Measures BIO-1.2 and BIO-1.3 shall be required.

BIO-1.2: Maternity Season Survey

A qualified bat biologist shall conduct a focused survey for roosting bats within all buildings and trees on the Project Site where suitable habitat was identified during the initial habitat survey, during the maternity season (generally March 15–August 31), and prior to the start of construction to determine the presence or absence of a maternity colony, the species present, and an estimate of the colony size, if present. If close inspection of potential roost features during the daytime is infeasible, the focused

survey shall consist of a dusk emergence survey when bats can be observed flying out of the roost. If work will be initiated during the maternity season, this survey shall be conducted 1 year prior to the year in which construction will occur. If a maternity colony is detected, the exclusion measures described in Mitigation Measure BIO-1.4, below, shall be implemented prior to March 15 of the year in which construction occurs to ensure that bats are excluded from the roost prior to the start of construction.

BIO-1.3: Pre-Construction Activity Bat Survey

A pre-construction activity survey shall be conducted for roosting bats within all buildings and trees on the Project Site that are slated for removal and within which suitable habitat was identified during the initial habitat survey and the maternity roosting survey. The survey shall be conducted by a qualified bat biologist within 7 days prior to the start of building demolition or tree removal for the purpose of impact avoidance. If building demolition and/or tree removal occurs in phases, a pre-activity survey shall be conducted within 14 days prior to the demolition of each building and/or removal of each tree with suitable roost habitat. If close inspection of potential roost features during the daytime is infeasible, the focused survey shall include a dusk emergence survey when bats can be observed flying out of the roost. If a moderate-size maternity colony of common bat species (i.e., at least 10 big brown bats, 20 Yuma myotis, 100 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size or any kind (i.e., a maternity or non-maternity colony), is not detected during the survey, no additional measures shall be required. If a moderate-size maternity colony of common bat species (i.e., at least 10 big brown bats, 20 Yuma myotis, or 100 individuals of other non-special-status species), or a pallid bat or Townsend's big-eared bat colony of any size or any kind (i.e., a maternity or non-maternity colony), is present, the qualified bat biologist shall identify an appropriate disturbance-free buffer zone for the species identified. The buffer will be maintained until either the end of the maternity season or until a qualified biologist determines that all young are volant (i.e., capable of flight) to avoid the loss of dependent young.

BIO-1.4: Bat Exclusion

If bats are present in a building or tree to be removed or disturbed, the individuals shall be safely evicted outside the bat maternity season (approximately March 15–August 31) and the winter torpor period (approximately October 15–February 28, depending on weather). Bats may be evicted through exclusion, as directed by a qualified biologist, after notifying the California Department of Fish and Wildlife. The qualified biologist must be present for the removal of trees or structures occupied by bats.

For eviction from roost trees, trimming or removing trees shall follow a two-step removal process whereby limbs and branches not containing roost habitat are removed on day 1, then the entire tree is removed on day 2.

The disturbance or removal of structures containing, or suspected of containing, active (non-maternity or hibernation) or potentially active common bat roosts shall be done in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change roost conditions, causing bats to abandon and not return to the roost. Removal shall be completed the subsequent day. Alternatively, exclusion methods may include the installation of one-way doors and/or use of ultrasonic deterrence devices. One-way doors and/or deterrence devices shall be left in place for a minimum of 2 weeks, with a minimum of five fair-weather nights with no rainfall and temperatures no colder than 50°F.

BIO-1.5: Compensatory Mitigation for Bat Habitat

If a maternity colony of common bat species containing at least 10 big brown bats, 20 Yuma myotis, or 100 individuals of other non-special-status bat species, or a pallid bat or Townsend's big-eared bat day roost of any type (maternity or non-maternity) or any size, is determined to be present on the Project Site, replacement roost habitat that is appropriate to the species shall be provided, as determined by a qualified bat biologist. The nature of the replacement roost habitat (e.g., the design of an artificial roost structure) shall be determined by the qualified bat biologist, based on the number and species of bats detected. Ideally, the roost structure shall be installed on the Project Site. If replacement habitat cannot be placed on the site, it shall be installed no more than 100 feet from the site (or as close to the site as feasible). The exact placement of replacement habitat shall be determined in consultation with the qualified bat biologist.

Impact BIO-2: Wildlife Movement and Native Wildlife Nursery Sites. The Proposed Project could interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (LTS/M)

Native Wildlife Nursery Sites

For many species, a typical urban landscape is a mosaic of suitable and unsuitable habitat types. Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. Development that fragments natural habitats (i.e., breaks them into smaller pieces) can have a twofold impact on wildlife. First, as habitat patches become smaller, they are unable to support as many individuals (patch size impact). Second, the area between habitat patches may be unsuitable for wildlife species to traverse (connectivity impact).

The Project Site is entirely developed and located within a highly developed area. Therefore, the Proposed Project would not result in the fragmentation of natural habitats. Any common, urban-adapted wildlife species that currently move through the Project Site would continue to be able to do so following Project construction. In addition, the Proposed Project would also include approximately 26.4 acres of open space areas. The Proposed Project would not impede the use of any native wildlife nursery sites, including sites for the breeding of common, urban-adapted birds. Thus, the Proposed Project would not interfere with the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors in the vicinity. Because the Proposed Project would not impede the use of any native wildlife nursery sites, impacts on native wildlife nursery sites would be ***less than significant***. No mitigation is required.

Migratory Birds

Construction disturbance during the bird nesting season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly through nest abandonment. Because of the absence of sensitive habitats on the Project Site, the Project Site supports only regionally common, urban-adapted breeding birds and potentially white-tailed kite (a state fully protected species). In addition, many birds are expected to continue to nest and forage on the Project Site after Project construction is completed. These birds are habituated to disturbance associated with existing conditions at the Project Site.

No old raptor nests were observed on the Project Site during the September 2022 survey by H.T. Harvey & Associates, suggesting that raptors (including white-tailed kites) have not nested on the

Project Site in recent years. The likelihood that these species would nest on the Project Site in the future is low.

The mature vegetation on the Project Site supports a number of bird species that could have active nests and could be affected during Project construction. Although construction impacts would be temporary, the disruption to nesting and foraging habitat could harm migratory bird populations. In addition, all native migratory birds, including raptors, are protected under the MBTA and California Fish and Game Code. Implementation of the Proposed Project could also temporarily reduce available nesting habitat for birds that currently use the Project Site as well as foraging habitat and cover for migrants and wintering birds through the removal of trees and landscape vegetation. This could result in a temporary decline in the number of migratory bird species and individuals that use the Project Site. Any disturbance of nesting birds that results in the abandonment of active nests or the loss of active nests through vegetation or structure removal would be a ***potentially significant*** impact.

The proposed land use program, which considers site orientation, was developed to ensure that existing and new trees would be distributed throughout the Project Site, which currently has approximately 1,340 trees. In total, the Proposed Project would remove approximately 708 trees, including approximately 198 heritage trees, and plant approximately 873 new trees, resulting in a total of 1,505 trees on the Project Site, an overall increase in the number of trees compared to existing conditions. Thus, many of the existing trees on the Project Site would be preserved and would continue to be available for nesting habitat following construction of the Proposed Project. Once the new trees and vegetation mature, the Proposed Project would result in an overall increase in nesting and foraging resources for the migratory birds that currently use the site compared to existing conditions. In addition, although the habitat on the Project Site does provide nesting and foraging habitat for migratory birds, this developed area represents only a small portion of the habitats that support these species regionally. Although many habitats in the vicinity of the Project Site support species of migratory birds that nest on the site, these birds are expected to nest in nearby habitats if they become displaced from the Project Site.

MITIGATION MEASURES. Implementation of Mitigation Measure BIO-2.1 would reduce potential impacts by requiring measures to avoid and minimize construction-period impacts on nesting birds. Implementation of this mitigation measure would reduce potentially significant impacts on migratory birds to ***less than significant with mitigation***.

BIO-2.1: Avoidance and Pre-construction Surveys for Nesting Migratory Birds

The Project Sponsor shall implement the following measures to avoid and minimize construction-period impacts on nesting birds:

- **Avoidance of the Nesting Season.** To the extent feasible, the commencement of demolition and construction activities shall be scheduled to avoid the nesting season. If demolition and construction activities are scheduled to take place outside the nesting season, all potential demolition/construction impacts on nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code will be avoided. The nesting season for most birds in San Mateo County extends from February 1 through August 31.
- **Pre-Activity/Pre-Disturbance Nesting Bird Surveys.** If it is not possible to schedule demolition and construction activities between September 1 and January 31, then pre-activity surveys for nesting birds shall be conducted by a qualified ornithologist to ensure that no nests will be disturbed during implementation of the Proposed Project. Surveys shall be conducted no more than 7 days prior to the initiation of demolition or construction activities for each construction

phase. During the surveys, the ornithologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, buildings) in and immediately adjacent to the impact areas for migratory bird nests.

- **Non-Disturbance Buffers Around Active Nests.** If an active nest is found close enough to work areas to be disturbed by demolition or construction activities, a construction-free buffer zone (typically 300 feet for raptors and 100 feet for other species) will be established around the nest to ensure that no nests of species protected by the MBTA and California Fish and Game Code are disturbed during implementation of the Proposed Project. The ornithologist shall determine the extent of the buffer.
- **Nesting Deterrence.** If construction activities will not be initiated until after the start of the nesting season, all potential nesting substrates (e.g., bushes, trees, grasses, other vegetation) that are scheduled to be removed by the Proposed Project may be removed prior to the start of the nesting season (e.g., prior to February 1). This will preclude the initiation of nests in this vegetation and prevent any potential delay for the Proposed Project because of the presence of active nests in these substrates.

Bird Collisions

Because birds do not necessarily perceive glass as an obstacle,[10] windows or structures that reflect the sky, trees, or other habitat may not be perceived as obstacles; therefore, birds may collide with them. Transparent windows can result in collisions when birds perceive an unobstructed flight path (e.g., at corners) or when the combination of transparent windows and interior vegetation results in attempts by birds to fly through glass to reach the vegetation. A number of factors play a role in determining the risk of bird collisions, including the amount and type of glass used, lighting, the properties of the building (e.g., size, design, orientation), the type and location of vegetation around the building, and building location. Foggy conditions may exacerbate collision risks because birds may be even less able to perceive glass in the fog. The highest collision risk would most likely occur when inclement weather enters the region on a night with heavy bird migration, with clouds and fog making it difficult for birds to find high-quality stopover sites once they reach ground level.

Under existing conditions, terrestrial land uses and habitat conditions on the Project Site consist entirely of developed areas such as office/research and development buildings, single-story military barracks-style housing, and other single-story buildings with associated landscaped areas, paved parking lots, sidewalks, and roads. There are approximately 1,340 existing trees on the Project Site, including 547 heritage trees, which are distributed across the Project Site. The mature, native coast live oaks and valley oaks on the Project Site provide relatively high-quality nesting and foraging habitat for native birds. According to the Parkline BRR, the large number of nonnative trees, shrubs, and landscape plants also present on the Project Site support fewer of the resources required by native birds than native vegetation, and the structural simplicity of the vegetation on the Project Site (i.e., without well-developed ground cover, understory, and canopy layers) further limits resources available to birds. Nevertheless, this nonnative vegetation contributes to the habitat quality on the Project Site, providing nesting and foraging opportunities, and due to the number of mature trees present (including native and nonnative trees), and native bird abundance on the Project Site is relatively high. However, particularly rare species or species of conservation concern are not expected to occur on the Project Site.

[10] Sheppard, C., and G. Phillips. 2015. *Bird-Friendly Building Design*. Second edition. The Plains, VA: American Bird Conservancy.

With implementation of the Proposed Project, the Project Site would provide habitat of similar or slightly greater value to landbirds compared to existing conditions. The Proposed Project would reduce the amount of impervious area across the Project Site by introducing new landscaped areas and open spaces and reducing the amount of surface parking and hardscape. The Proposed Project would have a pervious surface area of approximately 42.3 percent (1.165 million sf) across the site, compared to only 25.7 percent (643,045 sf) under existing conditions. Thus, the Proposed Project would increase the overall availability of foraging habitat on the Project Site for birds. In total, the Proposed Project would remove approximately 708 trees, including 198 heritage trees, and plant approximately 873 new trees, resulting in a total of 1,505 trees on the Project Site, an overall increase in the number of trees compared to existing conditions. The trees to be removed include native coast live oak trees and native valley oak trees, which provide high-quality resources for birds. This would reduce available nesting and foraging habitat for birds on the Project Site, at least temporarily. However, birds would continue to use the existing native coast live oaks and native valley oaks that be preserved on the Project Site under the Proposed Project. The trees that would be planted as part of the Proposed Project would increase the vegetative cover and the extent of habitat and foraging resources for the native resident birds that use the Project Site, especially as the replacement trees mature. Based on these combined factors, the number of birds that use the Project Site is expected to be greater than under existing conditions following implementation of the Proposed Project.

Land uses and habitat conditions in areas immediately surrounding the Project Site consist of residential buildings with associated pedestrian walkways, roads, and landscape vegetation, as well as open space areas at St. Patrick's Seminary & University to the northeast and the Corpus Christi Monastery to the northwest. Native vegetation in the adjacent and nearby open space areas (i.e., at St. Patrick's Seminary & University and the Corpus Christi Monastery) includes mature native trees, especially native oaks, and this vegetation supports relatively high densities and diversity of native bird species due to its extent, the number of mature trees, and the presence of understory vegetation (e.g., grasses and shrubs). Thus, relatively high densities and diversity of native bird species are present within these adjacent areas due to the presence of native vegetation, and some of these birds would use the vegetation on the Project Site opportunistically due to the site's close proximity to these areas. Certain surrounding areas of the city support mature trees, including native oaks, while other surrounding areas are landscaped with nonnative trees and shrubs. Areas with nonnative vegetation support fewer of the resources required by native birds compared native vegetation, and the structural simplicity of the vegetation both on the Project Site and in surrounding developed areas (without well-developed ground cover, understory, and canopy layers) further limits resources available to birds compared to park and open space areas such as St. Patrick's Seminary & University and the Corpus Christi Monastery, according to the Parkline BRR

The Project Site and its surroundings do not support high concentrations of migratory landbirds the way more natural/less developed ridgelines, woodlands, creeks with high-quality riparian habitat, or shorelines do (e.g., the Bay is approximately 1.7 miles north/northwest of the Project Site). Nevertheless, a moderate number of migrants are expected to use vegetation on the Project Site for foraging and resting opportunities during spring and fall migration due to the Project Site's close proximity to nearby and adjacent habitats at St. Patrick's Seminary & University and the Corpus Christi Monastery, as well as the presence of large numbers of trees on the Project Site.

It has been well documented that glass windows and building façades can result in injury or mortality for birds because of collisions with such surfaces.[11,12] Because birds do not perceive glass as an obstruction the way humans do, they may collide with glass when the sky or vegetation is reflected in glass (e.g., they see the glass as sky or vegetated areas); when transparent windows allow birds to perceive an unobstructed flight route through the glass (such as at corners); and when the combination of transparent glass and interior vegetation (such as in planted atria) results in attempts by birds to fly through glass to reach that vegetation. The greatest risk of avian collision with a building occurs in the area within 60 feet of the ground because this is the area in which most bird activity occurs.[13,14]

The potential for bird collisions at certain locations on the Project Site depends on certain factors. For instance, moderate numbers of resident and migrant landbirds are expected to use nearby and adjacent habitat areas at St. Patrick's Seminary & University to the northeast and the Corpus Christi Monastery to the northwest, and these birds will travel in between these areas and the Project Site when foraging in these habitats. As a result, there is a relatively higher potential for birds to collide with glazing on proposed buildings that faces these off-site open space areas compared to other locations on the Project Site. In addition, the extent of glazing on a building and the presence of vegetation opposite the glazing are known to be two of the strongest predictors of avian collision rates, according to the Parkline BRR. Thus, the risk of collisions increases where buildings with extensive glazing would face extensive landscape vegetation on the Project Site. Night lighting associated with new buildings also has some potential to disorient birds, especially during inclement weather when night migrating birds descend to lower altitudes, potentially increasing the risk of collisions. Based on the conceptual site plan for the Proposed Project in Figure 2-4 in Chapter 2, *Project Description*, the orientation of the proposed and existing buildings to remain in combination with the proposed landscape vegetation would not result in a heightened risk of collisions due to the funneling of flight paths towards building facades. The implementation of bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for the Project.[15] Therefore, impacts related to bird collisions would be ***less than significant***. No mitigation is required.

Impact BIO-3: Conflicts with Any Local Policies or Ordinances that Protect Biological Resources. The Proposed Project would not result in conflicts with the Menlo Park Municipal Code or the city's General Plan. (LTS)

Municipal Code Chapter 13.24, Heritage Trees

The proposed land use program, which considers site orientation, was developed to ensure that existing and new trees would be distributed throughout the Project Site, which currently has approximately 1,340 trees. In total, the Proposed Project would remove approximately 708 trees, including 198 heritage trees, and plant approximately 873 new trees, resulting in a total of 1,505 trees on the Project Site, an overall

[11] Klem, D., Jr., C.J. Farmer, N. Delacretaz, Y. Gelb, and P.G. Saenger. 2009. Architectural and Landscape Risk Factors Associated with Bird-glass Collisions in an Urban Environment. In *The Wilson Journal of Ornithology*, 121(1):126–134.

[12] Sheppard, C., and G. Phillips. 2015. *Bird-Friendly Building Design*. Second edition. The Plains, VA: American Bird Conservancy.

[13] San Francisco Planning Department. 2011. *Standards for Bird-Safe Buildings*. Planning Department. July 14.

[14] Sheppard, C., and G. Phillips. 2015. *Bird-Friendly Building Design*. Second edition. The Plains, VA: American Bird Conservancy.

[15] The Parkline BRR includes a mitigation measure that would require the implementation of bird-friendly design. The requirements included in the mitigation measure will be addressed by the proposed zoning for the Project; thus, the mitigation measure is not necessary.

increase in the number of trees compared to existing conditions. In accordance with Menlo Park Municipal Code Chapter 13.24, Heritage Trees, permits from the city's Director of Public Works or his or her designee and payment of a fee are required for the removal of any heritage trees, as defined in the *Regulatory Setting*. Removing or pruning heritage trees protected by the Menlo Park Municipal Code is considered a potentially significant impact. However, the Proposed Project would comply with the city's Heritage Tree Ordinance, Sections 13.24.030 and 13.24.050, by obtaining a permit from the city to remove protected trees, submitting and implementing a tree protection plan to protect remaining heritage trees near work areas, and paying any applicable fees. The Proposed Project would include the provision of replacement trees for all heritage trees removed during construction (in accordance with Heritage Tree Ordinance Section 13.24.090). Furthermore, a greater number of trees would be planted than removed (approximately 873 new trees would be planted). Therefore, impacts related to conflicts with local policies or ordinances that protect heritage trees would be ***less than significant***. No mitigation is required.

Bird-Safe Design Requirements

The city has adopted bird-friendly design standards in Title 16, Zoning, for individual zoning districts to limit potential harm to birds from striking buildings. The Project Site is currently zoned C-1(X) (Administrative and Professional District, Restrictive); a bird-friendly design is required for residential uses in this zone. The Project Site would be rezoned in connection with a zoning ordinance text amendment that would create a new zoning district and establish discrete development standards in accordance with the Proposed Project's uses and features. Consistent with existing development standards, implementation of a bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for the Project. Therefore, impacts related to conflicts with local policies or ordinances that reduce bird collisions would be ***less than significant***. No mitigation is required.

Compliance with General Plan Policy OSC1.3, Sensitive Habitats

City general plan Policy OSC1.3, Sensitive Habitats, requires new development on or near sensitive habitats to (1) provide a baseline assessment prepared by qualified biologists and specify requirements relative to the baseline assessments, (2) consult with appropriate regulatory and resource agencies, (3) incorporate appropriate avoidance and minimization measures, and (4) obtain necessary permits/authorizations.

The following summarizes the Proposed Project's compliance with the requirements of city general plan Policy OSC1.3, based on the Parkline BRR:

- A baseline biological resources report is required to provide a determination regarding whether any sensitive biological resources, including jurisdictional wetlands and waters, essential habitat for special-status species, and sensitive natural communities, are present on the Project Site or any adjacent undeveloped lands that could be affected by the Proposed Project. In compliance with this requirement, the Parkline BRR describes the biotic habitat types present in the vicinity of the Project Site, as summarized throughout this chapter. The Parkline BRR concludes that no jurisdictional wetlands or waters or sensitive natural communities are present on the Project Site and that the Proposed Project would not affect any adjacent undeveloped lands. The Parkline BRR also discusses the potential for the habitats to support special-status plants and animals and analyzes the potential for special-status species to occur in the vicinity of the Project Site. The Parkline BRR analyzes the potential impacts on special-status species, common wildlife species, wildlife movement (including bird collisions), and heritage trees.

- A baseline biological resources report is required to incorporate guidance from relevant regional conservation plans related to determining the potential presence or absence of sensitive biological resources. The Parkline BRR concludes that the Project Site is not located within an area covered by any approved local, regional, or state habitat conservation plan. As described above, the Parkline BRR analyzes the potential for special-status plant or animal species to occur on the Project Site.
- A baseline biological resources report is required to include an evaluation of the potential effects of the Proposed Project on sensitive biological resources. The Parkline BRR evaluated potential effects of the Proposed Project on special-status plant, wildlife, and fish species and concluded that there would be potential effects on special-status bats and less-than-significant effects on all other special-status species. The Parkline BRR also evaluated potential effects of the Proposed Project on nesting birds and increases in the number of bird collisions with buildings. The Proposed Project's potential to result in significant impacts on sensitive biological resources was analyzed in the Parkline BRR and the impacts above. Based on the analyses and the impacts discussed above, it was determined that the Proposed Project could result in significant impacts on special-status bats and nesting birds; however, compliance with the Menlo Park Municipal Code, to ensure a bird-safe design, would avoid any increase in the number of bird collisions. The Proposed Project would not result in significant impacts on any other special-status plant or animal species.
- The baseline biological resources report is required to include avoidance, minimization, and mitigation measures for adverse impacts. Mitigation Measures BIO-1.1 through BIO-1.5 would be necessary to reduce potential impacts on special-status bats to less-than-significant levels; Mitigation Measure BIO-2.1 would be necessary to reduce potential impacts on nesting birds. Otherwise, no mitigation measures would be necessary to avoid significant impacts related to bird safety. Nevertheless, all native bird species are protected from direct take by federal and state statutes. Therefore, recommended avoidance and minimization measures are provided to ensure that Project activities comply with the MBTA and California Fish and Game Code.

With implementation of the mitigation measures included in this section, the Proposed Project would not be in conflict with city's general plan Policy OSC1.3, and impacts would be ***less than significant***. No mitigation is required.

Cumulative Impacts

Cumulative impacts are addressed only for those thresholds that would result in a Project-related impact. If the Proposed Project would result in no impact with respect to a particular threshold, it would not contribute to a cumulative impact. Therefore, no analysis is required. As discussed under "Impacts Not Evaluated in Detail," the Proposed Project would result in ***no impact*** related to riparian habitat and sensitive natural communities, wetlands, or an adopted habitat conservation plan or natural community conservation plan, and no further cumulative analysis is required.

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. The geographic context for the cumulative assessment of biological resources impacts considers the degree to which significant vegetation and wildlife resources would be protected at the Project Site. It also considers the city, surrounding incorporated and unincorporated lands, and the region.

Impact C-BIO-1: Cumulative Biological Resources Impacts. Cumulative development could result in a significant environmental impact on biological resources; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)

Development of past, current, and future projects in the city could contribute to an incremental reduction in the amount of wildlife habitat, particularly for birds and larger mammals. Cumulative development in the city and the region could result in further conversion of natural habitats to urban and suburban conditions, thereby limiting the existing habitat values of the surrounding area. The Proposed Project in combination with other projects in the area, as well as other activities that would affect the species that would be affected by the Proposed Project, could contribute to cumulative effects on special-status species. Other projects in the area include office/retail/commercial development, mixed uses, and residential projects that could adversely affect these species. Thus, there would be potential for cumulative impacts on biological resources.

The cumulative impact on biological resources resulting from the project in combination with other projects in the larger region would be dependent on the relative magnitude of adverse effects of these projects on biological resources compared to the relative benefit of impact avoidance and minimization efforts prescribed by planning documents, mitigation measures, and permit requirements for each project and compensatory mitigation and proactive conservation measures associated with each project. In the absence of such avoidance, minimization, compensatory mitigation, and conservation measures, cumulatively significant impacts on biological resources could occur. However, many projects in the region that impact resources similar to those impacted by the Proposed Project would be subject to CEQA requirements. It is expected that such projects would mitigate their impacts on sensitive habitats and special-status species through the incorporation of mitigation measures and compliance with permit conditions. Regardless of the magnitude and significance of cumulative impacts that result from other projects, the Proposed Project is not expected to have a substantial effect on biological resources. Under proposed conditions, the Project Site may provide habitat of greater value to wildlife compared to existing conditions due to the addition of landscape trees and vegetation on the site. While the species composition of these replacement trees is currently unknown, the Proposed Project would comply with the City's Heritage Tree Ordinance, which identifies the use of native replacement trees as a priority. The Proposed Project would result in an increase in vegetative cover and trees would increase the extent of habitat and foraging resources for the wildlife species that use the site. Implementation of Mitigation Measures BIO-1.1 through 1.5 would reduce the Proposed Project's impacts on roosting bats to less-than-significant levels, and implementation of Mitigation Measure BIO-2.1 would reduce the Proposed Project's impacts on birds to less-than-significant levels. Based on the analysis above, the Proposed Project's contribution to cumulative impacts on biological resources would be ***less than cumulatively considerable with mitigation***. No additional mitigation is required.

3.11 Geology and Soils

This section identifies and evaluates the Proposed Project's potential impacts related to geology, seismicity, soils, and paleontological resources. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development* (preliminary geotechnical report).[1]

The preliminary geotechnical report is included in Appendix 3.11-1 of this EIR.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. No comments related to geology, seismicity, soils, or paleontological resources were raised in response to the NOP.

Existing Conditions

Environmental Setting

Geology

Regional Geology

The Project Site is located on a relatively flat-lying plain along the western edge of San Francisco Bay (Bay). Specifically, the vicinity of the Project Site is bounded by the Santa Cruz Mountains on the west and the Bay on the east. This area is part of the Coast Ranges geomorphic province of California, which extends from the Oregon border to nearly Point Conception. In the Bay Area, most of the Coast Ranges have developed on a basement of tectonically mixed Cretaceous- and Jurassic-age (70- to 200-million-year-old) rocks of the Franciscan Complex. Locally, younger sedimentary and volcanic units cap these basement rocks. Still-younger surficial deposits, reflecting geologic conditions from the last million years or so, cover most of the Coast Ranges.[2]

Movement on the many splays of the San Andreas fault system has produced the dominant northwest-oriented structural and topographic trend seen throughout the Coast Ranges today. This trend reflects the boundary between two of the Earth's major tectonic plates: the North American plate to the east and the Pacific plate to the west. The San Andreas fault system is about 40 miles wide in the Bay Area, extending from the San Gregorio fault near the coast to the Coast Ranges-Central Valley line thrust at the western edge of the Central Valley. The San Andreas fault is the dominant structure in the system, spanning nearly the entire length of California and capable of producing the highest magnitude earthquakes. Many other subparallel or branch faults in the San Andreas system are equally active and nearly as capable of generating large earthquakes. Right-lateral movement dominates on these faults, but an increasingly large amount of thrust faulting resulting from compression across the system is now also being identified.[3]

[1] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

[2] Ibid.

[3] Ibid.

The Project Site is located on the flat lands surrounding the Bay, about 1.5 miles south of the present tidal flats and 2.7 miles northeast of the base of the peninsula portion of the Santa Cruz Mountains. Several types of alluvium blanket this area between the Bay and the foothills. The regional geologic units mapped at the site generally consist of Pleistocene-age alluvial sediments.[4]

Project Site Geology

Site Topography

The Project Site is relatively flat. It ranges from an elevation of approximately 66 to 68 feet along its south edge to approximately 55 to 58 feet along its northern edge.[5]

Site Surface and Subsurface Conditions

The Project Site is currently improved with a substantial amount of impervious hardscape. This includes roofs, surface parking lots, streets, and paths, which, in total, cover approximately 74.3 percent of the Project Site. The surface pavement at the Project Site generally consists of 3 to 6 inches of asphalt concrete over 0 to 8 inches of aggregate base. Although much of the surficial geology of the Project Site is obscured by pavement, concrete, and structures, mapping by Pampeyan[6] indicates that the surficial geology is made up of a single geologic unit: older Pleistocene alluvium (Qoa). Figure 3.11-1 depicts the geologic units in the Project area. This alluvial deposit is weathered, unconsolidated to moderately consolidated gravel, sand, and silt. In the vicinity of the Project Site, it is locally incised by channels that are filled with younger Holocene alluvium (Qya) and overlain by younger Holocene alluvial deposits.[7] Subsurface data collected by Cornerstone Earth Group[8] indicate that the alluvial deposit consists of stiff to very stiff clays and silts, which are interbedded with occasional layers of medium-dense to dense sands that extend at least 100 feet below the surface. Undocumented surface and subsurface fills created for prior construction are also present.

[4] Pampeyan, E. H. 1993. *Geologic Map of the Palo Alto and Part of the Redwood Point 7.5-minute Quadrangles, San Mateo and Santa Clara Counties, California.* U.S. Geological Survey Map I-2371 and accompanying report. Available: https://ngmdb.usgs.gov/Prodesc/proddesc_424.htm. Accessed: August 18, 2023. In Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development* (129-7-1). Menlo Park, CA. Lane Partners.

[5] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

[6] Pampeyan, E. H. 1993. *Geologic Map of the Palo Alto and Part of the Redwood Point 7.5-minute Quadrangles, San Mateo and Santa Clara Counties, California.* U.S. Geological Survey Map I-2371 and accompanying report. Available: https://ngmdb.usgs.gov/Prodesc/proddesc_424.htm. Accessed: August 18, 2023.

[7] Ibid.

[8] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

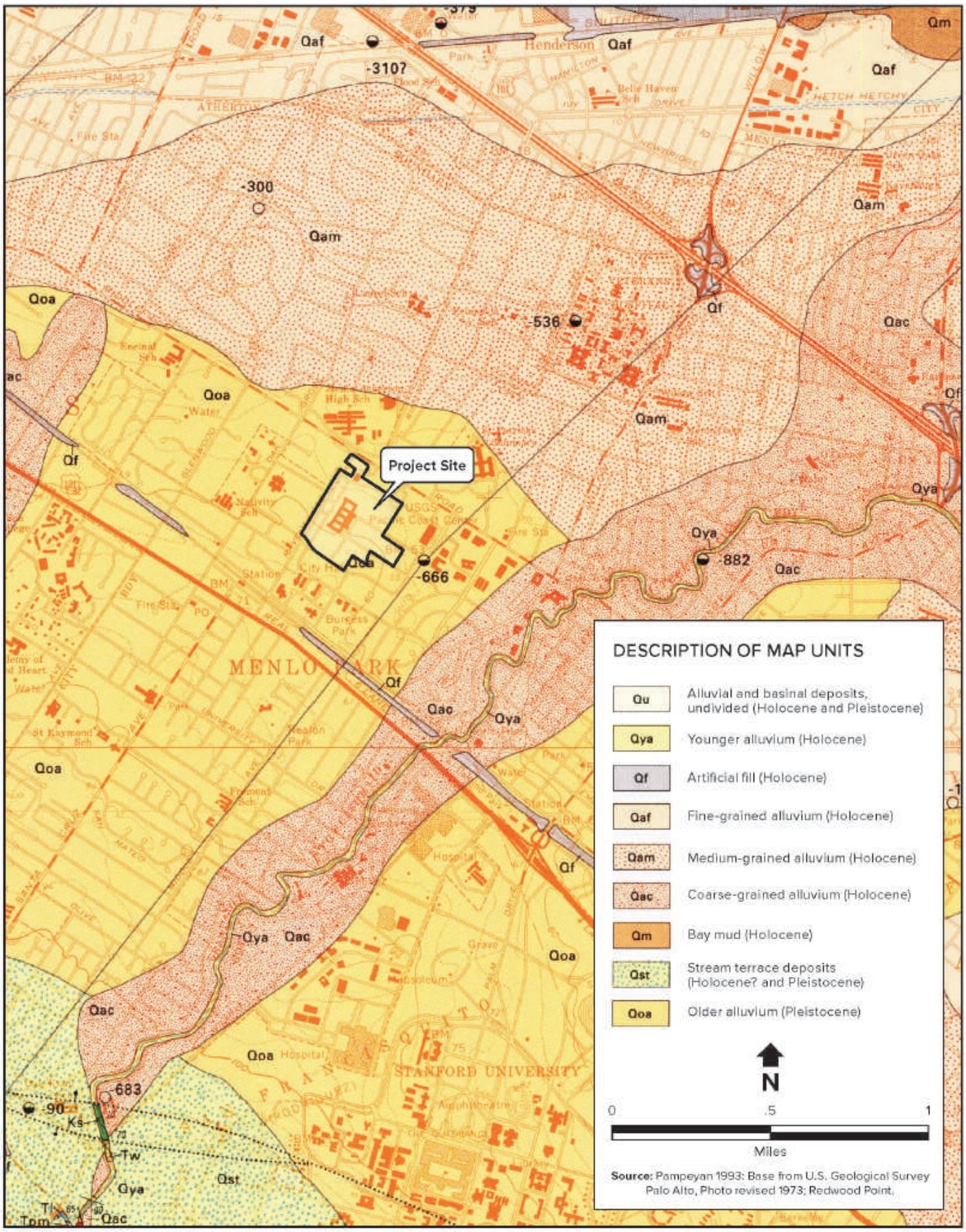


Figure 3.11-1
Geologic Units in the Project Area
Parkline

Depth to Groundwater and Unique Geologic Features

The depth to groundwater is inferred, based on explorations and research by Cornerstone, to be approximately 29 to 49 feet below the current grade. The historic high groundwater elevation is approximately 25 feet below the current site grade.[9] Fluctuations in groundwater levels are due to many factors, including seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors. These depths are supported by the "depth to groundwater" map in the Seismic Hazard Zone Report prepared for the Palo Alto quadrangle.[10]

No unique geologic features occur on the Project Site.

Seismicity

Primary Seismic Hazards

The State of California (State) considers two aspects of earthquake events to be primary seismic hazards: surface fault rupture (i.e., visual disruption of the Earth's surface as a result of fault activity) and seismic ground shaking.

Surface Fault Rupture

Figure 3.11-2 depicts active faults in the region. Although several active faults are within 15 miles of the Project Site, no known surface expressions of fault traces are thought to cross the Project Site. In addition, the Project Site is not located in a State-designated Alquist Priolo Earthquake Fault Zone. Therefore, surface fault rupture is not considered a geologic hazard at the site.

The faults that are considered capable of generating significant earthquakes are generally associated with well-defined areas of crustal movement that trend northwesterly. Table 3.11-1 presents the State-considered active faults within an approximately 15-mile radius of the Project Site.

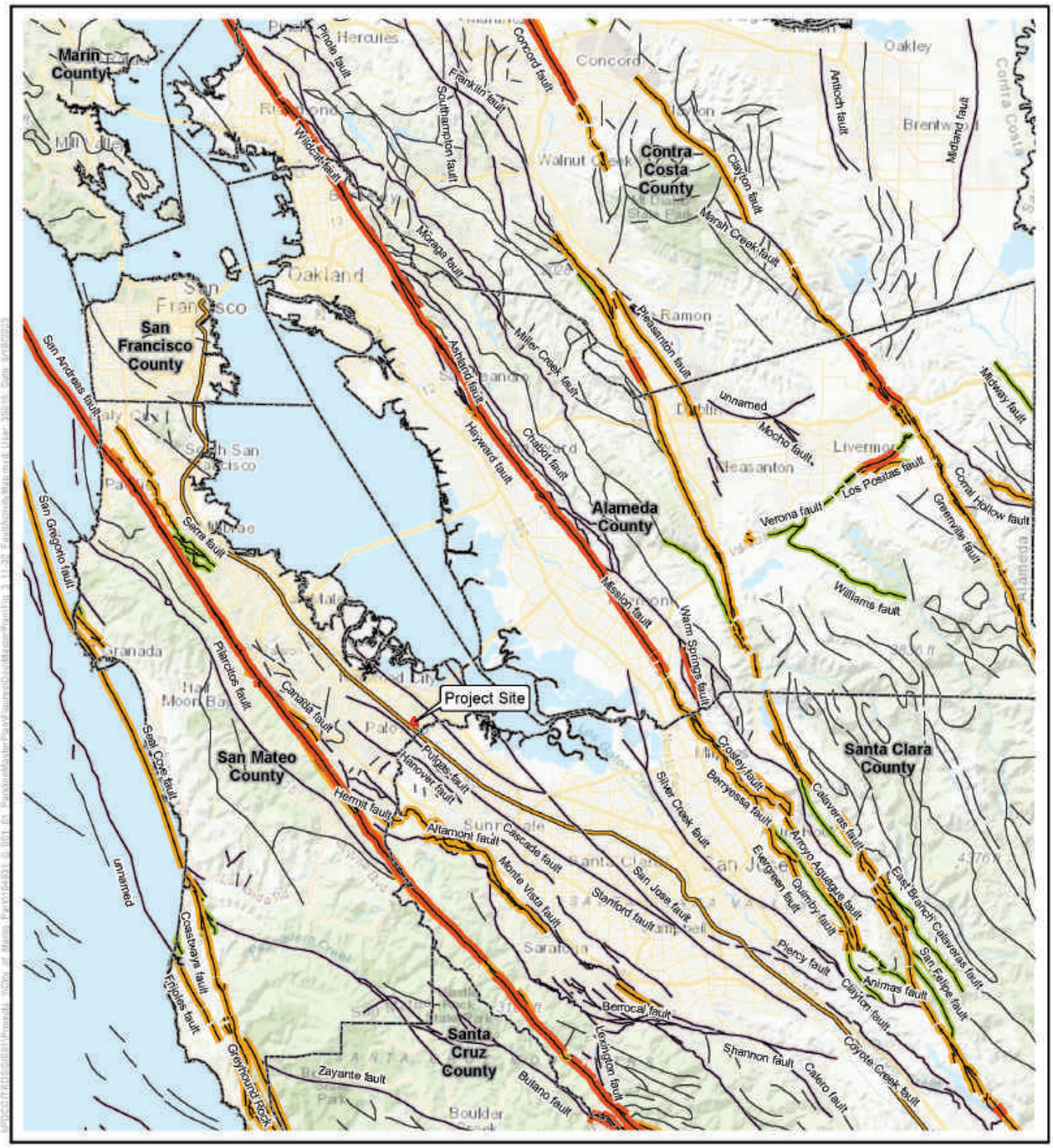
Table 3.11-1. Active Faults in the Vicinity of the Project Site

Fault Name	Distance (miles)
Monte Vista-Shannon	3.5
San Andreas (1906)	5.2
Hayward (total length)	13.5
Hayward (southeast extension)	15.0
San Gregorio	15.3

Source: Cornerstone Earth Group 2023.

[9] Ibid.

[10] California Geological Survey. 2006. *Earthquake Zones of Required Investigation, Palo Alto Quadrangle.* Final. Sacramento, CA. Prepared in compliance with the California Public Resource Code (7.5 and 7.8, Division 2). Earthquake Fault Zones released July 1, 1974; Seismic Hazard Zones released October 18, 2006.



Legend

- Project Site
- County Boundary

Fault Classification

- Historic
- Holocene
- Late Quaternary
- Quaternary
- Pre-Quaternary

0 5 10 Miles

Source: Imagery, ESRI 2021; CGS 2010.

Figure 3.11-2
Fault Activity Map
Parkline

Seismic Ground Shaking

Unlike surface rupture, ground shaking is not confined to the trace of a fault; rather, ground shaking propagates into surrounding areas during an earthquake. The San Francisco Bay Area region is one of the most seismically active areas in the country. Although seismologists cannot predict earthquake events, geologists from the U.S. Geological Survey have recently updated earlier estimates from their 2014 *Uniform California Earthquake Rupture Forecast* (Version 3) publications. The estimated probability of one or more earthquakes of magnitude 6.7 (the size of the destructive 1994 Northridge earthquake) in the San Francisco Bay Area has been revised (increased) to 72 percent for the 30-year period from 2014 to 2043. The faults in the region with the highest estimated probability of generating damaging earthquakes between 2014 and 2043 are the Hayward (33 percent), Calaveras (26 percent), and San Andreas (22 percent) faults.[11]

The intensity of ground shaking typically diminishes with distance from the fault, but ground shaking may be locally amplified and/or prolonged by some types of substrate materials. These factors are used in mapping the probabilistic shaking hazards throughout the state.

Moderate to severe earthquakes can cause strong ground shaking in the Bay Area. The preliminary geotechnical report[12] for the Proposed Project indicates that site-modified peak ground acceleration (PGA_M) was determined in accordance with American Society of Civil Engineers Standard 7-16, which recommends a PGA_M of 0.76g, with "g" equal to the acceleration of gravity. This high value is in keeping with the relative intensity of ground shaking shown on the California Geological Survey (CGS) "Earthquake Shaking Potential for California" map.[13]

Secondary Seismic Hazards

Secondary seismic hazards refer to seismically induced landslides, liquefaction, and related ground failures, and tsunami/seiche. The State maps areas that are subject to certain secondary seismic hazards, pursuant to the Seismic Hazards Mapping Act of 1990.

Liquefaction and Differential Settlement

Liquefaction is a process in which soil and sediment lose shear strength and fail during seismic ground shaking. The vibration caused by an earthquake can increase pore pressure in saturated materials. If the pore pressure is raised to be equivalent to the load pressure, this causes a temporary loss of shear strength, allowing the material to flow as a fluid. This temporary condition can result in severe settlement in foundations and slope failure. The susceptibility of an area to liquefaction is determined largely by the depth to groundwater and the properties (e.g., texture and density) of the soil and sediment within and above the groundwater. The sediments most susceptible to liquefaction are saturated, unconsolidated sand as well as silt with low plasticity within 50 feet of the ground surface.[14]

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[11] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

[12] Ibid.

[13] California Geological Survey. 2016. *Earthquake Shaking Potential for California*. Map Sheet 48. Sacramento, CA. Available: https://www.conservation.ca.gov/cgs/documents/publications/ map-sheets/MS_048.pdf. Accessed: August 22, 2023.

[14] California Geological Survey. 2008. *Special Publication 117A.* Guidelines for Evaluating and Mitigating Seismic Hazards in California. Sacramento, CA. Available: http://www.conservation.ca.gov/ cgs/shzp/webdocs/ Documents/sp117.pdf. Accessed: August 22, 2023.

There is moderate potential for liquefaction at the Project Site. Although CGS has not evaluated the liquefaction potential of the Project Site in a seismic hazard zone report, the site is just outside a State-designated Liquefaction Hazard Zone as well as a zone mapped by the U.S. Geological Survey as having moderate potential for liquefaction. In addition, the preliminary geotechnical report for the Proposed Project, which was conducted in accordance with *Special Publication 117A,* determined that several layers of interbedded sand in the subsurface could be susceptible to liquefaction.[15] These liquefiable layers, along with the presence of groundwater within 50 feet of the ground surface and the potential for strong ground shaking, create conditions that would be conducive for liquefaction.

Liquefaction can lead to uneven ground settling, which is known as *differential ground settlement*. The geotechnical investigation estimated that differential ground settlement could be 0.25 inch over a horizontal distance of 50 feet.

Lateral Spreading

Lateral spreading is a failure of soil and sediment within a nearly horizontal zone that causes the soil to move toward a free face (such as a streambank, excavation, or canal) or down a gentle slope. Even a relatively thin seam of liquefiable sediment can create planes of weakness that could result in continuous lateral spreading over large areas.[16] Because failure tends to propagate as block failures, it is difficult to analyze and estimate where the first tension crack will form. The potential for lateral spreading at the Project Site is low because there are no open faces within 200 feet of the Project Site.[17]

Landslide

Given the relatively flat topography of the Project Site, the potential for landslides, either as a result of strong ground shaking or general slope failure, is low.

Tsunami/Seiche

The risk of a tsunami at the Project Site is low. A tsunami or seiche is an ocean wave or series of waves that rush ashore in coastal areas. Unlike normal ocean waves, tsunami waves have no leading face and are often filled with debris. These waves may be triggered by earthquakes, volcanic eruptions, submarine landslides, or onshore landslides. The Project Site is not located in a State-designated Tsunami Hazard Zone. A tsunami or seiche originating from the Pacific Ocean would lose much of its energy when passing through the Bay. In the Bay Area, areas most likely to be inundated are marshlands, tidal flats, and former Bay margin lands that are now artificially filled. The Project Site is approximately 1 mile inland from the San Francisco Bay shoreline and approximately 61 to 67 feet above mean seal level. Therefore, the potential for inundation is considered low.[18] The nearest Tsunami Hazard Zones are in East Palo Alto and Redwood City.[19]

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[15] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

[16] California Geological Survey. 2008. *Special Publication 117A.* Guidelines for Evaluating and Mitigating Seismic Hazards in California. Sacramento, CA. Available: http://www.conservation.ca.gov/ cgs/shzp/webdocs/ Documents/sp117.pdf. Accessed: August 22, 2023.

[17] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

[18] Ibid.

[19] Governor's Office of Emergency Services. 2023. *MyHazards.* Tsunami Risk. State of California. Available: https://myhazards.caloes.ca.gov/. Accessed: August 30, 2023.

Soils

The Project Site is in a developed area and, therefore, the primary surface soil is Urban Land. Two other surface soils are present on the edges of the site: Botella loam, 0 to 5 percent slopes, and Botella-Urban land complex, 0 to 5 percent slopes. These soils, along with their characteristics related to construction suitability, are listed in Table 3.11-2. The primary construction concern is the presence of moderately expansive surface soils over much of the Project Site. A small area of undisturbed native soil (Botella loam) is located in a strip of land south of where the Loop Road would be developed within the Project Site.[20,21] In addition, both known and unknown fills are present on the Project Site, with an estimated thickness of approximately 4 feet.[22] Fills can contain excessive organic material and debris and be subject to compression. Therefore, they are often removed or reused so that engineered fill characteristics can be controlled.

Table 3.11-2. Construction Suitability Characteristics of Soils on the Project Site

Soil Name	Approximate Percent of Project Site	Plasticity (expansiveness)	Wind Erodibility	Water Erodibility	Corrosion of Concrete	Corrosion of Steel
Botella loam, 0 to 5 percent slopes	8.5	Low to moderate	Low	Moderate	Low	Low
Botella-Urban land complex, 0 to 5 percent slopes	10.5	Low to moderate	Not rated	Not rated	Not rated	Not rated
Urban land	80.0	Low to moderate	Not rated	Not rated	Not rated	Not rated

Sources: Natural Resources Conservation Service 2023; Cornerstone Earth Group 2023.

Paleontological Resources

Paleontological resources, commonly referred to as fossils, are the remains, traces, imprints, or life history artifacts (e.g., nests) of prehistoric plants and animals found in ancient sediments, which may be either unconsolidated or lithified (i.e., either poorly or well cemented). Fossils are considered nonrenewable scientific and educational resources. Fossils include the bones and teeth of animals, the casts and molds of ancient burrows and animal tracks, and very small remains such as the bones of birds and rodents. They also include plant remains such as logs, prehistoric leaf litter, and seeds.

The determination of paleontological sensitivity is a qualitative assessment, based on the paleontological resource potential of the stratigraphic units present, the local geology and geomorphology, and other factors relevant to fossil preservation and potential yield. According to the Society of Vertebrate

[20] Natural Resources Conservation Service. 2023. *Custom Soil Resource Report for San Mateo County, Eastern Part, and San Francisco County, California.* U.S. Department of Agriculture. Available: https://websoilsurvey.nrcs.usda.gov/app/. Accessed: August 23, 2023.

[21] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

[22] Ibid.

Paleontology (SVP),[23] standard considerations for determining sensitivity are (1) the potential for a geological unit to yield abundant or significant vertebrate fossils or to yield a few significant fossils, large or small, of vertebrate, invertebrate, or paleobotanical remains and (2) the importance of recovered evidence with respect to new and significant taxonomic, phylogenetic, paleoecological, or stratigraphic data (Table 3.11-3).

Unlike archaeological sites, which are narrowly defined, paleontological sites are defined by the entire extent (both areal and stratigraphic) of a unit or formation. In other words, once a unit is identified as containing vertebrate fossils, or other rare fossils, the entire unit is a paleontological site.[24] For this reason, the paleontological sensitivity of geologic units is described and analyzed broadly.

The surficial area of the Project Site has been disturbed by previous construction. Buildings, concrete, and pavement cover much of the site. In addition, documented and undocumented fills (i.e., nonnative material) are widely present. These fills may be up to several feet thick in some locations. A localized layer of interbedded brick debris is also present.

Table 3.11-3. Paleontological Sensitivity Ratings

Potential	Definition
High	Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have high potential with respect to containing additional significant paleontological resources. Paleontological potential considers both (a) the potential for yielding abundant or significant vertebrate fossils or a few significant fossils, large or small, of vertebrate, invertebrate, plant, or trace fossils and (b) the importance of recovered evidence with respect to new and significant taxonomic, phylogenetic, paleoecologic, taphonomic, biochronologic, or stratigraphic data.
Undetermined	Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment are considered to have undetermined potential. Further study is necessary to determine if these rock units have high or low potential with respect to containing significant paleontological resources.
Low	Reports in the paleontological literature or field surveys by a qualified professional paleontologist may allow a determination that some rock units have low potential for yielding significant fossils. Such rock units will be poorly represented by fossil specimens in institutional collections or, based on general scientific consensus, will preserve fossils only in rare circumstances. The presence of fossils is the exception, not the rule.
None	Some rock units, such as high-grade metamorphic rocks (e.g., gneisses and schists) and plutonic igneous rocks (e.g., granites and diorites), have no potential to contain significant paleontological resources. Rock units with no potential require neither protection nor mitigation measures relative to paleontological resources.

Source: Society of Vertebrate Paleontology 2010:1–2.

Underlying the disturb surface is older Pleistocene alluvium (Qoa). The paleontological sensitivity of this geologic unit is high because of fossil occurrences in Pleistocene units in San Mateo County as well as important nonmarine Pleistocene units in other parts of California. In San Mateo County, nearly 50 vertebrate fossil specimens from nonmarine Pleistocene units have been recorded in the University of

[23] Society of Vertebrate Paleontology. 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. Last revised: unknown. Available: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf. Accessed: August 24, 2023.

[24] Ibid.

California Museum of Paleontology database. These specimens include mammoth, bison, horse, ground sloth, and birds.[25] In addition, California's Pleistocene nonmarine geologic units have yielded stratigraphically important vertebrate fossils. Continental deposits of Pleistocene age are almost universally treated as paleontologically sensitive in California.

The depth of the older Pleistocene alluvium is not known, but there is no indication that another geologic unit is present within 20 feet of the ground surface.

Regulatory Setting

Federal

National Earthquake Hazards Reduction Program

Federal laws codified in United States Code Title 42, Chapter 86, were enacted to reduce risks to life and property from earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. Implementation of these requirements is regulated, monitored, and enforced at the state and local level. Key regulations and standards are summarized below.

State

Alquist-Priolo Earthquake Fault Zoning Act

California's Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) (Public Resources Code [PRC] Section 2621 et seq.) is intended to reduce risks to life and property from surface fault rupture during earthquakes. Under the Alquist-Priolo Act, faults are zoned and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." A fault is considered sufficiently active if one or more of its segments or strands shows evidence of surface displacement during Holocene time (defined for purposes of the act as referring to approximately the last 11,700 years). A fault is considered well defined if its trace can be clearly identified by a trained geologist at the ground surface or in the shallow subsurface using standard professional techniques, criteria, and judgment. The State guidelines for assessing fault rupture hazards are explained in CGS *Special Publication 42*.[26]

California Building Code

California Code of Regulations (CCR) Title 24, Part 2, the California Building Standards Code, provides minimum standards for building designs in the state. The current building code is the 2022 California Building Standards Code, which became effective January 1, 2023.

Each jurisdiction in California may adopt its own building code, based on the current California Building Standards Code. Local codes are permitted to be more stringent than the current California Building Standards Code but, at a minimum, are required to meet all State standards and enforce the regulations of the current California Building Standards Code. The city of Menlo Park has adopted the 2022 California Building Standards Code and local amendments.

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[25] University of California Museum of Paleontology. 2023. *UCMP Advanced Search*. Available: http://ucmpdb.berkeley.edu/. Accessed: August 24, 2023.

[26] California Geological Survey. 2018. *Earthquake Fault Zones—A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California.* Special Publication 42. Sacramento, CA: Department of Conservation. Available: https://www.conservation.ca.gov/cgs/documents/publications/special-publications/SP_042-a11y.pdf. Accessed: August 24, 2023.

The preliminary geotechnical report prepared for the Proposed Project based its design recommendations on American Society of Civil Engineers Standard 7-16 (Minimum Design Loads and Associated Criteria for Buildings and Other Structures), which has been adopted into the California Building Standards Code.

Seismic Hazards Mapping Act

Similar to the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) is intended to reduce damage resulting from earthquakes. Although the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act. The State is charged with identifying and mapping areas that are at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards; cities and counties are required to regulate development within mapped seismic hazard zones.

A primary purpose of the Seismic Hazards Mapping Act is to assist cities and counties in preparing the safety elements of their general plans and encourage land use management policies and regulations that reduce seismic hazards. The intent of this act is to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within seismic hazard zones until appropriate site-specific geologic or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into development plans. In addition, California Geologic Survey *Special Publication 117A*, Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for evaluating earthquake-related hazards in designated zones and recommending mitigation measures, as required by PRC Section 2695(a). CGS has prepared an "Earthquake Zones of Required Investigation" map for the Palo Alto quadrangle, which includes the Menlo Park area.[27] The map shows hazards related to earthquake fault zones, liquefaction zones, and earthquake-induced landslide zones.

National Pollutant Discharge Elimination System Construction General Permit

For projects that disturb 1 acre of land or more, Section 402 of the Clean Water Act requires the discharge of any pollutant or combination of pollutants from a point source to surface waters that are deemed waters of the United States to be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. The State Water Resources Control Board (State Water Board) is required to regulate all applicable activities under Order WQ 2022-0057-DWQ (adopted September 8, 2022, and effective September 2, 2023). The order requires the permit applicant to obtain coverage under the NPDES Construction General Permit prior to beginning construction by preparing and submitting a notice of intent to the State Water Board and preparing and implementing a Stormwater Pollution Prevention Plan (SWPPP), in accordance with Construction General Permit requirements. Construction activities that are subject to the Construction General Permit include clearing and grading as well as ground disturbance, such as stockpiling or excavation, that affects at least 1 acre of the total land area. The SWPPP has two major objectives: (1) identify the sources of sediment and other pollutants that affect the quality of stormwater discharges and (2) ensure the implementation of best management practices (BMPs) to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges

[27] California Geological Survey. 2006. *Earthquake Zones of Required Investigation, Palo Alto Quadrangle.* Final. Sacramento, CA. Prepared in compliance with the California Public Resource Code (7.5 and 7.8, Division 2). Earthquake Fault Zones released July 1, 1974; Seismic Hazard Zones released October 18, 2006.

(refer to Section 3.12, *Hydrology and Water Quality*, for additional information on the Construction General Permit and the SWPPP).

PRC, Chapter 1.7, Archaeological, Paleontological, and Historical Sites, Section 5097.5/5097.9

Section 5097.5 of the PRC prohibits "knowing and willful" excavation, removal, destruction, injury, or defacement of any paleontological feature on public lands (i.e., lands under state, county, city, district, or public authority jurisdiction or the jurisdiction of a public corporation), except where the agency with jurisdiction has granted express permission. This section applies to the Proposed Project because the city has jurisdiction over land in the area of analysis.

Local

Menlo Park Municipal Code

The city has adopted, and enforces, the 2022 California Building Standards Code through its Menlo Park Municipal Code (Section 12.04.010[2], Menlo Park Municipal Code).

City of Menlo Park Engineering Division Grading and Drainage Control Guidelines

The city's *Grading and Drainage Guidelines*[28] apply to commercial, multi-family, and subdivision projects that create or replace 10,000 square feet or more of impervious surfaces, including roofs and areas with pavement. As described in the guidelines, "The goals of the grading and drainage guidelines are to manage possible sources of water pollution (source control), ensure that site drainage does not affect neighboring properties (site design), and remove contaminants from onsite stormwater runoff before it drains into the city street or storm drain system (treatment measures)." The grading and drainage designs for stormwater runoff must conform to the criteria of San Mateo County's C.3 Stormwater Technical Guidance to meet local municipal requirements as well as requirements of the Municipal Regional Stormwater Permit CAS612008, which is an NPDES permit issued by the San Francisco Bay Regional Water Quality Control Board.

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with geology and soils.

The following policy from the Land Use Element related to geologic hazards was adopted to avoid or minimize environmental impacts and is relevant to the Proposed Project:

> **Policy LU-7.7: Hazards.** Avoid development in areas with seismic, flood, fire, and other hazards to life or property when potential impacts cannot be mitigated.

[28] City of Menlo Park. 2023. *Grading and Drainage Guidelines.* Available: https://menlopark.gov/files/sharedassets/public/v/1/public-works/documents/stormwater/commercial-drainage-guidelines.pdf. Accessed: July 18, 2023.

The following goal and policies from the Safety Element related to geologic, seismic, and soil hazards were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal S-1: Ensure a Safe Community. Minimize risk to life and damage to the environment and property from natural and human-caused hazards, and ensure community emergency preparedness and a high level of public safety services and facilities.

Policy S1.2: Location of Public Improvements. Avoid locating public improvements and utilities in areas with identified flood, geologic, and/or soil hazards to avoid any extraordinary maintenance and operating expenses. When the location of public improvements and utilities in such areas cannot be avoided, ensure that effective mitigation measures will be implemented.

Policy S1.3: Hazard Data and Standards. Integrate hazard data (geotechnical, flood, fire, etc.) and risk evaluations into the development review process and maintain, develop, and adopt up-to-date standards to reduce the level of risk from natural and human-caused hazards for all land use.

Policy S1.5: New Habitable Structures. Require all new habitable structures to incorporate adequate hazard mitigation measures to reduce identified risks from natural and human-caused hazards.

Policy S1.6: Design and Location of Utilities. Monitor appropriate location, design, construction, maintenance and inspection standards for utility systems traversing hazard areas within the city limits. This would include evaluation and upgrading outdated systems and infrastructure, coordination with the State Public Utilities Commission, and locating new utility systems away from potential hazard areas.

Policy S1.7: Hazard Reduction. Continue to require new development to reduce the seismic vulnerability of buildings and susceptibility to other hazards through enforcement of the California Building Standards Code and other programs.

Policy S1.13: Geotechnical Studies. Continue to require site-specific geologic and geotechnical studies for land development or construction in areas of potential land instability, as shown on the State and/or local geologic hazard maps or identified through other means.

Policy S1.14: Potential Land Instability. Prohibit development in areas of potential land instability identified on State and/or local geologic hazard maps, or identified through other means, unless a geologic investigation demonstrates hazards can be mitigated to an acceptable level, as defined by the State of California.

Policy S1.26: Erosion and Sediment Control. Continue to require the use of best management practices for erosion and sediment control measures with proposed development in compliance with applicable regional regulations.

Policy S1.D: Require Early Investigation of Potential Hazard Conditions. Require that potential geologic, seismic, soils, and/or hydrologic problems confronting public or private development be thoroughly investigated at the earliest stages of the design process and that these topics be comprehensively evaluated in the environmental review process by persons of competent technical expertise.

The following policies from the Open Space and Conservation Element related to paleontological resources were adopted to avoid or minimize environmnental impacts and are relevant to the Proposed Project:

Policy OSC3.3: Archaeological or Paleontological Resources Protection. Protect prehistoric or historic cultural resources either onsite or through appropriate documentation as a condition of

removal. Require that when a development project has sufficient flexibility, avoidance and preservation of the resource shall be the primary mitigation measure, unless the city identifies superior mitigation. If resources are documented, undertake coordination with descendants and/or stakeholder groups, as warranted.

Policy OSC3.4: Prehistoric or Historic Cultural Resources Found during Construction. Require that if cultural resources, including archaeological or paleontological resources, are uncovered during grading or other onsite excavation activities, construction shall stop until appropriate mitigation is implemented.

Environmental Impacts

This section describes the impact analysis related to geology, soils, and paleontological resources for the Proposed Project. It describes methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving (1) rupture of a known earthquake fault, as delineated on the most recent Alquist–Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42); (2) strong seismic ground shaking; (3) seismically related ground failure, including liquefaction; and (4) landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse.
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.
- Have soils that would be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Methods for Analysis

Geology, Soils, and Seismicity

The primary sources of information used in preparing the analysis of geologic and seismic hazards were the preliminary geotechnical report (Appendix 3.11-1 of this EIR), various hazard reports prepared by CGS,[29,30,31,32] and hazard maps prepared by the Governor's Office of Emergency Services.[33] The findings in this section were based on information in these and other relevant reports, which were evaluated both qualitatively and quantitatively, depending on the hazard; the conclusions in the geotechnical report prepared for the Proposed Project; and professional judgment. No new fieldwork was conducted for this analysis.

The analysis of impacts related to soil limitations and hazards was based on a qualitative analysis of information provided by the Natural Resources Conservation Service[34] in relation to ground disturbance under the Proposed Project.

Design-level geotechnical studies would be completed during development of construction plans, in accordance with the current California Building Standards Code and city building permit requirements.

Paleontological Resources

The primary source of information used in developing the paleontological resources analysis was the paleontological database at the University of California Museum of Paleontology.[35]

Effects on paleontological resources were analyzed qualitatively, based on professional judgment and guidelines provided in the SVP's *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources* (2010). These procedures reflect the accepted standard of care for paleontological resources and include guidelines for determining the paleontological sensitivity of geologic units and investigating, collecting, preserving, and cataloging paleontological resources (Table

[29] California Geological Survey. 2006. *Earthquake Zones of Required Investigation, Palo Alto Quadrangle.* Final. Sacramento, CA. Prepared in compliance with the California Public Resource Code (7.5 and 7.8, Division 2). Earthquake Fault Zones released July 1, 1974; Seismic Hazard Zones released October 18, 2006.

[30] California Geological Survey. 2008. *Special Publication 117A.* Guidelines for Evaluating and Mitigating Seismic Hazards in California. Sacramento, CA. Available: http://www.conservation.ca.gov/ cgs/shzp/webdocs/ Documents/sp117.pdf. Accessed: August 22, 2023.

[31] California Geological Survey. 2016. *Earthquake Shaking Potential for California*. Map Sheet 48. Sacramento, CA. Available: https://www.conservation.ca.gov/cgs/documents/publications/ map-sheets/MS_048.pdf. Accessed: August 22, 2023.

[32] California Geological Survey. 2018. *Earthquake Fault Zones—A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California.* Special Publication 42. Sacramento, CA: Department of Conservation. Available: https://www.conservation.ca.gov/cgs/ documents/publications/special-publications/SP_042-a11y.pdf. Accessed: August 24, 2023.

[33] Governor's Office of Emergency Services. 2023. *MyHazards.* Tsunami Risk. State of California. Available: https://myhazards.caloes.ca.gov/. Accessed: August 30, 2023.

[34] Natural Resources Conservation Service. 2023. *Custom Soil Resource Report for San Mateo County, Eastern Part, and San Francisco County, California.* U.S. Department of Agriculture. Available: https://websoilsurvey.nrcs.usda.gov/app/. Accessed: August 23, 2023.

[35] University of California Museum of Paleontology. 2023. *UCMP Advanced Search*. Available: http://ucmpdb.berkeley.edu/. Accessed: August 24, 2023.

3.11-3).[36] The SVP guidelines identify two key phases in the process for protecting paleontological resources from project impacts:[37]

- Assess the likelihood that a project's area of potential effect contains significant nonrenewable paleontological resources that could be directly or indirectly affected, damaged, or destroyed as a result of the project. As shown in Table 3.11-3, the SVP four sensitivity categories for geologic units are high, undetermined, and low, and no Potential.
- Formulate and implement measures to mitigate potential adverse impacts.

The SVP guidelines for evaluating paleontological sensitivity are provided in Table 3.11-3. SVP's recommended treatments to avoid adverse effects in each sensitivity category are provided in Table 3.11-4.

For purposes of this analysis, an impact on unique paleontological resources would be significant and require mitigation if the Proposed Project would directly or indirectly destroy a unique paleontological resource or site or a unique geologic feature. This analysis focuses on vertebrate paleontological resources because of their rarity and scientific importance.

Table 3.11-4. Society of Vertebrate Paleontology's Recommended Treatment for Paleontological Resources

Sensitivity Category/ Potential	Mitigation Treatment
High or Undetermined	• An intensive field survey and surface salvage prior to earthmoving, if applicable. • Monitoring by a qualified paleontological resource monitor of excavations. • Salvage of unearthed fossil remains and/or traces (e.g., tracks, trails, burrows). • Screen washing to recover small specimens, if applicable. • Preliminary survey and surface salvage before construction begins. • Preparation of salvaged fossils to a point of being ready for curation (i.e., removal of enclosing matrix, stabilization and repair of specimens, construction of reinforced support cradles, where appropriate). • Identification, cataloging, curation, and provision of repository storage for prepared fossil specimens. • A final report of the finds and their significance.
Low or No	Rock units with low or no potential typically will not require impact mitigation measures to protect fossils.

Source: Society of Vertebrate Paleontology 2010.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research and development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office

[36] Society of Vertebrate Paleontology. 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. Last revised: unknown. Available: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf. Accessed: August 24, 2023.

[37] Ibid.

scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact; in those cases, the analysis does not identify a "worst-case" scenario.

A project's geological impacts are site specific. Analysis of potential impacts related to geology, soils, and paleontology is dependent on a number of factors, including project location, the amount of ground that would be disturbed, the type of disturbance, and the depth of excavation. The two buildout scenarios would occur on the same parcels; therefore, there would be no difference in location that would affect the analysis. In addition, the two buildout scenarios would result in the same building footprint and soil disturbance during construction. Therefore, impacts would be the same regardless of the 100 percent office scenario or 100 percent R&D scenario for the purposes of the analysis in this section.

Impacts Not Evaluated In Detail

This section describes why the Proposed Project would result in ***no impact*** related to surface fault rupture, landslides, loss of topsoil, lateral spreading, unique geologic features, or septic systems, and no further analysis is required.

Surface Fault Rupture. No faults cross the Project Site, and the site is not in an Alquist-Priolo Earthquake Fault Zone. The risk of surface fault rupture is negligible.

Landslides. The Project Site is relatively flat. It is not adjacent to any hillsides where seismically induced landslides or other downslope movements of rock or soil material could pose a hazard. In addition, the Proposed Project would not cause or exacerbate landslide hazards.

Loss of Topsoil. Nearly all soils on the Project Site are disturbed urban soils, including: Urban land, Botella-Urban LAND, and cut and fill. There is no native topsoil; removing soils for construction would not result in a loss of topsoil. In addition, a small area of undisturbed native soil would not be disturbed by the Proposed Project.

Lateral Spreading. There are no open faces or bodies of water on or adjacent to the Project Site that would create conditions that would be conducive to lateral spreading; therefore, there would be no risk of lateral spreading.

Unique Geologic Features. No unique geologic features occur at the Project Site; therefore, the Proposed Project would not affect a unique geologic feature.

Septic Systems. The Proposed Project would not include septic tanks or leach fields; wastewater generated would be disposed of using the existing sanitary sewer system. The Proposed Project would, therefore, not require soils that would be capable of supporting septic systems.

Impacts and Mitigation Measures

Impact GS-1: Strong Seismic Ground Shaking and Seismically Related Ground Failure. The Proposed Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving (1) strong seismic ground shaking and (2) seismically related ground failure, including liquefaction. (LTS)

The Project Site is located in one of the most seismically active areas in the United States and within 15 miles of several active faults (Table 3.11-2). Given the Project Site's proximity to regional faults that are capable of producing a large earthquake, the potential exists for a large earthquake to induce strong to very strong ground shaking at the Project Site. In addition, the Project Site is within proximity to a designated liquefaction zone.

Strong ground shaking or seismically induced ground failure could destabilize structures that have not been properly designed and constructed, exposing people or structures to potential substantial adverse effects. In addition, as noted in Chapter 2, *Project Description*, some older existing buildings on the Project Site do not have modern seismic safety features. However, the Project would replace 35 of 38 existing buildings within the Project Site with modernized structures that are designed to meet all standards set forth by the California Building Standards Code, in accordance with the Menlo Park Municipal Code. These standards are intended to reduce major structural damage and loss of life in the event of an earthquake.

Policy S1.13 of the Safety Element of the General Plan requires site-specific geologic or geotechnical studies for construction in areas with potential land instability and recommendations to address soil instability. Program S-1D requires potential geologic, seismic, and soil problems to be thoroughly investigated during the earliest stages of the design process. Program S-1H requires a seismic risk analysis and adequate construction standards to be enforced. In addition, all Project structures must be designed and constructed in compliance with the requirements of the California Building Standards Code and Menlo Park Municipal Code. Compliance with these standards would ensure that Project structures would be built to withstand local seismic conditions and accommodate strong ground shaking, thereby reducing major structural damage and loss of life in the event of an earthquake. As part of the compliance process, the preliminary geotechnical report prepared for the Proposed Project would be followed by a design-level investigation to confirm the preliminary recommendations and develop detailed recommendations for design and construction. Both the investigation and the design would be in compliance with the criteria prescribed in *Special Publication 117A*.[38] As a result of compliance with the California Building Standards Code, Menlo Park Municipal Code, and geotechnical design-level recommendations, the impact would be ***less than significant***. No mitigation is required.

Strong ground shaking could also lead to liquefaction at the Project Site. However, all Project structures would be designed and constructed in compliance with the requirements of the California Building Standards Code and Menlo Park Municipal Code. As part of conformance with the California Building Standards Code, the design-level investigation would confirm the preliminary recommendations and develop detailed recommendations for design and construction. Both the investigation and the design would be in compliance with the criteria prescribed in *Special Publication 117A*.[39] Therefore, the Proposed Project would have a ***less than significant*** impact with regard to exposure of people or structures to seismic ground shaking or liquefaction-related hazards. No mitigation is required.

[38] California Geological Survey. 2008. *Special Publication 117A.* Guidelines for Evaluating and Mitigating Seismic Hazards in California. Sacramento, CA. Available: http://www.conservation.ca.gov/ cgs/shzp/webdocs/ Documents/sp117.pdf. Accessed: August 22, 2023.

[39] Ibid.

Impact GS-2: Substantial Soil Erosion. The Proposed Project would not result in substantial soil erosion. (LTS)

Construction

The Proposed Project construction activities that could lead to substantial soil erosion are demolition, tree and other vegetation removal, grading, and excavation for construction of new building structures and trenching for utilities. These activities would require approximately 281,605 cubic yards of excavated soil to be exported. Removal of the concrete and asphalt currently onsite would expose previously sheltered soils to the elements as well as construction activities on the site, which could accelerate erosion rates. Such activities would expose previously covered soils to erosion. However, as further discussed in Section 3.12, *Hydrology and Water Quality*, all construction activities would comply with existing NPDES Construction General Permit requirements, which include standard erosion control measures and BMPs and which would be identified in the SWPPP and implemented during construction to reduce sedimentation and loss of topsoil. These BMPs could include using drainage swales or lined ditches to control stormwater flows and protecting storm drain inlets with gravel bags or catch basin inserts. As a result, Proposed Project construction impacts related to a substantial increase in soil erosion would be ***less than significant***. No mitigation is required.

Operation

Following construction activity, operation of the Proposed Project would reduce stormwater runoff and erosion for several reasons. The amount of permeable surface area would be markedly increased compared to existing conditions, with more runoff retained onsite and stormwater runoff reduced. The Proposed Project would reduce the amount of impervious area across the Project Site by introducing new landscaped areas and open spaces and reducing the amount of surface parking and hardscape. Under both scenarios, the Proposed Project would have a pervious surface area of approximately 42.3 percent (1.165 million square feet) across the site, compared to only 25.7 percent (643,045 square feet) under existing conditions. In addition, the Proposed Project would include a runoff water collection system, which would reduce both runoff and the use of potable water for irrigation and other building needs. Also, the Proposed Project's grading and drainage designs for stormwater runoff would conform to San Mateo County's C.3 Stormwater Technical Guidance criteria, which require ongoing maintenance and inspection of treatment measures and the city's Grading and Drainage Guidelines. Therefore, the Proposed Project would have ***less than significant*** impact regarding operations related soil erosion. No mitigation is required.

Impact GS-3: Unstable Soils or Geologic Units. The Proposed Project would not be located on a geologic unit or soil that would be unstable or would become unstable as a result of the Proposed Project and potentially result in subsidence, liquefaction, or collapse. (LTS)

As described in Impact GS-1, there is potential for liquefaction on the Project Site, which, combined with construction activities, could lead to lateral spreading, subsidence, or differential settlement. Construction activities that would create an open, or free, face and potentially allow lateral spreading include excavation for underground parking garages, which could be up to 15 feet below the ground surface, and trenching for utilities. During a seismic event, liquefiable soil layers could flow toward the open face and cause ground failure. However, as described in the preliminary geotechnical report, a Project-specific shoring system would be designed, in compliance with California Building Standards Code and Menlo Park Municipal Code, and constructed to prevent lateral spreading and other types of liquefaction-related ground failure, such as subsidence and differential settlement. For example, liquefiable soils would most likely be removed to the appropriate depth and replaced with engineered fill, building foundations could

include shallow foundations or post-tensioned concrete mat foundations, and top and bottom mats of reinforcing steel could be included to span irregularities and differential settlement.

Shoring may also be needed if shallow groundwater is present, which could affect underground construction that extends below a depth of 25 feet and result in a wet and unstable pavement subgrade, difficult compaction, and difficult utility installations. However, at this time, excavation is not anticipated to extend below a depth of 25 feet. Other types of ground failures include cut-slope failure (e.g., during a heavy rain or as a result of creep), improperly compacted fill, and improperly backfilled and compacted trenches. Undocumented fill and underground voids and pipes could also lead to a collapse. However, as part of the design-level geotechnical investigation, construction cut, fill, and trench backfill would be engineered to meet code requirements and site-specific requirements. Borings and other investigation methods would be used to document unknown fills and voids.

Preliminary geotechnical report conducted for the Proposed Project concluded that development at the Project Site is feasible from a geotechnical perspective. As part of the construction permitting process, the Project Sponsor would be required by law to incorporate all applicable standards and geotechnical design-level recommendations into the design and construction of the Proposed Project. In addition, the Project Sponsor would be required to comply with the California Building Standards Code and the Menlo Park Municipal Code, which would ensure that Proposed Project structures and their associated trenches and foundations would have the maximum practicable protection from soil failure available under static or dynamic conditions. Therefore, Proposed Project impacts related to unstable geologic or soil units at the Project Site would be ***less than significant***. No mitigation is required.

Impact GS-4: Expansive Soils. The Proposed Project could be located on expansive soils but would not create a substantial direct or indirect risks to life or property. (LTS)

Moderately expansive soil occurs at the Project Site. Structures and utilities constructed on expansive soil could experience cyclic seasonal heave and settlement as soil expands and contracts through wetting and drying cycles. If structures and utilities are not properly designed, cyclic expansion and contraction could affect structural stability. Structural damage, warping, and cracking that affects foundations, parking garages, and utilities may occur if fills and foundations are not properly engineered to address the potential effects of expansive soils and imported fill.

To reduce potential impacts from expansive soils, measures that may be taken to address the potential for damage caused by the shrinking and swelling of these soils include removing the soils and replacing them with non-expansive fill and using slabs engineered for site-specific conditions. Additionally, city's General Plan Safety Element Policy S1.13 requires site-specific geologic or geotechnical studies for construction in areas with potential land instability. These studies must include recommendations to address soil instability (e.g., expansive soil). Program S-1D requires potential soil problems to be thoroughly investigated during the earliest stages of the design process.

The Proposed Project would be designed and constructed in compliance with these policies and programs and meet or exceed the California Building Standards Code, including its soil and foundation support parameters, as well as local standards, which also require early design-level geotechnical investigations and recommendations. Therefore, the impacts related to expansive soils at the Project Site would be ***less than significant***. No mitigation is required.

Impact GS-5: Paleontological Resources. The Proposed Project could destroy a unique paleontological resource or site. (LTS/M)

No known fossils, unique paleontological resources, or unique geologic features are present in the vicinity of the Project Site. Although the surficial area of the Project Site is disturbed by prior construction, the disturbed surface is underlain by nonmarine Pleistocene alluvium that has the potential to contain unique paleontological resources. It is currently anticipated that the maximum depth of excavation would be 15 feet below the current grade. The depth to the Pleistocene alluvium is unknown but could occur in the shallow subsurface; therefore, construction of the Proposed Project has the potential to destroy, directly or indirectly, an unknown unique paleontological resource onsite. The Proposed Project's ground-disturbing activities that could destroy these resources are those activities that would occur at the depth of the Pleistocene alluvium, such as excavation for utilities and below-grade parking. The impacts on paleontological resources would depend on the depth, extent, and type of soil-disturbing activities that would occur as a result of construction. Destruction of unique paleontological resources, such as vertebrate fossils, would be a ***potentially significant*** impact.

MITIGATION MEASURES. Implementation of Mitigation Measures GS-5.1 and GS-5.2 would reduce the potential impact by requiring that a worker education program on paleontological resources be conducted and that a protocol be in place to stop work should paleontological resources be encountered. Implementation of these mitigation measures would reduce potentially significant impacts on paleontological resources to ***less than significant with mitigation***.

GS-5.1: Conduct Worker Awareness Training

Before the start of excavation or grading activities, the Project Sponsor shall retain a Project Paleontologist, as defined in Mitigation Measure GS-5.1, who is experienced in teaching non-specialists. The paleontologist shall train all construction personnel who are involved with earthmoving activities, including the site superintendent, regarding the possibility of encountering fossils, the appearance and types of fossils that are likely to be seen during construction, and proper notification procedures should fossils be encountered. Procedures to be conveyed to workers include halting construction within 50 feet of any potential fossil find and notifying the Project Paleontologist, who shall evaluate the significance of the find.

GS-5.2: Conduct Protocol and Procedures for Encountering Paleontological Resources

In the event that fossils or fossil bearing deposits are discovered during ground disturbing activities, excavations within a 50-foot radius of the find shall be temporarily halted or diverted. Ground disturbance work shall cease until a city-approved qualified paleontologist determines whether the resource requires further study. The paleontologist shall document the discovery as needed (in accordance with Society of Vertebrate Paleontology standards [Society of Vertebrate Paleontology 2010]), evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The excavation plan shall be submitted to the city of Menlo Park for review and approval prior to implementation, and all construction activity shall adhere to the recommendations in the excavation plan.

Cumulative Impacts

Cumulative impacts are addressed only for those thresholds that would result in a Project-related impact. If the Proposed Project would result in no impact with respect to a particular threshold, it would not contribute to a cumulative impact. As discussed under "Impacts Not Evaluated in Detail," the Proposed Project would result in no impact related to surface fault rupture, landslides, loss of topsoil, lateral spreading, unique geologic features, or septic systems, and no cumulative analysis is required.

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. The geographic context for cumulative assessment of geology and soils impacts includes past, present, and reasonably foreseeable future projects in the vicinity of the Project Site as shown in Figure 3.0-1 that involve the construction of habitable buildings as well as ground disturbance. However, the geographic context for the analysis of impacts resulting from geologic hazards is generally site specific depending on the project site and underlying soils rather than cumulative in nature. Every project has unique geologic considerations that are subject to uniform site development and construction standards. Each structure will have different levels of excavation, cut-and-fill work, and grading, which would affect local geologic conditions in different ways. Therefore, the geographic context for cumulative impacts to geology and soils is site-specific and the potential for cumulative impacts to occur is limited.

Impact C-GS-1: Cumulative Impacts Related to Seismic Hazards. Cumulative development would not result in a significant environmental impact from seismically related hazards; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Past, present, and reasonably foreseeable future projects within proximity to the Project Site are identified under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*, and shown in Figure 3.0-1. Development of these cumulative projects in the vicinity of the Project Site could require excavation and cut-and-fill work, which could affect local geologic conditions. These activities have the potential to result in development-related impacts pertaining to seismic ground shaking, liquefaction, and seismically induced ground failure. However, the cumulative projects would be required to go through environmental and regulatory review and comply with local and state building codes. In addition, each project would also be required to have a site-specific geotechnical investigation performed, which would provide design recommendations to reduce each project's impacts related to geologic and seismic safety. Therefore, impacts of the Proposed Project would be less than significant, as development in the vicinity would be required to comply with the California Building Standards Code, Menlo Park Municipal Code, and General Plan policies. These codes and policies would, to the maximum extent practicable, reduce potential cumulative development-related impacts associated with seismic ground shaking, liquefaction, and seismically induced ground failure. The cumulative impact would therefore be ***less than significant***. No mitigation is required.

Impact C-GS-2: Cumulative Impacts Related to Soil Erosion and Soil Hazards. Cumulative development would not result in a significant environmental impact from soil erosion and soil hazards; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Development of past, current, and future projects in the vicinity of the Project Site could require excavation, cut-and-fill work, and construction on expansive soils. These activities have the potential to result in development-related impacts pertaining to soil erosion and soil hazards (e.g., expansive soil).

However, the impacts of the Proposed Project would be less than significant, and development in the vicinity would be required to comply with the California Building Standards Code, Menlo Park Municipal Code, San Mateo County C.3 Stormwater Technical Guidance (for conformance with the NPDES permit issued by the San Francisco Bay Regional Water Quality Control Board), and general plan polices. These codes and policies would, to the maximum extent practicable, reduce cumulative development-related impacts associated with soil erosion and expansive soil. In addition, the impacts related to soil erosion and expansive soil would be limited spatially to the Project Site (i.e., Project footprint) and would not combine with other projects to cause a cumulatively considerable impact. The cumulative impact would therefore be ***less than significant***. No mitigation is required.

Impact C-GS-3: Cumulative Impacts Related to Paleontological Resources. Cumulative development would not result in a significant environmental impact with mitigation on paleontological resources; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)

Development of past, current, and future projects in the vicinity of the Project Site could require extensive deep excavation in geologic units, including older Pleistocene alluvium, that are sensitive for paleontological resources. This excavation has the potential to result in development-related impacts on paleontological resources under the disturbed ground surface and a cumulatively considerable impact. However, implementation of Mitigation Measures GS-5.1 and GS-5.2 would reduce this impact to a less-than-significant level. Other projects in the vicinity of the Project Site would also be required to include mitigation measures in compliance with the city's General Plan to reduce the impact to a less-than-significant level. In addition, excavation would be limited spatially to the Project Site (i.e., Project footprint) and would not combine with other projects to cause a cumulative impact. The cumulative impact would therefore be ***less than significant with mitigation.*** No additional mitigation is required.

3.12 Hydrology and Water Quality

This section identifies and evaluates the Proposed Project's potential impacts on hydrology, including water quality, groundwater, drainage, and flood hazards. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Project Stormwater Analysis*;[1]
- *C.3 and C.6 Development Review Checklist, Parkline Campus Development*;[2]
- *Hydrology Calculation Summary, SRI Campus*;[3] and
- *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.*[4]

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. No comments related to hydrology and water quality were raised in response to the NOP.

Existing Conditions

Environmental Setting

Surface Water

Watershed Hydrology

The Project Site is in Menlo Park, part of San Mateo County, California, a region characterized by intermittent and perennial drainages that generally flow eastward from the Santa Cruz Mountains toward the sloughs and tidal flats of South San Francisco Bay. The Project Site is within the San Mateo Creek-Frontal San Francisco Bay Estuaries watershed,[5] which is within the larger San Francisco Bay (Bay) watershed. The San Mateo Creek-Frontal San Francisco Bay Estuaries watershed encompasses approximately 73 square miles. In the eastern portion of Menlo Park, across Bayfront Expressway/State Route 84 (Bayfront Expressway), are tidal mudflats and marshes in the Bay, the Don Edwards Bay National Wildlife Refuge (Refuge), Ravenswood Slough, and the former salt ponds (some of which are within the Refuge). The Project Site is less than 3 miles southwest of Lower San Francisco Bay and approximately 3 miles west of South San Francisco Bay.[6]

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1 Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

2 County of San Mateo. 2023. *C.3 and C.6 Development Review Checklist, Parkline Campus Development*. April 13.

3 Kier + Wright. 2023. *Hydrology Calculation Summary, SRI Campus*. April 17.

4 Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

5 Esri Environment. 2023. *Watershed Boundary Dataset HUC 10s.* Updated September 11.

6 For descriptive purposes, true northwest is Project north, with El Camino Real running in a north–south direction and Ravenswood Avenue running in an east–west direction. Compass directions in this document have Middlefield Road in a north–south direction and Ravenswood Avenue in an east–west direction. All references are labeled accordingly.

Figure 3.12-1 depicts the hydrologic features in the Project area. As shown, major surface waters in the vicinity of the Project Site include Atherton Channel (also known as Atherton Creek) to the north and San Francisquito Creek to the south. Closer to the eastern portion of the city, across U.S. 101 from the Project Site, are Flood Slough, Ravenswood Slough, Lower San Francisco Bay, and South San Francisco Bay. Atherton Channel, approximately 1 mile north of the Project Site, is an alternating earth- and concrete-lined channel that carries flows from the upper reaches of Atherton Creek to Flood Slough. Flood Slough is one of several sloughs that run through the salt ponds and salt marshes north of Bayfront Expressway; the slough drains into Lower San Francisco Bay. Levees are located throughout the salt ponds. San Francisquito Creek, less than 0.5 mile south of the Project Site, is a natural channel that flows into the Bay and serves as a boundary between San Mateo and Santa Clara Counties. Ravenswood Slough, a wetland feature approximately 2.3 miles east of the Project Site, flows into the Bay.

Local Drainage

Under current operations, the Project Site encompasses a substantial amount of impervious hardscape. This includes roofs, surface parking lots, streets, and paths, which cover approximately 74.3 percent of the Project Site. Pervious surface areas, which cover 25.7 percent of the Project Site, include areas with native and non-native tree species. Runoff is conveyed toward the northeast corner of the Project Site at the low point of the property. Numerous catch basins collect runoff throughout the Project Site. Based on the topographical survey for the Project Site, the existing site slopes from the west to east. Most of the Project Site currently drains to a single 27-inch reinforced concrete storm drain that ties into a 36-inch storm drain that runs north to south within Middlefield Road. Two smaller sub-watershed areas (totaling 5.7 acres) drain to the existing 27-inch storm drainpipe. Flows from the small sub-watersheds flow to small separate storm drain systems, an existing storm drain system in Laurel Street, and an existing 18-inch storm drain in Burgess Drive.[7] The Project Site ultimately drains to Lower San Francisco Bay.

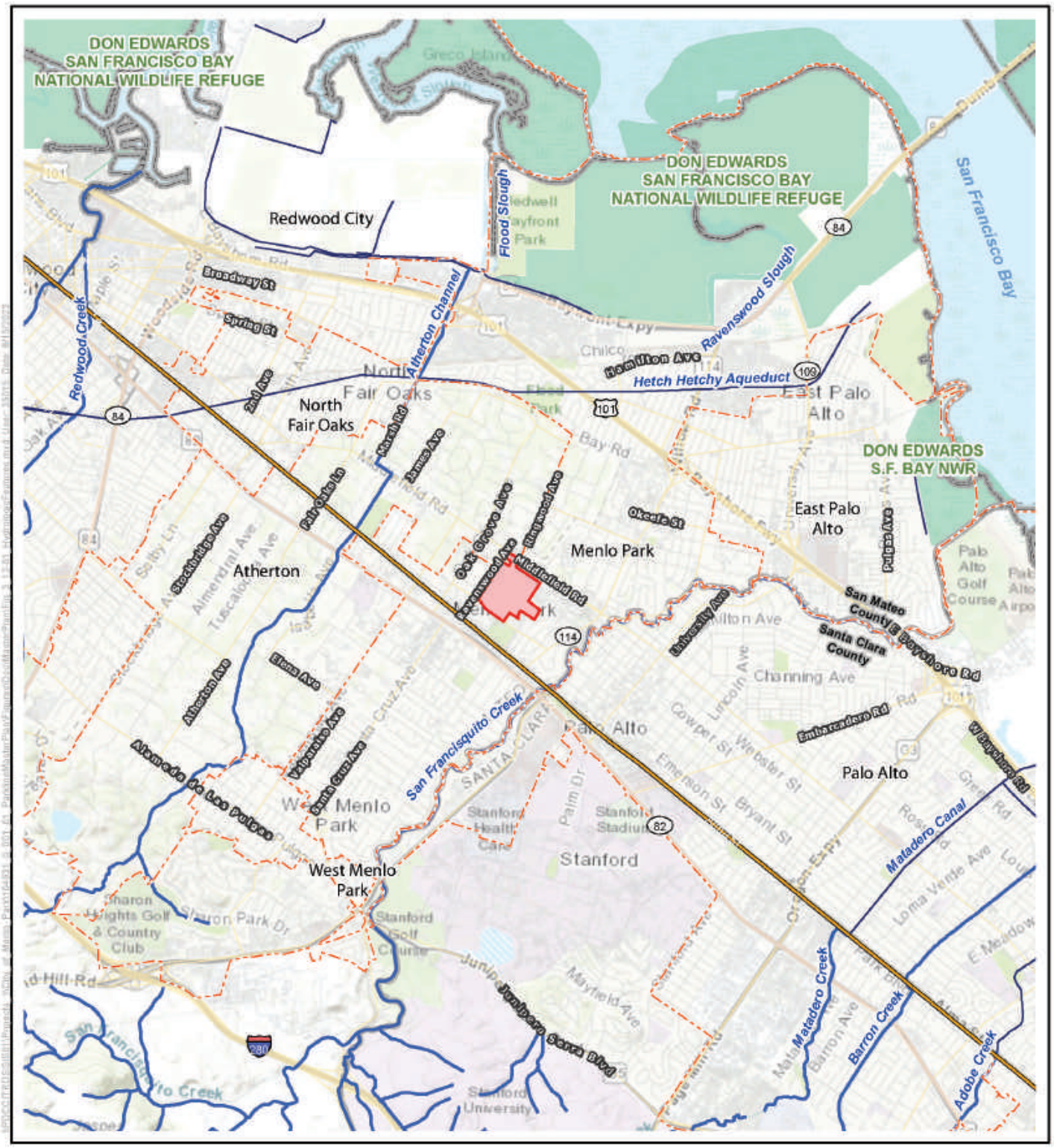
Water Quality

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) requires the State Water Resources Control Board (State Water Board) or a Regional Water Quality Control Board (Regional Water Board) to adopt basin plans for the protection of water quality. The San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) specifies region-wide and water body–specific beneficial uses and sets numeric and narrative water quality objectives for surface waters. The Basin Plan specifies beneficial uses that are applicable to Lower San Francisco Bay and could be affected by the Proposed Project, as shown in Table 3.12-1.[8] Table 3.12-2 shows the 303(d)-listed impairments for Lower San Francisco Bay, based on the 2020/2022 California Integrated Report.[9]

[7] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

[8] San Francisco Bay Regional Water Quality Control Board. 2017. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan).* Originally published: January 18, 2007. Last updated: March 7, 2023.

[9] State Water Resources Control Board. 2022. *2020/2022 California Integrated Report (Clean Water Act Section 303[d] List/305[b] Report).* Available: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html. Accessed: August 7, 2023.



Legend

- Project Site
- City Boundaries
- County Boundary
- Stream/River
- Canal/Ditch
- National Wildlife Refuge

0 0.5 1 Miles

Source: Imagery, ESRI 2021; USFWS 2021; USGS 2023.

Figure 3.12-1
Hydrologic Features in the Project Area
Parkline

Table 3.12-1. Beneficial Uses for Surface Waters with Potential to Be Affected by the Proposed Project

Water Body	Designated Beneficial Uses
Lower San Francisco Bay	IND, COMM, SHELL, EST, MIGR, RARE, SPWN, WILD, REC1, REC2, NAV

Source: San Francisco Bay Regional Water Quality Control Board. 2023. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan).* Originally published: January 18, 2007. Last updated: March 7, 2023.

Key:

COMM: Commercial and Sport Fishing	REC1: Water Contact Recreation
EST: Estuarine Habitat	REC2: Noncontact Water Recreation
IND: Industrial Service Supply	SHELL: Shellfish Harvesting
MIGR: Fish Migration	SPWN: Fish Spawning
NAV: Navigation	WILD: Wildlife Habitat
RARE: Preservation of Rare and Endangered Species	

Table 3.12-2. Overview of Water Quality Impairments for the Lower San Francisco Bay

Listed Impairments per 2014/2016 303(d) List	Potential Sources	EPA TMDL Completion
Chlordane	Unknown	2013[a]
DDT	Unknown	2013[a]
Dieldrin	Unknown	2013[a]
Dioxin compounds (including 2,3,7,8-TCDD)	Unknown	2019[a]
Furan compounds	Unknown	2019[a]
Invasive species	Unknown	2019[a]
Mercury	Unknown	02/12/2008
PCBs and dioxin-like PCBs	Unknown	03/29/2010
Trash	Unknown	2021[a]

[a] A TMDL was expected to be completed; however, no TMDL has been approved by EPA.

Source: State Water Resources Control Board, 2022.

DDT = dichlorodiphenyltrichloroethane	TMDL = total maximum daily load
EPA = U.S. Environmental Protection Agency	PCBs = polychlorinated biphenyl
TCDD = tetrachlorodibenxodioxin	

Water quality in a typical surface water body is influenced by processes and activities that take place within the watershed. The quality of stormwater runoff from the Project Site and surrounding development is typical of urban watersheds, areas where water quality is affected primarily by discharges from both point and nonpoint sources. These include winter storms, overland flows, exposed soil, roofs, parking lots, and streets. Water quality in the vicinity of the Project Site is directly affected by stormwater runoff from adjacent streets and properties that deliver fertilizers, pesticides, automotive and traffic-related pollutants (e.g., oil, grease, metals), sediment with attached pollutants from soil erosion, trash, and other pollutants.

In accordance with Clean Water Act (CWA) Section 303(d), the State Water Board is required to establish total maximum daily loads (TMDLs) for pollutants to gradually eliminate listed impairments and attain water quality standards. Therefore, pollutant control actions and further pollutant impact assessments are warranted and required pursuant to the Municipal Regional Permit (MRP). Although chlordane, dichlorodiphenyltrichloroethane (DDT), and dieldrin were banned in the U.S. in 1988, 1972, and 1974, respectively, these pollutants continue to persist in the Bay. In 1994, the California Office of

Environmental Health Hazard Assessment issued a fish consumption advisory for the Bay after pollutants, including dioxins, were discovered in fish. As a result, the Bay was listed as a water body that fails to meet water quality standards for dioxins. This listing requires the U.S. Environmental Protection Agency (EPA) and California's Regional Water Boards to establish and implement measures to achieve a TMDL and maintain water quality. At the time of listing, EPA committed to undertaking several multimedia studies to determine the extent of the dioxin problem in the Bay.

Lower San Francisco Bay is designated as impaired for mercury. Fish tissue collected from the Bay often contains relatively high mercury concentrations. Sources of mercury include runoff from historic mines, urban runoff, wastewater discharges, atmospheric deposition, and resuspension of historic deposits of mercury-laden sediment already in the Bay. Most of the historic mercury deposits date back to the gold rush of the 1800s, a time when mercury was mined throughout the Coastal Range and used in the Sierra Nevada to extract gold. The largest source of mercury is the Central Valley—specifically, rivers that carry mercury from remote regions to the Bay. The San Francisco Bay Regional Water Board amended the Basin Plan to incorporate a TMDL for mercury in the Bay and implement a plan for achieving the TMDL. The amendment became effective on November 7, 2007.

High levels of polychlorinated biphenyls (PCBs) in fish from the Bay prompted a public advisory in the mid-1990s to limit their consumption. PCBs in the Bay are more often found in bottom sediment than in water. PCB pollution in the Bay happened decades ago; however, small amounts of PCBs continue to enter the Bay from sources that include drainage from the Central Valley, municipal and industrial wastewater, storm drains and urban stormwater runoff, and the disturbance of buried Bay sediments through dredging or erosion. The San Francisco Bay Regional Water Board adopted a clean water action plan in 2008 that established a TMDL for PCBs in the Bay. In 2010, EPA approved the TMDL for PCBs in the Bay.

According to the 2014/2016 California Integrated Report, Lower San Francisco Bay is 303(d) listed as impaired for trash, which is considered a threat to aquatic life. This threat can result in impairments for beneficial uses, including Noncontact Water Recreation (REC2), as designated for Lower San Francisco Bay. Provision C.10 of the San Francisco Bay MRP contains requirements for reductions in the trash load. Such reduction control actions must be implemented to meet the goal that calls for a 100 percent trash load reduction or no adverse impact on receiving waters from trash by June 30, 2025.[10]

Groundwater

Hydrogeology

The Project Site is within the San Mateo Plain subbasin of the larger Santa Clara Valley groundwater basin (Department of Water Resources [DWR] Basin Number 2-9.03). The San Mateo Plain subbasin, which encompasses approximately 75 square miles, is bounded by the Santa Cruz Mountains to the west, the Westside groundwater basin to the north, the Bay to the northeast, and San Francisquito Creek to the south. The subbasin's underlying water-bearing formations include Quaternary and Plio-Pleistocene alluvial deposits, which are composed of gravel, sand, silt, and clay. A relatively shallow aquifer overlies the confined and semi-confined aquifers near the margins of the Bay; most wells draw from deeper

[10] San Francisco Bay Regional Water Quality Control Board. 2022. *San Francisco Bay Region Municipal Regional Stormwater NPDES Permit Order No. R2-2022-0018, NPDES Permit No. CAS612008.* May 11.

deposits. The direction of groundwater flow is generally toward the east and the north. The basin is composed of alluvial fan deposits formed by tributaries to the Bay that drain the basin.[11]

Recharge of the subbasin occurs through infiltration, including the infiltration of precipitation on the valley floor. Little is known about the storage capacity of the subbasin; however, groundwater levels have remained relatively stable over the past 40 years because of limited groundwater pumping in the subbasin. Because of its relatively small size, the subbasin has historically responded to changes in groundwater pumping. This includes the previous overuse and lack of management prior to the 1960s that resulted in seawater intrusion and subsidence. Recent studies indicate that the subbasin is full.[12]

Groundwater was not observed during recent site investigations. However, based on subsurface studies of the Project Site, groundwater was assumed to be at depths ranging from approximately 29 to 49 feet below current grades. Historic high groundwater is mapped at a depth of approximately 25 feet below current site grades. A design groundwater depth of 25 feet was used in the analysis. Variations in groundwater levels may occur because of seasonal fluctuations, variations in rainfall, underground drainage patterns, or other factors.[13] Generally, groundwater in the vicinity of the Project Site moves in a northeasterly direction and toward the Bay. However, for past investigations, the gradient beneath the Project Site has been reported as sloping more easterly and toward San Francisquito Creek.[14]

Groundwater Quality

In general, groundwater quality in the Santa Clara Valley groundwater basin is good. Throughout most of the basin, groundwater is suitable for most urban and agricultural uses, with the exception of a few local impairments. The primary constituents of concern are total dissolved solids (TDS), nitrates, boron, and organic compounds. Near the Bay margin, including the San Mateo Plain subbasin, historic groundwater overdraft has created areas of saltwater intrusion where groundwater salinity is elevated because of contact with seawater that infiltrates subsurface aquifers. Groundwater tends to be hard (i.e., high mineral content), with high concentrations of iron and manganese.[15,16] Nitrates/nitrogen groundwater concentrations in the San Mateo Plain subbasin are also in excess of maximum contaminant levels established by the California Department of Health Services and EPA. Although many of the wells in the subbasin, particularly shallow wells, which are prone to contamination, have concentrations of TDS, iron, and manganese that are above secondary maximum contaminant levels, or drinking water standards,

[11] California Department of Water Resources. 2004. Santa Clara Valley Groundwater Basin, San Mateo Plain Subbasin. In *California's Groundwater Bulletin 118*. February 27. Available: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/2_009_03_SanMateoSubbasin.pdf. Accessed: August 7, 2023.

[12] Stanford University. 2017. *San Mateo Plain Groundwater Subbasin: A Local Case Study.* Water in the West. April 26. Available: https://waterinthewest.stanford.edu/news-events/news-insights/san-mateo-plain-groundwater-subbasin-local-case-study. Accessed: August 7, 2023.

[13] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development*. Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

[14] ATC Group Services LLC. 2021. *Phase I Environmental Site Assessment, SRI International, 333 Ravenswood Avenue, Menlo Park, California 94025.* ATC Project No. NPLANE2002. March 12.

[15] California Department of Water Resources. 2015. *California's Groundwater Update 2013: A Compilation of Enhanced Content for California Water Plan Update 2013, San Francisco Bay Hydrologic Region.* April. Available: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin118/Files/Statewide-Reports/GWU2013_Ch4_SanFranciscoBay_Final.pdf. Accessed: August 7, 2023.

[16] U.S. Geological Survey and the State Water Resources Control Board. 2013. *Groundwater Quality in the San Francisco Bay Groundwater Basins.* California Fact Sheet 2012–3111. March. Available: https://pubs.usgs.gov/fs/2012/3111/pdf/fs20123111.pdf. Accessed: August 7, 2023.

these concentrations have generally been stable over time, indicating that water quality is not degrading further.

Designated beneficial uses identified for the Santa Clara Valley groundwater basin are as follows:[17]

- Municipal and Domestic Supply (MUN),
- Industrial Process Supply (PROC),
- Industrial Service Supply (IND), and
- Agricultural Supply (AGR).

Groundwater objectives consist primarily of narrative objectives, combined with a limited number of numerical objectives. The primary groundwater objective is the maintenance of existing high-quality groundwater. At a minimum, groundwater should not contain concentrations of bacteria, chemical constituents, radioactivity, or substances that produce taste and odor in excess of objectives unless naturally occurring background concentrations are greater. Groundwater contamination can be the result of historical industrial activities or soil contamination. It can also originate from underground storage tank (UST) releases of hazardous materials.

The Project Site was developed as an army hospital in the early 1940s and later occupied by the Stanford Research Institute in 1946. Documented releases involved the UST associated with a structure that housed the institute's original boiler. Soil contamination remains beneath the UST. Although fuel oil had migrated vertically at least 40 feet down, soil and groundwater downgradient of the UST were unaffected. One 1,500-gallon diesel UST was removed from the Project Site in November 1998. Subsurface investigations detected total petroleum hydrocarbons as diesel (TPHd) at a concentration of 200 parts per million in soil collected from the base of the UST excavation. However, concentrations of TPHd, benzene, toluene, ethylbenzene and total xylenes (BTEX) in groundwater were below their respective laboratory detection levels. The presence of chloroform in groundwater was identified at concentrations above the groundwater vapor intrusion environmental screening level (ESL) for a commercial/industrial site. Chloroform concentrations slightly exceed the groundwater vapor intrusion ESLs on the north and west sides of the site. Although chloroform only slightly exceeded the groundwater vapor intrusion ESLs, and due to the depth to groundwater, chloroform vapor intrusion is not a threat to existing or future site occupants under a commercial/industrial land use, an additional investigation may be warranted to determine the extent of the affected groundwater. In addition, PFAS (per- and polyfluoroalkyl substances) was reported above the California Drinking Water Notification Level at some monitoring locations. However, given the concentrations of PFAS identified, PFAS did not represent a threat to groundwater.[18] Other hazards and contaminants of concern are also present on the Project Site, as discussed in detail in Section 3.13, *Hazards and Hazardous Materials*.

[17] San Francisco Bay Regional Water Quality Control Board. 2017. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan).* Originally published: January 18, 2007. Last updated: March 7, 2023.

[18] ATC Group Services LLC. 2021. *Phase I Environmental Site Assessment, SRI International, 333 Ravenswood Avenue, Menlo Park, California 94025*. ATC Project No. NPLANE2002. March 12.

Flooding

The Project Site is outside of the Federal Emergency Management Agency (FEMA) flood zone, as shown in Figure 3.12-2, FEMA Flood Zones within the Project area. The site is within FEMA Zone X, an area with minimal flood risk and above the limits of the 500-year floodplain.[19] Areas within the 500-year flood-hazard area are subject to a 500-year flood, which means that, in any given year, the risk of flooding is 0.2 percent.

A tsunami is a series of ocean waves caused by displacement of a large volume of water, typically as a result of an undersea earthquake or landslide. At the shoreline, tsunami waves may range from a few inches to more than 30 feet. As depicted on the Tsunami Inundation Map for Emergency Planning prepared by the California Governor's Office of Emergency Services (Cal OES) and California Geological Survey, some areas in the city adjacent to the Bay are within a tsunami inundation area. However, the Project Site is not within such an area.[20]

Seiches occur in an enclosed or partially enclosed body of water, such as a lake or reservoir. The Bay is a large, open body of water with no immediate risk of seiche. No other larger bodies of water are near the Project Site. There would be minimal to no risk of inundation from a seiche event in the vicinity of the Project Site.

Regulatory Setting

Federal

Clean Water Act

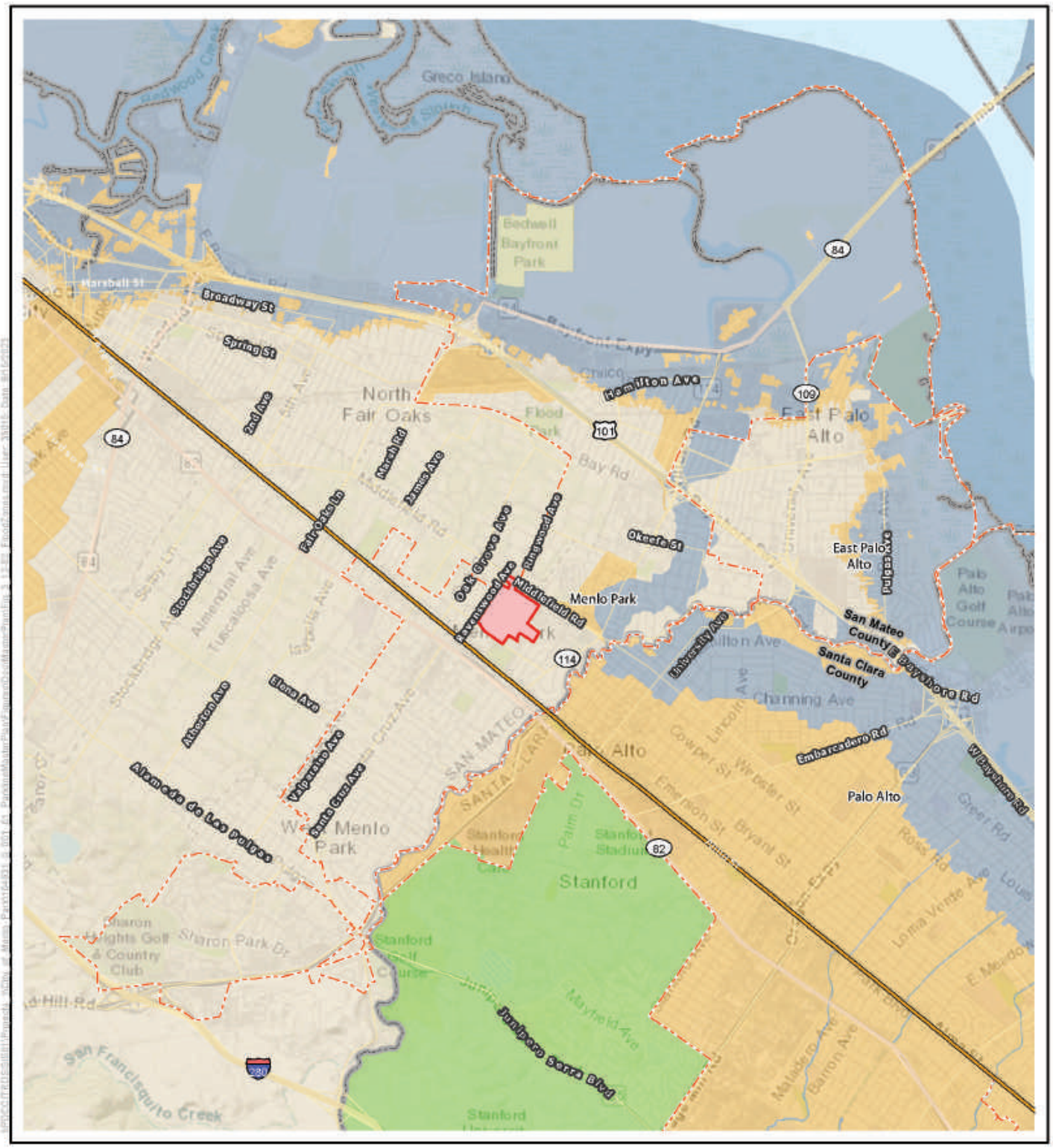
The federal CWA was enacted with the primary purpose of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. The CWA directs states to establish water quality standards for all waters of the United States and review and update such standards on a triennial basis.

EPA has delegated responsibility for implementation of portions of the CWA, including water quality control planning and control programs, such as the National Pollutant Discharge Elimination System (NPDES) program (discussed below), to the State Water Board and the Regional Water Boards.[21] The State Water Board establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and State of California (State) water quality statutes and regulations. The Regional Water Boards develop and implement water quality control plans (i.e., basin plans) that identify the beneficial uses of surface water and groundwater, water quality characteristics, and water quality problems.

[19] Federal Emergency Management Agency. 2012. *National Flood Hazard Layer Viewer*. FIRM 06081C0308E. October 16. Available: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed: August 7, 2023.

[20] State of California. 2021. *Tsunami Hazard Area Map, San Mateo County*. Produced by the California Geological Survey, the California Governor's Office of Emergency Services, and AECOM. Mapped at multiple scales.

[21] State Water Resources Control Board. 2023. *National Pollutant Discharge Elimination System (NPDES) – Wastewater.* Available: https://www.waterboards.ca.gov/water_issues/programs/npdes/#:~:text=The%20NPDES%20Program%20is%20a%20federal%20program%20which,Control%20Boards%20%28Regional%20Water%20Boards%29%2C%20collectively%20Water%20Boards. Accessed: September 20, 2023.



Legend

- Project Site
- City Boundaries
- County Boundary
- Special Flood Hazard Area* - 100-Year Flood Zone
- Zone D - Undetermined Flood Hazard
- Zone X1 - Moderate Flood Hazard
- Zone X2 - Minimal Flood Hazard

* Special flood hazard areas in the Project Vicinty include FEMA Zones A, AE, AH, AO, and VE

0 0.5 1 Miles

Source: Imagery, ESRI 2021; FEMA 2022 and 2023.

Figure 3.12-2
FEMA Flood Zones
Parkline

Section 303(d) and Total Maximum Daily Loads. The CWA contains two strategies for managing water quality. One is a technology-based approach that includes requirements for maintaining a minimum level of pollutant management, using the best available technology. The other is a water quality–based approach that relies on evaluating the condition of surface waters and setting limitations on the amount of pollution that surface waters can be exposed to without adversely affecting the beneficial uses of those waters. Section 303(d) of the CWA bridges the two strategies by requiring states to make a list of waters that fail to attain water quality standards after best-available-technology limits are implemented. For the waters on this list, and where the EPA administrator deems appropriate, the states are required to develop TMDLs, which are established at the level necessary to implement the applicable water quality standards.[22]

The CWA does not expressly require implementation of TMDLs. However, federal regulations require an implementation plan to be developed along with TMDLs. Furthermore, Sections 303(d) and 303(e) of the CWA, along with their implementing regulations, require approved TMDLs to be incorporated into basin plans. EPA has established regulations (40 Code of Federal Regulations 122) that require NPDES permits to be revised and consistent with any approved TMDL. A mercury TMDL has been established for the Bay and approved by the State Water Board (Resolution 2007-0045). TMDLs for the other constituents that contribute to impairment were scheduled to be established between 2013 and 2021 but have not been approved by the EPA.[23]

Section 404 Dredge/Fill Permitting. The discharge of dredged or fill material into waters of the United States is subject to permitting specified under Section 404 (Discharges of Dredged or Fill Material) of the CWA, which regulates the placement of fill materials in waters of the United States. Section 404 permits are administered by the U.S. Army Corps of Engineers (USACE).

Section 401 Water Quality Certification. Section 401 of the CWA requires an applicant for a federal permit to conduct an activity that may result in a discharge of a pollutant to obtain a Water Quality Certification (or waiver). A Water Quality Certification requires the evaluation of water quality considerations associated with dredging or the placement of fill materials into waters of the United States. Water Quality Certifications are issued by one of the nine geographically separated Regional Water Boards in California. Under the CWA, a Regional Water Board must issue or waive a Section 401 Water Quality Certification for a project to be permitted under CWA Section 404.

Section 402—National Pollutant Discharge Elimination System. The 1972 amendments to the federal Water Pollution Control Act established the NPDES permit program to control discharges of pollutants from point sources (Section 402). The 1987 amendments to the CWA created a new section that is devoted to stormwater permitting (Section 402[p]). EPA has granted the State (i.e., the State Water Board and Regional Water Boards) primacy in administering and enforcing the provisions of the CWA and NPDES. NPDES is the primary federal program that regulates point-source and nonpoint-source discharges to waters of the United States.

NPDES General Permit for Construction Activities. Most construction activities that disturb 1 acre of land or more are required to obtain coverage under the NPDES General Permit for Construction Activities (Construction General Permit). The State Water Board has issued a statewide Construction General Permit

[22] U.S. Environmental Protection Agency. 2015. *Water Quality Standards Handbook.* Chapter 7: Water Quality Standards and the Water Quality–based Approach to Pollution Control. EPA 820-B-15-001. January.

[23] State Water Resources Control Board. 2022. *California 2020–2022 Integrated Report*. Clean Water Act Section 303(d) List/305(b) Report. Available: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html. Accessed: August 7, 2023

(Order No. 2022-0057-DWQ, NPDES No. CAS000002), adopted September 2, 2023.[24] Activities subject to the Construction General Permit include clearing, grading, or ground disturbance, such as stockpiling or excavation that affects at least 1 acre of the total land area. The Construction General Permit requires the applicant to file a Notice of Intent to discharge stormwater and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP includes a site map and description of proposed construction activities, along with a demonstration of compliance with relevant local ordinances and regulations, and an overview of the best management practices (BMPs) that would be implemented to prevent soil erosion and discharges of other construction-related pollutants that could contaminate nearby water resources. Permittees are further required to conduct annual monitoring and reporting to ensure that BMPs are correctly implemented and effective in controlling the discharge of stormwater-related pollutants.

NPDES General Municipal Stormwater Permit. CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES General Permit for Municipal Separate Storm Sewer Systems (MS4s). MS4 permits require cities and counties to develop and implement programs and measures, including BMPs, control techniques, system design and engineering methods, and other measures, as appropriate, to reduce the discharge of pollutants in stormwater to the maximum extent possible. As part of permit compliance, permit holders create stormwater management plans for their respective locations. These plans outline requirements for municipal operations, industrial and commercial businesses, construction sites, and planning and land development. The requirements may include multiple measures to control pollutants in stormwater discharges. During implementation of specific projects, applicants are required to follow the guidance contained in the stormwater management plans, as defined by the permit holder. The discharge of stormwater runoff from the MS4 in San Mateo County is permitted under the San Francisco Bay MRP (Order No. R2-2022-0018; NPDES Permit No. CAS612008, as amended by R2-2023-0019), which is discussed under *San Francisco Bay Municipal Regional Stormwater Permit*, below.

National Flood Insurance Program

FEMA is responsible for determining flood elevations and floodplain boundaries. Such determinations are based on USACE studies. FEMA is also responsible for distributing Flood Insurance Rate Maps (FIRMs), which are used as part of the National Flood Insurance Program. The maps identify the locations of Special Flood Hazard Areas (SFHAs), including the 100-year floodplain.[25] FEMA allows non-residential development in the floodplain; however, construction activities are restricted within flood hazard areas, depending on the potential for flooding within each area.

Historically, Menlo Park was not considered flood prone; however, studies completed in the 1980s revised this assessment. FEMA conducted a flood insurance study that designated areas north of State Route (SR) 82 as SFHAs, making flood insurance mandatory for properties within the SFHAs and optional for those in other areas. The city of Menlo Park (city) performs floodplain management activities, above and beyond the minimum requirements for the National Flood Insurance Program. Participating in this program allows the city to earn discounted flood insurance rates for all community members. By following the guidelines set forth by FEMA, the community earns a community rating system (CRS) credit. As the community earns a higher CRS credit, the community is eligible for greater flood insurance discounts.

[24] State Water Resources Control Board. 2022. *National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit).* Order WQ 2022-0057-DWQ NPDES NO. CAS000002*.* September 8.

[25] Federal Emergency Management Agency. 2023. *Flood Maps*. Available: https://www.fema.gov/flood-maps. Accessed: September 20, 2023.

Menlo Park's current CRS is 8, effective October 1, 2020. Future planned levee projects, which would change the base flood elevation (BFE) or remove portions of Menlo Park from the flood zone, would also reduce residents' insurance premiums. FEMA requires communities to address issues such as tidal flooding (i.e., from San Francisco Bay) and residual flooding (i.e., from interior sources such as creeks) to remove the "flood-prone" designation from the FIRM. In response, the city adopted a flood ordinance that meets federal standards for regulating development and improving properties in SFHAs. The Project Site is outside of a SFHA.[26]

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act is established and implemented by the State Water Board and nine Regional Water Boards. Waters of the State are defined as "[a]ny surface water or groundwater, including saline waters within state boundaries." The definition includes natural and certain artificial or constructed facilities. Waters of the State include both waters of the United States and non-federal waters of the State. The act requires a project that discharges or proposes to discharge wastes that could affect the quality of California's water to file a waste discharge report with the appropriate Regional Water Board. The Porter-Cologne Act also requires the State Water Board or Regional Water Board to adopt a basin plan for the protection of water quality that specifies region-wide and water body–specific beneficial uses. It also sets numeric and narrative water quality objectives for several substances and parameters for numerous surface waters in its region. The Proposed Project lies within the jurisdiction of the San Francisco Bay Regional Water Board.[27] Beneficial uses, water quality objectives, and Section 303(d)-listed impairments are described above in the *Water Quality* section.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act of 2014 (SGMA) is a comprehensive, three-bill package that Governor Jerry Brown signed into law in September 2014. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention only if necessary to protect the resource. The plan is intended to ensure a reliable groundwater water supply for California for years to come. Specifically, the SGMA requires the formation of local groundwater sustainability agencies, which are required to adopt groundwater sustainability plans (GSPs) to manage the sustainability of groundwater basins. The groundwater sustainability agencies for all high- and medium-priority basins, as identified by DWR, must adopt a GSP or submit an alternative. The SGMA also requires governments and water agencies for high- and medium-priority basins to halt operations that result in overdraft conditions and bring the basins into balance respect to pumping and recharge. GSPs for high- and medium-priority basins were to be submitted to DWR by January 31, 2022; GSPs for high- and medium-priority basins with critical overdraft conditions were to be submitted to DWR by January 31, 2020.[28] The Project Site overlies the San Mateo Plain subbasin, which is

[26] Federal Emergency Management Agency. 2012. *National Flood Hazard Layer Viewer*. FIRM 06081C0308E. October 16. Available: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd. Accessed: August 7, 2023.

[27] San Francisco Bay Regional Water Quality Control Board. 2017. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan).* Originally published: January 18, 2007. Last updated: March 7, 2023.

[28] California Department of Water Resources. 2023. *Groundwater Sustainability Plan*. Available: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Groundwater-Sustainability-Plans. Accessed: September 20, 2023.

designated as a very low-priority basin and therefore not required to comply with the SGMA.[29] More information regarding groundwater in relation to water supply is provided in Section 3.16, *Utilities and Service Systems*.

Local

San Francisco Bay Municipal Regional Stormwater Permit

The San Francisco Bay Regional Water Board issued the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (MRP, Order No. R2-2022-0018, NPDES Permit No. CAS612008, as amended by R2-2023-0019) on May 11, 2022. The current MRP permit is an unofficial version (without the Fact Sheet and other Attachments) that incorporates amendments to MRP adopted in October 2023. The city is a permittee under the San Francisco Bay MRP for the discharge of stormwater runoff from MS4s. The following requirements apply to all projects, regardless of size, as appropriate:

- Construction-phase BMPs,
- Post-construction site design measures to maximize infiltration in pervious surface areas, and
- Post-construction source-control measures to keep pollutants out of stormwater.

The following requirements apply to certain projects, based on size and/or location:

- Post-construction stormwater treatment measures for most projects with 10,000 square feet or more of impervious surface area, and
- Post-construction stormwater quantity (i.e., flow-peak, volume, duration) controls for projects in certain locations with 1 acre or more of impervious surface area, in accordance with local hydromodification management plans.[30]

Provision C.3 of the San Francisco Bay MRP requires measures pertaining to source control, site design, and stormwater treatment for both new development as well as redevelopment to address pollutant discharges in stormwater runoff. Goals are accomplished through low-impact development (LID) techniques, including infiltration and biotreatment. The current MRP regulates stormwater treatment for new development but recognizes that certain urban infill and high-density developments have inherent environmental benefits and challenges. These types of projects, known as "special projects," are allowed to use specific types of non-LID treatment measures to treat a certain percentage of a site's runoff.

The Proposed Project is a new development and, therefore, considered a "regulated project" under the San Francisco Bay MRP. More specifically, the Proposed Project falls within the "other redevelopment projects" category of Provision C.3 (i.e., "any land-disturbing activity that results in the creation, addition, or replacement of exterior impervious surface area on a site on which some past development has occurred"). These projects include those that create or replace 10,000 square feet or more of impervious surface area, which applies to the Proposed Project. To meet the Provision C.3 requirements, projects must include appropriate site design measures, pollutant source controls, and treatment control measures.

[29] California Department of Water Resources. 2020. *SGMA Basin Prioritization Dashboard*. Available: https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed: September 20, 2023.

[30] More information on hydromodification is provided below in the San Mateo Countywide Water Pollution Prevention Program section.

San Mateo Countywide Water Pollution Prevention Program

The San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) is a partnership among the City/County Association of Governments, each incorporated city and town in the county, and the County of San Mateo, all of which share a common NPDES permit. Each municipality in San Mateo County is responsible for implementing a stormwater program in compliance with NPDES permit requirements to prevent discharges of polluted stormwater runoff from its streets to the local storm drain system and nearby surface waters. The Proposed Project would be required to comply with the San Francisco Bay MRP Provision C.3 Stormwater Technical Guidance.

Municipalities apply the "maximum extent practicable" standard, including standard stormwater conditions of approval, to projects that receive development permits. The Provision C.3 Stormwater Technical Guidance was prepared under the SMCWPPP to help projects design appropriate post-construction stormwater controls and meet local jurisdictional requirements as well as the requirements of the San Francisco Bay MRP. The Provision C.3 and Provision C.6 Development Review Checklist is required for projects that would result in any new impervious surface area. SMCWPPP Provision C.3.g, Hydromodification Control Requirements, requires certain new development projects to manage increases in stormwater runoff flows and volumes. Permit permittees, including the city, have developed maps to show where hydromodification controls would be required. The Proposed Project is exempt from SMCWPPP Provision C.3.g because the Project Site is outside the limits of the hydromodification areas.[31] The site is in a catchment area that discharges to a tidal area, hardened channel, or directly to the Bay and exempt from hydromodification requirements.[32]

San Mateo County Flood Control and Sea-Level Rise Resiliency District

The San Mateo County Flood Control and Sea-Level Rise Resiliency District coordinates cross-jurisdictional collaborations to manage impending threats of flooding. The district initiates new countywide efforts to address issues associated with sea-level rise (SLR), flooding, coastal erosion, and large-scale stormwater infrastructure improvements through integrated regional planning, project implementation, and long-term maintenance. Made up of 20 incorporated cities, the City/County Association of Governments, and the County of San Mateo, the district's purpose is to create a unified agency that cost effectively implements resilient infrastructure to face flood challenges. The San Mateo County Flood Control and Sea-Level Rise Resiliency District was created by modifying the existing flood control district through State legislation (i.e., Assembly Bill 825 [2019–2020]).

Menlo Park Municipal Code

Menlo Park Municipal Code contains the following requirements related to the protection of water resources:

Title 7: Health and Sanitation, Chapter 7.35. This chapter discusses general water conservation principals and adopts water conservation as a citywide goal. Furthermore, it notes that the city should conserve the water supply for uses with the greatest public benefit, particularly domestic uses, sanitation, and fire protection. The chapter includes regulations and restrictions regarding water use and mandates the elimination of any wasteful use of water.

[31] San Francisco Bay Regional Water Quality Control Board. 2022. *California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater NPDES Permit.* Order No. R2-2022-0018, NPDES Permit No. CAS612008. May 11.

[32] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

Title 7: Health and Sanitation, Chapter 7.42. This chapter officially adopts the San Mateo Countywide Pollution Prevention Program Stormwater Management Plan and its provisions as city policy. The purpose and intent of the chapter is to ensure the future health, safety, and general welfare of Menlo Park citizens by eliminating non-stormwater discharges to the municipal separate storm sewer; controlling discharges to municipal separate storm sewers from spills, dumping, or the disposal of materials other than stormwater; and reducing pollutants in stormwater discharges to the maximum extent practicable. The intent of the chapter is also to protect and enhance the quality of the watercourses, water bodies, and wetlands in a manner consistent with the CWA.

To meet the requirements of Stormwater Ordinance 859 (Chapter 7.42), the city requires a Grading and Drainage Plan whenever more than 500 square feet of the surface of a lot is affected by a building project. The goal of the Grading and Drainage Plan is to manage possible sources of water pollution (i.e., source control), make sure site drainage does not affect neighboring properties (i.e., site design), and remove contaminants from the stormwater before it drains into the city street or storm drain system (i.e., treatment measures).

Title 12: Buildings and Construction, Chapter 12.42. This chapter contains methods and provisions for preventing flood damage. Under the provisions of this chapter, a development permit is required before construction or development activities in a flood hazard area can begin. The standards for construction in this chapter involve anchoring, flood-resistant construction materials and methods, and elevation and flood-proofing standards.

Title 12: Buildings and Construction, Chapter 12.44. This chapter is known as the city Water-Efficient Landscaping Ordinance. Landscapes must be designed for water efficiency and comply with the criteria described in the ordinance. All new construction, of applicable sizes, would complete a landscape project application and documentation package and comply with the landscape and irrigation maintenance schedule. To demonstrate that the landscape meets the ordinance's water efficiency goals, two options are provided: the planting restrictions option (e.g., no turf or high-water-use plants, at least 80 percent native plants in landscaped areas, low-water-use plants, no-water-use plants) and the water budget calculation option.

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with hydrology and water quality.

The following goal and policy from the Open Space/Conservation Element related to water quality were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal OSC5: Ensure Healthy Air Quality and Water Quality. Enhance and preserve air quality in accord with State and regional standards and encourage coordination regarding water quality management, including management of both the water supply and wastewater treatment.

> **Policy OSC-5.1: Air and Water Quality Standards.** Continue to apply standards and policies established by the Bay Area Air Quality Management District (BAAQMD), San Mateo Countywide

Water Pollution Prevention Program (SMCWPPP), and city of Menlo Park Climate Action Plan through the California Environmental Quality Act (CEQA) process and other means as applicable.

The following goal and policies from the Safety Element related to flood control, tsunamis, and dam safety were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal S1: Ensure a Safe Community. Minimize risks to life and damage to the environment and property from natural and human-caused hazards and ensure community emergency preparedness, along with a high level of public safety services and facilities.

Policy S1.26: Erosion and Sediment Control. Continue to require the use of BMPs for erosion and sediment control measures associated with proposed development in compliance with applicable regional regulations.

Policy S1.27: RWQCB [Regional Water Quality Control Board] Requirements. Enforce stormwater pollution prevention practices and appropriate watershed management plans in the RWQCB general NPDES requirements, the San Mateo County Water Pollution Prevention Program, and the city's Stormwater Management Program. Revise, as necessary, city plans so they integrate water quality and watershed protection with water supply, flood control, habitat protection, groundwater recharge, and other sustainable development principles and policies.

The following goal, policy, and programs associated with hydrology and water quality from the Land Use Element were adopted to avoid or minimize environmental impacts and pertain to the Proposed Project:

Goal LU-7: Promote the implementation and maintenance of sustainable development, facilities and services to meet the needs of Menlo Park's residents, businesses, workers, and visitors.

Policy LU-7.7: Hazards. Avoid development in areas with seismic, flood, fire, and other hazards to life or property when potential impacts cannot be mitigated.

Policy LU-7.4: Water Protection. Work with regional and local jurisdictions and agencies responsible for groundwater extraction to develop a comprehensive underground water protection program in accordance with the San Francisquito Creek Watershed Policy, which includes preservation of existing sources and monitoring of all wells in the basin to evaluate the long-term effects of water extraction.

Program LU-7.B: Groundwater Wells. Monitor pumping from existing and new wells to identify and prevent potential ground subsidence, salinity intrusion into shallow aquifers (particularly in the Bayfront Area), and contamination of deeper aquifers.

Program LU-7.F: Adaptation Plan. Work with emergency service providers to develop an adaptation plan, including funding mechanisms, to help prepare the community for potential adverse impacts related to climate change, such as SLR, extreme weather events, wildfire, and threats to the health of ecosystems and species.

Program LU-7.G: SAFER Bay Process. Coordinate with the SAFER Bay process so that the Menlo Park community's objectives for SLR/flood protection, ecosystem protection, and recreation are adequately taken into consideration.

Program LU-7.I: Green Infrastructure Plan. Develop a Green Infrastructure Plan that focuses on implementing citywide projects to mitigate flooding and improve the quality of stormwater.

Environmental Impacts

This section describes the impact analysis related to hydrology and water quality for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:
    - Result in substantial erosion or siltation onsite or offsite,
    - Substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite,
    - Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, or
    - Impede or redirect floodflows.
- In flood hazard, tsunami, or seiche zones, risk a release of pollutants due to project inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Methods for Analysis

All Project elements were analyzed by comparing baseline conditions, as described above in the *Environmental Setting*, to conditions during construction and/or operation of the Proposed Project. The analysis focuses on issues related to surface hydrology, groundwater supply, surface water and groundwater quality, and flood hazards. The evaluation and identification of key construction- and operations-related impacts are based on the physical characteristics of the Proposed Project and the magnitude, intensity, location, and duration of specific activities. Compliance with existing laws, regulations, and policies is assumed to be part of the baseline setting against which the Proposed Project's incremental impacts are assessed.

- **Surface Water Hydrology.** The surface water hydrology impact analysis considers changes in impervious surfaces and drainage patterns. Information on the change in impervious surface area,

runoff quantities, and drainage patterns was provided in the Project Stormwater Analysis Memorandum and the Hydrology Calculation Summary as well as the C.3 and C.6 Development Review Checklist.[33,34,35]

- **Groundwater Hydrology.** Potential impacts on groundwater supply were analyzed using information from publicly available publications and site-specific technical reports, including the preliminary geotechnical investigation.[36] The potential impacts associated with construction dewatering and recharge capabilities were also evaluated.
- **Surface Water and Groundwater Quality.** Impacts on surface water and groundwater quality were analyzed using information regarding potential sources of pollution generated by activities such as vehicle use and parking, building maintenance, pesticide use, trash disposal, and hazardous material storage using site-specific technical reports, including the Phase I Environmental Site Assessment.[37] Additional information on hazardous materials with potential to affect the Proposed Project is provided in Section 3.13, *Hazards and Hazardous Materials*. These impacts are compared to potential impacts from Project-related sources of pollution during Project construction (e.g., sediment and construction material) as well as Project operation (e.g., vehicle use, building maintenance, storage of hazardous materials).
- **Flood Hazards.** The impact analysis for flood risk uses FEMA mapping to determine the existing flood zone, which may affect flooding risks.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact, in which case the analysis does not identify a "worst-case" scenario.

The two buildout scenarios would occur on the same parcels. The two buildout scenarios would result in the same building footprint and soil disturbance during construction. Excavation volumes and depths would also be the same under both buildout scenarios scenario; therefore, the potential for dewatering during construction would be the same under both buildout scenarios. Therefore, impacts would be the same regardless of the 100 percent office scenario or 100 percent R&D scenario for purposes of the impact analysis for the following impacts: groundwater contamination, groundwater supplies or interference with groundwater recharge, existing drainage patterns and associated erosion or siltation, stormwater

[33] Ibid.

[34] County of San Mateo. 2023. *C.3 and C.6 Development Review Checklist, Parkline Campus Development*. April 13.

[35] Kier + Wright. 2023. *Hydrology Calculation Summary, SRI Campus*. April 17.

[36] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development.* Project Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

[37] ATC Group Services, LLC. 2021. *Phase I Environmental Site Assessment, SRI International, 333 Ravenswood Avenue, Menlo Park, California 94025*. ATC Project No. NPLANE2002. March 12.

runoff and existing drainage patterns, and conflicts with respect to water quality control plans or sustainable groundwater management plans. However, as discussed in Section 3.3, *Transportation*, during operation, office uses could increase daily vehicle trip generation and employment density compared to R&D uses, resulting in potentially more contaminated onsite stormwater runoff with the potential to degrade surface water quality conveyed to receiving waters. Therefore, the 100 percent office scenario has greater potential to result in significant impacts with respect to violating water quality standards or waste discharge requirements or otherwise substantially degrading surface water or groundwater quality, and is therefore the scenario evaluated for purposes of the analysis in this section.

Impacts Not Evaluated in Detail

This section describes why the Proposed Project would result in ***no impact*** related to a release of pollutants due to Project inundation in a flood hazard, tsunami, or seiche zone, and no further analysis is required.

Risk Release of Pollutants Due to Project Inundation in Flood Hazard, Tsunami, or Seiche Zones. The Project Site is not within a tsunami inundation area, as depicted on the Tsunami Inundation Map for Emergency Planning prepared by the Cal OES and California Geological Survey. Therefore, the Proposed Project would not be subject to inundation by a tsunami. There are no reservoirs adjacent to the Project Site; therefore, the Proposed Project would not be prone to inundation from a seiche. Menlo Park contains areas that have been identified as lying within the FEMA 100-year floodplain. These areas are northeast of the Project Site; the Project Site itself is not within the c100-year floodplain. Therefore, the Project Site would not be subject to inundation from a flood.

During construction activities, stormwater BMPs would be implemented, as required by federal, county, and local policies, to minimize any degradation of water quality associated with stormwater runoff or construction-related pollutants. In addition, construction and maintenance activities would comply with local stormwater ordinances, stormwater requirements established by the MRP, and regional waste discharge requirements. Measures in the SWPPP would include a range of stormwater control BMPs (e.g., installing silt fences, staked straw wattles, or geofabric to prevent silt runoff to storm drains or waterways).

Project operation would comply with the SMCWPPP and the stormwater ordinance, as required by Menlo Park Municipal Code Title 7, Chapter 7.42; stormwater requirements established by the MRP; and regional waste discharge requirements. Additional discussion and measures to reduce risks related to pollutants and floodflows are provided under Impact HY-1 and Impact HY-3.

Impacts and Mitigation Measures

Impact HY-1: Water Quality. The Proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality. (LTS/M)

Construction

Surface Water Quality

Project construction activities, including grading, soil and material stockpiling, and other earth-disturbing activities, could result in short-term water quality impacts from erosion and the subsequent sediment transport to adjacent properties, roadways, or watercourses from storm drains. The total area of land

disturbance during construction would be approximately 68.4 acres. Approximately 281,605 cubic yards of excavated soil would be transported offsite for disposal. Sediment transport to local drainage facilities, such as drainage inlets, culverts, and storm drains, could result in reduced stormflow capacity as well as localized ponding or flooding during storm events.

Project construction would also involve the use of motorized heavy equipment, including trucks and dozers, that would require fuel, grease, and fluids. Construction would involve the delivery, handling, and storage of construction materials and waste (e.g., concrete debris). An accidental chemical release or spill from a vehicle or equipment could affect the quality of surface water or groundwater. Construction activities could also generate dust, litter, oil, and other pollutants that could temporarily contaminate runoff from the Project Site. All construction equipment and material would be staged onsite. Staging areas or building sites could be sources of pollution with the use of paints, solvents, cleaning agents, and metals during construction.

In addition to the 281,605 cubic yards of exported soil, the Proposed Project would demolish approximately 1,095,719 square feet (sf) of building space. This construction demolition waste would be disposed of at an offsite landfill. Waste would be source separated and tracked to divert it away from landfills, with a target of recycling more than 80 percent of construction and demolition waste.

All Project construction activities would be subject to existing regulatory requirements, as described above under "Regulatory Setting." Because land disturbance associated with the Proposed Project would affect more than 1 acre, coverage under the NPDES Construction General Permit would be required. Standards contained in the Construction General Permit, as described above, would ensure that water quality would not be degraded. As part of compliance with the Construction General Permit, standard erosion control measures and other BMPs would be identified in the SWPPP. These measures would be implemented during construction to reduce contamination and sedimentation in waterways. As a performance standard, the BMPs included in the SWPPP would be required to represent the best available technology that is economically achievable and the best conventional pollutant control technology for reducing pollution. Commonly practiced BMPs consist of a wide variety of measures to control and prevent the discharge of potential pollutants and non-stormwater discharges to storm drains and watercourses. These measures include erosion control devices such as silt fences, soil blankets or mats, and earthen dikes or berms to prevent silt runoff to storm drains or waterways. Topsoil and backfill would be stockpiled, protected, and replaced at the conclusion of construction activities. Disturbed soil would be revegetated as soon as possible with the appropriate selection and schedule for turf, plants, and other landscape vegetation. No disturbed surfaces would be left without erosion control measures in place during the wet season, which generally occurs between October 1 and April 30. In addition, all soil-disturbing activities would occur only in dry weather.

The Proposed Project is anticipated to be constructed in one phase, with site preparation occurring over the course of 12 to 15 months and buildout of site infrastructure and vertical improvements occurring afterward over the course of 30 to 36 months. Assuming the Proposed Project is constructed in one phase, construction is expected to occur over a total of approximately 51 months, or 4.2 years, conservatively assuming that construction durations will be on the longer end of the estimated ranges. However, the ultimate delivery dates may vary because of market conditions, the availability of financing, and tenancy requirements. Therefore, in order to provide for a conservative analysis, a further delineated phasing plan has been evaluated under which the Project is constructed over a longer timeline in three phases, as discussed in more detail below. Assuming the Proposed Project is constructed in three phases, construction could begin as early as mid-2025 and end in late 2031, a period of approximately 6.5 years. Therefore, some activities would occur during the wet season. Specific erosion and sediment control BMPs would be implemented for Project construction occurring during the wet season. The Project Sponsor would be required to implement BMPs to minimize the potential for large rain events to mobilize loose sediment during construction.

Construction activities must also comply with the MRP. This includes filing a Notice of Intent for permit coverage under the Construction General Permit and complying with the Menlo Park Municipal Code to ensure that water quality would not be degraded. In addition to compliance with the Menlo Park Municipal Code (Title 7, Chapter 7.42) and the permit review process, the Project Sponsor would also be required to prepare and implement a Grading and Drainage Plan. BMPs implemented as part of the Grading and Drainage Plan would reduce the amount of stormwater runoff and prevent the entry of Project-related sediment and pollutants into the city's storm drain system and surface waters.

Project construction would be in compliance with the Construction General Permit, including development and implementation of the SWPPP, and local stormwater regulations, such as the Menlo Park Municipal Code and other related regulations. Compliance with the requirements would ensure that construction activities would not result in a violation of water quality standards or waste discharge requirements or otherwise result in water quality degradation. Project impacts on surface water quality during construction would be ***less than significant***. No mitigation is required.

Groundwater Quality

Temporary construction dewatering could be required in isolated areas with shallow groundwater during excavation and trenching for foundation work and underground parking garages. The Project Site has historical soil and groundwater contamination issues. Soil vapor beneath the property has low concentrations of VOCs. Chloroform concentrations also slightly exceed the Groundwater Vapor Intrusion environmental screening levels on the north and west sides of the site.[38] Coverage under the Construction General Permit typically includes dewatering activities as authorized non-stormwater discharges, provided that dischargers prove that the quality of the water is adequate and not likely to affect beneficial uses.

In the event that contaminated groundwater is encountered during dewatering at the Project Site, the contractor may be subject to dewatering requirements in addition to those outlined in the Construction General Permit. Requirements include discharge sampling, treatment, and reporting to ensure compliance with applicable construction dewatering discharge permitting. If contaminated groundwater is encountered, compliance with discharge sampling, monitoring, and reporting requirements, as well as the VOC [volatile organic compound] and Fuel General Permit (Order No. R2-2018-0050), may also be required. If it is found that groundwater does not meet water quality standards, it would either be treated prior to discharge so that all applicable water quality objectives, as designated in the Basin Plan, would be met or hauled offsite for treatment and disposal at an appropriate waste treatment facility that is permitted to receive such water.

Other construction activities could result in short-term groundwater quality impacts associated with the input of sediment loads or chemicals into storm drains or groundwater aquifers that would exceed water quality objectives if proper minimization measures are not implemented. However, the Proposed Project would be required to comply with the MRP, including filing a Notice of Intent for permit coverage under the Construction General Permit, as well as local ordinances regarding stormwater and construction site runoff. These requirements involve development and implementation of a Construction General Permit, SWPPP, and stormwater management measures specific to the Project Site and Project construction activities to minimize water quality impacts related to spills or other actions that could contaminate groundwater. BMPs would be required and incorporated into the SWPPP and other permits prior to approval of grading permits, thereby providing an acceptable level of protection for water quality. More

[38] ATC Group Services, LLC. 2021. *Phase I Environmental Site Assessment, SRI International, 333 Ravenswood Avenue, Menlo Park, California 94025*. ATC Project No. NPLANE2002. March 12.

information is provided in Section 3.13, *Hazards and Hazardous Materials*. In addition, compliance with waste discharge requirements and dewatering regulations would ensure that dewatering activities would be monitored as required and that no violations of water quality standards or waste discharge requirements would occur. However, there is the potential to encounter contaminated groundwater. This would be considered a ***potentially significant*** impact during Project construction.

MITIGATION MEASURES. To address potential risks associated with an accidental release of hazardous materials from affected media onsite, the Proposed Project would be required to incorporate the recommendations described in the site-specific investigations prepared, including a Phase I ESA and a Site Assessment Report. Implementation of Mitigation Measures HAZ-2.1 (Prepare and Implement an Environmental Site Management Plan) and HAZ-2.2 (Require Groundwater Monitoring and Sampling prior to Dewatering Activity) presented in Section 3.13, *Hazards and Hazardous Materials*, would reduce potential impacts by requiring an Environmental Site Management Plan prior to the start of construction to minimize any potential exposure of construction personnel, future site occupants, and the general public to contaminated soils and unknown environmental conditions/subsurface features as well as groundwater monitoring and sampling if dewatering is required within the footprint of the construction sites. Implementation of these mitigation measures would reduce potentially significant impacts related to the release of hazardous materials from affected media onsite to ***less than significant with mitigation***.

Operation

Implementation of the Proposed Project would result in an increase in pervious surface area as compared to existing conditions. Approximately 42.3 percent (1.165 million sf) of the Project Site would be covered with pervious landscaped areas, compared to approximately 25.7 percent (643,045 sf) under existing conditions. The Proposed Project's introduction of new landscaped areas and open spaces and a reduction in the amount of surface parking and hardscape would reduce the amount of impervious cover. Impervious pavement or rooftop materials would cover 57.7 percent of the Project Site, compared to 74.3 percent under existing conditions.[39] Because of the reduction in impervious surface area across the Project Site, runoff rates and volumes would be less than under existing conditions. In addition, the Proposed Project would conform to Provision C.3 of the MRP and San Mateo County C.3 requirements and incorporate LID stormwater treatment measures to address runoff associated with impervious cover. The Project Site would include up to approximately 65,500 sf of bioretention areas that would be dispersed throughout the site. Generally, biotreatment areas would either be flow-through planters or recessed biotreatment ponds. The Project bioretention basins would be lined at the bottom; therefore, infiltration would not occur. All existing public streets, including public sidewalks surrounding the Project site, require stormwater treatment with the use of LID measures or treatment systems, subject to city of Menlo Park requirements. In addition to bioretention ponds, the Proposed Project could also include large centralized treatment areas, which could also serve as open space.[40] It is anticipated that a stormwater operations and maintenance agreement with the city would be required to ensure that any installed stormwater facilities would be properly maintained. LID site design measures may include directing runoff from sidewalks, patios, and surface parking areas and onto vegetated areas.[41] In addition to the reduction in impervious surface area on the Project Site, the Proposed Project would be designed in compliance with the city's stormwater requirements, including grading, drainage, and hydrology requirements. Compliance with these requirements would ensure no net increase in stormwater flows

[39] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

[40] Ibid.

[41] County of San Mateo. 2023. *C.3 and C.6 Development Review Checklist, Parkline Campus Development*. April 13.

after Project implementation. The Proposed Project would reduce stormwater discharges by approximately 18.5 percent during a 10-year storm.[42]

The Proposed Project would provide approximately 26.4 acres of open space and landscaped areas would include a total of approximately 1,503 trees, an overall increase in the number of trees compared to existing conditions. Native drought-tolerant plants and low-flow drip irrigation systems would be installed to minimize potable water consumption and associated runoff volumes. Landscaped areas would function as biofiltration areas, treating stormwater runoff and naturally filtering contaminants from the Project Site's stormwater runoff.

The Proposed Project would be designed and maintained in accordance with city of Menlo Park, County of San Mateo, and San Francisco Bay Regional Water Board water quality requirements, such as the San Francisco Bay MRP and SMCWPPP water quality requirements. Furthermore, it would comply with the General Construction Permit, San Francisco Bay MRP, Provision C.3, and SMCWPPP Provision C.3 Stormwater Technical Guidance. The Proposed Project would also implement the SWPPP and other erosion control measures and incorporate stormwater treatment measures, such as bioretention ponds and self-retaining areas. The Proposed Project would not violate any water quality standards or otherwise result in water quality degradation during operation. Therefore, impacts on water quality during operation would be ***less than significant***. No mitigation during operation is required.

Impact HY-2: Groundwater Supply and Recharge. The Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded. (LTS)

Construction

Groundwater is assumed to be at depths ranging from approximately 29 to 49 feet below current grades, although historic high groundwater is mapped at a depth of approximately 25 feet below current site grades. The design groundwater depth of the Project Site is 25 feet.[43] It is currently anticipated that the maximum depth of excavation would be 15 feet below the current grade. Although unlikely, construction dewatering could be required in isolated areas with shallow groundwater during excavation and trenching for foundation work and underground parking garages. Dewatering would be conducted on a one-time or temporary basis during the construction phase and would not result in a loss of water that would deplete groundwater supplies. Water supplies for construction activities such as dust control, concrete mixing, or material washing would come from existing city fire hydrants with meters. Groundwater supplies would not be used during construction activities. Therefore, construction of the Proposed Project would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. This impact would be ***less than significant***. No mitigation is required.

Operation

The pervious surface area within the Project Site would increase upon completion of the Proposed Project. Approximately 42.3 percent of the Project Site would be covered with pervious surfaces and 57.7 percent would be covered with impervious surfaces, resulting in approximately a 16.6 percent decrease in

[42] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

[43] Cornerstone Earth Group. 2023. *Preliminary Geotechnical Investigation, Parkline Mixed-Use Development Project.* Number 129-7-1. Originally published: February 16, 2021. Revised: April 27.

impervious surface area.[44] The Proposed Project would include new landscaped areas, with an overall increase in the number of trees; native drought-tolerant landscaping; self-retaining areas; and other features that would be integrated into the design of the Project Site. These treatment areas would receive stormwater runoff that would be diverted from impervious surfaces. New pervious landscaped areas would slow surface water runoff and allow it to percolate into the ground, thereby providing increased benefits related to groundwater infiltration and recharge.

Groundwater supplies would not be used for operation and maintenance activities. Because the Proposed Project would not increase groundwater demand or decrease the area for groundwater recharge, it would not substantially deplete groundwater supplies or substantially interfere with groundwater recharge. Natural groundwater recharge of the San Mateo Plain subbasin would continue to occur, primarily through infiltration from streams. Therefore, the Proposed Project's operations-related impact on groundwater supplies and recharge would be ***less than significant***. No mitigation is required.

Impact HY-3: Drainage and Flooding. The Proposed Project would not substantially alter the existing drainage pattern of the Project Site in a manner that would result in substantial erosion or flooding, impede or redirect floodflows, contribute runoff that would exceed the capacity of the stormwater system, or provide substantial additional sources of polluted runoff. (LTS)

Construction

During construction, stormwater drainage patterns could be temporarily altered because of site grading, site preparation, and excavation. The Proposed Project would remove approximately 739 trees and plant approximately 873 new trees, resulting in a total of approximately 1,503 trees on the Project Site. Grading would be designed to protect existing heritage trees while balancing the required earthwork to limit the need to import or export fill to and from the Project Site. Generally, the site grading strategy would align with existing grades, incorporate gentle slopes, and raise first-floor elevations to allow drainage to and within landscaped areas. Project construction would also implement BMPs, as required in the SWPPP, to minimize the potential for erosion or siltation in nearby storm drains as well as temporary changes in drainage patterns during construction. During construction, implementation of an erosion control plan would also be required to minimize construction-related erosion. Construction BMPs would capture and infiltrate small amounts of sheetflow such that offsite runoff would not increase, thereby ensuring that drainage patterns would not be significantly altered. Construction activities could also generate dust, litter, oil, and other pollutants that could be conveyed into stormwater and provide additional sources of polluted runoff. As part of compliance with the Construction General Permit, stormwater BMPs would be identified in the SWPPP. These measures would be implemented during construction to reduce contamination and additional sources of pollution in runoff and manage stormwater flow rates and volumes.

Measures required by the Construction General Permit would limit site runoff during construction but would not alter stormwater drainage patterns. BMPs would be implemented to control construction site runoff, ensure proper stormwater control and treatment, and reduce the discharge of pollutants to the storm drain system. As discussed in Impact HY-1, compliance with Provision C.3 of the MRP to manage runoff during construction and operation as well as city stormwater ordinances and policies, including grading, drainage, and hydrology requirements, in combination with the reduction in impervious surface area on the overall Project Site, would ensure that there would be no net increase in runoff compared with pre-Project conditions. Therefore, construction of the Proposed Project would not substantially alter the

[44] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

existing drainage pattern of the area in a manner that would result in substantial erosion or siltation or increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite. Project construction would not result in an exceedance of drainage system capacities. The associated impact would be ***less than significant***. No mitigation is required.

Operation

The Proposed Project would reduce the amount of impervious surface area across the Project Site by introducing new landscaped areas and open spaces and reducing the area for surface parking and hardscape. The Proposed Project would have a pervious surface area of approximately 42.3 percent across the site, compared to 25.7 percent under existing conditions. Because of the reduction in impervious surface area across the Project Site, the estimated flow rate for runoff leaving the Project Site would be less than under existing conditions. Therefore, no additional hydromodification measures would be required. The Proposed Project would conform with San Mateo County Provision C.3 requirements, as required by the city's NPDES municipal permit, and incorporate LID stormwater treatment measures.

The Project Site would include up to 65,500 sf of bioretention areas that would be dispersed throughout the Project site. Generally, biotreatment areas would either be flow-through planters or recessed biotreatment ponds. Bioretention basins and flow-through planters would manage stormwater onsite to reduce the flow rate of stormwater discharges. The Project bioretention basins would be lined at the bottom; therefore, infiltration would not occur. In addition to bioretention ponds, the Proposed Project could also include large centralized treatment areas, which could also serve as open space. Additional strategies to improve onsite drainage would include raising first-floor elevations to allow drainage to and within landscape areas, sloping to the perimeter of the site, and utilizing a loop road to manage stormwater drainage paths to the city's storm drain system. Overall, the Proposed Project would maintain the existing drainage pattern toward the northeast corner of the site. However, if needed, Project stormwater flows also could be directed to smaller storm drain systems in Laurel Street and Burgess Drive.[45]

Project Site runoff and associated erosion would be managed through a combination of LID strategies that could include vegetated areas, a self-retaining area, and additional trees. Directing runoff from impervious surface areas onto vegetated areas would be another strategy. Runoff would be captured in a water collection system to reduce the use of potable water for irrigation and building needs. No surface water features are within the Project Site; therefore, the course of a stream or river would not be altered.

Compliance with the city's stormwater, drainage, and hydrology requirements would ensure no net increase in stormwater flows after Project implementation. Storm drain pumps and bioretention basins would allow for stormwater detention. The reduction in impervious surface area and increased stormwater detention would reduce stormwater discharges by approximately 18.5 percent during a 10-year storm.[46]

New onsite utility infrastructure would be required to support the Proposed Project. Within the residential area, all residential utilities would connect to existing mains in Laurel Street or Ravenswood Avenue. The commercial utilities within the office/R&D area would connect to existing mains in Ravenswood Avenue and Middlefield Road through existing utility easements. A utility corridor beneath the new streets and internal loop road would include storm drain mains. Offsite improvements in the public right-of-way are anticipated to be included as part of the Proposed Project. At the current time, the

[45] Ibid.
[46] Ibid.

scope of potential offsite improvements has not been specifically defined. At a minimum, new curbs and gutters are anticipated to be required, consistent with the city's standard requirements. Trench restoration would also be required wherever new utility connections would be provided. It is anticipated that the Proposed Project would implement certain green infrastructure features within the public rights-of-way to be owned and maintained by the city, including stormwater treatment features for certain public streets along Project frontages. The final offsite improvements would be determined in conjunction with the city's Public Works Department during the entitlement and review process.

Because more than 10,000 sf of impervious surface area would be replaced, the Proposed Project would be a Provision C.3 regulated project and therefore required to comply with MRP Provision C.3. Furthermore, stormwater treatment methods would also comply with local stormwater requirements. Stormwater treatment volumes were sized per SMCWPPP Provision C.3 flow- and volume-based methods, resulting in approximately 1,320 sf of green infrastructure for stormwater treatment, in excess of the 1,208 sf of required treatment area. Stormwater treatment would be provided by an unlined bioretention area with an underdrain and infiltration trench. Other stormwater treatment site design measures, including self-retaining areas and tree interceptor credits, are also in excess of sizing requirements.[47]

The city has stringent stormwater requirements that exceed the C.3 provisions of the MRP (i.e., post-development stormwater volumes must not exceed pre-development volumes for projects adding net new impervious surfaces, regardless of whether the projects are regulated). Because the Proposed Project would decrease the impervious surface area, runoff flow rates would also decrease compared to existing conditions. Therefore, the capacity of the existing or planned storm drain system would not be exceeded. In addition, implementation of LID design guidelines and engineering review of drainage calculations and development plans by the Menlo Park Public Works Department would further ensure that there would be no substantial increases in peak flow rates or runoff volumes throughout the entire Project Site. Development consistent with the city's General Plan would not require significant expansion of existing stormwater drainage infrastructure because the majority of the Proposed Project would be infill related or within existing storm drainage systems. Implementation of landscaped areas would provide onsite infiltration of stormwater runoff. Furthermore, the city requires no net increase in stormwater flow rates. For these reasons, the Proposed Project would not result in substantial impacts associated with exceeding stormwater drainage system capacity.

All Project-related development would comply with the applicable federal, State, and local requirements discussed in the *Regulatory Setting*, including requirements regarding water quality, flood control, and stormwater management. Therefore, the Proposed Project would not result in changes to stormwater runoff rates or volumes that would result in the capacity of existing or planned stormwater drainage systems being exceeded, provide substantial additional sources of polluted runoff, or impede or redirect floodflows. The impact related to stormwater runoff and capacity would be ***less than significant***. No mitigation is required.

Impact HY-4: Conflict or Obstruct a Water Resource Management Plan. The Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (LTS)

Project construction and operation would be subject to existing regulatory requirements. Permittees would comply with appropriate water quality objectives, as defined in the Basin Plan. Commonly practiced BMPs would be implemented to control construction site runoff and reduce the discharge of pollutants to storm drain systems from stormwater and other nonpoint-source runoff. As part of

[47] County of San Mateo. 2023. *C.3 and C.6 Development Review Checklist, Parkline Campus Development*. April 13.

compliance with permit requirements during ground-disturbing or construction activities, the implementation of water quality control measures and BMPs would ensure that water quality standards would be achieved, including water quality objectives that protect designated beneficial uses of surface water and groundwater, as defined in the Basin Plan. Construction runoff would be required to occur in compliance with appropriate water quality objectives for the region. The NPDES Construction General Permit requires stormwater discharges to be free of pollutants that cause or contribute to an exceedance of applicable water quality objectives or water quality standards, including designated beneficial uses. As stated in Impact HY-1, bioretention ponds, a self-retaining area, additional trees and vegetated areas, and other features would be integrated into the design of the Project Site. These stormwater treatment areas would reduce and treat stormwater runoff flows and associated pollutants.

Dewatering would be conducted temporarily during the construction phase. Furthermore, groundwater supplies would not be used during construction or operation. The amount of impervious surface area within the Project Site would decrease upon Project completion. LID stormwater treatment measures, including bioretention ponds, new landscaped areas, and other features, would be integrated into the design. These features would treat runoff and allow groundwater infiltration. In addition, implementation of the appropriate city General Plan policies would require the protection of groundwater recharge areas and groundwater resources, in accordance with the applicable sustainable groundwater management plan. The Project Site overlies the San Mateo Plain subbasin, which is designated as a very low-priority basin. It is not subject to the SGMA; therefore, no sustainable groundwater management plan is applicable to the Project Site. Construction and operation of the Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Construction and operational impacts associated with the Proposed Project would be ***less than significant***. No mitigation is required.

Cumulative Impacts

Cumulative impacts are addressed only for those thresholds that would result in a Project-related impact. If the Proposed Project would result in no impact with respect to a particular threshold, it would not contribute to a cumulative impact. Therefore, no cumulative analysis is required. As discussed under "Impacts Not Evaluated in Detail," the Proposed Project would result in ***no impact*** related to a release of pollutants due to Project inundation in a flood hazard, tsunami, or seiche zone, and no further cumulative analysis is required.

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. The geographic context for cumulative assessment of hydrology and water quality impacts encompasses the San Mateo Creek-Frontal San Francisco Bay Estuaries watershed, an area of approximately 73 square miles that includes portions of both Santa Mateo County and San Francisco County. The cumulative geographic context for impacts related to groundwater hydrology and water quality encompasses the San Mateo Plain subbasin of the larger Santa Clara Valley groundwater basin, an area of approximately 75 square miles. Given the size of each area, it is beyond the scope of this EIR to identify every cumulative project within their boundaries. However, it is reasonable to assume that cumulative projects would be similar to the past, present, and reasonably foreseeable future projects identified within a 0.5-mile radius of the Project Site in that they would be anticipated to consist predominantly of urban development on paved infill sites.

Impact C-HY-1: Cumulative Hydrology and Water Quality Impacts. Cumulative development could result in a significant environmental impact on hydrology and water quality; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)

Water Quality

Assuming concurrent implementation of the Proposed Project with other reasonably foreseeable cumulative development, adverse cumulative effects on hydrology and water quality could include construction impacts related to increases in stormwater runoff and pollutant loading in the Bay. Together with cumulative projects, the Proposed Project could degrade stormwater quality during construction through land disturbance and during operation through an increase in impervious surface area and contaminated runoff.

The cumulative geographic areas, inclusive of the Project Site, are fully developed. Build-out of cumulative projects would be anticipated to involve primarily redevelopment of existing developed sites that contain substantial impervious surface areas. The incremental water quality impact contribution from implementation of the Proposed Project would be minor. However, the Proposed Project together with cumulative projects could degrade stormwater quality through an increase in daily vehicle trip generation, which would result in an increase in contaminated runoff. During operation, runoff may contain oil, grease, and metals that accumulated in streets and parking lots as well as pesticides, nutrients, animal waste, and trash from landscaped areas. Such potential impacts could ultimately violate water quality standards, affect beneficial uses, and/or further impair 303(d)-listed waters within the watershed. The quality of stormwater runoff varies with surrounding land uses, topography, and the amount of impervious cover as well as the intensity (i.e., energy) and frequency of irrigation or rainfall. When the effects of the Proposed Project on water quality are considered in combination with the potential effects of cumulative projects, there would be potential for cumulative impacts on surface water and groundwater quality. For each of the reasonably foreseeable projects under consideration, various project-specific measures, such as the ones identified for the Proposed Project, would be implemented as a condition of development approval to mitigate risks associated with an exposure to hazardous materials, including existing contaminated soils, groundwater, and unknown environmental conditions/subsurface features.

Like the Proposed Project, cumulative projects would be required to comply with the Construction General Permit to control runoff and regulate water quality at each development site, along with regional and local requirements regarding the protection of surface water and groundwater quality. In addition, development projects would be subject to an environmental review process, which would identify potential site- and/or project-specific water quality impacts and mitigate for any potential significant impacts. New projects would be required to demonstrate that stormwater volumes could be managed by downstream conveyance features and that they would not induce flooding.

Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2 in Section 3.13, *Hazards and Hazardous Materials*, would reduce potential impacts by requiring an Environmental Site Management Plan prior to the start of construction to minimize any potential exposure of construction personnel, future site occupants, and the general public to contaminated soils and unknown environmental conditions/ subsurface features as well as groundwater monitoring and sampling if dewatering is required within the footprint of the construction sites. Overall, implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2 would reduce the Proposed Project's contribution to the cumulative impact to less-than-significant levels.

Based on the analysis above, the Proposed Project's contribution to cumulative impacts on hydrology and water quality would be ***less than cumulatively considerable with mitigation***. No additional mitigation is required.

Groundwater Recharge and Supplies

During construction of cumulative development within the San Mateo Plain subbasin, dewatering could be conducted on a one-time or temporary basis during the construction phase but would not result in a loss of water that would deplete groundwater supplies. Dewatering during the construction phase of the Project would be conducted temporarily and would not adversely affect groundwater supplies.

During operation, new impervious surface areas could reduce the potential for groundwater recharge. Other reasonably foreseeable projects in the San Mateo Plain subbasin would be expected to include redevelopment or infill projects in highly urbanized areas where there is limited existing recharge through infiltration due to impervious surface areas. Development in highly urbanized areas would not be expected to increase the amount of impervious surface areas substantially because development would be occurring mostly in areas with a substantial amount of existing impervious surface area. Furthermore, the San Mateo Plain subbasin is designated as a very low-priority basin and is not subject to the SGMA. Therefore, groundwater recharge from percolating rainfall would not be adversely affected, and an indirect lowering of the local groundwater table is not likely to occur. Cumulative development would also be consistent with C.3 requirements in the MRP and city requirements related to LID methods or, where LID methods are infeasible, alternative methods permitted under the C.3 "special projects" provisions. The Proposed Project would not substantially interfere with groundwater recharge because it would increase the size of the groundwater recharge areas and would not require permanent dewatering.

Based on the analysis above, the Proposed Project's contribution to cumulative impacts on groundwater recharge and supplies would be ***less than cumulatively considerable***. No mitigation is required.

Storm Drain Capacity

Cumulative development within the vicinity of the Project site could increase the volume and rate of stormwater runoff. Such increases could cause localized flooding if storm drainage capacity is exceeded or excess flows overtop banks in areas where floodwater storage may not be available. Generally, cumulative projects would occur in developed areas with existing impervious surfaces and would not be expected to substantially increase the amount of new impervious surface area.

The Proposed Project would result in a decrease in impervious surface area, which could result in a reduction of stormwater runoff. As such, post-Project flows would likely be less than pre-Project flows. Post-construction stormwater management BMPs would include bioretention ponds, additional trees and vegetated areas, a self-retaining area, an infiltration trench, and interceptor trees, thereby allowing stormwater infiltration and reducing impacts associated with impervious surface areas. All new development would be required to address stormwater issues in a manner that would ensure that flooding would not increase and floodflows would not be redirected to other areas that are not currently prone to flooding. All cumulative projects would be required to include stormwater management features, such as LID design measures, into project designs to reduce flows to pre-project conditions. If improvements to storm drainage capacity are needed, the city will ensure that the appropriate storm drainage improvements are identified.

Based on the analysis above, the Proposed Project's contribution to cumulative impacts on storm drain capacity would be ***less than cumulatively considerable***. No mitigation is required.

3.13 Hazards and Hazardous Materials

This section identifies and evaluates the Proposed Project's potential impacts related to hazards and hazardous materials, including impacts from the routine transport, use, or disposal of hazardous materials; upset or accident conditions involving the release of hazardous materials into the environment; and hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Phase I Environmental Site Assessment – SRI International, 333 Ravenswood Avenue Menlo Park, California 94025* (Phase I ESA);[1]
- *Site Assessment Report, 333 Ravenswood Avenue, Menlo Park, California* (Site Assessment Report);[2]
- *Limited Hazardous Materials Survey – SRI International, 333 Ravenswood Avenue Menlo Park, California* (Limited Hazardous Materials Survey);[3]
- *Parkline – ICF Peer Review of the Phase I Environmental Site Assessment – SRI International, 333 Ravenswood Avenue, Menlo Park, California 94025;*[4] and
- *Parkline – ICF Peer Review of Site Assessment Report, 333 Ravenswood Avenue, Menlo Park, California.*[5]

Issues identified in response to the Notice of Preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. No comments related to hazards and hazardous materials were raised in response to the NOP.

Existing Conditions

Environmental Setting

SRI International's 63.2-acre research campus at 333 Ravenswood Avenue in Menlo Park, which includes 301 Ravenswood Avenue and 555 and 565 Middlefield Road, consists of 38 buildings totaling approximately 1.38 million gross square feet (gsf) that support mostly research-and-development (R&D) and related uses. The area surrounding the Project Site comprises a mix of developments, with civic buildings and parks to the southwest, beyond Laurel Street; residential and institutional developments to

1 ATC. 2021. *Phase I Environmental Site Assessment – SRI International, 333 Ravenswood Avenue Menlo Park, California 94025.* Project Number 129-7-1. March 12.

2 ATC. 2021. *Site Assessment Report, 333 Ravenswood Avenue, Menlo Park, California*. March 12.

3 ATC. 2021. *Limited Hazardous Materials Survey – SRI International, 333 Ravenswood Avenue Menlo Park, California.* March 12.

4 ICF. 2023. *ICF Peer Review of the Phase I Environmental Site Assessment – SRI International, 333 Ravenswood Avenue, Menlo Park, California 94025*. San Francisco, CA. Prepared for the city of Menlo Park. August 4. Unpublished.

5 ICF. 2023. *ICF Peer Review of Site Assessment Report, 333 Ravenswood Avenue, Menlo Park, California*. San Francisco, CA. Prepared for the city of Menlo Park. August 7. Unpublished.

the northwest and north, generally bound by Ravenswood Avenue; commercial office plazas to the northeast; and United States Geological Survey (USGS) offices, a scientific agency campus, residences, and the Menlo Park Water Division to the south and southeast. Surface topography across the Project Site is generally flat. The general topography of the surrounding area slopes slightly toward San Francisco Bay, approximately 3 miles to the northeast.

Previous Environmental Investigations

March 2021 Phase I Environmental Site Assessment – SRI International 333 Ravenswood Avenue, Menlo Park, California 94025

ATC Group Services (ATC) performed a Phase I ESA in conformance with the scope of ASTM Standard Practice E1527-13. The purpose of the Phase I ESA was to identify recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), and historical recognized environmental conditions (HRECs) on the Project Site.

Findings

No RECs were identified. However, one CREC was identified related to soil and groundwater contamination associated with three underground storage tank (UST) areas within the Project Site.

- **Building 412 Area.** Soil contamination remains beneath a closed-in-place, 50,000-gallon UST. The UST, which was for military use, stored oil for fueling operations associated with the boiler house (described in the Phase I ESA as Building 412) when the Project Site was developed with a hospital in 1943. No. 2 oil was later used by SRI from the mid-1960s through 1980. The UST was abandoned in place in 1987, along with an associated 565-gallon UST. A release associated with the 50,000-gallon UST led to subsurface investigations, including soil and groundwater sampling. It was determined that fuel oil had migrated vertically in the soil; however, soil and groundwater downgradient from the UST were unaffected. Excavation of the UST, associated vaults, and affected soil was not feasible because of the site's proximity to a Pacific Gas and Electric (PG&E) substation. According to a December 1994 case closure statement, "as long as the property use remains the same, limited human or environmental exposure is expected to occur." An associated 565-gallon UST was installed and used to store diesel from the mid-1960s through 1987 when it was abandoned in place by SRI.
- **Motor Pool Area**. Two 8,000-gallon USTs with gasoline, including one with leaded gasoline, were removed from the Project Site in 1992. Subsurface investigations were conducted in the motor pool area, and the case was granted closure in December 1994. The motor pool area was the site of vehicle servicing operations.
- **Backup Generator Area.** One 1,500-gallon UST with diesel for a backup generator was installed in the 1950s (between Buildings A and I, as described in the Phase I ESA). Use of the generator was discontinued in 1981, and the contents of the UST were removed. The UST was removed in November 1998. A subsequent subsurface investigation found total petroleum hydrocarbons as diesel (TPHd) in soil collected from the base of the excavation. However, no contaminants of concern, including TPHd as well as benzene, toluene, ethylbenzene, and xylenes (BTEX), were found in soil or groundwater above laboratory detection levels. Regulatory closure was granted in June 1999, with a stipulation from the city of Menlo Park Building Department that requires future development in the area to notify the San Mateo County Department of Environmental Health (SMCDEH) to ensure proper disposal or handling of contaminated soil.

Several business environmental risks (BERs)[6] associated with the Project Site were also identified in the Phase I ESA, including, but not limited to, (1) USTs and ongoing costs associated with routine inspections of USTs, (2) removal of remaining clarifiers, (3) abandonment costs associated with the potential onsite water wells, and (4) use, storage, and disposal practices associated with hazardous substances onsite. Further details are provided in the Phase I ESA. The Project Site was formerly used as a military hospital. As indicated above, affected soil was left in place in the vicinity of the abandoned-in-place USTs.

The Phase I ESA identified six onsite clarifiers (clarifiers are settling tanks, generally used to remove solid particulates or suspended solids from a liquid). Two have been deactivated or removed; limited information as to surrounding soil conditions was available. The potential cost associated with removal of the remaining clarifiers represents a BER.

An active and registered 10,000-gallon diesel UST is within the Project Site (within Building U). The UST was installed in 1985; no violations or releases have been documented. According to the Phase I ESA, the presence of the UST (along with ongoing costs associated with routine inspections) represents a BER.

Prior to a fire that destroyed Building 410, microfabrication and laboratory operations were conducted within the building. Historical uses within the 300 and 400 blocks as well as Buildings A, P, L, M, and T included operations associated with laboratory uses and machining. In addition, a paint booth once operated at the Project Site; however, limited information was available during preparation of the Phase I ESA as to the length of time this feature operated. In addition, drains throughout the Project Site discharge by way of a sanitary sewer system, which is monitored and sampled under permit. Moreover, the Phase I ESA notes that SRI maintains an internal clearance process for laboratory spaces through local oversight agency inspections. According to the Phase I ESA, use, storage and disposal practices associated with hazardous substances onsite represent a BER.

A water supply well is reportedly located in the courtyard area of what the Phase I ESA describes as the "AB Wing." For the specific location, please reference the 2021 Phase I ESA. In addition, an irrigation well was discovered in the area of Building T. Also, an artesian well system was installed in 1866 when a former estate occupied the Project Site. Abandonment costs (in accordance with regulatory guidelines) associated with the potential onsite water wells represent a BER.

Hydraulic elevators were noted for Buildings A, B, E, G, I, L, M, P, and S (installed 1943 through the 1980s). Based on the age of the elevators, the cost to evaluate, remove, and/or maintain the elevator systems represents a BER.

Environmental database information reviewed indicated a 10,000-gallon aboveground storage tank (AST) is associated with the PG&E substation. No other details for this listing were provided. Interviews conducted during preparation of the Phase I ESA revealed that the listing is an administrative error on the part of the SMCDEH. According to the Phase I ESA, costs associated with rectifying the administrative error represent a BER.

[6] A *business environmental risk* (BER) is defined as a risk that can have a material environmental or environmentally driven impact on the business associated with the current or planned use on a parcel of commercial real estate; it is not necessarily limited to those environmental issues required to be investigated in this practice. Evaluation of BER issues may involve addressing one or more non-ASTM scope considerations.

The following de minimis conditions[7] were also identified:

The Project Site was listed in the Emergency Response Notification System (ERNS) database for an incident on July 1, 1993, involving an equipment failure that resulted in a release from an AST. Eighty gallons of propylene glycol (not considered a hazardous substance) were released and discharged to an onsite drain. Information reviewed indicated that rainstorms washed away any residue, and local and county authorities were notified. Given the material spilled and notification of local agencies, the incident represents a de minimis condition.

A PG&E substation has been located onsite since the early 1950s. The length of time PG&E has operated the substation onsite and the likely use of polychlorinated biphenyl (PCB) fluids represents a de minimis condition.

March 2021 Site Assessment Report – 333 Ravenswood Avenue, Menlo Park, California 94025

ATC performed a site investigation within the Project Site to evaluate onsite soil and groundwater conditions. As mentioned in the assessment report, previous environmental assessments have documented the presence of gasoline and diesel-range petroleum hydrocarbons in soil and groundwater beneath portions of the site.

Based on the results of the Phase I ESA summarized above, constituents of potential concern were identified in soil, groundwater, and soil vapor that warranted further investigation. To assess soil, soil vapor, and groundwater conditions, soil borings, soil vapor probes, and groundwater wells were advanced/installed and sampled as part of the investigation.

Soil Vapor Well Installation and Sampling

Seventeen soil borings (SV-1 through SV-17) were advanced to a depth of approximately 10 feet below ground surface (bgs). Soil sampling and soil vapor sampling were conducted at each location; the borings were completed as soil vapor probes. Each vapor probe was installed at a depth of 10 feet bgs. Soil samples were collected at approximately 5 and 10 feet bgs.

Groundwater Monitoring Well Installation

ATC advanced six additional soil borings (MW-1 through MW-6), with soil samples collected at approximately 5 and 10 feet bgs. Following drilling at these six locations, each boring was converted to a groundwater monitoring well. The monitoring wells were completed to total depths ranging from approximately 44 to 50 feet bgs. An additional soil sample was collected where affected (odorous or visually stained) soil, if any, was observed. Each monitoring well was developed, surveyed, gauged, and sampled as part of the installation. Groundwater was generally encountered during drilling at approximately 35 to 40 feet bgs.

Soil Boring Sampling

As part of the investigation, ATC advanced an additional 15 soil borings (B1 through B15), and soil samples were collected at approximately 5, 10 and 15 feet bgs. Additional soil samples were collected where affected (odorous or visually stained) soil, if any, was observed.

[7] *De minimis conditions* are defined as conditions that generally do not present a threat to human health or the environment and generally would not be the subject of an enforcement action if brought to the attention of the appropriate governmental agencies. Conditions determined to be de minimis are not RECs or CRECs.

Sampling Results

Soil Vapor

The following results were in excess of applicable screening levels:

- Location SV-1 – Contained carbon tetrachloride (23.7 micrograms per cubic meter [µg/m^3]) in excess of the Residential Soil Vapor Screening Level (16 µg/m^3), chloroform (6.36 µg/m^3) in excess of the Residential Soil Vapor Screening Level (4.1 µg/m^3), and perchloroethylene (PCE) (32.6 µg/m^3) in excess of the Residential Soil Vapor Screening Level (15 µg/m^3).
- Location SV-2 – Contained chloroform (72.8 µg/m^3) in excess of the Residential (4.1 µg/m^3) and Commercial Soil Vapor Screening Levels (18 µg/m^3).
- Location SV-3 – Contained chloroform (26.4 µg/m^3) in excess of the Residential (4.1 µg/m^3) and Commercial Soil Vapor Screening Levels (18 µg/m^3).
- Location SV-11 – Contained methylene chloride (34.9 µg/m^3) in excess of the Residential Soil Vapor Screening Level (34 µg/m^3).
- Location SV-16 – Contained chloroform (11.3 µg/m^3) in excess of the Residential Soil Vapor Screening Level (4.1 µg/m^3).
- Location SV-17 – Contained PCE (33.7 µg/m^3) in excess of the Residential Soil Vapor Screening Level (15 µg/m^3).

As mentioned in the Site Assessment Report and listed above, results of the assessment indicated that soil vapor beneath the property has low concentrations of volatile organic compounds (VOCs), including carbon tetrachloride, chloroform, methylene chloride, and PCE.

Groundwater

The following results were in excess of applicable screening levels:

- Well location MW-1 – Contained chloroform (4.56 micrograms per liter [µg/L]) in excess of the Groundwater Vapor Intrusion Environmental Screening Level (ESL) of 3.6 µg/L and perfluorooctanesulfonic acid or PFOS (0.0056 nanogram per liter [ng/L]) in excess of the California Drinking Water Notification Level[8] of 0.0051 ng/L.
- Well location MW-4 – Contained perfluoro-n-octanoic acid or PFOA (0.026 ng/L) in excess of the California Drinking Water Notification Level (0.0065 ng/L) and PFOS (0.019 ng/L) in excess of the California Drinking Water Notification Level (0.0051 ng/L).
- Well location MW-5 – Contained PFOA (0.018 ng/L) in excess of the California Drinking Water Notification Level (0.0065 ng/L) and PFOS (0.0071 ng/L) in excess of the California Drinking Water Notification Level (0.0051 ng/L).
- Well location MW-6 – Contained chloroform (6.20 J µg/L) in excess of the Groundwater Vapor Intrusion ESL (3.6 µg/L), PFOA (0.016 ng/L) in excess of the California Drinking Water Notification Level (0.0065 ng/L), and PFOS (0.0066 ng/L) in excess of the California Drinking Water Notification Level (0.0051 ng/L).

[8] Notification levels are non-regulatory, precautionary health-based levels that may require reporting to drinking-water customers.

As indicated in the Site Assessment Report and results listed above, the presence of chloroform in groundwater was identified at concentrations above the Groundwater Vapor Intrusion ESL for a commercial/industrial site. In addition, PFAS was reported above the California Drinking Water Notification Level at some well locations. Chloroform exceeds the Groundwater Vapor Intrusion ESLs only slightly, and the depth to groundwater is approximately 35 feet bgs; thus, the Site Assessment Report determined that chloroform did not appear to pose a significant threat of vapor intrusion to existing or future site occupants under a commercial/industrial land use (provided the buildings are not in proximity to the affected areas). However, as summarized above, soil vapor samples also contained slightly elevated carbon tetrachloride, chloroform, methylene chloride, and PCE concentrations, in excess of Residential Soil Vapor ESLs. Additional soil vapor investigation should be conducted in areas designated for residential use to definitively assess if there is a need for passive or active engineering controls. Also, the investigation suggested that additional investigation may be warranted to determine the extent of the affected groundwater. Moreover, the Site Assessment Report determined that, given the concentrations of PFAS identified, PFAS did not represent a threat to groundwater.

Soil

The following detections were of note:

- No constituents were detected at concentrations in excess of applicable ESLs or screening levels for hazardous waste classification.
- Arsenic and nickel were present at concentrations above the Construction Worker ESL. However, they appear to be within the normal range for these naturally occurring elements and below the screening level for potential hazardous waste classification purposes (as stated in the first bullet). However, specific health and safety requirements and exposure controls to protect future construction workers are warranted.

March 2021 Limited Hazardous Materials Survey – SRI International, 333 Ravenswood Avenue, Menlo Park, California

The purpose of this survey was to determine the presence of asbestos-containing materials (ACMs), lead-containing materials (LCM), and PCBs within select buildings onsite.

Asbestos

One hundred and thirty-three bulk asbestos samples were collected, with 213 total layers analyzed by polarized light microscopy (PLM) with dispersion staining techniques. Asbestos samples were not collected in buildings denoted as K, T, and W at the time of the survey.

Buildings A, B, E, I, 100, 108, 202, 203, 204, 303, 305, L, G, 406, 408, 409, and 412 in the survey contained ACMs in some of the materials sampled. For specific sample locations and asbestos content, refer to Table I, Asbestos Containing Materials Sampling Results, in the Limited Hazardous Materials Survey.

Lead

Thirty-six samples of suspect LCM were collected onsite. Twenty-seven samples had detectable amounts of lead when analyzed.

Buildings A, B, E, I, P, 100, 108, 110, 201, 202, 203, 204, 205, 301, 302, 303, 304, 305, 307, 309, T, 402, 404, 406, 408, and 412 contained lead-based paint (LBP) or lead-containing paint (LCP) in some of the materials sampled. For specific sample locations and lead content, refer to Table II, Lead Containing Paint Sampling Results, in the Limited Hazardous Materials Survey.

PCBs

Thirty-six samples of suspect PCB-contaminated materials were collected onsite. Three of the samples were classified as PCB bulk product wastes[9] under 40 Code of Federal Regulations (CFR) 761. PCB samples were not collected at Buildings K and W, and only exterior PCB samples were collected at Building T. Buildings E, I, and L contained materials identified as PCB bulk product wastes. For specific sample locations and PCB concentrations, refer to Table III, PCB Sampling Results, in the Limited Hazardous Materials Survey.

Cortese List

The Cortese List is a compilation of several different lists of hazardous material release sites that meet criteria specified in Section 65962.5 of the California Government Code. Two listings were identified within the State Water Resources Control Board's (State Water Board's) leaking UST database; a third listing was identified as a Department of Toxic Substances Control (DTSC) military evaluation site. All three sites meet the criteria specified in Section 65962.5 and were identified as being within the Project Site.

- SRI at 333 Ravenswood – The site was listed as having a gasoline release to onsite soil. The release was detected in September 1987. The site was granted closure in February 1995 by the San Mateo County Local Oversight Program (LOP) and the San Francisco Bay Regional Water Quality Control Board (RWQCB). The USTs onsite at the time consisted of one 50,000-gallon concrete tank for fuel oil and two 8,000-gallon USTs for gasoline.
- SRI International at 333 Ravenswood – The site was listed as having a diesel release to soil. The release was reported in December 1998. The case was granted closure in June 1999 by the San Mateo County LOP and the San Francisco Bay RWQCB. However, a San Mateo County Case Closure Summary from June 1999 stated that future excavation or development of the property should occur with oversight from the County of San Mateo Environmental Health Services Agency.[10] The County of San Mateo Environmental Health Services Agency should be notified to ensure proper disposal and handling of affected soil with TPH-diesel onsite (i.e., 2 to 3 cubic yards). The remaining affected soil was identified in the same area as a former UST onsite.
- Dibble General Hospital – No address was provided, but a Department of the Army letter to DTSC dated January 30, 2011, indicated that the footprint of the former Dibble General Hospital overlapped the footprint of the Project Site.[11] The former hospital was a 2,700-bed Army facility with

[9] PCB bulk product wastes are manufactured with PCBs at concentrations greater than or equal to 50 parts per million and therefore require special management practices, in accordance with the Toxic Substances Control Act (TSCA) (40 CFR Section 761). All PCB bulk product waste must be removed and disposed of at a licensed facility that can accept such waste. This includes TSCA landfills and some non-TSCA landfills. PCB bulk product waste is managed is accordance with 40 CFR 761.62, most often under 40 CFR 761.62(b), Disposal in Solid Waste Landfills. However, removal and disposal of PCB bulk product waste in accordance with 40 CFR 761.62(b) does not require U.S. Environmental Protection Agency approval. In California, PCB bulk product wastes are considered hazardous wastes and therefore subject to applicable standards regarding management, transport, and disposal.

[10] County of San Mateo Health Services Agency. 1999. *Case Closure of One 1,500-gallon Diesel UST at SRI International, 333 Ravenswood Avenue, Menlo Park, California*. Available: https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/5821454703/Correspondence.pdf. Accessed: September 26, 2023.

[11] Department of the Army 2011. *No DoD Action Indicated (NDAI), Former Dibble General Hospital, San Mateo County, California*. Available: https://www.envirostor.dtsc.ca.gov/getfile?filename=/public%2Fdeliverable_documents%2F8676801919%2FNDAI%20Pkg_Former%20Dibble%20General%20Hospital%2C%20CA%20(J09CA0791).pdf. Accessed: September 26, 2023.

approximately 115 buildings, which were constructed in 1943 on 140 acres. All property was disposed of by 1949. Facilities onsite included USTs. The site was granted "No Further Action" status as of December 2013.

Schools

The Project Site is within 0.25 mile of two existing schools, the Alpha Kids Academy and Menlo-Atherton High School.

Regulatory Setting

Federal

Hazardous Waste Handling

The federal Toxic Substances Control Act (TSCA) and the Resource Conservation and Recovery Act (RCRA) established a program to be administered by the U.S. Environmental Protection Agency (EPA) to regulate the generation, transport, treatment, storage, and disposal of hazardous waste. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act, which specifically prohibits the use of certain techniques for the disposal of hazardous waste.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as "Superfund," was enacted by Congress on December 11, 1980, and amended by the Superfund Amendments and Reauthorization Act on October 17, 1986. This law (42 United States Code [USC] 103) provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enabled revision of the National Contingency Plan (NCP). The NCP (40 CFR 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List, which is the list of Superfund sites.

Occupational Safety and Health Administration

The Occupational Safety and Health Act of 1970, administered by the Occupational Safety and Health Administration (OSHA), is intended to ensure the safety and health of American workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. OSHA establishes and enforces protective standards and reaches out to employers and employees through technical assistance and consultation programs. OSHA standards are listed in Title 29 of the CFR.

Toxic Substances Control Act

The Toxic Substances Control Act of 1976 authorized the EPA to secure information on all new and existing chemical substances and control those substances with unreasonable risks related to public health and the environment.

U.S. Department of Transportation Hazardous Materials Regulations (49 CFR 100–185)

U.S. Department of Transportation regulations cover all aspects of hazardous materials packaging, handling, and transport. Some of the topics covered include Parts 107 (Hazard Materials Program), 130 (Oil Spill Prevention and Response), 172 (Emergency Response), 173 (Packaging Requirements), 174 (Rail Transportation), 176 (Vessel Transportation), 177 (Highway Transportation), 178 (Packaging Specifications), and 180 (Packaging Maintenance).

State

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) was created in 1991. It unified California's environmental authority in a single cabinet-level agency and brought the California Air Resources Board, State Water Board, RWQCBs, California Department of Resources Recycling and Recovery (CalRecycle), DTSC, Office of Environmental Health Hazard Assessment, and Department of Pesticide Regulation under one agency. These agencies were placed under the CalEPA "umbrella" for the protection of human health and the environment to ensure the coordinated deployment of state resources. Their mission is to restore, protect, and enhance the environment and ensure public health, environmental quality, and economic vitality.

Department of Toxic Substances Control

DTSC, a department of CalEPA, is the primary agency in California for regulating hazardous waste, cleaning up existing contamination, and finding ways to reduce the amount of hazardous waste produced in California. DTSC regulates hazardous waste primarily under the authority of the federal RCRA and the California Health and Safety Code (primarily Division 20, Chapters 6.5 through 10.6, and Title 22, Division 4.5). Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Cortese List

CalEPA maintains the Hazardous Wastes and Substances Site List (Cortese List), which is a planning document used by state and local agencies as well as developers to comply with California Environmental Quality Act (CEQA) requirements for providing information about the locations of hazardous material releases. Per Government Code Section 65962.5, the Cortese List must be updated at least once annually. DTSC, the State Water Board, and CalRecycle contribute to the hazardous material release site listings.

Hazardous Waste Control Act (Section 25100 et seq.)

DTSC is responsible for enforcing the Hazardous Waste Control Act (California Health and Safety Code Section 25100 et seq.), a framework under which hazardous wastes are managed in California. The law provides for the development of a state hazardous waste program that administers and implements the provisions of the federal RCRA with regard to the waste management system in California. It also provides for the designation of California-only hazardous waste and development of standards that are equal to or, in some cases, more stringent than federal requirements.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

In January 1996, CalEPA adopted regulations for implementing the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program) (California Health and Safety

Code, Chapter 6.11, Sections 25404–25404.9). The Unified Program is implemented at the local level. The Certified Unified Program Agency (CUPA) is the local agency responsible for implementation of the Unified Program. San Mateo County Environmental Health Services is the designated CUPA for the Project Site.

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of hazardous materials programs, including the HazMat Business Plan Program, California Accidental Release Prevention Program, Underground Storage Tank Program, Aboveground Storage Tank Program, and Hazardous Waste Generator Program; it also addresses incident response.

California Code of Regulations, Title 8—Industrial Relations

Occupational safety standards exist in federal and state laws to minimize safety risks for workers from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (known as Cal/OSHA) and the federal OSHA are the agencies responsible for ensuring worker safety in the workplace. Cal/OSHA assumes primary responsibility for developing and enforcing standards for safe workplaces and work practices. These standards apply to construction activities.

California Labor Code (Division 5, Parts 1, 6, 7, and 7.5)

The California Labor Code is a collection of regulations for the workplace that ensure appropriate training on the use and handling of hazardous materials as well as the operation of equipment and machines that use, store, transport, or dispose of hazardous materials. Division 5, Part 1, Chapter 2.5, ensures that employees who are in charge of handling hazardous materials are appropriately trained and informed with respect to the materials they handle. Division 5, Part 7, ensures that employees who work with volatile flammable liquids are outfitted with appropriate safety gear and clothing.

CUPA Hazardous Materials Release Response Plans and Inventory Program Business Plans

State and federal community right-to-know laws were passed in 1986. These laws allow public access to information about the types and amounts of chemicals being used at local businesses. The laws also require businesses to plan and prepare for a chemical emergency through preparation of Hazardous Materials Release Response Plans and Inventory Program Business Plans, which are certified annually. Hazardous Materials Release Response Plans and Inventory Program Business Plans are required of any facility that handles hazardous materials or hazardous waste in amounts greater than:

- 55 gallons for liquids,
- 500 pounds for solids, and
- 200 cubic feet for compressed gases.

Under this program, businesses are inspected at least once every 3 years by a CUPA inspector to verify compliance with the California Health and Safety Code and California Code of Regulations. Hazardous materials business plans must include the following:

- A floor plan of the facility in question and details regarding the business conducted at the site;
- An inventory of hazardous materials handled or stored onsite;
- An emergency response plan; and

- A training program for new employees regarding safety and emergency response, along with annual refresher courses.

Local

County of San Mateo Emergency Operations Plan

The 2015 County of San Mateo Emergency Operations Plan establishes policies and procedures and assigns responsibilities to ensure effective management of emergency response operations within the San Mateo County Operational Area.[12] The emergency management organization in San Mateo County identifies potential threats to life, property, and the environment. It also develops plans and procedures to protect assets from potential hazards and prevent or mitigate threats (e.g., hazardous materials spills).

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with hazards and hazardous materials.

The following goal and policies from the Safety Element related to hazards and hazardous materials were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal S-1: Ensure a Safe Community. Minimize risks to life and damage to the environment and property from natural and human-caused hazards and ensure community emergency preparedness and a high level of public safety services and facilities.

> **Policy S1.1: Location of Future Development.** Permit development only in those areas where potential danger to the health, safety, and welfare of the residents of the community can be adequately mitigated.
>
> **Policy S1.3: Hazard Data and Standards.** Integrate hazard data (geotechnical, flood, fire, etc.) and risk evaluations into the development review process and maintain, develop, and adopt up-to-date standards to reduce the level of risk from natural and human-caused hazards for all land uses.
>
> **Policy S-1.5: New Habitable Structures.** Require that all new habitable structures incorporate adequate hazard mitigation measures to reduce identified risks from natural and human-caused hazards.
>
> **Policy S1.10: Safety Review of Development Projects.** Continue to require hazard mitigation, crime prevention, fire prevention, and adequate access for emergency vehicles in new development.
>
> **Policy S1.16: Hazardous Materials Regulations.** Review and strengthen, if necessary, regulations for structural design and/or uses involving hazardous materials to minimize risk to local populations. Enforce compliance with current state and local requirements for the manufacture, use, storage,

[12] County of San Mateo. 2015. *County of San Mateo Emergency Operations Plan Basic Plan*. Available: https://hsd.smcsheriff.com/sites/default/files/downloadables/1%20-%20Emergency%20Operations%20Plan.pdf. Accessed: September 26, 2023.

transport, and disposal of hazardous materials, along with the designation of appropriate truck routes in Menlo Park.

Policy S1.17: Potential Exposure of New Residential Development to Hazardous Materials. Minimize risk associated with hazardous materials by assessing exposure to hazardous materials of new residential development and sensitive populations near existing industrial and manufacturing areas. Minimize risk associated with hazardous materials.

Policy S1.18: Potential Hazardous Materials Conditions Investigation. Continue to require developers to conduct an investigation of soils, groundwater, and buildings affected by hazardous material potentially released from prior land uses in areas historically used for commercial or industrial uses and identify and implement mitigation measures to avoid adversely affecting the environment or the health and safety of residents or new uses.

Policy S1.19: Disposal of Existing Hazardous Materials on Sites Planned for Housing. Continue to require that sites planned for housing be cleared of hazardous materials (paint, solvents, chlorine, etc.) and the hazardous materials are disposed of in compliance with state and federal laws.

Environmental Impacts

This section describes the impact analysis related to hazards and hazardous materials for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials.
- Create a significant hazard for the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.
- Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.
- Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard for the public or the environment.
- For a project located within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the area.
- Impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Methods for Analysis

As described above under *Regulatory Setting*, the use of hazardous materials is subject to numerous laws and regulations. In most cases, the laws and regulations pertaining to hazardous materials management minimize risks to human health and the environment. The impact analysis identifies areas where impacts related to the use of hazardous materials during Project construction and operation would be subject to applicable laws and regulations.

To assess the Proposed Project's potential to create a significant hazard for the public or environment related to subsurface hazardous materials, the impact analysis considers the potential pathways through which exposure to hazards could occur, based on the reports listed at the beginning of this section.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research and development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact; in those cases, the analysis does not identify a "worst-case" scenario.

Table 3.13-1 lists, by impact number, the buildout scenario assumed in the hazards and hazardous materials analysis and provides an explanation as to why the buildout scenario was evaluated for each impact.

Impacts Not Evaluated In Detail

This section describes why the Proposed Project would result in ***no impact*** related to airport hazards and wildland fires and no further analysis is required.

Airport Hazards. The Project Site is not within an area covered by an airport land use plan or within 2 miles of a public airport or public use airport. The closest airport is Palo Alto Airport, located at 1925 Embarcadero Road in Palo Alto, California, approximately 3 miles east of the Project Site. Furthermore, according to Figure 7, Airport Safety Zones, of the Comprehensive Land Use Plan for Santa Clara County, no airport safety zone associated with Palo Alto Airport overlaps the Project Site.[13]

Wildland Fires. According to CAL FIRE data regarding Very High FHSZs in the LRA (San Mateo County), the Project Site is not within a Very High FHSZ.[14] The Project Site is in a densely developed area of San Mateo County with no nearby wildlands.

[13] Santa Clara County Airport Land Use Commission. 2020. *Comprehensive Land Use Plan Santa Clara County, Palo Alto Airport*. Available: https://stgenpln.blob.core.windows.net/document/ALUC_PAO_CLUP.pdf. Accessed: September 26, 2023.

[14] California Department of Forestry and Fire Protection. 2008. *Very High Fire Hazard Severity Zones in LRA, San Mateo County*. Available: https://osfm.fire.ca.gov/media/6800/fhszl_map41.pdf. Accessed: September 26, 2023.

Table 3.13-1. Buildout Scenario Analyzed for Each Hazard and Hazardous Materials Impact

Impact	Scenario Evaluated	Explanation
HAZ-1: Create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials.	100 percent R&D scenario	Construction of the Proposed Project would be the same under either scenario. During operation, R&D uses could involve storing greater quantities of hazardous materials compared with office uses. Hazardous materials for R&D uses could include chemicals, solvents, medical waste, and infectious agents. Therefore, the 100 percent R&D scenario has greater potential to result in significant impacts related to hazards and hazardous materials from the routine transport, use, disposal, or accidental release of such materials. However, regardless of the type of development, these materials would be used, stored, and disposed of according to federal and state regulations and guidelines.
HAZ-2: Create a significant hazard for the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment.	100 percent R&D scenario	Construction of the Proposed Project would be the same under either scenario. During operation, R&D uses could involve storing more hazardous materials than office uses would. Therefore, the 100% R&D scenario has greater potential to result in significant impacts related to an accidental release of hazardous materials into the environment. However, regardless of the type of development, these materials would be used, stored, and disposed of according to federal and state regulations and guidelines.
HAZ-3: Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.	100 percent R&D scenario	The Project Site is within 0.25 mile of Alpha Kids Academy and Menlo-Atherton High School. Construction of the Proposed Project would be the same under either scenario. As explained above, during operation, R&D uses could involve storing more hazardous materials than office uses. Therefore, the 100 percent R&D scenario has greater potential to result in significant impacts related to hazardous emissions or the handing of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. However, regardless of the type of development, these materials would be used, stored, and disposed of according to federal and state regulations and guidelines.
HAZ-4: Be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard for the public or the environment.	Either scenario	Two former leaking UST sites are located within the footprint of the Project Site. Because this threshold considers current or former impacts (not future impacts) on the Project Site, only construction activities could be affected. Construction of the Proposed Project would be the same under either scenario.
HAZ-5: Impair or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Either scenario	As discussed in Section 3.2, *Transportation*, the 100 percent R&D scenario would generate more daily vehicular trips than the 100 percent office scenario. However, it is anticipated that office uses would

Impact	Scenario Evaluated	Explanation
		generate more peak-hour trips, which would result in increased traffic during peak hours. In addition, because the site plan would be the same under either scenario, emergency access to the Project Site would be the same.

Impacts and Mitigation Measures

Impact HAZ-1: Routine Hazardous Materials Use. The Proposed Project would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. (LTS)

Construction

Construction of the Proposed Project would involve the routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations, as discussed in the *Regulatory Setting* section, above. Although materials such as solvents, paints, oils, grease, and caulking would be transported, used, and disposed of during construction, this would be a temporary occurrence. It is expected that any spills or releases involving such materials would be small, localized, and cleaned up as they occur, in compliance with standard practices for handling such materials. In addition, a Stormwater Pollution Prevention Plan (SWPPP) must be prepared and implemented during Project construction for coverage under the Construction General Permit, in accordance with the requirements of the State Water Board. As described in Section 3.12, *Hydrology and Water Quality*, the SWPPP requires implementation of best management practices for hazardous materials storage and soil stockpiles, inspections, maintenance, employee training, and the containment of releases to prevent runoff to stormwater collection systems or waterways. Therefore, construction of the Proposed Project would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials during construction. This impact would be ***less than significant***. No mitigation is required.

Operation

As mentioned in Table 3.13-1, the analysis under Impact HAZ-1 considers a 100 percent R&D scenario. Because of the nature of R&D uses, the possibility exists for hazards related to the handling of hazardous materials. Laboratories associated with R&D/life science uses are categorized as biosafety levels (BSLs) 1 through 4. It is anticipated that the Proposed Project could accommodate BSL-1 or BSL-2 laboratories; BSL-3 and BSL-4 laboratories are less common (in fact, there are only four operational BSL-4 labs in the United States).[15] Although laboratory uses in Menlo Park have typically not been regulated by zoning ordinance, the Proposed Project is proposing a new mixed-use, transit-oriented zoning district that would allow office, commercial, R&D, and residential uses in proximity to each other; zoning could address the BSLs for laboratory uses. Regardless of the BSL, the Proposed Project would comply with required federal, state, and local standards, including Title 8 of the California Code of Regulations (CCR). Furthermore, in accordance with standard industry practice, any R&D tenant that handles qualifying hazardous materials

[15] National Institute of Allergy and Infectious Diseases. 2018. *The Need for Biosafety Labs*. Available: https://www.niaid.nih.gov/research/biosafety-labs-needed. Accessed: July 13, 2023.

would be required to meet relevant Biosafety in Microbiological and Biomedical Laboratories (BMBL) and National Institute of Health (NIH) guidelines. All new laboratories that use hazardous materials or generate biohazardous waste are required to obtain a permit for hazardous materials and/or medical waste generation within the city.

The Project Sponsor would also consult with San Mateo County Environmental Health Services and apply for applicable permits for any regulated substance that may pose a threat to public health and safety or the environment because of its highly toxic, flammable, or explosive nature. Tenants must comply with the safety procedures mandated by applicable federal, state and local laws and regulations, such as the ones described under the *Regulatory Setting,* to ensure that risks resulting from the routine use of hazardous materials or the disposal of hazardous waste remain less than significant. In addition, hazardous materials would be registered through the San Mateo County Environmental Health Services HazMat Business Plan Program to ensure safe and responsible handling of such materials.

Compliance with state and local regulations would ensure that buildings would be equipped with safety devices such as sprinklers and alarms to minimize potential impacts resulting from the presence of hazardous materials. Prior to issuance of a certificate of occupancy for completed structures, the city would require a final inspection from the Menlo Park Fire Protection District to ensure that all building systems are in conformance with the city's Fire Code and National Fire Protection Association requirements.

Finally, the Proposed Project would comply with California Department of Transportation regulations to ensure that all necessary safety precautions would be taken during the transportation of hazardous materials. Mandatory compliance with all applicable federal, state and local regulations pertaining to the use, storage, transport, and disposal of hazardous materials would ensure that the Proposed Project would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials during operation. This impact would be ***less than significant***. No mitigation is required.

Impact HAZ-2: Upset and Accident Conditions Involving Hazardous Materials. The Proposed Project could create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (LTS/M)

As discussed in the *Environmental Setting* section, under *Existing Conditions*, multiple site-specific investigations were prepared concurrently in 2021, including a Phase I ESA, a Site Assessment Report, and a Limited Hazardous Materials Survey. The Phase I ESA did not identify a REC associated with the Project Site but did identify a CREC related to soil and groundwater contamination within three UST areas on the Project Site. In addition, several BERs and de minimis conditions were also identified. Subsequently, a site assessment investigation was conducted to evaluate soil and groundwater conditions onsite (based on the conclusions and results of the Phase I ESA). The site assessment concluded the following in regard to onsite soil vapor, groundwater, and soils:

- Soil vapor beneath the property has low concentrations of VOCs, including carbon tetrachloride, chloroform, methylene chloride, and PCE. Chloroform concentrations slightly exceed the Groundwater Vapor Intrusion ESLs on the north and west sides of the site. No other constituents were reported above Groundwater Vapor Intrusion ESLs during this investigation in any groundwater samples. Because soil vapor samples also contained slightly elevated concentrations in excess of Residential Soil Vapor ESLs, additional soil vapor investigation should be conducted in areas designated for residential use to definitively assess if there is a need for passive or active engineering controls.

- Chloroform-affected groundwater did not appear to pose a significant threat of vapor intrusion for existing or future site occupants of a commercial/industrial land use. An additional investigation may be warranted to determine the extent of the affected groundwater. Based on concentrations detected, PFAS, specifically, did not represent a threat to groundwater.
- Soil samples did not exhibit contaminant concentrations in excess of applicable ESLs or screening levels for a hazardous waste classification. Arsenic and nickel were detected at concentrations above the Construction Worker ESLs but below the screening level for a hazardous waste classification and within the normal range for naturally occurring elements. However, specific health and safety requirements and exposure controls to protect future construction workers are warranted. The Site Assessment Report suggested that a Soil Management Plan, describing specific health and safety requirements and exposure controls, be prepared in advance of any future site construction activities involving disturbance of shallow soil.

The Limited Hazardous Materials Survey identified ACM, LCM, and PCBs in a portion of the structures surveyed (summarized in the *Existing Conditions* section, above). The survey noted that additional sampling would be required at renovation/demolition locations that were not surveyed. In addition, materials that resulted in a negative concentration for asbestos were not considered to be non-ACM; additional asbestos sampling would be required. Suspect lead paints and PCBs from the exterior and/or interior of buildings would require sampling as well (prior to renovation or demolition activities); additional samples are required to characterize further the PCB content of sampled materials with a result less than 50 ppm.

Construction

A total of approximately 281,605 cubic yards of excavated soil would be transported offsite for disposal during construction of the Proposed Project. In addition, temporary construction dewatering for the underground parking garages may be required in some isolated areas of the Project Site to mitigate the effects of shallow groundwater. Because residual contaminants exist on the Project Site, ground disturbance and excavation activities conducted during construction could encounter affected soils. In addition, dewatering as part of the Proposed Project could result in the withdrawal of contaminated groundwater. Encountering contaminated soil and/or groundwater would create an exposure risk for construction personnel and the surrounding environment, which would be a ***potentially significant*** impact. In addition, the Proposed Project would demolish 35 of the 38 existing buildings on the Project Site (excluding buildings P, S, and T). As previously mentioned, under the March 2021 Limited Hazardous Materials Survey Summary, asbestos, lead, and PCBs were identified in several locations throughout the site. As such, construction activities associated with the Proposed Project would create a risk for construction personnel and the surrounding environment from exposure to hazardous building materials, which would be a ***potentially significant*** impact.

Operation

The accidental release of hazardous materials during operation of the Proposed Project could pose a significant threat to human health or the environment. The use of hazardous materials would be subject to existing laws, regulations, and CUPA programs regarding hazardous materials, including a spill contingency plan, as described above under *Regulatory Setting*. Adherence to these standards would reduce the potential for an accidental release. Because compliance with existing regulations would be mandatory, accidental hazardous materials releases during operation would have a ***less-than-significant*** impact on human health and the environment. No mitigation is required.

Soil vapor samples contained slightly elevated concentrations of carbon tetrachloride, chloroform, methylene chloride, and PCE, in excess of Residential Soil Vapor ESLs; thus, operations associated with the Proposed Project could create a soil vapor exposure risk for proposed residential uses, which would be a ***potentially significant*** impact.

MITIGATION MEASURES. To address potential risks associated with an accidental release of hazardous materials from affected media onsite, the Proposed Project would be required to incorporate the recommendations described in the technical reports noted above. Implementation of Mitigation Measures HAZ-2.1 through HAZ-2.3 would reduce potential impacts associated with construction and operation by requiring an Environmental Site Management Plan prior to the start of construction to minimize any potential exposure of construction personnel, future site occupants, and the general public to contaminated soils and unknown environmental conditions/subsurface features. The mitigation measures would also require monitoring and sampling groundwater to ensure adequate treatment and disposal to address potential risks associated with contaminated groundwater encountered during dewatering, and implementing proper abatement procedures for buildings and structures that would be demolished as part of the Proposed Project that have known hazardous building materials. In addition, implementation of Mitigation Measure HAZ-2.4 would require an additional soil vapor investigation in areas designated for residential use to address the potential soil vapor intrusion risk associated with the Proposed Project. Implementation of these mitigation measures would reduce potentially significant impacts related to the release of hazardous materials from affected media onsite to ***less than significant with mitigation***.

HAZ-2.1: Prepare and Implement an Environmental Site Management Plan

Prior to ground-disturbing activities, the Project Sponsor shall retain the services of a qualified environmental engineering firm to prepare and implement an Environmental Site Management Plan (ESMP) for review and approval by the appropriate regulatory agency prior to issuance of building permits and commencement of construction. The purpose of the ESMP is to protect construction workers, the general public, the environment, and future site occupants from subsurface hazardous materials previously identified at the site and to address the possibility of encountering unknown contamination or hazards in the subsurface. The ESMP shall summarize soil and groundwater analytical data collected on the project site during past investigations; identify management options for excavated soil and groundwater, if contaminated media are encountered during deep excavations; and identify monitoring, irrigation, or other wells requiring proper abandonment in compliance with local, state, and federal laws, policies, and regulations.

The ESMP shall include measures for identifying, testing, and managing soil and groundwater suspected of or known to contain hazardous materials. The ESMP shall: 1) provide procedures for evaluating, handling, storing, testing, and disposing of soil and groundwater during project excavation and dewatering activities, respectively; 2) describe required worker health and safety provisions for all workers potentially exposed to hazardous materials in accordance with State and federal worker safety regulations; and 3) designate personnel responsible for implementation of the ESMP. The ESMP shall be prepared by a commercial environmental engineering firm with expertise and experience in the preparation of ESMPs and stamped by an appropriately licensed professional.

In addition, the ESMP shall establish protocols and measures for addressing the discovery of presently unknown environmental conditions or subsurface structures such as underground storage tanks (USTs), sumps, or wells, would include procedures for evaluating, handling, storing, testing and disposing of these unknown materials (as applicable),and would also establish required health and

safety provisions for all workers who could be exposed to said hazardous materials (in accordance with state and federal worker safety regulations). If the environmental engineering firm subsequently identifies the need for further sampling, the Project Sponsor shall implement this and any other requirements identified in the ESMP.

HAZ-2.2: Require Groundwater Monitoring and Sampling prior to Dewatering Activity

Prior to any construction activity with the potential to require dewatering any ground disturbing activity, the Project Sponsor shall measure both water levels and water quality prior to and during dewatering, with a focus on potential constituents of concern, based on known or suspected water quality impacts within or near the Project Site. The Project Sponsor shall ensure the collection and testing of samples prior to initiating construction activities with the potential to require dewatering. The sampling locations shall be an appropriate distance from the proposed dewatering site, as determined by a geotechnical evaluation of local groundwater and soil conditions. If contaminated water is detected, remedial measures to limit potential exposure to affected media and/or contain the spread shall be implemented. Several options can be employed (e.g., implementing onsite treatment/remediation; disposing in the sewer system (with any appropriate pre-treatment) or at a hazardous materials disposal facility, depending on type and level of contamination; tanking; or stopping or phasing underground construction. Affected water shall be handled with the appropriate use of personal protective equipment (PPE) and treated so that it complies with discharge and reporting requirements and applicable water quality objectives or hauled offsite for treatment and disposal at a permitted waste treatment facility. Upon disposal of the affected water, the Project Sponsor shall be responsible for demonstrating to the city of Menlo Park that the treatment and disposal requirements set forth in this mitigation measure have been met by providing a waste manifest or proof of a valid waste discharge requirement (WDR) permit.

HAZ-2.3: Conduct a Hazardous Building Materials Survey

Prior to the issuance of any demolition permit, the Project Sponsor shall conduct a Hazardous Building Materials Survey. The survey shall be performed by a licensed contractor at structures that are scheduled to be demolished but have not been surveyed previously (i.e., as part of the 2021 Limited Hazardous Materials Survey). The Hazardous Building Materials Survey shall identify the presence of hazardous building materials, including asbestos-containing materials (ACMs), lead-based paint (LBP), and polychlorinated biphenyls (PCBs). Should this survey determine that hazardous building materials are present, the following actions shall be implemented by the Project Sponsor:

- A health and safety plan shall be developed by a certified industrial hygienist for potential LBP, asbestos, or other hazardous building material risks present during demolition. The health and safety plan shall then be implemented by a licensed contractor. The health and safety plan shall comply with federal Occupational Safety and Health Administration (OSHA) and the California Occupational Safety and Health Administration (Cal/OSHA) requirements.
- Necessary approvals shall be acquired from the city of Menlo Park and/or county (by the licensed contractor) for specifications or commencement of abatement activities. Abatement activities shall be conducted by a licensed contractor.
- The Bay Area Air Quality Management District (BAAQMD) shall be notified 10 days prior to initiating demolition at structures that contain asbestos. Section 19827.5 of the California Health and Safety Code requires local agencies not to issue demolition or alteration permits until an applicant has demonstrated compliance with the notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. In addition:

- Asbestos shall be disposed of at a licensed disposal facility, to be identified by the licensed contractor.
- The local office of Cal/OSHA shall be notified of asbestos abatement activities.
- Asbestos abatement contractors shall follow state regulations contained in 8 CCR 1529 and 8 CCR 341.6 through 341.14 where asbestos-related work would involve 100 square feet or more of ACM.
- Asbestos removal contractors shall be certified as such by the Contractors Licensing Board of the State of California. The owner of the property where abatement is to occur shall have a hazardous waste generator number assigned by and registered with the California Department of Health Services in Sacramento.
- The contractor and hauler of hazardous building materials shall file a hazardous waste manifest, with details about hauling the material from the site and disposing of it. Pursuant to California law, the city of Menlo Park shall not issue the required permit until the Project Sponsor has complied with the notice requirements described above.

HAZ-2.4: Conduct a Focused Soil Vapor Intrusion Investigation

Prior to construction, the Project Sponsor shall retain the services of a qualified environmental consulting firm to conduct a focused soil vapor investigation. The investigation shall be conducted in areas that are designated for residential and office/R&D uses; such uses shall be designed to protect building occupants from potential long-term impacts associated with vapor intrusion. The investigation shall provide the data needed to determine whether long-term engineering controls shall be needed as part of proposed building development. The soil vapor investigation's methodology and sampling program shall be conducted by an environmental consulting firm with applicable expertise and experience. The soil vapor investigation shall be implemented by the Project Sponsor prior to construction of buildings on the Project Site.

If the environmental consulting firm or appropriate regulatory agency providing oversight determines engineering controls are required, they shall be designed by a qualified engineer in compliance with requirements of the appropriate regulatory agency and/or the city of Menlo Park to address vapor conditions by redirecting and/or minimizing soil vapor. The performance of the installed vapor mitigation systems shall be confirmed by appropriate quality assurance/quality control inspection and test methods, as certified by the design engineer, and the certification shall be provided to the appropriate regulatory agency providing oversight and city of Menlo Park as needed.

Specific engineering controls may include, but shall not be limited to:

- Installation of subsurface migration barriers; and/or
- Inclusion of ventilated foundations for any proposed structures; and/or
- The use and implementation of an alternative method or structural design to address soil gas releases and reduce the potential for hazardous conditions to occur.

Appropriate engineering control systems shall be determined with concurrence, approval, and oversight from the appropriate regulatory agency providing oversight and shall be dependent on building placement and construction.

Impact HAZ-3: Exposure to Schools. The Proposed Project could emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (LTS/M)

The handling or emission of hazardous or acutely hazardous materials near schools must consider potential health effects on children, who are considered sensitive receptors. Improper handling of these materials could result in airborne emissions or spills during use and transport, resulting in exposure to such materials. The Project Site is within 0.25 mile of Alpha Kids Academy (immediately adjacent to the northern portion of the Project Site), Menlo-Atherton High School (adjacent to the northern portion of the Project Site, across Middlefield Road), and Menlo Children's Center (across Laurel Street west of the Project Site). As discussed under Impact HAZ-2, construction activities associated with the Proposed Project could encounter residual contamination in soil during ground disturbance as well as affected groundwater during dewatering. In addition, demolition activities could expose construction personnel and the surrounding environment to hazardous building materials, which would be a ***potentially significant*** impact.

MITIGATION MEASURES. Implementation of Mitigation Measures HAZ-2.1 through HAZ-2.3 would reduce potential impacts by requiring an Environmental Site Management Plan prior to the start of construction to minimize any potential exposure of construction personnel, future site occupants, and the general public to contaminated soils and unknown environmental conditions/subsurface features. The mitigation measures would also require monitoring and groundwater sampling, ensuring adequate treatment and disposal to address potential risks associated with contaminated groundwater encountered during dewatering, and implementation of proper abatement procedures for buildings and structures with known hazardous materials that would be demolished as part of the Proposed Project. Implementation of these mitigation measures would reduce potentially significant impacts related to the handling of hazardous or acutely hazardous materials near schools to ***less than significant with mitigation***.

Impact HAZ-4: Cortese List. The Proposed Project would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard for the public or the environment. (LTS/M)

Contamination associated with the SRI and SRI International properties were addressed to the satisfaction of the oversight agencies, as indicated above. Thus, potential impacts associated with the aforementioned leaking UST listings are considered unlikely. In addition, the Site Assessment Report found that contaminants were not detected at concentrations in excess of applicable ESLs or screening levels for a hazardous waste classification during soil sampling conducted onsite. Nonetheless, the Proposed Project would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and as discussed above, there would be a ***potentially significant*** impact because of the potential to encounter residual affected media.

MITIGATION MEASURES. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2 would reduce potential impacts by requiring an Environmental Site Management Plan prior to the start of construction to minimize any potential exposure of construction personnel, future site occupants, and the general public to contaminated soils and unknown environmental conditions/subsurface features as well as groundwater monitoring and sampling if dewatering is required within the footprint of the construction sites. Implementation of these mitigation measures would reduce any potential exposure of construction workers or the public to residual contamination in onsite soils, if encountered, to ***less than significant with mitigation***.

Impact HAZ-5: Impairment of Emergency Response or Evacuation Plans. The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan. (LTS)

Construction

Development of the Proposed Project would not include any permanent changes to existing public roadways that provide emergency access to the Project Site or surrounding area. During construction, it is possible that construction activity could affect emergency response or evacuation plans due to temporary construction barricades or other roadway obstructions that could impede emergency access onsite. However, compliance with city requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times; therefore, emergency response access routes and emergency evacuation routes would not be impeded substantially during the construction period. This impact would be ***less than significant***. No mitigation is required.

Operation

Structures associated with the Proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, development of the Proposed Project is not expected to interfere with the County of San Mateo's Emergency Operations Plan or any evacuation route. Furthermore, a vehicular circulation plan would be implemented to ensure adequate emergency vehicle access throughout the Project Site, including improved connectivity to surrounding areas for emergency vehicles. Moreover, R&D tenants who handle hazardous materials would be required to adhere to all applicable regulations, including Hazardous Materials Release Response Plans, Inventory Program Business Plans, and the Unified Program (including Hazardous Materials Release Response Plans coordinated with the SMCDEH). Adherence to the aforementioned regulations and plans would ensure a proper response and evacuation in the event of an emergency associated with a hazardous material release. Therefore, the Proposed Project would not impair implementation of, or interfere with, an adopted emergency response plan or emergency evacuation plan. This impact would be ***less than significant***. No mitigation is required.

Cumulative Impacts

Cumulative impacts are addressed only for those thresholds that would result in a Project-related impact. If the Proposed Project would result in no impact with respect to a particular threshold, it would not contribute to a cumulative impact. Therefore, no analysis is required. As discussed under "Impacts Not Evaluated in Detail," the Proposed Project would result in no impact related to airport hazards and wildland fires, and no cumulative analysis is required.

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. The geographic context for cumulative assessment of impacts related to hazards and hazardous materials includes past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site.

Impact C-HAZ-1: Cumulative Hazards and Hazardous Materials Impacts. Cumulative development would not result in a significant environmental impact related to hazards and hazardous materials; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Similar to the Proposed Project, reasonably foreseeable projects could result in construction impacts related to the routine transport, disposal, or handling of hazardous materials; intermittent use and transport of petroleum-based lubricants, solvents, and fuels; and transport of affected soil to and from sites. However, hazardous waste generated during construction of any project would be collected, properly characterized for disposal, and transported in compliance with federal, state, and local regulations, as described under the Regulatory Setting, above. Hazardous materials are strictly regulated by local, state, and federal laws. Specifically, these laws are designed to ensure that hazardous materials do not result in a gradual increase in toxins in the environment. For each of the reasonably foreseeable projects under consideration, various project-specific measures, such as the ones identified for the Proposed Project, would be implemented as a condition of development approval to mitigate risks associated with an exposure to hazardous materials. The probability of an accident related to the transport of hazardous materials for development projects is relatively low because of the stringent regulations that apply to the transport, use, and storage of hazardous materials. The Proposed Project in combination with other development in the immediate vicinity would add to cumulative traffic congestion on roadways used for evacuation. However, the Project Site and immediate vicinity are well serviced by an extensive vehicular circulation network, allowing for multiple possible evacuation routes in case of an emergency. Although any growth involving an increased use of hazardous materials would have the potential to increase the demand for emergency response services, first-response capabilities, including hazardous materials emergency response capabilities, are currently available and adequate with respect to meeting the demand of all cumulative projects. Substantive hazardous materials accidents within the Project Site or in the vicinity are expected to be rare. In addition, if such incidents were to occur, only one such incident would be expected at any one time (except during major catastrophes). For these reasons, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site would not result in a significant cumulative impact associated with hazards or hazardous materials. The cumulative impact would be ***less than significant***. No mitigation is required.

3.14 Population and Housing

This section identifies and evaluates the Proposed Project's potential impacts on population and housing, including employment.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Housing Needs Assessment, Parkline* (HNA).[1]

The HNA is included in Appendix 3.14-1 of this EIR. The information in the HNA is used in this EIR to provide context for the evaluation of potential impacts of the Proposed Project related to population and housing as well as data for decision-makers during the entitlement process. The analysis also incorporates population, employment, and housing data published in Projections 2040[2] by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC)[3] as well as other demographic information from the Demographic Research Unit of the California Department of Finance (DOF), the U.S. Census Bureau, and the city Housing Element of the General Plan. Projections 2040 is the most recent of ABAG's statistical compendia on demographic, economic, and land use changes in each local Bay Area jurisdiction through 2040. As such, the data from Projections 2040 are used in this analysis.

The purpose of this section is to characterize the potential for Project-induced population, housing, and employment changes that may trigger physical environmental effects; these potential environmental impacts are also examined in other sections of this Draft EIR (e.g., Sections 3.3, *Transportation*; 3.4, *Air Quality*; 3.7, *Noise*; 3.15, *Public Services*; and 3.16, *Utilities and Service Systems,* and Chapter 5, *Other CEQA Considerations*).

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. Comments pertained to the potential for the Proposed Project to induce substantial population growth, long-term impacts regarding housing requirements, and the balance of new housing and new jobs.[4]

Existing Conditions

Environmental Setting

Population

Within the context of CEQA, *population* typically refers to residents within a particular jurisdiction. Menlo Park is in the southern portion of San Mateo County and bounded by San Francisco Bay to the north, East

1 Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

2 As discussed in Section 3.2, *Land Use and Planning*, although regional, county, and sub-county growth patterns and projections for households and jobs are available for Plan Bay Area 2050, city-level growth projections are not yet available. Therefore, to be consistent with the transportation models, and projections used in the city's Housing Element and ConnectMenlo General Plan, 2040 projections from Plan Bay Area 2040 are used throughout this document.

3 MTC is the government agency responsible for regional transportation planning and financing as well as coordinating transportation services in the nine-county San Francisco Bay Area.

4 In general, the jobs/housing balance is a socioeconomic issue related to regional planning rather than an issue related to physical impacts on the environment. However, this analysis considers direct and indirect housing market effects and evaluates the Proposed Project against the city's regional housing needs allocation.

Palo Alto to the east, Palo Alto to the east and south, Woodside and Portola Valley to the southwest, and Redwood City to the west. The city encompasses approximately 19 square miles, including nearly 12 square miles of San Francisco Bay and wetlands. The city's jurisdictional population was estimated to be 32,478 as of January 1, 2023. The DOF estimates that the city currently averages approximately 2.50 persons per household (pph).[5]

Table 3.14-1 presents population estimates and projections for 2020 through 2040[6] pertaining to Menlo Park (i.e., the sphere of influence),[7] San Mateo County, and the Bay Area (i.e., Marin, Sonoma, Napa, Solano, Contra Costa, Alameda, Santa Clara, San Mateo, and San Francisco Counties). The data indicate that population growth in Menlo Park from 2020 to 2040 (23.3 percent) will be greater than the level of growth in the county and the Bay Area as a whole (about 15.0 and 21.9 percent, respectively).[8]

Table 3.14-1. Population Trends in Menlo Park, San Mateo County, and the Bay Area, 2020–2040

	2020	2030	2040	Growth (2020–2040)
Menlo Park	44,530	52,865	54,920	10,390 (23.3%)
San Mateo County	796,925	853,260	916,590	119,665 (15.0%)
Bay Area	7,920,230	8,689,440	9,652,950	1,732,720 (21.9%)

Source: Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. *Plan Bay Area Projections 2040*. November.

Housing

According to the DOF, the estimated number of housing units in the city (jurisdictional boundary) as of January 1, 2023, was 13,912, with an average household size of 2.50 pph and a vacancy rate of 8.7 percent.[9] The housing stock of Menlo Park in 2020 was made up of 51.8 percent single-family detached homes, 7.8 percent single-family attached homes, 12.4 percent multi-family homes with two to four units,

[5] California Department of Finance. 2023. *Table 2: E-5 City/County Population and Housing Estimates, 1/1/2023*. Available: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. May 2023. Accessed: January 3, 2024.

[6] Full buildout of the Proposed Project is expected to occur in 2031. However, consistent with full buildout of the ConnectMenlo General Plan by 2040, this analysis compares the Proposed Project with the projections for the city as a whole in 2040. In addition, the ABAG projections assume that the majority of the ConnectMenlo growth would occur between 2035 and 2040. Therefore, to account for all city growth under ConnectMenlo in the ABAG projections, the horizon year of 2040 is used in this analysis.

[7] Several additional unincorporated areas adjoining the city are recognized as being within the city's sphere of influence and, therefore, included in the city general plan. In California, *sphere of influenc*e has a legal meaning (i.e., a plan for the probable physical boundaries and service area of a local agency). Spheres of influence at California's local agencies are regulated by Local Agency Formation Commissions that recognize the unincorporated communities that would be best and most likely served by the city agencies. Hence, the spheres of influence represent areas with the greatest potential for annexation by a city. In most cases, ABAG provides more detailed demographic and employment projections for a large city's sphere of influence rather than that of a small city, such as Menlo Park. Consequently, unless otherwise specifically noted, all city data represent the city sphere of influence because only limited demographic data are available for the city's unincorporated area. The sphere-of-influence designation for the city includes unincorporated West Menlo Park, Stanford Weekend Acres, Menlo Oaks, as well as the Stanford Linear Accelerator Center. With the exception of the Stanford Linear Accelerator Center, these areas are zoned residential and substantially developed. All ABAG projections in these areas of the city include the sphere of influence.

[8] Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. *Plan Bay Area Projections 2040*. November.

[9] California Department of Finance. 2023. *Table 2: E-5 City/County Population and Housing Estimates, 1/1/2023*. Available: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. May 2023. Accessed: January 3, 2024.

and 27.8 percent multi-family homes with five or more units. In Menlo Park, the housing type that experienced the most growth between 2010 and 2020 was multi-family housing with five or more units.[10]

Table 3.14-2 presents ABAG projections for households in the Bay Area, the county, and the city between 2020 and 2040. According to ABAG, the number of households in the county is projected to grow from approximately 284,260 in 2020 to 317,965 in 2040, an increase of approximately 11.9 percent. The number of households in the city is projected to grow from approximately 15,390 in 2020[11] to 17,680 in 2040, an increase of approximately 14.9 percent. Overall, the household growth rate in the city (14.9 percent) is expected to be greater than the household growth rate for the county (11.9 percent) but less than that of the Bay Area as a whole (18.9 percent).[12]

Table 3.14-2. Household Trends in Menlo Park, San Mateo County, and the Bay Area, 2020–2040

	2020	2030	2040	Growth (2020–2040)
Menlo Park	15,390	17,265	17,680	2,290 (14.9%)
San Mateo County	284,260	302,520	317,965	33,705 (11.9%)
Bay Area	2,881,965	3,142,015	3,426,700	544,735 (18.9%)

Source: Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. *Plan Bay Area Projections 2040*. November.

Home prices and rental costs have increased substantially in Menlo Park over the past 10 years. Although housing in Menlo Park has generally been more expensive than housing in San Mateo County and the Bay Area since the turn of the 21st century, the trend has increased recently. Menlo Park housing costs have grown from 51 percent greater than costs in the Bay Area in 2001 to 72 percent greater in 2020. In 2019, about 56 percent of owner-occupied units were valued at more than $2 million, and 25 percent of renter-occupied units rented for $3,000 per month or more.[13] The median price for a home in Menlo Park is $2.65 million, based on home sales from September 2022 through September 2023.[14] In addition, since 2009, median rent has increased 41 percent to $2,200.[15]

Employment

The employment profile for an area provides an indication of the composition of an area's economy as well as present and future demand for employees. Employment growth is an important driver of housing demand, both regionally and locally. Employment growth over the past several years in the Bay Area and the city has most likely contributed to significant upward pressure on the housing market, as evidenced in rent and housing price increases. Because of the lack of available and affordable housing in Menlo Park,

[10] City of Menlo Park. 2023. *Sixth-Cycle Housing Element: 2023–2031*. Adopted January 2023. Amended January 2024.

[11] As discussed, the growth forecasts are based on ABAG Projections 2040, which were released in 2018, and not the actual number of households in the city in 2020. For sake of consistency, the analysis includes comparison of projections for 2020 with projections for 2040 rather than the actual 2020 numbers provided by DOF.

[12] Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. *Plan Bay Area Projections 2040*. November.

[13] City of Menlo Park. 2023. *Sixth-Cycle Housing Element: 2023–2031.* Adopted January 2023. Amended January 2024.

[14] Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

[15] City of Menlo Park. 2023. *Sixth-Cycle Housing Element: 2023–2031.* Adopted January 2023. Amended January 2024.

approximately 96.1 percent of the city's workforce commutes from other cities. Approximately 87.2 percent of workers who live in Menlo Park commute to other jurisdictions.[16]

The majority of residents in Menlo Park's workforce, 69 percent, had occupations in management, business, science, and the arts, significantly more than the number in San Mateo County and the Bay Area where similar occupations account for 50 percent of the workforce. The industries that provide the greatest employment opportunities for Menlo Park residents are involved with health and educational services (32 percent) and financial and professional services (31 percent). The health and educational services industry is also the largest employer in San Mateo County and the greater Bay Area.

Unemployment rates have been low in the city. There was a 3.2 percentage point decrease in the unemployment rate between January 2010 and January 2021. Jurisdictions in the Bay Area experienced a sharp rise in unemployment in the early months of 2020 due to impacts related to the COVID-19 pandemic but experienced general improvement and recovery in the later months of 2020.[17] Recent data (as of December 2023) from the U.S. Bureau of Labor Statistics show that total unemployment in San Mateo County increased from 2.2 percent in October 2022 to 3.2 percent in October 2023; the national unemployment rate increased from 3.4 percent to 3.6 percent during the same period.[18]

Table 3.14-3 presents ABAG employment projections, which are used throughout the analysis presented below.

Table 3.14-3. Employment Trends in Menlo Park, San Mateo County, and the Bay Area Region, 2020–2040 (Total Number of Jobs)

	2020	2030	2040	Growth (2020–2040)
Menlo Park	36,410	37,195	42,475	6,065 (16.6%)
San Mateo County	399,415	423,005	472,340	72,770 (18.2%)
Bay Area Region	4,136,190	4,405,125	4,698,375	562,185 (13.6%)

Source: Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. *Plan Bay Area Projections 2040*. November.
Note: ABAG projections for 2040 incorporate full buildout of ConnectMenlo.

As indicated in Table 3.14-3, ABAG projections for 2020 to 2040 show a steady increase in employment in the Bay Area (13.6 percent). The projections for the city of Menlo Park identify a higher employment gain (16.6 percent) compared to the Bay Area region and a lower employment gain compared to San Mateo County.

Table 3.14-4 compares the projected number of employed residents in the city with the projected number of jobs available in the city. According to ABAG projections, the number of employed residents in the city is currently 62.4 percent of the number of jobs in the city. In the next 20 years, the number of employed residents is expected to remain relatively constant, decreasing only slightly to 61.7 percent.[19]

[16] City of Menlo Park. 2023. *Sixth-Cycle Housing Element: 2023–2031.* Adopted January 2023. Amended January 2024.

[17] Ibid.

[18] U.S. Department of Labor, Bureau of Labor Statistics. 2023. *San Francisco Area Economic Summary*. Available: www.bls.gov/regions/west/summary/blssummary_sanfrancisco.pdf. Updated December 5, 2023. Accessed: December 14, 2023.

[19] Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. *Plan Bay Area Projections 2040*. November.

Table 3.14-4. Comparison of Number of Jobs to Employed Residents in Menlo Park, 2020–2040

	2020	2040
Jobs	36,410	42,475
Employed Residents[a]	22,735	26,205
Percent of Employed Residents to Total Number of Jobs	62.4	61.7

Source: Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. *Plan Bay Area Projections 2040*. November.

a. The number of jobs and employed residents reflects the city's sphere of influence, which also includes unincorporated areas of San Mateo County.

As of 2023, the area median income (AMI) in San Mateo County for a family of four was approximately $175,000. However, in Menlo Park, because housing prices are high, many people who work in the city cannot afford to live in the city. Consequently, people who work in the community often commute long distances. All levels of income, including households with above-moderate incomes, face challenges from affordable housing in Menlo Park as well as the broader Bay Area. Because of the high cost of housing, housing affordability challenges extend to households that earn more than 150 percent of the AMI.[20]

Over the past 30 years, new home construction has not kept up with job growth, leading to a housing shortage in the region. The ratio of jobs to housing units in San Mateo County is 1.39. Comparatively, the jobs/housing ratio for Menlo Park is approximately 4.11.[21] This ratio, indicating more jobs in Menlo Park than housing, leads to longer commutes for employees living outside of the city and an increase in housing prices and rental rates.

According to the U.S. Census Bureau's 2017–2021 American Community Survey (ACS), 5.3 percent of those who currently work in the city of Menlo Park also live in the city of Menlo Park. This has declined since the 2000 census, which showed that 7.2 percent of those who worked in Menlo Park also lived in the city. The current number, 5.3 percent, is low compared to most other cities in the Bay Area and attributable to a range of factors, such as affordability constraints that limit workers' ability to find housing within the city and the large number of jobs in Menlo Park relative to the extent of the housing stock. Another contributing factor is the location and boundary configuration of the city, making many other jurisdictions within a short commute.[22] However, remote work, as experienced during the coronavirus pandemic, has led many employers to provide additional flexibility and allowed employees to work remotely on a more permanent basis. For employees who split their time between remote and in-person work, this additional flexibility may encourage them to explore housing options farther from their workplace. This may be an additional contributing factor to the declining share of workers who live in Menlo Park. The share of existing SRI International employees who live in Menlo Park is approximately 4.9 percent, similar to the citywide average of 5.3 percent.[23]

Project Site Setting

The Project Site includes SRI International's research campus, consisting of 38 buildings with approximately 1.38 million sf of mostly R&D space and areas for supporting uses. Historical employment trends at the SRI International Campus indicate that the total square footage of the structures on the

20 Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

21 Ibid.

22 Ibid.

23 Based on data provided by the Project Sponsor, 54 of the approximately 1,100 existing employees live in Menlo Park, which equates to 4.9 percent.

Project Site exceeds SRI International's current or projected needs. Employment on the site has ranged between approximately 1,400 to 2,000 workers since 2003, with fewer employees now working onsite as a result of the COVID-19 pandemic and shifts in work patterns. Approximately 1,100 people are currently employed at the Project Site; no residents currently live at the Project Site as there are no residential uses currently within the Project site.

Regulatory Setting

State

Sustainable Communities Strategy and Senate Bill 375

Senate Bill (SB) 375, adopted in 2008, requires preparation of a Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan (RTP) for the Bay Area. In the Bay Area, MTC and ABAG are jointly responsible for developing and adopting an SCS that integrates transportation, land use, and housing plans to meet the greenhouse gas reduction targets set by the California Air Resources Board. MTC and ABAG adopted Plan Bay Area 2050 in 2021.[24] Plan Bay Area 2050 is the integrated land use/transportation plan and demographic/economic forecast for the nine-county San Francisco Bay Area region. The plan coordinates housing plans, open space conservation efforts, economic development strategies, and transportation investments. Plan Bay Area 2050 includes transportation and environmental strategies that support active and shared modes of travel, combined with a transit-supportive land use pattern that places housing near transportation centers.

Plan Bay Area 2050 also forecasts changes to the Bay Area population, including projected household and job growth, at the regional, county, and sub-county level. Plan Bay Area 2050 Final Blueprint includes ABAG's most recent projections of demographic, economic, and land use changes in the coming decades. According to Plan Bay Area 2050, the number of households in San Mateo County is expected to increase by 129,000 between 2015 and 2050, and the number of jobs is expected to increase by 114,000 during the same period. Prior to Plan Bay Area 2050, Plan Bay Area 2040, adopted in 2017, was the most recent regional transportation plan and sustainable communities strategy for the Bay Area region. Plan Bay Area 2050, which updates Plan Bay Area 2040, is consistent with the current Regional Housing Needs Allocation (RHNA) cycle. In addition to providing household and job growth projections at the regional, county, and sub-county level, Plan Bay Area 2040 provided projections at the city level. However, city-level growth projections are not yet available in Plan Bay Area 2050.[25] Because Plan Bay Area 2050 was adopted in late 2021, Plan Bay Area 2040 will continue to serve as the basis for regional and county-wide transportation models until the models are updated. Updates to the models are anticipated within the next several years. To be consistent with the transportation models, as well as the projections used in the city's Housing Element Update and General Plan and M-2 Area Zoning Update (ConnectMenlo), 2040 projections from Plan Bay Area 2040 are used throughout this document.

Current planning assumptions envision the Project Site operating as both a research-and-development (R&D) campus and a housing site, consistent with the city's General Plan.

[24] Association of Bay Area Governments and Metropolitan Transportation Commission. 2021. *Plan Bay Area 2050: A Vision for the Future*. Released: October 1, 2021. Available: https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021_rev.pdf. Accessed: September 28, 2023.

[25] Association of Bay Area Governments. 2021. *Plan Bay Area 2050 Growth Patterns*. Available: https://www.planbayarea.org/digital-library/plan-bay-area-2050-final-blueprint-growth-pattern. Accessed: September 28, 2023.

Housing Element Law

The RHNA involves a process established under California Housing Element Law that requires cities in California to plan for the future development of new housing units to meet their share of regional housing needs. Housing needs for each region in the state are determined by the California Department of Housing and Community Development (HCD) and submitted to councils of government for allocation to local jurisdictions. ABAG is ultimately responsible for determining the share of the regional housing need to be met by each city in the San Francisco Bay Area.

California Housing Element Law has established three housing affordability categories. The categories are based on the region's AMI but also take into account household size, which ranges from one to six people. These three affordability categories are used by ABAG in allocating regional housing needs.

- Very Low: 0 to 50 percent of the AMI
- Low: 51 to 80 percent of the AMI
- Moderate: 81 to 120 percent of the AMI[26]

The sixth-cycle RHNA (2023–2031) for the city projects a need for 2,946 housing units for households of various income levels; approximately 56 percent would need to be affordable at the moderate-income level or below. Menlo Park is required to plan for its fair share of housing units by income group, as outlined below.

- Very Low Income: 740 units (25 percent of RHNA; 0–50 percent of AMI)
    - Because approximately 11.8 percent of households have incomes in the "Extremely Low Income" category (0–30 percent of AMI), the projected need is estimated to be 348 units from the 740 units in the "Very Low Income" category (47 percent).
- Low Income: 426 units (14 percent of RHNA; 51–80 percent of AMI)
- Moderate Income: 496 units (17 percent of RHNA; 81–120 percent of AMI)
- Above Moderate Income: 1,284 units (44 percent of RHNA; greater than 120 percent of AMI)

The city is meeting its RHNA requirements for the 2023–2031 RHNA planning period through the identification of 68 housing opportunity sites in the 2023–2031 Housing Element. These sites, which are focused in Districts 2 through 5, disperse affordable housing, and housing development in general, throughout the city. In addition, housing projects that were proposed, as well as projects that received entitlement, before completion of the 2015–2023 RHNA (fifth cycle) but not expected to be completed by the 2023–2031 RHNA (sixth cycle) count as "pipeline projects." These housing opportunity sites, along with the sites for the pipeline projects, are expected to provide the capacity needed to meet Menlo Park's RHNA, with an additional 30 percent buffer. The Housing Element Update (HEU) EIR evaluates up to 4,000 new residential units within the 8-year planning period.

Housing at the Project Site is included in Table 7-6 of the city's 2023–2031 Housing Element as a pipeline project. As shown, it was anticipated that the Project Site would include 400 new housing units (340 market-rate units and 60 affordable housing units).[27]

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[26] Association of Bay Area Governments. 2021. *Final Regional Housing Needs Allocation Plan: San Francisco Bay Area, 2023–2031*. Adopted December 2021.

[27] City of Menlo Park. 2023. *Sixth-Cycle Housing Element: 2023–2031.* Adopted January 2023. Amended January 2024.

Regional

Jobs Housing Connection Strategy Methodology for 2013–2040, Plan Bay Area

The Jobs Housing Connection Strategy was adopted by ABAG and MTC as part of Plan Bay Area 2040 in July 2013. The Jobs Housing Connection Strategy reflects the preferred land use pattern, which was selected from a series of land use alternatives and based on input from the public, cities and counties, and transportation agencies. The preferred scenario aims to concentrate growth near transit-served employment centers in the inner Bay Area. For the SCS, the methodology used for assigning household growth to local jurisdictions considered multiple factors, including housing development capacity, base housing unit growth, vehicle miles traveled/transit service adjustments, as well as other growth factors.[28]

Local

Menlo Park General Plan

Housing Element. Housing elements are one part of a community's general plan. They guide how each city, town, or county is planned and managed, from its roads and sidewalks to its parks and neighborhoods. State law requires each city and county to adopt a general plan with at least seven elements, including a housing element. Regulations regarding housing elements are found in California Government Code Sections 65580–65589. Although a housing element must follow state law, it is a local document. The Menlo Park Housing Element focuses on meeting the housing needs of Menlo Park residents.

The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by HCD. In March 2024, the 2023–2031 Housing Element was certified by HCD; it is in substantial compliance with state Housing Element law. The current Menlo Park Housing Element, which covers the planning period from 2023 to 2031, creates a foundation for all goals, policies, programs, and objectives related to housing in Menlo Park. The 2023–2031 Housing Element was prepared to respond to current and near-term housing needs in Menlo Park and provide a framework for the community's longer-term approach to such needs.[29]

The following policies from the Housing Element were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

> **Policy H1.3: Local Funding for Affordable Housing.** Seek ways to reduce housing costs for lower-income workers and people with special needs by developing ongoing local funding sources and continuing to utilize other local, state and federal assistance to the fullest extent possible. Funding should also be sought for the development and support of transitional housing. The city will also maintain the below-market-rate housing program requirements for residential and non-residential developments.
>
> **Policy H3.1: Special-Needs Groups.** Encourage non-profit organizations and private developers to build and maintain affordable housing for groups with special needs, including the needs of seniors; people living with disabilities, including developmental disabilities; the unhoused; people

[28] Association of Bay Area Governments and Metropolitan Transportation Commission. 2018. *Plan Bay Area Projections 2040*. November.

[29] Ibid.

living with HIV/AIDS and other illnesses; people in need of mental health care; single-parent families; large families; and other persons identified as having special housing needs.

Policy H3.3: Incentives for Special-Needs Housing. Use density bonuses and other incentives to meet special housing needs, including housing for lower-income seniors and people living with disabilities.

Policy H3.7: Adaptable/Accessible Units for People Living with Disabilities. Ensure that new multi-family housing includes units that are accessible and adaptable for use by people living with disabilities, including developmental disabilities, in conformance with the California Building Code. This strategy will include ways to promote a housing design that allows seniors to "age in place" in their community.

Policy H3.8: Develop and Preserve Accessible Units. Promote the development, rehabilitation, and preservation of affordable housing for people living with disabilities, including developmental disabilities, particularly in neighborhoods accessible to public transit, commercial services, and health and community facilities.

Policy H4.1: Housing Opportunity Sites. Identify housing opportunity areas and sites where a special effort will be made to provide affordable housing consistent with other general plan policies.

Policy H4.2: Housing to Address Local Housing Needs. Strive to provide opportunities for new housing development to meet the city's share of its Regional Housing Needs Allocation (RHNA). The city intends to provide an adequate supply and variety of housing opportunities to meet the needs of Menlo Park's workforce and special-needs populations; strive to match housing types, affordability, and location with household income; and address the housing needs of extremely low-income persons, lower-income families with children, and lower-income seniors.

Policy H4.3: Variety of Housing Choices. Strive to achieve a mix of housing types, densities, affordability levels, and designs distributed throughout the city.

Policy H4.4: Mixed-Use Housing. Encourage well-designed residential mixed-use developments where residential use is appropriate to the setting. Encourage mixed-use development in proximity to transit and services, such as shopping centers; the C-4 district along Willow Road near the Willows neighborhood; properties zoned C-1, C-1-A, C-1-C, C-2 and C-2-A, C-2-B, C-2-S, and P; as well as properties near downtown, to support downtown businesses (consistent with the El Camino Real/Downtown Specific Plan).

Policy H4.5: Redevelopment of Commercial Shopping Areas and Sites. Encourage housing development in conjunction with the redevelopment of commercial shopping areas and sites.

Policy H4.11: Inclusionary Housing Approach. Require residential developments involving five or more units to provide very low-, low-, and moderate-income housing units. In-lieu fees are allowed but not encouraged. The units provided through this policy are intended for permanent occupancy and must be deed-restricted, including, but not limited to, single-family housing, multi-family housing, condominiums, townhouses, or land subdivisions. In addition, the city will require larger non-residential developments, as job generators, to participate in addressing housing needs in the community through the city's in-lieu fee requirements.

Policy H4.12: Emphasis on Affordable Housing. To the extent possible, focus housing development on 100 percent affordable housing developments, particularly in areas near existing amenities and in high-opportunity areas of the city. Ministerial review could support this on 100 percent affordable projects within the AHO and in areas under SB10 or citywide.

Policy H4.16: Neighborhood Responsibilities within Menlo Park. Seek ways specific to each neighborhood to provide additional housing as part of each neighborhood's fair share responsibility and commitment to help achieve community-wide housing goals. This may range from in-lieu fees, accessory dwelling units, higher-density housing sites, infill housing, mixed-use housing, or other new housing construction.

Policy H7.1: Housing Design. Review proposed new housing to achieve excellence in development design through an efficient process, and encourage infill development on vacant and underutilized sites that meet the community's needs. The city will encourage innovative new construction and universal housing design that enhances mobility and independence of the elderly.

ConnectMenlo. ConnectMenlo, which updated the Land Use Element and Circulation Element of the city's General Plan, was adopted in November 2016.[30] The following goals and policies from ConnectMenlo were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal LU-2: Maintain and enhance the character, variety, and stability of Menlo Park's residential neighborhoods.

Policy LU-2.9: Compatible Uses. Promote residential uses in mixed-use arrangements and the clustering of compatible uses such as employment centers, shopping areas, open space, and parks within easy walking and bicycling distance of each other and transit stops.

Goal LU-3: Retain and enhance existing and encourage new neighborhood-serving commercial uses, particularly retail services, to create vibrant commercial corridors.

Policy LU-4.4: Community Amenities. Require mixed-use and nonresidential development of a certain minimum scale to support and contribute to programs that benefit the community and the city, including education, transit, transportation infrastructure, sustainability, neighborhood-serving amenities, childcare, housing, job training, and meaningful employment for Menlo Park youth and adults.

City of Menlo Park Below-Market-Rate Housing Program

The city's Below Market-Rate (BMR) Housing Program (Menlo Park Municipal Code Chapter 16.96) is intended to increase the supply of affordable housing in Menlo Park. As part of the program, qualifying residential and other developers are required to contribute BMR housing units and/or BMR housing in-lieu fees. These units may be available for rent at low-income levels (or an equivalent alternative) or purchase by very low-, low-, or moderate-income households. The BMR Housing Program is administered under the BMR Housing Program Guidelines (Guidelines). Residential developments with five or more units are subject to the requirements of the BMR Housing Program. Specifically, they must submit a BMR Housing Agreement and comply with the program before a building permit or land use authorization can be issued. For developments with five to 19 units, the developer must provide not less than 10 percent of the units at below-market rates to very low-, low-, and moderate-income households. For developments with 20 or more units, no fewer than 15 percent of the units must be provided at below-market rates to very low-, low-, and moderate-income households, in compliance with the BMR Guidelines. Commercial development projects that add 10,000 square feet of new square footage or more, or that convert more

[30] City of Menlo Park. 2016. *City of Menlo Park General Plan, Land Use and Circulation Elements*. November 29. Available: https://menlopark.gov/Government/Departments/Community-Development/Planning-Division/Comprehensive-planning/ConnectMenlo. Accessed: January 11, 2024.

than 10,000 square feet from an exempt use to a non-exempt use or from a commercial/industrial use to an office/R&D use, are required to provide BMR units or pay an affordable housing impact fee.[31]

Environmental Impacts

This section describes the impact analysis related to population and housing for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through the extension of roads or other infrastructure).
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Methods for Analysis

This analysis considers whether population and household growth would occur with implementation of the Proposed Project and whether this growth would be within the forecasts for the city and/or considered substantial with respect to remaining growth potential in the city. This section uses ABAG projections to analyze the impacts of the Proposed Project.

The primary source of information used in preparing the analysis of population and housing was the HNA (Appendix 3.14-1 of this EIR). U.S. Census Bureau, U.S. Bureau of Labor Statistics, and California Employment Development Department data were used in preparation of the HNA. The HNA presents the anticipated housing needs associated with the Proposed Project. Issues related to both increased demand for housing and the regional housing needs allocation are addressed. The HNA is part of a range of analyses that will be used in the decision-making and entitlement process for the Proposed Project. In addition to providing an analysis of the housing supply and housing demand impacts of the Proposed Project, the HNA also evaluates the Proposed Project's potential to contribute to the displacement of existing residents in nearby communities vulnerable to displacement. However, indirect displacement, as analyzed in the HNA, is provided for informational purposes and is not a requirement of CEQA. As noted in the HNA, the Proposed Project is not likely to have a material impact on displacement pressures in communities vulnerable to displacement, located roughly two to three miles away, because as described in more detail in the HNA, the Proposed Project adds 550 units to the housing supply, including 168 BMR units, and is in an area with a low risk of displacement. Please refer to the HNA (Appendix 3.14-1) for a more thorough evaluation of the Proposed Project's potential to contribute to displacement.

Indirect or secondary impacts are those that are caused by a project and later in time or farther removed in distance but still reasonably foreseeable. Indirect or secondary effects may include growth-inducing

[31] City of Menlo Park. 2024. *Menlo Park Municipal Code*. Chapter 16.96, Below-Market-Rate Housing Program. Available: https://www.codepublishing.com/CA/MenloPark/#!/MenloPark16/MenloPark1696.html#16.96. Accessed: January 11, 2024.

effects and other effects related to induced changes in the pattern of land use, population density, or growth (CEQA Guidelines, Section 15358[a][2]). Specifically, growth-inducing effects include the ways in which a project could foster economic or population growth or the construction of additional housing, either directly or indirectly. As such, indirect population growth is a secondary impact and therefore considered below.

Numbers in the footnote formulas may not add up exactly because of rounding. For ease of reference, decimal places are not shown. The totals described in the text are correct, when accounting for rounding. The numbers in this section are also consistent with the numbers provided in the HNA.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of the Build-out Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, both scenarios would result in the same level of impact; in those cases, the analysis does not identify a "worst-case" scenario.

The same number of units (550 units) and onsite residents would be generated under either scenario. However, in general, R&D and life science uses require fewer employees than office buildings of the same size. The 100 percent office scenario is expected to generate approximately 3,868 employees, which is more than the approximately 2,667 employees that would be generated under the 100 percent R&D scenario. Therefore, the 100 percent office scenario has greater potential to result in significant impacts with respect to induced unplanned population growth, and is the scenario evaluated for purposes of the analysis in this section.

Impacts and Mitigation Measures

Impact POP-1: Unplanned Population Growth. The Proposed Project would not induce substantial unplanned direct or indirect population growth. (LTS)

Construction

Construction of the Proposed Project, including demolition, grading, utility work, excavation, landscaping, building and parking garage construction, and the application of architectural coatings, would temporarily increase construction employment. Given the relatively common nature and scale of the construction associated with the Proposed Project compared to proposed development projects throughout the Bay Area, the demand for construction employment would most likely be met with the existing and future labor market in the Bay Area. The size of the construction workforce would vary during the different phases of construction, but it is anticipated that construction of the Proposed Project would require between two and 213 construction workers per day. The minimum number of construction workers onsite would be two to six workers during demolition. The maximum number of construction workers onsite would be between 60 and 213 when building construction occurs during each phase. It is anticipated that construction workers would be hired from Bay Area sources. Although some would

commute from outside the Bay Area, because of the temporary nature of construction, these workers would not be expected to relocate permanently. Therefore, impacts related to indirect population growth during construction of the Proposed Project would be ***less than significant***. No mitigation is required.

Operation

The Proposed Project would have impacts on both the supply and demand for housing. New residential units developed by the Project would increase the supply of housing; whereas the Project's non-residential components would increase employment as compared to existing employment conditions and, therefore, would result in new demand for additional housing within commuting distance for workers. Table 3.14-5 includes a summary regarding employment as well as housing supply and demand directly and indirectly induced by the Proposed Project. The numbers provided in the table are described and analyzed in more detail below. As shown in this table, the Proposed Project would result in added housing supply and housing demand, as outlined below.

Table 3.14-5. Summary of Employment and Housing Induced by the Proposed Project

	Onsite	Offsite Due to Induced Employment[a]	Total
Regional Totals			
Net New Employment	3,868	262	4,130 employees
Worker Housing Demand	2,066	140	2,206 housing units
Housing Units Constructed Onsite	550	n/a	550 housing units
Net Decrease in Housing Availability in Region[b]	-1,516	410	-1,656 housing units
Menlo Park Share			
Estimated Menlo Park Share of Housing Need[c]	110	7	117 housing units
Project Housing Units Constructed in Menlo Park	550	n/a	550 housing units
Net Increase in Housing Availability in Menlo Park	440	n/a	433 housing units
Estimated Population Added in Menlo Park	1,305	293[d]	1,598 persons

Source: Keyser Marston Associates. 2024. *Housing Needs Assessment Parkline*. April.

a. Estimated offsite employment would be induced by the demand of the residents at the new onsite housing for additional retail, restaurant, medical, and other services.

b. Housing units constructed under the Proposed Project minus number of households induced by the Proposed Project.

c. The estimated Menlo Park share of housing need is based on commute data from the U.S. Census Bureau showing that an average of 5.3 percent of Menlo Park employees also live in the city.

d. As discussed in more detail below, onsite employment could result in 274 new Menlo Park residents; offsite induced employment could result in 19 new Menlo Park residents. However, because the onsite units added by the Proposed Project (550 units) could accommodate these employment-induced residents, they are included in the total Menlo Park population as a result of the Proposed Project.

- **Added Housing Supply:** The Proposed Project would increase the housing supply with the construction of up to 550 units at the Project Site.
- **Added Housing Demand:** New jobs added by the Proposed Project would result in new worker households that would need housing somewhere within commuting distance to Menlo Park. The approximately up to 3,868 jobs added onsite under the Proposed Project at full office buildout would create a demand for an estimated 2,066 additional housing units, along with an estimated demand for 140 housing units for workers in offsite services (e.g., restaurant, retail, educational, medical, or other

facilities). The number of jobs can be translated into an estimate of worker housing demand, based on an average of 1.87 workers per worker household.[32]

The following analysis describes employment growth as a result of the Proposed Project as well as indirect population growth. Direct population growth from onsite residences is included. The analysis also describes the housing demand and growth resulting from direct and indirect population increases under the Proposed Project.

Employment Growth

Operation of the Proposed Project would generate up to 3,868 net new jobs onsite, accounting for the 400 existing employees who would no longer work at the Project Site with implementation of the Proposed Project. In addition, the Proposed Project would add 550 new residential units in Menlo Park, thereby increasing the population and creating net new demand for products and services. The jobs associated with the delivery of these products and services are also assumed to be net new jobs. Although existing offsite health care facilities, schools, and other services may be able to absorb a portion of the new demand, existing establishments would still require additional employees. As a result, the Proposed Project would induce approximately 262 offsite jobs that would serve residents of the proposed housing. In total, the Proposed Project would result in the creation of approximately 4,130 new jobs in the region. Using the assumption that 5.3 percent of people who live in Menlo Park also work in the city, this would equate to approximately 14 new offsite jobs in Menlo Park. Together with the 3,868 net new jobs onsite, approximately 3,882 new jobs would be created in Menlo Park as a result of the Proposed Project.[33]

As shown in Table 3.14-3, above, ABAG estimates that the number of jobs in the city's sphere of influence will grow by approximately 6,065 between 2020 and 2040. Therefore, the number of direct and indirect employees generated by the Proposed Project in Menlo Park would equal approximately 64 percent[34] of the anticipated employment growth in the city from 2020 to 2040, which is within employment growth forecasts. Therefore, the number of employees generated by the Proposed Project would not exceed ABAG projections, and the Proposed Project would not result in an increase in city population or demand for housing that would exceed ABAG projections, as explained in more detail below.

Indirect Population Growth from Project Employment

Operation of the Proposed Project would generate up to 3,868 net new jobs at the Project Site. Using an average of approximately 1.87 workers per housing unit in San Mateo County, the Proposed Project would generate approximately 2,066 new households regionally.[35] The current estimate of "commute share" uses data on existing commute patterns to estimate the number of workers who would live in Menlo Park; it is currently estimated that 5.3 percent of Menlo Park's workforce also lives in Menlo Park. The city-wide average for commute share is similar to the 4.9 percent share from existing SRI International employees

[32] Ibid. KMA derived the worker-per-worker household figure from ACS data for 2017 to 2021. The ACS data provide estimates of the total number of workers in San Mateo County (399,594) and the total number of households with at least one working household member (213,491). The ratio of the two figures for San Mateo County is 1.87 workers per worker household. The San Mateo County figure is used in the analysis because worker averages will be more similar to those of the county as a whole rather than those from the smaller city of Menlo Park profile, which has an average of 1.72 workers per worker household.

[33] Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

[34] 3,868 net jobs at the Project Site + 14 new jobs in the city induced by the onsite residents/6,065 new jobs in the city between 2020 and 2040 × 100 = 64 percent of anticipated employment growth in the city's sphere of influence.

[35] 3,868 new jobs/1.87 workers per housing unit = 2,066 total households (rounded).

who live in Menlo Park, based on data reported by the Project Sponsor.[36] However, city-wide data provide a more accurate representation of employment trends under the Proposed Project. Therefore, assuming that 5.3 percent of workers who work at the Project Site would also live in Menlo Park, approximately 110 new households would be generated in the city.[37] With an average 2.50 pph, the Proposed Project's onsite employment could generate approximately 274 residents in Menlo Park.[38] In addition, the residential uses of the Proposed Project would result in an indirect demand for 262 new offsite employees throughout the region. With an average of 1.87 workers per housing unit in San Mateo County, the Proposed Project would generate approximately 140 new households regionally from offsite employees.[39] Assuming 5.3 percent of employees who work in the city would also live in the city, approximately seven new households would be generated.[40] With an average 2.50 pph, the Proposed Project's offsite induced employment could generate approximately 19 residents in Menlo Park.[41]

The onsite and offsite employment induced by onsite residents would result in indirect population growth (i.e., approximately 293 new Menlo Park residents). As shown in Table 3.14-1, approximately 44,530 residents lived within the city's sphere of influence in 2020. According to ABAG projections, the population is projected to increase to approximately 54,920 by 2040. This represents 10,390 additional residents over 20 years. The addition of up to 293 new residents in the city as a result of the Proposed Project's onsite employment, as well as indirect offsite employment, would represent approximately 2.8 percent of the anticipated population growth within the city between 2020 and 2040.[42]

Direct Population Growth from Onsite Residences

The proposed dwelling units would be located within the residential area on the Project Site. The units would consist of studio units and one-, two-, and three-bedroom units that would be distributed throughout four multi-family buildings and 19 townhouses. Of these residential units, 431 would be within three buildings with multi-family rental units and 19 would be within townhouses, for a total of 450 multi-family dwelling units. Consistent with the city's inclusionary housing requirements, 15 percent of the dwelling units (68 dwelling units) would be BMR housing. Under the city's BMR requirements, the overall income mix for the inclusionary units needs to average 80 percent of the AMI (i.e., low income), with an option to provide a range of BMR income levels that achieves a low-income average. The city's BMR requirements also specify that BMR units generally need to reflect the overall type and size of market-rate units.

Beyond the BMR requirement, the Proposed Project's additional 100 dwelling units to be developed by an affordable housing developer would all be affordable and located within one building. In total, the proposed BMR units would represent up to 31 percent of the total units in the Proposed Project, which exceeds the city's 15 percent inclusionary requirement.

As shown in Table 3.14-6, the residential uses at the Project Site would provide a mix of studio as well as one-, two-, and three-bedroom units and townhomes. Because of the proposed unit sizes, estimates for

[36] According to the Project Sponsor, 54 of the approximately 1,100 existing SRI International employees live in Menlo Park, which equates to a 4.9 percent share living in Menlo Park.

[37] 2,066 regional households × 5.3 percent of people who work and live in Menlo Park = 110 new households in Menlo Park.

[38] 110 new households × 2.50 pph = 274 residents in Menlo Park (rounded).

[39] 262 new jobs/1.87 workers per housing unit = 140 total households.

[40] 140 regional households × 5.3 percent of people who work and live in Menlo Park = 7 new households in Menlo Park.

[41] 7 new households × 2.50 pph = 19 residents in Menlo Park (rounded).

[42] Up to 293 new residents in the city's sphere of influence/10,390 anticipated new residents in the city's sphere of influence between 2020 and 2040 = 2.8 percent of anticipated population growth in the city's sphere of influence.

the onsite population reflect a lower average household size than the city average of 2.50 pph. Across all units, it is expected that the average household size would be approximately 2.37 pph. This would result in a total onsite population of approximately 1,305. Table 3.14-8 summarizes the onsite population by unit size.

Table 3.14-6. Onsite Population by Unit Size

	Number of Units	Estimated Household Size[a]	Total Number of People
Studio	95	1	95
1-Bedroom Unit	218	2	436
2-Bedroom Unit	174	3	522
3-Bedroom Unit	44	4	176
Townhomes	19	4[a]	76
Total	***550***	***2.37***	***1,305***

Source: California Health and Safety Code Section 50052.5(h), 2024.

a. Assumes townhomes will include an average of three bedrooms.

Based on ABAG projections, the residential population in Menlo Park is expected to increase by 10,390 over the next 20 years. The addition of up to 1,305 new onsite residents in the city as a result of the Proposed Project would represent approximately 12.5 percent of the anticipated population growth within the city between 2020 and 2040.[43]

Total Menlo Park Population Growth

Overall, as discussed above, the onsite and offsite employment induced by the Proposed Project would result in 293 new Menlo Park residents. Housing units generated by the Proposed Project on the Project Site are anticipated to increase the resident population of Menlo Park by 1,305. Assuming the conservative scenario that none of the Proposed Project employees would live onsite (an unlikely scenario), the Proposed Project would result in up to 1,598 new residents in Menlo Park. Based on ABAG projections, the residential population in Menlo Park is expected to increase by 10,390 over the next 20 years. The addition of up to 1,598 new residents in the city as a result of the Proposed Project (employment and onsite residents) would represent approximately 15.4 percent of the anticipated population growth within the city between 2020 and 2040.[44]

Total Regional Housing Demand and Growth

As discussed above, at full buildout, the Proposed Project would induce a demand for 2,066 housing units in the region as a result of onsite employment. In addition, approximately 140 households would be induced by offsite employment, creating a total demand for 2,206 housing units across the region. Although the Proposed Project would add up to 550 new residential units to the housing supply, because of the regional housing demand from the Proposed Project's onsite and induced employment, there would be a 1,656-unit deficit in housing supplied by the Proposed Project in Menlo Park compared to the demand created by the Proposed Project in the region.[45] Therefore, the Proposed Project is estimated to result in a net decrease in available

[43] Up to 1,305 new residents in the city's sphere of influence/10,390 anticipated new residents in the city's sphere of influence between 2020 and 2040 = 12.5 percent of anticipated population growth in the city's sphere of influence.

[44] Up to 1,598 new residents in the city's sphere of influence/10,390 anticipated new residents in the city's sphere of influence between 2020 and 2040 = 15.4 percent of anticipated population growth in the city's sphere of influence.

[45] Project demand for 2,206 units minus the Proposed Project's provision of 550 units = 1,656-unit deficit.

housing in the region (i.e., approximately 1,656 units).[46] However, the approximately 1,656-unit decrease across the region as a result of the Proposed Project, as induced by onsite and offsite employment, could be accommodated within other allowable construction in the city and housing in the rest of the region. Within the city alone, the Housing Element (2023–2031) EIR evaluates the development of up to 4,000 new residential units within the 8-year planning period. These housing units would be constructed at various sites throughout the city; therefore, it is anticipated that some of the housing demand as a result of the Proposed Project could be accommodated within the projected housing studied in the Housing Element.

According to ABAG projections, the number of households in the Bay Area is expected to grow by 544,735 between 2020 and 2040. Therefore, the 1,656-unit demand deficit represents only a small fraction of the anticipated housing growth in the region between 2020 and 2040. Furthermore, only 5.3 of the employees who would be induced by the Proposed Project would live in the city; therefore, the rest would seek housing elsewhere in the Bay Area. Out of the 2,206 households induced by the Proposed Project, it is anticipated that approximately 30.4 percent of the Proposed Project's induced employees at full buildout would live in Santa Clara County (671 employees), approximately 38.7 percent would live in San Mateo County (855 employees), 12.2 percent would live in Alameda County (269 employees), 12 percent would live in San Francisco County (265 employees), and the remainder would live in other nearby counties.[47]

Within Menlo Park, onsite and offsite induced employment would generate a demand for 117 housing units within the city. However, the net increase in housing availability in Menlo Park as a result of the Proposed Project would amount to 550 units. Therefore, the proposed housing at the Project Site would offset the housing demand from onsite and offsite induced employees who would both live and work in Menlo Park. In addition, the Proposed Project was considered as part of the growth accounted for in regional planning efforts and projections, including the Menlo Park Housing Element. Therefore, the Proposed Project's induced housing demand in the city, county, and region was also accounted for. The remaining employees who would not live in Menlo Park would very likely find housing throughout the region, with the majority living in San Mateo, Santa Clara, Alameda, and San Francisco Counties.

ABAG projections are considered the benchmark for foreseeable housing growth (i.e., built housing) in each area. As shown in Table 3.14-2, ABAG projects that the number of households will grow by 18.9 percent in the Bay Area, 11.9 percent in San Mateo County, and 14.9 percent in the city between 2020 and 2040. For that same period, the indirect housing demand generated by the Proposed Project would be 0.4 percent of the projected household growth in the Bay Area and 6.6 percent of that in San Mateo County. On a regional basis, the Proposed Project's demand for housing would not represent a significant share of the total housing growth projected by ABAG.

Conclusion

Housing at the Project Site is included in Table 7-6 of the city's 2023–2031 Housing Element as a pipeline project. It was anticipated that the Project Site would include 400 new housing units (340 market-rate units and 60 below-market-rate units), along with an office/R&D campus.[48] As such, much of the development proposed under the Proposed Project is accounted for under city and regional projections. The Proposed Project would construct more housing (550 units) than originally analyzed under the Housing Element, but the units would be absorbed within the 4,000 total residential units analyzed in

[46] Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

[47] Ibid.

[48] City of Menlo Park. 2023. *Sixth-Cycle Housing Element: 2023–2031.* Adopted January 2023. Amended January 2024.

HEU EIR. Therefore, the Proposed Project would be consistent with the intensity of residential development, job development, and associated population increases considered by the General Plan and Housing Element and would not result in residential or employment growth beyond that already analyzed in previous EIRs.

Although it is not known exactly where the offsite generation of approximately 262 jobs would occur as a result of the housing component of the Proposed Project at full buildout, it can be assumed that the majority of the jobs would be dispersed throughout San Mateo County and not just within Menlo Park, given the proximity of the Project Site to other jurisdictions within the county. As discussed above, according to ABAG, San Mateo County is expected to experience continued employment growth, with approximately 72,770 jobs by 2040. The increase in offsite jobs under the Proposed Project would therefore represent a small percentage of the employment growth expected in San Mateo County by 2040 and would fall within the range of expected employment growth accounted for by ABAG.

The Proposed Project is an infill development within an already-developed area of the city. The employment growth under the Proposed Project is accounted for in the city's Housing Element and regional growth plans, such as ABAG projections. The Proposed Project would increase the supply of housing in Menlo Park by providing new housing. However, non-residential Proposed Project components would increase employment and likely result in the demand for additional housing within commuting distance for workers. The housing demand in the city as a result of the Proposed Project can be accommodated in the city, and the anticipated housing demand in the region has been anticipated in regional growth plans. The Project Site is an urban infill site and served by existing infrastructure and services. The Proposed Project would not induce a substantial level of unplanned population growth, either directly or indirectly, resulting in ***less-than-significant*** impacts. No mitigation is required.

Impact POP-2: Displacement of People or Housing. The Proposed Project would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere. (LTS)

The Proposed Project would not directly displace housing because there is no existing housing on the Project Site. Therefore, the Proposed Project would not directly displace people or housing by demolishing housing units. The displacement of housing units or residents is an appropriate subject for study under CEQA to the extent that a project would displace housing onsite and result in a need to construct replacement housing elsewhere. By itself, the possibility of a project resulting in economic displacement of existing residents represents a social and economic issue that would not be considered an impact on the physical environment, unless there is substantial evidence that economic displacement would result in reasonably foreseeable (i.e., not speculative) indirect physical effects that would require the construction of new housing. For the Proposed Project, determining how economic effects influence future housing development in particular locations throughout a region is too speculative to predict or evaluate. Therefore, for purposes of CEQA, the Proposed Project would not result in the displacement of substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere, resulting in a ***less-than-significant*** impact. No mitigation is required.

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*.

Impact C-POP-1: Cumulative Unplanned Population Growth. Cumulative development would not result in a significant environmental impact related to unplanned population growth; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The geographic context for cumulative population and housing growth with the Proposed Project includes the area within the Menlo Park city boundary and sphere of influence in combination with projected growth in the rest of San Mateo County and the surrounding region, as forecasted by ABAG. Impacts from cumulative growth were considered in the context of their consistency with regional planning efforts.

The majority of the housing proposed at the Project Site is included in the analysis of the Menlo Park Housing Element Update EIR. The Proposed Project would construct more housing (550 units) than originally analyzed under the Housing Element, but the units would be included within the 4,000 units analyzed in the HEU EIR. Implementation of the HEU would have a less-than-significant impact with respect to unplanned population growth or residential displacement. When growth planned for in the HEU is combined with other growth projected to occur in the city, there would be a total of 24,829 dwelling units, and 63,810 residents in Menlo Park by the year 2040.[49] This would represent an increase of 9,365 dwelling units and 23,372 people from the 2021 baseline and would exceed the projection of households and population for the city of Menlo Park in Plan Bay Area 2040.

Nonetheless, complete build-out of the HEU in the timeframe of the housing element represents a conservative assumption, and would require a consistently high rate of housing production beyond typical trends the city has seen in recent years. In addition, the potential population and housing growth provided for in the HEU would conform to the ABAG RHNA Plan and would conform to the city's zoning code and General Plan, as amended, and would thus constitute planned growth. In addition, the city and surrounding areas implement general plans and regulations adopted to guide development and growth within their respective jurisdictions. Therefore, any additional projects beyond the scope of local or regional projects would not alter the less-than-significant cumulative impact determination.

Housing demand, beyond that accommodated by the Proposed Project, from onsite and offsite employment associated with the Proposed Project could be accommodated in the region. Therefore, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects in the city and region would not result in a significant cumulative impact from unplanned population growth. The cumulative impact related to unplanned population growth would be ***less than significant***. No mitigation is required.

Impact C-POP-2: Cumulative Displacement of People or Housing. Cumulative development would not result in a significant environmental impact related to displacement of people or housing; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The geographic context for cumulative displacement of people or housing impacts includes the area within the Menlo Park city boundary and sphere of influence in combination with projected growth in the rest of San Mateo County and the surrounding region, as forecast by ABAG. The Project Site currently does not contain housing units. During construction, workers would be displaced only temporarily. Therefore, the Proposed Project would not displace housing or permanently displace people. Furthermore, the Proposed Project would not require the construction of replacement housing elsewhere. Housing

[49] City of Menlo Park. *City of Menlo Park Housing Element Update Draft Subsequent Environmental Impact Report*. November 2022. Certified January 31, 2023.

demand, beyond that accommodated by the Proposed Project, from onsite and offsite employment associated with the Proposed Project could be accommodated in the region. Such demand is accounted for in the ABAG growth projections for the region. Therefore, because the Proposed Project would be within the scope of development anticipated by ConnectMenlo and the Housing Element, the Proposed Project would not make a cumulatively considerable contribution with respect to significant cumulative impacts related to the displacement of people or housing.

For these reasons, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects within the city and region would not result in a significant cumulative impact associated with the displacement of people or housing. The cumulative impact related to displacement of people or housing would be ***less than significant***. No mitigation is required.

3.15 Public Services and Recreation

This section identifies and evaluates the Proposed Project's potential impacts on public services and recreation, including police, fire, and emergency services; recreational facilities; libraries; and schools. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. Comments included requests to assess the Proposed Project's potential impacts on public service providers (i.e., emergency and first-responder response times) and recreational facilities (i.e., within Burgess Park). Comments also requested an assessment of the impact of population growth on schools, the potential for overcrowding in schools, and whether schools would have adequate capacity to serve Project-generated students or if there would be a need for new school facilities.

Existing Conditions

Environmental Setting

Fire and Emergency Services

The Menlo Park Fire Protection District (MPFPD), which has a service boundary of 30 square miles, serves the cities of Menlo Park, Atherton, East Palo Alto, and some unincorporated areas in San Mateo County. Seven MPFPD fire stations currently serve an estimated residential population of approximately 90,000.[1] The MPFPD is organized into four Fire District Divisions, as follows: Operations, Support Services, Fire Prevention, and Administration. As of 2021, the MPFPD had 109 fire safety and emergency services personnel. The MPFPD also employs an administrative support staff of 39.[2] At present staffing levels, the MPFPD has a ratio of approximately 1.2 firefighters per 1,000 residents in the service population. In addition, the MPFPD is part of the greater San Mateo County boundary-drop plan, which means the closest unit responds to each call, regardless of the department.

In 2022, the MPFPD responded to approximately 9,749 emergencies.[3] For first-response units, the adopted performance goal is to have the first unit arrive on the scene of all Code 3 (i.e., using warning lights and sirens) emergencies within 7 minutes, starting from the time of the call to the dispatch center, 90 percent of the time. For the full response, the MPFPD's goal is to have all dispatched units arrive on the incident scene within 11 minutes, starting from the time of the call to the dispatch center, 90 percent of

1 Menlo Park Fire Protection District. 2023. *Who We Serve*. Available: https://www.menlofire.gov/our-fire-district. Accessed: September 1, 2023.

2 ESA. 2022. *City of Menlo Park Housing Element Update Draft Subsequent Environmental Impact Report*. Available: https://menlopark.gov/files/sharedassets/public/v/1/community-development/documents/projects/housing-element-update/menlo-park-housing-element-update-draft-seir.pdf. Accessed: September 13, 2023.

3 Johnston, Jon. Division Chief/Fire Marshal, Menlo Park Fire Protection District. November 15, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

the time.[4] The MPFPD's average response times fall under the currently adopted 7-minute standard for first-response units and 11-minute standard for all units.[5]

The closest fire stations to the Project Site are MPFPD Station 1, located at 300 Middlefield Road; MPFPD Station 6, located at 700 Oak Grove Avenue; and MPFPD Station 5, located at 4101 Fair Oaks Avenue. Station 1 serves the city of Menlo Park, the town of Atherton, and unincorporated areas of the county. Station 1 staffs an engine, truck, and rescue squad with two captains, two firefighters, and one paramedic/firefighter per shift. Of the personnel for each shift, at least one is a licensed paramedic with Advanced Life Support certification and two are qualified engineers. Station 5's primary response area includes the unincorporated area of North Fair Oaks, the city of Menlo Park, and the town of Atherton. Station 5 staffs an engine with one captain and two firefighters per shift. Of the three personnel per shift, one is a licensed paramedic and one is a qualified engineer. Station 6's primary response areas include the downtown commercial district of Menlo Park and the town of Atherton. Station 6 staffs an engine with one captain, two firefighters, and one battalion chief. Of the four personnel per shift, one is a licensed paramedic and one is a qualified engineer.[6,7] The MPFPD plans to replace and expand Fire Station 1.[8]

Police

The Menlo Park Police Department (MPPD) serves Menlo Park, including the Project Site, which is within Beat 2. The MPPD is headquartered at Menlo Park City Hall at 701 Laurel Street, adjacent to the western boundary of the Project Site. This station covers the entire service area. The MPPD also operates a police substation and neighborhood service center north of U.S. 101 in the Belle Haven neighborhood. The Belle Haven Neighborhood Service Center and Substation houses the MPPD's Code Enforcement Office and a community safety police officer. MPPD officers use the substation to make calls as well as interview and/or process suspects, victims, or witnesses. In addition, the substation serves as a place for the community to meet with police officers or gather.

The MPPD is headed by a chief of police who oversees four divisions, the Patrol Division; Special Operations Division; Records, Dispatch, and Property Division; and Recruitment, Training, and Public Relations Division. MPPD staffing includes 47 sworn officers and a support staff of 22.5, for a total of 69.5 full-time-equivalent (FTE) staff members.[9] The MPPD's current service population is approximately 45,000, which represents the existing population plus one-third of the employees in Menlo Park. The current MPPD service ratio is therefore approximately 1.04 sworn officers per 1,000 residents, which is below the MPPD's target ratio of 1.3 or 1.4 sworn officers per 1,000.

A review of the MPPD's call volume indicates that the annual number of calls for service was approximately 33,000 in fiscal year 2022 to 2023, with 12,000 of those being moderate to high-priority

4 Emergency Services Consulting International. 2020. *Community Risk Assessment: Standards of Cover—Menlo Park Fire Protection District, California*. Available: https://www.menlofire.gov/media/News/2020/January%202020/Menlo%20Park%20FPD%20SOC_Final.pdf. Accessed: September 8, 2023.

5 Johnston, Jon. Division, Chief/Fire Marshal, Menlo Park Fire Protection District. November 15, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

6 Ibid.

7 Menlo Park Fire Protection District. 2020. *Menlo Park Fire Protection District 2020 Annual Report*. Available: https://www.menlofire.gov/media/PDF/Annual%20Reports/2020%20Annual%20Report.pdf. Accessed: September 8, 2023.

8 Johnston, Jon. Division Chief/Fire Marshal, Menlo Park Fire Protection District. November 15, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

9 Norris, David. Police Chief, Menlo Park Police Department. November 16, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

calls.[10] The MPPD's average response time from call to officer on scene for high-priority calls is under approximately 12 minutes; the time from dispatch of incident to officer on scene is under approximately 8 minutes.[11]

The MPPD has a mutual aid agreement with every police agency in San Mateo County. This includes the Atherton Police Department, East Palo Alto Police Department, Redwood City Police Department, and the San Mateo County Sherriff's Office, which is responsible for law enforcement in unincorporated areas of Menlo Park and Redwood City. The MPPD also has an informal mutual aid agreement with the Palo Alto Police Department, which borders Menlo Park but is in Santa Clara County.[12] In preparation for the General Plan and M-2 Area Zoning Update (ConnectMenlo), the MPPD indicated that it would need to hire an additional 17 sworn officers and purchase equipment commensurate with the level of growth and expansion anticipated in Menlo Park.

The Project Site is currently monitored by a private security firm, which helps supplement services provided by the MPPD. This private security includes, but is not limited to, fencing, closed-circuit television, alarms, vehicle and pedestrian gates, security officer–staffed access points, and card-controlled access points. SRI's Security Officer Force, which operates 24 hours a day, 7 days a week, is staffed to ensure that appropriate security is maintained on the Project Site. SRI security personnel interact with the MPPD as needed. However, other than public law or safety violations, SRI does not involve the MPPD with site security operations. SRI does, however, list the MPPD in some security plans but only for issues related to public law or safety.

Schools

Four elementary/middle school districts and one high school district are within the boundaries of Menlo Park: Menlo Park City School District (CSD), Ravenswood CSD, Las Lomitas School District, Redwood CSD, and Sequoia Union High School District (SUHSD). The portion of Menlo Park that includes Las Lomitas School District, which is generally bounded by Alameda de las Pulgas to the north and Interstate 280 to the south, is built out, with no substantial potential for new housing units. Therefore, this school district is not analyzed further in this section because the Proposed Project would not induce the construction of new housing in that area and, subsequently, generate new students.

The Project Site is served by the Menlo Park CSD. However, the Proposed Project could indirectly generate students in the attendance areas of other districts because the potential exists for onsite employees to live elsewhere; therefore, the remaining districts are discussed in detail below.

Each school district that serves Menlo Park is part of a development fee-sharing agreement. The SUHSD collects development fees and distributes a percentage of the fees to its feeder districts, which include Menlo Park CSD, Ravenswood CSD, Las Lomitas School District, and Redwood CSD.

Menlo Park City School District. The Menlo Park CSD serves parts of Menlo Park, Atherton, and unincorporated areas of San Mateo County. The Menlo Park CSD operates an early-learning center, three elementary schools (Encinal School, Laurel School [Upper and Lower Campus], and Oak Knoll School) and one middle school (Hillview Middle School). According to the most recent data available, total student enrollment at the four transitional kindergarten (TK) through eighth-grade schools was 2,825 from 2022

[10] Ibid.

[11] Ibid.

[12] City of Menlo Park. 2020. *Menlo Park Police Department Policy Manual*. Available: https://www.menlopark.org/DocumentCenter/View/27049/Menlo_Park_PD_Policy_Manual-12-31-2020. Accessed: September 11, 2023.

to 2023.[13] With 180.6 teachers employed from 2021 to 2022, the Menlo Park CSD had a student/teacher ratio of approximately 15.6 students per teacher.[14,15]

The Menlo Park CSD is required to accommodate students within its boundaries. When a school reaches capacity, students can attend an alternate school within the district. If all classes are at capacity, then the Menlo Park CSD may increase the class size or open new classrooms. Table 3.15-1 provides a breakdown of the schools within the district, their capacities from 2023 to 2024, and current enrollment. Although Table 3.15-1 indicates that there is additional capacity available in all Menlo Park CSD schools, Menlo Park CSD has indicated that three of its five campuses are very close to capacity, either because of classroom size or the current state of the facilities.[16]

Table 3.15-1. Menlo Park City School District—Capacity and Enrollment

School	Grades	Capacity	Enrollment Population (2023–2024)	Additional Capacity
Laurel School [Lower Campus]	TK–2	350	348	2
Laurel School [Upper Campus]	3–5	350	315	35
Encinal School	TK–5	700	632	68
Oak Knoll School	TK–5	700	582	118
Hillview Middle School	6–8	900	860	40

Source: Kristen Garcia, Superintendent, Menlo Park City School District. November 20, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

The Menlo Park CSD's most recent student generation rates for elementary schools are 0.42 student per complex or townhome and 0.04 student per condominium or apartment.[17,18]

Ravenswood City School District. The Ravenswood CSD serves northern Menlo Park and East Palo Alto. The district operates three elementary schools and one middle school. Belle Haven Elementary School and Ravenswood Middle School serve students in the Ravenswood CSD attendance area who live in Menlo Park. Reported student enrollment for the 2023–2024 school year (the most recent data available) was 1,523.[19] Ravenswood employed 93.3 teachers from 2021 to 2022, resulting in a student/teacher ratio of approximately 16.3 students per teacher.[20] The district anticipates that enrollment will remain the same in the near term. However, the district is in the process of updating and improving school facilities across

[13] Kristen Garcia, Superintendent, Menlo Park City School District. November 20, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

[14] Ibid.

[15] California Department of Education. 2023a. *DataQuest: 2021–2022 Teaching Assignment Monitoring Outcomes by Full-Time Equivalent (FTE), Menlo Park City School District.* Available: Teaching Assignment Monitoring Outcomes by FTE – Menlo Park City Elementary (California Department of Education). Accessed: September 13, 2023.

[16] Kristen Garcia, Superintendent, Menlo Park City School District. November 20, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

[17] Ibid.

[18] A complex is a building or group of buildings with multiple residential units, such as a duplex, triplex, fourplex, or sixplex.

[19] Pineda, Maria. Executive Coordinator to the Superintendent, Ravenswood City School District. October 3, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

[20] California Department of Education. 2023b. *DataQuest: 2021–2022 Teaching Assignment Monitoring Outcomes by Full-Time Equivalent (FTE), Ravenswood City School District*. Available: Teaching Assignment Monitoring Outcomes by FTE - Ravenswood City Elementary (CA Dept of Education). Accessed: September 14, 2023.

the district. This includes removing outdated portable classrooms, which, in turn, would slightly reduce overall capacity at the schools.[21] The Ravenswood CSD's student generation rate is 0.249 student per housing unit for grades K–5 and 0.123 student per housing unit for grades 6–8.[22] Table 3.15-2 provides a breakdown of schools within the district, capacities, and current enrollment.

Table 3.15-2. Ravenswood City School District—Capacity and Enrollment

School	Grades	Total Capacity	Current Enrollment (2023–2024)	Additional Capacity
Belle Haven Elementary School	K–5	500	372	128
Costano School of the Arts	K–5	500	356	144
Los Robles Ronald McNair Academy	K–5	300	259	41
Cesar Chavez Ravenswood Middle School	6–8	750	536	214

Source: Maria Pineda, Executive Coordinator to the Superintendent, Ravenswood City School District. October 3, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

Redwood City School District. The Redwood CSD serves elementary and middle school students in Redwood City and portions of San Carlos, Menlo Park, Atherton, and Woodside. Redwood CSD has 16 schools, including 11 elementary schools, one middle school, three charter schools, and one Spanish immersion school. Not including enrollment at the charter schools and Spanish immersion school, which are considered "schools of choice," student enrollment in the Redwood CSD is approximately 5,800.[23] The district employs approximately 285.2 teachers, resulting in a student/teacher ratio of approximately 20.3 students per teacher.[24,25] The Redwood CSD's student generation rates for elementary schools are 0.36 student for single-family detached units, 0.18 student for single-family attached units, and 0.10 student for multi-family units. The Redwood CSD's student generation rates for middle schools are 0.10 student for single-family detached units, 0.06 student for single-family attached units, and 0.04 student for multi-family units.[26]

Taft Community School and Kennedy Middle School serve portions of Menlo Park. Because Redwood CSD is a "district of choice" that allows students to apply to its four "schools of choice," regardless of attendance boundary, not all students living within a specific attendance boundary necessarily attend those schools. Table 3.15-3 provides a breakdown of the schools within the district that serve portions of Menlo Park, their capacities, and current enrollment.

[21] Pineda, Maria. Executive Coordinator to the Superintendent, Ravenswood City School District. October 3, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

[22] School Facility Consultants. 2020. *School Facility Fee Justification Report for Residential, Commercial, and Industrial Development Projects for the Ravenswood City School District*. June.

[23] California Department of Education. 2023c. *DataQuest: 2022–2023 Enrollment by Grade, Redwood City School District.* Available: https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=4169005&agglevel=district&year=2022-23. Accessed: September 15, 2023.

[24] California Department of Education. 2023d. *DataQuest: 2021–2022 Teaching Assignment Monitoring Outcomes by Full-Time Equivalent (FTE), Redwood City School District.* Available: https://dq.cde.ca.gov/dataquest/DQCensus/TchAssgnOutcomeLevels.aspx?agglevel=District&cds=4169005&year=2021-22. Accessed: September 15, 2023.

[25] This calculation is for the Redwood City School District's non-charter schools and Spanish immersion school.

[26] DecisionInsite. 2015. *Residential Research Summary*. Prepared for the Redwood City School District. August.

Table 3.15-3. Redwood City School District—Capacity and Enrollment

School	Grades	Total Capacity[a]	Current Enrollment (2022–2023)[b]	Additional Capacity
Taft Community School	K–5	800	354	446
Kennedy Middle School	6–8	1,150	706	444

Source:

a. ESA. 2022. *City of Menlo Park Housing Element Update Draft Subsequent Environmental Impact Report*. Available: https://menlopark.gov/files/sharedassets/public/v/1/community-development/documents/projects/housing-element-update/menlo-park-housing-element-update-draft-seir.pdf. Accessed: September 13, 2023.

b. California Department of Education. 2023c. *DataQuest: 2022–2023 Enrollment by Grade, Redwood City School District.*

Sequoia Union High School District. The SUHSD operates four comprehensive high schools, one alternative high school, one technology- and design-focused high school, and one charter school, along with additional programs. The SUHSD serves Atherton, East Palo Alto, San Carlos, Woodside, Belmont, Portola Valley, portions of unincorporated San Mateo County, and Menlo Park. Student enrollment in the SUHSD, which is steadily increasing, was 8,806 as of the 2023–2024 school year. The district employs a staff of approximately 1,189.[27] TIDE Academy, a new high school at 150 Jefferson Drive with capacity for 400 students,[28] opened in August 2019 to accommodate enrollment growth within the district. As of the 2022–2023 school year, an estimated 243 students were enrolled at TIDE Academy.[29] Among the other SUHSD schools, Menlo-Atherton High School serves students residing in Menlo Park. Total student enrollment at Menlo-Atherton High School in 2022–2023 was approximately 2,125.[30] This school's capacity is estimated to be 2,600; therefore, the school is under capacity. With approximately 127.3 teachers,[31] Menlo-Atherton High School has a student/teacher ratio of approximately 16.7 students per teacher. The SUHSD has a student generation rate of 0.14 student per single-family detached housing unit, 0.09 student per single-family attached unit, and 0.10 for multi-family units.[32]

Parks and Recreation

The Menlo Park Library and Community Services Department is responsible for providing recreational and cultural programs for residents of Menlo Park. Its facilities include 17 parks, two recreational centers, two public pools, two preschool childcare centers, two school-age childcare centers, two gymnasiums, one senior center, and one gymnastics center. Included in the park and recreational areas are tennis and pickleball courts, softball diamonds, basketball courts, picnic areas, dog parks, playgrounds, a skate park, a shared-use performing arts center, athletic fields, running track, outdoor exercise stations, and open

27 Marquez, Cecilia. Senior Administrative Secretary, Sequoia Union High School District. February 9, 2024—email to Payal Bhagat, contract principal planner, city of Menlo Park.

28 Ibid.

29 California Department of Education. 2023e. *DataQuest: 2022–2023 Enrollment by Grade, Sequoia Union High School District*. Available: https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=4169062&agglevel=district&year=2022-23. Accessed: September 15, 2023.

30 Ibid.

31 California Department of Education. 2023f. *DataQuest: 2021–2022 Teaching Assignment Monitoring Outcomes by Full-Time Equivalent (FTE), Sequoia Union High School District.* Available: https://dq.cde.ca.gov/dataquest/DQCensus/TchAssgnOutcomeLevels.aspx?agglevel=District&cds=4169062&year=2021-22. Accessed: September 15, 2023.

32 Marquez, Cecilia. Senior Administrative Secretary, Sequoia Union High School District. February 9, 2024—email to Payal Bhagat, contract principal planner, city of Menlo Park.

space.[33] In total, the city's recreation and child-care facilities have approximately 47.25 FTE staff members and 40 to 80 temporary hourly employees.[34]

City of Menlo Park General Plan Policy OSC-2.4 calls for maintaining a ratio of 5 acres of developed parkland per 1,000 residents. As of January 1, 2023, Menlo Park had an estimated population of 32,478 and 222 acres of parkland and open space for its residents.[35] Therefore, Menlo Park had a ratio of 6.84 acres of parkland per 1,000 residents. It is currently meeting or exceeding the parkland service ratio.

City of Menlo Park General Plan Policy OSC-2.2 calls for residential developers to ensure that park and recreational facilities for new development will be available concurrently with need. The city indicates that local demand for pickleball courts and lighted athletic fields currently exceeds the capacity of existing facilities.[36]

Libraries

Menlo Park has two libraries, Menlo Park Library on Alma Street and Belle Haven Library at the Belle Haven Community Campus on Terminal Avenue. In total, the libraries have approximately 43,000 square feet of space, along with approximately 14.0 FTE staff members and 15 to 30 temporary hourly employees.[37] Operated by the Menlo Park Library and Community Services Department, the Menlo Park library system circulated 569,000 books and other print materials in 2023.[38] In 2017, the city authorized the Library System Improvement Project. That project includes three main components: a new Belle Haven branch, a new Main Library, and various short-term system improvements to support increased usage. Short-term physical improvements are ongoing in the city's libraries. Construction of the new Belle Haven Community Campus, which includes library facilities for the Belle Haven neighborhood, was completed in 2024.

Regulatory Setting

State

California Fire Code

The California Fire Code incorporates, by adoption, the International Fire Code of the International Code Council, with California amendments. This is the official fire code for California and all political subdivisions. The code is located in Part 9 of Title 24 of the California Code of Regulations. The California Fire Code is revised and published every 3 years by the California Building Standards Commission; the current code is the 2022 version. Similar to the California Building Code, the California Fire Code is

[33] ESA. 2022. *City of Menlo Park Housing Element Update Draft Subsequent Environmental Impact Report*. Available: https://menlopark.gov/files/sharedassets/public/v/1/community-development/documents/projects/housing-element-update/menlo-park-housing-element-update-draft-seir.pdf. Accessed: September 13, 2023.

[34] Reinhart, Sean. Library and Community Services Director, Community Services. June 7, 2024—email to Payal Bhagat, contract principal planner, city of Menlo Park.

[35] California Department of Finance. 2023. *Table 2: E-5 City/County Population and Housing Estimates, 1/1/2023*. May. Available: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/. Accessed: January 3, 2024.

[36] Reinhart, Sean. Library and Community Services Director, Community Services. November 16, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

[37] Reinhart, Sean. Library and Community Services Director, Community Services. June 7, 2024—email to Payal Bhagat, contract principal planner, city of Menlo Park.

[38] Ibid.

generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification according to local conditions.

Senate Bill 50

Under the provisions of Senate Bill (SB) 50, school districts are authorized to collect fees to offset costs associated with increasing school capacity as a result of development and related population increases. The funding goes toward acquiring school sites, constructing new school facilities, and modernizing existing school facilities. SB 50 establishes a process for determining the amount developers would be charged to mitigate the impact of development on school districts from increased enrollment. According to the California Government Code, development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation."

California Government Code, Section 65995(b), and Education Code, Section 17620

SB 50 amended California Government Code Section 65995 to set limitations on Education Code Section 17620, the statute that authorizes school districts to assess development fees within school district boundaries. California Government Code Section 65995(b)(3) requires the maximum square footage assessment for development to be increased every 2 years, according to inflation adjustments. On February 23, 2022, the State Allocation Board approved increasing the allowable amount for statutory school facilities fees (Level I School Fees) to $4.79 per square foot of assessable space for residential development of 500 square feet or more and $0.78 per square foot of chargeable covered and enclosed space for commercial/industrial development.[39]

Mitigation Fee Act (California Government Code Sections 66000–66008)

Enacted as Assembly Bill 1600, the Mitigation Fee Act requires a local agency that establishes, increases, or imposes an impact fee as a condition of development to identify the purpose of the fee as well as the use for the fee. The agency must also demonstrate a reasonable relationship between the fee and the purpose for it as well as between the fee and the type of development plan upon which the fee will be levied. The act became effective on January 1, 1989.

Local

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with public services and recreation.

[39] Office of Public School Construction. 2022. *Report of the Executive Officer, State Allocation Board Meeting, February 23, 2022—Index Adjustment on the Assessment for Development*. Available: https://www.dgs.ca.gov/OPSC/Resources/Page-Content/Office-of-Public-School-Construction-Resources-List-Folder/Annual-Adjustment-to-SFP-Grants-and-Developer-Fee-History. Accessed: July 12, 2023.

The following goal and policies from the Open Space/Conservation Element related to public services or recreation were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal OSC2: Provide Parks and Recreational Facilities. Develop and maintain a parks and recreation system to provide areas and facilities that are conveniently located, sustainable, properly designed, and well maintained to serve recreation needs and promote healthy living for residents, workers, and visitors to Menlo Park.

Policy OSC2.1: Open Space for Recreation Use. Provide open space lands for a variety of recreation opportunities, and make improvements, construct facilities, and maintain programs that incorporate sustainable practices that promote healthy living and quality of life.

Policy OSC-2.2: Planning for Residential Recreational Needs. Work with residential developers to ensure that parks and recreational facilities planned to serve new development will be available concurrently with need.

Policy OSC-2.3: Recreation Requirements of New Development. Require dedication of improved land, or payment of fee in lieu of, for park and recreation land for all residential uses.

Policy OSC-2.4: Parkland Standards. Strive to maintain a standard of 5 acres of parkland per 1,000 residents.

Policy OSC-2.6: Pedestrian and Bicycle Paths. Develop pedestrian and bicycle paths consistent with the recommendations of local and regional trail and bicycle route projects, including the Bay Trail.

The following goal and policies from the Safety Element related to public services were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal S1: Ensure a Safe Community.

Policy S1.5: New Habitable Structures. Require that all new habitable structures incorporate adequate hazard mitigation measures to reduce identified risks from natural and human-caused disasters.

Policy S1.10: Safety Review of Development Projects. Continue to require hazard mitigation, crime prevention, fire prevention, and adequate emergency access for emergency vehicles in new development.

Policy S1.11: Visibility and Access to Address Safety Concerns. Require that residential development be designed to permit maximum visibility and access to law enforcement and fire control vehicles consistent with privacy and other design considerations.

Policy S1.29: Fire Equipment and Personnel Access. Require adequate access and clearance, to the maximum extent practical, for fire equipment, fire suppression personnel, and evacuation for high-occupancy structures in coordination with the Menlo Park Fire Protection District.

Policy S-1.30: Coordination with the Menlo Park Fire Protection District. Encourage city fire district coordination in the planning process and require all development applications to be reviewed and approved by the Menlo Park Fire Protection District prior to project approval.

Policy S1.38: Emergency Vehicle Access. Require that all private roads be designed to allow access for emergency vehicles as a prerequisite to the granting of permits and approvals for construction.

The following goals and policies from the Land Use Element related to public services and recreation were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal LU-2: Maintain and enhance the character, variety, and stability of Menlo Park's residential neighborhoods.

> **Policy LU-2.2: Open Space.** Require accessible, attractive open space that is well maintained and uses sustainable practices and materials in all new multiple-dwelling and mixed-use development.

Goal LU-4. Promote and encourage existing and new business to be successful and attract entrepreneurship and emerging technologies for providing goods, services amenities, local job opportunities, and tax revenue for the community while avoiding or minimizing potential environmental and traffic impacts.

> **Policy LU-4.4: Community Amenities.** Require mixed-use and nonresidential development of a certain minimum scale to support and contribute to programs that benefit the community and the city, including programs related to education, transit, transportation infrastructure, sustainability, neighborhood-serving amenities, childcare, housing, job training, and meaningful employment for Menlo Park youth and adults.

Goal LU-6. Preserve open space lands for recreation; protect natural resources, as well as air and water quality; and protect and enhance scenic qualities.

> **Policy LU-6.1: Parks and Recreation System.** Develop and maintain a parks and recreation system that provides areas, play fields, and facilities conveniently located and properly designed to serve the recreation needs of all Menlo Park residents.
>
> **Policy LU-6.2: Open Space in New Development.** Require new nonresidential, mixed-use, and multiple-dwelling development of a certain minimum scale to provide ample open space in the form of plazas, greens, community gardens, and parks whose frequent use is encouraged through thoughtful placement and design.
>
> **Policy LU-6.3: Public Open Space Design.** Promote public open space design that encourages active and passive uses, and use during daytime and appropriate nighttime hours to improve quality of life.
>
> **Policy LU-6.4: Park and Recreational Land Dedication.** Require new residential development to dedicate land, or pay fees in lieu thereof, for park and recreation purposes.

The following goal and policies from the Housing Element related to public services were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal H2: Existing Housing and Neighborhoods. Equitably maintain, protect, and enhance existing housing and neighborhoods while also supporting quality schools, city services, and infrastructure.

> **Policy H2.6. School District and City Service Maintenance.** Work with the school districts and childcare providers (pre-K and out-of-school time) to maintain quality service as demand increases.
>
> **Policy H4.17. Developer Coordination with Schools:** Developers will meet and confer with the affected school districts as part of the development review process to discuss the potential effects of their development on school-related issues and consider appropriate analysis, as needed, to address any potential effects.

Menlo Park Fire Protection District Fire Prevention Code, Ordinance 50-2022

Pursuant to Title 24 of the California Code of Regulations (also known as the California Building Standards Code) as well as California Health and Safety Code Section 13869 et seq., a fire protection district may adopt a fire prevention code by reference. The MPFPD adopted the 2021 edition of the International Fire Code with the 2022 California Fire Code in November 2022; local amendments to the 2022 California Fire Code, as presented in Ordinance 50-2022, were included. Ordinance 50-2022 outlined requirements for historic buildings, access roads for fire apparatus, fire control rooms, automatic fire sprinkler systems, fire alarm and detection systems, interconnected electrical power sources, and building access. Ordinance 50-2022 also noted that fees for permits and other services may be established by resolution of the MPFPD Fire Board.[40]

Menlo Park Fire Protection District Fire Prevention Code, Ordinance No. 52-2022

The Fire Prevention Code was adopted pursuant to the Fire Protection District Act of 1987 (California Health and Safety Code Section 13800 et seq.). This code, which was adopted by the MPFPD in November 2022, adopted locally specific fire prevention regulations, beyond the specifications of the 2022 California Fire Code, according to specific climatic, geological, and topographical conditions in Menlo Park. These regulations apply to the area within the MPFPD's jurisdictional boundaries. Ordinance 52-2022 also noted that fees for permits and other services may be established by resolution of the MPFPD Fire Board.[41]

Environmental Impacts

This section describes the impact analysis related to public services and recreation for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect related to public services if it would result in any of the conditions listed below.

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
    - Fire protection
    - Police protection

[40] Menlo Park Fire Protection District. 2022. *Menlo Park Fire Protection District Ordinance No. 50-2022: District Fire Prevention Code for the City of Menlo Park*. Adopted: November 15, 2022. Available: www.menlofire.gov/media/Fire%20Prevention/Guidelines%20and%20Standards/50-2022%20City%20of%20Menlo%20Park.pdf. Accessed: July 12, 2023.

[41] Menlo Park Fire Protection District. 2022. *Menlo Park Fire Protection District Ordinance No. 52-2022: District Fire Prevention Code*. Adopted: November 15, 2022. Available: https://www.menlofire.gov/media/Fire%20Prevention/Guidelines%20and%20Standards/52-2022%20MPFPD.pdf. Accessed: July 12, 2023.

- Schools
- Parks
- Other public facilities

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect related to recreation if it would result in any of the conditions listed below.

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated.
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Methods for Analysis

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of Buildout Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, either scenario would result in the same level of impact, in which case the analysis does not identify a "worst-case" scenario.

This section analyzes the buildout scenario that represents the "worst-case" scenario for public services and recreation. The same number of onsite residents would be generated under either scenario. However, as discussed in Section 3.14, *Population and Housing*, the 100 percent office scenario would have the highest density with respect to employees and, as such, generate the greatest number of new employees. The 100 percent office scenario would generate more residents in the city when considering the indirect residents associated with Project employees. Therefore, the 100 percent office scenario will be analyzed when considering impacts on public services and recreation.

Impacts and Mitigation Measures

Impact PS-1: Fire Services. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered fire service facilities. (LTS)

The Proposed Project would generate a residential population and a daytime employment population that would require additional fire services in Menlo Park. The Proposed Project would construct 550 units in the residential area and, as a result of employment, indirectly generate a demand for 117 units in Menlo Park, as explained in Section 3.14, *Population and Housing*. Overall, the onsite and offsite employment induced by the Proposed Project would result in 293 new Menlo Park residents. Housing units on the Project Site generated by the Proposed Project are anticipated to increase the resident population of

Menlo Park by 1,305. Therefore, in total, the Proposed Project would result in approximately 1,598 new residents. As a result, the Proposed Project is expected to increase the number of fire and medical calls because of the new Menlo Park residents and the onsite employees.

As described above, the MPFPD has a fire-protection staff of 109 and an estimated residential service population of 90,000. The current service ratio is 1.20 fire-protection staff members per 1,000 residents in the service population, which exceeds the MPFPD's goal of one fire-protection staff member per 1,000 residents in the service population. If there were no increase in MPFPD staffing, this ratio would decrease from 1.20 to 1.1 per 1,000 upon implementation of the Proposed Project, which would continue to exceed the MPFPD's goal of one fire-protection staff member per 1,000 residents in the service population. Therefore, the Proposed Project would not result in the need for new or physically altered fire service facilities in order to maintain acceptable service ratios. However, if there is no increase in the number of fire-safety employees, it is acknowledged that the demands for fire protection and emergency response that could be generated by Project residents, in addition to the demand already generated within the MPFPD's service area, could affect the MPFPD's response times by slightly reducing the service ratio.[42] The Proposed Project may result in a need for additional staff members to maintain existing service ratios, which currently exceed MPFPD staffing goals; therefore, it is possible that there could be a need for new or expanded facilities. However, the MPFPD is currently in the planning stages for replacing and expanding Fire Station 1 and a training facility in order to accommodate growth and maintain service ratios within its service area. In addition, other stations are located on infill lots in Menlo Park and neighboring jurisdictions that are highly developed. Therefore, the anticipated small scale of the expansion needed to accommodate additional personnel is not directly or indirectly related to the demands of the Proposed Project, and such expansion would be unlikely to result in significant environmental impacts. As such, if expanded facilities are needed, the physical environmental impacts would most likely be less than significant. Any new facilities would be subject to a separate CEQA review process, as applicable, at the time specific facilities are proposed.

The Proposed Project would be required to comply with all applicable MPFPD codes and regulations and meet MPFPD standards related to fire hydrants (e.g., fire-flow requirements, hydrant spacing), the design of driveway turnaround and access points to accommodate fire equipment, and other standards. In addition, prior to the issuance of building permits, the MPFPD would review the site plans to ensure that adequate fire and emergency response infrastructure would be incorporated as part of the Proposed Project. Furthermore, the Project Sponsor could be required to pay applicable fire protection impact fees, as outlined in the Fire Protection Facilities Impact Fee Program for new construction. Although the fees had not been formally adopted by the city when the EIR was prepared, the Proposed Project would be subject to the fees if the city formally adopts them prior to building permit issuance. The payment of applicable fees would further address the potential need for additional fire service equipment.

Upon Project completion, the MPFPD would continue to serve the Project Site and respond to calls for assistance from its existing stations. Stations 1, 5, and 6 are less than 2 miles from the Project Site. In addition, the MPFPD has an automatic aid agreement with Redwood City and Palo Alto, which would provide backup and respond in the event of a major fire. At this time, additional firefighters could be needed as a result of the Proposed Project in order to maintain existing staffing ratios, which currently exceed MPFPD staffing goals; additional equipment could also be needed to serve the Proposed Project. If the MPFPD determines that expanded facilities are needed to accommodate the additional staff and equipment, the physical environmental impacts would most likely be less than significant. Any new

[42] Johnston, Jon. Division Chief/Fire Marshal, Menlo Park Fire Protection District. November 15, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

facilities would be subject to CEQA review, as applicable, at the time when specific facilities are proposed. As such, the Proposed Project would not result in substantial adverse physical environmental impacts associated with the provision of new or physically altered fire and emergency service facilities in order to maintain acceptable service ratios, response times, or other performance objectives. Impacts related to fire services would be ***less than significant***. No mitigation is required.

Impact PS-2: Police Services. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered police service facilities. (LTS)

Although the Proposed Project would include onsite private security for the office/R&D area, the Proposed Project could still affect the MPPD by intensifying site activity; adding new residents, employees, and visitors; increasing square footage; and increasing the number of traffic incidents on the Project Site. As part of the city's approval process, the Proposed Project would be required to comply with existing regulations, including city's General Plan policies that have been prepared to minimize impacts related to police protection services.

The MPPD's service population is approximately 45,000, which represents the existing residential population and one-third of the existing employees in Menlo Park. No plans exist for immediate or near-term expansion of MPPD facilities or additional personnel or equipment. With 47 sworn police officers and a service population of approximately 45,000, the MPPD's current ratio of officers to residents is approximately 1.04 to 1,000. This is below the MPPD's target ratio of 1.3 or 1.4 officers per 1,000 members of the service population, which the MPPD believes is the most effective service ratio.[43] The Proposed Project would add approximately 1,598 residents to Menlo Park. In addition, approximately 3,868 employees would be added at the Project Site. To calculate the service population, the MPPD considers employees who work in Menlo Park as one-third of a resident. As such, the service population with the Proposed Project would increase from approximately 45,000 to 47,887. This would reduce the service ratio from 1.04 to 0.98 officer per 1,000. To adjust the number of sworn police officers per 1,000 accordingly, the MPPD has indicated that at least one sworn officer would be needed for every anticipated increase in service population of 1,000. Therefore, the Proposed Project would result in the need to hire an additional two or three sworn police officers to accommodate the additional growth from the Proposed Project. With the 47 existing sworn officers, the addition of up to three sworn officers as a result of the Proposed Project would bring the total number of sworn officers to 50. The MPPD indicated that the department had approximately 52 sworn officers from 2019 to 2020; therefore, the additional three sworn officers needed as a result of the Proposed Project would be able to be accommodated within existing facilities.[44]

A review of MPPD data indicates that the department's annual call volume is approximately 33,000, including approximately 12,000 high-priority calls. Average response times, from call to officer on scene, for high-priority calls is under 12 minutes; from dispatch of incident to officer on scene is under approximately 8 minutes.[45] The MPPD may need to hire additional sworn officers to maintain current response times; however, even if the MPPD determines that additional officers are necessary, the MPPD would not require new or expanded facilities to accommodate the additional sworn officers.

[43] Norris, David. Police Chief, Menlo Park Police Department. November 16, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

[44] Norris, David. Police Chief, Menlo Park Police Department, January 18, 2024—email to Payal Bhagat, contract principal planner, city of Menlo Park.

[45] Ibid.

Overall, implementation of the Proposed Project would not be anticipated to affect service levels or other service indicators to the extent that new or expanded facilities would be required in order to maintain acceptable service ratios, response times, or other performance objectives. Impacts related to police services would be ***less than significant***. No mitigation is required.

Impact PS-3: School Facilities. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered school facilities. (LTS)

Implementation of the Proposed Project would result in a direct increase in demand for school facilities because of the provision of residential units in the residential area, along with an indirect increase in demand because of the offsite housing required by Project-generated employees in the office/R&D area. Overall, as described in Section 3.14, *Population and Housing*, the onsite and offsite employment induced by the Proposed Project would result in 293 new Menlo Park residents. Housing units generated by the Proposed Project are anticipated to increase the resident population of Menlo Park by 1,305. In total, the Proposed Project would result in 1,598 new residents.

With respect to Project Site–generated students, school-age students residing in the 550 residential units included in the Proposed Project would be assigned to Menlo Park CSD for elementary and middle school. High school students would be within Menlo-Atherton High School's attendance area. For this analysis, the Menlo Park CSD student generation rates of 0.42 student per complex or townhome and 0.04 student per condominium or apartment were used to estimate the number of elementary and middle school students added by the Proposed Project; SUHSD's student generation rate of 0.10 for multi-family units and 0.14 for townhomes was used to estimate the number of high school students added by the Proposed Project. However, because approximately 57 percent of the Proposed Project's residential units, currently estimated at approximately 313 if the maximum number of units (550) is constructed, would be studio and one-bedroom units and therefore less likely to have families in them, the student generation rate provides a conservative approach. Using the rates provided, the Proposed Project's 550 residential units would be estimated to generate 30 elementary and middle school students and 56 high school students.[46,47,48,]

The Proposed Project could also indirectly generate new school-aged students in Menlo Park because of increased employment, which would require 117 offsite residential units (see Section 3.14, *Population and Housing*), throughout the Ravenswood CSD, Menlo Park CSD, Redwood CSD, and SUHSD. Elementary and middle school students indirectly generated by the Proposed Project could attend the Menlo Park CSD, Ravenswood CSD, or Redwood CSD, depending on their home addresses. High school students indirectly generated by the Proposed Project would be zoned to Menlo-Atherton High School. To ensure a conservative analysis for students indirectly generated by the Proposed Project, this analysis considers generation rates for both single-family and multi-family residential units.

For elementary school students, the Menlo Park CSD generation rate for single-family dwelling units (0.42) is used because it is the highest compared with rates of other districts; for multi-family residential

[46] Garcia, Kristen. Superintendent, Menlo Park City School District. November 20, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park. City of Menlo Park notes that according to the district's demographer, the Proposed Project would generate new students at a higher rate than the District's current published generation rate; nevertheless, the analysis in this EIR utilizes the District's published generation rates.

[47] Calculations: 56 high school students = (531 multi-family units x 0.10) + (19 townhomes x 0.14).

[48] Calculations: 30 elementary and middle school students = (531 multi-family units x 0.04) + (19 townhomes x 0.42)

units, the Redwood CSD and Menlo Park CSD generation rate (0.04) is used because it is the highest compared with rates of other districts. For middle school students, the Ravenswood CSD generation rate for all housing types (0.123) is used because it is the highest compared with rates of other districts. To distribute the students within elementary and middle schools, it is assumed that students would be split evenly between grade levels. For high school students, the rate used by the SUHSD, 0.14 student per single-family detached housing unit and 0.10 student per multi-family unit, is used.

At this time, the types of housing units that Project employees would occupy are unknown. Therefore, this analysis assumes a breakdown in housing units similar to that of the existing housing unit types in Menlo Park. According to the city's General Plan Housing Element, approximately 60 percent of the housing units in Menlo Park are single-family detached/attached residential units; 40 percent are multi-family residential units.[49] Therefore, it is assumed that the 117 new offsite residential units generated by the Proposed Project would comprise 70 single-family residential units and 47 multi-family residential units. In total, the Proposed Project could indirectly generate 31 elementary school students, 14 middle school students, and 15 high school students throughout Menlo Park.[50] The indirectly generated elementary school students would be divided evenly between the Menlo Park CSD, Ravenswood CSD, and Redwood CSD.

The sections below provide a detailed breakdown of the capacities of the various school districts and their ability to absorb students generated by the Proposed Project.

Elementary and Middle Schools

Menlo Park City School District. Based on the Menlo Park CSD's, Redwood CSD's, and Ravenswood CSD's student generation rates, the Proposed Project would generate approximately 41 elementary school students and 35 middle school students as a result of both proposed onsite and offsite employment and proposed onsite residential units. Based on currently available capacity and enrollment estimates, as shown in Table 3.15-1, the Menlo Park CSD has additional capacity for 223 elementary school students and 40 middle school students. The elementary school and middle school students directly and indirectly generated by the Proposed Project would not exceed existing capacity in the Menlo Park CSD. It is anticipated that the students generated directly and indirectly by the Proposed Project could be accommodated by existing facilities. It is anticipated that new elementary and middle school facilities would not be required to accommodate expected growth in the Menlo Park CSD.

*Ravenswood City School District***.** Based on Menlo Park CSD's, Redwood CSD's, and Ravenswood CSD's student generation rates, approximately 11 elementary school students and five middle school students would be indirectly generated by induced population growth from the Proposed Project's non-residential uses. The students expected to be indirectly generated by the Proposed Project within Ravenswood CSD's attendance area would represent approximately 3.5 percent of remaining existing capacity at elementary schools and 2.3 percent of existing capacity at middle schools in the Ravenswood CSD. Based on the most recent enrollment data and school remaining capacity estimates, as shown in Table 3.15-2, the Ravenswood CSD has the capacity to accommodate the students. However, the Ravenswood CSD is in the process of updating and improving school facilities across the district, which would include the removal

[49] City of Menlo Park. 2023. *Sixth-Cycle Housing Element:2023–2031*. Adopted January 31, 2023.

[50] Calculations: 31 elementary students = (70 × 0.41) + (47 × 0.04); 14 middle school students = 117 × 0.123; 15 high school students = (70 x 0.14) + (47 x 0.10).

of outdated portable classrooms; removal of the portables would, in turn, slightly reduce overall capacity at the schools.[51]

Redwood City School District. Based on the Menlo Park CSD's, Redwood CSD's, and Ravenswood CSD's student generation rates, approximately 11 elementary school students and five middle school students would be indirectly generated by induced population growth from the Proposed Project's non-residential uses. As shown in Table 3.15-3, the Redwood CSD has the capacity to accommodate the students. The students indirectly generated by the Proposed Project would represent approximately 2.5 percent of total remaining capacity in the Redwood CSD elementary schools and 1.1 percent of total remaining capacity in the middle school. Redwood CSD would be able to accommodate the increase in the number of students potentially generated by the Proposed Project in its existing facilities.

High Schools

Sequoia Union High School District. Based on SUHSD's student generation rate, the Proposed Project would generate 71 high school students as a result of both proposed onsite and offsite employment and proposed onsite residential units. This represents a 3.3 percent increase from Menlo-Atherton High School's most recent enrollment statistics. Menlo-Atherton High School's capacity was 2,125 as of the 2022–2023 school year.[52] The students directly and indirectly generated by the Proposed Project would represent approximately 14.7 percent of enrollment capacity at Menlo-Atherton High School. In addition, in August 2019, the SUHSD opened a new high school, the TIDE Academy, to accommodate enrollment growth. As of the 2022–2023 school year, TIDE Academy had additional enrollment capacity for approximately 157 students.[53,54] Therefore, SUHSD would be able to accommodate the increase in the number of students potentially generated directly and indirectly by the Proposed Project in its existing facilities.

Conclusion

As discussed above, the Proposed Project would generate additional students within Menlo Park. In addition, the Proposed Project would be subject to SB 50 school impact fees, as established by the Leroy F. Greene School Facilities Act of 1998, thereby providing a mechanism to support this demand. As a result of the wide-ranging changes in the financing of school facilities, including the passage of school facilities bonds, which are intended to provide a major source of financing, Section 65996 of the State Government Code provides that the payment of school impact fees that may be required by any state or local agency, as established by SB 50, is deemed to constitute full and complete mitigation for school impacts from development. Because it would include both residential space and non-residential space, the Proposed Project would be subject to residential and non-residential school impact fees to fund improvements to existing school facilities that would be required because of the Proposed Project's impact on school enrollment. These fees are based on the square footage and land use types proposed by a development project.

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[51] Pineda, Maria. Executive Coordinator to the Superintendent, Ravenswood City School District. October 3, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

[52] California Department of Education. 2023e. *DataQuest: 2022–2023 Enrollment by Grade, Sequoia Union High School District.* Available: https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=4169062&agglevel=district&year=2022-23. Accessed: September 15, 2023.

[53] Marquez, Cecilia. Senior Administrative Secretary, Sequoia Union High School District. February 9, 2024—email to Payal Bhagat, contract principal planner, city of Menlo Park.

[54] California Department of Education. 2023e. *DataQuest: 2022–2023 Enrollment by Grade, Sequoia Union High School District.* Available: https://dq.cde.ca.gov/dataquest/dqcensus/EnrGrdLevels.aspx?cds=4169062&agglevel=district&year=2022-23. Accessed: September 15, 2023.

Although the payment of the school impact fees by the Proposed Project could contribute toward the construction or expansion of schools, any actual construction or expansion of school facilities would not be a direct result of the Proposed Project and would be required to undergo a separate environmental review process. Similarly, if new housing were built to support induced population growth from the Proposed Project's non-residential uses, it would be subject to separate environmental review and required to pay the appropriate impact fees to affected school districts. As a result, the impacts related to schools would be ***less than significant***. No mitigation is required.

Impact PS-4: Parks and Recreational Facilities. The Proposed Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated, nor would it require construction or expansion of recreational facilities that would have an adverse physical effect on the environment. (LTS)

Deterioration of Recreation Facilities

The Proposed Project would result in an increase in the residential and employee populations that would use existing park and recreational facilities in Menlo Park. However, the Proposed Project would include approximately 26.4 acres of open space areas and supporting amenities throughout the Project Site that would be available to the public and could offset this increased park demand. Open space features on the Project Site would include the Ravenswood Avenue Parklet, Parkline Central Commons, and Parkline Recreational Area.

As stated in Section 3.14, *Population and Housing*, in total, the Proposed Project would result in 1,598 new residents in Menlo Park and 3,868 net new employees at the Project Site. These employees and their families could use the city's park facilities during non-work hours. As explained above, the Menlo Park Library and Community Services Department currently exceeds its goal of 5 acres per 1,000 residents and has not identified any existing capacity issues.[55] The 1,598 new Menlo Park residents generated by the Proposed Project would reduce the park service ratio from 6.84 to 6.51 residents per 1,000 acres of parkland. With implementation of the Proposed Project, including the open space provided, the city would still exceed its service goal of 5 acres of parkland per 1,000 residents. However, the Proposed Project's inclusion of approximately 26.4 acres of open space and supporting amenities would offset park usage from the Project's onsite residents and employees.

It is not anticipated that the increase in the worker and residential population would affect park and recreational facilities because the increased use of these facilities is expected to be spread out among several parks and recreational facilities in the area, including the facilities proposed as part of the Proposed Project. Overall, the Proposed Project would not cause or accelerate the physical deterioration of existing neighborhood and regional parks or other recreational facilities. Therefore, impacts would be ***less than significant.***

Construction of Recreational Facilities

As discussed above, with implementation of the Proposed Project, the city would still exceed its service goal of 5 acres of parkland per 1,000 residents. Therefore, the Proposed Project would not increase the demand for park and recreational facilities such that the construction of new facilities, other than those included in the Proposed Project, would be required. The Proposed Project would include park and

[55] Reinhart, Sean. Library and Community Services Director, Community Services. November 16, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

recreational space that would total approximately 26.4 acres, the environmental impacts of which are analyzed throughout this EIR. This would include the Ravenswood Avenue Parklet, Parkline Central Commons, and Parkline Recreational Area, which are described in detail below. In addition, the added open space, consisting of landscaped sidewalk areas and outdoor seating areas, would provide a buffer and transition between the Proposed Project's land uses. The final design of open spaces would be subject to review and approval by the city.

The proposed open space features on the Project Site are described below.

- The Ravenswood Avenue Parklet would be an approximately 6-acre parklet on the northern edge of the Project Site, along Ravenswood Avenue. A shared-use path would pass through the existing trees in the setback area and connect with and support bicycle and pedestrian circulation throughout the Project Site. This shared-use path would provide a safe route of travel and separate pedestrians and cyclists from automotive traffic along Ravenswood Avenue. Small-scale public spaces, such as picnic areas and exercise stations, would connect to the shared-use path, offering residents and neighbors an opportunity to move through the site, use active and passive areas, and enjoy a setting that features mature trees and natural landscaping. The Ravenswood Avenue Parklet would also lead to a large multi-use plaza that would open to the campus and provide a visual connection to the Parkline Central Commons.
- The Parkline Central Commons would be approximately 9-acres of open space between the office/R&D buildings and amenities building. The common area would provide a variety of programmed open spaces, such as flexible-use lawn areas and a multi-use plaza that would accommodate gatherings. The Parkline Central Commons is anticipated to include an event pavilion and landscaped areas. In addition, smaller landscaped spaces for tenant use would be located adjacent to the buildings, which would provide outdoor seating and shaded tree groves. The primary pedestrian circulation paths would connect the edges of the Project Site to the Parkline Central Commons.
- The Parkline Recreational Area would be an approximately 2-acre community recreational sports area on the northeast corner of the Project Site at the intersection of Ravenswood Avenue and Middlefield Road, adjacent and connected to the Ravenswood shared-use path. This open space area would support publicly accessible community activities within a recreational field, a children's play area, and other activities. In addition, a community amenity building would contain publicly accessible restrooms and possibly small retail spaces. Specific programming functions for these facilities would be determined in coordination with the city and through community outreach.

The privately owned, publicly accessible open space on the Project Site would not be dedicated parkland and would not be considered part of Menlo Park Library and Community Services Department parkland. Furthermore, it would not affect park service ratios; however, it would offset park usage from Project-generated residents and workers. In summary, the Proposed Project would not result in the need for new or expanded park and recreational facilities, the construction of which could have significant environmental impacts. The environmental impacts associated with the park and recreational space provided by the Proposed Project are discussed throughout the applicable resource chapters of this EIR.

Conclusion

Overall, impacts of the Proposed Project associated with the provision of or the need for new or physically altered park and recreational facilities would be less than significant because the Proposed Project would not result in significant deterioration at existing park and recreational facilities or require the

construction of new or expanded park and recreational facilities that would have an adverse physical effect on the environment. Therefore, recreational impacts would be ***less than significant***. No mitigation is required.

Impact PS-5: Library Facilities. The Proposed Project would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered library facilities. (LTS)

The Proposed Project would introduce an increased residential population that would use the city's library resources. As stated in Section 3.14, *Population and Housing*, the Proposed Project would result in approximately 1,598 new residents in Menlo Park. The Menlo Park Library does not have numerical service goals but, rather, assesses service needs through demographics, current and historic usage levels, cost of services analysis, staff workflow analysis, and community surveys.[56]

In 2017, the city authorized the Library System Improvement Project. That project included three main components—a new Belle Haven branch, a new Main Library, and various short-term system improvements to support increased usage. Short-term physical improvements are ongoing in the city's libraries. Construction of the new Belle Haven Community Campus, which included library facilities for the Belle Haven neighborhood, was completed in 2024. With the new library on the Menlo Park Community Campus, total library square footage will increase to approximately 43,000 square feet.

Existing library projects would expand Menlo Park's library capacity enough to accommodate the Proposed Project. Thus, the increased demand on library facilities generated by the Proposed Project would not result in the need for new or physically altered library facilities. Therefore, impacts on city libraries with the Proposed Project would be ***less than significant***. No mitigation is required.

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*. The geographic context for this cumulative public services analysis is the service area of the service in question. For instance, the geographic context for cumulative impacts on police service and park/recreational facilities is the city because these services are provided on a citywide basis, and the service ratios by which demand is estimated are based on citywide figures. However, the cumulative context area for fire protection would include the city of Menlo Park as well as the cities of Palo Alto, Atherton, and East Palo Alto and parts of unincorporated San Mateo County to correspond with the MPFPD's service area. Likewise, the cumulative analysis for impacts on schools would include the communities served by the five school districts discussed in this analysis.

Impact C-PS-1: Cumulative Public Services and Recreation Impacts. Cumulative development would not result in a significant environmental impact related to public services or recreation; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Fire Services

Cumulative impacts were considered in the context of growth from development projects within Menlo Park combined with the estimated growth in the service area of the MPFPD, which includes the cities of

[56] Reinhart, Sean. Library and Community Services Director, Menlo Park Library. November 16, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

Atherton, East Palo Alto, and Menlo Park and some of the unincorporated areas of San Mateo County. As noted in Chapter 3, *Environmental Impact Analysis*, of this EIR, in addition to buildout considered in Menlo Park, the cumulative scenario for this EIR also includes the reasonably foreseeable projects in East Palo Alto, where applicable. Because these projects would also be served by the MPFPD, they are considered in the cumulative analysis for fire services. The Proposed Project in combination with other projected growth in Menlo Park and East Palo Alto would increase demand on fire protection services. Based on the analysis presented under Impact PS-1, existing fire protection facilities would be able to serve the population growth anticipated to occur with the Proposed Project. However, population and employment growth in the MPFPD's service area due to cumulative development would increase service call volumes and could create a need for additional facilities to maintain existing MPFPD service levels. Additional firefighters and facilities could be required to accommodate the projected cumulative growth and maintain the same level of service as under existing conditions. However, as discussed above, the MPFPD is in the planning stages for replacing and expanding Fire Station 1 and a training facility. In addition, the expansion of other existing fire facilities would occur in already-urbanized areas, which would reduce the potential for significant environmental impacts. The physical environmental impacts resulting from potential future expansion of stations within the urban setting of Menlo Park and neighboring jurisdictions are expected to be less than significant. Furthermore, any environmental impacts related to future expansions would require permitting and review in accordance with CEQA, as necessary, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. Therefore, the cumulative impact related to fire services and the need for new or altered facilities would be ***less than significant***. No mitigation is required.

Police Services

Cumulative impacts were considered in the context of Menlo Park's city limits, which represent the MPPD's service area, though it is noted that the MPPD also maintains mutual aid agreements with the Atherton Police Department, East Palo Alto Police Department, Redwood City Police Department, and the San Mateo County Sherriff's Office. The Proposed Project in combination with other projected growth in Menlo Park would increase demand for police services. Based on the analysis presented under Impact PS-2, the Proposed Project alone would not require new or expanded police facilities. The MPPD reviews population forecasts during its annual budgeting process to determine whether additional police services are required to accommodate growth. It is not anticipated that the addition of officers would require additional facilities because existing facilities would be able to accommodate the additional officers. Therefore, the cumulative impact related to police services and the need for new or altered facilities would be ***less than significant***. No mitigation is required.

School Facilities

The potential cumulative impacts related to schools that could occur from implementation of the Proposed Project were considered in combination with reasonably foreseeable growth in the areas served by the Menlo Park CSD, Redwood CSD, Ravenswood CSD, and SUHSD. In addition to development considered in Menlo Park, the cumulative scenario for this EIR also includes reasonably foreseeable projects in East Palo Alto, where applicable. Because these projects would also be served by the Ravenswood CSD and SUHSD, they are considered in the cumulative analysis for schools.

As addressed under Impact PS-3, the Proposed Project would directly generate elementary, middle, and high school students who would reside within the Menlo Park CSD and SUHSD attendance areas. Future housing projects in the Menlo Park CSD, Ravenswood CSD, Redwood CSD, and SUHSD attendance areas would generate additional students who would need to be accommodated within these or other local

school districts. Section 65996 of the State Government Code states that the payment of school impact fees established by SB 50 (i.e., the Leroy F. Greene School Facilities Act of 1998) is deemed to constitute full and complete mitigation for school impacts. The school districts discussed previously have enacted development fees in accordance with the Leroy F. Greene School Facilities Act and levied the fees on development projects within their service areas. Development projects would be required to pay school impact fees, which are based on the amount of proposed residential and commercial space. The payment of appropriate fees would help to provide school services and meet the needs associated with current and future citywide growth. Development within East Palo Alto would also be required to pay school impact fees. Therefore, the cumulative impact related to schools and the need for new or altered facilities would be ***less than significant***. No mitigation is required.

Parks and Recreational Facilities

The geographic scope for the cumulative analysis included park and recreational facilities within the boundary of Menlo Park as well as San Mateo County and the Midpeninsula Regional Open Space District. In addition to development considered in Menlo Park, the cumulative scenario for this EIR also includes reasonably foreseeable projects in East Palo Alto and Palo Alto, where applicable. Because these projects would also be served by open space areas in San Mateo County, they are considered in the cumulative analysis for park and recreational facilities. As described in Chapter 3, *Environmental Impact Analysis*, reasonably foreseeable future projects would be distributed throughout Menlo Park and occur incrementally over time. In addition, future development, as part of a project approval process, would be required to comply with existing regulations, including General Plan policies, to minimize impacts related to park and recreational services and facilities. Other projects in surrounding communities, including East Palo Alto and Palo Alto, that would use city, County of San Mateo, and Midpeninsula Regional Open Space parks would also be required to adhere to existing regulations governing the use of parks. The city would also implement General Plan programs that would require ongoing evaluation of the city's recreational facilities and services. Any environmental impacts related to future expansion of city park and recreational facilities would require permitting and review in accordance with CEQA, as necessary, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. Therefore, the cumulative impact related to park and recreational facilities would be ***less than significant***. No mitigation is required.

Library Facilities

The geographic context for an analysis of cumulative impacts on library services is the area served by Menlo Park library system, which is Menlo Park. A significant cumulative impact would occur if the cumulative context would require new or physically altered library facilities to accommodate growth, the construction of which could cause significant environmental impacts. The Proposed Project alone would not result in the need for new or physically altered library facilities because existing facilities and current library expansion projects would be able to serve Menlo Park residents. However, future expansion of library facilities could be required to serve potential increases in growth in conjunction with cumulative growth in the service area. Short- and long-term physical improvements are ongoing within the Menlo Park library system. Additional library capacity will be provided by the Library System Improvement Project, including the new Belle Haven branch and Main Library. These separate projects will help the libraries accommodate cumulative growth. The expansion of existing libraries or the construction of new libraries would occur in an urbanized area, which would reduce the potential for new environmental impacts. Any environmental impacts related to the expansion or construction of library facilities would be project-specific and require permitting and review in accordance with CEQA, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. With planned

improvements, the construction of which is not expected to cause significant environmental impacts, the Menlo Park library system would be able to meet service demands under cumulative conditions. Therefore, the cumulative impact related to library facilities would be ***less than significant***. No mitigation is required.

3.16 Utilities and Service Systems

This section identifies and evaluates the Proposed Project's potential impacts on utilities and service systems, including water, wastewater, stormwater, natural gas, electricity, telecommunications, and solid waste. This section also describes existing conditions in the Project area and the regulatory framework for this analysis. Feasible mitigation measures, where applicable, are also described and cumulative impacts are evaluated.

Relevant technical documentation prepared for the Proposed Project used in this analysis includes:

- *Parkline Water Supply Assessment* (WSA);[1]
- *Existing Sewer Flow Calculations*;[2]
- *Parkline Sanitary Sewer Demand Analysis*;[3]
- *Project Stormwater Analysis*;[4] and
- *Parkline Water Infrastructure Analysis.*[5]

The WSA is included in Appendix 3.16-1 of this EIR.

Issues identified in response to the notice of preparation (NOP) (Appendix 1 of this EIR) were considered in preparing this analysis. Comments expressed concern regarding the Proposed Project's impact on existing infrastructure. Comments also expressed concern regarding impacts on water supply due to increased water demand.

Existing Conditions

Environmental Setting

Water Demand, Supply, Treatment, Storage, and Distribution and Conveyance

The Project Site is within the Menlo Park Municipal Water (MPMW) service area, which consists of two service areas, the Upper Zone (providing water to the Sharon Heights area) and the Lower Zone (providing water to areas east of El Camino Real). The Lower Zone serves the Project Site.[6] MPMW provides water to roughly half of Menlo Park (including the Project Site), which equates to about 21,000 residents through 4,300 service connections (as of 2023). MPMW purchases all of its water from the Regional Water System (RWS), which is operated by the San Francisco Public Utilities Commission (SFPUC) in accordance with the 2021 Amended and Restated Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo, and Santa Clara Counties. The term of the agreement is 25 years, with a beginning date of July 1, 2009, and an expiration date of

1 West Yost and Associates. 2024. *Parkline Water Supply Assessment*. April.
2 Kier+Wright. 2022. *Existing Sewer Flow Calculations*. November 7.
3 Kier+Wright. 2024. *Parkline Sanitary Sewer Demand Analysis*. March 11.
4 Kier+Wright. 2024. *Project Stormwater Analysis*. March 11.
5 Kier+Wright. 2024. *Parkline Water Infrastructure Analysis*. March 11.
6 Menlo Park Municipal Water. 2023. *Menlo Park Municipal Water*. Available: https://menlopark.gov/Government/Departments/Public-Works/Utilities/Menlo-Park-Municipal-Water. Accessed: November 10, 2023.

June 30, 2034. Per the agreement, MPMW has an Individual Supply Guarantee (ISG) of 4.456 million gallons per day (mgd), or 1,630 million gallons per year, supplied by the SFPUC RWS. Over the last 5 years (2019–2023), MPMW has purchased between 52 and 66 percent of its ISG. Approximately 85 percent of the water supplied to the RWS originates in the Hetch Hetchy watershed in Yosemite National Park where water flows down the Tuolumne River and into Hetch Hetchy Reservoir. Water from the Hetch Hetchy watershed is managed through the Hetch Hetchy Water and Power Project (Hetch Hetchy Project). The Hetch Hetchy Project is composed of reservoirs, hydroelectric generation and transmission facilities, and water transmission facilities, extending from the Hetch Hetchy Valley west to the Alameda East Portal of the Coast Range Tunnel in Sunol Valley.

The reliability of MPMW's water supply is dependent upon its water supply contract with the SFPUC and its membership in the Bay Area Water Supply and Conservation Agency (BAWSCA), which represents the SFPUC's 26 wholesale customers and coordinates their water conservation programs. Approximately 15 percent of the water supply to the RWS originates in the Alameda and Peninsula watersheds, which comprise the Alameda System and the Peninsula System. These systems generally consist of facilities west of the Alameda East Portal, including the 63,000-acre Alameda and Peninsula watersheds, storage reservoirs, two water treatment plants (WTPs), and a distribution system that delivers water to retail and wholesale customers. The current reliability of MPMW's water supply is largely dependent upon the reliability of the SFPUC's water supply.[7]

In December 2018, the State Water Resources Control Board (SWRCB) adopted the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives and maintain the health of the Bay-Delta ecosystem. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (i.e., Stanislaus, Merced, Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 40 percent of the "unimpaired flow" on the three tributaries from February through June in every year type, whether wet, normal, dry, or critically dry. Implementation of the Bay-Delta Amendment would significantly affect SFPUC RWS reliability in dry years; however, actual implementation of the Bay-Delta Plan Amendment is uncertain because of ongoing litigation, among other factors.

In June 2021, in response to various comments from wholesale customers regarding the reliability of the RWS, as described in SFPUC's 2020 UWMP, the SFPUC provided a memorandum describing SFPUC's efforts to remedy the potential effects of the Bay-Delta Amendment, which include pursuing a Tuolumne River voluntary agreement, evaluating the drought planning scenario in light of climate change, pursuing alternative water supplies, pursuing litigation with the state over the Bay-Delta Plan Amendment, and pursuing litigation with the state over the proposed Don Pedro Federal Energy Regulatory Commission Water Quality Certification. The SFPUC has initiated an Alternative Water Supply Planning Program, ensuring that San Francisco will be able to meet the water needs of its retail and wholesale customers, address shortages in projected dry years, and limit rationing to a maximum 20 percent system-wide, in accordance with adopted SFPUC policies. This program is intended to meet future water supply challenges and vulnerabilities (e.g., environmental flow needs and other regulatory changes; earthquakes, disasters, and emergencies; increases in population and employment; climate change). Because the region faces future challenges, both known and unknown, the SFPUC is considering a suite of diverse, non-traditional supplies and leveraging regional partnerships to meet retail and wholesale customer needs through 2045. As of the most recent Alternative Water Supply Planning Quarterly Update, SFPUC has budgeted $131.5 million over the next 10 years to fund water supply projects. The SFPUC is considering several water

[7] Ibid.

supply options and opportunities to meet all foreseeable water supply needs, including surface water storage, recycled water expansion, water transfers, desalination, and potable reuse.

In November 2022, key stakeholders signed a Memorandum of Understanding (MOU), indicating a mutual agreement among the signatories to commit to collaborating with the state. Although a voluntary agreement is not finalized, signing of an MOU signals that stakeholders are committed to reaching an agreement.

In May 2021, the Menlo Park City Council adopted the 2020 Urban Water Management Plan (UWMP). The 2020 UWMP carries forward information from the 2015 UWMP that remains current and relevant but also provides additional information required by the amendments to the Urban Water Management Planning Act (California Water Code Sections 10610–10657). The 2020 UWMP concludes that, in normal years, Menlo Park will have the necessary water resources available to support anticipated growth, including the growth anticipated in the General Plan and M-2 Area Zoning Update (ConnectMenlo). In single and multiple dry years, there is more uncertainty regarding the available water supply due to implementation of the Bay-Delta Plan Amendment. However, MPMW is taking steps to improve supply reliability through local emergency supply projects, partnerships to pursue recycled water supplies, and actions to reduce potable water demand in dry years through implementation of its adopted Water Shortage Contingency Plan (WSCP). The WSCP was approved in May 2021 concurrent with the 2020 UWMP but serves as a stand-alone document. It is to be engaged in case of a water shortage event, such as a drought or supply interruption. The WSCP provides specific policies and actions that can be implemented for various shortage scenarios (e.g., implementing customer water budgets and surcharges or restricting landscape irrigation to specific days/times). Consistent with Department of Water Resources requirements, the WSCP provides six standard water shortage levels, ranging from 10 percent to more than 50 percent.[8,9]

Water Treatment

The city of Menlo Park does not own or operate a water treatment plant (WTP). Although Hetch Hetchy water meets federal and state drinking water quality requirements without the need for filtration, it is secondarily disinfected with ultraviolet treatment at the SFPUC's Tesla Treatment Facility, constructed in 2011. The Tesla Treatment Facility has the capacity to treat 315 mgd.[10] All SFPUC water derived from sources other than Hetch Hetchy Reservoir is treated at one of two treatment plants, the Sunol Valley WTP or the Harry Tracy WTP. The Sunol Valley WTP treats primarily water from the Alameda System. The Harry Tracy WTP filters and disinfects water supplied from the Peninsula System, including Crystal

[8] City of Menlo Park. 2021. *2020 Urban Water Management Plan for Menlo Park Municipal Water*. Prepared by EKI. June. Available: https://menlopark.gov/files/sharedassets/public/v/1/public-works/documents/water/2020-urban-water-management-plan-june-2021_20210715225802092l.pdf. Accessed: May 31, 2024.

[9] As mentioned above, the city receives its water from the SFPUC. In April 2021, the SFPUC issued a UWMP for July 2021. The SFPUC's UWMP identified several potential future water supply scenarios. Scenarios that involve full adoption of the Bay-Delta Plan indicate substantial long-term water deficits during multi-year droughts. Such deficits could result in cities not receiving their full annual water allocations from the SFPUC. However, should this scenario occur, the city's WSCP would be implemented, along with further reductions, as needed. Compliance with city code and ordinance requirements, the 2020 UWMP, and the WSCP, as well as any additional water reductions, would apply across the city's water department to all customers.

[10] San Francisco Public Utilities Commission. 2011. *Hetch Hetchy Regional Water System, Water System Improvement Program, Tesla Treatment Facility*. Available: https://infrastructure.sfwater.org/fds/ fds.aspx?lib=SFPUC&doc=708008&ver=1&data=272583080. Accessed: November 7, 2023.

Springs Reservoir and San Andreas Reservoir. The Sunol Valley WTP's peak capacity is 160 mgd.[11] The Harry Tracy WTP, which was seismically upgraded in 2017, has the capacity to provide approximately 140 mgd for 60 days within 24 hours of a major earthquake.[12]

In 2020, processed and redistributed recycled water, discussed below (see *Wastewater Treatment and Collection and Recycled Water*), accounted for 20 million gallons (mg) in the MPMW system, offsetting the demand for potable water from the SFPUC. In addition, MPMW is pursuing emergency groundwater resources through the Emergency Water Storage/Supply Project. According to the WSA, the Emergency Water Storage/Supply Project will provide a total capacity of up to 3,000 gallons per minute (gpm), or approximately 4.32 mgd, between two or three wells. In early 2023, MPMW received approval from SWRCB to operate the Corporation Yard Well as a standby well for use during emergencies up to a limited number of days per year. MPMW plans to perform final testing of the well in 2024. The Corporation Yard Well is adjacent to the Project Site to the southeast. In addition, MPMW drilled three sites (Fire Station No. 1, 300 Middlefield Road; Willow Oaks school field, 620 Willow Road; and SRI parking lot, 333 Ravenswood Avenue)[13] to determine well yields, develop cost estimates, and provide necessary information for staff members in order to recommend next steps to City Council. MPMW also installed a monitoring well in the SRI parking lot to measure the groundwater level over a 12-month period and to determine the feasibility of a future underground reservoir to increase supply reliability. The SWRCB would need to amend MPMW's drinking water permit once any new wells and/or reservoir are constructed.

Existing Water Supply Infrastructure and Water Demand at the Project Site

The Project Site is fed from two water sources: (1) a 10-inch-high pressure water distribution main located at the westerly side of the Project Site, off Laurel Street, which includes a water meter and back flow prevention device and (2) a 10-inch water distribution main located at the easterly side of the project site, off of Middlefield Road, which includes a water meter and back flow prevention device. The existing water system within the Project Site consists of 8-inch and 10-inch water mains configured in a looped system that provides water distribution to the existing commercial buildings and feeds the existing fire water system for both existing buildings and fire hydrants.

As documented in the WSA, existing development at the Project Site uses 46.9 mg of water per year (128,486 gpd).

Wastewater Treatment and Collection and Recycled Water

The city of Menlo Park does not own or operate a wastewater treatment plant (WWTP) and does not convey its own wastewater. The West Bay Sanitary District (WBSD) provides wastewater collection and conveyance services to the MPMW service area. WBSD's service area includes Menlo Park, portions of Portola Valley, portions of Atherton, portions of East Palo Alto, portions of Redwood City, portions of Santa

[11] Monterey Mechanical Company. 2023. *Sunol Water Treatment Plant*. Available: https://www.montmech.com/project/sunol-water-treatment-plant/. Accessed November 7, 2023.

[12] San Francisco Public Utilities Commission. No Date. *Hetch Hetchy Regional Water System, Harry Tracy Water Treatment Plant.* Available: https://baywork.org/wp-content/uploads/2017/08/Harry-Tracy-Water-Treatment-Plant-factsheet-020817.pdf#:~:text=The%20recently%20upgraded%20Harry%20Tracy%20Water%20Treatment%20Plant,Hetch%20Hetchy%20Regional%20Water%20System.%20Filter%20no.%203. Accessed: November 7, 2023.

[13] City of Menlo Park. 2023. *Emergency Water Storage/Supply*. Available: https://menlopark.gov/Government/Departments/Public-Works/Capital-improvement-projects/Emergency-water-storagesupply. Accessed: November 7, 2023.

Clara County, and portions of unincorporated San Mateo County. Overall, the WBSD service area encompasses approximately 8,325 acres and has approximately 19,000 connections to serve a population of 52,900 as of 2011, the most recent year for which data are available.[14] The collection system includes approximately 200 miles of gravity sewer mains; about 37 miles of pressure, or force, mains; and 12 sewage pump stations. WBSD conveys the majority of raw wastewater from the Menlo Park pump station and force main to the Silicon Valley Clean Water (SVCW) pump station in Redwood City for treatment and discharge to San Francisco Bay.[15] A limited volume of wastewater is treated within the MPMW service area at the Sharon Heights Recycled Water Facility (RWF), located at the Sharon Heights Golf and Country Club, which began using recycled water in late 2020.

SVCW, a joint powers authority, serves the cities of Belmont, Redwood City, and San Carlos as well as the WBSD. More than 220,000 people and businesses are in its service area. SVCW owns and operates a WWTP, including the support facilities necessary for operation and maintenance of the plant. Its facilities also include force mains for a wastewater conveyance system, five wastewater conveyance pump stations, and an effluent outfall to a deep-water channel in San Francisco Bay.[16] As noted in the ConnectMenlo Environmental Impact Report (EIR) and reported by the Regional Water Quality Control Board (RWQCB), the SVCW WWTP has an average dry-weather design flow of 29 mgd and a peak wet-weather design flow of 71 mgd. In general, conveyance systems and treatment plants are designed and constructed to accommodate future capacity, including additional base flows due to planned growth plus estimated wet-weather flows.[17]

Starting in July 2020, with completion of the Sharon Heights Recycled Water Project, recycled water provided by WBSD became available to certain MPMW customers.[18] The Sharon Heights RWF is managed by the WBSD in coordination with MPMW. This 0.5 mgd satellite WWTP produces tertiary recycled water under Title 22 for reuse within MPMW's service area. Wastewater is diverted from the WBSD's collection system and pumped into the RWF. In 2020, approximately 63 mg of wastewater was treated at the Sharon Heights RWF.[19] Of that total, 20 mg was recycled; the remaining 43 mg was conveyed to the SVCW WWTP for discharge. The amount of wastewater collected from the MPMW service area in 2020 totaled approximately 873 mg.

WBSD completed a feasibility study and approved the feasibility of a Resource Recovery Center at WBSD's former treatment plant behind Bedwell Bayfront Park, which could produce approximately 500,000 gpd of recycled water for reuse (the 2020 UWMP projects an annual recycled water supply of 72 mg/yr from this new facility).

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[14] West Bay Sanitary District. 2011. *Wastewater Collection System Master Plan*. Available: https://westbaysanitary.org/wsbd-prod/resources/824/WBSD_Master_Plan_2011.pdf. Accessed: May 31, 2024.

[15] West Bay Sanitary District. 2023. *About Us*. Available: https://westbaysanitary.org/about-us/. Accessed: November 7, 2023.

[16] Silicon Valley Clean Water. 2020. *Capital Improvement Program 2020 Update, FY 20–21 to FY 29–30*. Prepared January. Available: https://svcw.org/wp-content/uploads/2020/08/2020-SVCW-CIP-Update.pdf. Accessed: May 31, 2024.

[17] City of Menlo Park. 2016. *ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Area Zoning Update for the City of Menlo Park Public Draft EIR*. Available: https://menlopark.gov/Government/Departments/Community-Development/Planning-Division/Comprehensive-planning/ConnectMenlo. Accessed: May 31, 2024.

[18] City of Menlo Park. 2021. *2020 Urban Water Management Plan for Menlo Park Municipal Water*. Available: https://menlopark.gov/files/sharedassets/public/v/1/public-works/documents/water/2020-urban-water-management-plan-june-2021_20210715225802092l.pdf. June. Accessed: May 31, 2024.

[19] Ibid.

Existing Wastewater Infrastructure and Wastewater Generation at the Project Site

The Project Site is currently served by sewer infrastructure maintained by WBSD, which provides wastewater collection and conveyance services to the city of Menlo Park. Existing sanitary sewer flows from the Project Site are conservatively estimated to be approximately 152,437 gpd. The existing sewer system at the Project Site collects and conveys all sewer discharges to the southeast corner of the site where the system splits into 8- and 12-inch sewer pipes that run through adjacent properties; the pipes eventually meet and discharge into one 18-inch sewer pipe. The 18-inch sewer pipe runs northeasterly along Survey Lane and ties into the sanitary sewer confluence point at Sanitary Sewer Manhole #1 at Middlefield Road, then continues to the southeast. The connection point is approximately 400 linear feet south of existing VO Sewer Pump Station #1, which discharges to an existing 8-inch sewer pipe that meets at the confluence point.

Existing Stormwater Infrastructure at the Project Site

According to the topographical survey, the Project Site slopes from the west to east. Most of the Project Site currently drains to a single 27-inch reinforced concrete pipe storm drain main that ties into a 36-inch storm drain main running north to south within Middlefield Road. Under existing conditions, the Project Site has a pervious surface area of 25.7 percent (643,045 square feet).

Solid Waste Collection and Disposal

Recology provides solid waste collection and conveyance service for the city of Menlo Park. Collected recyclables, organics, and garbage are conveyed to the Shoreway Environmental Center (Shoreway) in San Carlos for processing and shipment. Shoreway is owned by RethinkWaste, which is a joint powers authority made up of 11 public agencies (i.e., Belmont, Burlingame, East Palo Alto, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos, San Mateo, the County of San Mateo, and the WBSD). Shoreway is separately permitted by the California State Integrated Waste Management Board to receive 3,000 tons per day of solid waste and recyclables.[20] In 2022, Shoreway received, sorted, and transported 398,885 tons of materials.[21]

In 2022, the RethinkWaste service area (San Mateo County) produced a total of approximately 115,679 tons of commercial solid waste (and had a diversion rate of approximately 41 percent), 46,520 tons of multi-family waste (and had a diversion rate of approximately 25 percent), and 161,672 tons of single-family solid waste (and had a diversion rate of approximately 65 percent); these totals include recycling, compost (organics), and garbage.[22] In 2022, the service area experienced an approximately 51 percent diversion rate by recycling and composting waste, while Menlo Park had a diversion rate of approximately 58 percent.[23] In 2021, the most recent year for which data are available, the city of Menlo Park's per capita solid waste disposal rate for residents was 4.1 pounds per day (ppd); the target per capita disposal rate for residents was 7.5 ppd. The city of Menlo Park's per capita solid waste disposal rate for employees in

[20] RethinkWaste. 2023. *About Shoreway*. Available: https://rethinkwaste.org/shoreway-environmental-center/about/. Accessed: November 16, 2023.

[21] RethinkWaste. 2022. *2022 Annual Report*. Available https://rethinkwaste.org/wp-content/uploads/2023/05/2022-Annual-Report.pdf. Accessed: May 31, 2024.

[22] Ibid.

[23] Recology San Mateo County. 2023. *Annual Report to the SBWMA for Year 2022*. Available: https://rethinkwaste.org/wp-content/uploads/2023/04/RSMC-Annual-Report-2022.pdf. Accessed: November 1, 2023.

2021 was 2.3 ppd; the California Department of Resources Recycling and Recovery (CalRecycle) target per capita disposal rate for employees is 9.2 ppd.[24]

Materials that are not composted or recycled at Shoreway are sent to several different landfills, with most going to the Ox Mountain Landfill (also known as Corinda Los Trancos Landfill) near the city of Half Moon Bay in San Mateo County. The Ox Mountain Landfill is expected to remain operational until 2034, with a permitted throughput capacity of 3,598 tons per day.[25] In 2021, approximately 25,006 tons of waste from Menlo Park went to the Ox Mountain Landfill.[26]

Electricity

Although Pacific Gas and Electric (PG&E) delivers power, maintains the electrical grid and other infrastructure, and handles customer billing, energy in Menlo Park is purchased through Peninsula Clean Energy, a Community Choice Energy (CCE) program, from renewable energy sources, such as solar, wind, hydroelectric, geothermal, and biomass. CCE programs allow local governments to pool the electricity demands of their communities, purchase power with higher renewable content, and reinvest in local infrastructure.[27]

Historically, PG&E has provided natural gas and electricity services to the vast majority of Northern California, including the city of Menlo Park and the Project Site. PG&E is a publicly traded utility company that, under contract with the California Public Utilities Commission (CPUC), generates, purchases, and distributes energy. PG&E's service area covers 70,000 square miles, roughly extending north to south from Eureka to Bakersfield and east to west from the Sierra Nevada to the Pacific Ocean. PG&E's electricity distribution system consists of 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines.[28]

Existing Electricity Infrastructure at the Project Site

The Project Site includes a cogeneration plant that serves the existing SRI International Campus. The 6-megawatt natural gas power facility currently generates power and steam energy for the Project Site. Generated power is delivered to a substation where it interconnects with the electric utility company and gets distributed to campus buildings. Generated steam is distributed throughout the SRI International Campus for various uses, including the production of chilled water through centralized steam absorption chillers for building cooling, building heating systems, hot-water heat-exchange systems, and lab processes. During periods when the cogeneration plant is out of operation, steam is produced by an auxiliary boiler in the cogeneration plant. Alternative standby power is delivered to the SRI International Campus by the electric utility provider. Under existing conditions, the existing SRI International Campus

[24] California Department of Resources Recycling and Recovery. 2022. *Jurisdiction Review Reports*. Select for Menlo Park, 2022–2022, Jurisdiction Per Capita Disposal Rate Trends (post-2006). Available: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports. Accessed: May 31, 2024.

[25] California Department of Resources Recycling and Recovery. 2019. *SWIS Facility/Site Activity Details-Corinda Los Trancos Landfill (Ox Mtn) (41-AA-002)*. Available: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1561?siteID=3223. Accessed: November 7, 2023.

[26] California Department of Resources Recycling and Recovery. 2021. *Jurisdiction Diversion/Disposal Rate Detail (Menlo Park)*. Available: https://www2.calrecycle.ca.gov/LGCentral/%20DiversionProgram/JurisdictionDiversionDetail/299/Year/2021. Accessed: May 31, 2024.

[27] Peninsula Clean Energy. 2024. *Background*. Available: https://www.peninsulacleanenergy.com/background/. Accessed: May 31, 2024.

[28] Pacific Gas & Electric Company. 2024. *Company Profile*. Available: https://www.pge.com/en/about/company-information/company-profile.html. Accessed: January 29, 2024.

exports electricity to PG&E grid when the on-site cogeneration plant generates excess electricity, and imports electricity from the PG&E grid when electricity demand exceeds the cogeneration plant energy generation.

Natural Gas

PG&E's natural gas (methane) pipe delivery system includes 42,141 miles of distribution pipelines and 6,438 miles of transmission pipelines.[29] Gas delivered by PG&E originates in gas fields in California, the Southwest, the Rocky Mountains, and Canada. Transmission pipelines send natural gas from fields and storage facilities in large pipes under high pressure. Smaller distribution pipelines deliver gas to individual businesses and residences.

Natural gas pipelines are located below ground in adjacent public rights-of-way along Seminary Drive and Middlefield Road.[30]

Telecommunications

There are numerous telecommunications providers in the city of Menlo Park that offer DSL, wireless, cable, fiber, and copper services, including Atherton Fiber, Sonic, XFINITY from Comcast, AT&T, Earthlink, Wave Broadband, Viasat Internet, Zayo, Lumen, Verizon, and HughesNet, to residents and businesses in the city. The Project Site receives services primarily from AT&T, Comcast Viasat Internet, and HughesNet.[31]

Telecommunications facilities include underground conduits and overhead cables throughout the vicinity of the Project Site.

Regulatory Setting

Federal

Federal Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), enacted in 1974, is a federal law. Its intent is to ensure safe drinking water for the public. The SDWA, which has been amended several times since it came into law, authorizes the U.S. Environmental Protection Agency (EPA) to set national standards for drinking water. These are called the National Primary Drinking Water Regulations. The regulations, which provide protection from both naturally occurring and manufactured contaminants, set enforceable maximum contaminant levels for drinking water and require all water providers in the United States to treat water sources, except for private wells that serve fewer than 25 people. In California, the State Department of Health Services conducts most enforcement activities. If a water system does not meet the standards, it is the water supplier's responsibility to notify its customers.

[29] Ibid.

[30] U.S. Department of Transportation. n.d. *NPMS Public Viewer—Gas Transmission Pipelines, San Mateo County*. Available: https://pvnpms.phmsa.dot.gov/PublicViewer/. Accessed: December 19, 2023.

[31] BroadbandNow. 2023. *Internet Providers in Menlo Park, California*. Available: https://broadbandnow.com/California/Menlo-Park?zip=94025. Accessed: November 7, 2023.

Clean Water Act

Refer to Section 3.12, *Hydrology and Water Quality*, for a discussion of the federal Clean Water Act of 1972 (CWA).

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the CWA to regulate municipal and industrial discharges to surface waters in the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits identify effluent and receiving-water limits for allowable concentrations and/or mass emissions of pollutants contained in discharges, prohibitions on discharges that were not specifically allowed under the permit, and provisions that describe required actions for the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities.

Wastewater discharges are regulated under the NPDES permit program for direct discharges to receiving waters as well as the National Pretreatment Program for indirect discharges to sewage treatment plants. Operation of the SVCW WWTP and its wastewater collection system is regulated by the waste discharge requirements (NPDES No. CA0038369) found in RWQCB Order No. R2-2018-00XX, which expired on March 31, 2023.[32] However, pursuant to California Code of Regulations, Title 23, Section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the discharger complies with all requirements for continuation of expired permits. The discharger's wastewater collection system consists of four pump stations, which receive wastewater from the "satellite" wastewater collection systems of four municipal jurisdictions (i.e., WBSD, Belmont, San Carlos, Redwood City). Effluent from the WWTP is also subject to two other NPDES permits, 1) the waste discharge requirements for mercury and polychlorinated biphenyls (PCBs) from municipal and industrial wastewater discharges to San Francisco Bay (NPDES No. CA0038849) and 2) the waste discharge requirements for nutrients from municipal wastewater discharges to San Francisco Bay (NPDES No. CA0038873).[33] The NPDES permits enable SVCW to discharge treated wastewater into San Francisco Bay.

State

California Porter-Cologne Water Quality Control Act

Refer to Section 3.12, *Hydrology and Water Quality*, for a discussion of the California Porter-Cologne Water Quality Control Act, passed in 1969 and amended in 2013. Under the California Porter-Cologne Water Quality Control Act, the SWRCB has authority over state water rights and water quality policy. The act divides the state into nine regional basins, each of which is under the jurisdiction of the RWQCB that oversees water quality on a day-to-day basis at the local and regional level. RWQCBs oversee a number of water quality functions in their respective regions. RWQCBs regulate all pollutant or nuisance discharges that may affect either surface water or groundwater. Menlo Park is under the jurisdiction of the San Francisco Bay RWQCB.

[32] San Francisco Bay Regional Water Quality Control Board. 2023. *Tentative Order No. R2-2018-00XX*. Available: https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2018/February/SiliconValley/SVCW_Tentative_Order.pdf. Accessed: November 16, 2023.

[33] San Francisco Bay Regional Water Quality Control Board. 2023. *Order No. R2-2019-0017*. Available: https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/adopted_orders/2019/R2-2019-0017.pdf. Accessed: May 31, 2024.

The San Francisco Bay-Delta Water Quality Control Plan

The SWRCB adopted an amendment to the San Francisco Bay-Delta Water Quality Control Plan (Bay-Delta Plan) on December 12, 2018. The plan establishes water quality objectives that protect uses of water in the Bay-Delta watershed, including uses pertaining to drinking water, water for irrigation, and fish and wildlife habitat. The Bay-Delta Plan Amendment requires the release of 40 percent of the "unimpaired flow" on the Lower San Joaquin River's three salmon-bearing tributaries, the Stanislaus, Tuolumne, and Merced Rivers, from February through June in every year type, whether wet, normal, dry, or critically dry, and requires a program for implementation. The new flow objectives recognize the vital role upstream flows provide for habitat as well as the migration of threatened and endangered fish. The revised salinity objectives reflect updated scientific information about the salt levels that are suitable for agriculture in the southern delta. The reliability of the SFPUC RWS supply is highly dependent on the assumption of whether or not the 2018 Bay-Delta Plan Amendment is implemented. According to the SFPUC, should the Bay-Delta Plan Amendment be implemented, significant supply shortfalls are projected in dry years for agencies that receive water supplies from the SFPUC RWS as well as other agencies whose water supplies would be affected by the amendment. For MPMW, supply shortfalls are projected in single dry years (ranging from 27 to 32 percent) and in multiple dry years (ranging from 27 to 44 percent) through 2040, with similar shortfalls through 2045. If supply shortfalls do occur, MPMW expects to meet these supply shortfalls through water demand reductions and other shortage response actions, such as implementation of its WSCP.[38] The projected single dry-year shortfalls would require implementation of Stage 3 or 4 of the MPMW WSCP; projected multiple dry-year shortfalls would require implementation of Stage 3, 4 or 5 of the MPMW WSCP.

Should the Bay-Delta Plan Amendment not be implemented, MPMW expects to meet the demand for existing and planned future uses through 2040 in normal years, single dry years, and multiple dry years. A 16.5 percent supply shortfall is projected during the fourth and fifth consecutive dry year for base year 2045. These projected supply shortfalls are significantly less than the projected supply shortfalls that would occur if the Bay-Delta Plan Amendment is implemented. The SFPUC is currently implementing an Alternative Water Supply Planning Program to investigate and plan for new water supplies and address future long-term water supply reliability challenges and vulnerabilities of the RWS. As of June 2021, the SFPUC is pursuing several strategies to uphold its supply agreements, including strategies involving voluntary agreements, drought planning, alternative water supplies, and litigation.

Senate Bills 610 and 221

California Senate Bill (SB) 610 and SB 221 amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 were companion measures that sought to promote more collaborative planning between local water suppliers and the cities and counties. Both statutes require detailed information regarding water availability. This information would be provided to city and county decision-makers prior to approval of specified large development projects to ensure that prudent water supply planning has been conducted and that planned water supplies will be adequate with respect to meeting existing demands, anticipated demands from approved projects and tentative maps, and the demands of proposed projects.

SB 610 amended California Water Code Sections 10910 through 10915 (inclusive) to require land use lead agencies to, in certain instances:

- Identify any public water purveyor that may supply water for a proposed development project and
- Request a WSA from the identified water purveyor.

The purpose of the WSA is to demonstrate the sufficiency of the purveyor's water supplies with respect to satisfying the water demands of proposed projects that exceed a certain size and are subject to review under CEQA while still meeting the demands of the water purveyor's existing and planned future uses. Projects requiring a WSA include the following: (1) a proposed residential development of more than 500 dwelling units; (2) a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space; (3) a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; (4) a proposed hotel or motel, or both, having more than 500 rooms; (5) a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; (6) a mixed-use project that includes one or more of the projects specified in this subdivision; and (7) a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a project with 500 dwelling units. California Water Code Sections 10910 through 10915 delineate the specific information that must be included in the WSA.

In 2001, SB 221 amended state law to require affirmative written verification of the availability of an adequate water supply before approval by a city or county of certain residential subdivisions. Per California Government Code Section 66473.7(a)(1), a *subdivision* means a proposed residential development with more than 500 dwelling units. SB 221 was intended to be a fail-safe mechanism that would ensure collaboration in finding needed water supplies before construction begins.

The WSA prepared for the Proposed Project complies with SB 610 (California Water Code Sections 10910 through 10915) and SB 221. The Proposed Project meets the definition of a "project," as specified in Water Code Section 10912(a), because it would include more than 500 dwelling units as well as non-residential development that would cumulatively require a quantity of water equivalent to or greater than the quantity required by a project with 500 dwelling units; thus, the Proposed Project would be subject to the requirements of SB 610. In addition, because the Proposed Project would include more than 500 dwelling units in MPMW's water service area, the Proposed Project would be subject to the requirements of SB 221.

Urban Water Management Planning Act

Through the Urban Water Management Planning Act of 1983, the California Water Code requires all urban water suppliers within California to prepare and adopt an UWMP and update it every 5 years. This requirement applies to all suppliers that provide water to more than 3,000 customers or supply more than 3,000 acre-feet of water annually. The act is intended to support the conservation and efficient use of urban water supplies. It requires a comparison between a project's water use and water supply sources for the next 20 years, in 5-year increments; planning for single and multiple dry years; and a water recycling analysis with a description of the wastewater collection and treatment system within the agency's service area and the current and potential recycled water uses. In September 2014, the act was amended by SB 1420 to require urban water suppliers to provide descriptions of their water demand management measures and similar information. In May 2021, the Menlo Park City Council adopted the 2020 UWMP, the most recent update to its UWMP.

The 2020 UWMP incorporated the future population, employment, and water demand projections for build-out of the general plan, including the additional allowable development associated with ConnectMenlo (including bonus-level development potential) and other major development projects within the MPMW service area. The SFPUC 2020 UWMP, adopted in June 2021, extends to a 2045 horizon year and analyzes two supply scenarios, one with the Bay-Delta Plan Amendment, assuming implementation starting in 2023, and one without the Bay-Delta Plan Amendment. Results of these analyses are summarized as follows:

- If the Bay-Delta Plan Amendment is implemented, SFPUC would be able to meet its contractual obligations to its wholesale customers as presented in the SFPUC 2020 UWMP in normal years but would experience significant supply shortages in dry years. In single dry years, supply shortages would range from 36 to 46 percent. In multiple dry years, supply shortages would range from 36 to 54 percent. Implementation of the Bay-Delta Plan Amendment would require rationing in all single dry and multiple dry years through 2045.
- If the Bay-Delta Plan Amendment is not implemented, SFPUC would be able to meet 100 percent of the projected purchases of its wholesale customers during all year types through 2045, except during the fourth and fifth consecutive dry year for base year 2045 when 15 percent wholesale supply shortages are projected.

In June 2021, in response to various comments from wholesale customers regarding the reliability of the RWS, as described in SFPUC's 2020 UWMP, SFPUC provided a memorandum that described SFPUC's efforts to remedy the potential effects of the Bay-Delta Plan Amendment. As described in the memorandum, which is appended to the WSA, SFPUC's efforts include the following:[34]

- Pursuing a Tuolumne River voluntary agreement,
- Evaluating the drought planning scenario in light of climate change,
- Pursuing alternative water supplies,
- Pursuing litigation with the state over the Bay-Delta Plan Amendment, and
- Pursuing litigation with the state over the proposed Don Pedro Federal Energy Regulatory Commission Water Quality Certification.

Sustainable Groundwater Management Act

Refer to Section 3.12, *Hydrology and Water Quality*, for a discussion of the Sustainable Groundwater Management Act of 2014.

2009 Water Conservation Act

The Water Conservation Act of 2009, SB X7-7, requires water suppliers to increase water use efficiency. The legislation set an overall goal of reducing per capita water use by 20 percent by 2020, with an interim goal of 10 percent by 2015. Effective in 2016, urban retail water suppliers that did not meet the water conservation requirements established by this bill were not eligible for state water grants or loans. SB X7-7 required urban retail water suppliers to determine baseline water use and set reduction targets

[34] West Yost and Associates. 2024. *Parkline Water Supply Assessment*. April.

according to specified standards. As demonstrated in the 2020 UWMP, MPMW is in compliance with SB X7-7 requirements.[35]

State Updated Model Water Efficient Landscape Ordinance

The updated Model Water Efficient Landscape Ordinance required cities and counties to adopt landscape water conservation ordinances by February 1, 2016, or a different ordinance that would be at least as effective in conserving water as the updated ordinance. The city of Menlo Park adopted Ordinance No. 968, Water Efficient Landscaping Regulations, in 2016 and revised Menlo Park Municipal Code Chapter 12.44, as described below.

Title 24, California Green Building Standards Code

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations [CCR]). In accordance with CCR Title 24, Part 6 (last amended in 2022, effective January 1, 2023), buildings constructed after June 30, 1977, must comply with the standards identified in CCR Title 24. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. Title 24 requires the inclusion of state-of-the-art energy conservation features in building designs and construction, such as specific energy-conserving design features and non-depletable energy resources. In addition, it must be demonstrated that a building would comply with a designated energy budget. Part 11 of the Title 24 California Building Standards Code is referred to as the CALGreen Code. Unless otherwise noted in a regulation, all newly constructed buildings in California are subject to the requirements of the CALGreen Code.

Refer to Section 3.6, *Greenhouse Gas Emissions*, for a discussion of the California Energy Code.

The California Plumbing Code

The California Plumbing Code (Part 5, Title 24, CCR) was adopted as part of the California Building Standards Code to prevent disorder in the industry as a result of widely divergent plumbing practices and the use of many different, and often conflicting, plumbing codes by local jurisdictions. Among the many topics covered in the code were water fixtures, potable and non-potable water systems, and recycled water systems. According to the code, water supply and distribution practices shall comply with all applicable provisions of the current edition of the California Plumbing Code.

State Water Resources Control Board General Waste Discharge Requirement

On May 2, 2006, the SWRCB adopted a General Waste Discharge Requirement (Order No. 2006-0003) for all publicly owned sanitary sewer collection systems in California with more than 1 mile of sewer pipe. The order provides a consistent statewide approach to reducing sanitary sewer overflows by requiring public sewer system operators to take all feasible steps to control the volume of waste discharged into the system, prevent sanitary sewer waste from entering the storm sewer system, and develop a Sanitary Sewer Master Plan. The General Waste Discharge Requirement requires storm sewer overflows to be reported to the SWRCB with use of an online reporting system. The SWRCB has delegated enforcement authority to the

[35] City of Menlo Park. 2021. *2020 Urban Water Management Plan for Menlo Park Municipal Water*. Available: https://menlopark.gov/files/sharedassets/public/v/1/public-works/documents/water/2020-urban-water-management-plan-june-2021_20210715225802092l.pdf. June. Accessed: May 31, 2024.

nine RWQCBs. The San Francisco Bay RWQCB issues and enforces NPDES permits applicable to the WBSD wastewater collection system in Menlo Park and the SVCW WWTP in Redwood City.

Sanitary District Act of 1923

The Sanitary District Act of 1923 (Health and Safety Code Section 6400 et seq.) authorizes the formation of sanitation districts. It also authorizes the districts to construct, operate, and maintain facilities for the collection, treatment, and disposal of wastewater. The act was amended in 1949 to allow the districts to provide solid waste management and disposal services, including refuse transfer and resource recovery.

Senate Bill 1383

SB 1383 requires the California Air Resources Board (CARB) to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants (SLCPs), such as methane (CH_4), hydrofluorocarbons, and anthropogenic black carbon (soot) emissions. SLCPs are greenhouse gases (GHGs) that degrade in the atmosphere at a faster rate than carbon dioxide (CO_2) and are considered to be responsible for 40 percent of current net climate changing emissions. The strategy includes a target to reduce CH_4 emissions by 40 percent below 2013 levels by 2030, including those from livestock management operations. This bill also requires CalRecycle and CARB to adopt regulations that achieve specific targets to reduce organic waste in landfills. The Final SLCP Reduction Strategy was approved by CARB in March 2017 and includes recommendations to reduce CH_4 emissions from a variety of sources as well as refrigerants and fumigants.[36] As it pertains to CalRecycle, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025 and grants CalRecycle the regulatory authority required to achieve these targets. SB 1383 also establishes an additional waste reduction target (i.e., not less than 20 percent of currently disposed of edible food to be recovered for human consumption by 2025). The Office of Administrative Law approved CalRecycle's regulations to reduce SLCPs from organic waste in November 2020.

Assembly Bill 939 and Senate Bill 1016

The California Integrated Waste Management Act of 1989, or AB 939, established the Integrated Waste Management Board, required implementation of integrated waste management plans, and mandated local jurisdictions to divert at least 50 percent of all solid waste (from 1990 levels), beginning January 1, 2000 (and at least 75 percent by 2010). In 2006, SB 1016 updated the requirements. The new per capita disposal and goal measurement system moves the emphasis from an estimated diversion measurement number to an actual disposal measurement number, along with an evaluation of program implementation efforts. These two factors will help determine each jurisdiction's progress toward achieving AB 939 diversion goals. The 50 percent diversion requirement is now measured in terms of per capita disposal, expressed as pounds per day. Under the SB 1016 measurement system, a city is required to annually dispose of an amount equal to or less than its "50 percent equivalent per capita disposal target," as calculated by CalRecycle.

Title 14, CalRecycle

CCR Title 14, Division 7, contains CalRecycle regulations pertaining to all nonhazardous waste management in California. It includes regulations regarding the minimum standards for solid waste

[36] California Air Resources Board. 2017. *Short-Lived Climate Pollutant Reduction Strategy*. Available: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf. Accessed: May 31, 2024.

handling and disposal, the handling and disposal of asbestos-containing waste, special waste, and enforcement. Other regulations concern commercial recycling and solid waste cleanup programs, among other topics.

Local

Bay Area Water Supply and Conservation Agency

BAWSCA, created on May 27, 2003, represents 26 agencies that depend on the San Francisco RWS, including MPMW. The BAWSCA oversees and coordinates water conservation, water supply, and water recycling activities for member agencies; acquires water and makes it available to other agencies on a wholesale basis; finances improvements to the RWS; and builds facilities as necessary.

Water Shortage Allocation Plan

In 2021 wholesale customers and SFPUC adopted the Amended and Restated Water Supply Agreement, which included a Water Shortage Allocation Plan (WSAP) to allocate water from the RWS to retail and wholesale customers during system-wide shortages, including shortages occurring as a result of implementation of the Bay-Delta Plan Amendment. The WSAP has two tiers:

- The Tier One Plan allocates water between SFPUC and wholesale customers collectively, based on the level of the shortage (up to 20 percent). This plan applies only when SFPUC determines that a system-wide water shortage exists and issues a declaration of a water shortage emergency under California Water Code Section 350. SFPUC may also opt to request voluntary cut-backs from San Francisco and wholesale customers to achieve necessary water use reductions during drought periods.
- The Tier Two Plan allocates the collective wholesale customers' share, based on a formula that accounts for each wholesale customer's ISG, seasonal use of all available water supplies, and residential per capita use. BAWSCA calculates each wholesale customer's allocation factors annually in preparation for a potential water shortage emergency.

BAWSCA recognizes that the Tier Two Plan was not designed for RWS shortages greater than 20 percent. In a memorandum dated March 1, 2021, BAWSCA provided a refined methodology to allocate RWS supplies during projected future single dry and multiple dry years (i.e., in instances where supply shortfalls were greater than 20 percent) for purposes of the BAWSCA member agencies' 2020 UWMPs. The revised methodology developed by BAWSCA allocates the wholesale supplies as follows:

- When the average wholesale customers' RWS shortages are 10 percent or less, an equal percent reduction will be applied across all agencies. This is consistent with the existing Tier Two requirements in a Tier Two application scenario.
- When average wholesale customers' shortages are between 10 and 20 percent, the Tier Two Plan will be applied.
- When the average wholesale customers' RWS shortages are greater than 20 percent, an equal percent reduction will be applied across all agencies.

In another memorandum, dated February 18, 2021, BAWSCA explains that, in actual RWS shortages greater than 20 percent, BAWSCA member agencies would have the opportunity to negotiate and agree upon a more nuanced and equitable approach. This would very likely consider basic health and safety needs, the water needs of critical institutions, and economic impacts on individual communities and the region. As such, the allocation method described in the 2020 UWMP is intended to serve as only the

preliminary basis for the 2020 UWMP supply reliability analysis. The analysis provided in the SFPUC 2020 UWMP and the MPMW 2020 UWMP does not in any way imply an agreement by BAWSCA member agencies as to the exact allocation methodology.

Silicon Valley Clean Water 2020 Capital Improvement Program

The 2020 updated SVCW Capital Improvement Program (CIP), which is applicable through fiscal year 2030, identifies and allocates funds for projects within the SVCW system. This includes projects that would replace and rehabilitate existing infrastructure (e.g., pump stations, treatment plants, force mains).

Menlo Park Municipal Water 2018 Water System Master Plan

MPMW completed the 2018 Water System Master Plan as a comprehensive evaluation of its water distribution system. The master plan identifies strategies to 1) meet the system's infrastructure needs in a cost-effective manner; 2) guide capital expenditures for the system; 3) furnish important guidance to enhance renewal and replacement strategies, along with operational and water quality practices; and 4) provide a framework for diversifying MPMW's water supply.

West Bay Sanitary District Collection System Master Plan

The WBSD completed a sewer Collection System Master Plan in June 2011. In July 2013, the WBSD updated the plan to address recalibration issues following completion of several CIP projects that affected the district's flow monitoring program. The 2011 master plan assessed the conveyance capacity of the WBSD's sewer collection system (e.g., pipes, pump stations); evaluated facilities, which may require rehabilitation or replacement; developed a prioritized CIP; and established a funding plan for the proposed CIP.

West Bay Sanitary District Code of General Regulations

The WBSD's Code of General Regulations establishes standards, conditions, and provisions for fees related to the use of the district's sanitary wastewater facilities. Article VII requires Class 1 sewer permits for residential connections, Class 2 sewer permits for non-residential connections, and Class 3 sewer permits for construction of sewer mains, pumping stations, and other wastewater facilities. To receive a permit, a developer must submit an application, pay all fees and charges, and satisfy requirements, such as extending collection facilities to the vicinity of the development site. For a Class 3 permit, the WBSD manager examines the submitted application's conformance with engineering practices and the standard specifications and policies of the WBSD and then submits it to the WBSD board of directors for approval. Subsequent to the WBSD's acceptance of a Class 3 permit, but prior to connection and discharge to the WBSD's wastewater facilities, a Class 1 or Class 2 permit, as applicable, must be obtained by the developer. All costs and expenses associated with the installation and connection of the building sewer shall be at the owner's expense. All work shall be inspected and performed in accordance with the standard specifications of the WBSD.

Water Shortage Contingency Plan

Chapter 8 and Appendix J of the 2020 UWMP provide a Water Shortage Contingency Plan to address situations when catastrophic water supply interruptions occur due to regional power outages, earthquakes or other disasters, and drought. The primary objective of the WSCP is to ensure that MPMW has adequate resources and management responses available to protect health and human safety, minimize economic disruption, and preserve environmental and community assets during a water supply

shortage or interruption. The plan is based on Menlo Park Municipal Code Section 7.35, which requires water rationing and conservation and grants MPMW the authority to enforce penalties.

The MPMW 2020 WSCP builds upon the WSCP established in 2015, including additional provisions required by California Water Code. On an annual basis, MPMW, in coordination with BAWSCA, will evaluate water supply information provided by SFPUC or BAWSCA to determine if a water shortage exists as well as the severity of a particular water shortage. In response to water use reductions required by SFPUC or another governing body, the City Council may declare a water shortage. The MPMW 2020 WSCP defines six water shortage stages, ranging from 10 to more than 50 percent, in addition to water waste prohibitions that are always in effect. MPMW monitors water use in its service area through monthly meter readings, which allows high water use to be identified and resolved during a water shortage. In addition, MPMW plans to install advanced metering infrastructure over the next two fiscal years to provide automated real-time water use data and allow MPMW to aggressively target leaks and high water use.

If an emergency or drought condition were to occur that would require MPMW to implement its WSCP, all MPMW customers would be subject to the same water conservation and water use restrictions included in the 2020 WSCP.

Menlo Park General Plan

The city's General Plan was updated in November 2016 when the city adopted ConnectMenlo, which contained the city's new Land Use Element and new Circulation Element. Other recent revisions to the city's General Plan took place in 2013, including updated Open Space and Conservation, Noise, and Safety Elements. The 2023–2031 Housing Element was adopted in January 2023, in addition to associated amendments to the Land Use Element, with a further amendment in January 2024 to incorporate revisions required by the California Department of Housing and Community Development. The city also continues to work on an update to its Safety Element and preparation of its first Environmental Justice Element. The city's General Plan includes goals and policies associated with utilities and service systems.

The following goal and policies from the Land Use Element related to utilities and service systems were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal LU-7: Promote the implementation and maintenance of sustainable development, facilities, and services to meet the needs of Menlo Park's residents, businesses, workers, and visitors.

> **Policy LU-7.1 Sustainability.** Promote sustainable site planning, development, landscaping, and operational practices that conserve resources and minimize waste.
>
> **Policy LU-7.2: Water Supply.** Support the efforts of the Bay Area Water Supply and Conservation Agency or other appropriate agencies to secure adequate water supplies for the peninsula to the extent that these efforts are in conformance with other city policies.
>
> **Policy LU-7.3: Supplemental Water Supply.** Explore and evaluate development of supplemental water sources and storage systems, such as wells and cisterns, for use during both normal and dry years, in collaboration with water providers and users.
>
> **Policy LU-7.4: Water Protection.** Work with regional and local jurisdictions and agencies responsible for groundwater extraction to develop a comprehensive underground water protection program in accordance with the San Francisquito Creek Watershed Policy, which includes preservation of existing sources and monitoring of all wells in the basin to evaluate the long-term effects of water extraction.

Policy LU-7.5: Reclaimed Water Use. Implement use of adequately treated "reclaimed" water (recycled/non-potable water sources such as graywater, blackwater, rainwater, stormwater, foundation drainage, etc.) through dual plumbing systems for outdoor and indoor uses, as feasible.

Policy LU-7.6: Sewage Treatment Facilities. Support expansion and improvement of sewage treatment facilities to meet Menlo Park's needs, as well as regional water quality standards, to the extent that such expansion and improvement are in conformance with other city policies.

The following goals and policies from the Open Space and Conservation Element related to utilities and service systems were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal OSC4: Promote Sustainability and Climate Action Planning. Promote a sustainable energy supply and implement the city's Climate Action Plan to reduce greenhouse gas emissions and improve the sustainability of actions by city government, residents, and businesses in Menlo Park. This includes promoting land use patterns that reduce the number and length of motor vehicle trips, and encouraging recycling, reduction and reuse programs.

Policy OSC4.2: Sustainable Building. Promote and/or establish environmentally sustainable building practices or standards in new development that conserve water and energy, prevent stormwater pollution, reduce landfilled waste, and reduce fossil fuel consumption from transportation and energy activities.

Policy OSC4.3 Renewable Energy. Promote the installation of renewable energy technology for residences and businesses through education, social marketing methods, standards, and/or incentives.

Policy OSC4.4: Vehicles Using Alternative Fuel. Explore the potential for installing infrastructure for vehicles that use alternative fuel, such as electric plug-in recharging stations.

Policy OSC4.5: Energy Standards in Residential and Commercial Construction. Encourage projects to achieve a high level of energy conservation, exceeding standards set forth in the California Energy Code for residential and commercial development.

Policy OSC4.6: Waste Reduction Target. Strive to meet the California State Integrated Waste Management Board per person target of waste generation per person per day through their source reduction, reuse, and recycling programs.

Policy OSC4.7: Waste Management Collaboration. Continue to support and participate in efforts such as the South Bayside Waste Management Authority, which provides waste reduction, recycling, and solid waste programs and solutions.

Policy OSC4.8: Waste Diversion. Develop and implement a zero-waste policy or implement standards, incentives, or other programs that would lead the community toward a zero-waste goal.

Goal OSC5: Ensure Healthy Air and Water Quality. Enhance and preserve air quality in accord with state and regional standards and encourage the coordination of total water quality management, including both supply and wastewater treatment.

Policy OSC-5.3: Water Conservation. Encourage water-conserving practices in businesses, homes, and institutions.

The following goal and policy from the Safety Element related to utilities and service systems were adopted to avoid or minimize environmental impacts and are relevant to the Proposed Project:

Goal S-1: Ensure a Safe Community. Minimize risk to life and damage to the environment and property from natural and human-caused hazards and ensure community emergency preparedness and a high level of public safety services and facilities.

Policy S-1.6: Design and Location of Utilities. Monitor appropriate location, design, construction, maintenance, and inspection standards for utility systems traversing hazard areas within the city limits. This would include evaluating and upgrading outdated systems and infrastructure, coordinating with the State Public Utilities Commission, and locating new utility systems away from potential hazard areas.

Policy S-1.27: Regional Water Quality Control Board (RWQCB) Requirements. Enforce stormwater pollution prevention practices and appropriate watershed management plans in the RWQCB general National Pollutant Discharge Elimination System requirements, the San Mateo County Water Pollution Prevention Program, and the city's Stormwater Management Program. Revise, as necessary, city plans so they integrate water quality and watershed protection with water supply, flood control, habitat protection, groundwater recharge, and other sustainable development principles and policies.

Refer to Section 3.12, *Hydrology and Water Quality*, for a discussion of additional goals and policies related to water and wastewater.

Menlo Park Municipal Code

Title 7, Health and Sanitation, and Title 12, Buildings and Construction, of the Menlo Park Municipal Code include the regulations below relevant to water resources.

Chapter 7.35, Water Conservation

Chapter 7.35, Water Conservation, contains regulations and restrictions regarding water use to conserve water resources and eliminate wasteful water uses. Menlo Park Municipal Code Section 7.35.020 allows the City Council to adopt by resolution a water conservation plan and mandate water conservation measures in the event of adoption of emergency water conservation regulations by the SWRCB, SFPUC or the city.

Chapter 12.44, Water Efficient Landscaping Ordinance

Chapter 12.44, Water Efficient Landscaping Ordinance, adopted in 2016 (Ordinance No. 968), establishes water-efficient landscaping standards to conserve water used for irrigation. The ordinance applies to all new landscapes greater than 500 square feet and rehabilitated landscapes greater than 1,000 square feet associated with projects that require city review and approval.

Environmental Impacts

This section describes the impact analysis related to utilities and service systems for the Proposed Project. It describes the methods used to determine the impacts of the Proposed Project and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (i.e., avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the Proposed Project would have a significant effect if it would result in any of the conditions listed below.

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Have inadequate water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Methods for Analysis

Potential impacts on utilities and service systems are evaluated by:

- Assessing the potential for the Proposed Project to increase demand for utilities services, based on goals established by service providers; and
- Comparing the ability of the service provider/public facility to serve the Proposed Project and accommodate the associated increase in demand.

A determination is made as to whether existing services and facilities would be capable of meeting the demand of the Proposed Project and, if not, whether the expansion of existing facilities would cause an adverse environmental effect. Specifically, to determine potential water supply and infrastructure impacts, existing and projected water consumption was estimated from demand projection calculations and quantitative evaluation of data for existing land uses, approved projects, and proposed development, including the Proposed Project. To determine potential wastewater generation and infrastructure impacts, the analysis conservatively assumes that 95 percent of the interior water usage by the Proposed Project would become wastewater, consistent with the *Parkline Sanitary Sewer Capacity Analysis*.[37] Following that assumption, it is assumed that wastewater generation under the Proposed Project would equal 95 percent of water consumed by the Proposed Project and would be conveyed to the SVCW WWTP. The wastewater demands of the Proposed Project are compared to the available capacity of the WBSD sanitary sewer system and the SVCW WWTP to assess the potential for significant environmental impacts.

The primary sources of information used in preparing the analysis of utilities and service systems were the WSA (Appendix 3.16-1 of this EIR), Existing Sanitary Sewer Flow Estimate Memorandum, Parkline Sanitary Sewer Capacity Analysis, Project Stormwater Analysis, and Parkline Water Infrastructure

[37] Kier+Wright. 2024. *Parkline Sanitary Sewer Demand Analysis*. March 11.

Analysis. In addition, this section is based on information from the 2020 UWMP[38] and other relevant reports, along with professional judgment.

Buildout Scenario Evaluated

As discussed in Chapter 2, *Project Description*, the Proposed Project could be occupied by office tenants, research-and-development (R&D) tenants, or a combination of the two. Because future tenants have not been identified, two scenarios have been identified for purposes of the EIR analysis: a 100 percent office scenario and a 100 percent R&D scenario. Each impact analysis in the EIR evaluates the "worst-case" scenario for the impact being analyzed. The "worst-case" scenario is the scenario with the greatest potential to result in significant environmental impacts. This approach ensures that the EIR evaluates the Proposed Project's maximum potential impact and that any future tenant mix is within the scope of the EIR, as discussed under "Approach to Analysis of the Build-out Scenarios" in Chapter 3, *Environmental Impact Analysis*. The "worst-case" scenario can vary by resource topic and by impact. In some cases, both scenarios would result in the same level of impact; in those cases, the analysis does not identify a "worst-case" scenario.

Table 3.16-1 lists, by impact number, the buildout scenario assumed in the utilities and service systems analysis and provides an explanation as to why the buildout scenario was evaluated for each impact.

Table 3.16-1. Buildout Scenario Analyzed for Each Utilities and Service Systems Impact

Impact	Scenario Evaluated	Explanation
UT-1: Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.	100 percent R&D scenario (for all impacts except stormwater)	Depending on the type of utilities, both scenarios could be considered the worst-case scenario, although, in general, it is anticipated that the 100 percent R&D scenario would result in greater impacts. The analysis of impacts on existing utility infrastructure would need to consider both scenarios, as follows: **Water:** The 100 percent R&D scenario would generate a greater demand for water than the 100 percent office scenario. Despite the fact that the 100 percent office scenario would have more employees, R&D uses typically use more water in laboratory spaces. **Wastewater:** Assuming a 1:1 ratio of water and wastewater, the 100 percent R&D scenario would generate more wastewater than the 100 percent office scenario. Therefore, the 100 percent R&D scenario would have a greater impact on existing wastewater facilities. **Stormwater:** As discussed in Section 3.12, *Hydrology and Water Quality*, building footprints, hardscapes (such as paved paths and parking lots), and open spaces (such as landscaped areas and parks) would be the same under either scenario. Therefore, because the same amount of impervious surfaces

[38] City of Menlo Park. 2021. *2020 Urban Water Management Plan for Menlo Park Municipal Water*. Available: https://menlopark.gov/files/sharedassets/public/v/1/public-works/documents/water/2020-urban-water-management-plan-june-2021_20210715225802092l.pdf. June. Accessed: May 31, 2024.

Impact	Scenario Evaluated	Explanation
		would be constructed under either scenario, the same impacts related to stormwater drainage would occur. **Electric Power, Natural Gas, and Telecommunications:** As discussed in Section 3.5, *Energy*, the worst-case scenario in terms of energy consumption would be the 100 percent R&D scenario due to the types of equipment proposed. Therefore, a greater demand for electricity would occur under the 100 percent R&D scenario. According to the Project Sponsor, existing uses to remain onsite would continue to use natural gas, but no new natural gas connections would be included under the Proposed Project. Therefore, because the existing uses to remain would be the same under both scenarios, either scenario would result in the same potential demand for natural gas. For telecommunications, it is anticipated that demand would be similar under either build-out scenario.
UT-2: Have adequate water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	100 percent R&D scenario	The 100 percent R&D scenario would generate a greater demand for water than the 100 percent office scenario. Despite the fact that the 100 percent office scenario would have more employees, R&D uses typically use more water in the laboratory spaces.
UT-3: Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	100 percent R&D scenario	Assuming a 1:1 ratio between water and wastewater, the 100 percent R&D scenario would generate more wastewater than the 100 percent office scenario. Therefore, the 100 percent R&D scenario would have a greater impact on existing wastewater facilities.
UT-4: Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	100 percent office scenario	Solid waste impacts are calculated using CalRecycle generation rates, which are based on the number of employees. Therefore, because the 100 percent office scenario would result in more employees than the 100 percent R&D scenario, the 100 percent office scenario is considered the conservative scenario for solid waste impacts.
UT-5: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.	Either scenario	When considering compliance with regulations related to solid waste, both scenarios need to be considered, depending on the specific regulation and which scenario would have the greatest impact on that policy. The 100 percent office scenario would generate the greatest number of employees and, therefore, could generate the most solid waste. However, the 100 percent R&D scenario could generate more hazardous solid waste. Regulations pertaining to that type of waste would need to be considered.

Impacts and Mitigation Measures

Impact UT-1: Construction or Relocation of Utilities. The Proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (LTS)

Construction of the proposed water, wastewater, stormwater, electricity, and telecommunications infrastructure and upgrades required for the Proposed Project and demolition of the 6-megawatt natural gas power facility that generates power and steam energy for the SRI International Campus would have the potential to cause significant adverse environmental effects, such as fugitive dust, noise, sedimentation, and erosion. The proposed utility expansions and demolition of the cogeneration plant are part of the Proposed Project and described in Chapter 2, *Project Description*; the potential impacts that would result from construction and demolition of these facilities are evaluated throughout this EIR (e.g., refer to Section 3.4, *Air Quality*; Section 3.6, *Greenhouse Gas Emissions*; Section 3.7, *Noise and Vibration*; and Section 3.12, *Hydrology and Water Quality)*.

Water

Water for the Proposed Project would be treated at one of three WTPs: the SFPUC's Tesla Treatment Facility, the Sunol Valley WTP, or the Harry Tracy WTP. The Tesla Treatment Facility has the capacity to treat approximately 315 mgd. The Sunol Valley WTP has the capacity to treat 160 mgd. The Harry Tracy WTP has the capacity to treat 140 mgd. The total net increase in water demand of the Proposed Project is estimated to be approximately 217.5 gpm, or approximately 0.31 mgd.[39] Although it is not known exactly which of the three WTPs would treat water for the Project Site, the increase in demand (i.e., about 0.31 mgd) would not be considered a significant increase for the SFPUC system, which can treat 615 mgd with the combined capacity of three WTPs. In addition, the SFPUC is continuously planning operational upgrades, maintenance, and capital improvements for its WTPs. This is expected to continue in the future, independent of the Proposed Project. Environmental impacts from construction of new or expanded water treatment facilities deemed necessary through the planning process would be addressed in the CEQA review conducted by the lead agency for such facility expansion or development (i.e., SFPUC). Therefore, an evaluation of the possible environmental effects of future expansion/development of such facilities would be speculative and beyond the scope of this EIR.

The Proposed Project would install dedicated fire-service water and metered domestic water at each proposed building. The onsite water system for the Proposed Project would consist of an approximately 10- to 12-inch looped water system for domestic water and fire systems within the onsite buildings and for fire hydrants. In addition, a metered irrigation service would be provided to the Project Site for landscaped areas. This proposed system would use the existing 10-inch water distribution mains. The existing water connections to Buildings P, S, and T, which are unaffiliated with the Proposed Project and currently operational, would remain as is under existing conditions.

Correspondence with MPMW and modeling of the water distribution system for the Proposed Project determined that flows from the 10-inch high-pressure water line from Laurel Street would amount to approximately 1,625 gpm, and flows from the 10-inch line from Middlefield Road would amount to approximately 1,250 gpm. As stated above, the Proposed Project would use approximately 313,212 gpd of water, or approximately 217.5 gpm. Given the available flows from the lines in Laurel Street and

[39] Kier+Wright. 2024. *Parkline Water Infrastructure Analysis*. March 11.

Middlefield Road, the anticipated demand flows of the Proposed Project would be significantly less than the available flows of 1,250 to 1,625 gpm.[40] Therefore, the existing water system at the Project Site can provide an adequate flow for fire and domestic water under the Proposed Project without the need for upgrades or additional facilities.

The installation of new or expanded water lines on or adjacent to the Project Site would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. These construction impacts are part of the Project Description, and the potential impacts that would result from construction of these facilities are evaluated throughout this EIR (e.g., refer to Section 3.4, *Air Quality*; Section 3.6, *Greenhouse Gas Emissions*; Section 3.7, *Noise and Vibration; and* Section 3.12, *Hydrology and Water Quality*). In addition, the Proposed Project, as part of the city's project approval process, would be required to comply with existing regulations, including plans, policies, and zoning regulations that promote water conservation and green building practices, and would not require or result in the relocation of existing or construction of new or expanded water treatment facilities beyond those proposed as part of the Proposed Project and analyzed in this EIR. In addition, the Project Sponsor would be required to coordinate with the city and MPMW to address water-flow requirements through the subdivision mapping process and ensure that the existing and proposed water delivery infrastructure would be adequate for the Proposed Project. Therefore, the Proposed Project would result in ***less-than-significant*** impacts with respect to water facilities and service. No mitigation is required.

Wastewater

The Project Site is currently served by sewer infrastructure maintained by WBSD, which provides wastewater collection and conveyance services to the city of Menlo Park. The existing sewer system at the Project Site collects and conveys all sewer discharge to the southeast corner of the Project Site where the system splits into 8- and 12-inch sewer pipes that run through adjacent properties; the pipes eventually meet and discharge into one 18-inch sewer pipe. The 18-inch sewer pipe runs northeasterly along Survey Lane and ties into the sanitary sewer confluence point at Sanitary Sewer Manhole #1 at Middlefield Road, then continues to the southeast. This connection point is approximately 400 linear feet south of an existing VO Sewer Pump Station #1, which discharges to an existing 8-inch sewer pipe that meets at the confluence point. The proposed sanitary sewer system would collect and convey all sewer discharges to a 12-inch sanitary sewer line that would connect to the existing 18-inch sanitary sewer line in Middlefield Road downstream of an existing sanitary sewer pump (VO Pump Station #1). Existing Buildings P, S, and T would also continue to use the existing sewer infrastructure and discharge to the same discharge points as under current conditions. The existing buildings along Middlefield Road (unaffiliated with the Proposed Project but adjacent to the Project Site and discharging to the same sanitary sewer infrastructure) would continue to discharge through the Project Site from a relocated 12-inch main within a private drive along the northern property line. Existing sanitary sewer flows from the Project Site are conservatively estimated to be approximately 152,437 gpd (0.15 mgd or 0.23 cubic feet per second [cfs]).

Wastewater in the MPMW service area is collected by the WBSD and the SVCW WWTP. According to the 2020 MPMW UWMP, the volume of wastewater from the MPMW service area collected by the WBSD totaled approximately 873 mg/yr in 2020, or about 2.4 mgd. The Proposed Project would result in increased sanitary sewer flows, due primarily to the incorporation of new residential uses within the Project Site. For purposes of this analysis, it is assumed that 95 percent of the interior water usage would be discharged into the sewer system, which is a standard assumption that accounts for various

[40] Ibid.

evaporation and system losses. The Proposed Project would result in a sewer flow rate of approximately 239,615 gpd (0.24 mgd or 0.37 cfs).[41] This would not represent a significant increase for the WBSD relative to its current average collection rates.

Operation of the SVCW WWTP and its wastewater collection system is regulated by the waste discharge requirements (NPDES No. CA0038369) found in RWQCB Order No. R2-2018-00XX.[42,43] This order has a dry-weather facility design flow of 29 mgd and a peak wet-weather flow of 71 mgd. The NPDES permit does not have a limitation on flow quantity. As reported by the RWQCB, from October 2012 through August 2017, the SVCW WWTP treated an average of 13.5 mgd, with a maximum instantaneous flow of 50 mgd. Both rates are well within the 29 mgd average dry-weather design flow and 71 mgd peak wet-weather design flow. Under its Stage 2 expansion program, SVCW will increase WWTP capacity to 108 mgd, as needed.[44]

Assuming that 95 percent of the interior water usage by the Proposed Project would become wastewater, the estimated net increase in wastewater generated would be approximately 0.24 mgd (or 239,615 gpd). This increased in wastewater generation would not be significant relative to the current excess dry-weather design flow capacity of 15.5 mgd (i.e., 29 mgd design flow minus 13.5 mgd current average flow = 15.5 mgd) or its excess wet-weather design flow capacity of 57.5 mgd (i.e., 71 mgd design flow minus 13.5 mgd current average flow = 57.5 mgd).

Although the increase in wastewater flows with implementation of the Proposed Project would add to capacity demands for the WWTP and its conveyance system, the effect would not be substantial. Any increase would be integrated into ongoing planning processes to improve conveyance system, treatment processes, and capacity. Planning for operational upgrades, maintenance, and capital improvements at the WWTP is expected to continue in the future, independent of the Proposed Project. Environmental impacts from the construction of new or expanded wastewater treatment facilities deemed necessary through the planning process would be addressed in the CEQA review conducted by the lead agency for such facility expansion or development. Therefore, an evaluation of possible environmental effects from future expansion/development of such facilities would be speculative and beyond the scope of this EIR.

The Proposed Project, as part of the city's project approval process, would be required to comply with existing regulations, including policies and zoning requirements that promote water conservation and minimize impacts related to wastewater generation. In addition, the Proposed Project would not reduce the capacity of the wastewater treatment system substantially. Therefore, the Proposed Project would not require or result in the relocation of existing or construction of new or expanded wastewater treatment facilities. There would be a ***less-than-significant*** impact regarding the need for new or expanded wastewater treatment facilities. No mitigation is required.

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41 Kier+Wright. 2024. *Parkline Sanitary Sewer Demand Analysis*. March 11.

42 It should be noted that this permit expired on March 31, 2023, and no new permit has been issued yet. However, pursuant to California Code of Regulations, Title 23, Section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the discharger complies with all requirements for continuation of expired permits.

43 Effluent from the WWTP is also subject to two other NPDES permits: NPDES No. CA0038849 and NPDES No. CA0038873.

44 U.S. Environmental Protection Agency. 2023. *Water Infrastructure Finance and Innovation Act (WIFIA)—Silicon Valley Regional Environmental Sewer Conveyance Upgrade Phase 2*. Available: https://www.epa.gov/wifia/silicon-valley-regional-environmental-sewer-conveyance-upgrade-phase-2. Accessed: October 30, 2023.

Stormwater

The Proposed Project would have a pervious surface area of approximately 42.3 percent (1.165 million square feet) across the site, compared to only 25.7 percent (643,045 square feet) under existing conditions. This would result in a total Project Site impervious surface area of approximately 57.7 percent (1.588 million square feet).[45] As described in greater detail in Section 3.12, *Hydrology and Water Quality*, the Proposed Project would reduce discharges of stormwater runoff compared to existing conditions because it would decrease the amount of impervious surface area by introducing new landscaped areas and open space and reducing the amount of surface parking and other hardscape. Because of the reduction in impervious surface area across the site, the expected stormwater flow rate leaving the Project Site would be less than under existing conditions. The Project Sponsor would be required to develop and implement a final Stormwater Management Plan, with the goal of reducing the discharge of pollutants to the maximum extent practicable, in compliance with state and County of San Mateo requirements.

The Proposed Project would include up to 65,500 square feet of bioretention areas that would be dispersed throughout the Project Site. Generally, biotreatment areas would either be flow-through planters or recessed biotreatment ponds. The Proposed Project's bioretention basins would be lined at the bottom; therefore, infiltration would not occur. In addition to bioretention ponds, the Proposed Project could also include larger centralized treatment areas, which could also serve as open space. Additional strategies to improve onsite drainage include raising first-floor elevations to allow drainage to and within landscape areas, sloping to the perimeter of the site, and utilizing the loop road to manage stormwater drainage paths to the city's storm drain system.

It is assumed that all stormwater flows associated with the Proposed Project would discharge to the existing 27-inch storm drainpipe; the Proposed Project would maintain the existing drainage pattern toward the northeast corner of the site (i.e., the low point of the property). However, if needed, stormwater flows also could be directed to smaller storm drain systems in Laurel Street and Burgess Drive.[46] As stated above, because of the reduction in impervious area across the Project Site, the anticipated flow rate for runoff leaving the Project Site would be less than under existing conditions. The reduced impervious surface area, compared to the existing impervious surface area, and bioretention/ flow-through planters would result in a flow rate of approximately 39.7 cfs. Compared to existing conditions, this represents a decreased stormwater flow into the existing storm drain system of approximately 18.5 percent.

Routine maintenance at the bioretention and centralized treatment areas would be required to prevent sediment build-up and clogging, which reduce efficiency and could lead to bioretention and treatment area failure. Maintenance tasks include inspecting bioretention and centralized treatment areas to ensure proper drainage between storms and removing obstructions, debris, and trash. Furthermore, the Project Sponsor would be required to enter into a Stormwater Operations Maintenance Agreement with the city for maintenance of the stormwater treatment facilities. In addition, the Proposed Project would implement best management practices (BMPs), both during and after construction, to minimize or prevent pollutant discharges and runoff. The Proposed Project would comply with the General Construction Permit; San Francisco Bay Municipal Separate Storm Sewer Permit, Provision C.3; and the San Mateo Countywide Pollution Prevention Program C.3 Stormwater Technical Guidance and implement

[45] Kier+Wright. 2024. *Project Stormwater Analysis*. March 11.
[46] Ibid.

a Stormwater Pollution Prevention Plan (SWPPP), low-impact development (LID) measures, and other erosion and pollution control measures.

As part of the city's project approval process, the Proposed Project would be required to comply with existing stormwater regulations, as discussed above. In addition, the Proposed Project would reduce the total volume of stormwater runoff at the Project Site compared with existing conditions because of the on-stie stormwater elements discussed above. Therefore, the Proposed Project would not require or result in the relocation of existing or construction of new or expanded stormwater drainage facilities beyond what is proposed as part of the Proposed Project. Impacts would be ***less than significant***. No mitigation is required.

Electricity and Natural Gas

As part of the Proposed Project, nearly all of the outdated and energy-inefficient buildings on the Project Site would be replaced with buildings and related improvements that would reflect the latest sustainability requirements, including the city's all-electric Reach Code and green building program; the California Green Building Standards Code, known as CALGreen; and California Title 24's new renewable energy mandates. The Proposed Project would also remove the existing cogeneration plant and establish an all-electric energy design throughout the Project Site, with the exception of Buildings P, S, and T, which would retain natural gas usage for continued laboratory and R&D purposes. No new natural gas service would be provided to structures constructed as part of the Proposed Project. A joint trench would provide space for electrical and telecommunication conduits and pathways.

Other sustainability features (see Chapter 2, *Project Description*) of the Proposed Project include Leadership in Energy and Environmental Design (LEED) Gold certification for the office/R&D area, LEED New Construction certification or equivalent standards for multi-family residential buildings, and LEED for Homes certification or equivalent standards for residential townhouses. Additional features include electric-vehicle charging stations for 10 percent of all office/R&D area parking spaces and 15 percent of all residential area parking spaces. The use of on-site renewable energy in the form of solar arrays, as a strategy for achieving Reach Code compliance by generating power onsite, would be explored.

Although the Project Site is currently served by existing PG&E electrical infrastructure, PG&E would provide improvements to support distribution-level electrical service to the Project Site. The proposed infrastructure upgrades and demolition of the cogeneration plan would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. Proposed electrical and natural gas expansion work and demolition of the cogeneration plant, which are part of the Proposed Project, are described in Chapter 2, *Project Description*; the potential impacts that would result from construction and demolition are evaluated throughout this EIR (e.g., refer to Section 3.4, *Air Quality*; Section 3.6, *Greenhouse Gas Emissions*; Section 3.7, *Noise and Vibration*; and Section 3.12, *Hydrology and Water Quality)*. In addition, any such work would be subject to compliance with applicable regulations and standard conditions of approval for the Proposed Project, including city permits/review for construction (e.g., grading permits, private development review, encroachment permits). Therefore, the Proposed Project would have ***less-than-significant*** impacts with respect to electricity and natural gas infrastructure and facilities. No mitigation is required.

Telecommunications

Telecommunications lines may need to be extended or relocated as a result of the Proposed Project. A joint trench would provide space for electrical and telecommunication conduits and pathways. The installation of new or expanded telecommunication lines on the Project Site would require excavation,

trenching, soil movement, and other activities that are typical during construction of development projects. The proposed telecommunication infrastructure installations and facility expansion work, which are part of the Proposed Project, are described in Chapter 2, *Project Description*; the potential impacts that would result from construction and demolition of these facilities are evaluated throughout this EIR (e.g., refer to Section 3.4, *Air Quality*; Section 3.6, *Greenhouse Gas Emissions*; Section 3.7, *Noise and Vibration*; and Section 3.12, *Hydrology and Water Quality)*. However, no offsite telecommunications facilities would need to be constructed or expanded as a result of the Proposed Project. Therefore, the Proposed Project would have ***less-than-significant*** impacts with respect to telecommunications infrastructure and facilities. No mitigation is required.

Impact UT-2: Water Supply. The Proposed Project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (LTS)

As required, a WSA was prepared for the Proposed Project (discussed below). Twelve months after certification of occupancy, a standard condition to ensure compliance with the approved water demand for the Proposed Project (refer to Chapter 2, *Project Description*) would require the building owner(s) to submit the data and information necessary to allow the city to compare actual water use to the allocation in the approved WSA. If actual water consumption exceeds the water budget, a water conservation program, as approved by the city's public works director, would be implemented.

A summary of the water demands of the Proposed Project, as estimated by the Project Sponsor and evaluated by the city's consultant during preparation of the WSA, is provided in Table 3.16-2. As shown, total projected water demand for the Proposed Project under the 100 percent R&D scenario would be approximately 105.3 mg/year. However, as shown in Table 3.16-2, only the net new water demand associated with the Proposed Project is evaluated for purposes of this analysis because the existing water demand for the existing buildings that will remain in operation (e.g., Buildings P, S and T) is already accounted for in the city's current water supply planning. Thus, the water demand associated from the existing uses on the Project Site to be demolished in connection with the Project (i.e., from 35 buildings) is subtracted from the total demand associated with the Proposed Project. When the existing water demand at the Project Site is subtracted from the Proposed Project's projected water demand, the total net new water demand would be 58.4 mg/yr. Of this net new demand (i.e., 58.4 mg/yr), a portion was previously evaluated in the WSA that was prepared for the city's Housing Element Update. The Housing Element Update assumed 400 dwelling units for the Proposed Project. Therefore, the water demand associated with 400 dwelling units is not double counted and not evaluated as part of this analysis. When the water demand associated with the 400 dwelling units (i.e., 19.4 mg/yr) is subtracted from the projected water demand of the Proposed Project (i.e., 58.4 mg/yr), the resulting demand of the Proposed Project would be 39 mg/yr. Therefore, the net increase in water demand under the Proposed Project would be 39 mg/yr.

The water demand projections shown in Table 3.16-2 assume that potable water would be used to meet projected water demands. The Proposed Project is not expected to use recycled water because no recycled water infrastructure is currently in place near the Project Site.

Table 3.16-2. Projected Water Demand for the Proposed Project

Building Type	Proposed Project: 100 percent R&D Scenario (MG/YR)
Proposed Project	
Office/R&D (new)	44.6
Multi-family	26.7
Amenities	2.2
Landscaping	22.3
Total Projected Water Demand	***95.7***
Office/R&D Existing to Remain[b]	9.6
Total Projected Water Demand + Existing Buildings P, S, & T	***105.3***
Increase in Water Demand From Existing Conditions	
Existing Water Use at Project Site (all nonresidential, as of 2019)	46.9
Net New Proposed Project Water Demand	***58.4***
Water Demand Not Already Evaluated in a Previous WSA	
Project Residential Demand Included in Housing Element Update WSA (400 units)[a]	19.4
Proposed Project Water Demand to Be Evaluated [b]	***39***

Source: West Yost and Associates. 2024. *Parkline Water Supply Assessment*. April.

Notes:

a. Information is from the Water Supply Assessment prepared for the 2022 Menlo Park Housing Element Update prepared by ESA. Refer to Table 2-1 for the 400 new units attributed to Parkline, and refer to Table 5-1 for the demand factor assumed (i.e., 133 gpd/dwelling unit). The city has noted that the number of housing units in the Housing Element Update was conceptual by site and may change, depending on actual development proposals.

b. Demand totals are rounded to the nearest million gallon, and therefore, totals may not be exact.

The WSA for the Proposed Project summarizes the projected availability of the MPMW's existing and planned future water supplies as well as the MPMW's projected water demands in normal, single, and multiple dry years through 2040. Because MPMW purchases all of its water from SFPUC, and the availability of water to SFPUC would be affected by implementation of the Bay-Delta Plan Amendment, the WSA for the Project considered two scenarios, one assuming the Bay-Delta Plan Amendment is implemented and one assuming that the Bay-Delta Plan Amendment is not implemented. Pursuant to California Water Code Section 10910(c)(4) and the technical analyses described in the WSA for the Proposed Project, MPMW found that there would be an adequate water supply for the Proposed Project during normal years.

MPMW, a member agency of BAWSCA, purchases water solely from the SFPUC RWS. As such, MPMW's water supply is largely dependent upon the reliability of the SFPUC's water supply. The reliability of the SFPUC RWS is highly dependent on the assumption of whether or not the 2018 Bay-Delta Plan Amendment is implemented, which is analyzed further below.

The WSA for the Proposed Project summarizes the projected availability of MPMW's existing and planned future water supplies as well as MPMW's projected water demands in normal, single, and multiple dry years through 2040. The WSA determined that the SFPUC would be able to meet contractual obligations to its wholesale customers, as presented in the SFPUC 2020 UWMP, in all year types through 2045, except during fourth and fifth consecutive dry years for base year 2045 when a 16.5 percent supply shortfall is projected for MPMW. With the addition of the Proposed Project and the Housing Element Update demand, the supply

shortfall during these years is expected to be greater than 16.5 percent. Implementation of the Bay-Delta Plan Amendment would result in greater supply shortfalls.

Bay-Delta Plan Amendment Implementation

In December 2018, SWRCB adopted the Bay-Delta Plan Amendment to establish water quality objectives and maintain the health of the Bay-Delta ecosystem. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (i.e., Stanislaus, Merced, Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 40 percent of the "unimpaired flow" on the three tributaries from February through June in every year type, whether wet, normal, dry, or critically dry. Implementation of the Bay-Delta Amendment significantly affects SFPUC RWS reliability in dry years; however, actual implementation of the Bay-Delta Plan Amendment is uncertain. In November 2022, key stakeholders signed an MOU, indicating a mutual agreement among the signatories to commit to collaborating with the state. Although a voluntary agreement is not finalized, signing an MOU signals that stakeholders are committed to reaching an agreement.

If the Bay-Delta Plan Amendment is implemented, SFPUC will be able to meet its contractual obligations to its wholesale customers, as presented in the SFPUC 2020 UWMP, in normal years, but would experience significant supply shortages in dry years. In single dry years, supply shortages would range from 36 to 46 percent. In multiple dry years, supply shortages would range from 36 to 54 percent. Implementation of the Bay-Delta Plan Amendment would require rationing in all single dry and multiple dry years through 2045.

If the Bay-Delta Plan Amendment is not implemented SFPUC would be able to meet 100 percent of the projected purchases of its wholesale customers, including MPMW, during all year types through 2045, except during the fourth and fifth consecutive dry years for base year 2045 when 15 percent wholesale supply shortages are projected.

In June 2021, in response to various comments from wholesale customers regarding the reliability of the RWS, as described in SFPUC's 2020 UWMP, the SFPUC provided a memorandum describing SFPUC's efforts to remedy the potential effects of the Bay-Delta Amendment, which include pursuing a Tuolumne River voluntary agreement, evaluating the drought planning scenario in light of climate change, pursuing alternative water supplies, pursuing litigation with the state over the Bay-Delta Plan Amendment, and pursuing litigation with the state over the proposed Don Pedro Federal Energy Regulatory Commission Water Quality Certification. The SFPUC has initiated an Alternative Water Supply Planning Program to ensure that San Francisco will be able to meet the water needs of its retail and wholesale customers, address shortages in projected dry years, and limit rationing to a maximum 20 percent system-wide, in accordance with adopted SFPUC policies. This program is intended to meet future water supply challenges and vulnerabilities (e.g., environmental flow needs and other regulatory changes; earthquakes, disasters, and emergencies; increases in population and employment; climate change). Because the region faces future challenges, both known and unknown, the SFPUC is considering a suite of diverse, non-traditional supplies and leveraging regional partnerships to meet retail and wholesale customer needs through 2045. As of the most recent Alternative Water Supply Planning Quarterly Update, SFPUC has budgeted $131.5 million over the next 10 years to fund water supply projects. The SFPUC is considering several water supply options and opportunities to meet all foreseeable water supply needs, including surface water storage, recycled water expansion, water transfers, desalination, and potable reuse.

Water Supply Reliability

In the MPMW 2020 UWMP, projected normal-year supplies are shown to be adequate and able to satisfy MPMW's projected normal-year demands. But under dry-year scenarios, MPMW's purchased supplies from the SFPUC RWS are reduced as a result of implementation of the Bay-Delta Plan Amendment, which significantly reduces dry-year allocations for the SFPUC's wholesale customers. Table 3.16-3 shows MPMW's projected supplies during normal, single dry, and multiple dry years through 2040, based on the assumptions in the MPMW 2020 UWMP, including implementation of the Bay-Delta Plan Amendment. Based on the SFPUC's analysis, similar water supplies would be available to MPMW in 2045 under the various hydrologic conditions. Recycled water is estimated to be available during all hydrologic years at a volume that meets MPMW's projected recycled-water demands.

Table 3.16-3. Projected MPMW Water Supplies with Bay-Delta Plan Amendment

	Projected Water Supply (mg)[a]			
Hydrologic Condition	**2025**	**2030**	**2035**	**2040**
Normal Year	1,678	1,750	1,750	1,750
Single Dry Year	877	978	1,018	1,062
Multiple Dry Years – Year 1	877	978	1,018	1,062
Multiple Dry Years – Year 2	760	854	887	927
Multiple Dry Years – Year 3	760	854	887	927
Multiple Dry Years – Year 4	760	854	887	832
Multiple Dry Years – Year 5	760	854	824	832

Source: West Yost and Associates. 2024. *Parkline Water Supply Assessment*. April.

Notes:

[a] Includes projected potable water supply from the SFPUC RWS and projected recycled water supply (48 mg/year in 2025 and 120 mg/year for 2030 to 2040).

The water supply estimates provided in Table 3.16-3 use the best available data from the time when the MPMW 2020 UWMP was prepared but do not account for the following factors:

- Potential changes to implementation of the Bay-Delta Plan Amendment,
- Climate change impacts on the SFPUC RWS, and
- Potential delays in completion of the WSIP.

Table 3.16-4 shows MPMW's projected supplies during normal, single dry, and multiple dry years from 2025 through 2040, assuming that the Bay-Delta Plan Amendment is not implemented. The SFPUC's analysis indicated that it would be able to meet 100 percent of wholesale projected purchases (analysis was conducted before the Proposed Project was included) during all year types through 2045, except during the fourth and fifth consecutive dry year for base year 2045 when a 16.5 percent supply shortfall is projected for MPMW (note that 2045 supplies are not shown in Table 3.16-4 because they were not shown in MPMW's 2020 UWMP). With the addition of the Proposed Project and Housing Element update demand, the supply shortfall during these years is expected to be greater than 16.5 percent.

Table 3.16-4. Projected MPMW Water Supplies without Bay-Delta Plan Amendment

	Projected Water Supply (mg)[a]			
Hydrologic Condition	**2025**	**2030**	**2035**	**2040**
Normal Year	1,678	1,750	1,750	1,750
Single Dry Year	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 1	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 2	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 3	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 4[b]	1,344	1,465	1,530	1,603
Multiple Dry Years – Year 5[b]	1,344	1,465	1,530	1,603

Source: West Yost and Associates. 2024. *Parkline Water Supply Assessment*. April.

Notes:

a. Includes projected potable water supply from the SFPUC RWS (based on projected purchases) and projected recycled water supply (48 mg/year in 2025 and 120 mg/year for 2030 to 2040).

b. A 16.5 percent reduction in supply from the SFPUC RWS is projected for MPMW in the fourth and fifth years of a multiple-dry-year drought but not until 2045 (BAWSCA Drought Allocation Tables by Agency (Table 2: Individual Agency Drought Allocations, Base Year 2045, without Bay-Delta Plan), dated April 1, 2021.

As described above, SFPUC is implementing an Alternative Water Supply Planning Program to investigate and plan for new water supplies and address future long-term water supply reliability challenges and vulnerabilities of the RWS. In addition, MPMW is implementing an emergency water storage/supply project to provide a backup water supply to MPMW's Lower Zone. However, because these potential supplies are still being developed, they do not include the projections provided in the tables or considered in this analysis.

As shown in Table 3.16-5, with implementation of the Bay-Delta Amendment, the total projected water supply determined to be available in normal years would meet MPMW's existing and planned future uses as well as the demand associated with the city's Housing Element Update, including the projected net water demand for the Proposed Project, through 2040. However, supply shortfalls would be projected to occur in single dry years (ranging from 34 to 48 percent) and multiple dry years (ranging from 34 to 48 percent) through 2040.

Table 3.16-5. MPMW Summary of Water Demand Versus Supply with Bay-Delta Amendment

Hydrologic Condition		Supply and Demand Comparison, MG			
		2025	2030	2035	2040
Normal Year					
Available Water Supply[a]		1,678	1,750	1,750	1,750
2020 UWMP Demand[b]		1,296	1,345	1,410	1,483
HEU WSA Demand[b]		87	87	87	87
Project Scenario 2 Demand[b]		39	39	39	39
Updated Water Demand		*1,422*	*1,471*	*1,536*	*1,609*
Potential Surplus (Deficit)		**256**	**279**	**214**	**141**
Percent Shortfall of Demand		**-**	**-**	**-**	**-**
Single Dry Year					
Available Water Supply[a]		877	978	1,018	1,062
2020 UWMP Demand[c]		1,296	1,345	1,410	1,483
HEU WSA Demand[c]		87	87	87	87
Project Scenario 2 Demand[c]		39	39	39	39
Updated Water Demand		*1,422*	*1,471*	*1,536*	*1,609*
Potential Surplus (Deficit)		**(545)**	**(493)**	**(518)**	**(547)**
Percent Shortfall of Demand		**38%**	**34%**	**34%**	**34%**
Multiple Dry Years					
Multiple-Dry Year 1	Available Water Supply[a]	877	978	1,018	1,062
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(545)**	**(493)**	**(518)**	**(547)**
	Percent Shortfall of Demand	**38%**	**34%**	**34%**	**34%**
Multiple-Dry Year 2	Available Water Supply[a]	760	854	887	927
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(662)**	**(617)**	**(649)**	**(682)**
	Percent Shortfall of Demand	**47%**	**42%**	**42%**	**42%**
Multiple-Dry Year 3	Available Water Supply[a]	760	854	887	927
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(662)**	**(617)**	**(649)**	**(682)**
	Percent Shortfall of Demand	**47%**	**42%**	**42%**	**42%**
Multiple-Dry Year 4	Available Water Supply[a]	760	854	887	832
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(662)**	**(617)**	**(649)**	**(777)**
	Percent Shortfall of Demand	**47%**	**42%**	**42%**	**48%**
Multiple-Dry Year 5	Available Water Supply[a]	760	854	824	832
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(662)**	**(617)**	**(712)**	**(777)**
	Percent Shortfall of Demand	**47%**	**42%**	**46%**	**48%**

(a) From Table 7-2 of this WSA.
(b) From Table 5-2 of this WSA.
(c) From Table 5-3 of this WSA.

As shown in Table 3.16-6, without implementation of the Bay-Delta Amendment, the total projected water supply determined to be available in normal years would be able to meet MPMW's existing and planned future uses, including demand associated with the Housing Element Update and the Proposed Project, through 2040. However, supply shortfalls would be projected to occur in singly dry years (ranging from 1 to 5 percent) and multiple dry years (also ranging from 1 to 5 percent) through 2040.

As mentioned previously, based on SFPUC's projections, a 16.5 percent supply shortfall would be projected to occur during the fourth and fifth consecutive dry years for base year 2045.47 With the addition of the demand generated by the Proposed Project and Housing Element Update, the supply shortfall during these years would be expected to be greater than 16.5 percent. However, supply shortfalls, as well as the shortfalls depicted in Tables 3.16-5 and 3.16-6, would be significantly less than the projected supply shortfalls if the Bay-Delta Plan is implemented.

Conclusion

The availability of water supplies to meet the Proposed Project's demand is dependent on the reliability of SFPUC RWS supplies, which is dependent on implementation of the Bay-Delta Plan Amendment. As stated above, if the Bay-Delta Plan Amendment is implemented, projected supplies during normal years would be able to meet the Proposed Project's demand; however, there would be significant supply shortfalls in dry years. For MPMW, with the Proposed Project, supply shortfalls are projected in single dry years (ranging from 34 to 38 percent) and in multiple dry years (ranging from 34 to 48 percent) through 2040. It should be noted that supply shortfalls with implementation of the Bay-Delta Amendment are not unique to MPMW. With the amendment, significant supply shortfalls are projected to occur in dry years for all agencies that receive water from the SFPUC RWS as well as other agencies whose water supplies would also be affected by the amendment.

If the Bay-Delta Plan Amendment is not implemented, projected supplies during normal dry years would be able to meet the Proposed Project demands, but supply shortfalls would be projected in dry years. For MPMW, with the Proposed Project, supply shortfalls would be projected in single dry years (ranging from less than 1 percent to 5 percent) and in multiple dry years (also ranging from less than 1 percent to 5 percent) through 2040. In addition, a 16.5 percent supply shortfall or greater would be projected during fourth and fifth consecutive dry years for base year 2045.

If supply shortfalls do occur, MPMW expects to meet supply shortfalls through water demand reductions and other shortage response actions through implementation of its WSCP.[48] With the WSCP in place, if the Bay-Delta Plan Amendment is implemented, the projected single dry-year shortfalls would be managed through implementation of Stage 4 of the MPMW WSCP. In addition, the projected multiple dry-year shortfalls would be managed through implementation of Stage 4 or 5 of the MPMW WSCP. If the Bay-Delta Plan Amendment is not implemented, a projected single dry year would be managed through implementation of Stage 1 of the MPMW WSCP. The projected multiple dry years would also be managed through implementation of Stage 1 of the MPMW WSCP, except for a multiple dry-year shortfall in 2045, which would be managed through implementation of Stage 2 or 3 of the MPMW WSCP.

[47] Note that 2045 supplies demands are not shown in Tables 3.16-5 and 3.16-6 because they are not provided in MPMW's 2020 UWMP.

[48] A main focus of MPMW's planned demand reduction measures is to increase public outreach and keep customers informed of the water shortage emergency and actions they can take to reduce consumption. The City will utilize its emergency supply groundwater well(s) as supply augmentation during WSCP Stages 5 and 6. Other actions the City will take include coordination with other agencies, implementing drought surcharge, increasing waste water patrols, etc. Additional information on MPMW's WSCP is provided in Chapter 8 of the MPMW's 2020 UWMP.

Table 3.16-6. MPMW Summary of Water Demand Versus Supply without Bay-Delta Amendment

Hydrologic Condition		Supply and Demand Comparison, MG			
		2025	2030	2035	2040
Normal Year					
Available Water Supply[a]		1,678	1,750	1,750	1,750
2020 UWMP Demand[b]		1,296	1,345	1,410	1,483
HEU WSA Demand[b]		87	87	87	87
Project Scenario 2 Demand[b]		39	39	39	39
Updated Water Demand		*1,422*	*1,471*	*1,536*	*1,609*
Potential Surplus (Deficit)		**256**	**279**	**214**	**141**
Percent Shortfall of Demand		**-**	**-**	**-**	**-**
Single Dry Year					
Available Water Supply[a]		1,344	1,465	1,530	1,603
2020 UWMP Demand[c]		1,296	1,345	1,410	1,483
HEU WSA Demand[c]		87	87	87	87
Project Scenario 2 Demand[c]		39	39	39	39
Updated Water Demand		*1,422*	*1,471*	*1,536*	*1,609*
Potential Surplus (Deficit)		**(78)**	**(6)**	**(6)**	**(6)**
Percent Shortfall of Demand		**5%**	**< 1%**	**< 1%**	**< 1%**
Multiple Dry Years					
Multiple-Dry Year 1	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(78)**	**(6)**	**(6)**	**(6)**
	Percent Shortfall of Demand	**5%**	**< 1%**	**< 1%**	**< 1%**
Multiple-Dry Year 2	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(78)**	**(6)**	**(6)**	**(6)**
	Percent Shortfall of Demand	**5%**	**< 1%**	**< 1%**	**< 1%**
Multiple-Dry Year 3	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(78)**	**(6)**	**(6)**	**(6)**
	Percent Shortfall of Demand	**5%**	**< 1%**	**< 1%**	**< 1%**
Multiple-Dry Year 4	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(78)**	**(6)**	**(6)**	**(6)**
	Percent Shortfall of Demand	**5%**	**< 1%**	**< 1%**	**< 1%**
Multiple-Dry Year 5	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Scenario 2 Demand[c]	39	39	39	39
	Updated Water Demand	*1,422*	*1,471*	*1,536*	*1,609*
	Potential Surplus (Deficit)	**(78)**	**(6)**	**(6)**	**(6)**
	Percent Shortfall of Demand	**5%**	**< 1%**	**< 1%**	**< 1%**

(a) From Table 7-3 of this WSA.
(b) From Table 5-2 of this WSA.
(c) From Table 5-3 of this WSA.

The Proposed Project would be subject to the same water conservation and water use restrictions as other water users within the MPMW system. In addition, the Proposed Project would incorporate green and sustainable building practices (e.g., ultra-low flow fixtures within the proposed buildings) and implement water conservation measures, both in the design of the building and residential and tenant spaces, as well as daily operations, employee practices, and landscaping choices. Further, the Proposed Project's on-site water system has been evaluated to ensure that the Proposed Project would meet fire flow requirements, and would not negatively affect the fire flow for neighboring uses. Further, MPMW is pursuing emergency groundwater resources through the emergency water storage/supply project. If water supplies from the RWS are reduced or unavailable, the emergency water storage/supply project would have the capacity to provide MPMW with up to 4.32 mgd from two or three wells at separate locations to supplement MPMW's water supply. In addition, MPMW received approval from SWRCB to operate the Corporation Yard Well as a standby well for use during emergencies up to a limited number of days per year. The Corporation Yard Well is adjacent to the Project Site to the southeast. MPMW also drilled three sites(Fire Station No. 1, 300 Middlefield Road; Willow Oaks school field, 620 Willow Road; and SRI parking lot, 333 Ravenswood Avenue)[49] to determine well yields, develop cost estimates, and provide necessary information for staff members in order to recommend next steps to City Council, as potential sites for additional emergency wells. Furthermore, MPMW also installed a monitoring well in the SRI parking lot to measure groundwater level over a 12-month period and to determine the feasibility of a future underground reservoir to increase supply reliability.

The Proposed Project would not exacerbate MPMW's anticipated supply shortages and therefore would not cause MPMW to increase customer water use restrictions beyond those restrictions anticipated in the 2020 UWMP. If shortfalls occur with or without implementation of the Bay-Delta Plan Amendment, the WSCP (which is applicable to all customers) would ensure that MPMW could deliver water to its customers during shortfall years. Therefore, adequate water supplies would be available to serve the Proposed Project and reasonably foreseeable future development with implementation of applicable stages of water use reductions from the WSCP. The Proposed Project would have ***less-than-significant*** impacts with respect to water supply. No mitigation is required.

Impact UT-3: Generation of Wastewater. The Proposed Project would not result in a determination by the wastewater treatment providers that they have inadequate capacity to serve the Proposed Project's projected demand in addition to the providers' existing commitments. (LTS)

The WBSD provides wastewater collection and conveyance services for MPMW, which conveys the majority of raw wastewater to the SVCW WWTP. According to the 2020 MPMW UWMP, the total volume of wastewater collected by the WBSD from the MPMW service area in 2020 was approximately 873 mg, or an average of about 2.4 mgd. The Proposed Project would result in increased sanitary sewer flows, primarily due to the incorporation of new residential uses on the Project Site. For purposes of this analysis, it is assumed that 95 percent of the interior water usage by the Proposed Project would become wastewater and would generate approximately 239,615 gpd (0.24 mgd) of wastewater at the Project Site. Given the current wastewater generated at the Project Site is estimated to be approximately 152,437 gpd (0.15 mgd), this is an increase of 87,178 gpd (0.08 mgd) compared with existing conditions, which is a negligible amount given the capacity of the existing system.

[49] City of Menlo Park. 2023. *Emergency Water Storage/Supply*. Available: https://menlopark.gov/Government/Departments/Public-Works/Capital-improvement-projects/Emergency-water-storagesupply. Accessed: November 7, 2023.

The proposed sanitary sewer system would collect and convey all sewer discharges to a 12-inch sanitary sewer line that would connect to the existing 18-inch sanitary sewer line in Middlefield Road downstream of an existing sanitary sewer pump (VO Pump Station #1). Existing Buildings P, S, and T would also continue to use the existing sewer infrastructure and discharge to the same discharge points as under current conditions.

Correspondence with WBSD and modeling of the wastewater distribution system for the Proposed Project determined that a full flow from the 12-inch line is approximately 1.57 cfs, which currently has a utilization rate of 0.24 cfs. Therefore, approximately 85 percent of the 12-inch line capacity remains available for sewer flows, allowing for an additional flow of approximately 859,542 gpd. In addition, a full flow from the 18-inch line is approximately 3.6 cfs, which currently has a utilization rate of approximately 1.53 cfs. Therefore, approximately 57 percent of the 18-inch line capacity remains available for sewer flow, allowing for an additional flow of approximately 1,337,783 gpd. Given the available flows from the 18-inch and 12-inch lines, the anticipated wastewater generation of the Proposed Project would be significantly less than the available flows of 859,542 to 1,337,783 gpd.[50] Therefore, the existing wastewater system at the Project Site can provide adequate capacity under the Proposed Project without the need for upgrades or additional facilities.

As described in greater detail under Impact UT-1, operation of the SVCW WWTP and its wastewater conveyance system is governed by the waste discharge requirements found in RWQCB Order No. R2-2018-00XX (NPDES No. CA0038369).[51] This order has a dry-weather facility design flow of 29 mgd and a peak wet-weather flow of 71 mgd. The NPDES permit does not have a limitation on flow quantity. As reported by the RWQCB, from October 2012 through August 2017, the SVCW WWTP treated an average of 13.5 mgd, with a maximum instantaneous flow of 50 mgd. Both rates are well within the 29 mgd average dry-weather design flow and 71 mgd peak wet-weather design flow. Under its Stage 2 expansion program, SVCW will increase the WWTP capacity to 108 mgd as needed.[52]

Assuming that 95 percent of the interior water usage by the Proposed Project would become wastewater, the estimated net increase in wastewater generated would be approximately 0.24 mgd (or 239,615 gpd). The increase in wastewater generation would not be significant relative to the current excess dry-weather design flow capacity of 15.5 mgd (i.e., 29 mgd design flow minus 13.5 mgd current average flow = 15.5 mgd) or its excess wet-weather design flow capacity of 57.5 mgd (i.e., 71 mgd design flow minus 13.5 mgd current average flow = 57.5 mgd) at the SVCW WWTP. Estimated wastewater flows from the Proposed Project would therefore represent a small percentage of the total daily wastewater capacities at the SVCW WWTP. Likewise, wastewater generation from the Proposed Project (i.e., 0.24 mgd) would not be significant relative to current average collection rates at the WBSD. Therefore, the Proposed Project would not result in a determination by the wastewater treatment provider that it would have inadequate capacity to serve the Proposed Project's projected demand in addition to the provider's existing commitments, and there would be a ***less-than-significant*** impact. No mitigation is required.

[50] Kier+Wright. 2024. *Parkline Sanitary Sewer Demand Analysis*. March 11.

[51] It should be noted that this permit expired on March 31, 2023, and no new permit has been issued yet. However, pursuant to California Code of Regulations, Title 23, Section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the discharger complies with all requirements for continuation of expired permits.

[52] U.S. Environmental Protection Agency. 2023. *Water Infrastructure Finance and Innovation Act (WIFIA)—Silicon Valley Regional Environmental Sewer Conveyance Upgrade Phase 2*. Available: https://www.epa.gov/wifia/silicon-valley-regional-environmental-sewer-conveyance-upgrade-phase-2. Accessed: October 30, 2023.

Impact UT-4: Generation of Solid Waste. The Proposed Project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. (LTS)

The California Integrated Waste Management Act of 1989 (AB 939) requires municipalities to adopt an integrated waste management plan and establish objectives, policies, and programs related to waste disposal, management, source reduction, and recycling. In addition, SB 1383, passed in 2016, established a target that calls for a 50 percent reduction in organic waste by 2020 and 75 percent by 2025. The city of Menlo Park has been working to meet these standards. As noted above, in 2022, the service area experienced an approximately 51 percent diversion rate by recycling and composting waste, while Menlo Park had a diversion rate of approximately 58 percent.[53]

In total, construction of the Proposed Project would include the demolition of approximately 1,095,719 square feet of building area and generate approximately 281,605 cubic yards of excavated soil. All soil and debris, including contaminated soil, would most likely be off-hauled to Ox Mountain Landfill. The city's Construction and Demolition Recycling Ordinance calls for salvage or recycling of at least 65 percent of construction-related solid waste. Throughout construction, waste would be source separated and tracked to divert it away from landfills, with a target of recycling more than 80 percent of construction and demolition waste. Consistent with city requirements, the Project Sponsor would submit documentation to the city describing the Proposed Project's approach to maximizing waste diversion during demolition, construction, and occupancy of the residential and commercial uses. Each component of the Proposed Project would be subject to the city's zero-waste management plan requirements during both construction and operation. Therefore, construction of the Proposed Project is not expected to have a significant impact on existing landfills.

Operation of the Proposed Project would result in the generation of solid waste but would continue to meet state and local standards for solid waste and recycling. Under the 100 percent office scenario (the worst case scenario for purposes of solid waste generation), approximately 1,375 residents would live in the 550 new rental dwelling units. In addition, there would be approximately 3,868 net new employees at the Project Site. These new residents and employees would generate solid waste. Using the 2021 city of Menlo Park per capita solid waste disposal rate for residents (4.1 ppd) and per capita solid waste disposal rate for employees (2.3 ppd), the Proposed Project would generate approximately 14,534 pounds of solid waste per day, or approximately 7.3 tons per day.[54] As described in Chapter 2, *Project Description*, each component of the Proposed Project would be subject to the city's zero-waste management plan requirements during both construction and operation. With implementation of the Proposed Project's zero-waste management plans, the Proposed Project would achieve state and local requirements for waste reduction. In addition, operational waste would be separated and sorted into salvage, recycle, and reuse materials for proper disposal, donation, or sale.

The solid waste generated at the Project Site would be collected by Recology and hauled to Shoreway. Shoreway is permitted to receive 3,000 tons of refuse per day. Once collected and sorted at Shoreway, solid waste would be transported to Ox Mountain Landfill, which is permitted to receive 3,598 tons per

[53] Recology San Mateo County. 2023. *Annual Report to the SBWMA for Year 2022*. Available: https://rethinkwaste.org/wp-content/uploads/2023/04/RSMC-Annual-Report-2022.pdf. Accessed: November 1, 2023.

[54] 3,868 employees x 2.30 pounds/day/person = 8,896 pounds/day of solid waste generated from employees; 1,375 residents x 4.10 pounds/day/person = 5,638 pounds/day of solid waste generated from residents; 8,896 pounds/day (from employees) + 5,638 pounds/day (from residents) = 14,534 pounds/day generated from operation of the Proposed Project.

day. Solid waste generated by operation of the Proposed Project (i.e., 7.3 tons per day) would represent a small percentage of the permitted capacity of Shoreway and Ox Mountain Landfill. Implementation of the required zero-waste management plans for all new buildings and uses on the Project Site would further reduce waste from operation of the Proposed Project. As such, Shoreway and Ox Mountain Landfill would have adequate capacity for the Proposed Project. Operation of the Proposed Project would have ***less-than-significant*** impacts on existing landfills and solid waste facilities. No mitigation is required.

Impact UT-5: Compliance with Solid Waste Regulations. The Proposed Project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (LTS)

Construction and operation of the Proposed Project would comply with all applicable statutes and regulations related to solid waste. State law (AB 939 and SB 1016) requires businesses to recycle and cities to divert 50 percent of their solid waste from landfills. The Proposed Project would adhere to these laws and require waste to be separated and tracked to divert it from landfills, with a target of recycling more than 80 percent of construction and demolition waste during Project construction. In addition, the Proposed Project would be required to adhere to the city's Construction and Demolition Recycling and zero-waste management plans during operation of the Proposed Project. Therefore, the Proposed Project would result in a ***less-than-significant*** impact with respect to compliance with federal, state, and local statutes and regulations related to solid waste.

Cumulative Impacts

The approach to cumulative impacts is discussed under "Approach to Cumulative Impacts" in Chapter 3, *Environmental Impact Analysis*.

Impact C-UT-1: Cumulative Water Service and Infrastructure Impacts. Cumulative development could result in a significant environmental impact on water service; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The geographic context for the cumulative assessment of water service is the SFPUC retail and wholesale service area.

Regarding water supply, the analysis above (Impact UT-2) is inherently cumulative because it is based on demand and supply projections for the MPMW's service area, as based on the 2020 UWMP. For the reasons stated above, a significant cumulative impact related to water supply would occur during dry years due to projected supply shortfalls with and without implementation of the Bay-Delta Plan Amendment. However, the Proposed Project would be required to comply with, and adhere to, the various stages of the MPMW WSCP, which would reduce the Proposed Project's contribution to the cumulative impact to less-than-significant levels. Based on the analysis above, the Proposed Project's contribution to cumulative impacts on water supply would be ***less than cumulatively considerable***. No mitigation is required.

The existing water system serving the Project Site would be able to provide an adequate fire flow for the Proposed Project, without the need for upgrades or additional facilities.[55] As shown in Figure 3.0-1 in Chapter 3, none of the cumulative projects (with the exception of the on-site tenant improvements in Buildings P, S, and T) are close enough to the Project Site to have the potential to result in cumulative impacts on water infrastructure. As with the Proposed Project, all cumulative projects would be required to provide adequate water infrastructure for their anticipated demand and comply with all city

[55] Kier+Wright. 2024. *Parkline Water Infrastructure Analysis*. March 11.

requirements regarding new water facilities and fire-flow requirements. The cumulative impact related to water supply infrastructure would be ***less than significant***. No mitigation is required.

Impact C-UT-2: Cumulative Wastewater Service and Infrastructure Impacts. Cumulative development would not result in a significant environmental impact on wastewater service; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The geographic context for the cumulative assessment of wastewater impacts is the WBSD and SVCW service areas. As noted in Chapter 3, *Environmental Impact Analysis*, of this EIR, the cumulative scenario for this EIR includes additional Menlo Park and East Palo Alto projects, which are also located within the WBSD and SVCW service areas.[56] As with the Proposed Project, Menlo Park and East Palo Alto projects, as well as other projects within the service areas, would be required to comply with applicable policies and zoning regulations that promote water conservation and minimize impacts related to wastewater generation. For these reasons, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects in the WBSD and SVCW service areas would not result in a significant cumulative impact associated with wastewater service and infrastructure. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-UT-3: Cumulative Stormwater Service and Infrastructure Impacts. Cumulative development would not result in a significant environmental impact on stormwater service; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The geographic context for the cumulative assessment of stormwater impacts encompasses the San Mateo Creek-Frontal San Francisco Bay Estuaries watershed, an area of approximately 73 square miles that includes portions of both San Mateo County and San Francisco County. Given the size of the watershed, it is beyond the scope of this EIR to identify every cumulative project within its boundaries. However, it is reasonable to assume that cumulative projects would be similar to past, present, and reasonably foreseeable future projects identified within a 0.5-mile radius of the Project Site because they would be anticipated to consist of predominantly urban development on paved infill sites.

Cumulative development within the vicinity of the Project Site could increase the volume and rate of stormwater runoff, which could result in impacts related to stormwater service and infrastructure if adequate capacity is not available. However, these cumulative projects would generally occur in developed areas with existing impervious surfaces and would not be expected to substantially increase the amount of new impervious surface area. In addition, all new development would be required to include stormwater management features, such as LID design measures, in project designs to reduce flows to pre-project conditions. If improvements to storm drainage capacity are needed, the city will ensure that the appropriate storm drainage improvements are identified.

As with the Proposed Project, cumulative development in the vicinity of the Project Site, as well as other projects within the San Mateo Creek-Frontal San Francisco Bay Estuaries watershed, would implement BMPs and be required to comply with federal, state, and local standards pertaining to stormwater and water quality (e.g., General Construction Permit; San Francisco Bay Municipal Separate Storm Sewer

[56] As noted in Chapter 3, *Environmental Impact Analysis*, projects in Palo Alto are also considered as part of the cumulative analysis for the Proposed Project. However, wastewater services for projects in Palo Alto are provided by the City of Palo Alto (i.e., not WBSD and SVCW) and are therefore not considered for purposes of cumulative impacts on wastewater service and infrastructure.

System Permit, Provision C.3; SWPPP; other erosion and pollution control measures). For these reasons, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects in the vicinity of the Project Site and within the San Mateo Creek-Frontal San Francisco Bay Estuaries watershed would not result in a significant cumulative impact associated with stormwater service and infrastructure. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-UT-4: Cumulative Solid Waste Impacts. Cumulative development would not result in a significant environmental impact on solid waste; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The geographic context for the cumulative assessment of solid waste impacts includes the landfills that serve the city and other cities in the region. As with the Proposed Project, Menlo Park and East Palo Alto projects, as well as other projects within the service areas of Shoreway and Ox Mountain Landfill, would be required to comply with applicable policies and zoning regulations that require municipalities to adopt an integrated waste management plan and establish objectives, policies, and programs related to waste disposal, management, source reduction, and recycling (e.g., SB 1383, city's Construction and Demolition Recycling Ordinance). For these reasons, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects in the service areas of Shoreway and Ox Mountain Landfill would not result in a significant cumulative impact associated with solid waste. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-UT-5: Cumulative Natural Gas and Electric Service Impacts. Cumulative development would not result in a significant environmental impact on natural gas and electric service; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The geographic context for the cumulative assessment of natural gas and electrical service impacts is the 70,000-square-mile PG&E service territory. Development of past, present, and reasonably foreseeable future projects within the PG&E service territory has the potential to increase demand. However, some of the cumulative development in the PG&E service territory would very likely be constructed on infill sites in highly urbanized areas; it is anticipated that these projects would not substantially increase electric power and natural gas demands. PG&E would be able to serve new cumulative development from known and available sources. In addition, as with the Proposed Project, Menlo Park and East Palo Alto projects, as well as other projects within the PG&E service territory, would be required to comply with applicable city and state energy conservation measures (e.g., the CALGreen Code, California Energy Code). For these reasons, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects in the PG&E service territory would not result in a significant cumulative impact associated with natural gas and electric service. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-UT-6: Cumulative Telecommunications Impacts. Cumulative development would result in a less-than-significant environmental impact on telecommunications; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact on telecommunications. (LTS)

The geographic context for the cumulative assessment of telecommunications impacts is the service area for telecommunication providers, including Atherton Fiber, Sonic, XFINITY from Comcast, AT&T, Earthlink, Wave Broadband, Viasat Internet, Zayo, Lumen, Verizon, and HughesNet. Development of past, present, and reasonably foreseeable future projects within the service area of these telecommunications providers has the potential to increase demand. However, similar to the Proposed Project, cumulative

development associated with underground conduits and overhead cables to facilitate telecommunications services would be required to comply with applicable federal, state, and local standards pertaining to underground and overhead utility infrastructure. For these reasons, the Proposed Project in combination with other past, present, and reasonably foreseeable future projects would not result in a significant cumulative impact regarding telecommunications demand and facilities. The cumulative impact would be ***less than significant***. No mitigation is required.

Chapter 4
Project Variant Analysis

4.1 Introduction

In addition to describing Parkline (Proposed Project), this environmental impact report (EIR) includes a description and evaluation of a variant of the Proposed Project, called the "Increased Development Variant" (Project Variant). The Project Variant is a variation of the Proposed Project at the same Project Site (although the Project Site would be slightly expanded to include 201 Ravenswood Avenue), generally with the same objectives, background, and development controls but with the following differences:

1. The Project Site has been expanded to include the parcel at 201 Ravenswood Avenue to create a continuous Project frontage area along Ravenswood Avenue and increase the overall Project Site by approximately 43,762 square feet (sf) (approximately 1.0 acre), for a total of approximately 64.2 acres;
2. The Project Variant would include up to 250 additional residential rental dwelling units compared to the Proposed Project (an increase from 550 to 800 units, inclusive of up to 154 units to be developed by an affordable housing developer);
3. The Project Variant would reduce the underground parking footprint within the site, both by removing underground parking from the multifamily residential buildings in the residential area and removing the underground parking connection between office/research-and-development (R&D) Building O1 and Building O5. As a result, Parking Garage (PG) 1 and PG2 increase in square footage and height compared to the Proposed Project and the number of structured spaces increases by 400 (with no change in the total number of parking spaces proposed for the office/R&D buildings); and
4. The Project Variant would include an approximately 2- to 3-million-gallon emergency water reservoir that would be buried below grade in the northeast area of the Project Site, in addition to a small pump station, an emergency well, and related improvements that would be built at and below grade (i.e., emergency generator, disinfection system, surge tank) (referred to as "reservoir" throughout this document). It would be built and operated by the city of Menlo Park.

The Project Variant would not differ from many of the basic characteristics of the Proposed Project, particularly with respect to the commercial component. For example, total office/R&D development would remain the same as under the Proposed Project. Certain residential uses, including the affordable housing site and a limited number of townhome units, would shift to the corner of the site nearest to the intersection of Middlefield Avenue and Ravenswood Avenue. In addition, the existing buildings associated with First Church of Christ, Scientist and Alpha Kids Academy (Chapel buildings) located at 201 Ravenswood would be demolished.

Table 4-1 provides a comparative summary of overall development under the Proposed Project and the Project Variant.

Table 4-1. Comparison of the Overall Development Summary of the Proposed Project and the Project Variant

	Proposed Project	Project Variant
Residential Component		
Residential Development	675,200 sf (550 dwelling units)	1,096,000 sf (800 dwelling units)
Maximum Building Heights	85 feet	90 feet
Parking Spaces	519 spaces	919 spaces
Office/R&D Component		
Commercial Development	Total Office/R&D Buildings: 1,051,600 sf Office Amenity Building: 40,000 sf Public Amenity Building: 2,002 sf	No Change No Change No Change (public amenity space to be included in Building R3)
Pump Station/Utility Room for Water Reservoir	Not Applicable	1,500 sf
Well and Surge Tank for Water Reservoir	Not Applicable	350 sf
Maximum Building Heights	110 feet	No Change
Parking Spaces	2,800 spaces	No Change
Total Project Site		
Existing Buildings to Be Demolished	1,093,602 sf	1,106,302
Existing Buildings to Be Retained	286,730 sf	No Change
Building Area Coverage	752,117 sf	918,000 sf
Open Space	26.4 acres[a]	29.3 acres[b]
Maximum Excavation Depth	15 feet below the current grade	15 feet below the current grade, and 30 feet below current grade for the emergency water reservoir
Maximum Depth for Emergency Well	Not Applicable	430 feet below current grade
Excavation Volume[c]	281,605 cubic yards export	174,905 cubic yards export
Trees to Be Removed	708 trees	768 trees
Trees to Be Planted	873 trees	860 trees
Emergency Generators[d]	13	No Change

Source: Lane Partners and SRI International, 2024.

Notes:

a. The 26.4 acres of Project open space includes all open space at grade. At the time the Project Sponsor submitted this information, specific acreage allocations of public versus private open space were not yet available.

b. The 29.3 acres of Project Variant open space includes 19.8 acres of publicly accessible open space, 5 acres of private office open space, and 4.6 acres of private at-grade residential open space. Values may not total due to rounding.

c. Export volumes assume that all disturbed soil is off-hauled, rather than reused onsite. Soils have not yet been fully characterized; it is currently unknown how much soil would be reused. Therefore, to provide conservative estimates, this document assumes that all excavated soil would be hauled offsite.

d. There are six existing generators along with a cogeneration power facility in place today, with one additional generator proposed to be installed by SRI in connection with its separate tenant improvements prior to Parkline project buildout (subject to separate city review and approval). The Parkline Project would remove 3 of the 6 existing SRI generators along with the cogeneration power facility and would install 13 new generators onsite, yielding a total of 17 generators at Project buildout, inclusive of the one additional generator proposed to be installed by SRI in connection with its separate tenant improvements. Under the Project Variant, 1 of the 13 emergency generators would be used for the proposed emergency water reservoir.

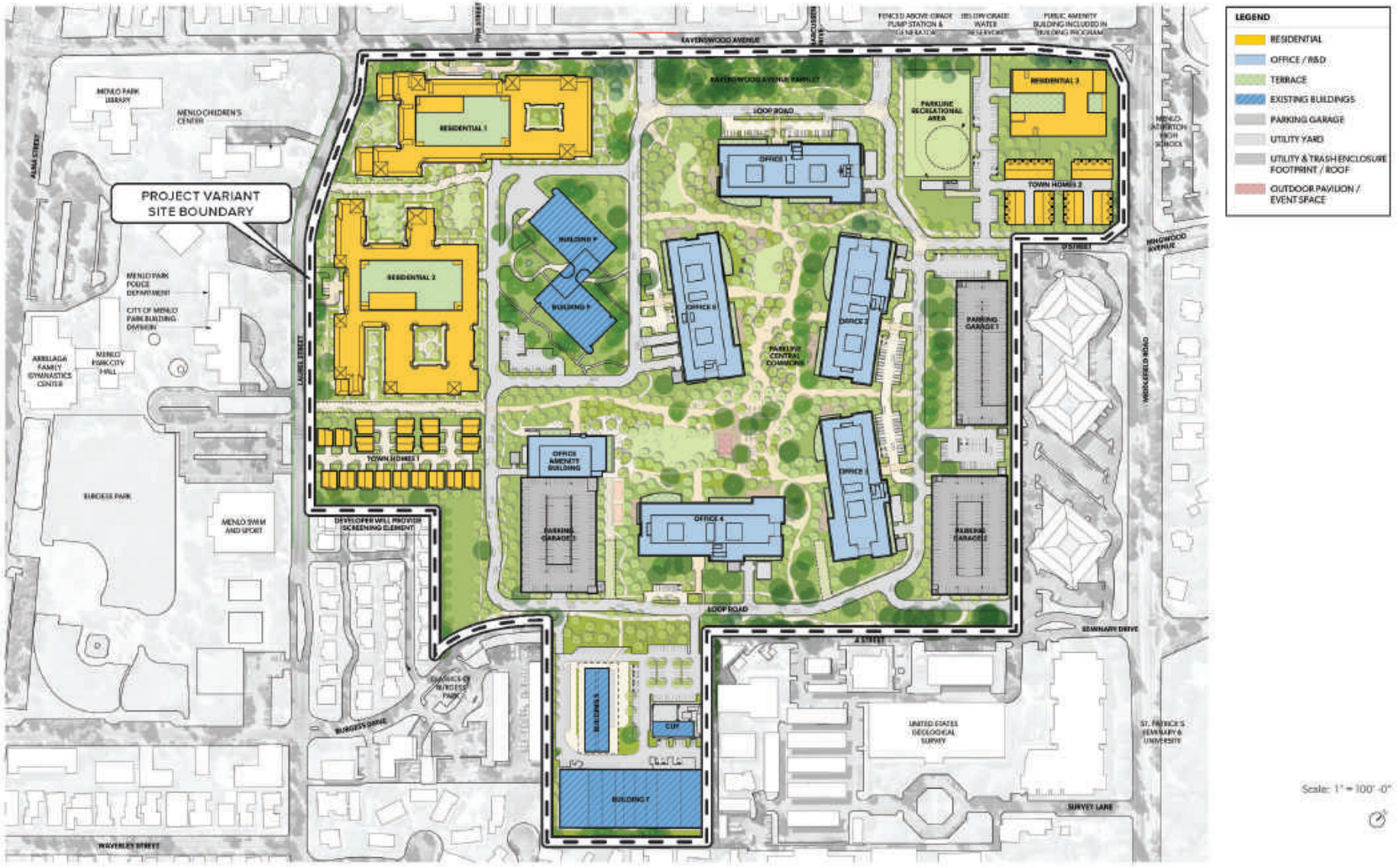
If the Project Sponsor exercises its option right to acquire the property at 201 Ravenswood Avenue, the Project Variant could be put forth by the Project Sponsor and made available for selection by the decision-makers as part of an approval action. The city could approve a modified version of the Project Variant with either or both of the residential and water reservoir components (i.e., additional dwelling units and no emergency water reservoir, emergency water reservoir and no additional dwelling units, or additional dwelling units and emergency water reservoir), as discussed in detail below. For purposes of the EIR analysis, the Project Variant includes both the additional dwelling units and the emergency water reservoir, in addition to the other site plan changes proposed, to ensure a complete analysis of potential environmental effects. Because the Project Variant could result in different impacts compared to the Proposed Project, this chapter describes and analyzes the associated impacts of the Project Variant. The Project Variant would modify limited features or aspects of the Proposed Project to address the potential variations in the Proposed Project that could occur. In contrast, the alternatives to the Proposed Project (as described and analyzed in Chapter 6, Alternatives Analysis) are designed to meet the requirements of California Environmental Quality Act (CEQA) Guidelines Section 15126.6. Alternatives must meet most of the basic Proposed Project objectives and avoid or lessen one or more of the significant environmental impacts of the Proposed Project.

4.2 Project Variant Characteristics

Development Under the Project Variant

Under the Project Variant, the Project Site would be expanded to include the property at 201 Ravenswood Avenue, resulting in a total of approximately 64.2 acres compared to approximately 63.2 acres under the Proposed Project. The office/R&D development would be the same as the Proposed Project. In addition, the same existing SRI buildings would be retained (Buildings P, S, and T, totaling approximately 286,730 sf), and the same existing SRI buildings would be demolished (approximately 1,093,602 sf), except that the existing Chapel buildings at 201 Ravenswood Avenue (approximately 12,700 sf) would also be demolished. Therefore, a total of 1,106,302 sf of buildings at the Project Site would be demolished under the Project Variant.

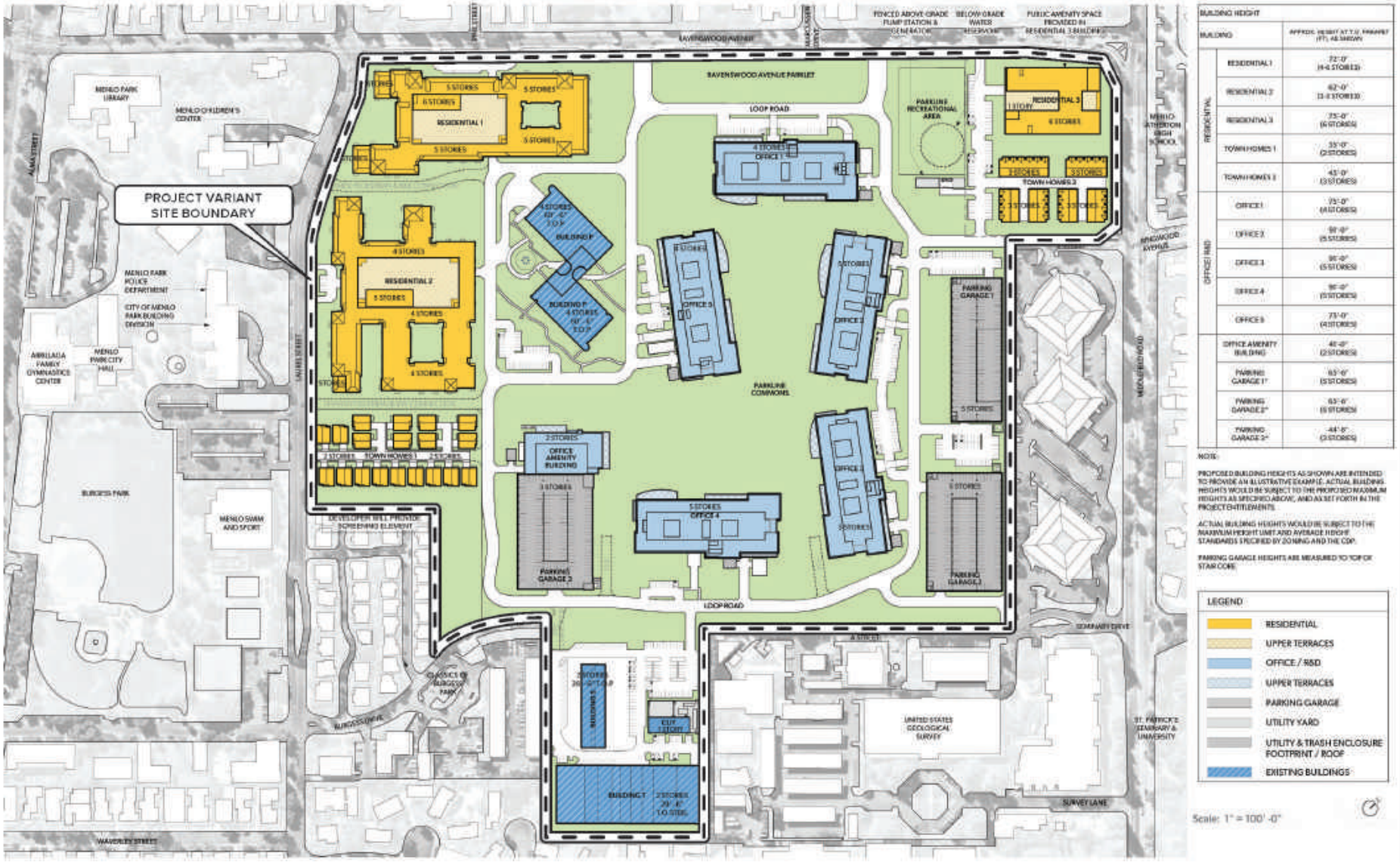
Figure 4-1 depicts the conceptual site plan for the Project Variant. Figure 4-2 depicts an illustrative example of the proposed building heights for the Project Variant. Figure 4-3 depicts the proposed vehicular circulation plan for the Project Variant, Figure 4-4 depicts the primary bicycle and pedestrian facilities for the Project Variant, and Figure 4-5 depicts the proposed parking plan for the Project Variant.



Source: Studios Architecture, OJB, Kier+Wright, 2024.

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Figure 4-1
Conceptual Site Plan for the Project Variant
Parkline



Source: Studios Architecture, OJB, Kier+Wright, 2024.

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Figure 4-2
Conceptual Building Height Plan for the Project Variant
Parkline

Source: Studios Architecture, OJB, Kier+Wright, 2024.

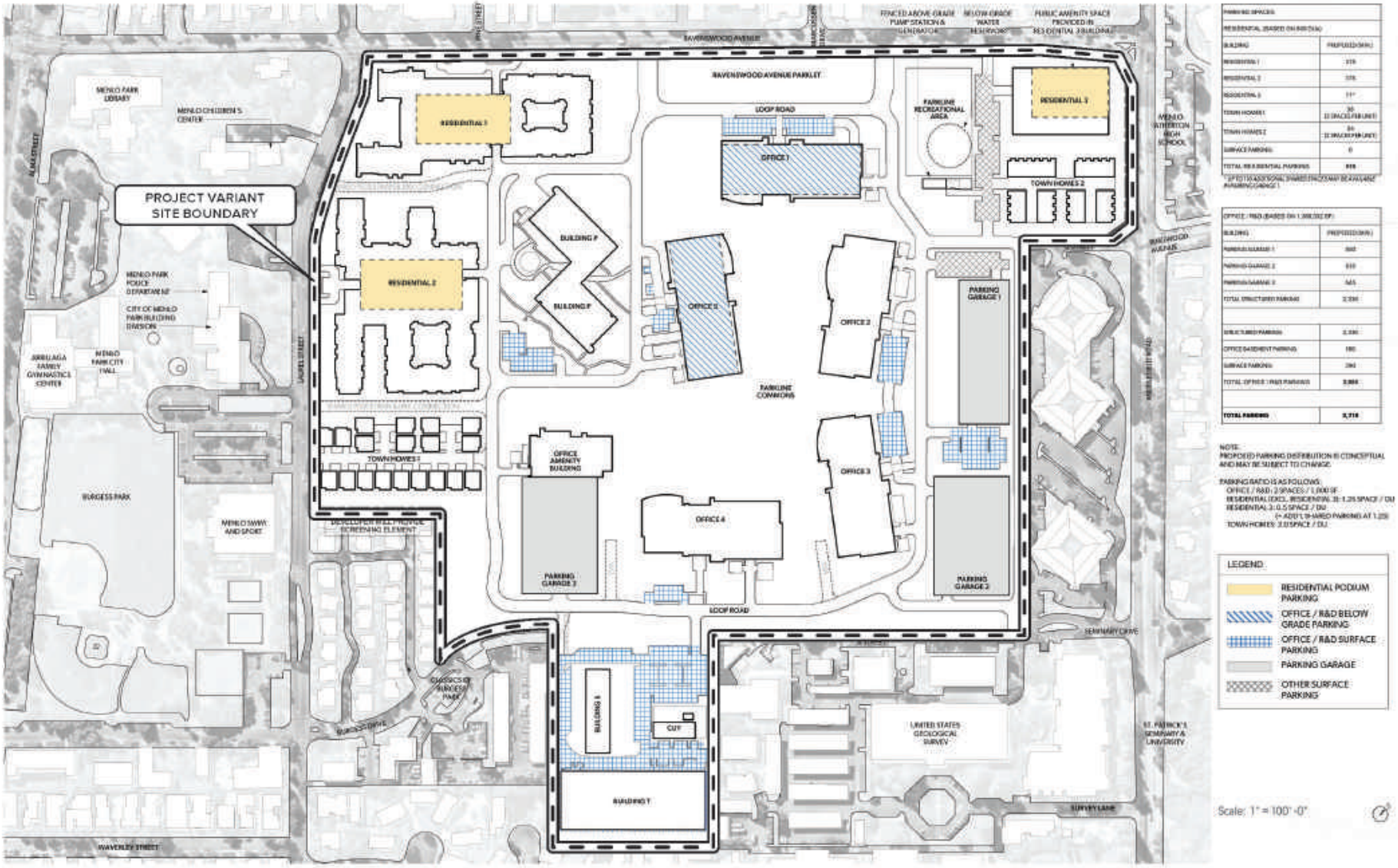
Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Figure 4-3
Conceptual Vehicular Circulation Plan for the Project Variant
Parkline

Source: Studios Architecture, OJB, Kier+Wright, 2024.

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Figure 4-4
Conceptual Bicycle and Pedestrian Circulation Plan for the Project Variant
Parkline



Source: Studios Architecture, OJB, Kier+Wright, 2024.

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Figure 4-5
Conceptual Parking Plan for the Project Variant
Parkline

Residential Uses

The Project Variant would include approximately 800 dwelling units, as shown in Table 4-2, which is 250 more than the Proposed Project; this would be accomplished through a slight increase in maximum building height and expansion of the Project Site. The additional dwelling units would assist the city in meeting its housing allocation under the Regional Housing Needs Allocation (RHNA), in furtherance of the Project objective of increasing the city's housing supply and progress toward its State of California–(State-) mandated housing goals.[1] The additional dwelling units would be located along the western and northeastern portions of the Project Site. In the western portion of the site, Residential Buildings 1 (R1), R2, and R3 would be replaced with two multifamily buildings (Buildings R1 and R2), which would accommodate 300 units each, for a total of 600 multifamily rental units. The 19 detached townhomes along Laurel Street included in the Proposed Project would be maintained (referred to as TH1).

Table 4-2. Total Residential Units Under the Project Variant

Proposed Total Dwelling Units	Area (square feet)	Number of Units	Percent of Dwelling Units
Studio	500–650	46	6%
1 Bedroom	500–900	323	40%
2 Bedroom	800–1,250	299	37%
3 Bedroom	1,000–1,450	86	11%
4 Bedroom (Townhouse)	2,000–3,000	46	6%
Total Units	**1,096,000**	**800**	**100%**

Source: Lane Partners and SRI International, 2024

In the northeastern portion of the Project Site, a multifamily six-story, 100 percent affordable housing complex with up to 154 units (Building R3) would be developed separately by an affordable housing developer; this would be located at the corner of Ravenswood Avenue and Middlefield Road. In addition, 27 attached townhomes would be located immediately south of Building R3 (referred to as TH2). In total, the number of below-market rate (BMR) units would increase from 68 to 97 by applying the city's 15 percent inclusionary requirement to the 646 units within the mixed-income component of the Project Variant, as shown in Table 4-3. The number of units to be included within the separate 100 percent affordable building would increase from 100 to 154, as shown in Table 4-4. In total, there would be 251 BMR units and 549 market-rate residential units under the Project Variant. The Project Variant would increase the average square footage of residential area per unit because the Project Variant would include more three- and four-bedroom units than the Proposed Project.

[1] Association of Bay Area Governments. 2021. *Regional Housing Need Plan for the San Francisco Bay Area: 2023–2031*. December 2021. Available: https://abag.ca.gov/sites/default/files/documents/2022-12/Final%20RHNA%20Methodology%20Report%202023-2031_update_11-22.pdf. Accessed: June 5, 2023.

Table 4-3. Market-Rate/Mixed-Income Residential Units (Buildings R1, R2, TH1 and TH2) under the Project Variant

Proposed Market Rate Dwelling Units	Area (square feet)	Number of Units	Percent of Dwelling Units
Studio/1 Bath	550–650	46	7.1%
1 Bedroom/1 Bath	700–900	253	39.2%
2 Bedroom/2 Bath	1,000–1,250	257	39.8%
3 Bedroom/2 Bath	1,300–1,450	44	6.8%
4 Bedroom/3 Bath (Townhouse)	2,000–3,000	46	7.1%
Total Market Rate Units	**918,000**	**646**	**100%**

Source: Lane Partners and SRI International, 2024

Note: For purposes of the housing needs assessment prepared for the Proposed Project and included in Appendix 3.14-1 of this EIR, it is assumed that 15 percent (97 units) of the above 646 units would be affordable to low-income households and that the unit mix/type for those income-restricted units would be consistent with the unit mix/type shown in this table. Beyond this 15 percent BMR requirement, the Proposed Project would also provide a land dedication to an affordable housing developer that could accommodate up to 154 additional affordable units, as summarized in Table 4-4.

Table 4-4. Affordable Housing Dedication (Building R3) Under the Project Variant

Proposed Affordable Dwelling Units	Area (square feet)	Number of Units	Percent of Dwelling Units
1 Bedroom/1 Bath	500–600	70	45.5%
2 Bedroom/1 Bath	800–850	42	27.3%
3 Bedroom/2 Bath	1,000–1,200	42	27.3%
Total Affordable Units	**178,000**	**154**	**100%**

Source: Lane Partners and SRI International, 2024

Based on the types of units proposed under the Project Variant, as well as the average of 2.64 persons per household (pph), it is anticipated that the 800 new rental dwelling units would generate approximately 2,117 residents (compared to approximately 1,305 residents under the Proposed Project), for a total of 812 additional residents compared to the Proposed Project. It is anticipated that the 250 additional residential dwelling units would generate approximately six additional employees in the residential area compared to the Proposed Project, for a total of 20 employees associated with the proposed residential uses. However, approximately 18 employees would be displaced at the Project Site due to the demolition of the buildings at 201 Ravenswood Avenue. Therefore, the Project Variant would generate approximately the same number of net new employees as the Proposed Project under the 100 percent office scenario (approximately 3,856 net new employees) and under the 100 percent R&D scenario (approximately 2,655 net new employees).

Building Design

The design, height, and massing of the office/R&D buildings under the Project Variant would be the same as under the Proposed Project. However, the design and height of the residential buildings and the parking garages would be different under the Project Variant. The Project Variant's incorporation of the parcel located at 201 Ravenswood Avenue would allow for the distribution of the additional residential units at the northeastern corner of the Project Site, along with development of a large recreational area (with programming to be determined by the city as part of a future process) and an emergency water reservoir. A reduction in surface parking would occur in the vicinity of the large recreational area.

The reconfigured Buildings R1 and R2 would differ in massing and height to accommodate additional units within the two buildings as well as an above-ground parking podium and a "wrapped" construction typology. Under the Proposed Project, Buildings R1, R2, and R3 would be four stories tall along the frontages at Laurel Street and Ravenswood Avenue and six stories tall closer to the interior of the site to create a sense of transition; under the Project Variant, the portions of Buildings R1 and R2 fronting Laurel Street would be three and four stories. A portion of R1 along Ravenswood Avenue would increase from four stories to five stories, and small interior portions of Buildings R1 and R2 would include a sixth story to accommodate rooftop amenity space for residents. The detached TH1 townhomes along Laurel Street would remain two stories. In the northeast corner of the site for the Project Variant, at the corners of Ravenswood Avenue and Middlefield Road, Building R3 (100 percent affordable) would be six stories. The TH2 townhomes along Middlefield Road would be three stories.

The maximum building heights for the office/R&D buildings would be the same (approximately 110 feet) as under the Proposed Project, whereas the maximum heights for the residential buildings would increase slightly to approximately 90 feet (compared to 85 feet under the Proposed Project). In addition, the maximum heights for the commercial parking garages (PG1 and PG2) would increase by one level to five stories and approximately 75 feet (compared to four stories and 55 feet under the Proposed Project) to accommodate adequate parking for the office/R&D buildings at the same parking ratio as the Proposed Project. Table 4-1 shows the maximum building heights, as established through applicable entitlements and land use controls, under the Proposed Project and Project Variant. Figure 4-2 depicts an illustrative example of the proposed building heights for the Project Variant.

Site Access

Under the Project Variant, site access as well as vehicular, bicycle, and pedestrian circulation would be similar to access and circulation under the Proposed Project but with some differences because of the residential buildings. R1 ingress and egress would be located on Ravenswood Avenue and accessed via the internal road that would connect to the Loop Road; there would be no access from Laurel Street. R2 ingress would be located on Laurel Street and accessed via the internal road that would connect to the Loop Road and the driveways on Ravenswood Avenue and Middlefield Road. R2 egress would be provided only via the internal road to the driveways on Ravenswood Avenue and Middlefield Road. No R2 egress to Laurel Street would be provided. As a result, residential trips associated with R1 and R2 would be largely shifted to the driveways on Ravenswood Avenue and Middlefield Road, and fewer trips would use Laurel Street. The TH1 townhomes would be accessible only from Laurel Street. R3 (Affordable) and TH2 townhomes would be accessible from Ravenswood Avenue and Middlefield Road.

Parking

With respect to parking under the Project Variant, all parking for the new buildings and retained Buildings P, S and T would be provided onsite. The total number of commercial parking spaces for the office/R&D buildings would be the same (2,800 spaces), although the distribution of the parking spaces would change slightly by removing the underground connection between Buildings O1 and O5, as anticipated under the Proposed Project, resulting in increased square footage and heights for the parking garages (PG1 and PG2) compared to the Proposed Project in order to maintain the same overall parking ratio. Total residential parking would include 919 spaces under the Project Variant (compared to 519 spaces under the Proposed Project) to provide parking for the additional units. The increased residential parking would result from providing parking within Buildings R1 and R2 at 1.25 spaces per unit and providing for additional townhome parking amounting to two spaces per unit for TH1 and TH2 (Project Variant includes 54 townhomes compared to 19 townhomes under the Proposed Project). Parking for the 100 percent affordable building (Building R3) would remain at 0.5 space per unit, with the option to utilize parking spaces within PG1 and PG2 during nights and weekends. Under the Project Variant, no underground parking would be provided for the residential buildings (compared to underground parking beneath Buildings R1, R2, and R3 under the Proposed Project) because the residential parking would be provided above grade within the buildings utilizing a wrap-style construction typology.

Underground Emergency Water Reservoir

The Project Variant would include an approximately 2- to 3-million-gallon emergency water reservoir that would be buried below grade at the northeast corner of the Project Site near the intersection of Ravenswood Avenue and Middlefield Road, an area where the aboveground use would be devoted to recreational activities. This area is west of the proposed 100 percent affordable residential building (Building R3). The emergency water reservoir was identified as a needed citywide improvement in the Menlo Park Municipal Water's 2018 Water System Master Plan2 to provide a local back-up source of potable and firefighting water supply. The facilities associated with the emergency water reservoir would include a small pump station building, an emergency groundwater well, and related improvements that would be built at or below grade. The facility would also include an emergency generator, treatment and disinfection system (chloramination), and a surge tank. The facilities would be located both above and below ground surrounded by a fence or screen. The area for the emergency water reservoir and associated facilities would be leased by the city from the Project Sponsor.

During operation of the Project Variant, the emergency water reservoir would be filled and used on an ongoing basis using water purchased from the San Francisco Public Utilities Commission (SFPUC). As discussed in Section 3.16, *Utilities and Service Systems*, MPMW purchases all of its water from the Regional Water System, which is operated by the SFPUC. The new emergency well would be used as a standby well for municipal water in the event SFPUC deliveries are reduced, interrupted, or unavailable. The new emergency well would be located adjacent to the emergency water reservoir and would be approximately 430 feet deep drawing from the deeper aquifer. If used, the new emergency well would be required to produce potable water supply consistent with standards established by the State Water Resources Control Board Division of Drinking Water. To ensure that all components of the facility remain in good working order and can be brought online quickly and efficiently in an emergency, the well pumps and generator

[2] West Yost Associates. 2018. *Menlo Park Municipal Water – Water System Master Plan Final Report*. April. Available: https://menlopark.gov/files/sharedassets/public/public-works/documents/water/menlo-park-municipal-water-2018-water-system-master-plan.pdf. Accessed: August 2, 2023.

would be "exercised" routinely for short periods (approximately one hour, one time per month for a maximum of up to 15 hours per year). To avoid waste, water that is pumped during monthly exercising would be used for city operation and maintenance purposes (e.g., street cleaning, tree irrigation, and median landscaping irrigation which currently use water from the potable supply). It is anticipated that the emergency well pump would have a capacity to draw up to 1,500 gallons per minute (gpm), resulting in a withdrawal of approximately 4 acre-feet per year (AFY) during the routine "exercises."

The emergency water reservoir would require the additional following authorizations and approvals:

- State Water Resources Control Board Division of Drinking Water – The State will need to review and approve the proposed well location prior to considering and granting approval to drill the proposed well. Water Supply Permit per Article 7 of the California State Drinking Water Act for drilling of a well to be used for potable water supply in the event water from SFPUC is reduced, interrupted, or unavailable.
- San Mateo County – Well Construction Permit per San Mateo County Code Section 4.68.080 for well construction activities.

Open Space

Although the Project Variant would increase in the number of dwelling units and would incorporate additional facilities associated with the emergency water reservoir, the Project Variant would include more open space than the Proposed Project. The Project Variant would include approximately 29.3 acres of open space areas and supporting amenities (compared to approximately 26.4 acres under the Proposed Project). The Project Variant would also result in the removal of approximately 768 trees (compared to approximately 708 trees under the Proposed Project).

Utilities

Water infrastructure improvements for the Project Variant would be the same as proposed under the Proposed Project. To manage and reduce potable water use, the Project Variant would comply with all applicable State and local codes and regulations regarding water usage and, where feasible, incorporate features such as low-flow fixtures, and options for greywater use, among other features. With implementation of water conservation measures, it is anticipated that the net increase in water use at the Project Site, compared to current use, would be approximately 49 million gallons per year (compared to the 39 million gallons per year under the Proposed Project).[3]

The Project Variant would result in increased sanitary sewer flows compared to existing conditions, primarily due to incorporation of 250 additional residential units on the Project Site. For the purposes of this analysis, it is assumed that 95 percent of the interior water usage would be discharged into the sewer system, which is a standard assumption that accounts for various evaporation and system losses. The Project Variant is estimated to result in a sewer flow rate of approximately 272,452 gallons per day (a net increase of approximately 120,015 gallons per day compared to existing conditions). The Project Variant would be adequately accommodated by the existing sanitary sewer infrastructure, with no upsizing or additional infrastructure required. Water from exterior uses, such as landscaping, would be absorbed by plants and soil; it could also evaporate or flow to onsite stormwater treatment areas. Therefore, it would not be expected to result in discharges to sewer infrastructure.[4]

[3] West Yost and Associates. 2024. *Parkline Water Supply Assessment*. Prepared for Menlo Park Municipal Water. April.

[4] Kier + Wright. 2024. *Parkline Sanitary Sewer Capacity Analysis*. March 11.

The Project Variant would have a pervious surface area of approximately 41.6 percent (1.164 million sf) across the site, compared to only approximately 25.9 percent (659,900 sf) under existing conditions, which includes the property at 201 Ravenswood Avenue.[5] The Project Variant would include approximately 81,000 to 83,500 sf of bioretention areas. Generally, biotreatment areas would either be flow-through planters or recessed biotreatment ponds. All onsite drainage would discharge into the same drainpipe as the Proposed Project. Because of the reduction in impervious area across the Project Site, the anticipated flow rate for runoff leaving the Project Site would be less than under existing conditions. Therefore, no additional hydromodification measures would be required for the Project Variant. The reduced impervious surface area, compared to the existing impervious surface area, and implementation of bioretention areas/flow-through planters would result in a flow rate of approximately 40.3 cubic feet per second (cfs). Compared to existing conditions, this represents a decrease of approximately 18.6 percent in stormwater flows to the existing storm drain system.[6]

Table 4-5 compares the utilities use and flow of the Project Variant compared to the Proposed Project (conservative scenario).

Table 4-5. Comparison of Utilities for the Proposed Project and the Project Variant (Conservative Scenario)

	Proposed Project	Project Variant
Water	39 million gallons per year (R&D)	49 million gallons per year
Sewer Flow	239,615 gallons per day (R&D)	272,452 gallons per day
Pervious Surfaces	42.3 percent (both)	41.6 percent
Stormwater Flow Rate	39.7 cfs (both)	40.3 cfs

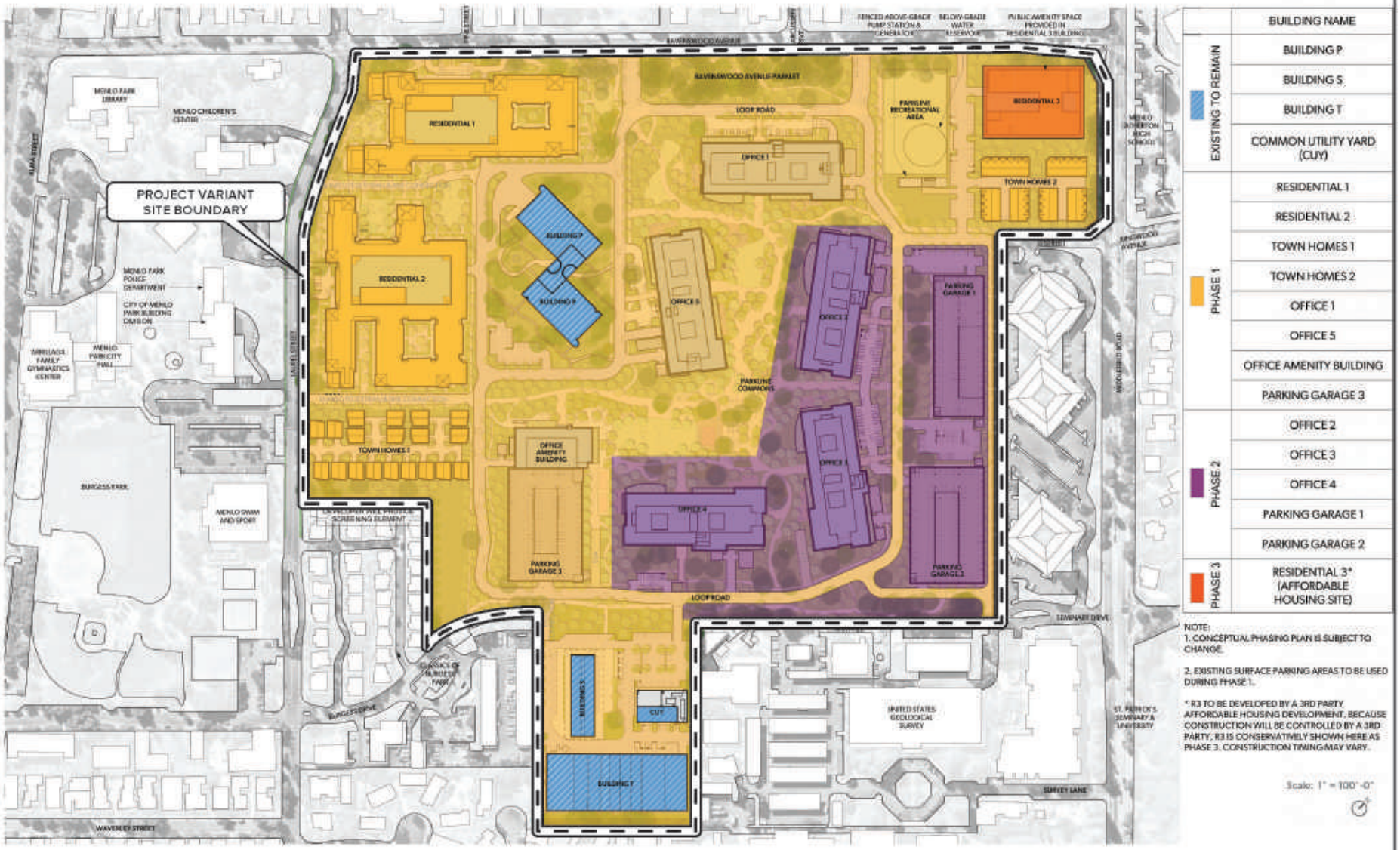
Source: Lane Partners, SRI International, West Yost and Associates, and Kier + Wright, 2024

Construction and Phasing

The same general construction phasing and hours are expected to occur under the Project Variant as under the Proposed Project. However, the Project Variant would result in an extended construction schedule, more overall equipment, and more haul trips during Phase 1 due to the increased development compared to the Proposed Project. However, exported soil volumes would decrease compared to the Proposed Project, given that the Project Variant would include comparatively less underground parking and, therefore, require less excavation. As a result, the total haul trips, exported soil volumes, and construction schedule of the Project Variant would also be different compared to the Proposed Project. Taken together, removal of the underground parking garages beneath both the residential buildings and the connection between Buildings O1 and O5 under the Project Variant would result in an increase in the footprint and height of PG1 and PG2 and a reduction in the required soil excavation volume compared to the Proposed Project. Table 4-6 provides a comparison of the construction assumptions for the Proposed Project and the Project Variant. Figure 4-6 depicts the proposed construction phasing plan for the Project Variant.

[5] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

[6] Ibid.



Source: Studios Architecture, OJB, Kier+Wright, 2024.

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Figure 4-6
Conceptual Construction Phasing Plan for the Project Variant
Parkline

Under the Project Variant, Phase 1 would include the construction of Buildings R1 and R2, which have increased in size compared to the Proposed Project to accommodate additional units, along with construction of the TH1 and TH2 townhomes. Construction of the Project Variant would result in approximately 42,765 total construction haul trips and a total construction duration of approximately 68 months during Phase 1 (compared to the Proposed Project, which would result in up to 35,775 total construction haul trips and a total construction duration of approximately 48 months during Phase 1). In addition, construction of the emergency water reservoir is assumed to occur during Phase 1, concurrent with excavation activities, although it is unknown when actual construction would occur because it would depend on the city of Menlo Park obtaining funding and other factors outside of the Project Sponsor's control. The Chapel buildings at 201 Ravenswood Avenue, including Alpha Kids Academy, would be demolished during Phase 1 to accommodate the emergency water reservoir. The construction phase for the emergency water reservoir would include rough grading and miscellaneous demolition, excavation for the water tank, construction of the concrete structure, construction of the pump station and pump station yard, and installation of utilities. In total, construction of the emergency water reservoir would occur over a duration of approximately 24 months and result in approximately 3,226 total construction haul trips (which are accounted for in Phase 1 haul trips). Construction of the emergency water reservoir would result in approximately 18,050 additional cubic yards of exported soil.

The data shown in Table 4-6 accounts for the construction haul trips and cubic yards of exported soil associated with construction of the emergency water reservoir in Phase 1.

Construction durations in Phases 2 and 3 of the Project Variant would remain the same as the Proposed Project with respect to scope and program, although the start and end dates for construction would be different compared with the Proposed Project, given the longer duration for Phase 1 under the Project Variant.

In total, construction of the Project Variant would take approximately 99 months, compared to approximately 77 months under the Proposed Project. It is currently anticipated that the maximum depth of excavation for the Project Variant would be 15 feet below the current grade for the below-grade parking garages located under Buildings O1 and O5 and 30 feet below the current grade for the emergency water reservoir (compared to 15 feet below the current grade under the Proposed Project). In addition, the emergency well would be approximately 430 feet deep in order to draw from the deeper aquifer; however, the exported soil generated by the new emergency well would be minor due to the anticipated depth and boring diameter of the well. Therefore, the Project Variant would require less excavation, resulting in a total volume of 174,905 cubic yards of export. These export volumes assume that all disturbed soil would be off-hauled rather than reused onsite. It is likely that some amount of excavated soil would be reused on the Project Site; however, it is currently unknown how much soil would be reused onsite rather than exported. Therefore, to provide conservative estimates, this EIR assumes that all excavated soil would be exported.

Overall, a similar amount of ground disturbance would occur compared to the Proposed Project, except that development on the 201 Ravenswood Avenue parcel would also occur. The Project Variant would result in approximately 3,133,000 sf (71.9 acres) of ground disturbance during construction, inclusive of right-of-way and offsite improvements along the Project Site frontages. In comparison, the Proposed Project would result in approximately 2,981,000 sf (68.4 acres) of ground disturbance during construction. Similar to the Proposed Project, construction equipment for the Project Variant would be electric or Tier 4 and would include concrete/industrial saws, excavators, rubber-tired dozers, tractors, loaders, backhoes, welders, graders, scrapers, drill rigs, cranes, forklifts, generator sets, pavers, paving equipment, rollers, industrial saws, and aerial lifts.

Table 4-6. Comparison of Construction Assumptions and Phasing for the Proposed Project and the Project Variant

	Proposed Project	Project Variant[a]
Haul Trips[b]		
Phase 1	35,775 trips	40,712 trips
Phase 2	4,860 trips	1,705 trips
Phase 3	1,588 trips	348 trips
Total Haul Trips (All Phases)	42,223 trips	42,765 trips
Exported Soil[b,c]		
Phase 1	231,050 cubic yards	160,905 cubic yards
Phase 2	43,055 cubic yards	11,500 cubic yards
Phase 3	7,500 cubic yards	2,500 cubic yards
Total Exported Soil (All Phases)	281,605 cubic yards	174,905 cubic yards
Construction Schedule		
Phase 1	48 months	68 months
Phase 2	25 months	25 months
Phase 3	21 months	21 months
Total Construction Duration (All Phases)	77 months	99 months

Source: Lane Partners and SRI International, 2024

Notes:

a. Phases 2 and 3 of construction under the Project Variant would remain the same as the Proposed Project with respect to scope and program, although the start and end dates for Phase 2 and 3 construction are different, given the longer duration for Phase 1 under the Project Variant.

b. The emergency water reservoir is accounted for in the construction schedule in Phase 1, including the number of haul trips and the amount of exported soil. However, subsequent to preparation of this analysis, the reservoir increased in size from approximately 2 million gallons to up to 3 million gallons and an emergency well was added to the Project Variant, which would result in a minor increase in the number of haul trips and the amount of exported soil. It is anticipated that the increase in haul trips and exported soil generated by the new emergency well would be minor due to the anticipated depth and narrow boring diameter of the well (approximately 28 inches wide). Overall, the Project Variant would require less soil export but a minor increase in haul trips compared to the Proposed Project.

c. Exported soil volumes are conservative estimates; it is assumed that all excavated soil would be exported offsite.

4.3 Impact Assessment

This assessment considers the environmental impacts associated with the Project Variant. For some environmental topics, the impacts under the Project Variant would be the same as those of the Proposed Project. For those topics, further analysis is not needed, as explained in this chapter. However, in some cases, the impacts under the Project Variant would differ from the impacts identified for the Proposed Project in Chapter 3, *Environmental Impact Analysis*. The differences between the Proposed Project and the Project Variant are analyzed quantitatively throughout this chapter. When comparing the Proposed Project to the Project Variant, the more conservative scenario (100 percent office or 100 percent R&D) is used. Unless otherwise stated, all mitigation measures described in Chapter 3 required to reduce impacts associated with the Proposed Project would be applicable to the Project Variant.

Environmental Topics Not Requiring Further Analysis

Under the Project Variant, the site plan would also include the parcel located at 201 Ravenswood Avenue to accommodate additional dwelling units and the underground emergency water reservoir, but the overall Project Site location would remain the same as the Proposed Project. As such, environmental impacts related to aesthetics and vehicular parking,[7] agricultural and forestry resources, mineral resources, and wildfire that could result from construction and operation activities would not change under the Project Variant. Similar to the Proposed Project, there would be ***no impact*** related to these resources as a result of buildout of the Project Variant.

Land Use

Similar to the Proposed Project, the Project Variant would result in no impacts related the division of an established community. Although the Project Variant would add intensified development in the area, the Project Site has been developed for decades with similar uses. The Project Variant would add residential uses, which are not a current use at the Project Site; however, properties to the north are zoned R2 (Low-Density Apartment District) and R3 (Apartment District), while properties to the south are zoned R1S (Single-Family Suburban Residential District). The proposed multi-family residential units would act as a transition from the low-density apartments to the north to the single-family neighborhood to the south. No impact would occur.

Impact LU-1: Conflicts with Any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect. The Project Variant would not result in a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project Variant (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. (LTS)

As with the Proposed Project, the Project Variant would be designed with an integrated master plan, with all parcels held in common ownership, allowing a continuous and complementary site plan and program. To achieve this, the Project Variant would establish site-specific, tailored land use controls, including development standards, to guide development on the Project Site. The Project Variant would result in similar development standards, with some exceptions to account for incorporation of the additional site at 201 Ravenswood Avenue, the increase in residential units, and installation of an emergency reservoir. These development standards would be established through zoning ordinance text and a zoning map amendment, along with a conditional development permit. The Project Variant would be generally consistent with applicable goals and policies in the city's General Plan, which would also be amended as part of overall project approvals, and the regional Plan Bay Area, resulting in ***less-than-significant*** impacts.

[7] In accordance with Senate Bill (SB) 743, aesthetics and parking impacts are not to be considered in determining if a project has the potential to result in significant environmental effects, provided the project meets the qualifying criteria established under Public Resources Code Section 21099. For the same reasons described for the Project in Chapter 2, *Project Description*, the Project Variant meets those criteria and, therefore, this EIR does not consider aesthetics or vehicular parking in determining the significance of impacts under CEQA. Appendix 3.1-1 of this EIR includes a discussion of the Project Variant's potential aesthetics impacts for informational purposes.

Impact C-LU-1: Cumulative Land Use Impacts. Cumulative development would not result in a significant environmental impact on land use and planning; the Proposed Project would not be a cumulatively considerable contributor to any significant environmental impact. (NI)

Because consistency with land use plans and policies is inherently a project-specific issue, and each jurisdiction would decide on consistency at the project level, there would be no cumulative impact as a result of cumulative development in the Association of Bay Area Governments (ABAG) region. As with the Proposed Project, the Project Variant would make no contribution to cumulative impacts on land use and planning.

Transportation

This section identifies and evaluates the Project Variant's potential impacts related to transportation. Relevant technical documentation prepared for the Project Variant used in this analysis includes:

- *Parkline Vehicle Miles Traveled Memorandum* (Parkline VMT Memorandum),[8] and
- *Draft Parkline Transportation Demand Management (TDM) Plan* (TDM plan).[9]

The Parkline VMT Memorandum was prepared by Hexagon Transportation Consultants, Inc., for the Proposed Project. The Parkline VMT Memorandum is included in Appendix 3.13-1 of this EIR. The TDM plan was prepared by Fehr & Peers for the Proposed Project and peer reviewed by Hexagon Transportation Consultants, Inc.; the TDM plan is an appendix to the Parkline VMT Memorandum.

Project Variant Traffic Estimates

Trip generation estimates for the Project Variant are evaluated using the same methodology and assumptions described in Section 3.3, *Transportation*. The only difference is in the increased number of residential units and the mix. Table 4-7 and Table 4-8 show the trip generation estimates for the 100 percent office and 100 percent R&D scenarios, respectively.

[8] Hexagon Transportation Consultants, Inc. 2024. *Vehicle-Miles Traveled Analysis for Parkline in Menlo Park, CA*. June 12.

[9] Fehr & Peers. 2024. *Draft Parkline Transportation Demand Management (TDM) Plan.* June 10.

Table 4-7. Trip Generation Estimates – 100 Percent Office Scenario (Project Variant)

Land Use	ITE Land Use Code[a]	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
				Rate[a]	Total	Rate[a]	IN	OUT	Total	Rate[a]	IN	OUT	Total
Office	710	1,094	ksf	10.84	11,855	1.52	1,462	200	1,662	1.44	268	1,307	1,575
Market-rate multi-family residential	221	600	du	4.54	2,724	0.37	51	171	222	0.39	143	91	234
Market-rate townhouse[b]	215	46	du	7.20	331	0.48	6	16	22	0.57	15	11	26
Affordable BMR housing	223	154	du	4.81	741	0.50	22	55	77	0.46	42	29	71
Publicly accessible park[c]	488	1	field	71.33	71	0.99	1	0	1	16.43	11	5	16
Gross Project trips (before any reductions)					15,722		1,542	442	1,984		479	1,443	1,922
Gross Project trips after internal capture reduction					14,987		1,495	427	1,922		459	1,398	1,857
Total Project Variant Trips after TDM Reduction[d]					**11,302**		**1,079**	**314**	**1,393**		**336**	**1,011**	**1,347**
Existing trip generation credit[e]					(518)		(38)	(8)	(46)		(11)	(32)	(43)
Net New Trips Generated on Roadway Network					**10,514**		**1,041**	**306**	**1,347**		**325**	**979**	**1,304**

Source: Hexagon Transportation Consultants, Inc. 2024. *Vehicle-Miles Traveled Analysis for Parkline in Menlo Park, CA*. June 12.

Notes:

ITE = Institute of Transportation Engineers; ksf = thousand square feet; du = dwelling unit

a. Daily, AM, and PM peak-hour average rates published in the 2021 ITE *Trip Generation Manual*, 11th edition, were used for each land use.

b. Trip estimates for the townhouses are based on the ITE land use "Single-Family Attached Housing," which includes townhouses/rowhouses.

c. The Project Variant would include active recreational areas in the Ravenswood Avenue parklet. The programmatic design of the park has not been determined. The ITE land use "Soccer Complex" is analyzed as a proxy. In order to provide a conservative estimate of potential traffic generation, it is assumed that the park would have play structures and open field areas for warm-ups or casual play. The number of soccer fields at the park was estimated, based on the size of a standard soccer field.

d. Similar to the Proposed Project, the Project Variant would include a Project Variant–specific TDM plan for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Project Variant. The Project Variant is considered a transit-oriented development (TOD) because of the Project Site's proximity to the Menlo Park Caltrain station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Project Variant by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Project Variant, this trip reduction would be applied to the net trip generation after accounting for internalization.

e. Existing-use trip estimates are based on driveway counts conducted by Fehr & Peers in 2021. Of the 1,100 employees onsite, 700 employees were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned, based on employees.

Table 4-8. Trip Generation Estimates – 100 Percent R&D Scenario (Project Variant)

Land Use	ITE Land Use Code[a]	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
				Rate[a]	Total	Rate[a]	IN	OUT	Total	Rate[a]	IN	OUT	Total
R&D	760	1,094	ksf	11.08	12,117	1.03	923	203	1,126	0.98	172	900	1,072
Market-rate multi-family residential	221	600	du	4.54	2,724	0.37	51	171	222	0.39	143	91	234
Market-rate townhouse[b]	215	46	du	7.20	331	0.48	6	16	22	0.57	15	11	26
Affordable BMR housing	223	154	du	4.81	741	0.50	22	55	77	0.46	42	29	71
Publicly accessible park[c]	488	1	field	71.33	71	0.99	1	0	1	16.43	11	5	16
Gross Project trips (before any reductions)					15,984		1,003	445	1,448		383	1,036	1,419
Gross Project trips after internal capture reduction					15,237		965	428	1,393		366	996	1,362
Total Project Variant Trips after TDM Reduction[d]					**11,212**		**702**	**317**	**1,019**		**270**	**726**	**996**
Existing trip generation credit[e]					(518)		(38)	(8)	(46)		(11)	(32)	(43)
Net New Trips Generated on Roadway Network					**10,694**		**664**	**309**	**973**		**259**	**694**	**953**

Source: Hexagon Transportation Consultants, Inc. 2024. *Vehicle-Miles Traveled Analysis for Parkline in Menlo Park, CA*. June 12.

Notes:

ITE = Institute of Transportation Engineers; ksf = thousand square feet; du = dwelling unit

a. Daily, AM, and PM peak-hour average rates published in the 2021 ITE *Trip Generation Manual*, 11th edition, were used for each land use.

b. Trip estimates for the townhouses are based on the ITE land use "Single-Family Attached Housing," which includes townhouses/rowhouses.

c. The Project Variant would include active recreational areas in the Ravenswood Avenue parklet. The programmatic design of the park has not been determined. The ITE land use "Soccer Complex" is analyzed as a proxy. In order to provide a conservative estimate of potential traffic generation, it is assumed that the park would have play structures and open field areas for warm-ups or casual play. The number of soccer fields at the park was estimated, based on the size of a standard soccer field.

d. Similar to the Proposed Project, the Project Variant would include a Project Variant–specific TDM plan for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Project Variant. The Project Variant is considered a transit-oriented development (TOD) because of the Project Site's proximity to the Menlo Park Caltrain station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Project Variant by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Project Variant, this trip reduction would be applied to the net trip generation after accounting for internalization.

e. Existing-use trip estimates are based on driveway counts conducted by Fehr & Peers in 2021. Of the 1,100 employees onsite, 700 employees were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned, based on employees.

Impact TRA-1: Conflicts with Applicable Plans and Policies. The Project Variant would not conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (LTS)

Under the Project Variant, pedestrian, bicycle, and transit facilities are expected to be the same as under the Proposed Project. The Project Variant would comply with existing regulations, including the city's General Plan policies and zoning regulations, and provide adequate infrastructure for bicyclists and pedestrians. Therefore, it would be consistent with applicable plans, ordinances, and policies that address the circulation system, as shown in Table 3.3-5 in Section 3.3, *Transportation*; impacts would be ***less than significant***. No mitigation is required.

Impact TRA-2: Vehicle Miles Traveled. The Project Variant would not exceed an applicable vehicle-miles-traveled threshold of significance. (LTS)

Office/R&D and residential land uses were evaluated using the citywide model. Similar to the Proposed Project, the Project Variant would include a Project Variant–specific TDM plan for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Project Variant. The Project Variant is considered a transit-oriented development (TOD) because of the Project Site's proximity to the Menlo Park Caltrain station. For projects of this type, the City/County Association of Governments (C/CAG) requires a 25 percent trip reduction. For mixed-use projects such as the Project Variant, this 25 percent trip reduction would be applied to net trip generation after accounting for internalization. The Project Variant's TDM plan would meet the C/CAG trip reduction requirement because it would provide at least a 25 percent trip reduction for the proposed residential uses and at least a 28 percent trip reduction for the proposed office/R&D uses.

As noted in the "Net Project Trip Generation" discussion in Section 3.3, *Transportation*, the Proposed Project's daily internalization is estimated at 4.7 percent. The Project Variant is also assumed to generate daily internalization at 4.7 percent. Per ITE's *Trip Generation Handbook*, third edition (page 38), baseline trip generation rates, as used for this analysis, generally assume a non-driving mode share of 5 percent or less. Accordingly, the 5 percent non-driving mode share inherent to the ITE trip generation rates has been incorporated into the analysis for the Project Variant. Therefore, the Project Variant's proposed total TDM-based trip reduction in gross ITE trip generation rates (after crediting internalization) is equivalent to a driving mode split of approximately 65.2 percent for the proposed office/R&D land uses and 67.9 percent for the proposed residential land use.[10]

As shown in Table 4-9, the travel demand model, accounting for the Project Variant's TDM plan, showed that vehicle miles traveled (VMT) for the Project Variant's office land use would be 13.5 per employee,[11] which is below the city's office VMT impact threshold of 13.6 per capita. Therefore, VMT impacts associated with office land uses would be ***less than significant***. VMT for the Project Variant's residential land use would be 9.6 per capita, which is also below the city's residential VMT impact threshold of 11.2 per capita. Therefore, VMT impacts associated with residential land uses would be ***less than significant***. No mitigation is required.

[10] (1 - 5 percent of inherent non-driving mode) × (1 - 4.7 percent of internalization) × (1 - 28 percent of TDM reduction) = 65.2 percent for the proposed office/R&D land uses; (1 - 5 percent of inherent non-driving mode) × (1 - 4.7 percent of internalization) × (1 - 25 percent of TDM reduction) = 67.9 percent for the proposed residential land uses.

[11] Because the Project Variant does not propose any changes to the office/R&D land use, the office/R&D's VMT analysis is assumed to be the same as under the Proposed Project.

Table 4-9. Office/R&D and Residential VMT Analysis Summary – Project Variant

Land Use	Regional Average	VMT Threshold	Project Variant VMT	Higher than VMT Threshold?
Office/R&D	15.9	13.6	13.5	No
Residential	13.1	11.2	9.6	No

Impact TRA-3: Design Hazards. The Project Variant would not substantially increase hazards due to a design feature or incompatible uses. (LTS)

For purposes of CEQA, *hazards* are the engineering aspects of a project (e.g., speed, turning movements, designs, distances between street crossings, sight lines) that may increase the risk, compared with a typical project, of collision and result in serious or fatal physical injuries. This analysis focuses on hazards that could reasonably stem from the Project Variant itself, beyond the collisions that may result from non-engineering aspects or the transportation system as a whole. Therefore, the methodology qualitatively assesses the Project Variant's potential to exacerbate an existing hazardous condition, or create a new hazard, for people bicycling, walking, or driving or for public transit operations.

The Project Variant would not involve any changes to the roadway network outside the Project Site. Furthermore, the Project Variant would not include any design features that could cause potentially hazardous conditions. Under existing conditions, there are six driveways on Ravenswood Avenue along the Project frontage. The Project Variant would reduce it to five driveways (two residential driveways, two office/R&D driveways, and one driveway for the affordable housing complex at the northeast corner of the Project Site). This would improve access on Ravenswood Avenue by consolidating the access points on the street. The Project Variant would provide driveways on Ravenswood Avenue and Laurel Street as well as the internal roads that connect to the existing driveways on Middlefield Road opposite Ringwood Avenue and Seminary Drive. The driveway designs would comply with applicable standards and therefore would not present hazards. It should be noted that the Project Sponsor is working with city personnel to improve the geometric design and simplify intersection and right-of-way operations at the Middlefield Road and Seminary Drive intersection.

As discussed under Impact TRA-1 in Section 3.3, *Transportation*, the Proposed Project proposes multiple bicycle and pedestrian facility improvements within the Project Site and along its frontage roadways. The Project Variant would provide adequate bicycle and pedestrian infrastructure and represent an overall improvement with respect to bicyclist and pedestrian access and circulation. It would not generate activities that would create potentially hazardous conditions for people bicycling, walking, or driving or for public transit operations.

Although the dimensions for driveways, parking aisles, parking spaces, and bicycle/pedestrian facilities are not known, as with current practice, the Project Variant would be designed and reviewed in accordance with the city's Public Works Department Transportation Program. The department would provide oversight during the engineering review to ensure that the Project Variant would be constructed according to city specifications. For these reasons, the Project Variant would have a ***less-than-significant*** impact with respect to design features or incompatible uses. No mitigation is required.

Impact TRA-4: Emergency Access. The Project Variant would not result in inadequate emergency access. (LTS)

Emergency access to the Project Site under the Project Variant would be similar to the Proposed Project. Menlo Park Fire Protection District Station 1 on Middlefield Road and Station 6 on Oak Grove Avenue are approximately 0.3 and 0.6 mile south and west of the Project Site, respectively. Although there would be

a general increase in vehicle traffic from the Project Variant, it would not inhibit emergency access to the Project Site or materially affect emergency vehicle response from a fire station. The proposed development on the Project Site, with associated increases in bicycle, pedestrian, and vehicle travel, would not substantially affect emergency vehicle response times or access to other buildings or land uses in the area, including hospitals. The Project Variant would be designed and built according to local fire district standards and State building codes. Building and site plans would be reviewed by city Planning, Engineering, and Building Services Departments as well as the Menlo Park Fire Protection District for compliance with the zoning ordinance and building code, the fire code, and engineering standards. This would ensure that the Project Variant would not impair emergency access for fire or emergency services. City staff members would also review the Project Variant's construction management plan to ensure the Project Variant's construction would follow city standards and would not inhibit emergency services. For these reasons, the Project Variant would have a ***less-than-significant*** impact with respect to emergency access and circulation. No mitigation is required.

Impact C-TRA-1: Cumulative Impacts Related to Conflicts Addressing the Circulation System. Cumulative development would not result in a significant environmental impact related to conflicts with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Future development in the city would be required to comply with existing regulations, including Menlo Park General Plan policies and zoning regulations that have been enacted to minimize impacts related to transportation and circulation. The city, through the 2040 buildout horizon, would implement Menlo Park General Plan programs that would require the city to update its Capital Improvement Program annually to reflect city and community priorities for physical projects related to transportation involving all travel modes. Data regarding the travel patterns of all modes would be updated bi-annually to measure circulation system efficiency (e.g., VMT per capita, traffic volumes) and safety standards (e.g., collision rates), along with other metrics. Furthermore, future projects developed in compliance with zoning regulations that call for adequate facilities and access to transportation would be consistent with the city's Transportation Master Plan. Based on the analysis above, the cumulative impacts with respect to conflicts with adopted plans, ordinances, or policies regarding bicycle, pedestrian, or public transit facilities would be ***less than significant***. No mitigation is required.

Impact C-TRA-2: Cumulative Impacts Related to VMT. Cumulative development could result in a significant environmental impact related to VMT; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Consistent with the *Technical Advisory on Evaluating Transportation Impacts in CEQA* from the Governor's Office of Planning and Research,[12] the evaluation of a project's cumulative impact is based on whether the incremental effects are "considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. An efficiency-based threshold applies to a proposed project without regard to VMT generated by an existing land use. As discussed under Impact TRA-2, above, VMT generated by the Project Variant would be below the city's VMT thresholds. Based on the analysis above, the Project Variant's contribution to cumulative impacts on VMT would be ***less than cumulatively considerable***. No mitigation is required.

[12] Governor's Office of Planning and Research. 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available: https://opr.ca.gov/ceqa/docs/20190122-743_Technical_Advisory.pdf. Accessed: October 13, 2023.

Impact C-TRA-3: Cumulative Impacts Related to Hazards Due to a Design Feature or Incompatible Uses. Cumulative development would not result in a significant environmental impact related to substantially increasing hazards due to a design feature or incompatible uses; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Similar to the Project Variant, other land use development and transportation projects would also promote accessibility for people traveling to or through a project site by conforming to Menlo Park General Plan policies and zoning regulations and adhering to planning principles that provide convenient connections and safe routes for bicycling, walking, driving, or taking transit. In addition, as per current practice, other projects would be designed and reviewed in accordance with the city's Public Works Department Transportation Program. The department would provide oversight during the engineering review to ensure that other projects would be constructed according to city specifications. As a result, other projects would not involve activities that would increase hazards due to a design feature or incompatible use. Therefore, cumulative impacts related to hazards due to a design feature or incompatible use would be ***less than significant***. No mitigation is required.

Impact C-TRA-4: Cumulative Impacts Related to Inadequate Emergency Access. Cumulative development would not result in a significant environmental impact related to inadequate emergency access; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

As part of the city's project approval process, future development would be required to comply with existing regulations, including Menlo Park General Plan policies and zoning regulations that have been enacted to minimize impacts related to emergency access. The city, through the 2040 buildout horizon, would implement Menlo Park General Plan programs that require the city's continued coordination with the Menlo Park Police Department and the Menlo Park Fire Protection District to establish circulation standards, adopt emergency response route maps, and equip all new traffic signals with pre-emptive devices for emergency services. Furthermore, implementation of the zoning regulations would help minimize traffic congestion that could affect emergency access. Therefore, cumulative impacts related to inadequate emergency access would be ***less than significant***. No mitigation is required.

Air Quality

Relevant technical documentation prepared for the Project Variant and used in this analysis includes the *CEQA Air Quality, Greenhouse Gas, and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant*.[13] All mitigation measures included as part of the Proposed Project apply to the Project Variant and are referenced in this analysis.

Impact AQ-1: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan. The Project Variant would not conflict with or obstruct implementation of the applicable air quality plan. (LTS/M)

Similar to the Proposed Project, the Project Variant would be consistent with the applicable stationary-source control measures, energy control measures, building control measures, transportation control measures, and waste control measures included in the Clean Air Plan. However, the Project Variant would exceed the Bay Area Air Quality Management District (BAAQMD) operational reactive organic gas (ROG)

[13] Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant.* April. Refer to Appendix 4.1 of this EIR.

threshold, as shown in Table 4-13. In addition, unmitigated construction-related fugitive dust emissions would be significant without implementation of BAAQMD best management practices (BMPs) for construction fugitive dust control. Therefore, the Project Variant would conflict with the goals of the Clean Air Plan. This would be considered a ***potentially significant*** impact. To reduce Project Variant criteria pollutant emissions, Project Mitigation Measures AQ-1.1, AQ-1.2, and AQ-1.3, included as part of the Proposed Project, would be implemented.

With implementation of Project Mitigation Measures AQ-1.1, AQ-1.2, and AQ-1.3, criteria pollutant emissions would be reduced below applicable BAAQMD thresholds, as shown in Table 4-15. Therefore, the Project Variant would reduce potentially significant impacts related to conflicts with air quality plans to ***less than significant with mitigation***.

Impact AQ-2: Cumulatively Considerable Net Increase in Criteria Pollutants. The Project Variant would not result in a cumulative net increase in a criteria pollutant for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard. (LTS/M)

Construction

Construction of the Project Variant would result in emissions that would not exceed BAAQMD's recommended thresholds for criteria pollutants, as shown in Table 4-10. Therefore, construction activities would not result in a cumulatively considerable net increase in criteria air pollutants for which the San Francisco Bay Area Air Basin (SFBAAB) is designated as a nonattainment area with respect to federal or State ambient air quality standards. This impact would be ***less than significant***.

BAAQMD's CEQA Guidelines consider fugitive dust impacts to be less than significant with application of BMPs. The BMPs require applicants for future development projects to comply with BAAQMD's basic control measures for reducing construction emissions of particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}). If BMPs are not implemented, dust impacts would be ***potentially significant***. Therefore, BMPs would be required and implemented to reduce impacts from construction-related fugitive dust emissions, including any cumulative impacts. With implementation of Project Mitigation Measure AQ-1.3, included as part of the Proposed Project, fugitive dust emissions would be reduced, and the impact would be ***less than significant with mitigation***.[14]

[14] Subsequent to preparation of this analysis, the proposed emergency water reservoir increased in size from approximately 2 million gallons to up to 3 million gallons and an emergency well was added to the Project Variant, which resulted in an increase in the amount of exported soil and haul trips during construction compared to the scenario that was modeled. Table 4-6 reflects the updated estimates of soil export and haul trips. As shown in Table 4-6, even with the increase in reservoir size and addition of an emergency well, the Project Variant would require less soil export than the Proposed Project and would result in a minor increase in haul trips compared to the Proposed Project. As discussed in Section 3.4, *Air Quality*, the Proposed Project's construction impacts related to air quality would be less than significant. Thus, the increase in reservoir size and the addition of a well would not result in any change to the level of impact of the Project Variant.

Table 4-10. Estimated Average Daily Construction Emissions of Criteria Pollutants and Precursors Under the Project Variant

	Average Daily Emissions (lb/day)[a]			
Construction Year	**ROG**	**NO_X**	**PM_{10} Exhaust**	**$PM_{2.5}$ Exhaust**
2025	0.7	7.1	0.3	0.2
2026	1.8	20	0.9	0.5
2027	2.0	10	0.5	0.3
2028	1.9	10	0.5	0.3
2029	23	6.4	0.3	0.2
2030	46	2.3	0.1	< 0.1
2031	2.2	5.7	0.3	0.1
2032	30	4.0	0.2	0.1
2033	10	1.5	0.1	< 0.1
Maximum Average Daily Emissions	**46**	**20**	**0.9**	**0.5**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant.* April. Accessed: April 4, 2024. Table 14V.

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

a. BAAQMD construction thresholds for PM_{10} and $PM_{2.5}$ evaluate only exhaust emissions. Fugitive dust emissions would be controlled using BMPs.

Operation

Estimated unmitigated daily operational emissions under the Project Variant for the existing year (2022) and the full-buildout year (2033), as well as net daily operational emissions, are summarized in Tables 4-11, 4-12, and 4-13. As shown in Table 4-13, operation of the Project Variant would not generate levels of NO_X or particulate matter that would exceed BAAQMD-recommended mass emission thresholds. However, operation of the Project Variant would generate 68 pounds of unmitigated ROG emissions per day, as shown in Table 4-13, which exceeds BAAQMD's ROG threshold. Due to the increase in the number of residential units, the ROG emissions under the Project Variant are higher compared to the Proposed Project, which would generate 56 pounds of ROG per day before mitigation. ROG emissions from laboratories and consumer products constitute the majority of operational ROG emissions associated with the Project Variant. Therefore, unmitigated operation of the Project Variant would result in a cumulatively considerable net increase in criteria air pollutants for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards. This impact would be ***potentially significant***.

Table 4-11. Estimated Unmitigated Average Daily Operational Emissions, Existing Conditions/Baseline (2022)

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Mobile	1.2	1.6	1.3	0.2
Laboratories	11	N/A	N/A	N/A
Emergency Generators	0.1	1.7	0.1	0.1
Natural Gas Use – PG&E	< 0.1	< 0.1	< 0.1	< 0.1
Natural Gas Use – Cogen	2.6	124	8.3	8.3
Natural Gas Use – Buildings P, S, & T	-0.1	-1.9	-0.1	-0.1
Landscaping	6.3	0.4	0.1	0.1
Architectural Coatings	3.3	N/A	N/A	N/A
Consumer Products	20	N/A	N/A	N/A
Total	**44**	**126**	**10**	**8.5**

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant. April.* Accessed: April 4, 2024. Table 41V.

Notes:

Values may not total due to rounding.

cogen = cogeneration plant; lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas; PG&E = Pacific Gas and Electric Company

a. BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

Table 4-12. Estimated Unmitigated Average Daily Operational Emissions, Full-Buildout Conditions (2031) Under the Project Variant

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Mobile	18	16	28	5.1
Laboratories	28	N/A	N/A	N/A
Emergency Generators	0.5	4.4	0.2	0.2
Landscaping	16	1.0	0.2	0.2
Architectural Coatings	11	N/A	N/A	N/A
Consumer Products	39	N/A	N/A	N/A
Total	**113**	**21**	**28**	**5.4**

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant. April.* Accessed: April 4, 2024. Table 41V.

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

a. BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

Table 4-13. Estimated Net Unmitigated Average Daily Operational Emissions (Full-Buildout Emissions minus Baseline Emissions) Under the Project Variant

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Full Buildout Conditions (2033 [Table 4-11])	113	21	28	5.4
Existing Conditions (2022 [Table 4-8])	44	126	10	8.5
Total Net Operational Emissions	**68**	**-105**	**18**	**-3.1**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	Yes	No	No	No

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant. April.* Accessed: April 4, 2024. Table 41V.

Notes:

Values may not total due to rounding.

lb/day = pounds per day; NOX = oxides of nitrogen; PM10 = particulate matter with an aerodynamic diameter of 10 microns or less; PM2.5 = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

a. BAAQMD operational thresholds for PM10 and PM2.5 include both fugitive dust and exhaust emissions.

Implementation of Project Mitigation Measures AQ-1.1 and AQ-1.2 would decrease the Project Variant's full-buildout operational ROG emissions, as shown in Tables 4-14 and 4-15. Project Mitigation Measure AQ-1.1 requires the Project Sponsor to use all-electric landscaping equipment, and Project Mitigation Measure AQ-1.2 requires the Project Sponsor to use architectural coatings with a low volatile-organic-compound (VOC) content in all buildings. Therefore, mitigated operation of the Project Variant would not result in a cumulatively considerable net increase in any criteria air pollutant for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards. Implementation of these mitigation measures would reduce potentially significant impacts to ***less than significant with mitigation***.

Table 4-14. Estimated Mitigated Average Daily Operational Emissions, Full-Buildout Conditions (2033) Under the Project Variant

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Mobile	18	16	28	5.1
Laboratories	28	N/A	N/A	N/A
Emergency Generators	0.5	4.4	0.2	0.2
Landscaping	N/A	N/A	N/A	N/A
Architectural Coatings	4.3	N/A	N/A	N/A
Consumer Products	39	N/A	N/A	N/A
Total	**90**	**20**	**28**	**5.2**

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant. April.* Accessed: April 4, 2024. Table 42V.

Notes:

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

a. BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

Table 4-15. Estimated Net Mitigated Average Daily Operational Emissions Under the Project Variant

	Average Daily Emissions (lb/day)			
Emissions Source	**ROG**	**NO_X**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Full Buildout Conditions (2033)	90	20	28	5.2
Existing Conditions (2022)	44	126	10	8.5
Total Net Operational Emissions	**46**	**-106**	**18**	**-3.3**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**No**	**No**	**No**	**No**

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant. April.* Accessed: April 4, 2024. Table 42V.

Notes:

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

a. BAAQMD operational thresholds for PM_{10} and $PM_{2.5}$ include both fugitive dust and exhaust emissions.

Construction and Operations

Construction is expected to occur concurrently with operations during some years, starting in 2031, because the Project Variant would be constructed over a period of several years. In years when construction is scheduled to coincide with operations, construction emissions were combined with operational emissions. This analysis conservatively assumed that the buildings constructed in each year of the construction program would be occupied and fully operational upon completion. This is conservative because occupancy and operation of each phase would very likely ramp up over time. The combined construction and operational emissions were compared with average daily emissions thresholds, using the 365 days per year to average annual emissions for both construction and operations, as shown in Table 4-16 and Table 4-17.

Table 4-16. Estimated Net Unmitigated Average Daily Construction plus Operational Emissions of Criteria Pollutants and Precursors Under the Project Variant

	Average Daily Emissions (lb/day)[a]			
Construction Year	**ROG**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
2025	-44	-123	-9.5	-8.4
2026	-43	-112	-8.9	-8.2
2027	-43	-118	-9.2	-8.3
2028	-43	-119	-9.2	-8.3
2029	-28	-121	-9.3	-8.4
2030	-11	-124	-9.5	-8.5
2031	5.0	-112	1.2	-6.3
2032	35	-112	3.3	-6.0
2033	58	-103	21	-2.7
Full Buildout	68	-105	18	-3.1
Maximum Average Daily Emissions	**68**	**-103**	**21**	**-2.7**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**Yes**	**No**	**No**	**No**

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant.* April. Accessed: April 4, 2024. Table 44V.

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

a. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout.

Table 4-17. Estimated Net Mitigated Average Daily Construction plus Operational Emissions of Criteria Pollutants and Precursors Under the Project Variant

	Average Daily Emissions (lb/day)[a]			
Construction Year	**ROG**	**NO_X**	**PM_{10}**	**$PM_{2.5}$**
2025	-44	-123	-9.5	-8.4
2026	-43	-112	-8.9	-8.2
2027	-43	-118	-9.2	-8.3
2028	-43	-119	-9.2	-8.3
2029	-28	-121	-9.3	-8.4
2030	-11	-124	-9.5	-8.5
2031	-4.9	-113	1.2	-6.4
2032	23	-112	3.2	-6.0
2033	40	-103	20	-2.9
Full Buildout	46	-106	18	-3.3
Maximum Average Daily Emissions	**46**	**-103**	**20**	**-2.9**
BAAQMD Significance Threshold	54	54	82	54
Exceeds Threshold?	**No**	**No**	**No**	**No**

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant*. April. Accessed: April 4, 2024. Table 45V.

lb/day = pounds per day; NO_X = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less; ROG = reactive organic gas

a. Net new operational emissions are scaled for partial years of phased operations by the percent that each parcel is operational for each year relative to full buildout.

Unmitigated NO_X and particulate matter emissions would not exceed the applicable BAAQMD thresholds, as shown in Table 4-16. This impact would be ***less than significant***. As shown in Table 4-16, construction plus operation of the Project Variant would result in unmitigated emissions that would exceed BAAQMD's recommended threshold for ROG. This impact would be ***potentially significant***. As shown in Table 4-17, after implementation of Project Mitigation Measures AQ-1.1 and AQ-1.2, construction plus net operational emissions would be below all applicable BAAQMD thresholds. Therefore, construction plus operation of the Project Variant would not result in a cumulatively considerable net increase in any criteria air pollutant for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards. Implementation of these mitigation measures would reduce potentially significant impacts to ***less than significant with mitigation***.

Impact AQ-3: Expose Sensitive Receptors to Substantial Pollutant Concentrations. The Project Variant would not expose sensitive receptors to substantial pollutant concentrations. (LTS)

Local Carbon Monoxide Hot Spots

Under the Project Variant, maximum traffic volumes at intersections under all scenarios would be less than BAAQMD's recommended screening criterion for carbon monoxide (CO) of 44,000 vehicles per hour. Therefore, as with the Proposed Project, implementation of the Project Variant would not result in, or contribute to, a localized concentration of CO that would exceed the applicable National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS). The impact would be ***less than significant***. No mitigation is required.

Toxic Air Contaminants

Asbestos

Under the Project Variant, the exposure to asbestos during demolition of the existing hardscape (asphalt and concrete) and buildings on the Project Site would include the additional buildings at 201 Ravenswood Avenue. However, implementation of the Project Variant would not change environmental impacts related to exposure to asbestos emissions during construction. The impact would be less than significant.

Criteria Air Pollutants

As discussed above under Impact AQ-2, construction emissions as a result of the Project Variant would be below the BAAQMD thresholds of significance. Mitigated operational emissions as a result of the Project Variant would also be below BAAQMD thresholds of significance for all pollutants, as summarized under Impact AQ-2. Projects that do not exceed BAAQMD's thresholds would not adversely affect regional air quality or exceed the NAAQS or CAAQS. The analysis presented in Impact AQ-2 demonstrates that construction and operation of the Project Variant would not exceed BAAQMD's regional thresholds and therefore would not contribute a significant level of air pollution that could degrade regional air quality within the SFBAAB. This impact related to criteria air pollutants would be ***less than significant***. No mitigation is required.

Toxic Air Contaminants and Localized $PM_{2.5}$

Construction Plus Operations

Table 4-18 includes the maximum unmitigated health risks for sensitive receptors near the Project Site. The evaluation of cancer risk was based on a total exposure duration of 30 years. The health impacts associated with construction and operation at onsite sensitive receptors is also included. As shown in

Table 4-18. Estimated Unmitigated Project-Level Health Risk Results from Construction plus Operations Under the Project Variant

Scenario	Cancer Risk (cases per million)[a]	Non-Cancer Chronic Risk[b]	Non-Cancer Acute Risk[c]	Annual PM2.5 Concentrations (ug/m^3)[d]
Construction plus Operations (offsite)	4.8	0.01	0.06	0.22
Construction plus Operations (onsite)	3.7	0.02	0.08	0.11
BAAQMD Significance Threshold	10.0	1.0	1.0	0.3
Exceeds Threshold?	No	No	No	No

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant.* April. Accessed: April 4, 2024. Tables 54V–57V.

Notes:

µg/m^3 = micrograms per cubic meter; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less

a. Maximum cancer risk for the onsite maximally exposed individual receptor (MEIR) is associated with Scenario 2. Maximum cancer risk for the offsite MEIR is associated with Scenario 1.

b. Maximum chronic risk for the onsite MEIR is associated with Scenario 3. Maximum chronic risk for the offsite MEIR is associated with Scenario 1.

c. Maximum acute risk for the onsite MEIR is associated with Scenario 3. Maximum acute risk for the offsite MEIR is associated with Scenario 4.

d. Maximum $PM_{2.5}$ concentrations for the onsite MEIR is associated with Scenario 2. Maximum $PM_{2.5}$ concentrations for the offsite MEIR is associated with Scenario 1.

Table 4-18, the unmitigated health risk results would not exceed BAAQMD's recommended health risk thresholds for cancer risk, non-cancer hazard index, and annual $PM_{2.5}$ concentration thresholds. Therefore, impacts would be ***less than significant***.

Impact AQ-4: Other Air Emissions. The Project Variant would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. (LTS)

Similar to the Proposed Project, the Project Variant would include similar odor-generating sources for both construction and operation. Although such brief exhaust- and paint-related odors may be considered adverse, they would not be atypical of developed urban areas. Therefore, implementation of the Project Variant would not change environmental impacts related to objectionable odors. The impact would be ***less than significant***. No mitigation is required.

Impact C-AQ-1: Cumulative Air Quality Impacts. Cumulative development could result in a significant environmental impact on air quality; the Project Variant would not be a cumulatively considerable contributor to a significant environmental impact. (LTS/M)

Criteria Pollutants

The geographic context for cumulative air quality impacts with the Project Variant includes the SFBAAB. Air pollution in its nature is largely a cumulative impact. If a project exceeds the identified significance thresholds for the SFBAAB, its emissions would be a cumulatively considerable contributor to significant cumulative air quality impacts in the region and therefore considered significant under CEQA. Development of past, current, and future projects in the SFBAAB could contribute to the nonattainment of ambient air quality standards. Thus, there would be potential for cumulative impacts related to criteria pollutants.

As noted under Impact AQ-2, construction as well as construction plus operation of the Project Variant would not result in a cumulatively considerable net increase in any criteria air pollutant, except construction-related fugitive particulate matter and operational ROG, for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards. The cumulative impact for criteria pollutants other than construction-related fugitive particulate matter and operational ROG would be less than significant, while the cumulative construction-related fugitive particulate matter and operational ROG impacts would be significant. The Proposed Project's contribution to these impacts would also be cumulatively considerable because operational ROG would exceed thresholds. As explained above, not implementing BMPs for construction fugitive dust would also result in an exceedance of BAAQMD thresholds. Therefore, the Proposed Project's contribution to this significant cumulative impact would be ***cumulatively considerable***. With implementation of Mitigation Measures AQ-1.1 and AQ-1.2, the operational ROG impact would be less than significant; with implementation of Mitigation Measure AQ-1.3, the construction fugitive particulate matter impact would be less than significant. Therefore, the Project Variant would not result in a cumulatively considerable net increase in any criteria air pollutant for which the SFBAAB is designated as a nonattainment area with respect to the federal or State ambient air quality standards after implementation of Mitigation Measures AQ-1.1, AQ-1.2, and AQ-1.3. Based on the analysis above, the Project Variant's contribution to cumulative impacts on criteria pollutants would be ***less than cumulatively considerable with mitigation***.

Toxic Air Contaminants and $PM_{2.5}$

Nearby toxic air contaminant (TAC) sources as well as the Project Variant's construction and operational emissions could contribute to a cumulative health risk for sensitive receptors near the Project Site. The results of the cumulative impact assessment are summarized in Tables 4-19 and 4-20. These tables show the health risk values for the Project Variant's maximally affected receptors and the health risk contributions from existing sources. The sum of the Project Variant's health risk results and the existing background health risks were compared to BAAQMD cumulative thresholds.

Table 4-19. Maximum Unmitigated Cumulative Health Risks (onsite) Under the Project Variant

Scenario	Cancer Risk (cases per million)[b]	Non-Cancer Chronic Risk[c]	Annual $PM_{2.5}$ Concentrations (ug/m^3)[d]
Stationary Sources	1.5	0.01	< 0.01
SRI Continued Operations	< 0.1	< 0.01	< 0.01
Roadways	18	0.02	0.14
Railways	6.6	< 0.01	0.03
Foreseeable Future Cumulative Development Projects[a]	N/A	N/A	N/A
Net Project	3.7	0.02	0.11
Total	**30**	**0.04**	**0.28**
BAAQMD Significance Threshold	100	10	0.8
Exceeds Threshold?	**No**	**No**	**No**

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant.* April. Accessed: April 4, 2024. Table 59V.

Note: Values may not total due to rounding.

$\mu g/m^3$ = micrograms per cubic meter; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less

Scenario	Cancer Risk (cases per million)[b]	Non-Cancer Chronic Risk[c]	Annual $PM_{2.5}$ Concentrations (ug/m^3)[d]

a. A list of foreseeable future development was provided by the city of Menlo Park. No foreseeable future developments were within a 1,000-foot buffer from the Project Site; therefore, there would be no health risk impacts from future development.

b. Maximum cancer risk for the onsite maximally exposed individual receptor (MEIR) is associated with a Phase 1 resident.

c. Maximum chronic risk for the onsite MEIR is associated with a Phase 2 worker.

d. Maximum $PM_{2.5}$ concentrations for the onsite MEIR is associated with a Phase 1 resident.

Table 4-20. Maximum Unmitigated Cumulative Health Risks (offsite) Under the Project Variant

Scenario	Cancer Risk (cases per million)[b]	Non-Cancer Chronic Risk[c]	Annual $PM_{2.5}$ Concentrations (ug/m^3)[d]
Stationary Sources	0.3	0.01	0
SRI Continued Operations	0.1	< 0.01	< 0.01
Roadways	11	0.02	0.13
Railways	32	< 0.01	0.02
Foreseeable Future Cumulative Development Projects[a]	N/A	N/A	N/A
Net Project	4.8	0.01	0.12
Total	**48**	**0.04**	**0.27**
BAAQMD Significance Threshold	100	10	0.8
Exceeds Threshold?	**No**	**No**	**No**

Sources: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant.* April. Accessed: April 4, 2024. Table 59V.

Note: Values may not total due to rounding.

$\mu g/m^3$ = micrograms per cubic meter; $PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 or less

a. A list of foreseeable future development was provided by the city of Menlo Park. No foreseeable future developments were within a 1,000-foot buffer from the Project Site; therefore, there would be no health risk impacts from future development.

b. Maximum cancer risk for the offsite maximally exposed individual receptor (MEIR) is associated with an offsite daycare receptor.

c. Maximum chronic risk for the offsite MEIR is associated with a worker.

d. Maximum $PM_{2.5}$ concentrations for the offsite MEIR is associated with a worker.

As shown in Tables 4-19 and 4-20, the combined level of health risk from the Project Variant and other local sources of TACs would be less than all BAAQMD-recommended cumulative health risk thresholds. Therefore, the level of health risk associated with TACs emitted by the Project Variant in combination with the level of health risk associated with other nearby TAC sources would not result in a significant cumulative local health risk at any nearby sensitive land uses. The cumulative impact related to TACs and $PM_{2.5}$ would be ***less than significant***. No mitigation is required.

Energy

Relevant technical documentation prepared for the Project Variant and used in this analysis includes the *Assessment of Energy Use for the Parkline Project, Menlo Park, CA*;[15] *Assessment of Energy Use for the Increased Development Variant—Parkline Menlo Park, Menlo Park, CA*;[16] and model assumptions and inputs for construction and operational energy use.

Impact EN-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources. The Project Variant would not result in significant environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. (LTS)

Construction

Under the Project Variant, construction-related energy usage would increase slightly due to the increase in dwelling units and the underground emergency water reservoir, which would require more construction activity overall. Table 4-21 provides an estimate of the energy consumption of the Project Variant during construction. As shown, construction of the Project Variant would consume 101,875 million British thermal units (MMBtu) over the approximately 8.5-year construction period. However, the Project Variant would not change environmental impacts related to the wasteful, inefficient, or unnecessary consumption of energy resources. Similar to the Proposed Project, construction under the Project Variant would utilize construction equipment with higher-tier engines (Tier 4) or electric motors. In addition, throughout construction of the Project Variant, waste would be source separated and tracked to divert it away from landfills, with a target of recycling more than 80 percent of construction and demolition waste. Therefore, construction would result in a ***less-than significant*** energy impact.[17] No mitigation is required.

[15] Ramboll. 2024. *Assessment of Energy Use for the Parkline Project, Menlo Park, CA*. January 26. Refer to Appendix 3.5-1 of this EIR.

[16] Ramboll. 2024. *Assessment of Energy Use for the Increased Development Variant—Parkline Menlo Park, Menlo Park, CA*. April 1. Refer to Appendix 4.2 of this EIR.

[17] Subsequent to preparation of this analysis, the proposed emergency water reservoir increased in size from approximately 2 million gallons to up to 3 million gallons and an emergency well was added to the Project Variant, which resulted in an increase in the amount of exported soil and haul trips during construction compared to the scenario that was modeled. Table 4-6 reflects the updated estimates of soil export and haul trips. As shown in Table 4-6, even with the increase in reservoir size and addition of a well, the Project Variant would require less soil export than the Proposed Project and would result in a minor increase in haul trips compared to the Proposed Project. As discussed in Section 3.5, *Energy*, the Proposed Project's construction impacts related to energy would be less than significant. Thus, the increase in reservoir size and the addition of a well would not result in any change to the level of impact of the Project Variant.

Table 4-21. Estimated Construction Energy Consumption from the Project Variant

Source		Usage (units vary)	Usage (MMBtu)
Electricity	Off-Road Construction Equipment	149	507
	Electricity Total (MWh)	**149 MWh**	**507**
Diesel	On-Road Construction Trips (gallons)	182,198	25,031
	Off-Road Construction Equipment (gallons)	368,826	50,670
	Diesel Total (gallons)	**551,024 gallons**	**75,701**
Gasoline	On-Road Construction Trips (gallons)	213,383	25,667
	Gasoline Total (gallons)	**213,383 gallons**	**25,667**
Total Project Variant Construction Energy Consumption: 101,875			

Source: Ramboll. 2024. *Assessment of Energy Use for the Increased Development Variant—Parkline Menlo Park, Menlo Park, CA.* April 1.
MWh = megawatt hours; MMBtu = million British thermal units

Operation

Buildout of the Project Variant would increase energy use associated with operation compared to the Proposed Project due to the greater number of residential units and the emergency water reservoir. Table 4-22 provides an estimate of the energy consumption during operation of the Project Variant. The Project Variant's net energy consumption is the difference between existing (2022) conditions at the Project Site and 2033 with-Project Variant conditions when the Project would be operational.

Table 4-22. Estimated Operational Energy Consumption of the Project Variant

Condition/Source	MMBtu/Year
Existing (2022)	
Electricity (building + water + mobile)	-10,859
Natural Gas (building)	450,956
Gasoline (mobile)	7,849
Diesel (mobile + stationary sources)	1,259
Total	449,206
Project Variant (2033)	
Electricity (building + water + mobile)	211,217
Natural Gas	0
Gasoline (mobile)	139,780
Diesel (mobile + stationary sources)	19,097
Total	370,094
Net Decrease with Proposed Project	
2033 versus Existing	-79,113
Energy per Square Foot (MMBtu/sf)	
Existing (2022)	0.33
With-Project Variant Conditions (2033)	0.17

Source: Ramboll. 2024. *Assessment of Energy Use for the Increased Development Variant—Parkline Menlo Park, Menlo Park, CA.* April 1.
Notes: Values may not total due to rounding.
MMBtu = million British thermal units; sf = square foot

As shown in Table 4-22, buildout of the Project Variant would decrease operational energy consumption on the Project Site by approximately 79,113 MMBtu per year compared with existing conditions. Similarly, energy use per square foot would decrease to 0.17 MMBtu per square foot compared with existing conditions (i.e., 0.33 MMBtu per square foot), despite the increase in overall building area. Similar to the Proposed Project, this decrease is largely attributable to the removal of the existing cogeneration plant, which currently provides the Project Site with natural gas as a source of energy, as well as the energy efficiency measures incorporated into the Project Variant. Similar to the Proposed Project, the Project Variant is anticipated to incorporate a range of Leadership in Energy and Environmental Design (LEED) certification strategies or equivalent standards across the residential area and the office/R&D area. In addition, the proposed buildings within the office/R&D area would be designed to promote occupant health through achievement of Fitwel certification. Furthermore, the Project Variant would implement a robust TDM plan like the Proposed Project and also voluntarily comply with the city's adopted Reach Code[18] and electric-vehicle (EV) charging requirements for all new buildings. Therefore, operation of the Project Variant would not change environmental impacts related to the wasteful, inefficient, or unnecessary consumption of energy resources. The impact would be ***less than significant***. No mitigation is required.

Impact EN-2: Conflict with Energy Plan. The Project Variant would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (LTS)

As discussed under Impact EN-1, the Project Variant would incorporate sustainability and transportation demand management features, which would decrease energy per square foot despite the overall increase in building area that would occur. Like the Proposed Project, the Project Variant is anticipated to incorporate a range of LEED certification strategies or equivalent standards across the residential area and the office/R&D area. In addition, the Project Variant would also include the removal of the existing cogeneration plant that provides energy in the form of natural gas to the Project Site. With the removal of the cogeneration plant, overall energy consumption would be reduced. There would be no operational natural gas usage under the Project Variant.

Similar to the Proposed Project, with incorporation of these sustainability and transportation demand management features, the Project Variant would comply with local plans that address energy efficiency to achieve the State's Renewables Portfolio Standard (RPS) mandates, including Pacific Gas and Electric Company's (PG&E's) and Peninsula Clean Energy's (PCE's) 2022 Integrated Resource Plans (IRPs) and the city's Climate Action Plan (CAP). The city's General Plan and Menlo Park Municipal Code also include goals, policies, and requirements related to energy use and energy reductions. Therefore, implementation of the Project Variant would not change environmental impacts related to a potential conflict with State or local plan for renewable energy or energy efficiency. The impact would be ***less than significant***. No mitigation is required.

[18] In 2019, the city of Menlo Park adopted local amendments to the California Building Standards Code that require electricity to be the only fuel source for new buildings (not natural gas). This ordinance (Menlo Park Municipal Code Chapter 12.16) applies only to newly constructed buildings and does not include additions or remodeled buildings. Enforcement of Menlo Park's Reach Code, which took effect January 1, 2020, is currently paused, based on the 9th Circuit Court ruling in *California Restaurant Association v. City of Berkeley* and resulting settlement agreement.

Impact C-EN-1: Cumulative Energy Impacts. Cumulative development would result in a less-than-significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Continued growth throughout PG&E's service area (which includes the larger Northern California area and PCE service area) could contribute to ongoing increases in demand for electricity and natural gas. The anticipated increases would be countered, in part, as State and local requirements related to renewable energy become more stringent and energy efficiency increase. Specifically, Senate Bill (SB) 100 obligates utilities to supply 100 percent carbon-free electricity by 2045. PG&E reached California's 2020 renewable energy goal 3 years ahead of schedule and is currently projected to meet the SB 100 goal. Similarly, other regulations, such as Pavley standards, which require 100 percent of new vehicles sold by 2035 to be zero-emission vehicles, would reduce the demand for fossil fuels. Therefore, it is anticipated that future energy users will become more efficient and less wasteful over time.

As stated above, buildout of the Project Variant would decrease operational energy consumption on the Project Site by approximately 79,113 MMBtu compared with existing conditions, even with the increase in overall building square footage. Similarly, energy use would decrease to approximately 0.17 MMBtu per square foot compared with existing conditions (i.e., 0.33 MMBtu per square foot). This is attributable to the expected energy efficiency of future buildings and vehicles, which would be subject to increasingly robust regulations over time to meet the State's renewable energy and energy efficiency mandates. The Project Variant would encourage building designs that would reduce energy consumption and promote increased energy efficiency. Because buildout under the Project Variant would not result in the wasteful, inefficient, or unnecessary consumption of energy resources and cumulative development would be subject to increasingly robust standards regarding energy efficiency, the cumulative impact would be ***less than significant.*** No mitigation is required.

Impact C-EN-2: Cumulative Conflicts with Energy Plans. Cumulative development would not conflict with or obstruct implementation of a State or local plan for renewable energy or energy efficiency and would result in a less-than-significant environmental impact; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Other development and the Project Variant would be required to comply with all adopted State and local renewable energy and energy efficiency plans and regulations. Therefore, the cumulative impact would be ***less than significant.*** No mitigation is required.

Greenhouse Gas Emissions

Impact GHG-1a: Generation of Greenhouse Gas Emissions during Construction. Construction of the Project Variant would not generate greenhouse gas emissions that may have a significant impact on the environment. (LTS)

Construction of the Project Variant would generate 7,780 metric tons of carbon dioxide equivalent ($MTCO_2e$) over the construction period (2025–2033). Similar to the Proposed Project, the Project Sponsor would comply with feasible and practical construction-related measures suggested in the 2017 scoping plan, as applicable (specifically, the measures in Appendix B to the 2017 scoping plan that would be imposed as conditions of approval on the Proposed Project), which would further reduce the level of GHGs associated with construction of the Project Variant.

The Appendix B scoping plan measures and BAAQMD-recommended BMPs outlined below would be incorporated into the Project Variant as conditions of approval, subject to review of feasibility and practicality, based on the specifics of the Project Variant, including, but not limited to, the architectural design, availability of technological advances in equipment, and general availability of construction equipment and/or materials. The list of measures below is not an exhaustive list; the city and the Project Sponsor would review the comprehensive list of potential measures in Appendix B of the scoping plan and the BAAQMD recommended BMPs and determine which measures would be feasible and practical for each specific building permit, based on analysis from the Project Sponsor. Documentation of feasible and practical measures would be required as a Project condition for each building permit through the conditional development permit.

- Instead of using fossil fuel–based generators for temporary jobsite power, grid-sourced electricity from Pacific Gas and Electric Company (PG&E) or Peninsula Clean Energy shall be used to power tools (e.g., drills, saws, welders) as well as any temporary office buildings used by construction contractors. This measure shall be required during all construction phases, except demolition, site grubbing, site grading, and the installation of electric, water, and wastewater infrastructure. This measure shall be implemented during building framing and erection for new buildings, all interior work, and the application of architectural coatings. Electrical outlets shall be designed according to PG&E's Greenbook standards and placed in accessible locations throughout the construction site. The Project Sponsor, or its primary construction contractor, shall coordinate with the utility to activate a temporary service account prior to starting construction (with the exception of demolition) to the extent feasible and practical, as determined by the city and based on an analysis by the Project Sponsor.
- Require diesel equipment fleets to be lower emitting than any current emission standard (statewide average equipment fleet tier) to the extent feasible and practical, as determined by the city and based on an analysis by the Project Sponsor.[19]
- Enforce idling time restrictions for construction vehicles.[20]
- Minimize tree removal, and mitigate indirect GHG emissions increases that occur because of vegetation removal, loss of sequestration, and soil disturbance to the extent feasible and practical, as determined by the city and based on an analysis by the Project Sponsor.[21]
- Use alternative-fuel (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet to the extent feasible and practical, as determined by the city and based on a feasibility analysis by the Project Sponsor.
- Use local building materials for at least 10 percent of all project construction to the extent feasible and practical, as determined by the city and based on a feasibility analysis by the Project Sponsor
- Recycle or reuse at least 50 percent of construction waste or demolition materials.

[19] As shown in Table 3 of Appendix 3.4-1, the diesel equipment fleet to be used for the Project Variant would satisfy this condition of approval.

[20] Compliance with the California Airborne Toxics Control Measure would satisfy this condition of approval.

[21] The Project Variant would necessitate tree removals but would comply with the city's tree replacement requirements.

Construction of the Project Variant would not generate GHG emissions that could have a significant impact on the environment. This impact would be ***less than significant***.[22] No mitigation is required.

Impact GHG-1b: Generation of GHG Emissions during Operation. Operation of the Project Variant would not generate GHG emissions that may have a significant impact on the environment. (LTS)

BAAQMD's adopted thresholds of significance for GHG are based on whether or not the Project Variant would incorporate specific design and transportation features. The Project Variant would be consistent with design elements regarding natural gas usage because the Project Variant would not support natural gas use in new buildings. The Project Variant would be consistent with respect to efficient energy usage because, as discussed above in the *Energy* section, the Project Variant would result in a reduction in energy usage compared to existing conditions. The Project Variant would be consistent with EV charging requirements because it would include EV charging infrastructure , in compliance with the Menlo Park Municipal Code. Within the residential area, the townhouses would have one EV-ready space; the multi-family buildings would have one EV-ready space per unit, 15 percent of which would have EV chargers. Approximately 15 percent of the parking spaces in the Office/R&D area would be EV ready, 10 percent of which would have EV chargers.

As noted above, for purposes of this EIR, the evaluation of the transportation-related GHG impacts of the Project Variant is based on consistency with the city's VMT threshold. As discussed above in the *Transportation* section, the Project Variant would meet the city's VMT thresholds for residential uses and would meet the city's VMT threshold for office/R&D uses. Various Project Variant features promote transportation efficiency, including its TDM plan, mix of uses, and location in an urban area rather than a remote rural area. Therefore, the Project Variant's operational GHG emissions would not constitute a considerable contribution to significant climate change impacts. This impact would be ***less than significant***. No mitigation is required. In addition, as shown in Table 4-23, the Project Variant at full buildout would result in a net reduction in operational GHG emissions compared to existing conditions.

[22] Subsequent to preparation of this analysis, the proposed emergency water reservoir increased in size from approximately 2 million gallons to up to 3 million gallons and an emergency well was added to the Project Variant, which resulted in an increase in the amount of exported soil and haul trips during construction compared to the scenario that was modeled. Table 4-6 reflects the updated estimates of soil export and haul trips. As shown in Table 4-6, even with the increase in reservoir size, the Project Variant would require less soil export than the Proposed Project and would result in a minor increase in haul trips compared to the Proposed Project. As discussed in Section 3.6, *Greenhouse Gas Emissions*, the Proposed Project's construction impacts related to GHG would be less than significant. Thus, the increase in reservoir size would not result in any change to the level impact of the Project Variant.

Table 4-23. Summary of Operational GHG Emissions ($MTCO_2e$/year) for the Project Variant

Emissions Source	Existing Conditions	Full-Buildout Conditions
Mobile	624	11,072
Laboratory	N/A	N/A
Emergency Generators	32	254
Replaced Exported Electricity Generation	-359	N/A
Electricity Use from PG&E	28	N/A
Natural Gas Use – PG&E	13	N/A
Natural Gas Use – Cogeneration Plant	24,232	N/A
Natural Gas Use – Buildings P, S, & T	-364	N/A
Water Use	65	147
Solid Waste Generation	92	1,028
Refrigerants	4.6	5.4
Landscaping	23	58
Total Greenhouse Gas Emissions ($MTCO_2e$)	**24,390**	**12,564**
Net Full-Buildout GHG Emissions ($MTCO_2e$)		**-11,826**

Source: Ramboll US Corporation. 2024. *CEQA Air Quality, Greenhouse Gas and Health Risk Assessment Analysis of the Parkline Project Increased Development Variant.* April. Accessed: April 4, 2024. Table 43V.

Notes: $MTCO_2e$ = metric tons of carbon dioxide equivalent

Impact GHG-2: Conflicts with Applicable Plans and Policies. The Project Variant would not conflict with an applicable plan, policy, or regulation, adopted for the purpose of reducing emissions of GHGs. (LTS)

Similar to the Proposed Project, the quantitative efficiency of operations associated with the Project Variant would be aligned with the statewide GHG target for 2030 mandated by SB 32 as well as the Menlo Park's adopted Reach Code, which requires onsite or offsite renewable energy generation, the use of 100 percent renewable electricity, and/or renewable energy credits and/or certified renewable energy offsets. The Menlo Park Municipal Code requires a minimum of 15 percent of the parking spaces for passenger vehicles to be EV spaces, with another 10 percent designated EVSE, thereby supporting the projected future vehicle fleet. Also, the Project Variant would result in a reduction in operational GHG emissions compared to existing conditions (see Table 4-23). In addition, the Project Variant would be consistent with Plan Bay Area 2040 and 2050, which are regional plans to reduce per-service-population VMT in the San Francisco Bay Area. Similar to the Proposed Project, the Project Variant would be consistent with Plan Bay Area 2050 Environmental Strategies EN1, EN4, EN7, EN8, and EN9.

Construction and operation of the buildings associated with the Project Variant would be consistent with all applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The buildings would meet a net-zero operational GHG threshold. The Project Variant meets the city's VMT thresholds for residential uses and would meet the city's VMT threshold for office/R&D uses. Thus, the Project Variant would be consistent with all applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions, and this impact would be ***less than significant***. No mitigation is required.

Noise

Relevant technical documentation prepared for the Project Variant and used in this analysis includes the *Parkline – Noise Technical Memorandum*.[23] All mitigation measures included as part of the Proposed Project apply to the Project Variant and are referenced in this analysis.

Impact NOI-1: Construction Noise. Construction of the Project Variant would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (SU)

In total, Project Variant construction is expected to occur over approximately 99 months, longer than the 77 months for the Proposed Project. The Project Variant would require more individual pieces of equipment than the Proposed Project for the building construction and architectural coating phases during Phase 1 of construction. The equipment numbers for Phases 2 and 3 would be the same for both. For Phase 1 building construction, the Project Variant would require one or two more of each of the following types of equipment: crane, forklift, generator set, and a tractor, loader, or backhoe. For Phase 1 architectural coatings, the Project Variant would require an additional three aerial lifts. Despite the additional equipment that would be used, the analysis of the three loudest pieces of equipment would be the same (for building construction) or similar (for architectural coatings) for both. For architectural coatings, the Proposed Project would require only two pieces of equipment (an industrial saw and aerial lift), while the Project Variant would require five pieces of equipment (an industrial saw and four aerial lifts). However, because the noise level from the industrial saw would be substantially greater than the noise level from the aerial lifts, the overall noise level for architectural coatings would be the same for both the Proposed Project and Project Variant. The additional aerial lifts would not affect the overall noise level appreciably because of the much louder noise level from the industrial saw.

The Project Variant would include an emergency water reservoir and associated groundwater well, which are not included under the Proposed Project and thus not evaluated in Section 3.7, *Noise*. Daytime and nighttime noise impacts from construction of the emergency water reservoir, and in particular the emergency well component, are evaluated below and in the *Parkline – Noise Technical Memorandum*. For all other components of the site development, there would be similarity between the Proposed Project and Project Variant's construction characteristics, in that they both would have the same three loudest pieces of construction equipment. As such, the construction analysis of the primary construction activities (e.g. demolition, site preparation, grading, building construction, paving, and architectural coatings) in Section 3.7, *Noise*, applies to both the Proposed Project and the Project Variant.

Municipal Code – Powered Equipment Limit

With respect to the powered equipment limit from the Menlo Park Municipal Code, the types of equipment would be the same for both the Proposed Project and Project Variant; thus, the noise levels in Table 3.7-8 (see Section 3.7, *Noise*) are reflective of the Project Variant. No equipment for construction of the Project Variant would exceed 85 A-weighted decibels (dBA), equivalent sound level (L_{eq}), at a distance of 50 feet, and no substantial increase in noise would occur.

[23] ICF. 2024. *Parkline – Noise Technical Memorandum*. June 13. Refer to Appendix 3.7-1 of this EIR.

Daytime Construction Noise

As described in detail in Section 3.7, *Noise*, worst-case combined noise levels at noise-sensitive uses resulting from construction of the Proposed Project were evaluated with operation of the three loudest pieces of equipment expected to be used concurrently during construction over three phases of construction and each sub-phase of construction. As noted above, the combined noise level from the three loudest pieces of equipment is representative of both the Proposed Project and the Project Variant; thus, the construction noise level results presented in Tables 3.7-9 through 3.7-11 in Section 3.7, *Noise*, are applicable to the Project Variant. For the emergency reservoir, particularly the groundwater well component, the daytime construction noise levels from construction would be at the lower end of the range relative to other construction phases. Thus, for the Project Variant, worst-case noise is represented by other phases (i.e. demolition, paving) and not the construction of the emergency well. For more detail on the noise levels from the Project Variant by distance, including the emergency well, refer to the *Parkline – Noise Technical Memorandum*, which is included in Appendix 3.7-1 of this EIR.

At the worst-case distance, the receptors closest to construction of the Project Variant (i.e., within the Linfield Oaks and Classics of Burgess Park neighborhoods) would experience construction noise for only a short time (e.g., only 3 or 4 days.) Most construction activities would occur at a greater distance. The noise levels shown in Tables 3.7-9 through 3.7-11 in Section 3.7, *Noise*, represent a conservative analysis. The time needed for activities occurring 15 feet away represents a small fraction of the total time for construction of the Project Variant. Nevertheless, because construction would result in a temporary noise level greater than 10 decibels (dB) relative to the existing noise level, this would be a ***potentially significant impact***.

Nighttime and Early-Morning Construction Noise

As with the Proposed Project, general working hours would be from 6:00 a.m. to 6:00 p.m. weekdays, with concrete pours anticipated to start as early as 6:00 a.m. The equipment used for concrete pours (concrete mixer truck and pump) would be used for both the Proposed Project and the Project Variant; thus, the construction noise level results presented in Table 3.7-12 in Section 3.7, *Noise*, are applicable to the Project Variant. Additionally, the Project Variant would require 24-hour construction activity for 10 days during construction of the emergency well at the emergency water reservoir, which would require a generator, an air compressor, and a drill rig. During the nighttime hours, construction noise would have a greater potential to disturb noise-sensitive land uses. Construction of the emergency water reservoir would occur during Phase 1 of construction and would thus not affect future residences or other onsite sensitive land uses. However, existing noise-sensitive land uses, such as the homes north of Ravenswood Avenue, would be affected by the nighttime construction activity. The exact location of the emergency well is not yet known; however, if it is conservatively assumed to be located at the boundary of the Project Site, nighttime emergency well construction activity could occur as close as 60 feet from existing residences north of Ravenswood Avenue. At 60 feet, nighttime noise would be as loud as 80 dBA L_{eq}. For more detail on the noise levels from the Project Variant by distance, please refer to the *Parkline – Noise Technical Memorandum*, which is included in Appendix 3.7-1 of this EIR.

As noted for the Proposed Project in Section 3.7, *Noise*, the noise levels indicated in Table 3.7-12 in Section 3.7 are greater than the measured noise levels shown in Table 3.7-3 in Section 3.7, which range from 49.6 to 52.8 dBA L_{eq} during nighttime hours; nighttime hours are used as a proxy for early-morning hours. During emergency well construction, which is the only component of the emergency water reservoir system that would be constructed outside of the typical construction hours in Menlo Park of 8:00 a.m. to 6:00 p.m., nighttime noise of 80 dBA L_{eq} would also exceed the existing noise levels during nighttime hours and the

nighttime noise limits. The nighttime noise would affect noise-sensitive land uses near the emergency water reservoir (i.e., residences north of Ravenswood Avenue, near Middlefield Road). Because the noise limits of 50 dBA L_{eq} and 60 dBA L_{eq} would be exceeded, this is a ***potentially significant impact***.

Construction Noise – Haul Trucks

Like the Proposed Project, the Project Variant would involve the use of haul trucks to move excavated material and deliver materials to the Project Site. Based on the data provided by the Project Sponsor, up to 177 daily haul truck trips could occur during grading for Phase 1. The same route assumed for the Proposed Project is also assumed for the Project Variant (i.e. Willow Road and Middlefield Road). Table 4-24 shows estimated traffic noise levels along the roadway segments for the existing year and for the existing year with haul truck trips during construction.

Based on these results, noise increases from haul truck activity would not result in an increase of 3 dB at any roadways used for hauling. The maximum increase in noise would be 2.3 dB at Ravenswood Avenue, west of Middlefield Road. No substantial temporary increase in noise would occur, and this impact would be ***less than significant***.[24] No mitigation is required.

Table 4-24. Project Variant Construction Haul Truck Noise Levels

Roadway	Segment	Existing Traffic Noise Levels (dBA L_{dn})	Existing plus Construction Truck Noise Levels (dBA L_{dn})	Noise Increase (dB)
Willow Road	East of Bay Road	62.0	63.2	1.2
Willow Road	Between Bay Road and Durham Street	60.0	61.8	1.8
Willow Road	Between Durham Street and Coleman Avenue	59.8	61.7	1.9
Willow Road	Between Coleman Avenue and Gilbert Avenue	59.3	61.3	2.1
Willow Road	Between Gilbert Avenue and Middlefield Road	59.3	61.4	2.0
Middlefield Road	Between Willow Road and Seminary Drive	59.5	61.5	2.0
Middlefield Road	Between Seminary Drive and Ringwood Avenue	60.8	62.6	1.8
Middlefield Road	Between Ringwood Avenue and Ravenswood Avenue	61.9	63.3	1.4
Ravenswood Avenue	West of Middlefield Road	58.8	61.1	2.3

dBA L_{dn} = A-weighted decibels, day-night average sound level; dB = decibel

[24] Subsequent to preparation of this analysis, the proposed emergency water reservoir increased in size from approximately 2 million gallons to up to 3 million gallons and a well was added, which resulted in an increase in the amount of exported soil and haul trips during construction compared to the scenario that was modeled. Table 4-6 reflects the updated estimates of soil export and haul trips. As shown in Table 4-6, even with the increase in reservoir size and addition of a well, the Project Variant would still require less soil export and fewer haul trips than the Proposed Project. As discussed in Section 3.7, *Noise*, the Proposed Project's construction impacts related to noise would be less than significant. Thus, the increase in reservoir size and the addition of a well would not result in any change to the level of impact of the Project Variant.

Conclusion

Unlike the Proposed Project, the Project Variant would include an emergency well. A construction noise reduction plan, per Mitigation Measure NOI-1.3 (similar to Mitigation Measure NOI-1.1 for the Proposed Project), would be needed to reduce the noise levels from construction activities for the Project Variant; however, such a plan may not be able to ensure that noise would be below the applicable thresholds in all circumstances. Mitigation Measure NOI-1.1 would apply only to the Proposed Project, and Mitigation Measure NOI-1.3 would apply only to the Project Variant. As with the Proposed Project, implementation of Mitigation Measure NOI-1.2 during Project Variant construction would reduce noise by requiring a noise barrier. However, these mitigation measures may not be able to ensure that noise would be below the applicable thresholds in all circumstances. The construction noise reduction plan and noise barrier would reduce noise, but noise levels could temporarily be as high as 97 dBA L_{eq}, which, even with measures to reduce noise, would very likely still result in a substantial temporary increase in noise. Although the substantial increase in noise would be temporary, the increase could nevertheless adversely affect surrounding land uses that are sensitive to noise, particularly during construction activities that occur in the nighttime and early morning hours. Impacts under the Project Variant related to early-morning and daytime construction noise would be ***significant and unavoidable with mitigation***.

NOI-1.3: Implement Noise Reduction Plan to Reduce Construction Noise (Project Variant)

Prior to issuance of any demolition, grading, and/or building permits for construction of the Proposed Project, the Project Sponsor and/or contractor(s) shall (i) develop a construction noise control plan to reduce noise levels and demonstrate how the Proposed Project will comply with Menlo Park Municipal Code daytime (i.e., during non-exempt hours) and nighttime noise standards to the extent feasible and practical, subject to review and determination by the Community Development Department, and (ii) provide a note on all development plans, stating that, during ongoing grading, demolition, and construction, the Project Sponsor shall be responsible for requiring contractors to implement measures to limit construction-related noise, as set forth in the plan and in this mitigation measure (NOI-1.3). The plan shall also include measures to reduce noise levels such that a 10 dB increase over the ambient noise level does not occur at nearby noise-sensitive land uses to the extent feasible and practical, as determined by the city of Menlo Park. For concrete pouring occurring during early-morning hours, the closest distance that equipment for concrete pouring shall operate to noise-sensitive land uses is 100 feet, which applies to residential properties and the church property on the north side of Ravenswood Avenue. Equipment for concrete pouring shall operate no closer than 200 feet from the property line of residential properties in the Classics of Burgess Park or Linfield Oaks neighborhoods. These distances are based on the anticipated locations for the concrete pouring activities.

The plan shall demonstrate that, to the extent feasible and practical, noise from concrete pouring activities and emergency well construction that occur overnight and between 6:00 a.m. and 8:00 a.m. will comply with the applicable city of Menlo Park noise limit of 50 dBA from 10:00 p.m. to 7:00 a.m. or 60 dBA from 7:00 a.m. to 10:00 p.m. at the nearest existing residential or noise-sensitive land use. The plan shall also demonstrate that, to the extent feasible and practical, as determined by the city, noise from individual pieces of equipment proposed for use will not exceed the limit for powered equipment (i.e., 85 dBA L_{eq} at 50 feet) and combined noise from construction activities during all hours will not result in a 10 dB or greater increase beyond the ambient noise level at the nearest noise-sensitive land uses. Activities that would produce noise above applicable daytime or nighttime limits shall be scheduled only during normal daytime construction hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday). If it is determined that a particular piece of equipment will not meet the

requirements of this mitigation measure, that equipment shall not be used outside normal daytime construction hours (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday). The plan shall be approved by the city prior to the issuance of building permits to confirm the precise noise minimization strategies that will be implemented and document the strategies that will be employed to the extent feasible and practical.

The measures to reduce noise from construction activity may include, but are not limited to, the following:

- Require all construction equipment to be equipped with mufflers and sound control devices (e.g., intake silencers, ducts, engine enclosures, acoustically attenuating shields, noise shrouds) that are in good condition (i.e., at least as effective as those originally provided by the manufacturer) and appropriate for the equipment.
- Maintain all construction equipment to minimize noise emissions.
- Locate construction equipment as far as feasible from adjacent or nearby noise-sensitive receptors.
- Stockpiling locations shall be as far as feasible from adjacent or nearby noise-sensitive receptors.
- Require all stationary equipment to be located so as to maintain the greatest possible distance from nearby existing buildings, where feasible and practical.
- Require stationary noise sources associated with construction (e.g., generators and compressors) in proximity to noise-sensitive land uses to be muffled and/or enclosed within temporary enclosures and shielded by barriers, to the extent feasible and practical.
- Install noise-reducing sound walls or fencing (e.g., temporary fencing with sound blankets) around noise-generating equipment, to the extent feasible and practical, where no perimeter wall is provided. See also Mitigation Measure NOI-1.2.
- Prohibit the idling of inactive construction equipment for prolonged periods (i.e., more than 2 minutes) during early-morning hours.
- Provide advance notification by mailing/delivering notices to surrounding land uses regarding the construction schedule, including the various types of activities that would be occurring throughout the duration of the construction period.
- Provide the name and telephone number of an onsite construction liaison through onsite signage and the notices mailed/delivered to surrounding land uses. If construction noise is found to be intrusive to the community (i.e., if complaints are received), the construction liaison shall take reasonable efforts to investigate the source of the noise and require that reasonable measures be implemented to correct the problem.
- Use electric motors rather than gasoline- or diesel-powered engines to avoid noise associated with compressed air exhaust from pneumatically powered tools, to the extent feasible and practical (as determined by the city). Where the use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust could be used; this muffler can lower noise levels from the exhaust by about 10 dB. External jackets on the tools themselves could be used, which could achieve a reduction of 5 dB.
- Limit the use of public address systems.
- Limit construction traffic to the haul routes established by the city.

The Project Sponsor and/or the contractor(s) shall obtain a permit to complete work outside the normal daytime construction hours outlined in the Menlo Park Municipal Code (i.e., 8:00 a.m. to 6:00 p.m. Monday through Friday); this may be incorporated into the conditional development permit for the Proposed Project. Furthermore, the plan shall require verification that construction activities will be conducted at adequate distances or otherwise shielded with sound barriers, as determined through analysis, from noise-sensitive receptors when occurring outside normal daytime construction hours; compliance with the Menlo Park Municipal Code will be verified through measurement.

Impact NOI-2: Operational Noise. Operation of the Project Variant would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (LTS)

Emergency Generators

The Project Variant would include 13 emergency generators, which would be located throughout the Project Site, with power ratings ranging from 200 kilowatts (kW) to 1,500 kW. The emergency generators would result in audible noise during periodic testing, which, in general, would occur at each generator for 30 minutes every month. Generator noise levels vary, depending on the power rating of the generator. At a reference distance of 23 feet, noise levels could be up to 76 dBA for a 600 kW generator. Appendix 3.7-1 of this EIR provides more information, including the inventory of generators for the buildings on the Project Site, the power rating of the generators, the nearest land uses, the corresponding ambient noise level at the nearest land uses, and the estimated noise level from generator operation. The Project Variant would include the same number of emergency generators as the Proposed Project; thus, the potential for the Project Variant to generate noise from emergency generators would be similar to that of the Proposed Project.

Although there are some instances in which noise-sensitive land uses near future residential buildings could experience generator noise that would be above 60 dBA, in many cases, buildings associated with the Project Variant, as well as other buildings, would provide shielding and block the line of sight between the generator and the nearest noise-sensitive land use. Therefore, it is very likely that noise levels would be lower because of the shielding provided by intervening buildings.

Like the Proposed Project, noise from the testing of generators could exceed the city's threshold of 60 dBA at the nearest sensitive land uses without further design considerations. However, the Project Sponsor would be required to adhere to Menlo Park Municipal Code noise limits when operating the generators. Such adherence would be a required condition of approval to construct the Project Variant. Therefore, noise from the generators would not be allowed to exceed 60 dBA at noise-sensitive land uses. Furthermore, the Project Sponsor would be required to provide evidence to the city that the equipment on the site would be in compliance with Menlo Park Municipal Code noise limits; therefore, to reduce noise levels even further, additional design features for the generators would be needed, after taking site-specific conditions into account (e.g., shielding from walls and buildings, ground attenuation). As such, the required condition of approval to construct the Project Variant would ensure that noise from emergency generator testing would be in compliance with the noise limits outlined in Chapter 8.06 of the Menlo Park Municipal Code. Operational noise impacts related to emergency generators would be ***less than significant***. No mitigation is required.

Mechanical Equipment

The Project Variant would include both residential and office buildings, which would require various types of heating, ventilation, and air-conditioning (HVAC) equipment for climate control. Like the Proposed Project, the equipment is anticipated to include air-handling units, exhaust fans, hot-water pumps, battery energy storage systems, photovoltaic arrays, utility transformers, variable-refrigerant-flow (VRF) equipment, and dedicated outdoor air-system equipment.

Overall, the Proposed Project and Project Variant would require similar types of mechanical equipment in similar numbers. There may be some differences at the residential buildings because the Proposed Project would have more individual buildings, with each requiring its own equipment. In addition, townhomes for the Proposed Project would be expected to require more mechanical equipment than the TH1 townhomes for the Project Variant. The Project Variant would also result in more new equipment in the northeastern portion of the site than the Proposed Project. This equipment would be closer to the homes north of Ravenswood Avenue (approximately 100 feet away). The equipment associated with the emergency water reservoir for the Project Variant is another difference relative to the Proposed Project, as discussed separately below.

Section 3.7, *Noise*, and Appendix 3.7-1 provide additional information regarding estimated noise levels for each type of equipment to be used at the Project Site and equipment noise levels. Because equipment would be distributed throughout the Project Site, many land uses, both within and external to the site, could be affected by noise from the equipment. The shortest distance between equipment at the Project Site and offsite sensitive land uses is expected to be approximately 50 feet, which is the distance between TH1 townhomes and the single-family houses in the Classics of Burgess Park neighborhood. This estimate is approximate, however, because the location of the equipment has not been precisely determined and also conservative because the actual equipment is not likely to be placed at the closest possible distance between the buildings.

The Project Variant would include an emergency reservoir where equipment unique from the rest of the noise-generating equipment would be present, such as equipment for a pumping station. Pumps can produce noise levels of approximately 78 dBA at a distance of 50 feet.[25] There would be a future noise-sensitive land use approximately 100 feet from the pumping equipment (TH2 townhomes); this would be the shortest distance between the pumping equipment and any noise-sensitive land use (offsite or onsite). At 100 feet, the estimate of 78 dBA at 50 feet is equal to approximately 72 dBA but does not account for any shielding, such as a building enclosure, which would very likely be constructed around the pumping station. In addition, the pumping station would operate only intermittently.

Stationary noise sources are regulated by Chapter 8.06 of the Menlo Park Municipal Code, which limits daytime noise levels to 60 dBA and nighttime noise levels to 50 dBA. Noise levels from rooftop equipment are limited to 50 dBA at 50 feet. As noted above in the discussion of emergency generators, the Project Sponsor would be required to adhere to the Menlo Park Municipal Code noise limits when operating equipment. Such adherence would be a required condition of approval to construct the Proposed Project; therefore, noise from stationary equipment would not be allowed to exceed the 60 dBA or 50 dBA limits at noise-sensitive land uses. As such, the required condition of approval to construct the Project Variant would ensure that noise from mechanical equipment would be in compliance with the noise limits outlined in Chapter 8.06 of the Menlo Park Municipal Code. Operational noise impacts related to other mechanical equipment would be ***less than significant***. No mitigation is required.

[25] Federal Highway Administration. 2006. *FHWA Roadway Construction Noise Model User's Guide*. FHWA-HEP-05-054. January. Available: https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnm.pdf.

Operational Traffic Noise

The Project Variant would result in increased traffic volumes on existing roadways in the area because new residences would be added to the Project Site. Traffic noise levels have been estimated for the same three scenarios included in the Proposed Project: existing year, background year, and cumulative year. For the Project Variant's background-year and cumulative-year conditions, two sub-scenarios were analyzed: with Project Variant and no Project Variant. The difference in noise between the no-Project Variant and with-Project Variant scenarios represents the Proposed Variant's incremental contribution to noise levels in the area. Table 4-25 shows the results of the noise modeling analysis for evaluated roadway segments in the background year.

Table 4-25. Project-Level Traffic Noise Impacts for the Project Variant

Roadway Segment	Background No-Project Variant (L_{dn})	Background with Project Variant (L_{dn})	Increase (dB)	3 dB or Greater Project Variant-Related Increase[a]
Project Variant				
Middlefield Road north of Willow Road	60.2	61.4	1.2	No
Willow Road east of Coleman Avenue	60.4	61.2	0.8	No
Willow Road east of Gilbert Avenue	59.9	60.8	0.9	No
Willow Road east of Middlefield Road	60.5	61.3	0.8	No
Willow Road east of Durham Street	60.6	61.4	0.8	No
Ravenswood Avenue east of Project Driveway B1 East	57.7	58.6	0.9	No
Ravenswood Avenue east of Project Driveway B1 West	57.7	58.7	1.0	No
Ravenswood Avenue east of Pine Street	58.1	59.3	1.2	No
Ravenswood Avenue between Laurel Street and Pine Street	58.3	59.5	1.1	No
Middlefield Road between Ravenswood Avenue and Ringwood Avenue	63.0	63.7	0.8	No
Middlefield Road between Ringwood Avenue and Seminary Drive	62.0	62.9	0.9	No
Middlefield Road south of Seminary Drive	61.6	62.7	1.0	No
Bay Road east of Marsh Road	55.8	55.9	0.1	No
Pine Street south of Ravenswood Avenue	46.0	46.0	0.0	No
Willow Road west of Gilbert Avenue	59.8	60.6	0.8	No
D Street west of Middlefield Road	**48.9**	**56.2**	**7.3**	**Yes**
Seminary Drive west of Middlefield Road	**45.3**	**53.1**	**7.8**	**Yes**
Ravenswood Avenue west of Project Driveway B1 East	58.9	59.9	1.0	No
Ravenswood Avenue west of Project Driveway B1 West	58.9	60.1	1.2	No
Ravenswood Avenue west of Pine Street	58.9	60.1	1.2	No
Ravenswood Avenue west of Laurel Street	59.3	60.4	1.1	No

Notes:

a. A change of 3 dB or less in traffic noise levels would not constitute a significant impact because such a change is considered just noticeable. A change of more than 3 dB may be significant, depending on the existing noise levels.

L_{dn} = day-night average sound level; dB = decibel

In areas where the background and resulting noise levels (i.e., background with Project Variant) would not exceed the "normally acceptable" land use compatibility standard, an increase of more than 5 dB is considered a significant traffic noise increase. In areas where the background and background with-Project noise levels would exceed the "normally acceptable" level, based on the land use compatibility chart, a 3 dB or larger increase from baseline to baseline plus-Project conditions is considered a significant traffic noise increase. An exceedance of the 3 dB or 5 dB thresholds may not constitute a significant impact in certain circumstances, such as in areas where there are no noise-sensitive land uses as well as areas where the applicable compatibility standard has not been exceeded. As shown in Table 4-25, a 3 dB increase, or greater, would occur at the following segments, indicating additional analysis is warranted:

- D Street west of Middlefield Road, and
- Seminary Drive west of Middlefield Road.

At D Street west of Middlefield Road and at Seminary Drive west of Middlefield Road, the background with-Project noise level would be less than the compatibility standard for all uses in Menlo Park; however, the increase in noise of 7.3 and 7.8 dB, respectively, would be greater than the 5 dB threshold. It should be noted that these roadway segments are at the driveway entry points to the Project Site; there are currently no noise-sensitive land uses adjacent to these segments. As such, the increase at these segments is likely to be less of a concern than a noise increase occurring in an area with noise-sensitive land uses. Commercial and office uses are typically less affected by increases in noise than residences or schools. Thus, although the increase in noise is above the identified thresholds, the land use context (i.e., commercial and office uses and no sensitive land uses) should also be taken into consideration. As noted in Section 3.7, Noise, there are certain circumstances where an exceedance of the thresholds may not constitute a significant impact.

Traffic noise levels, in general, can be lessened by reducing the number of vehicles or installing intervening barriers. Reducing vehicle volumes would require changing the proposed land uses; any proposed changes would need to be feasible and consistent with Project objectives. As noted in Section 3.7, *Noise*, a sound wall would very likely be visually intrusive and an obstruction to access to the Project Site driveway, which would not be feasible with respect to the Project objectives. Because there are no sensitive land uses near the roadways where the noise increases would be 7.3 and 7.8 dB, and because these areas would have noise levels that would be below the compatibility standard with Project Variant-generated traffic, this impact would be ***less than significant***. No mitigation is required.

Other Sources of Operational Noise

As with the Proposed Project, the Central Commons and recreational area under the Project Variant would have occasional outdoor events with 200 to 250 people a maximum of four times a year. At the recreational area, a typical use is anticipated to attract 20 to 50 people. These events may result in temporary use of portable audio-visual equipment for amplified sound and music, but no permanent sound equipment would be installed at either the Central Commons or recreational area. These events would result in noise levels from amplified music and voices that could affect noise-sensitive land uses. The events at the Central Commons would occur within the Project Site, at approximately 400 feet from onsite residences (Building R1). For the Project Variant, the closest offsite noise-sensitive land use would be the homes north of Ravenswood Avenue, which have 100 feet between the property line of the homes and the recreational area. Onsite residential uses (R3 and TH2) would be about the same distance away from the recreational area as the offsite homes north of Ravenswood Avenue. The recreational area for the Project Variant would also be farther away from Middlefield Road than under the Proposed Project and thus farther from Menlo-Atherton High School. There would be no appreciable differences in noise at

the Central Comments or recreational area for the Proposed Project and Project Variant; however, the Project Variant may result in lower noise levels at the noise-sensitive land uses because of the greater distances.

As noted for the Proposed Project, voices amplified by a single loudspeaker have been measured in the range of approximately 56 to 58 dBA L_{eq} at 100 feet, whereas sound from a small live band, with a guitar, vocalists, and a single amplifier, has been measured to be approximately 65 dBA L_{eq} at 100 feet. Based on these estimated levels, noise from such events at a distance of 50 feet (i.e., the distance to the nearest noise-sensitive land use) would be approximately 62 to 64 dBA for amplified voices and 71 dBA for amplified sound from a small band; thus, it is possible that noise levels from events may exceed the city's daytime (i.e., 7:00 a.m. to 10:00 p.m.) noise limit of 60 dBA. Smaller events are unlikely to result in noise levels greater than this limit.

In Menlo Park, a special event application must be filed if a proposed gathering would have 150 or more attendees. As noted above, there may be occasional events with more than 150 people; thus, the Project Sponsor or event host would need to obtain a permit for those events. For smaller events that would not require a special permit, it is reasonable to conclude that event noise would not exceed the limits in the Menlo Park Municipal Code. However, it is possible that larger events could result in noise levels in excess of Menlo Park Municipal Code noise standards at the nearest sensitive land use. As noted in Section 3.7, *Noise*, larger events would be required to obtain an event permit and comply with the stipulations of the permit, which would include adherence to the applicable Menlo Park Municipal Code limits or measures to reduce noise effects from the event. Further, Menlo Park Municipal Code Section 8.60.050, Review Process, stipulates that the police chief or designee shall issue permits only if it is determined that the events do not present substantial noise hazards. Because larger events with amplified music or voices would comply with the requirements of the applicable permit, noise from such events would be in compliance with local regulations and would not result in substantial noise increases. Impacts would be ***less than significant***. No mitigation is required.

Impact NOI-3: Ground-borne Vibration. The Project Variant would generate excessive ground-borne vibration or ground-borne noise levels. (SU)

Building Damage

During construction of the Project Variant, vibration-generating construction equipment, such as excavators and loaded trucks, may be operated in proximity to existing buildings and structures. Pile driving would not occur during construction. Therefore, the vibration analysis focuses on the use of excavators as the equipment type generating the most intensive vibration for the Project Variant. Vibration levels associated with heavy-duty construction equipment at a reference distance of 25 feet are shown in Table 3.7-16 in Section 3.7, *Noise*. The equipment that would be used would be similar or the same for both the Proposed Project and Project Variant's construction activities; thus, vibration levels and the analysis of vibration-related impacts would be approximately the same for both.

The shortest distance between construction equipment and existing buildings under the Project Variant is expected to be the same as under the Proposed Project (approximately 15 feet), which could occur at the Linfield Oaks or Classics of Burgess Park neighborhoods. The length of time that equipment would operate within 15 feet of residences in these neighborhoods would be limited because the equipment would also be operating in other areas throughout the Project Site and thus at much greater distances from these structures for most of construction. At 15 feet, the most vibration-intensive equipment proposed for use (i.e., a large bulldozer) would generate a vibration level with a peak particle velocity (PPV) of up to approximately 0.191 inch per second (in/sec). With the Project Variant, a vibration-

sensitive land use (First Church of Christ, Scientist and Alpha Kids Academy) would be removed during Phase 1 of construction. Regardless, the closest sensitive land uses for the Proposed Project and Project Variant would be the homes in the Classics of Burgess Park neighborhood.

As noted in Section 3.7, *Noise*, the commercial and residential structures in the area have an applicable damage criterion with a PPV of 0.5 and 0.3 in/sec, respectively. As shown in Table 3.7-16, vibration from construction at the nearest residential land uses (i.e., single-family residences in the Classics of Burgess Park and Linfield Oaks neighborhoods) could result in a PPV of up to 0.191 in/sec. As with the Proposed Project, this scenario would occur in very limited circumstances. It is anticipated that construction equipment would be 15 feet from residential receptors for only 3 or 4 days (during grading for landscaping). A PPV of 0.191 in/sec would thus occur only rarely and would be less than the applicable damage criterion with a PPV of 0.3 in/sec that applies to residential structures. Consequently, the Project Variant would not be expected to result in damage effects at buildings in the Study Area.

Annoyance/Sleep Disturbance

As noted in Section 3.7, *Noise*, the analysis considers a significant vibration impact to occur when construction activities generate vibration levels that are strongly perceptible (i.e., PPV of 0.1 in/sec) at surrounding land uses during daytime or nighttime hours or when vibration levels exceed the criteria outlined in ConnectMenlo EIR Mitigation Measure NOISE-2a. During construction, vibration-generating construction equipment may be temporarily operated approximately 15 feet from single-family residences, which is the same distance that would occur under the Proposed Project, resulting in a vibration level with a PPV of up to 0.191 in/sec at 15 feet (refer to Table 3.7-16 in Section 3.7, *Noise*). This vibration level would be above the "strongly perceptible" level (i.e., PPV of 0.1 in/sec) and above the thresholds specified in Mitigation Measure NOISE-2a from the ConnectMenlo EIR (0.032 in/sec at residential uses during the daytime hours). With the Project Variant, a vibration-sensitive land use (First Church of Christ, Scientist and Alpha Kids Academy) would be removed during construction. Regardless, the closest sensitive land use for the Proposed Project and Project Variant would be the homes in the Classics of Burgess Park neighborhood.

At a distance of 25 feet, the vibration level would be below the strongly perceptible level and considered distinctly perceptible (i.e., PPV of 0.4 in/sec); however, it would still above the ConnectMenlo EIR threshold of 0.032 in/sec. Most construction activities would occur more than 15 feet from offsite uses because construction along the perimeter of the site would be short term compared to the overall duration of construction. Construction involving the use of a large bulldozer or similar equipment would occur within 50 feet of existing residential uses because the TH1 townhomes would be within 50 feet of the Classics of Burgess Park neighborhood. Like the Proposed Project, this construction vibration impact would be ***potentially significant***.

During the early-morning concrete pours, equipment would operate within the interior of the Project Site, not near existing residential uses. However, a loaded concrete truck traveling within approximately 70 feet of existing residential uses could generate a vibration level greater than the nighttime threshold specified in the ConnectMenlo EIR of 0.016 in/sec. Additionally, construction of the emergency well, which would be included as part of the emergency water reservoir, would occur for 24 hours per day for 10 days and could be located as close as 60 feet to existing residences north of Ravenswood Avenue. During emergency well construction, the equipment with the greatest potential for vibration during the nighttime hours would be the drill rig. The vibration levels associated with a drill rig are shown in Table 14 of the *Parkline – Noise Technical Memorandum*, which is included in Appendix 3.7-1 of this EIR, and are the same as the vibration levels from a large bulldozer. At a distance of 60 feet, the drill rig would result in a PPV of

0.024 in/sec, which is above the nighttime threshold specified in the ConnectMenlo EIR of 0.016 in/sec. Therefore, the construction vibration impact from nighttime and early morning construction would be ***potentially significant***.

As with the Proposed Project, implementation of Mitigation Measure NOI-3.1 would reduce vibration levels from construction activity during daytime and early-morning hours by requiring larger equipment to operate at distances greater than 15 feet from sensitive land uses to the extent feasible; a vibration coordinator would be required to address any vibration-related complaints received. However, it may not be possible to ensure that vibration levels at all times and at all locations would be reduced to a level below the "strongly perceptible" level or below the thresholds identified in the ConnectMenlo EIR because larger equipment may need to operate at closer distances to sensitive land uses. Temporary impacts related to construction vibration under the Project Variant would be ***significant and unavoidable with mitigation***.

Impact C-NOI-1: Cumulative Construction Noise. Cumulative development would result in a significant environmental impact related to construction noise; the Project Variant would be a cumulatively considerable contributor to a significant environmental impact. (SU)

Project Variant construction may result in a 10 dB or greater increase in noise at nearby sensitive uses during daytime hours; thus, like the Proposed Project, the Project Variant would result in a new significant and unavoidable noise impact. As noted in Section 3.7, *Noise*, for Project Variant construction noise to combine with noise from other nearby construction projects and expose individual receptors to greater noise levels, the projects would need to be close to one another.

The same list of projects discussed in Section 3.7, *Noise*, applies to the Project Variant, including the 3333 Ravenswood Avenue project (No. 35) and the 429 University Avenue project (No. 47). These projects could overlap with Project Variant construction (refer to Figure 3.0-1). If the construction of multiple projects overlaps, cumulative construction noise impacts would be significant. Because the Project Variant on its own would result in a significant impact, its contribution would be cumulatively considerable. Although implementation of Mitigation Measures NOI-1.1 and NOI-1.2 would reduce the Project Variant's construction noise impacts, such impacts were determined to be significant and unavoidable. Based on the analysis above, the Project Variant's contribution to cumulative impacts related to construction noise would be ***cumulatively considerable,*** even with mitigation.

Impact C-NOI-2: Cumulative Operational Noise. Cumulative development would not result in a significant environmental impact related to operational noise; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Emergency Generators

Under cumulative conditions, emergency generators at the Project Site would generate audible noise during testing. However, the emergency generators would be tested only intermittently. Furthermore, noise from generators is exempted during actual emergencies. It is very unlikely that the testing of an emergency generator as part of the Project Variant would occur concurrently with the testing of a generator at a nearby project. Even if testing were to occur simultaneously, it is not likely that the generators would be close enough to one another for the noise to combine at a given sensitive land use. In addition, all new generators in the city would need to be in compliance with the Menlo Park Municipal Code as a condition of approval to construct. Therefore, cumulative noise impacts related to emergency generator testing would be ***less than significant***. No mitigation is required.

Mechanical Equipment and Other Noise Sources

Because multiple projects may be located close to one another, it is possible that noise from mechanical equipment (e.g., HVAC units, exhaust fans) for the Project Variant would combine with noise from mechanical equipment at nearby projects and cause a cumulative noise impact at nearby noise-sensitive land uses. However, as discussed in Section 3.7, *Noise*, all new mechanical equipment in the city would need to be in compliance with the Menlo Park Municipal Code as a condition of approval to construct. For event-related noise, as noted above, all events with more than 150 people would need a permit to ensure compliance with Menlo Park Municipal Code noise limits. Furthermore, it is unlikely that event noise at more than one project site would overlap and combine to affect a given land use. New equipment at project sites must be in compliance with the Menlo Park Municipal Code, and all projects in the vicinity would need to ensure that noise from larger events would be in compliance with applicable local noise limits. The cumulative impact from equipment and event noise would be ***less than significant***. No mitigation is required.

Traffic Noise

To determine cumulative noise increases as a result of the Project Variant, existing volumes were compared to cumulative-year with-Project volumes. In addition, cumulative-year no-Project vehicular traffic volumes were compared to cumulative-year with-Project volumes to isolate the effect of the Project Variant. Table 4-26 presents the modeling results of the cumulative traffic noise assessment.

Table 4-26. Cumulative-Level Traffic Noise Impacts for the Project Variant

Roadway Segment	Existing (L_{dn})	Cumulative without Project (L_{dn})	Cumulative plus Project (L_{dn})	Increase Relative to Existing (dB)	Increase Relative to Cumulative (dB)	3 dB or Greater Project-Related Increase[a]
Project Variant						
Middlefield Road north of Willow Road	59.4	60.8	61.9	2.5	1.1	No
Willow Road east of Durham Street	60.1	59.9	60.7	0.6	0.8	No
Willow Road east of Coleman Avenue	59.7	59.7	60.6	0.9	0.9	No
Willow Road east of Gilbert Avenue	59.1	59.0	60.0	0.8	1.0	No
Willow Road east of Middlefield Road	60.0	59.8	60.7	0.7	0.9	No
Willow Road west of Gilbert Avenue	59.3	59.5	60.3	1.0	0.8	No
Ravenswood Avenue east of Project Driveway B1 East	57.7	57.1	58.2	0.5	1.1	No
Ravenswood Avenue east of Project Driveway B1 West	57.7	57.1	58.4	0.7	1.3	No
Ravenswood Avenue east of Pine Street	58.1	57.4	58.9	0.8	1.5	No

Roadway Segment	Existing (L_{dn})	Cumulative without Project (L_{dn})	Cumulative plus Project (L_{dn})	Increase Relative to Existing (dB)	Increase Relative to Cumulative (dB)	3 dB or Greater Project-Related Increase[a]
Ravenswood Avenue between Laurel Street and Pine Street	58.3	57.8	59.1	0.9	1.4	No
Ravenswood Avenue east of El Camino	57.4	58.4	59.1	1.8	0.7	No
Middlefield Road between Ravenswood Avenue and Ringwood Avenue	62.4	62.7	63.5	1.1	0.8	No
Middlefield Road between Ringwood Avenue and Seminary Drive	61.3	61.7	62.7	1.4	1.0	No
Middlefield Road south of Seminary Drive	61.2	61.4	62.5	1.3	1.1	No
Willow Road west of Durham Street	60.2	60.0	60.7	0.5	0.7	No
Willow Road west of Coleman Avenue	59.8	59.8	60.6	0.8	0.8	No
Ravenswood Avenue west of Project Driveway B1 East	58.9	57.5	58.9	0.0	1.3	No
Ravenswood Avenue west of Project Driveways B1 West	58.9	57.1	58.8	0.0	1.8	No
Ravenswood Avenue west of Pine Street	58.9	57.1	58.8	0.0	1.7	No
Ravenswood Avenue west of Laurel Street	59.0	57.9	59.4	0.3	1.5	No
Seminary Drive west of Middlefield Road[b]	45.3	N/A	53.1	7.8	N/A	N/A
D Street west of Middlefield Road	48.9	N/A	55.6	6.7	N/A	N/A
Willow Road between Laurel Street and Middlefield Road	51.6	54.1	54.7	3.1	0.6	No

Notes:

a. A change of 3 dB or less in traffic noise levels would not constitute a significant impact because such a change is considered just noticeable. A change of more than 3 dB may be significant, depending on the no-project noise levels.

b. For this segment, it is not possible to calculate an increase relative to cumulative no-Project conditions because there would be volumes of zero.

L_{dn} = day-night average sound level; dB = decibel

As shown in Table 4-26, which presents the results for roadway segments under cumulative conditions, the traffic noise increase between existing-year and cumulative-year with-Project conditions would be a maximum of 7.8 dB. The three largest increases would be at Seminary Drive west of Middlefield Road, D Street west of Middlefield Road, and Willow Road between Laurel Street and Middlefield Road where the increases would be 7.8, 6.7, and 3.1 dB, respectively. Although the increases of 7.8 and 6.7 would be considered noticeable, there are no sensitive land uses in proximity to the roadway segments where these two increases would occur. In addition, for cumulative plus-Project conditions, the noise level at these

segments would be a maximum of 55.6 dB, day-night average sound level (L_{dn}), which is within or below the compatibility standard for what is considered "normally acceptable" for all land uses. As such, increases of 7.8 dB and 6.7 dB are not considered to be a significant cumulative impact because there are no sensitive land uses near the roadways and the overall noise levels would be below the compatibility standards.

The increase of 3.1 dB at Willow Road between Laurel Street and Middlefield Road would be noticeable relative to existing conditions, and this would be considered a significant cumulative impact. However, much of the increase (2.5 dB) is from background traffic volumes that are unrelated to the Project Variant. The increase in noise at this segment between cumulative-year no-Project conditions and cumulative-year with-Project conditions is 0.6 dB, which would not be noticeable. Consequently, the Project Variant's contribution at Willow Road between Laurel Street and Middlefield Road would not be cumulatively considerable. The cumulative operational traffic noise impact would be ***less than significant***. No mitigation is required.

Impact C-NOI-3: Cumulative Vibration Impacts. Cumulative development would not result in a significant environmental impact related to exposing persons to or generating excessive ground-borne vibration or ground-borne noise levels; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

As noted in Section 3.7, *Noise*, vibration impacts are based on instantaneous PPV levels; because PPV is a measure of the peak instantaneous vibration level rather than an average, other sources of vibration that may operate simultaneously (e.g., at other project sites or even on the same project site) would not be expected to combine to raise the overall peak vibration level. Worst-case ground-borne vibration levels are generally determined by the equipment that generates the highest vibration level at the affected location; therefore, vibration would be dominated by the closest and most vibration-intensive equipment being used at a given time.

In general, vibration from multiple construction sites, even if close to one another, would not combine to raise the maximum PPV level at sensitive uses near the Project Site. For that reason, the cumulative impact of construction vibration from multiple construction projects near or even adjacent to one another would not combine to increase PPV vibration levels. Cumulative vibration impacts would be ***less than significant***. No mitigation is required.

Cultural Resources

Impact CR-1: Historical Resources. The Project Variant would cause a substantial adverse change in the significance of historical resources, pursuant to Section 15064.5. (SU)

Like the Proposed Project, the Project Variant would demolish 23 out of 26 existing commercial buildings at the Project Site. In addition, the Project Variant also includes the property at 201 Ravenswood Avenue, which has a 1966 chapel (Chapel) and a 1958 multi-use building. Page & Turnbull evaluated the property in April 2024[26] and determined that the Chapel is individually eligible for listing in the California Register of Historical Resources (CRHR) under Criterion 3 (Architecture) as a distinctive local example of Late Modernist religious architecture. As such, the Chapel at 201 Ravenswood Avenue is a historic resource for the purposes of CEQA.

[26] Page & Turnbull. 2024. *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*. June 6. Refer to Appendix 3.8-1 of this EIR.

The Project Variant would affect the SRI Campus historic district and the four individually significant buildings (Building 100, Building A, and Building E and the Chapel at 201 Ravenswood Avenue). Implementation of the Project Variant would require demolition of the four individual buildings, 23 of the 26 historic district contributor buildings, and one of two contributing landscape features, all of which are historical resources, as defined in State CEQA Guidelines Section 15064.5. As a result, the historic district and four individual buildings would lose eligibility for listing in the CRHR. The impacts would be potentially significant.

MITIGATION MEASURES. As with the Proposed Project, the Project Variant would implement Mitigation Measures CR-1.1 (including CR-1.1.a, CR-1.1.b, CR-1.1.c), CR-1.2, and CR-1.3, which would reduce the potential level of impact on the three individually CRHR-eligible historical resources and the potential impact on the CRHR-eligible SRI Campus historic district by requiring documentation and interpretation and/or commemoration of the resources to be demolished and the relocation of a contributing landscape feature of the historic district. However, the demolition of historical resources cannot be mitigated to a less-than-significant level, and impacts on built-environment resources at the SRI Campus historic district would be significant and unavoidable with mitigation.

Unlike the Proposed Project, the Project Variant would demolish the Chapel. Mitigation measures that document the Chapel to be demolished would lessen the impacts associated with the Project Variant. Mitigation Measure CR-1.4 would apply only to the Project Variant. However, demolition cannot be mitigated to reduce impacts to a less-than-significant level. Impacts under the Project Variant on the Chapel would remain ***significant and unavoidable with mitigation***.

CR-1.4: Documentation of the Chapel (Project Variant)

Prior to issuance of a demolition permit for the First Church of Christ, Scientist and Alpha Kids Academy (Chapel buildings), the Project Sponsor shall undertake documentation of the Chapel at 201 Ravenswood Avenue. The documentation shall be funded by the Project Sponsor and undertaken by a qualified professional(s) who meets the Secretary of the Interior's Professional Qualification Standards for history, architectural history, or architecture (Code of Federal Regulations, Title 36, Part 61, Appendix A) and be submitted for review by the Menlo Park Planning Division or a qualified historic consultant prior to issuance of a demolition permit for the Chapel buildings. The documentation package created shall consist of the items listed below, consisting of (a) digital photography and (b) a historical report. The documentation materials shall be submitted to the Northwest Information Center at Sonoma State University, the repository for the California Historical Resources Information System. The documentation shall also be offered to local repositories, including the Menlo Park Public Library, Menlo Park Historical Association, and San Mateo County History Museum. Materials shall either be provided in archival digital and/or hard copy formats, depending on the capacity and preference of the repository. This measure would create a collection of reference materials that would be available to the public and inform future research. Although the documentation would use some of the guidelines and specifications developed for the Historic American Buildings Survey (HABS), the documentation package would not need to be delivered as HABS documentation to the Library of Congress.

a.) Digital Photography. Digital photographs shall be taken of the Chapel at 201 Ravenswood Avenue. All digital photography shall be conducted according to current National Park Service (NPS) standards, as specified in the National Register Photo Policy Factsheet (updated May 2013). The photography shall be undertaken by a qualified professional with demonstrated experience in documentation photography. Large-format negatives are not required. Photograph for the data set shall include:

- Photographs of all façades
- Detailed views of character-defining features

- Representative interior views of the nave and narthex
- Contextual views of the site, including the courtyards at the corners of the cross plan for the Chapel. Contextual views may include the multi-use building, but full façade and detailed views of the multi-use building are not required.

b.) Historical Reports. A written historical narrative and report that meets HABS Historical Report Guidelines shall be produced for the Chapel at 201 Ravenswood Avenue. This HABS-style historical report may be based on the documentation provided in the 2024 Department of Parks and Recreation 523 form evaluation for the property and include historic photographs and drawings, if available. The HABS-style historical report shall follow an outline format, with a statement of significance for the building and a description of the building.

Impact CR-2: Archaeological Resources. The Project Variant could cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5. (LTS/M)

The anticipated maximum depth of construction under the Project Variant would be 30 feet below the current grade for the emergency water reservoir and 430 feet below the current grade for the emergency well. Under the Proposed Project, the maximum depth of excavation would be 15 feet below the current grade for the underground parking throughout the Project Site. Similar to the Proposed Project, underground parking would be included in the office/R&D area. The Project Variant would also include demolition at 201 Ravenswood Drive and some excavation at that location. However, the Project Variant would not construct underground parking in the residential area, resulting in overall less ground disturbance and excavated soil. Although the emergency groundwater well would be approximately 430 feet deep, construction activities at this depth would be relatively minor due to the anticipated boring diameter of the well. Approximately 174,905 cubic yards of excavated soil would be transported offsite for disposal.

No known archaeological resources are present within the Project Site. Therefore, similar to the Proposed Project, ground disturbance associated with construction of the Project Variant would not affect known archaeological resources. However, a review of historic-period maps indicates that the Project Site has moderate potential for containing intact historic-period archaeological deposits. Therefore, although it is unlikely that ground disturbance associated with construction of the Project Variant would affect unknown archaeological resources, the possibility cannot be eliminated. Because the emergency water reservoir would require a greater excavation depth (30 feet below current grade for the reservoir and 430 feet below the current grade for the emergency well, with a narrow boring diameter of approximately 28 inches) than the maximum excavation depth of the Proposed Project (15 feet below current grade), the potential to encounter unknown archeological resources would exist. In the event that previously unknown archaeological resources are encountered during ground disturbance related to construction of the Project Variant, a substantial adverse change in the significance of an as-yet unknown historically significant archaeological resource could occur from its demolition, destruction, relocation, or alteration, and the significance of the resource could be materially impaired. This impact would be ***potentially significant***.

Implementation of Mitigation Measures CR-2.1 and CR-2.2, also required for the Proposed Project, would reduce the potential impacts of the Project Variant by requiring archaeological resources sensitivity training and early detection of potential conflicts between development and resources. Appropriate treatment of historical resources, if found, would also be required. Similar to the Proposed Project, implementation of these mitigation measures would reduce potentially significant impacts on archeological resources to ***less than significant with mitigation***.

Impact CR-3: Inadvertent Disturbance of Human Remains. The Project Variant could result in a significant impact due to the disturbance of human remains, including those interred outside of dedicated cemeteries. (LTS/M)

No known human remains are located on the Project Site, including the 201 Ravenswood Avenue parcel, which is included in the Project Site under the Project Variant. If human remains are encountered during ground disturbance related to the Project Variant, the impacts could be significant. Overall, less ground disturbance would occur under the Project Variant compared to the Proposed Project, but the maximum depth of excavation would be greater. Therefore, the potential to disturb human remains under the Project Variant would be generally similar to that of the Proposed Project. The impact would be ***potentially significant***. Implementation of Mitigation Measure CR-3.1, also required for the Proposed Project, would reduce potential impacts by requiring adherence to appropriate procedures if remains are encountered. Implementation of this mitigation measure would reduce potentially significant impacts on human remains to ***less than significant with mitigation***.

Impact C-CR-1: Cumulative Historic Resources Impacts. Cumulative development would not result in a significant environmental impact on historic resources; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Page & Turnbull cross referenced 34 project sites against lists of designated and identified historic resources.[27] None of the 34 development projects are on or immediately adjacent to the Project Site. Furthermore, none of the 34 development projects include historic resources from the same era as the SRI Campus, historic resources with Modernist architectural styles, or historic resources that have an association with technology and innovation. Therefore, the Project Variant is not anticipated to result in cumulative impacts related to historic resources on a project site or the types of historic resources in Menlo Park. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-CR-2: Cumulative Archaeological Resources and Human Remains Impacts. Cumulative development could result in a significant environmental impact on archeological resources and human remains; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)

The cumulative projects in the vicinity of the Project Site would be constructed on infill sites in highly disturbed areas. It is likely that the cumulative projects would be constructed on sites where the ground surface has been disturbed and/or covered with fill and gravel. As with the Project Variant, all cumulative projects would be required to implement BMPs, legal requirements, and/or mitigation measures to ensure that project activities would not result in the inadvertent destruction of an archaeological resource and that discovery procedures pertaining to human remains would be implemented. In addition, implementation of Mitigation Measures CR-2.1 and CR-2.2, as required for the Proposed Project, would reduce the impacts of the Project Variant by requiring archaeological resources sensitivity training and allowing early detection of potential conflicts between development and resources. Implementation of Mitigation Measure CR-3.1, as required for the Proposed Project, would reduce the Project Variant's impacts by detailing the appropriate procedures to follow if human remains are encountered. Overall, implementation of Mitigation Measures CR-2.1, CR-2.2, and CR-3.1 would reduce the Project Variant's contribution to a cumulative impact to a less-than-significant level. The Proposed Project's contribution to cumulative impacts on archeological resources and human remains would be ***less than cumulatively considerable with mitigation***. No additional mitigation is required.

[27] Ibid.

Tribal Cultural Resources

Impact TCR-1: Tribal Cultural Resources. The Project Variant would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code (PRC) Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe and:

a) Listed or eligible for listing in the CRHR or a local register of historical resources, as defined in PRC Section 5020.1(k), or

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (LTS/M)

Similar to the Proposed Project, construction of the Project Variant could result in impacts on tribal cultural resources during ground-disturbing activities. Overall, less ground disturbance would occur under the Project Variant, even with the addition of the parcel at 201 Ravenswood Avenue, compared to the Proposed Project, but the maximum depth of excavation would be greater. Therefore, the potential to disturb human remains under the Project Variant would be generally similar to that of the Proposed Project, resulting in similar impacts on tribal cultural resources. The NWIC records search and literature review indicated no previously recorded cultural resources within or adjacent to the Project Site, including the property at 201 Ravenswood Avenue, which would be part of the Project Site under the Project Variant. Regardless, similar to the Proposed Project, archaeological deposits that qualify as tribal cultural resources could be encountered during excavation for the Project Variant. Such resources would be eligible for listing in the CRHR or a local register of historical resources, or the lead agency, in its discretion and supported by substantial evidence, could determine the resources to be eligible for the CRHR pursuant to the criteria set forth in subdivision (c) of PRC Section 5024.1. Therefore, impacts related to tribal cultural resources could result from construction of the Project Variant and be ***potentially significant***. However, similar to the Proposed Project, implementation of Mitigation Measures CR-2.1, CR-2.2, CR-3.1, and TRC-1 would reduce impacts on tribal cultural resources by requiring archaeological resources sensitivity training and requiring early detection of potential conflicts between development and resources. Appropriate treatment of historical resources, if found, would also be required. Impacts would be ***less than significant with mitigation***.

Impact C-TCR-1: Cumulative Tribal Cultural Resources Impacts. Cumulative development could result in a significant environmental impact on tribal cultural resources; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact on tribal cultural resources. (LTS/M)

Future development within the city of Menlo Park could include ground-disturbing activities, construction, or alteration to the landscape. This would have the potential to result in development-related impacts on tribal cultural resources. However, new development would be subject to existing federal, state, and local regulations as well as general plan goals, policies, and programs, which would, to the maximum extent practicable, reduce cumulative development-related impacts on tribal cultural resources. Future development would be required to adopt mitigation measures to ensure that project activities would not result in the inadvertent destruction of a tribal cultural resource. Nonetheless,

cumulative impacts on tribal cultural resources are considered potentially significant because the reasonably foreseeable projects would most likely involve ground-disturbing activities that could uncover unknown tribal cultural resources. Therefore, the Project Variant, similar to the Proposed Project, could contribute to a cumulative loss of tribal cultural resources. Nonetheless, implementation of Mitigation Measures CR-2.1, CR-2.2, CR-3.1, and TRC-1, which require an archaeological monitoring plan, cultural resources sensitivity training for all construction crews participating in ground-disturbing activities, and stopping work if archaeological deposits are encountered during ground-disturbing activities, would reduce impacts. Impacts would be ***less than cumulatively considerable with mitigation***, similar to the Project.

Biological Resources

Similar to the Proposed Project, the Project Variant would result in no impacts related to riparian habitat or sensitive natural communities, State or federally protected wetlands and non-wetland waters, or conflicts with an adopted habitat conservation plan or natural community conservation plan. The Project Variant would be located on the same site as the Proposed Project but would also include the parcel at 201 Ravenswood Avenue, which also has none of these resources. Therefore, no further analysis of these topics is required.

Relevant technical documentation prepared for the Project Variant and used in this analysis includes the *Parkline Project Biological Resources Report* (Parkline BRR);[28] *Preliminary Arborist Report* (Arborist Report);[29] and *Parkline—ICF Peer Review of Parkline Project Biological Resources Report*.[30]

Impact BIO-1: Special-Status Species. The Project Variant could result in a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. (LTS/M)

As discussed in Section 3.10, *Biological Resources*, because of its largely developed nature, the Project Site provides relatively low-quality habitat for most species; therefore, it supports relatively small numbers of individuals from any one species.

Special-Status Plants

The plant species observed on the Project Site during the reconnaissance-level survey are not regulated under State or federal laws and are not listed as rare by the California Native Plant Society. All native plant species found on the Project Site or with potential to occur on the site are regionally abundant and common in California. No special-status plant species are anticipated to occur on the Project Site; therefore, there would be ***no impact*** on special-status plants.

[28] H.T. Harvey & Associates. 2024. *Parkline Project Biological Resources Report*. Los Gatos, CA. Prepared for Lane Partners, Menlo Park, CA. March 12.

[29] HortScience Bartlett Consulting. 2022. *Preliminary Arborist Report.* Berkeley, CA. Prepared for Lane Partners. Menlo Park, CA. November 22.

[30] ICF. 2023. *Parkline – ICF Peer Review of Parkline Project Biological Resources Report*. San Francisco, CA. Prepared for the City of Menlo Park. August 4.

Special-Status Species: Monarch Butterfly, Vaux's Swift, Olive-sided Flycatcher, Yellow Warbler, Yellow-breasted Chat, and Western Red Bat

Monarch butterfly, Vaux's swift, olive-sided flycatcher, yellow warbler, yellow-breasted chat, and western red bat potentially occur on the Project Site as nonbreeding migrant species, transients, or foragers, but they are not known or expected to breed or occur in large numbers on or near the Project Site. Monarch butterfly, a candidate for listing under the federal Endangered Species Act, may occur as an occasional forager on the Project Site, but it is not expected to breed there because of the absence of larval host plants (i.e., milkweeds). During demolition and construction of the Project Variant, vegetation removal, noise, and the operation of heavy equipment would have some potential to affect foraging habitats and/or disturb individual monarch butterflies, along with Vaux's swift, olive-sided flycatcher, yellow warbler, yellow-breasted chat, and western red bat. Construction activities might result in a temporary direct impact through the alteration of foraging patterns (e.g., avoidance of work sites because of increased noise and activity levels during maintenance) but would not result in a loss of individuals because individuals would move away from construction areas or equipment before being injured or killed. Furthermore, the Project Site does not provide important foraging habitat that is used regularly or by large numbers of individuals from any of these species. As a result, the Project Variant would have minimal impact on species' foraging habitat and no substantial impact on regional populations of these species. Therefore, impacts on monarch butterfly, yellow warbler, yellow-breasted chat, Vaux's swift, olive-sided flycatcher, and western red bat would be ***less than significant***. No mitigation is required.

Special-Status Species: Pallid Bat and Townsend's Big-eared Bat

Pallid bat and Townsend's big-eared bat, which are California species of special concern, could roost in buildings and trees on the Project Site. Although no evidence of a colony of roosting bats was detected in trees or buildings on the site during the September 2022 reconnaissance-level survey, the presence of a moderate-size colony (i.e., at least 10 big brown bats, 20 Yuma myotis, or at least 100 individuals of other non-special-status bat species) of a common species of roosting bats or a colony of any size of pallid bats or Townsend's big-eared bats cannot be ruled out from existing in trees or buildings on the site. Thus, the removal of trees and buildings on the Project Site would have the potential to result in the loss of a colony of roosting bats. When buildings or trees containing roosting colonies are removed or modified and when individual bats are removed, individual bats can be physically injured or killed, can be subjected to physiological stress from disturbance during torpor, or can face increased predation because of exposure during daylight. In addition, nursing young may be subjected to disturbance-related abandonment by their mothers. Impacts on a moderate-size maternity colony of common species with the potential to occur on the site or impacts on a pallid bat or Townsend's big-eared bat roost of any type (i.e., a maternity or non-maternity colony) or any size would be considered a substantial impact on these species because this could have a substantial effect on regional populations, which would be a ***potentially significant*** impact. However, implementation of Mitigation Measures BIO-1.1 through BIO-1.5 would reduce potential impacts from the Project Variant by requiring an initial bat habitat survey, maternity season survey, pre-construction activity bat survey, bat exclusion measures, and compensatory mitigation for bat habitat. Implementation of these mitigation measures would reduce potentially significant impacts on roosting bats to ***less than significant with mitigation***.

Impact BIO-2: Wildlife Movement and Native Wildlife Nursery Sites. The Project Variant could interfere substantially with the movement of a native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (LTS/M)

Native Wildlife Nursery Sites

As discussed in Section 3.10, *Biological Resources*, the Project Site is entirely developed and located within a highly developed area. In addition, the parcel at 201 Ravenswood Avenue is entirely developed. Therefore, the Project Variant would not result in the fragmentation of natural habitats. Any common, urban-adapted wildlife species that currently move through the Project Site would continue to be able to do so following Project Variant construction. Thus, similar to the Proposed Project, the Project Variant would not impede the use of any native wildlife nursery sites, and impacts on native wildlife nursery sites would be ***less than significant***. No mitigation is required.

Migratory Birds

Construction-related disturbance during the bird nesting season (February 1 through August 31, for most species) could result in the incidental loss of eggs or nestlings, either directly through the destruction or disturbance of active nests or indirectly through nest abandonment. The habitat present on the Project Site supports only regionally common, urban-adapted breeding birds and potentially white-tailed kite (a State fully protected species). In addition, many birds are expected to continue to nest and forage on the Project Site after construction of the Project Variant is completed. These birds are habituated to disturbance associated with existing conditions at the Project Site. Further, no old raptor nests were observed on the Project Site during the September 2022 survey by H.T. Harvey & Associates, suggesting that raptors (including white-tailed kites) have not nested on the Project Site in recent years. The likelihood that these species would nest on the Project Site in the future is low.

The mature vegetation on the Project Site supports a number of bird species that could have active nests and could be affected during Project Variant construction. The Project Variant would remove approximately 768 trees, including approximately 244 heritage trees. Although construction impacts would be temporary, the disruption to nesting and foraging habitat could harm migratory bird populations. In addition, implementation of the Project Variant could temporarily reduce available nesting habitat for birds that currently use the Project Site as well as foraging habitat and cover for migrants and wintering birds through the removal of trees and landscape vegetation. This could result in a temporary decline in the number of migratory bird species and individuals that use the Project Site. Any disturbance of nesting birds that results in the abandonment of active nests or the loss of active nests through vegetation or structure removal would be a ***potentially significant*** impact.

The proposed land use program under the Project Variant was developed to ensure that existing and new trees would be distributed throughout the Project Site, which currently has approximately 1,355 trees. As mentioned above, the Project Variant would remove approximately 768 trees, including approximately 244 heritage trees, and plant approximately 860 new trees, resulting in a total of 1,447 trees on the Project Site, an overall increase in the number of trees compared to existing conditions. Thus, many of the existing trees on the Project Site would be preserved and would continue to be available for nesting habitat following construction of the Project Variant. Once the new trees and vegetation mature, the Project Variant would result in an overall increase in nesting and foraging resources for the migratory birds that currently use the site compared to existing conditions. In addition, although the habitat on the Project Site does provide nesting and foraging habitat for migratory birds, this developed area represents only a small

portion of the habitats that support these species regionally. Although many habitats in the vicinity of the Project Site support species of migratory birds that nest on the site, these birds are expected to nest in nearby habitats if they become displaced from the Project Site.

Similar to the Proposed Project, implementation of Mitigation Measure BIO-2.1 would reduce potential impacts by requiring measures to avoid and minimize construction-period impacts on nesting birds. Implementation of this mitigation measure would reduce potentially significant impacts on migratory birds under the Project Variant to ***less than significant with mitigation***.

Bird Collisions

Conditions on the site attract an abundance of avian species. Under existing conditions, there are approximately 1,355 trees on the Project Site, including 593 heritage trees, which are distributed across the Project Site. The mature, native coast live oaks and valley oaks on the Project Site provide relatively high-quality nesting and foraging habitat for native birds. According to the Parkline BRR, the large number of nonnative trees, shrubs, and landscape plants also present on the Project Site supports fewer of the resources required by native birds than native vegetation, and the structural simplicity of the vegetation on the Project Site (i.e., without well-developed ground cover and an understory or canopy layers) further limits the resources available to birds. Nevertheless, this nonnative vegetation contributes to habitat quality on the Project Site, providing nesting and foraging opportunities. Because of the number of mature trees (both native and nonnative) present, native bird abundance on the Project Site is relatively high. However, particularly rare species or species of conservation concern are not expected to occur on the Project Site.

With implementation of the Project Variant, the Project Site would provide habitat of similar or slightly greater value to landbirds compared to existing conditions. The Project Variant would remove approximately 768 trees, including 244 heritage trees, and plant approximately 860 new trees, resulting in a total of 1,429 trees on the Project Site, an overall increase in the number of trees compared to existing conditions. The trees that would be planted as part of the Project Variant would increase the vegetative cover and the extent of habitat and foraging resources for the native resident birds that use the Project Site, especially as the replacement trees mature. Based on these combined factors, the number of birds that use the Project Site is expected to be similar to, or slightly greater than, under existing conditions following implementation of the Project Variant. In addition, a moderate number of migrants are expected to use vegetation on the Project Site for foraging and resting opportunities during spring and fall migration because of the Project Site's proximity to adjacent habitats at St. Patrick's Seminary & University and the Corpus Christi Monastery as well as the presence of large numbers of trees on the Project Site.

It has been well documented that glass windows and building façades can result in injury or mortality for birds because of collisions with such surfaces.[31,32] The greatest risk of avian collision with a building occurs in the area within 60 feet of the ground because this is the area in which most bird activity occurs.[33,34] The potential for bird collisions at certain locations on the Project Site depends on certain

[31] Klem, D., Jr., C.J. Farmer, N. Delacretaz, Y. Gelb, and P.G. Saenger. 2009. Architectural and Landscape Risk Factors Associated with Bird-glass Collisions in an Urban Environment. In *The Wilson Journal of Ornithology*, 121(1):126–134.

[32] Sheppard, C., and G. Phillips. 2015. *Bird-Friendly Building Design*. Second edition. The Plains, VA: American Bird Conservancy.

[33] San Francisco Planning Department. 2011. *Standards for Bird-Safe Buildings*. July 14.

[34] Sheppard, C., and G. Phillips. 2015. *Bird-Friendly Building Design*. Second edition. The Plains, VA: American Bird Conservancy.

factors. For instance, moderate numbers of resident and migrant landbirds are expected to use nearby and adjacent habitat areas at St. Patrick's Seminary & University to the northeast and the Corpus Christi Monastery to the northwest; birds would travel between these areas and the Project Site when foraging. As a result, there is relatively higher potential for birds to collide with glazing on proposed buildings that face offsite open space areas compared to other locations on the Project Site. In addition, the extent of glazing on a building and the presence of vegetation opposite the glazing are known to be two of the strongest predictors of avian collision rates, according to the Parkline BRR. Thus, the risk of collisions would increase where buildings with extensive glazing would face extensive landscape vegetation on the Project Site. Night lighting associated with new buildings also has some potential to disorient birds, especially during inclement weather when night-migrating birds descend to lower altitudes, potentially increasing the risk of collisions. Based on the conceptual site plan for Project Variant in Figure 4-1, the orientation of the proposed and existing buildings to remain in combination with the proposed landscape vegetation would not result in a heightened risk of collisions due to the funneling of flight paths towards building facades. In addition, the implementation of bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for the Project Variant.[35] Therefore, impacts related to bird collisions would be ***less than significant***. No mitigation is required.

Impact BIO-3: Conflicts with Local Policies or Ordinances that Protect Biological Resources. The Project Variant would not result in conflicts with the Menlo Park Municipal Code or the city's general plan. (LTS)

Municipal Code Chapter 13.24, Heritage Trees

The proposed land use program, which considers site orientation, was developed to ensure that existing and new trees would be distributed throughout the Project Site, which currently has approximately 1,355 trees. (This total does not include approximately 58 trees, of which approximately 24 are heritage trees, near Buildings S and T, which are being evaluated separately as part of the entitlement review for proposed tenant improvements in Buildings P, S, and T and associated utility work, including the addition of a combined utility yard.)

In total, the Project Variant would remove approximately 768 trees, including 244 heritage trees, and plant approximately 860 new trees, resulting in a total of 1,447 trees on the Project Site, an overall increase in the number of trees compared to existing conditions. In accordance with Menlo Park Municipal Code Chapter 13.24, Heritage Trees, permits from the city's Director of Public Works or designee and payment of a fee would be required for the removal of any heritage trees, as defined in the Regulatory Setting. Removing or pruning heritage trees protected by the Menlo Park Municipal Code is considered a potentially significant impact. However, the Project Variant would comply with the city's Heritage Tree Ordinance, Sections 13.24.030 and 13.24.050, by obtaining a permit from the city to remove protected trees, submitting and implementing a tree protection plan to protect remaining heritage trees near work areas, and paying any applicable fees. The Project Variant would include the provision of replacement trees for all heritage trees removed during construction (in accordance with Heritage Tree Ordinance Section 13.24.090). Furthermore, a greater number of trees would be planted than removed (approximately 860 new trees would be planted). Therefore, impacts related to conflicts with local policies or ordinances that protect heritage trees would be ***less than significant***. No mitigation is required.

[35] The Parkline BRR includes a mitigation measure that would require implementation of bird-friendly design. The requirements included in the mitigation measure will be addressed by the proposed zoning for the Project; thus, the mitigation measure is not necessary.

Bird-safe Design Requirements

The Project Site is currently zoned C-1(X) (Administrative and Professional District, Restrictive); a bird-friendly design is not required for this zone. The Project Site would be rezoned in connection with a zoning ordinance text amendment that would create a new zoning district and establish discrete development standards in accordance with the Project Variant's uses and features. Bird-friendly design requirements may be incorporated into the new zoning district(s); implementation of a bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for the Project Variant. Therefore, impacts related to conflicts with local policies or ordinances to reduce bird collisions would be ***less than significant***. No mitigation is required.

Compliance with General Plan Policy OSC1.3, Sensitive Habitats

City General Plan Policy OSC1.3, Sensitive Habitats, requires new development on or near sensitive habitats to (1) provide a baseline assessment prepared by qualified biologists and specify requirements relative to the baseline assessments, (2) consult with appropriate regulatory and resource agencies, (3) incorporate appropriate avoidance and minimization measures, and (4) obtain necessary permits/authorizations. As described in the discussions above, the Parkline BRR was prepared in compliance with General Plan Policy OSC1.3 to provide a baseline biological resources assessment, incorporate guidance from relevant regional plans and agencies, evaluate the potential effects of the Project on biological resources, and identify avoidance, minimization, and mitigation measures for potentially adverse impacts. In addition, this EIR identifies mitigation measures to be included in the Project Variant to reduce impacts. The Project Variant would not be in conflict with city General Plan Policy OSC1.3, and impacts would be ***less than significant***. Therefore, no mitigation is required.

Impact C-BIO-1: Cumulative Biological Resources Impacts. Cumulative development could result in a significant environmental impact on biological resources; however, the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)

The geographic context for a cumulative assessment of biological resources impacts considers the degree to which significant vegetation and wildlife resources would be protected at the Project Site. It also considers the city, surrounding incorporated and unincorporated lands, and the region. Development of past, current, and future projects in the city could contribute to an incremental reduction in the amount of wildlife habitat, particularly for birds and larger mammals. Cumulative development in the city and the region could result in further conversion of natural habitats to urban and suburban conditions, thereby limiting the existing habitat values of the surrounding area. The Project Variant in combination with other projects in the area, as well as other activities that would affect the species that would be affected by the Project Variant, could contribute to cumulative effects on special-status species. Other projects in the area include office/retail/commercial developments, mixed uses, and residential projects that could adversely affect these species. Thus, there would be potential for cumulative impacts on biological resources.

The cumulative impact on biological resources resulting from the Project Variant in combination with other projects in the larger region would be dependent on the relative magnitude of the adverse effects of the projects on biological resources compared to the relative benefit from the avoidance and minimization efforts prescribed by planning documents, mitigation measures, and permit requirements for each project, along with the compensatory mitigation and proactive conservation measures associated with each project. Many projects in the region that would affect resources similar to those that would be affected by the Project Variant would be subject to CEQA requirements. It is expected that such projects

would mitigate their impacts on sensitive habitats and special-status species through the incorporation of mitigation measures and compliance with permit conditions. In the absence of such avoidance, minimization, and conservation measures, as well as compensatory mitigation, cumulatively significant impacts on biological resources could occur.

Regardless of the magnitude and significance of cumulative impacts that result from other projects, the Project Variant is not expected to have a substantial effect on biological resources. Under proposed conditions, the Project Site may provide habitat of greater value to wildlife compared to existing conditions due to the addition of landscape trees and vegetation on the site. Although the species composition for the replacement trees is currently unknown, the Project Variant, as discussed above, would comply with the city's Heritage Tree Ordinance, which identifies the use of native replacement trees as a priority. The Project Variant would result in an increase in vegetative cover, and the increase in the number of trees would increase the extent of habitat and foraging resources for the wildlife species that use the site. Similar to the Proposed Project, implementation of Mitigation Measures BIO-1.1 through 1.5 would reduce the Project Variant's impacts on roosting bats to less-than-significant levels, and implementation of Mitigation Measure BIO-2.1 would reduce the Project Variant's impacts on birds to less-than-significant levels. Based on the analysis above, the Project Variant's contribution to cumulative impacts on biological resources would be ***less than cumulatively considerable with mitigation***. No additional mitigation is required.

Geology and Soils

Similar to the Proposed Project, the Project Variant would result in no impacts related to surface fault rupture, landslides, loss of topsoil, lateral spreading, unique geologic features, or septic systems because these features are not present at the Project Site. No further analysis is required.

Impact GS-1: Strong Seismic Ground Shaking and Seismically Related Ground Failure. The Project Variant would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving (1) strong seismic ground shaking or (2) seismically related ground failure, including liquefaction. (LTS)

Construction and operation of the Project Variant would be subject to the same seismic conditions as the Proposed Project because both would be located on the same site and would be required to comply with existing regulations regarding seismic hazards. Therefore, similar to the Proposed Project, the Project Variant would result in ***less-than-significant impacts*** related to the exposure of people or structures to seismic ground shaking or liquefaction-related hazards for the same reasons described for the Proposed Project.

Impact GS-2: Substantial Soil Erosion. The Project Variant would not result in substantial soil erosion. (LTS)

As with the Proposed Project, the Project Variant would include construction activities that could lead to substantial soil erosion, such as demolition, tree and other vegetation removal, grading, and excavation for the construction of new building structures and trenching for utilities. The Project Variant would reduce the amount of soil excavated because underground parking would not be provided for the residential uses (under the Proposed Project, underground parking would be provided beneath Buildings R1, R2, and R3). In addition, the underground connection between Buildings O1 and O5 in the office/R&D area would not be constructed under the Project Variant, resulting in less excavation.

The Project Variant would also include an approximately 2- to 3-million-gallon emergency water reservoir that would be buried 30 feet below the current grade at the northeast corner of the Project Site, resulting in additional excavation and ground disturbance. In addition, the emergency groundwater well would be approximately 430 feet deep in order to draw from the deeper aquifer; however, construction activities at this depth for the new emergency well would be relatively minor due to the anticipated boring diameter of the well. Building R3 would be constructed at the corner of Ravenswood Avenue and Middlefield Road, and the TH2 townhomes would be constructed along Middlefield Road, again resulting in additional excavation and ground disturbance, including an area that was not part of the Project Site under the Proposed Project (201 Ravenswood Avenue). Overall, a similar amount of ground disturbance would occur compared to the Proposed Project, except that development on the 201 Ravenswood Avenue parcel would also occur. The Project Variant would result in approximately 3,133,000 sf (71.9 acres) of ground disturbance during construction, inclusive of right-of-way and offsite improvements along Project Site frontages. In comparison, the Proposed Project would result in approximately 2,981,000 sf (68.4 acres) of ground disturbance during construction.

Construction and operation of the Project Variant would be subject to the same soil conditions as the Proposed Project because both would be located on the same site, although 201 Ravenswood Avenue would be included under the Project Variant. Therefore, both would be required to comply with existing regulations to address erosion, such as National Pollutant Discharge Elimination System (NPDES) Construction General Permit requirements and San Mateo County Provision C.3 Stormwater Technical Guidance. Therefore, similar to the Proposed Project, the Project Variant would result in ***less-than-significant impacts*** related to soil erosion during construction and operation.

Impact GS-3: Unstable Soils or Geologic Units. The Project Variant would not be located on a geologic unit or soil that would be unstable or would become unstable as a result of the Project Variant and potentially result in subsidence, liquefaction, or collapse. (LTS)

There is potential for liquefaction on the Project Site, which, combined with construction activities, could lead to lateral spreading, subsidence, or differential settlement. Construction activities that would create an open, or free, face and potentially allow lateral spreading include the excavation for underground parking garages, which could be up to 15 feet below the ground surface, and trenching for utilities. Construction of the Project Variant would include slightly less excavation and dewatering compared with the Proposed Project because the Project Variant would provide no underground parking for the residential uses. In addition, the underground connection between Buildings O1 and O5 in the office/R&D area would not be constructed under the Project Variant, resulting in less excavation. The Project Variant would also include an approximately 2- to 3-million-gallon emergency water reservoir that would buried 30 feet below the current grade at the northeast corner of the Project Site, which would require excavation that could allow lateral spreading. However, as part of the construction permitting process, the Project Sponsor would be required by law to incorporate all applicable standards and geotechnical design-level recommendations into the design and construction of the Project Variant. In addition, the Project Sponsor would be required to comply with the California Building Standards Code and the Menlo Park Municipal Code, which would ensure that structures developed under the Project Variant and their associated trenches and foundations would have the maximum practicable protection from soil failure available under static or dynamic conditions. Therefore, similar to the Proposed Project, impacts related to unstable geologic or soil units at the Project Site under the Project Variant would be ***less than significant***. Operation of the Project Variant would not include the placement of fill material or involve excavation/dewatering; therefore, it would not contribute to collapse, subsidence, or settlement within unstable soil. There would be ***no impact*** from operations.

Impact GS-4: Expansive Soils. The Project Variant could be located on expansive soils but would not create a substantial direct or indirect risk to life or property. (LTS)

Moderately expansive soil occurs at the Project Site. Because the Project Variant would be located on the same Project Site as the Proposed Project (plus the property at 201 Ravenswood Avenue), the same impacts related to expansive soils could occur. Structures and utilities constructed on expansive soil could experience cyclic seasonal heave and settlement as soil expands and contracts through wetting and drying cycles. If structures and utilities are not properly designed, cyclic expansion and contraction could affect structural stability. Structural damage, warping, and cracking that affects foundations, parking garages, and utilities may occur if fills and foundations are not properly engineered to address the potential effects of expansive soils and imported fill.

To reduce potential impacts from expansive soils, the measures that may be taken to address the potential for damage caused by the shrinking and swelling of these soils include removing the soils and replacing them with non-expansive fill and using slabs engineered for site-specific conditions. As required for the Proposed Project, the Project Variant would be designed and constructed in compliance with policies and programs regarding expansive soils and meet or exceed the California Building Standards Code, including its soil and foundation support parameters, as well as local standards, which also require early design-level geotechnical investigations and recommendations. Therefore, the impacts related to expansive soils at the Project Site under the Project Variant would be ***less than significant***, similar to the Proposed Project. No mitigation is required.

Impact GS-5: Paleontological Resources. The Project Variant could destroy a unique paleontological resource or site. (LTS/M)

No known fossils, unique paleontological resources, or unique geologic features are present in the vicinity of the Project Site. However, the Project Site is underlain by nonmarine Pleistocene alluvium that has the potential to contain unique paleontological resources. The Project Variant would be located on the same site as the Proposed Project but would also include the property at 201 Ravenswood Avenue. The Project Variant would result in slightly fewer ground-disturbing activities because no underground parking would be provided in the residential area, and no underground connection would be constructed between Buildings O1 and O5 in the office/R&D area. However, the below-grade parking in the office/R&D area would still be developed under the Project Variant at a depth of 15 feet below the current grade. In addition, ground-disturbing activities would occur at the northeast corner of the Project Site under the Project Variant, an area that would not be developed under the Proposed Project, beyond a recreational field, surface parking lot, and small public amenities building.

Under the Project Variant, ground-disturbing activities, which could affect paleontological resources, would include the construction of a below-grade emergency water reservoir and development of Building R3 and the TH2 townhomes for residential uses. Because the anticipated maximum depth of construction under the Project Variant would be 30 feet below the current grade for the emergency water reservoir, compared to 15 feet below the current grade for the Proposed Project, there would be greater potential for unknown paleontological resources to be destroyed during construction because encounters with native soils would be more likely. In addition, the emergency groundwater well would be approximately 430 feet deep in order to draw from the deeper aquifer; however, construction activities at that depth for the new emergency well would be relatively minor due to the anticipated narrow boring diameter of approximately 28 inches for the well. Well drilling would involve older strata with varying levels of sensitivity and would affect only a very small volume of material. Regardless, the Project Variant would result in ***potentially significant*** impacts to paleontological resources.

Implementation of Mitigation Measure GS-5.1 and GS-5.2, also required for the Proposed Project, would reduce the potential impact by requiring a worker education program regarding paleontological resources to be conducted and a protocol to be in place to stop work should paleontological resources be encountered. Implementation of these mitigation measures would ensure that the significant impacts related to unknown paleontological resources would be reduced to a ***less-than-significant level***, similar to the Proposed Project.

Impact C-GS-1: Cumulative Impacts Related to Seismic Hazards. Cumulative development would not result in a significant environmental impact from seismically related hazards; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Cumulative projects would be required to go through environmental and regulatory review and comply with local and State building codes to reduce impacts related to seismic hazards. In addition, each project would also be required to have a site-specific geotechnical investigation performed, which would provide design recommendations to reduce each project's impacts related to geologic and seismic safety. Development in the vicinity would be required to comply with the California Building Standards Code, Menlo Park Municipal Code, and General Plan polices. These codes and policies would, to the maximum extent practicable, reduce potential cumulative development-related impacts associated with seismic ground shaking, liquefaction, and seismically induced ground failure. The cumulative impact would therefore be ***less than significant***, similar to the Proposed Project. No mitigation is required.

Impact C-GS-2: Cumulative Impacts Related to Soil Erosion and Soil Hazards. Cumulative development would not result in a significant environmental impact from soil erosion and soil hazards; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The Project Variant and development in the vicinity would be required to comply with the California Building Standards Code, Menlo Park Municipal Code, San Mateo County Provision C.3 Stormwater Technical Guidance (for conformance with the NPDES permit issued by the San Francisco Bay Regional Water Quality Control Board), and General Plan polices. These codes and policies would, to the maximum extent practicable, reduce cumulative development-related impacts associated with soil erosion and expansive soil. The cumulative impact would therefore be ***less than significant***, similar to the Proposed Project. No mitigation is required.

Impact C-GS-3: Cumulative Impacts Related to Paleontological Resources. Cumulative development would not result in a significant environmental impact with mitigation on paleontological resources; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)

Excavation for other development projects would have the potential to result in development-related impacts on paleontological resources under the disturbed ground surface and a significant cumulative impact. However, implementation of Mitigation Measures GS-5.1 and GS-5.2, under both the Proposed Project and the Project Variant, would reduce this impact to a less-than-significant level. Other projects in the vicinity of the Project Site would also be required to include mitigation measures in compliance with the city's General Plan to reduce impacts to a less-than-significant level. In addition, excavation would be limited spatially to the Project Site (i.e., Project footprint) and would not combine with other projects to cause a cumulative impact. The cumulative impact would therefore be ***less than significant with mitigation***. No additional mitigation is required.

Hydrology and Water Quality

Similar to the Proposed Project, the Project Variant would result in no impacts related to a release of pollutants due to inundation in flood hazard, tsunami, or seiche zones because the area is not subject to such hazards. No further analysis is required.

Impact HY-1: Water Quality. The Project Variant would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality. (LTS/M)

Surface Water Quality

Project construction activities, including grading, soil and material stockpiling, and other earth-disturbing activities, could result in short-term water quality impacts from erosion and the subsequent sediment transport to adjacent properties, roadways, or watercourses from storm drains. The Project Variant would result in approximately 3,133,000 sf (71.9 acres) of ground disturbance during construction, inclusive of right-of-way and offsite improvements along Project Site frontages. Approximately 174,905 cubic yards of excavated soil would be transported offsite for disposal under the Proposed Variant. Sediment transport to local drainage facilities, such as drainage inlets, culverts, and storm drains, could result in reduced stormflow capacity as well as localized ponding or flooding during storm events. In addition to the 174,905 cubic yards of exported soil, the Proposed Variant would demolish approximately 1,106,302 sf of building space, including the Chapel buildings. This construction demolition waste would be disposed of at an offsite landfill.

All Project Variant construction activities, which would be generally similar to those of the Proposed Project, would be subject to existing regulatory requirements. For example, because land disturbance associated with the Project Variant would affect more than 1 acre, coverage under the NPDES Construction General Permit would be required. Standards contained in the Construction General Permit would ensure that water quality would not be degraded. As part of compliance with the Construction General Permit, standard erosion control measures and other BMPs would be identified in the stormwater pollution prevention plan (SWPPP). These measures would be implemented during construction to reduce contamination and sedimentation in waterways.

The Project Variant would very likely be constructed in three phases, with construction lasting approximately 99 months, compared to 77 months under the Proposed Project. Therefore, some activities would occur during the wet season. However, specific erosion and sediment control BMPs would be implemented for Project construction occurring during the wet season. The Project Sponsor would be required to implement BMPs to minimize the potential for large rain events to mobilize loose sediment during construction.

Project Variant construction would comply with the Construction General Permit, including development and implementation of the SWPPP, and local stormwater regulations, such as the Menlo Park Municipal Code and other related regulations. Compliance with the requirements would ensure that construction activities would not result in a violation of water quality standards or waste discharge requirements or otherwise result in water quality degradation. Project impacts on surface water quality during construction would be ***less than significant***. No mitigation is required.

Groundwater Quality

Temporary construction dewatering could be required in isolated areas with shallow groundwater during excavation and trenching for foundation work and construction of the emergency water reservoir and underground parking garages. The anticipated maximum depth of construction under the Project Variant would be 30 feet below the current grade for the emergency water reservoir and 430 feet below the current grade for the narrow diameter (approximately 28 inches) of the emergency groundwater well. In comparison, the maximum depth of excavation under the Proposed Project would be 15 feet below the current grade for the underground parking throughout the Project Site. Similar to the Proposed Project, underground parking would be included in the office/R&D area, although fewer underground parking spaces are proposed as part of the Project Variant relative to the Proposed Project. However, the Project Variant would not construct underground parking in the residential area, resulting in overall less ground disturbance and excavated soil.

The Project Site has had historical soil and groundwater contamination issues. Soil vapor beneath the property has low concentrations of VOCs. In addition, chloroform concentrations slightly exceed the environmental screening levels for groundwater vapor intrusion on the north and west sides of the site.[36] Therefore, contaminated groundwater could be encountered during dewatering for construction of the proposed underground parking areas and the emergency water reservoir, resulting in a potentially significant impact. In the event that contaminated groundwater is encountered during dewatering at the Project Site, the contractor may be subject to dewatering requirements in addition to those outlined in the Construction General Permit. The Project Variant would be required to comply with the Municipal Regional Permit (MRP), which includes filing a Notice of Intent for permit coverage under the Construction General Permit, as well as local ordinances regarding stormwater and construction site runoff. These requirements would involve development and implementation of a Construction General Permit, SWPPP, and stormwater management measures specific to the Project Site and Project construction activities to minimize water quality impacts related to spills or other actions that could contaminate groundwater.

The emergency well under the Project Variant would comply with the State standards that govern design and construction of potable water supply wells were specifically developed to prevent wells from inadvertently creating a conduit for the migration of any type of fluid between separate aquifer bodies. Portions of the well bore that are not anticipated to be used for withdrawal are cased with solid pipe and sealed according to regulatory standards, therefore excluding those zones from flowing into a well. Only the intervals targeted for withdrawals are constructed with perforated ("screened") pipe that allows water to enter, and the borehole is sealed to prevent fluid migration between different depths of an aquifer. This is a precaution to prevent the potential transfer of contaminants from shallow groundwater into deeper potable water aquifers, as well as potentially detrimental mixing of fresh and saline water bodies in the subsurface. However, a corollary benefit is that adherence to the standards also develops wells that withdraw water only from very specific intervals in the subsurface.

Project Variant compliance with waste discharge requirements and dewatering regulations would ensure that dewatering activities would be monitored as required and that no violations of water quality standards or waste discharge requirements would occur. However, the potential to encounter contaminated groundwater exists. This would be considered a ***potentially significant*** impact during Project construction. However, as under the Proposed Project, the Project Variant would be required to

[36] ATC Group Services, LLC. 2021. *Phase I Environmental Site Assessment, SRI International, 333 Ravenswood Avenue, Menlo Park, California 94025*. ATC Project No. NPLANE2002. March 12.

incorporate the recommendations described in the site-specific investigations, including a Phase I environmental site assessment and a site assessment report. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2 would reduce impacts to ***less than significant with mitigation***, similar to the Proposed Project.

Surface Water Quality

The Project Variant would have a pervious surface area of approximately 41.6 percent (1.164 million sf) across the site, compared to approximately 25.9 percent (659,900 sf) under existing conditions. The introduction of new landscaped areas and open spaces under the Project Variant, as well as a reduction in the amount of surface parking and hardscape, would reduce the amount of impervious cover compared to existing conditions. Because of the reduction in impervious surface area across the Project Site, runoff rates and volumes would be less than under existing conditions. The Project Site under the Project Variant would include approximately 81,000 to 83,500 sf of bioretention areas. Generally, bioretention areas would either be flow-through planters or recessed biotreatment ponds. The Project bioretention basins would be lined at the bottom; therefore, infiltration would not occur. In addition, the Proposed Project would conform to MRP Provision C.3 and San Mateo County Provision C.3 Stormwater Technical Guidance requirements and incorporate low-impact development (LID) stormwater treatment measures to address runoff associated with impervious cover. The Project Variant would comply with the General Construction Permit, San Francisco Bay MRP Provision C.3, and San Mateo County Provision C.3 Stormwater Technical Guidance. The Project Variant would also implement the SWPPP as well as other erosion control measures and incorporate stormwater treatment measures, such as bioretention ponds and self-retaining areas. The Project Variant would not violate any water quality standards or otherwise result in water quality degradation during operation. Therefore, impacts on water quality during operation would be ***less than significant***. No mitigation is required.

Impact HY-2: Groundwater Supply and Recharge. The Project Variant would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded. (LTS)

Construction

Groundwater is assumed to be at depths ranging from approximately 29 to 49 feet below current grades, although historic high groundwater is mapped at a depth of approximately 25 feet below current site grades. It is anticipated that the maximum depth of excavation would be 30 feet below the current grade for the emergency water reservoir, compared to 15 feet under the Proposed Project. Therefore, dewatering could be required for construction of the underground emergency water reservoir and in isolated areas with shallow groundwater during excavation and trenching for foundation work and underground parking garages. Dewatering would be conducted on a one-time or temporary basis during the construction phase and would not result in a loss of water that would deplete groundwater supplies. Groundwater supplies would not be used during construction activities. Therefore, construction of the Project Variant would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. Construction impacts would be ***less than significant***. No mitigation is required.

Groundwater Resources

The new emergency well under the Project Variant is expected to withdraw groundwater from the deeper aquifer during operation; although this withdrawal would be infrequent, use of the emergency well would occur only during a disruption in imported water deliveries from the SFPUC. The Project Site is within an

area of the San Mateo Plain subbasin known as the San Francisquito cone subbasin. The groundwater in this area consists of an upper, unconfined aquifer (the "shallow aquifer") at depths ranging up to 100 feet below ground surface, overlying a regionally extensive clay layer that forms an aquitard, which in turn overlies a lower confined or semi-confined aquifer (the "deep aquifer"). The deep aquifer comprises two water bearing zones: an upper zone at depths of 200–300 feet below ground surface, and a lower zone extending to depths in excess of 300 feet below ground surface.[37]

Natural recharge (inflow) to the San Francisquito subbasin includes infiltration from streams and other surface water, direct infiltration of surface rainfall in areas with pervious surfaces, and subsurface inflow from areas of higher elevation along the margins of the basin. Additional recharge is believed to occur from artificial sources, through infiltration of irrigation water and leakage from sewer and potable water pipelines. Low range annual recharge to the subbasin is approximately 5,000 AFY and the high-range amount is 10,000 AFY.[38] Discharge (outflow) from the subbasin includes groundwater pumping, subsurface outflow, and seasonal outflow to stream channels that are below the local water table. As of 2005, total discharge was estimated at approximately 8,000 AFY, with consumptive use through groundwater pumping making up about 1,100 acre-feet of that annual total.[39] More recently, studies for the Gloria Way Well Retrofit Project have estimated discharge at approximately 3,100 AFY, of which about 2,530 AFY reflects groundwater pumping and consumptive use.[40] As a result, recharge is greater than discharge within the subbasin.

The city of Menlo Park Corporation Yard is located on Burgess Drive south of the Project Site. An initial study/mitigated negative declaration (IS/MND) was prepared for the Corporation Yard Emergency Back-Up Water Supply Well No. 1 Project[41] in 2016; the adopted IS/MND identified the rate of recharge and discharge for the groundwater basin. Since the adoption of the IS/MND, no additional emergency wells other than the city's emergency well within the Corporation Yard have begun operating. Therefore, the analysis in this section relies on the groundwater recharge and discharge rates from the adopted IS/MND, which considered the city's Emergency Water Supply Program goal of providing up to three wells with a total capacity of up to 3,000 gpm drawing from the deep aquifer in addition to planned and operating wells in East Palo Alto and Palo Alto. The adopted IS/MND concluded that if a conservative recharge rate of 5,000 AFY is applied, an increase in overall groundwater withdrawals of 1,900 AFY could result in a significant impact on groundwater supplies. Groundwater conditions within the subbasin and surrounding basin indicate that withdrawals are within the overall sustainable yield (the rate of groundwater withdrawal that can be accommodated without unacceptable lowering of the water table or other adverse effects such as subsidence) of the basin.[42]

[37] Todd Engineers. 2005. *Final Report: Feasibility of Supplemental Groundwater Resources Development –Menlo Park and East Palo Alto, California*. Prepared for Cities of Menlo Park and East Palo Alto. Emeryville, CA.

[38] Todd Engineers, Kennedy/Jenks Consultants, and ESA. 2012. *Report: Gloria Way Water Well Production Alternatives Analysis and East Palo Alto Water Security Feasibility Study*. November.

[39] Todd Engineers. 2005. *Final Report: Feasibility of Supplemental Groundwater Resources Development –Menlo Park and East Palo Alto, California*. Prepared for Cities of Menlo Park and East Palo Alto. Emeryville, CA.

[40] ESA. 2013. *Gloria Way Well Retrofit Project – Draft Joint Initial Study and Environmental Assessment. Prepared for City of East Palo Alto and U.S. Environmental Protection Agency*. February.

[41] Infrastructure Engineering Corporation. 2016. *Corporation Yard Emergency Back-Up Water Supply Well No. 1 Initial Study/Mitigated Negative Declaration*. April. Prepared for City of Menlo Park Public Works Department.

[42] Todd Engineers, Kennedy/Jenks Consultants, and ESA. 2012. *Report: Gloria Way Water Well Production Alternatives Analysis and East Palo Alto Water Security Feasibility Study*. November.

Shallow Groundwater Supply

The Project Variant would not use groundwater from the shallow aquifer. The preliminary design of the emergency well, developed based on exploratory drilling conducted for the Project Variant, indicated salinity levels below 440 feet below ground surface, but that would not impact a well that is drilled above that at 430 feet below ground surface. This will be refined in the final design process and through regulatory review but is not expected to change materially. Therefore, ***no impacts*** on groundwater resources in the shallow aquifer are anticipated during operation. No mitigation is required.

Deep Groundwater Supply

The emergency well under the Project Variant would use groundwater from the deep aquifer on an emergency basis. The emergency well would not be expected to substantially deplete groundwater supplies because it would only be used for municipal supply during emergencies when a back-up source of water is needed to compensate for interruption or reduction in deliveries to the city's usual imported supply from the SFPUC. If water treated by the proposed disinfection system does not produce potable water supply consistent with standards established by the State Water Resources Control Board Division of Drinking Water, the city would not be legally able to include the well water in its municipal water supply. However, the well water could be used for non-potable purposes.

Sustainable yield for individual wells depends on a combination of aquifer characteristics and well design. However well design cannot be completed in final detail until the well is drilled and the details of subsurface geology at the immediate well site are determined. Estimates of likely sustainable yield can be based on sustainable yields derived for other wells in the vicinity. For example, the city of Palo Alto currently has plans to operate several wells for emergency back-up supply, with a total estimated sustainable yield of 500 AFY over the long term, or up to 1,500 AFY on an intermittent basis without excessive declines in groundwater levels.[43]

The emergency well under the Project Variant would not be used for withdrawals of this magnitude. The emergency well is anticipated to withdraw a maximum of 1,500 gpm, based on an initial feasibility analysis and the actual rates from the Corporation Yard emergency well; however, the actual yield will not be known until the well is drilled and the details of subsurface stratigraphy at the immediate well site are determined. As mentioned previously, the emergency well would be expected to be exercised at full capacity for one hour, once a month each year. To account for the possibility that additional hours for exercising the well could be required, the analysis assumes up to 15 total hours per year, outside of an emergency water draw. Using the maximum capacity, the annual yield for groundwater withdraw during testing can be estimated as:

1,500 gallons/minute x 60 minutes/hour x 15 hours/year = 1,350,000 gallons/year

1,350,000 gallons/year = 4.15 acre-feet/year

This is a very small quantity by comparison with the overall water budget in the San Francisquito subbasin, substantially (approximately 0.2 percent) less than the threshold of total withdrawals at which subbasin overdraft would be expected to occur. It is also much smaller (less than 0.3 percent) than the estimated sustainable yield on an intermittent basis for other area wells. Furthermore, the emergency well on the Project Site would be more than 1,000 feet from the existing Corporation Yard emergency well, which is a general guide for separation between well pumps to avoid interference with other wells. Wells may be closer than 1,000 feet depending on the nature of the aquifer, pumping, and recharge rate.

[43] Ibid.

Based on the above, regular monthly exercising of the well pumps is expected to have a ***less-than-significant*** impact with regard to over-use of groundwater in the deep aquifer. No mitigation is required. In addition, the adopted IS/MND considered the totality of Menlo Park Municipal Water's (MPMW's) Emergency Water Supply Program goal of providing up to 3,000 gpm during an emergency and determined that the Corporation Yard emergency well and MPMW's overall water supply goal would result in a ***less-than-significant*** impact to cumulative groundwater depletion, given the infrequent use of the emergency wells only during a disruption in imported water deliveries from the SFPUC. No mitigation is required. Additionally, the emergency well at the Project Site would be greater than 1,000 feet from the existing Corporation Yard well, reducing the interference with other wells and the potential for overdraft of the existing groundwater supplies within the San Francisquito subbasin.

During an emergency, the emergency well could operate for longer periods of time but as soon as reliable deliveries of imported supply could feasibly be restored, the city would return to the use of imported supply. It is difficult to predict how long operation would be needed in practice, but one of the stated objectives of the SFPUC's in-progress seismic upgrades is to enable restoration of major facilities to meet average-day demand within 30 days after a major earthquake. Assuming round-the-clock operation for a period of 30 days at a pumping rate of 1,500 gpm yields 199 acre-feet of water consumed. This is still a very small quantity of water by comparison with the overall water budget in the San Francisquito subbasin, and is also well below estimated sustainable yields for other area wells, and is thus substantially below the threshold where significant impacts on groundwater supply are anticipated. Moreover, in the unlikely event that usage persisted over a number of months, it would still be temporary and comparatively short-term, allowing the aquifer to recover from Project-related use through natural recharge once imported supply is restored and emergency withdrawals terminate.

Groundwater Recharge

The pervious surface area within the Project Site would increase upon completion of the Project Variant. Approximately 41.6 percent of the Project Site would be covered with pervious surfaces, compared to 25.9 percent under existing conditions and 42.3 percent under the Proposed Project. The Project Variant, similar to the Proposed Project, would include new landscaped areas, with an overall increase in the number of trees; native drought-tolerant landscaping; self-retaining areas; and other features that would be integrated into the design of the Project Site. New pervious landscaped areas would slow surface water runoff and allow it to percolate into the ground, thereby providing increased benefits related to groundwater infiltration and recharge. Therefore, the Project Variant's operations-related impact on groundwater recharge would be ***less than significant***. No mitigation is required.

Impact HY-3: Drainage and Flooding. The Project Variant would not substantially alter the existing drainage pattern of the Project Site in a manner that would result in substantial erosion or flooding, impede or redirect floodflows, contribute runoff that would exceed the capacity of the stormwater system, or provide substantial additional sources of polluted runoff. (LTS)

During construction of the Project Variant, stormwater drainage patterns could be temporarily altered because of site grading, site preparation, and excavation. Measures required by the Construction General Permit would limit site runoff during construction but would not alter stormwater drainage patterns. BMPs would be implemented to control construction site runoff, ensure proper stormwater control and treatment, and reduce the discharge of pollutants to the storm

drain system. Therefore, construction of the Proposed Project would not substantially alter the existing drainage pattern of the area in a manner that would result in substantial erosion or siltation or increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite. Project construction would not result in an exceedance of drainage system capacities. The associated impact would be ***less than significant***. No mitigation is required.

The Project Variant would reduce the amount of impervious surface area across the Project Site by introducing new landscaped areas and open spaces and reducing the area for surface parking and hardscape. All onsite drainage would discharge into the same drainpipe as the Proposed Project. Because of the reduction in impervious area across the Project Site, the anticipated flow rate for runoff leaving the Project Site would be less than under existing conditions. Therefore, no additional hydromodification measures would be required to address changes in runoff. A reduced impervious surface area, compared to the existing impervious surface area, and implementation of bioretention areas/flow-through planters would result in a flow rate of approximately 40.3 cfs. Compared to existing conditions, the flow rate into the existing storm drain system would decrease by approximately 18.6 percent.[44] The Proposed Project would result in a flow rate of approximately 39.7 cfs, which would be less than that of the Project Variant. Nonetheless, no additional hydromodification measures would be required because the Project Variant would result in a reduction in the flow rate compared to existing conditions.

The Project Variant would conform to San Mateo County Provision C.3 requirements, as required by the city's NPDES municipal permit, and incorporate LID stormwater treatment measures. All development under the Project Variant would comply with the applicable federal, State, and local requirements, as discussed in the Regulatory Setting, including requirements regarding water quality, flood control, and stormwater management. Therefore, the Project Variant would not result in changes to stormwater runoff rates or volumes that would result in the capacity of existing or planned stormwater drainage systems being exceeded, provide substantial additional sources of polluted runoff, or impede or redirect floodflows. The impact related to stormwater runoff and capacity would be ***less than significant***. No mitigation is required.

Impact HY-4: Conflict or Obstruct a Water Resource Management Plan. The Project Variant would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (LTS)

As with the Proposed Project, construction and operation of the Project Variant would be subject to existing regulatory requirements. During construction, permittees would comply with appropriate water quality objectives, as defined in the San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). In addition, implementation of appropriate city General Plan policies would require the protection of groundwater recharge areas and groundwater resources, in accordance with the applicable sustainable groundwater management plan. The Project Site overlies the San Mateo Plain subbasin, which is designated as a very low-priority basin and therefore not subject to a groundwater sustainability plan (GSP). In the event the emergency well is used, groundwater withdrawals would be within the overall sustainable yield of the subbasin. Construction and operation of the Project Variant, similar to the Proposed Project, would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Construction and operational impacts associated with the Project Variant would be ***less than significant***. No mitigation is required.

[44] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

Impact C-HY-1: Cumulative Hydrology and Water Quality Impacts. Cumulative development could result in a significant environmental impact on hydrology and water quality; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)

The cumulative geographic areas, inclusive of the Project Site, are fully developed. The buildout of cumulative projects would be anticipated to involve primarily redevelopment of existing developed sites that contain substantial impervious surface areas. The incremental contribution to an impact on water quality from implementation of the Project Variant would be minor. Like the Proposed Project, cumulative projects would be required to comply with the Construction General Permit to control runoff and regulate water quality at each development site, along with regional and local requirements regarding the protection of surface water and groundwater quality. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2, as required for the Proposed Project, would reduce potential impacts by requiring an environmental site management plan prior to the start of construction to minimize any potential exposure of construction personnel, future site occupants, or the general public to contaminated soils and unknown environmental conditions/subsurface features, along with groundwater monitoring and sampling if dewatering is required within the footprint of the construction sites. Overall, implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2 would reduce the Project Variant's contribution to cumulative impact to ***less than cumulatively considerable with mitigation.***

During construction of cumulative development within the San Mateo Plain subbasin, dewatering could be conducted on a one-time or temporary basis during the construction phase but would not result in a loss of water that would deplete groundwater supplies. Dewatering during the construction phase of the Project Variant would be conducted temporarily and would not adversely affect groundwater supplies. The contribution to groundwater withdrawals from emergency back-up wells during operation such as the proposed new emergency well, in addition to additional wells anticipated under the city's Emergency Water Supply Program, and existing wells, would be infrequent, minor, and short-term, and should be naturally recoverable. Groundwater withdrawals are within the basin's sustainable safe yield, and as a result, no significant cumulative impacts with regard to groundwater supply are anticipated. The Project Variant would not substantially interfere with groundwater recharge because it would increase the size of the groundwater recharge areas and would not require permanent dewatering. Therefore, the Project Variant's contribution to cumulative impacts on groundwater recharge and supplies would be ***less than cumulatively considerable***.

Cumulative development within the vicinity of the Project Site could increase the volume and rate of stormwater runoff. Such increases could cause localized flooding if storm drainage capacity is exceeded or excess flows overtop banks in areas where floodwater storage may not be available. The Project Variant would result in a decrease in impervious surface area, which could result in a reduction of stormwater runoff. All cumulative projects would be required to include stormwater management features, such as LID design measures, in project designs to reduce flows to pre-project conditions. If improvements to storm drainage capacity are needed, the city will ensure that the appropriate storm drainage improvements are identified. Therefore, the Project Variant's contribution to cumulative impacts on storm drain capacity would be ***less than cumulatively considerable***.

Hazards and Hazardous Materials

Similar to the Proposed Project, the Project Variant would result in no impact related to airport hazards or wildland fires because the Project Site is not adjacent to airports or within wildland fire hazard zones. No further analysis is required.

Impact HAZ-1: Routine Hazardous Materials Use. The Project Variant would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. (LTS)

Similar to the Proposed Project, construction of the Project Variant would involve the routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations. In addition, because of the nature of the proposed R&D uses under the Project Variant, which are the same as the Proposed Project, although to a slightly greater extent due to the increase in the number of residential units, the possibility exists for hazards related to the handling of hazardous materials during operation. Mandatory compliance with all applicable federal, State, and local regulations pertaining to the use, storage, transport, and disposal of hazardous materials would ensure that the construction and operation of the Project Variant would not create a significant hazard for the public or the environment. As with the Proposed Project, the impact associated with routine hazardous materials use under the Project Variant would be ***less than significant***. No mitigation is required.

Impact HAZ-2: Upset and Accident Conditions Involving Hazardous Materials. The Project Variant could create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (LTS/M)

Under the limited hazardous materials survey summary prepared for the Project Site, asbestos, lead, and polychlorinated biphenyls (PCBs) were identified in several locations throughout the site.[45] Encountering contaminated soil and/or groundwater would create an exposure risk for construction personnel and the surrounding environment. Similar to the Proposed Project, soil excavated during construction of the Project Variant would be transported offsite for disposal. In addition, as under the Proposed Project, temporary construction dewatering for the below-grade parking at the proposed buildings in the office/R&D area may be required in some isolated areas of the Project Site to mitigate the effects of shallow groundwater. However, under the Project Variant, no underground parking would be provided for the residential uses (compared to underground parking beneath Buildings R1, R2, and R3 for the Proposed Project). Therefore, the removal of the underground parking garages beneath the residential buildings in the residential area, along with the removal of the connection between Buildings O1 and O5 in the office/R&D area, would result in a reduction in soil excavation and construction dewatering. Regardless, because residual contaminants exist on the Project Site, ground disturbance, excavation, and dewatering activities conducted during construction of the Project Variant could encounter affected soils and contaminated groundwater.

Unlike the Project, during operation the Project Variant may use an emergency well to fill the emergency water reservoir in the event water from SFPUC is reduced or unavailable. The new emergency well would be required to produce a potable water supply consistent with standards established by the State Water Resources Control Board Division of Drinking Water. Thus, the Project Variant would not create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation.

As with the Proposed Project, the Project Variant would demolish the majority of the existing buildings at the Project Site. Unlike the Proposed Project, the Project Variant would include the demolition of the buildings at 201 Ravenswood Avenue. Therefore, approximately 12,700 sf of building materials that

[45] ATC. 2021. *Limited Hazardous Materials Survey – SRI International, 333 Ravenswood Avenue Menlo Park, California.* March 12.

would not be demolished under the Proposed Project would be demolished under the Variant. Because these buildings were constructed in 1966, hazardous building materials such as asbestos, lead, and PCBs could be present. As such, construction activities associated with the Project Variant would create a risk for construction personnel and the surrounding environment from an exposure to hazardous building materials, which would be a ***potentially significant*** impact.

Mitigation Measures HAZ-2.1 through HAZ-2.3 would reduce potential impacts associated with construction and operation of the Project Variant by requiring an environmental site management plan prior to the start of construction to minimize any potential exposure of construction personnel, future site occupants, and the general public to contaminated soils and unknown environmental conditions/subsurface features. The mitigation measures would also require monitoring and groundwater sampling to ensure adequate treatment and disposal and address potential risks associated with contaminated groundwater encountered during dewatering. In addition, proper abatement procedures would be implemented at buildings and structures with known hazardous building materials that would be demolished as part of the Project Variant. In addition, implementation of Mitigation Measure HAZ-2.4 would require additional soil vapor investigation in areas designated for residential use to address the potential soil vapor intrusion risk associated with the Project Variant. Implementation of the mitigation measures, which are the same as required for the Proposed Project, would reduce potentially significant impacts related to the release of hazardous materials from affected media onsite to ***less than significant with mitigation***.

Impact HAZ-3: Exposure of Schools to Hazards. The Project Variant could emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (LTS/M)

The Project Site is within 0.25 mile of Alpha Kids Academy, Menlo-Atherton High School, and Menlo Children's Center. Under the Project Variant, the buildings at 201 Ravenswood Avenue, including the site where Alpha Kids Academy currently operates, would be demolished during Phase 1 of construction (unlike under the Proposed Project). In addition, the six-story Building R3 and the three-story TH2 townhomes would be constructed in the northeast corner of the Project Site, across Middlefield Road from Menlo-Atherton High School. The emergency water reservoir would be buried 30 feet under the current grade in the northeast portion of the Project Site. In comparison, under the Proposed Project, development in this area would include recreational fields, a small public amenity building, and a surface parking lot. Therefore, the intensity of construction activities, including soil excavation and dewatering, in proximity to Menlo-Atherton High School would be greater under the Project Variant. However, construction in the northwest corner of the Project Site, across Laurel Street from the Menlo Children's Center, would be slightly less intense because construction of the below-grade parking under the residential buildings would not occur.

As discussed above, construction activities associated with the Project Variant, similar to the Proposed Project, could encounter residual contamination in soil during ground disturbance as well as affected groundwater during dewatering. In addition, demolition activities could uncover and expose construction personnel and the surrounding environment to hazardous building materials, which would be a ***potentially significant*** impact. Although these activities would be more intense and closer to Menlo-Atherton High School compared to the Proposed Project, the impacts would have the same character as those under the Proposed Project. Implementation of Mitigation Measures HAZ-2.1 through HAZ-2.3 would reduce potential impacts of the Project Variant by requiring an environmental site management plan prior to the start of construction to minimize any potential exposure of construction personnel, future site occupants, and the general public to contaminated soils and unknown environmental

conditions/subsurface features. The mitigation measures would also require monitoring and groundwater sampling to ensure adequate treatment and disposal and address potential risks associated with contaminated groundwater encountered during dewatering**.** In addition, proper abatement procedures would be implemented at buildings and structures with known hazardous building materials that would be demolished as part of the Project Variant. Implementation of these mitigation measures would reduce potentially significant impacts related to the handling of hazardous or acutely hazardous materials near schools to ***less than significant with mitigation***.

Impact HAZ-4: Cortese List. The Project Variant would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard for the public or the environment. (LTS/M)

Contamination associated with the SRI and SRI International properties was addressed to the satisfaction of the oversight agencies. Thus, impacts associated with leaking underground storage tanks are considered unlikely. No additional hazards or hazardous materials have been identified at the 201 Ravenswood Avenue property.[46] Nonetheless, as with the Proposed Project, the Project Variant would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in the potential to encounter residual affected media. This would be a ***potentially significant*** impact. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2, also required for the Proposed Project, would reduce the potential impacts of the Project Variant by requiring an environmental site management plan prior to the start of construction. Similar to the Proposed Project, implementation of the mitigation measures under the Project Variant would reduce any potential exposure of construction workers or the public to residual contamination in onsite soils, if encountered, to ***less than significant with mitigation***.

Impact HAZ-5: Impairment of Emergency Response or Evacuation Plans. The Project Variant would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan. (LTS)

Development of the Project Variant, similar to the Proposed Project, would not include any permanent changes to existing public roadways that provide emergency access to the Project Site or surrounding area. During construction, it is possible that construction activity could affect emergency response or evacuation plans due to temporary construction barricades or other roadway obstructions that could impede emergency access onsite. However, compliance with city requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times. Structures associated with the Project Variant would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, development of the Project Variant is not expected to interfere with the County of San Mateo's Emergency Operations Plan or any evacuation route. The Project Variant, similar to the Proposed Project, would not impair implementation of, or interfere with, an adopted emergency response plan or emergency evacuation plan during construction or operation. This impact would be ***less than significant***. No mitigation is required.

[46] ATC. 2021. *Phase I Environmental Site Assessment – SRI International, 333 Ravenswood Avenue Menlo Park, California 94025.* Project Number 129-7-1. March 12.

Impact C-HAZ-1: Cumulative Hazards and Hazardous Materials Impacts. Cumulative development would not result in a significant environmental impact related to hazards and hazardous materials; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Substantial hazardous materials accidents within the Project Site or in the vicinity are not foreseeable with adherence to laws and regulation. In addition, if such incidents were to occur, only one such incident would be expected at any one time (except during major catastrophes). Therefore, as with the Proposed Project, the Project Variant in combination with other past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site would not result in a significant cumulative impact associated with hazards or hazardous materials. The cumulative impact would be ***less than significant***. No mitigation is required.

Population and Housing

Impact POP-1: Unplanned Population Growth. The Project Variant would not induce substantial unplanned direct or indirect population growth. (LTS)

Construction of the Project Variant, including demolition, grading, utility work, excavation, landscaping, building and parking garage construction, and the application of architectural coatings, would temporarily increase construction employment. Given the relatively common nature and scale of the construction associated with the Project Variant compared to proposed development projects throughout the Bay Area, the demand for construction employment would most likely be met with the existing and future labor market in the Bay Area. Although some would commute from outside the Bay Area, because of the temporary nature of construction, these workers would not be expected to relocate permanently. Therefore, impacts related to indirect population growth during construction of the Project Variant would be ***less than significant***. No mitigation is required.

Like the Proposed Project, operation of the Project Variant would have impacts on both housing supply and demand. New residential units developed by the Project Variant would increase the supply of housing; non-residential components developed by the Project Variant would increase employment compared to existing conditions and, therefore, very likely result in new demand for additional housing within commuting distance for workers. Table 4-27 summarizes the onsite population by unit size.

Table 4-27. Onsite Population by Unit Size for the Project Variant

	Number of Units	Estimated Household Size[a]	Total Number of People
Studio	46	1	46
1-Bedroom Unit	323	2	646
2-Bedroom Unit	299	3	897
3-Bedroom Unit	86	4	344
Townhomes	46	4[a]	184
Total	***800***	***2.64***	***2,117***

Source: California Health and Safety Code Section 50052.5(h), 2024.

a. Assumes townhomes will include an average of three bedrooms.

Table 4-28 includes a summary regarding employment as well as the housing supply and demand directly and indirectly induced by the Project Variant. Consistent with the analysis for the Proposed Project, the analysis for the Project Variant includes the conservative scenario for office uses, which would result in more employees than R&D uses. The numbers provided in the table are described in detail in Section 3.14, *Population and Housing*; refer to Section 3.14 for further details. As shown in the table, like the Proposed Project, the Project Variant would result in added housing supply and housing demand, as outlined below.

Table 4-28. Summary of Employment and Housing Induced by the Project Variant (Conservative Scenario)

	Onsite	Offsite Due to Induced Employment[a]	Total
Regional Totals			
Net New Employment	3,856 employees	419 employees	4,275 employees
Worker Housing Demand	2,060 units	224 units	2,284 units
Housing Units Constructed Onsite	800 units	n/a	800 units
Net Decrease in Housing Availability in Region[b]	-1,260 units	-224 units	-1,484 units
Menlo Park Share			
Estimated Menlo Park Share of Housing Need[c]	110 units	11 units	121 units
Project Housing Units Constructed in Menlo Park	800 units	n/a	800 units
Net Increase in Housing Availability in Menlo Park	690 units	n/a	679 units
Estimated Population Added in Menlo Park	2,117 persons	301	2,418 persons

Source: Keyser Marston Associates. 2024. *Housing Needs Assessment Parkline*. April.

a. Estimated offsite employment would be induced by the demand of the residents at the new onsite housing for additional retail, restaurant, medical, and other services.

b. Housing units constructed under the Proposed Project minus number of households induced by the Proposed Project.

c. The estimated Menlo Park share of housing need is based on commute data from the U.S. Census Bureau showing that an average of 5.3 percent of Menlo Park employees also live in the city.

Based on Tables 4-27 and 4-28, added housing supply and demand is summarized, as follows:

- **Added Housing Supply**: The Project Variant would increase the housing supply with the construction of up to 800 units at the Project Site. Based on the average of 2.64 pph, it is anticipated that the 800 new rental dwelling units would generate approximately 2,117 residents.
- **Added Housing Demand**: New jobs added by the Project Variant would result in new worker households that would need housing somewhere within commuting distance to Menlo Park. The approximately 3,856 jobs added under the Proposed Project at full buildout would create a demand for an estimated 2,284 additional housing units, including a demand from workers in offsite services (e.g., restaurant, retail, educational, medical) for housing units. The number of jobs can be translated into an estimate of worker housing demand, based on an average of 1.87 workers per worker household. This analysis is conservative as it does not account for workers who may already live within commuting distance of Menlo Park.

Employment Growth

Operation of the Project Variant would generate up to 3,856 net new jobs onsite, accounting for the existing employees who would no longer work at the Project Site, including employees at 201 Ravenswood Avenue. In addition, the Project Variant would add 800 new residential units in Menlo Park, thereby increasing the population and creating net new demand for products and services. The jobs associated with the delivery of these products and services are also conservatively assumed to be net new jobs. As a result, the Project Variant would induce approximately 419 offsite jobs that would serve residents of the proposed housing. In total, the Project Variant would result in the creation of approximately 4,275 new jobs in the region.[47] Using the assumption that 5.3 percent of people who live in Menlo Park also work in the city, this would equate to approximately 22 new offsite jobs in Menlo Park. Together with the 3,856 net new jobs onsite, approximately 3,878 new jobs would be created in Menlo Park as a result of the Project Variant.[48]

ABAG estimates that the number of jobs in the city's sphere of influence will grow by approximately 6,065 between 2020 and 2040. Therefore, the number of direct and indirect employees generated by the Project Variant in Menlo Park would equal approximately 64 percent[49] of the anticipated employment growth in the city from 2020 to 2040. The number of employees generated by the Project Variant would not exceed ABAG projections, and the Project Variant would not result in an increase in city population or demand for housing that would exceed ABAG projections, as explained in more detail below.

Indirect Population Growth from Project Employment

Operation of the Project Variant would generate up to 3,856 net new jobs at the Project Site. Using an average of approximately 1.87 workers per housing unit in San Mateo County, the Project Variant would generate approximately 2,060 new households regionally.[50] The current estimate of "commute share" uses data on existing commute patterns to estimate the number of workers who would live in Menlo Park; it is currently estimated that 5.3 percent of Menlo Park's workforce also lives in Menlo Park. Assuming that 5.3 percent of workers who work at the Project Site would also live in Menlo Park, approximately 110 new households would be generated in the city.[51] With a citywide average 2.50 pph,[52] the Project Variant's onsite employment could generate approximately 274 residents in Menlo Park.[53] In addition, the residential uses of the Project Variant would result in an indirect demand for 419 new offsite employees throughout the region. With an average of 1.87 workers per housing unit in San Mateo County, the Project Variant would generate approximately 224 new households regionally from offsite employees.[54] Assuming 5.3 percent of employees who work in the city would

47 3,856 onsite jobs + 419 offsite jobs = 4,275 total jobs.

48 Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

49 3,856 net jobs at the Project Site + 22 new jobs in the city induced by the onsite residents/6,065 new jobs in the city between 2020 and 2040 × 100 = 64 percent of anticipated employment growth in the city's sphere of influence.

50 3,856 new jobs/1.87 workers per housing unit = 2,060 total households (rounded).

51 2,060 regional households × 5.3 percent of people who work and live in Menlo Park = 110 new households in Menlo Park (rounded).

52 When calculating pph for the proposed onsite population, a Project Variant–specific pph of 2.64 is used. However, when calculating pph for the offsite population induced by onsite employment, the citywide pph of 2.50 is used.

53 110 new households × 2.50 pph = 274 residents in Menlo Park (rounded).

54 419 new jobs/1.87 workers per housing unit = 224 total households.

also live in the city, approximately 12 new households would be generated.[55] With an average 2.50 pph, the Project Variant's offsite induced employment could generate approximately 30 residents in Menlo Park.[56]

The onsite and offsite employment induced by onsite residents would result in indirect population growth (i.e., approximately 301 new Menlo Park residents). Approximately 44,530 residents lived within the city's sphere of influence in 2020. According to ABAG projections, the population is projected to increase to approximately 54,920 by 2040. This represents 10,390 additional residents over 20 years. The addition of up to 301 new residents in the city as a result of the Project Variant's onsite employment, as well as indirect offsite employment, would represent approximately 2.9 percent of the anticipated population growth within the city between 2020 and 2040, which is similar to growth under the Proposed Project.[57]

Direct Population Growth from Onsite Residences

The Project Variant would include approximately 800 dwelling units. The dwelling units, which would help the city meet its housing allocation under the RHNA, would be located along the western and northeastern portions of the Project Site. In the western portion of the site, Buildings R1, R2, and R3 would be replaced with two multifamily buildings (Buildings R1 and R2), which would accommodate 300 units each, for a total of 600 multifamily rental units. In addition, 19 detached townhomes would be located along Laurel Street. In the northeastern portion of the Project Site, a six-story multifamily, 100 percent affordable building with up to 154 units (referred to as Building R3), to be developed separately by an affordable housing developer, would be located at the corner of Ravenswood Avenue and Middlefield Road. In addition, 27 attached townhomes would be located immediately south of Building R3. In total, the number of BMR units would increase to 97, compared with the 68 under the Proposed Project, after applying the city's 15 percent inclusionary requirement to the 646 units within the mixed-income component of the Project Variant. The number of units to be included within the separate 100 percent affordable building would also increase, growing from 100 units to 154. In total, there would be 251 BMR units and 549 market-rate residential units under the Project Variant.

Residential uses under the Project Variant would provide a mix of studio as well as one-, two-, and three-bedroom units and townhomes. Across all units, it is expected that the average household size would be approximately 2.64 pph. Therefore, it is assumed that the Project Variant would result in a total onsite population of approximately 2,117. Based on ABAG projections, the residential population in Menlo Park is expected to increase by 10,390 over the next 20 years. The addition of up to 2,117 new onsite residents in the city as a result of the Project Variant would represent approximately 20.4 percent of the anticipated population growth within the city between 2020 and 2040.[58]

Total Menlo Park Population Growth

Overall, as discussed above, the onsite and offsite employment induced by the Project Variant would result in 301 new Menlo Park residents. Housing units generated by the Project Variant on the Project Site are anticipated to increase the resident population of Menlo Park by 2,117. Assuming the conservative scenario that none of the Project Variant employees would live onsite (an unlikely scenario), the Project

[55] 224 regional households × 5.3 percent of people who work and live in Menlo Park = 12 new households in Menlo Park.

[56] 12 new households × 2.50 pph = 30 residents in Menlo Park (rounded).

[57] Up to 301 new residents in the city's sphere of influence/10,390 anticipated new residents in the city's sphere of influence between 2020 and 2040 = 2.9 percent of anticipated population growth in the city's sphere of influence.

[58] Up to 2,117 new residents in the city's sphere of influence/10,390 anticipated new residents in the city's sphere of influence between 2020 and 2040 = 20.4 percent of anticipated population growth in the city's sphere of influence.

Variant would result in up to 2,418 new residents in Menlo Park. Based on ABAG projections, the residential population in Menlo Park is expected to increase by 10,390 over the next 20 years. The addition of up to 2,418 new residents in the city as a result of the Project Variant (employment and onsite residents) would represent approximately 23.3 percent of the anticipated population growth within the city between 2020 and 2040.[59]

Housing Demand and Growth

As discussed above, at full buildout, the Project Variant would induce a demand for 2,060 housing units in the region as a result of onsite employment. In addition, approximately 224 households would be induced by offsite employment, creating a total demand for 2,284 housing units across the region. Although the Project Variant would add up to 800 new residential units to the housing supply, because of the regional housing demand from the Project Variant's onsite and induced employment, there would be a 1,484-unit deficit in housing supplied by the Project Variant in Menlo Park.[60] However, the approximately 1,484-unit decrease across the region as a result of the Project Variant, as induced by onsite and offsite employment, could be accommodated within other allowable construction in the city and housing in the rest of the region. Within the city alone, the Housing Element (2023–2031) EIR evaluates the development of up to 4,000 new residential units within the 8-year planning period. These housing units would be constructed at various sites throughout the city; therefore, it is anticipated that some of the housing demand as a result of the Project Variant could be accommodated within the projected housing studied in the Housing Element.

ABAG projects that the number of households will grow by 18.9 percent in the Bay Area, 11.9 percent in San Mateo County, and 14.9 percent in the city between 2020 and 2040. For that same period, the indirect housing demand generated by the Project Variant would be 0.4 percent of the projected household growth in the Bay Area and 6.8 percent of that in San Mateo County. On a regional basis, the Project Variant's demand for housing would not represent a significant share of the total housing growth projected by ABAG.

Housing Demand and Growth

The Project Variant is an infill development within an already-developed area of the city. Employment growth under the Project Variant is accounted for in the city's Housing Element and regional growth plans, such as ABAG projections. The Project Variant would increase the supply of housing in Menlo Park by providing new housing (a total of 800 units). However, non-residential Project Variant components would increase employment and very likely result in the demand for additional housing within commuting distance for workers. The housing demand in the city as a result of the Project Variant can be accommodated in the city, and the anticipated housing demand in the region has been anticipated in regional growth plans. The Project Site is an urban infill site and served by existing infrastructure and services. The Project Variant would not induce a substantial level of unplanned population growth, either directly or indirectly, resulting in ***less-than-significant impacts***. No mitigation is required.

[59] Up to 2,418 new residents in the city's sphere of influence/10,390 anticipated new residents in the city's sphere of influence between 2020 and 2040 = 23.3 percent of anticipated population growth in the city's sphere of influence.

[60] Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

Impact POP-2: Displacement of People or Housing. The Project Variant would not displace substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere. (LTS)

The Project Variant would not directly displace housing because there is no existing housing on the Project Site. Therefore, the Project Variant would not directly displace people or housing by demolishing housing units. The displacement of housing units or residents is an appropriate subject for study under CEQA to the extent that a project would displace housing onsite and result in a need to construct replacement housing elsewhere. By itself, the possibility of a project resulting in economic displacement of existing residents represents a social and economic issue that would not be considered an impact on the physical environment, unless there is substantial evidence that economic displacement would result in reasonably foreseeable (i.e., not speculative) indirect physical effects that would require the construction of new housing. For the Project Variant, determining how economic effects influence future housing development in particular locations throughout a region is too speculative to predict or evaluate. Therefore, for purposes of CEQA, the Project Variant would not result in the displacement of substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere, resulting in a ***less-than-significant impact***. No mitigation is required.

Impact C-POP-1: Cumulative Unplanned Population Growth. Cumulative development would not result in a significant environmental impact related to unplanned population growth; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Some of the housing proposed at the Project Site is included in the analysis of the Menlo Park Housing Element Update EIR, which assumed and studied the inclusion of 400 units at the Project Site. The Project Variant would construct a total of 800 units, 400 more housing units than originally analyzed under the Housing Element; however, the additional units are included within the 4,000 units analyzed in Housing Element Update EIR. Implementation of the Housing Element Update would have a less-than-significant impact with respect to unplanned population growth or residential displacement. When growth planned for in the Housing Element Update is combined with other growth projected to occur in the city, there would be a total of 24,829 dwelling units and 63,810 residents in Menlo Park by 2040. This would represent an increase of 9,365 dwelling units and 23,372 people from the 2021 baseline and exceed the projection of households and population for the city of Menlo Park in Plan Bay Area 2040. Nonetheless, complete buildout of the Housing Element Update in the timeframe of the housing element represents a conservative assumption and requires a consistently high rate of housing production beyond typical trends the city has seen in recent years. In addition, the potential population and housing growth provided for in the Housing Element Update would conform to the ABAG Regional Housing Needs Assessment and the city's Zoning Code and General Plan, as amended, and thus constitute planned growth. In addition, the city and surrounding areas implement general plans and regulations adopted to guide development and growth within their respective jurisdictions. Therefore, any additional projects beyond the scope of local or regional projects would not alter the less-than-significant cumulative impact determination.

Housing demand, beyond that accommodated by the Project Variant, from onsite and offsite employment associated with the Project Variant could be accommodated in the region. For these reasons, the Project Variant in combination with other past, present, and reasonably foreseeable future projects within the city and region would not result in a significant cumulative impact associated with unplanned population growth. The cumulative impact related to unplanned population growth would be ***less than significant***. No mitigation is required.

Impact C-POP-2: Cumulative Displacement of People or Housing. Cumulative development would not result in a significant environmental impact related to displacement of people or housing; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

The Project Site currently does not contain housing units. Therefore, the Project Variant would not displace housing or permanently displace people. Furthermore, the Proposed Project would not require the construction of replacement housing elsewhere. For these reasons, the Project Variant in combination with other past, present, and reasonably foreseeable future projects within the city and region would not result in a significant cumulative impact associated with the displacement of people or housing. The cumulative impact related to displacement of people or housing would be ***less than significant***. No mitigation is required.

Public Services

The Project Variant would provide 800 residential units, which would result in approximately 2,117 residents at the Project Site. In addition, the onsite and offsite employment induced by the Project Variant would result in approximately 301 new Menlo Park residents. As noted in Impact POP-1, above, assuming the conservative scenario that none of the Project Variant employees would live onsite (an unlikely scenario), the Project Variant would result in up to 2,418 new residents in Menlo Park.

Impact PS-1: Fire Services. The Project Variant would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered fire service facilities. (LTS)

The Project Variant is expected to increase fire and medical calls because of new Menlo Park residents and onsite employees. The current Menlo Park Fire Protection District (MPFPD) service ratio is 1.20 fire-protection staff members per 1,000 residents in the service population, which is above the MPFPD's goal of one fire protection staff member per 1,000 residents in the service population. If there were no increase in MPFPD staffing under the Project Variant, this ratio would decrease from 1.20 to 1.1 per 1,000 upon implementation, which would continue to exceed the MPFPD's goal of one fire-protection staff member per 1,000 residents in the service population. However, if there is no increase in the number of fire-safety employees, it is acknowledged that the demands for fire protection and emergency response that could be generated by the Project Variant residents, in addition to the demand already generated within the MPFPD's service area, could affect the MPFPD's response times by slightly reducing the service ratio (albeit not below the MPFPD's goal of one fire protection staff member per 1,000 residents).[61] Like the Proposed Project, the Project Variant may result in a need for additional staff members to maintain existing service ratios, which currently exceed MPFPD staffing goals; therefore, it is possible that there could be a need for new or expanded facilities when combined with the demand already generated within the MPFPD's service area. However, the MPFPD is currently in the planning stages for replacing and expanding Fire Station 1 and a training facility in order to accommodate growth and maintain service ratios within its service area. In addition, other stations are located on infill lots in Menlo Park and neighboring jurisdictions that are highly developed. Therefore, any resulting additional personnel is not directly or indirectly related to the Project Variant demands, and such growth would not result in expansion of facilities and therefore would not result in significant environmental impacts. Moreover, development of any new facilities would be subject to CEQA review, as applicable, at the time specific facilities are proposed. Therefore, similar to the Proposed Project, the Project Variant would not result in

[61] Johnston, Jon. Division Chief/Fire Marshal, Menlo Park Fire Protection District. November 15, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

significant adverse physical environmental impacts associated with the provision of new or physically altered fire and emergency service facilities in order to maintain acceptable service ratios, response times, or other performance objectives. Impacts would be ***less than significant***. No mitigation is required.

Impact PS-2: Police Services. The Project Variant would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered police services. (LTS)

New residents under the Project Variant are expected to increase the need for police services. The current Menlo Park Police Department (MPPD) service ratio is approximately 1.04 officers per 1,000 members of the service population, which is below the MPPD's target ratio of 1.3 or 1.4 officers per 1,000 members of the service population.[62] The Project Variant would add approximately 2,418 residents in Menlo Park. In addition, approximately 3,856 employees would be added at the Project Site. To calculate the service population, the MPPD considers employees who work in Menlo Park as one-third of a resident. As such, the service population with the Proposed Project would increase from approximately 45,000 to 48,703. If there were no increase in MPPD officers under the Project Variant, this ratio would decrease from 1.04 to 0.97 officer per 1,000 members of the service population. To adjust the number of sworn police officers per 1,000 accordingly, MPPD has indicated that at least one sworn officer would be needed for every anticipated increase in service population of 1,000. Therefore the Project Variant would result in the need to hire two or three sworn police officers to accommodate the additional growth from the Project Variant. With the 47 existing sworn officers, the addition of up to three sworn officers as a result of the Project Variant would bring the total number of sworn officers to 50. The MPPD indicated that the department had approximately 52 sworn officers from 2019 to 2020; therefore, the additional three sworn officers needed as a result of the Project Variant would be able to be accommodated within existing facilities.[63] Overall, similar to the Proposed Project, implementation of the Project Variant would not be anticipated to affect service levels or other service indicators to the extent that new or expanded facilities would be required in order to maintain acceptable service ratios, response times, or other performance objectives. As with the Proposed Project, private onsite security for the commercial portions of the Project Variant would be provided. The impact would be ***less than significant***. No mitigation is required.

Impact PS-3: School Facilities. The Project Variant would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered school facilities. (LTS)

With respect to Project Site–generated students, school-age students residing in the 800 residential units included in the Project Variant would be assigned to Menlo Park City School District (CSD) for elementary and middle school. High school students would be within Menlo-Atherton High School's attendance area. For this analysis, the Menlo Park CSD student generation rates of 0.42 student per complex or townhome and 0.04 student per condominium or apartment were used to estimate the number of elementary and middle school students added by the Project Variant; the Sequoia Union High School District's (SUHSD's) student generation rate of 0.10 for multi-family units and 0.14 for townhomes was used to estimate the number of high school students added by the Project Variant.[64] However, because approximately 46 percent of the Project Variant's residential units, currently estimated at approximately 369 if the maximum number of units (800) is constructed, would be studio and one-bedroom units and therefore

[62] Norris, David. Police Chief, Menlo Park Police Department. November 16, 2023—email to Corinna Sandmeier, principal planner, City of Menlo Park.

[63] Norris, David. Police Chief, Menlo Park Police Department, January 18, 2024—email to Payal Bhagat, contract principal planner, city of Menlo Park.

[64] A complex is a building or group of buildings with multiple residential units, such as a duplex, triplex, four-plex, or six-plex.

less likely to have families in them, the student generation rate provides a conservative approach. Using the rates provided, the Project Variant's 800 residential units would be estimated to generate 50 elementary and middle school students and 82 high school students.[65,66, 67,]

The Project Variant could also indirectly generate new school-aged students in Menlo Park because of increased employment, which would result in a demand for 121 offsite residential units (see *Population and Housing*) throughout the Ravenswood CSD, Menlo Park CSD, Redwood CSD, and SUHSD. Elementary and middle school students indirectly generated by the Proposed Project could attend the Menlo Park CSD, Ravenswood CSD, or Redwood CSD, depending on their home addresses. High school students indirectly generated by the Project Variant would be zoned to Menlo-Atherton High School. To ensure a conservative analysis for students indirectly generated by the Project Variant, this analysis considers generation rates for both single-family and multi-family residential units.

For elementary school students, the Menlo Park CSD generation rate for single-family dwelling units (0.42) is used because it is the highest compared with rates of other districts; for multi-family residential units, the Redwood CSD and Menlo Park CSD generation rate (0.04) is used because it is the highest compared with rates of other districts. For middle school students, the Ravenswood CSD generation rate for all housing types (0.123) is used because it is the highest compared with rates of other districts. To distribute the students within elementary and middle schools, it is assumed that students would be split evenly between grade levels. For high school students, the rate used by the SUHSD, 0.14 student per single-family detached housing unit and 0.10 student per multi-family unit, is used.

At this time, the types of housing units that Project Variant employees would occupy are unknown. Therefore, this analysis assumes a breakdown in housing units similar to that of the existing housing unit types in Menlo Park. According to the city's General Plan Housing Element, approximately 60 percent of the housing units in Menlo Park are single-family detached/attached residential units; 40 percent are multi-family residential units.[68] Therefore, it is assumed that the 121 new offsite residential units generated by the Project Variant would comprise 73 single-family residential units and 48 multi-family residential units. In total, the Project Variant could indirectly generate 33 elementary school students, 15 middle school students, and 15 high school students throughout Menlo Park.[69] The indirectly generated elementary school students would be divided evenly between the Menlo Park CSD, Ravenswood CSD, and Redwood CSD.

The Project Variant would generate additional students within Menlo Park that could result in exceedances of school capacities. However, similar to the Proposed Project, the Project Variant would also be subject to SB 50 school impact fees (established by the Leroy F. Greene School Facilities Act of 1998), providing a mechanism to support this demand. The Project Variant would be subject to residential and non-residential school impact fees to fund improvements to school facilities that would be required because of the Project Variant's impact on school enrollment. These fees are based on the square footage

[65] Kristen Garcia. Superintendent, Menlo Park City School District. November 20, 2023—email to Corinna Sandmeier, principal planner, City of Menlo Park. The City of Menlo Park notes that according to the District's demographer, the proposed Project Variant would generate new students at a lower rate than the District's current published generation rate; nevertheless, the analysis in this EIR utilizes the District's published generation rates.

[66] Calculations: 82 high school students = (754 multi-family units x 0.10) + (46 townhomes x 0.14)

[67] Calculations: 50 elementary and middle schools students = (754 multi-family units x 0.04) + (46 townhomes x 0.42)

[68] City of Menlo Park. 2023. *Sixth-Cycle Housing Element:2023–2031*. Adopted January 31, 2023.

[69] Calculations: 33 elementary students = (73 × 0.42) + (48 × 0.04); 15 middle school students = 121 × 0.123; 15 high school students = (73 × 0.14) + (48 × 0.10).

and land use types proposed by a development project. Although the payment of the school impact fees by the Project Variant could contribute toward the construction or expansion of schools, any actual construction or expansion of school facilities would not be a direct result of the Project Variant and would be required to undergo a separate environmental review process. Similarly, if new housing were built to support induced population growth from non-residential uses proposed under the Project Variant, it would be subject to separate environmental review and required to pay the appropriate impact fees to affected school districts. Therefore, impacts related to schools would be ***less than significant***. No mitigation is required.

Impact PS-4: Parks and Recreational Facilities. The Project Variant would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated, nor would it require construction or expansion of recreational facilities that would have an adverse physical effect on the environment. (LTS)

Deterioration of Recreation Facilities

New residents under the Project Variant would be expected to increase the use of recreational facilities. The current Menlo Park Library and Community Services Department service ratio for parkland is 6.84 acres per 1,000 residents; the city's goal is to have 5 acres of open space per 1,000 residents. If there were no increase in park acreage, the Project Variant would decrease the park service ratio from 6.84 acres of parkland per 1,000 residents to 6.36 acres. Therefore, implementation of the Project Variant would not change environmental impacts related to the deterioration of recreational facilities; the city would still exceed its service goal of 5 acres of parkland per 1,000 residents under the Project Variant. In addition, the Project Variant would incorporate approximately 29.3 acres of at-grade open space, including approximately 19.8 acres of publicly accessible open space and amenities, which would offset park usage from Project Variant–generated residents and employees. Therefore, the impact under the Project Variant would be ***less than significant***. No mitigation is required.

Construction of Recreational Facilities

The Project Variant would not increase the demand for park and recreational facilities such that the construction of new facilities, other than those evaluated throughout this Draft EIR, would be required. Therefore, implementation of the Project Variant would not change environmental impacts related to the construction of recreational facilities. The impact under the Project Variant would be ***less than significant***. No mitigation is required.

Impact PS-5: Library Facilities. The Project Variant would not result in substantial adverse impacts associated with the provision of or the need for new or physically altered library facilities. (LTS)

The Menlo Park Library does not have a numerical service goal for library services. Service needs are assessed by conducting user surveys, monitoring collection use, collecting user feedback on programs and services, and comparing services provided to those provided by other local libraries. Library best practices are also assessed.[70] Existing library projects would expand Menlo Park Library capacity enough to accommodate the new residents under the Project Variant. Similar to the Proposed Project, the impact under the Project Variant would be ***less than significant***. No mitigation is required.

[70] Reinhart, Sean. Library and Community Services Director, Menlo Park Library. November 16, 2023—email to Corinna Sandmeier, principal planner, city of Menlo Park.

Impact C-PS-1: Cumulative Public Services and Recreation Impacts. Cumulative development would not result in a significant environmental impact related to public services or recreation; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Fire Services

The Project Variant in combination with other projected growth in Menlo Park and East Palo Alto would increase demand on fire protection services. Based on the analysis presented under Impact PS-1, existing fire protection facilities would be able to serve the population growth anticipated to occur with the Project Variant. However, as stated above, without an increase in MPFPD staffing, the service ratio would decrease from 1.20 to 1.1 per 1,000 residents upon implementation of the Project Variant but would continue to exceed the MPFPD's goal of one fire-protection staff member per 1,000 residents in the service population. Although the Project Variant would not result in the need for new or physically altered fire service facilities in order to maintain acceptable service ratios, it is acknowledged that, without an increase in the number of fire-safety employees, demands for fire protection and emergency response from population and employment growth in the MPFPD's service area due to cumulative development would increase service call volumes and could affect MPFPD response times by reducing the service ratio and creating a need for additional facilities to maintain existing MPFPD service levels. [71] Additional firefighters and facilities could be required to accommodate the projected cumulative growth and maintain the same level of service as under existing conditions. However, as discussed above, the MPFPD is in the planning stages for replacing and expanding Fire Station 1 and a training facility. In addition, the expansion of other existing fire facilities would occur in already-urbanized areas, which would reduce the potential for significant environmental impacts. Furthermore, any environmental impacts related to future expansions would require permitting and review in accordance with CEQA, as necessary, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. Therefore, the cumulative impact related to fire services and the need for new or altered facilities would be ***less than significant***. No mitigation is required.

Police Services

The Project Variant in combination with other projected growth in Menlo Park would increase demand for police services. Based on the analysis presented under Impact PS-2, the Project Variant alone would not require new or expanded police facilities. The MPPD reviews population forecasts during its annual budgeting process to determine whether additional police services are required to accommodate growth. It is not anticipated that the addition of officers would require additional facilities because existing facilities would be able to accommodate the additional officers. Therefore, the cumulative impact related to police services and the need for new or altered facilities would be ***less than significant***. No mitigation is required.

School Facilities

As addressed under Impact PS-3, the Project Variant would directly generate elementary, middle, and high school students who would reside within the Menlo Park CSD and SUHSD attendance areas. Future housing projects in the Menlo Park CSD, Ravenswood CSD, Redwood CSD, and SUHSD attendance areas would generate additional students who would need to be accommodated within these or other local

[71] Johnston, Jon. Division Chief/Fire Marshal, Menlo Park Fire Protection District. November 15, 2023—email to Corinna Sandmeier, principal planner, City of Menlo Park.

school districts. Section 65996 of the State Government Code states that the payment of school impact fees established by SB 50 (i.e., the Leroy F. Greene School Facilities Act of 1998) is deemed to constitute full and complete mitigation for school impacts. The school districts discussed previously have enacted development fees in accordance with the Leroy F. Greene School Facilities Act and levied fees on development projects within their service areas. Development projects would be required to pay school impact fees, which are based on the amount of proposed residential and commercial space. The payment of appropriate fees would help to provide school services and meet the needs associated with current and future citywide growth. Development within East Palo Alto would also be required to pay school impact fees. Therefore, the cumulative impact related to schools and the need for new or altered facilities would be ***less than significant***. No mitigation is required.

Parks and Recreational Facilities

As described in Chapter 3, *Environmental Impact Analysis*, reasonably foreseeable future projects would be distributed throughout Menlo Park, occurring incrementally over time. In addition, future development, as part of a project approval process, would be required to comply with existing regulations, including General Plan policies, to minimize impacts related to park and recreational services and facilities. Other projects in surrounding communities, including East Palo Alto and Palo Alto, that would use city, County of San Mateo, and Midpeninsula Regional Open Space parks would also be required to adhere to existing regulations governing the use of parks. The city would also implement General Plan programs that would require ongoing evaluation of the city's recreational facilities and services. Any environmental impacts related to future expansion of city park and recreational facilities would require permitting and review in accordance with CEQA, as necessary, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. Therefore, the cumulative impact related to park and recreational facilities would be ***less than significant***. No mitigation is required.

Library Facilities

The Project Variant alone would not result in the need for new or physically altered library facilities because existing facilities and current library expansion projects would be able to serve Menlo Park residents. However, future expansion of library facilities could be required to serve potential increases in growth in conjunction with cumulative growth in the service area. Short- and long-term physical improvements are ongoing within the Menlo Park library system. These separate projects help the libraries accommodate cumulative growth. The expansion of existing libraries or the construction of new libraries would occur in an urbanized area, which would reduce the potential for new environmental impacts. Any environmental impacts related to the expansion or construction of library facilities would be project specific and require permitting and review in accordance with CEQA, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. With planned improvements, the construction of which is not expected to cause significant environmental impacts, the Menlo Park library system would be able to meet service demands under cumulative conditions. Therefore, the cumulative impact related to library facilities would be ***less than significant***. No mitigation is required.

Utilities and Service Systems

Relevant technical documentation prepared for the Project Variant and used in this analysis includes the *Parkline Water Supply Assessment*,[72] *Parkline Sanitary Sewer Demand Analysis*,[73] *Parkline Water Infrastructure Analysis*,[74] and *Project Stormwater Analysis*.[75]

Impact UT-1: Construction or Relocation of Utilities. The Project Variant would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. (LTS)

Similar to the Proposed Project, the Project Variant would include the construction of water, wastewater, stormwater, electricity, and telecommunications infrastructure and upgrades, as well as the demolition of the 6-megawatt natural gas facility that generates power and steam for the SRI Campus. In addition to the above utility infrastructure upgrades, the Project Variant would also include the construction of an approximately 2- to 3-million-gallon emergency water reservoir below grade, which is described in more detail below.

Water

The total net increase in potable water demand under the Project Variant is estimated to be approximately 240 gallons per minute (gpm), or approximately 0.34 million gallon per day (mgd) compared to existing conditions.[76] Water delivered to the Project Site would be treated at one of SFPUC's three water treatment plants (WTPs): the Tesla Treatment Facility, the Sunol Valley WTP, or the Harry Tracy WTP. The Tesla Treatment Facility has the capacity to treat 315 mgd. The Sunol Valley WTP has the capacity to treat 160 mgd. The Harry Tracy WTP has the capacity to treat approximately 140 mgd. Although it is not known exactly which of the three WTPs would treat water from the Project Variant, the increase in demand (i.e., about 0.34 mgd) would not be considered a significant increase for the SFPUC system, which can treat 615 mgd with the combined capacity of the three WTPs. Therefore, the three WTPs would have adequate capacity and would be able to treat water for the Project Variant. In addition, the SFPUC is continuously planning operational upgrades, maintenance, and capital improvements for its WTPs. This is expected to continue in the future, independent of the Proposed Project. Environmental impacts from construction of new or expanded water treatment facilities deemed necessary through the planning process would be addressed in the CEQA review conducted by the lead agency for such facility expansion or development (e.g., SFPUC). Therefore, an evaluation of the possible environmental effects of future expansion/ development of such facilities would be speculative and beyond the scope of this EIR.

Similar to the Proposed Project, the Project Variant would install dedicated fire-service water and metered domestic water at each proposed building. The onsite water system for the Project Variant would consist of an approximately 10- to 12-inch looped water system for domestic water and fire systems within the onsite buildings. Like the Proposed Project, the Project Variant would use the existing 10-inch water distribution mains. In addition, the Project Variant would also include an approximately 2- to 3-million-gallon emergency water reservoir that would be buried below grade at the northeast corner of

[72] West Yost and Associates. 2024. *Parkline Water Supply Assessment*. April.
[73] Kier + Wright. 2024. *Parkline Sanitary Sewer Demand* Analysis. March 11.
[74] Kier + Wright. 2024. *Parkline Water Infrastructure Analysis*. March 11.
[75] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.
[76] Kier + Wright. 2024. *Parkline Water Infrastructure Analysis*. March 11.

the Project Site (beneath a proposed surface recreational use) near the intersection of Ravenswood Avenue and Middlefield Road, west of the 100 percent affordable building (Building R3). These facilities, associated with the emergency water reservoir, would include a pump station building, surge tank, and a well head. The facilities would be located aboveground adjacent to the community amenity building and surrounded by a fence or screen. The area for the emergency water reservoir and associated facilities would be leased by the city. The emergency water reservoir was identified as a needed citywide improvement in the 2018 Menlo Park Municipal Water's Water System Master Plan.[77]

Correspondence with MPMW and modeling of the water distribution system for the Project Variant determined that flows from the 10-inch high-pressure water line from Laurel Street would amount to approximately 1,625 gpm, and flows from the 10-inch line from Middlefield Road would amount to approximately 1,250 gpm. As stated above, the Project Variant would use approximately 340,034 gpd of water, or approximately 236 gpm. Given the available flows from the lines in Laurel Street and Middlefield Road, the anticipated demand flows of the Project Variant would be significantly less than the available flows of 1,250 to 1,625 gpm.[78] Therefore, the existing water system at the Project Site can provide an adequate flow for fire and domestic water under the Project Variant without the need for upgrades or additional facilities.

The installation of the new or expanded water lines and the underground emergency water reservoir would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. These construction impacts are part of the Project Variant, and the potential impacts that would result from the construction of these facilities are evaluated throughout this chapter (e.g., refer to the air quality, GHG, noise and vibration, and hydrology and water quality discussions above). Like the Proposed Project, as part of the city's project approval process, the Project Variant would be required to comply with existing regulations, including plans, policies, and zoning regulations that promote water conservation and green building practices; it would not require or result in the relocation of existing or construction of new or expanded water treatment facilities beyond those proposed as part of the Project Variant and analyzed within this EIR. In addition, the Project Sponsor would be required to coordinate with the city and MPMW to address water-flow requirements through the subdivision mapping process and ensure that the existing and proposed water delivery infrastructure would be adequate for the Project Variant. The Project Variant would not change the environmental impacts related to the relocation of existing or construction of new or expanded water treatment facilities. In addition, in the event groundwater pumped from the emergency well does not produce a potable water supply, groundwater would be treated for domestic use using either best management practices or best economically achievable treatment practices, prior to distribution and use. The city is also responsible for demonstrating that treated groundwater meets all applicable Primary Drinking Water Standards (PDWS) established by the U.S. Environmental Protection Agency (EPA) under the Federal Safe Drinking Water Act and California State Water Resources Control Board's Division of Drinking Water (State Water Board) requirements prior to use in the municipal water supply. The impact would be ***less than significant***. No mitigation is required.

[77] West Yost Associates, 2018. *Menlo Park Municipal Water – Water System Master Plan Final Report*. April 2018. Available: https://menlopark.gov/files/sharedassets/public/public-works/documents/water/menlo-park-municipal-water-2018-water-system-master-plan.pdf. Accessed: August 2, 2023.

[78] Kier + Wright. 2024. *Parkline Water Infrastructure Analysis*. March 11.

Wastewater

The net amount of total water use by the Project Variant is estimated to be approximately 0.34 mgd. Assuming that 95 percent of the interior water usage by the Project Variant would become wastewater, the estimated increase wastewater generation would be approximately 0.27 mgd. This increase in wastewater generation would not be significant relative to the currently available excess dry-weather design-flow capacity of 15.5 mgd (i.e., 29 mgd design flow minus 13.5 mgd current average flow = 15.5 mgd) or its excess wet-weather design flow capacity of 57.5 mgd (i.e., 71 mgd design flow minus 13.5 mgd current average flow = 57.5 mgd). Therefore, there would be adequate wastewater treatment capacity to serve the Project Variant. Water for exterior uses, such as landscaping, would be absorbed by plants and soil, would evaporate, or would flow to onsite stormwater treatment areas; therefore, it would not be expected to result in discharges to the sewer infrastructure.[79]

The Project Variant would be adequately accommodated by the existing sanitary sewer infrastructure, with no upsizing or additional infrastructure required. Therefore, the Project Variant would not change the environmental impacts related to the relocation of existing or construction of new or expanded wastewater treatment facilities. The impact would be ***less than significant***. No mitigation is required.

Stormwater

Implementation of the Project Variant would result in a pervious surface area of approximately 41.6 percent (1.164 million sf) across the site, compared to only approximately 25.9 percent (659,900 sf) under existing conditions.[80] The Project Variant would include approximately 81,000 to 83,500 sf of bioretention areas, which would either be flow-through planters or recessed biotreatment ponds. All onsite drainage would discharge into the same drainpipe as the Proposed Project. Due to the reduction in impervious area across the Project Site, the anticipated flow rate for runoff leaving the Project Site would be less than under existing conditions, and no additional stormwater modifications would be needed. Therefore, the Project Variant would not change the environmental impacts related to the relocation of existing or construction of new or expanded stormwater drainage facilities. The impact would be ***less than significant.*** No mitigation is required.

Electricity and Natural Gas

Similar to the Proposed Project, the Project Variant would remove the existing cogeneration plant and establish all-electric energy design throughout the Project Site, with the exceptions of Buildings P, S, and T, which would retain natural gas usage for continued laboratory and R&D purposes. No new natural gas service would be provided to structures constructed as part of the Project Variant. In addition, PG&E would provide improvements to support distribution-level electrical service to the Project Site. The proposed infrastructure upgrades and demolition of the cogeneration plant would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. Proposed electrical and natural gas expansion work and demolition of the cogeneration plant would be part of the Project Variant; the potential impacts that would result from construction and demolition are evaluated throughout this chapter (e.g., refer to the air quality, GHG, noise and vibration, and hydrology and water quality discussions above). Therefore, the Project Variant would not change the environmental impacts related to the relocation of existing or construction of new or expanded natural gas and electrical facilities relative to the Proposed Project. The impact would be ***less than significant.*** No mitigation is required.

[79] Kier + Wright. 2024. *Parkline Sanitary Sewer Capacity Analysis*. March 11.

[80] Kier + Wright. 2024. *Project Stormwater Analysis*. March 11.

Telecommunications

Similar to the Proposed Project, the Project Variant may extend or relocate telecommunication lines. A joint trench would provide space for electrical and telecommunication conduits and pathways. The installation of new or expanded telecommunication lines on the Project Site would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. The proposed telecommunication infrastructure installations and telecommunication facility expansion work would be part of the Project Variant; the potential impacts that would result from construction and demolition of these facilities are evaluated throughout this chapter (e.g., refer to the air quality, GHG, noise and vibration, and hydrology and water quality discussions above). However, no offsite telecommunications facilities would need to be constructed or expanded as a result of the Project Variant. Therefore, the Project Variant would not change the environmental impacts related to the relocation of existing or construction of new or expanded telecommunication facilities. The impact would be ***less than significant.*** No mitigation is required.

Impact UT-2: Water Supply. The Project Variant would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. (LTS)

A summary of the water demands for the Project Variant, as evaluated by West Yost and Associates in preparation of the Water Supply Assessment (WSA), which studied both the Proposed Project and the Project Variant, is provided in Table 4-29. As shown, the total projected water demand for the Project Variant is approximately 115.1 million gallons per year (mg/yr). When the existing water demand at the Project Site is subtracted from the Project Variant's projected water demand, the total net new water demand would be 68.0 mg/yr. Of this net new demand (i.e., 68.0 mg/yr), a portion was previously evaluated in the WSA that was prepared for the city's Housing Element Update. The Housing Element Update assumed 400 dwelling units for the Proposed Project. Therefore, the water demand associated with 400 dwelling units is not double counted and not evaluated as part of this analysis. When the water demand associated with the 400 dwelling units (i.e., 19.4 mg/yr) is subtracted from the projected water demand of the Project Variant (i.e., 68.0 mg/yr), the resulting demand of the Project Variant would be 49 mg/yr. Therefore, the net increase in water demand under the Project Variant would be 49 mg/yr.

Similar to the Proposed Project, the availability of water supplies to meet the Project Variant's demand is dependent on the reliability of SFPUC Regional Water System (RWS) supplies, which is dependent on implementation of the Bay-Delta Plan Amendment. As shown in Table 4-30, if the Bay-Delta Plan Amendment is implemented, projected supplies during normal years would be able to meet the Project Variant's demand; however, there would be substantial supply shortfalls in dry years. For MPMW, with the Project Variant, supply shortfalls are projected in single dry years (ranging from 34 to 39 percent) and in multiple dry years (ranging from 34 to 49 percent) through 2040. It should be noted that supply shortfalls with implementation of the Bay-Delta Amendment are not unique to MPMW. With the Bay-Delta Amendment, substantial shortfalls are projected to occur in dry years for all agencies that receive water from the SFPUC RWS as well as other agencies whose water supplies would also be affected by the amendment.

As shown in Table 4-31, if the Bay-Delta Plan Amendment is not implemented, projected supplies during normal dry years would be able to meet the Project Variant demands, but supply shortfalls would be projected in dry years. For MPMW, with the Project Variant, supply shortfalls would be projected in single dry years (ranging from less than 1 percent to 6 percent) and in multiple dry years (also ranging from less than 1 percent to 6 percent) through 2040. In addition, a 16.5 percent supply shortfall or greater would be projected during fourth and fifth consecutive dry years for base year 2045.

If supply shortfalls occur, MPMW expects to meet them through water demand reductions and other shortage response actions by implementation of its Water Shortage Contingency Plan (WSCP). With the WSCP in place, if the Bay-Delta Plan Amendment is implemented, the projected single dry-year shortfalls would be managed through implementation of Stage 4 of the MPMW WSCP. In addition, the projected multiple dry-year shortfalls would be managed through implementation of Stage 4 or 5 of the MPMW WSCP. If the Bay-Delta Plan Amendment is not implemented, a projected single dry year would be managed through implementation of Stage 1 of the MPMW WSCP. The projected multiple dry years would also be managed through implementation of Stage 1 of the MPMW WSCP, except for a multiple dry-year shortfall in 2045, which would be managed through implementation of Stage 2 or 3 of the MPMW WSCP.

Table 4-29. Projected Water Demand for the Project Variant

Building Type	Project Variant 100 percent R&D Scenario (mg/yr)
Project Variant	
Office/R&D (new)	44.6
Multi-family	38.8
Multi-family pool	0.5
Amenities	2.2
Landscaping	19.4
Total Projected Water Demand	***105.5***
Office/R&D Existing to Remain[b]	9.6
Total Projected Water Demand + Existing Buildings P, S, & T	***115.1***
Increase in Water Demand from Existing Conditions	
Existing Water Use at Project Site (all non-residential, as of 2019)	47.1
Net New Project Variant Water Demand	***68.0***
Water Demand Not Already Evaluated in a Previous WSA	
Project Residential Demand Included in Housing Element Update WSA (400 units)[a]	19.4
Project Variant Water Demand to Be Evaluated [b,c]	***49***

Source: West Yost and Associates. 2024. *Parkline Water Supply Assessment*. April.

Notes:

a. Information is from the Water Supply Assessment prepared for the 2022 Menlo Park Housing Element Update by ESA. Refer to Table 2-1 for the 400 new units attributed to Parkline, and refer to Table 5-1 for the demand factor assumed (i.e., 133 gpd/dwelling unit). The city has noted that the number of housing units in the Housing Element Update was conceptual by site and may change, depending on actual development proposals.

b. Demand totals are rounded to the nearest million gallon; therefore, totals may not be exact.

c. Water use estimates for the emergency reservoir are assumed to be negligible, based on equipment being used only during emergencies and for preventative system testing, and therefore not considered as part of the Project Variant's projected water demand.

Table 4-30. MPMW Summary of Water Demand Versus Supply with Bay-Delta Amendment for the Project Variant

Hydrologic Condition		Supply and Demand Comparison, MG			
		2025	2030	2035	2040
Normal Year					
Available Water Supply[a]		1,678	1,750	1,750	1,750
2020 UWMP Demand[b]		1,296	1,345	1,410	1,483
HEU WSA Demand[b]		87	87	87	87
Project Variant Demand[b]		49	49	49	49
Updated Water Demand		*1,432*	*1,481*	*1,546*	*1,619*
Potential Surplus (Deficit)		**246**	**269**	**204**	**131**
Percent Shortfall of Demand		**-**	**-**	**-**	**-**
Single Dry Year					
Available Water Supply[a]		877	978	1,018	1,062
2020 UWMP Demand[c]		1,296	1,345	1,410	1,483
HEU WSA Demand[c]		87	87	87	87
Project Variant Demand[c]		49	49	49	49
Updated Water Demand		*1,432*	*1,481*	*1,546*	*1,619*
Potential Surplus (Deficit)		**(555)**	**(503)**	**(528)**	**(557)**
Percent Shortfall of Demand		**39%**	**34%**	**34%**	**34%**
Multiple Dry Years					
Multiple-Dry Year 1	Available Water Supply[a]	877	978	1,018	1,062
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(555)**	**(503)**	**(528)**	**(557)**
	Percent Shortfall of Demand	**39%**	**34%**	**34%**	**34%**
Multiple-Dry Year 2	Available Water Supply[a]	760	854	887	927
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(672)**	**(627)**	**(659)**	**(692)**
	Percent Shortfall of Demand	**47%**	**42%**	**43%**	**43%**
Multiple-Dry Year 3	Available Water Supply[a]	760	854	887	927
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(672)**	**(627)**	**(659)**	**(692)**
	Percent Shortfall of Demand	**47%**	**42%**	**43%**	**43%**
Multiple-Dry Year 4	Available Water Supply[a]	760	854	887	832
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(672)**	**(627)**	**(659)**	**(787)**
	Percent Shortfall of Demand	**47%**	**42%**	**43%**	**49%**
Multiple-Dry Year 5	Available Water Supply[a]	760	854	824	832
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(672)**	**(627)**	**(722)**	**(787)**
	Percent Shortfall of Demand	**47%**	**42%**	**47%**	**49%**

(a) From Table 7-2 of this WSA.
(b) From Table 5-2V of this WSA.
(c) From Table 5-3V of this WSA.

Table 4-31. MPMW Summary of Water Demand Versus Supply without Bay-Delta Amendment for the Project Variant

Table 8-2V. MPMW Summary of Water Demand Versus Supply without Bay-Delta Plan Amendment During Hydrologic Normal, Single Dry, and Multiple Dry Years (Project Variant)

Hydrologic Condition		Supply and Demand Comparison, MG			
		2025	2030	2035	2040
Normal Year					
Available Water Supply[a]		1,678	1,750	1,750	1,750
2020 UWMP Demand[b]		1,296	1,345	1,410	1,483
HEU WSA Demand[b]		87	87	87	87
Project Variant Demand[b]		49	49	49	49
Updated Water Demand		*1,432*	*1,481*	*1,546*	*1,619*
Potential Surplus (Deficit)		**246**	**269**	**204**	**131**
Percent Shortfall of Demand		**-**	**-**	**-**	**-**
Single Dry Year					
Available Water Supply[a]		1,344	1,465	1,530	1,603
2020 UWMP Demand[c]		1,296	1,345	1,410	1,483
HEU WSA Demand[c]		87	87	87	87
Project Variant Demand[c]		49	49	49	49
Updated Water Demand		*1,432*	*1,481*	*1,546*	*1,619*
Potential Surplus (Deficit)		**(88)**	**(16)**	**(16)**	**(16)**
Percent Shortfall of Demand		**6%**	**1%**	**1%**	**1%**
Multiple Dry Years					
Multiple-Dry Year 1	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(88)**	**(16)**	**(16)**	**(16)**
	Percent Shortfall of Demand	**6%**	**1%**	**1%**	**1%**
Multiple-Dry Year 2	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(88)**	**(16)**	**(16)**	**(16)**
	Percent Shortfall of Demand	**6%**	**1%**	**1%**	**1%**
Multiple-Dry Year 3	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(88)**	**(16)**	**(16)**	**(16)**
	Percent Shortfall of Demand	**6%**	**1%**	**1%**	**1%**
Multiple-Dry Year 4	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(88)**	**(16)**	**(16)**	**(16)**
	Percent Shortfall of Demand	**6%**	**1%**	**1%**	**1%**
Multiple-Dry Year 5	Available Water Supply[a]	1,344	1,465	1,530	1,603
	2020 UWMP Demand[c]	1,296	1,345	1,410	1,483
	HEU WSA Demand[c]	87	87	87	87
	Project Variant Demand[c]	49	49	49	49
	Updated Water Demand	*1,432*	*1,481*	*1,546*	*1,619*
	Potential Surplus (Deficit)	**(88)**	**(16)**	**(16)**	**(16)**
	Percent Shortfall of Demand	**6%**	**1%**	**1%**	**1%**

(a) From Table 7-3 of this WSA.
(b) From Table 5-2V of this WSA.
(c) From Table 5-3V of this WSA.

Similar to the Proposed Project, the Project Variant would be subject to the same water conservation and water use restrictions as other water users within the MPMW system. In addition, the Project Variant would incorporate green and sustainable building practices (e.g., ultra-low flow fixtures within the proposed buildings) and implement water conservation measures, both in the design of the buildings and residential and tenant spaces as well as daily operations, employee practices, and landscaping choices. Furthermore, the Project Variant includes the emergency water reservoir and well, which would help ensure that the city's municipal water supply remains adequate to serve demand in the event SFPUC deliveries are reduced, interrupted, or unavailable. Therefore, the Project Variant would not change the environmental impacts related to water supplies, as discussed for the Proposed Project. The impact would be ***less than significant***. No mitigation is required.

Impact UT-3: Generation of Wastewater. The Project Variant would not result in a determination by the wastewater treatment providers that they would have inadequate capacity to serve the Project Variant's projected demand in addition to the providers' existing commitments. (LTS)

The Project Variant would result in increased sanitary sewer flows, primarily due to the incorporation of new residential uses on the Project Site. For purposes of this analysis, it is assumed that 95 percent of the interior water usage by the Project Variant would become wastewater and would generate approximately 272,452 gallons per day (gpd) (or approximately 0.27 mgd) of wastewater at the Project Site. Under existing conditions, the Project Site generates approximately 152,437 gpd (0.15 mgd) of wastewater. The net increase in wastewater generated by the Project Variant would be approximately 0.12 mgd compared with existing conditions.[81]

With the current amount of wastewater generated at the Project Site estimated to be approximately 0.15 mgd, an increase of approximately 0.12 mgd is a negligible amount, given the capacity of the existing system. Therefore, there would be adequate wastewater treatment capacity available to serve the Project Variant's projected demand in addition to the provider's existing commitments. This increase in wastewater generation would not be significant relative to the currently available excess dry-weather design-flow capacity of 15.5 mgd (i.e., 29 mgd design flow minus 13.5 mgd current average flow = 15.5 mgd) or excess wet-weather design-flow capacity of 57.5 mgd (i.e., 71 mgd design flow minus 13.5 mgd current average flow) at the Silicon Valley Clean Water (SVCW) wastewater treatment plant (WWTP). Estimated wastewater flows from the Proposed Project would therefore represent a small percentage of the total daily wastewater capacities of the SVCW WWTP. Likewise, wastewater generation from Project Variant (i.e., maximum of approximately 0.27 mgd) would not be significant relative to current average collection rates of the West Bay Sanitary District (WBSD). Based on existing SVCW WWTP and WBSD collection and processing capacity, it is not expected that the Project Variant would result in a determination by either wastewater treatment provider that it would have inadequate capacity to serve projected demand under the Project Variant in addition to existing commitments. The impact would be ***less than significant***. No mitigation is required.

Impact UT-4: Generation of Solid Waste. The Project Variant would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. (LTS)

The Project Variant would generate more construction debris from structure demolition than the Proposed Project because structures on the parcel at 201 Ravenswood Avenue would also be demolished. In total, construction of the Project Variant would include the demolition of approximately 1,106,302 sf of building area and generate approximately 174,905 cubic yards of excavated soil. All soil and debris,

[81] Kier + Wright. 2024. *Parkline Sanitary Sewer Demand Analysis*. March 11.

including contaminated soil, would most likely be off-hauled to Ox Mountain Landfill. The city's Construction and Demolition Recycling Ordinance calls for salvage or recycling of at least 65 percent of construction-related solid waste. Like the Proposed Project, throughout construction of the Project Variant, waste would be source separated and tracked to divert it away from landfills, with a target of recycling more than 80 percent of construction and demolition waste. Consistent with city requirements, the Project Sponsor would submit documentation to the city describing the Project Variant's approach to maximizing waste diversion during demolition, construction, and occupancy of the residential and commercial uses. Each component of the Project Variant would be subject to the city's zero-waste management plan requirements during both construction and operation. Therefore, construction of the Project Variant is not expected to have a significant impact on existing landfills.

The 3,856 net new employees and estimated 2,117 new residents under the Project Variant would generate solid waste onsite. Using the 2021 city of Menlo Park per capita solid waste disposal rate for residents (4.1 pounds per day [ppd]) and per capita solid waste disposal rate for employees (2.3 ppd), the Project Variant would generate approximately 17,549 ppd of solid waste, or approximately 8.8 tons per day.[82] Similar to the Proposed Project, a zero-waste management plan would be prepared for the waste stream generated during the occupancy phase of the Project Variant. The solid waste generated would be collected by Recology San Mateo and hauled to Shoreway. Shoreway is permitted to receive 3,000 tons of refuse per day. Once collected and sorted at Shoreway, solid waste would be transported to Ox Mountain, which is permitted to receive 3,598 tons per day. Solid waste generated by operation of the Project Variant would represent a small percentage (i.e., approximately 0.13 percent) of the total permitted capacity between Shoreway and Ox Mountain.[83] Implementation of the required zero-waste management plans for all new buildings and uses on the Project Site would further reduce waste from the occupancy phase. As such, Shoreway and Ox Mountain would have adequate capacity for the Project Variant. The Project Variant would be served by a landfill with adequate permitted capacity to accommodate its solid waste disposal needs. The impact would be ***less than significant***. No mitigation is required.

Impact UT-5: Compliance with Solid Waste Regulations. The Project Variant would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (LTS)

Construction and operation of the Project Variant would comply with all applicable statutes and regulations related to solid waste. State law (Assembly Bill 939 and SB 1016) requires businesses and cities to divert 50 percent of their solid waste from landfills. Similar to the Proposed Project, the Project Variant would adhere to these laws, with a target of recycling more than 80 percent of construction and demolition waste during construction, consistent with the city's requirements. In addition, the Project Variant would be required to adhere to the city's Construction and Demolition Recycling Ordinance and zero-waste management plan requirements during the occupancy phase. Accordingly, the Project Variant would comply with all federal, State, and local management and reduction statutes and regulations related to solid waste. The impact would be ***less than significant***. No mitigation is required.

[82] 3,856 employees × 2.30 pounds/day/person = 8,869 pounds/day of solid waste generated from employees; 2,117 residents × 4.10 pounds/day/person = 8,680pounds/day of solid waste generated from residents; 8,869 pounds/day (from employees) + 7,774 pounds/day (from residents) = 17,549 pounds/day generated from operation of the Project Variant.

[83] (8.8 tons per day of Project Variant generated waste)/(3,000 tons [Shoreway permitted daily capacity] + 3,598 tons [Ox Mountain permitted capacity]) = 0.0013; 0.0013 X100 = 0.13 percent.

Impact C-UT-1: Cumulative Water Service and Infrastructure Impacts. Cumulative development could result in a significant environmental impact on water service; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Regarding water supply, the analysis above (Impact UT-2) is inherently cumulative because it is based on demand and supply projections for the MPMW's service area, as based on the 2020 Urban Water Management Plan. For the reasons stated above, a significant cumulative impact related to water supply would occur during dry years due to projected supply shortfalls with and without implementation of the Bay-Delta Plan Amendment. However, the Project Variant would be required to comply with, and adhere to, the various stages of the MPMW WSCP, which would reduce the Project Variant's contribution to the cumulative impact to less-than-significant levels. Based on the analysis above, the Project Variant's contribution to cumulative impacts on water supply would be ***less than cumulatively considerable***.

The existing water system serving the Project Site would be able to provide an adequate fire flow for the Project Variant, without the need for upgrades or additional facilities.[84] As shown in Figure 3.0-1 in Chapter 3, none of the cumulative projects (with the exception of the onsite tenant improvements in Buildings P, S, and T) are close enough to the Project Site to have the potential to result in cumulative impacts on water infrastructure. As with the Proposed Project and Project Variant, all cumulative projects would be required to provide adequate water infrastructure for their anticipated demand and comply with all city requirements regarding new water facilities and fire-flow requirements. The cumulative impact related to water supply infrastructure would be ***less than significant***. No mitigation is required.

Impact C-UT-2: Cumulative Wastewater Service and Infrastructure Impacts. Cumulative development would not result in a significant environmental impact on wastewater service; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

As with the Proposed Project and Project Variant, Menlo Park and East Palo Alto projects, as well as other projects in the WBSD and SVCW service areas, would be required to comply with applicable policies and zoning regulations that promote water conservation and minimize impacts related to wastewater generation. For these reasons, the Project Variant in combination with other past, present, and reasonably foreseeable future projects in the WBSD and SVCW service areas would not result in a significant cumulative impact associated with wastewater service and infrastructure. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-UT-3: Cumulative Stormwater Service and Infrastructure Impacts. Cumulative development would not result in a significant environmental impact on stormwater service; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

As with the Proposed Project and Project Variant, cumulative development in the vicinity of the Project Site, as well as other projects within the San Mateo Creek-Frontal San Francisco Bay Estuaries watershed, would implement BMPs and be required to comply with federal, State, and local standards pertaining to stormwater and water quality (e.g., General Construction Permit; San Francisco Bay Municipal Separate Storm Sewer System Permit, Provision C.3; SWPPP; other erosion and pollution control measures). In addition, all new development would be required to include stormwater management features, such as LID design measures, in project designs to reduce flows to pre-project conditions. For these reasons, the Project Variant in combination with other past, present, and reasonably foreseeable future projects in the

[84] Kier+Wright. 2024. *Parkline Water Infrastructure Analysis*. March 11.

vicinity of the Project Site and within the San Mateo Creek-Frontal San Francisco Bay Estuaries watershed would not result in a significant cumulative impact associated with stormwater service and infrastructure. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-UT-4: Cumulative Solid Waste Impacts. Cumulative development would not result in a significant environmental impact on solid waste; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

As with the Proposed Project and the Project Variant, Menlo Park and East Palo Alto projects, as well as other projects within the service areas of Shoreway and Ox Mountain Landfill, would be required to comply with applicable policies and zoning regulations that call for municipalities to adopt an integrated waste management plan and establish objectives, policies, and programs related to waste disposal, management, source reduction, and recycling (e.g., SB 1383, city's Construction and Demolition Recycling Ordinance). For these reasons, the Project Variant in combination with other past, present, and reasonably foreseeable future projects in the service areas of Shoreway and Ox Mountain Landfill would not result in a significant cumulative impact associated with solid waste. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-UT-5: Cumulative Natural Gas and Electric Service Impacts. Cumulative development would not result in a significant environmental impact on natural gas and electric service; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)

Development of past, present, and reasonably foreseeable future projects within the PG&E service territory has the potential to increase demand. However, some of the cumulative development in the PG&E service territory would very likely be constructed on infill sites in highly urbanized areas; it is anticipated that these projects would not substantially increase electric power and natural gas demands. PG&E would be able to serve new cumulative development from known and available sources. In addition, as with the Project Variant, Menlo Park and East Palo Alto projects, as well as other projects within the PG&E service territory, would be required to comply with applicable city and State energy conservation measures (e.g., the CALGreen Code, California Energy Code). For these reasons, the Project Variant, similar to the Proposed Project, in combination with other past, present, and reasonably foreseeable future projects in the PG&E service territory would not result in a significant cumulative impact associated with natural gas and electric service. The cumulative impact would be ***less than significant***. No mitigation is required.

Impact C-UT-6: Cumulative Telecommunications Impacts. Cumulative development would result in a less-than-significant environmental impact on telecommunications; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact on telecommunications. (LTS)

Similar to the Proposed Project, cumulative development associated with underground conduits and overhead cables to facilitate telecommunications services would be required to comply with applicable federal, State, and local standards pertaining to underground and overhead utility infrastructure. For these reasons, the Project Variant in combination with other past, present, and reasonably foreseeable future projects would not result in a significant cumulative impact regarding telecommunications demand and facilities. The cumulative impact would be ***less than significant***. No mitigation is required.

Chapter 5
Other CEQA Considerations

5.1 Introduction

Pursuant to the California Environmental Quality Act (CEQA) Guidelines Section 15126.2, this chapter discusses significant environmental effects that cannot be avoided as identified in this draft environmental impact report (EIR); significant irreversible environmental changes, including those related to energy and the consumption of nonrenewable resources; and growth-inducing impacts. For a complete summary of the potential environmental impacts that could occur from implementation of Parkline (Proposed Project) and the Increased Development Variant (Project Variant), refer to the *Executive Summary*. For an evaluation of alternatives that could reduce or avoid significant environmental effects of the Proposed Project and the Project Variant, refer to Chapter 6, *Alternatives*.

5.2 Proposed Project

Significant and Unavoidable Environmental Impacts

CEQA Guidelines Section 15126.2(c) requires EIRs to include a discussion of the significant environmental effects that cannot be avoided if the Proposed Project is implemented. Further, where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described. The following impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the Project's impacts to a less-than-significant level. Additional details about these impacts are provided in the respective sections of Chapter 3, *Environmental Impact Analysis*.

Notwithstanding the significant and unavoidable impacts of the Proposed Project and the Project Variant related to noise and historical resources, the Proposed Project and Project Variant are being proposed in order to advance SRI's and the Project Sponsor's objectives of redeveloping an underutilized property with a master-planned, mixed-use neighborhood with a significant amount of new residential units, including a significant amount of affordable units, enhancing bicycle and pedestrian connectivity and creating new publicly accessible open space in what has historically been a non-publicly accessible private campus, advancing numerous environmental and sustainability benefits including substantial reductions in GHG emissions due to the removal of an existing cogeneration plant, creating economic benefits and positive fiscal impacts for the city, and accommodating new, state-of-the-art office/R&D facilities for innovation and research with no net increase in commercial square footage compared to existing conditions.

- **Impact NOI-1: Construction Noise.** Construction equipment proposed for use during daytime hours would be in compliance with the threshold of 85 dBA at 50 feet for individual pieces of powered equipment. Combined construction noise during daytime hours was modeled to result in a noise level that would be more than 10 dB greater than the ambient noise levels at several nearby noise-sensitive land uses. Noise during Phase 1, Phase 2, and Phase 3 construction could reach a maximum of 97 dBA L_{eq} (at a distance of 15 feet from sensitive land uses), 71 dBA L_{eq} (at a distance of 250 feet from sensitive land uses), and 85 dBA L_{eq} (at a distance of 50 feet from sensitive land uses), respectively, all of which are 10 dB over the daytime ambient noise levels in the area. In addition, noise levels would

be 10 dB over the daytime ambient levels at distances beyond the worst-case distance. Furthermore, concrete pour activities during early-morning hours were modeled to result in a noise level of 72 dBA L_{eq} at the nearest sensitive land use, which would be greater than the applicable noise limit. Although the substantial increase in noise would be temporary, the estimated construction noise levels during daytime and early-morning hours would exceed the applicable thresholds. Implementation of Mitigation Measures NOI-1.1 and NOI-1.2 would reduce noise during Project construction by requiring a construction noise reduction plan and a noise barrier, respectively. However, these mitigation measures may not be able to ensure that noise would be below the applicable thresholds in all circumstances and impacts related to construction noise would be significant and unavoidable with mitigation.

- **Impact NOI-3: Ground-borne Vibration.** During construction, vibration-generating construction equipment may be operated approximately 15 feet from single-family residences. The use of an excavator could result in a vibration level with a PPV of up to 0.191 in/sec at 15 feet. This vibration level would be above the "strongly perceptible" level (i.e., PPV of 0.1 in/sec) and above the thresholds specified in Mitigation Measure NOISE-2a from the ConnectMenlo EIR (0.032 in/sec at residential uses, during the daytime hours). At a distance of 25 feet, however, the vibration level would be below the strongly perceptible level and considered distinctly perceptible (i.e., PPV of 0.4 in/sec); however, it would still be above the ConnectMenlo EIR threshold of 0.032 in/sec. Most construction activities would occur more than 15 feet from offsite uses because construction along the perimeter of the site would be short term compared to the overall duration of construction. However, vibration levels from a large bulldozer could be above 0.031 in/sec at a distance of 50 feet. Construction involving the use of a large bulldozer or similar equipment would occur within 50 feet of existing residential uses because the proposed townhomes would be within 50 feet of the Classics of Burgess Park neighborhood. It is unlikely that a concrete truck would operate within 15 feet of residential structures; thus, vibration levels during early-morning hours would not exceed the Caltrans "strongly perceptible" vibration criterion for annoyance (i.e., PPV of 0.1 in/sec). Other equipment used for the concrete pours would operate within the interior of the Project Site and not near existing residential uses. However, a loaded concrete truck traveling within approximately 70 feet of existing residential uses could generate a vibration level greater than the nighttime threshold specified in the ConnectMenlo EIR of 0.016 in/sec. This scenario would be more likely to occur. Implementation of Mitigation Measure NOI-3.1 would reduce vibration levels from construction activity during daytime and early-morning hours by requiring larger equipment to operate at distances greater than 15 feet from sensitive land uses to the extent feasible, limiting morning construction activity involving concrete trucks to after 7:00 a.m., and requiring the contractor to appoint a vibration coordinator to address any vibration-related complaints received. However, it may not be possible to ensure that vibration levels at all times and at all locations would be reduced to a level below the "strongly perceptible" level or below the thresholds identified in the ConnectMenlo EIR because larger equipment may need to operate at closer distances to sensitive land uses and impacts related to construction noise would be significant and unavoidable with mitigation.
- **Impact C-NOI-1: Cumulative Construction Noise.** For Project construction noise to combine with noise from other nearby construction projects and expose individual receptors to greater noise levels, the projects would need to be close to one another. Construction of cumulative projects in proximity to the Project Site, including the 333 Ravenswood Avenue project (No. 35) and the 429 University Avenue project (No. 47), could overlap with Project construction. These cumulative projects and the Proposed Project could be under construction at the same time and cumulative construction noise impacts would be significant. Because the Proposed Project on its own would result in a significant

impact, its contribution would be cumulatively considerable. Although implementation of Mitigation Measures NOI-1.1 and NOI-1.2 would reduce the Proposed Project's construction noise impacts, such impacts were determined to be significant and unavoidable. The Proposed Project's contribution to cumulative impacts related to construction noise would be cumulatively considerable even with mitigation.

- **Impact CR-1: Historical Resources.** Construction of the Proposed Project would cause a substantial adverse change in the significance of three individual historical resources (i.e., Building 100, Building A, Building E) and one historic district, all of which are historical resources, as defined in State CEQA Guidelines Section 15064.5. Implementation of Mitigation Measures CR-1.1 (including CR-1.1.a, CR-1.1.b, CR-1.1.c), CR-1.2, and CR-1.3 would reduce the potential level of impact on the three individually CRHR-eligible historical resources and the potential impact on the CRHR-eligible SRI International Campus Historic District by requiring documentation and interpretation and/or commemoration of the resources to be demolished and the relocation of a contributing landscape feature of the historic district. However, the demolition of historical resources cannot be mitigated to a less-than-significant level, and impacts on built-environment resources would be significant and unavoidable with mitigation.

Significant Irreversible Environmental Changes

CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the project. Specifically, Section 15126.2(d) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The Proposed Project would include a new office/research and development (R&D) campus with no increase in office/R&D square footage; up to 550 new dwelling units at a range of affordability levels (comprising 450 multi-family units and townhomes, along with a proposed land dedication to an affordable-housing developer that could accommodate up to 100 affordable units); new bicycle and pedestrian connections; approximately 26.4 acres of open space; and decommissioning of a 6-megawatt natural gas cogeneration plant. In total, the Proposed Project would result in approximately 1,768,802 square feet (sf) of mixed-use development, with approximately 1,093,602 sf of office/R&D uses and approximately 675,200 sf of residential uses. The Proposed Project would demolish all buildings on SRI International's Campus, excluding Buildings P, S, and T, which would remain onsite and be operated by SRI International.

As discussed in Section 3.5, *Energy*, Project construction would result in approximately 71,631 MMBtu being consumed over the approximately 6.5-year construction period. Table 5-1 provides an estimate of the energy consumption of the Project during operation. The Proposed Project's net energy consumption is the difference in operational energy consumption between existing (2022) conditions at the Project Site and 2031 with-Project conditions.

Table 5-1. Estimated Operational Energy Consumption of the Proposed Project

Condition/Source	MMBtu/Year
Existing (2022)	
Electricity (building + water + mobile)	-10,859
Natural Gas (building)	450,956
Gasoline (mobile)	7,849
Diesel (mobile + stationary sources)	1,259
Total[a]	449,206
Proposed Project (2031)	
Electricity (building + water + mobile)	199,261
Natural Gas	0
Gasoline (mobile)	133,149
Diesel (mobile + stationary sources)	18,424
Total[a]	350,834
Net Decrease with Proposed Project	
2031 v. Existing	-98,372
Energy per Square Foot (MMBtu/sf)	
Existing (2022)	0.33
With-Project Conditions (2031)	0.20

Source: Source: Ramboll. 2024. *Assessment of Energy Use for the Parkline Project, Menlo Park, CA.* January 26.
[a] Totals may not add up because of rounding.
MMBtu = million British thermal units; sf = square foot

Buildout of the Proposed Project would decrease operational energy consumption on the Project Site by approximately 98,372 MMBtu per year compared with existing conditions. Similarly, energy use per square foot would decrease to 0.20 MMBtu per square foot compared with existing conditions (i.e., 0.33 MMBtu per square foot), despite the increase in overall building area. This decrease in energy usage is largely attributable to the removal of the existing cogeneration plant, which currently provides the Project Site with natural gas as a source of energy, as well as the energy efficiency measures incorporated into the Proposed Project. To the extent that electricity for the Proposed Project would come from sources that can be renewed, such as hydropower, sun, wind, and geothermal, it would not represent an irreversible use of resources. To the extent that electricity for the Proposed Project comes from non-renewable sources, such as natural gas, coal, and nuclear, it would represent an irreversible use of those resources. However, any such irreversible use of those resources is nevertheless an improvement over existing conditions because the Project would decrease operational energy consumption on the Project Site by approximately 98,372 MMBtu per year, which in the first year of operations would more than offset the 71,631 MMBtu consumed over the approximately 6.5-year construction period. Thus, the irreversible use of any non-renewable energy resources by the Project is justified.

As discussed in Section 3.12, *Hazards and Hazardous Materials*, accidents such as release of hazardous materials may trigger irreversible environmental damage. With respect to accident conditions involving hazardous materials, the use of hazardous materials would be subject to existing laws, regulations, and CUPA programs regarding hazardous materials, including a spill contingency plan. Adherence to these standards would reduce the potential for an accidental release. With respect to routine hazardous materials uses, because of the nature of R&D uses, the possibility exists for hazards related to the handling of hazardous materials. Laboratories associated with R&D/life science uses are categorized as biosafety

levels (BSLs) 1 through 4. It is anticipated that the Proposed Project could accommodate BSL-1 or BSL-2 laboratories; BSL-3 and BSL-4 laboratories are less common (in fact, there are only four operational BSL-4 labs in the United States).[1] Although laboratory uses in Menlo Park have typically not been regulated by its zoning ordinance, the Proposed Project is proposing a new mixed-use, transit-oriented zoning district allowing for office, commercial, R&D, and residential uses in proximity to each other; zoning could address BSLs for laboratory uses. Regardless of the BSL, the Proposed Project would comply with required federal, state, and local standards, including Title 8 of the California Code of Regulations. The Project Sponsor would also consult with San Mateo County Environmental Health Services and apply for applicable permits for any regulated substance that may pose a threat to public health and safety or the environment because of its highly toxic, flammable, or explosive nature. Tenants must comply with the safety procedures mandated by applicable federal, state and local laws and regulations. In addition, hazardous materials would be registered through the San Mateo County Environmental Health Services HazMat Business Plan Program to ensure safe and responsible handling of such materials. Compliance with state and local regulations would ensure that buildings would be equipped with safety devices such as sprinklers and alarms to minimize potential impacts resulting from the presence of hazardous materials. Prior to issuance of a certificate of occupancy for completed structures, the city would require a final inspection from the Menlo Park Fire Protection District to ensure that all building systems are in conformance with the city's Fire Code and National Fire Protection Association requirements. Finally, the Proposed Project would comply with California Department of Transportation regulations to ensure that all necessary safety precautions would be taken during the transportation of hazardous materials. The Project is not expected to create a significant hazard to public health or the environment or to result in significant irreversible damage related to environmental accidents associated with the Project.

Growth-Inducing Impacts

CEQA Section 21100(b)(5) specifies that the growth-inducing impacts of a project must be addressed in an EIR. Section 15126.2(e) of the CEQA Guidelines provides the following guidance for assessing growth-inducing impacts of a project:

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant, for example, could allow more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can induce growth directly, indirectly, or both. Direct growth inducement could result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in any of the following:

- Substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or

[1] National Institute of Allergy and Infectious Diseases. 2018. *The Need for Biosafety Labs*. Available: https://www.niaid.nih.gov/research/biosafety-labs-needed. Accessed: July 13, 2023.

- Substantial new permanent employment opportunities (e.g., commercial, industrial, or government enterprises) that stimulates the need for additional housing and services to support the new employment demand; and/or
- Removal of an obstacle to additional growth and development, such as remove a constraint on a required utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

Growth inducement itself is not an environmental effect but may lead to foreseeable environmental effects. If substantial growth inducement occurs, it could result in secondary environmental effects, such as increased demand for housing, the construction of which could cause environmental effects; demand for other community and public facilities; demand for infrastructure, the construction of which could cause environmental effects; increased traffic and noise; degradation of air or water quality; degradation or loss of plant or animal habitats; conversion of agricultural and open-space land to urban uses; and other effects.

Growth Inducing Impacts of the Proposed Project

Short-term Employment Opportunities

As discussed in Section 3.14, *Population and Housing*, the size of the construction workforce would vary during the different phases of construction, but it is anticipated that the Proposed Project would require between two and 213 construction workers per day. It is anticipated that construction workers would be hired from Bay Area sources. Although some would commute from outside the Bay Area, because of the temporary nature of construction, these workers would not be expected to relocate permanently. Therefore, the Proposed Project would not induce population growth by bringing substantial numbers of construction jobs to the area or result in associated increases in demand for housing.

Permanent Employment Opportunities

Operation of the Proposed Project would generate up to 3,868 net new jobs onsite, accounting for the 400 existing employees who would no longer work at the Project Site with implementation of the Proposed Project. In addition, the Proposed Project would add 550 new residential units in Menlo Park, thereby increasing the population and creating net new demand for products and services. The jobs associated with the delivery of these products and services are also assumed to be net new jobs. Although existing offsite health care facilities, schools, and other services may be able to absorb a portion of the new demand, existing establishments would still require additional employees. As a result, the Proposed Project would induce approximately 262 offsite jobs that would serve residents of the proposed housing. In total, the Proposed Project would result in the creation of approximately 4,130 new jobs in the region. Using the assumption that 5.3 percent of people who live in Menlo Park also work in the city, this would equate to approximately 14 new offsite jobs in Menlo Park. Together with the 3,868 net new jobs onsite, approximately 3,882 new jobs would be created in Menlo Park as a result of the Proposed Project.[2]

The new jobs induced by the Proposed Project would result in a demand for approximately 2,206 housing units across the region. Although the Proposed Project would add up to 550 new residential units to the housing supply in Menlo Park, because of the regional housing demand from the Proposed Project's onsite and induced employment, there would be a 1,656-unit deficit in housing supplied by the Proposed Project compared to the demand created by the Proposed Project in the region.[3] Therefore,

[2] Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

[3] Proposed Project demand for 2,206 units minus the Proposed Project's provision of 550 units = 1,656-unit deficit.

the Proposed Project is estimated to result in a net decrease in available housing in the region (i.e., approximately 1,656 units).[4] Regardless, due to the Proposed Project's development of housing, in addition to office/R&D uses, the Proposed Project would generally support a more balanced jobs/housing ratio, furthering the growth objectives of Plan Bay Area.

ABAG estimates that the number of jobs in the city's sphere of influence will grow by approximately 6,065 between 2020 and 2040. Therefore, the number of direct and indirect employees generated by the Proposed Project in Menlo Park would equal approximately 64 percent[5] of the anticipated employment growth in the city from 2020 to 2040, which is within employment growth forecasts. Therefore, the number of employees generated by the Proposed Project would not exceed ABAG projections, and the Proposed Project would not result in an increase in city population or demand for housing that would exceed ABAG projections.

Removal of an Obstacle to Additional Growth

Development of infrastructure could remove obstacles to population growth if it would allow for development in an area that was not previously considered feasible for development because of infrastructure limitations. As discussed in Section 3.16*, Utilities and Service Systems*, while offsite existing infrastructure would be sufficient to support the majority of the Proposed Project, new onsite utility infrastructure would be required. Off-site improvements in the public right-of-way are anticipated to be included as part of the Proposed Project. At the current time, the scope of potential offsite improvements has not been specifically defined. The Proposed Project is an infill development within an already-developed area of the city. The infrastructure improvements are intended to serve Project-related demand. These improvements would not extend infrastructure into unserved or underserved areas or provide excess infrastructure capacity. Therefore, no indirect impacts related to population growth as a result of expansion of infrastructure would occur.

In connection with the Proposed Project's entitlement review and process, all proposed driveway access points would be evaluated to determine if they warrant new signals or signage. As part of the Proposed Project, a new signal would be installed at the intersection of Seminary Drive and Middlefield Road. Additional off-site improvements as part of the Proposed Project are anticipated within the portion of Seminary Drive that extends from Middlefield Road, bike lane enhancements within Laurel Street and Burgess Drive, and realignment of West 4th Street. The Proposed Project would not result in roadway improvements that would provide access to a previously inaccessible area. As such, no indirect impacts related to population growth would occur.

5.3 Project Variant

Significant and Unavoidable Environmental Impacts

CEQA Guidelines Section 15126.2(c) requires EIRs to include a discussion of the significant environmental effects that cannot be avoided if the Project Variant is implemented. Further, where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described. The following impacts are

[4] Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

[5] 3,868 net jobs at the Project Site + 14 new jobs in the city induced by the onsite residents/6,065 new jobs in the city between 2020 and 2040 × 100 = 64 percent of anticipated employment growth in the city's sphere of influence.

considered significant and unavoidable; that is, no feasible mitigation is available to reduce the Project Variant's impacts to a less-than-significant level. Similar to the Proposed Project, the Project Variant is a variation at the same Project Site with the same basic characteristics and development controls. Notwithstanding the significant and unavoidable impacts of the Project Variant related to noise and historical resources, the Project Variant is being proposed in order to advance SRI's and the Project Sponsor's objectives of redeveloping an underutilized property with a master-planned, mixed-use neighborhood with a significant amount of new residential units, including a significant amount of affordable units, enhancing bicycle and pedestrian connectivity and creating new publicly accessible open space in what has historically been a non-publicly accessible private campus, advancing numerous environmental and sustainability benefits including substantial reductions in GHG emissions due to the removal of an existing cogeneration plant, creating economic benefits and positive fiscal impacts for the city, and accommodating new, state-of-the-art office/R&D facilities for innovation and research with no net increase in commercial square footage compared to existing conditions. Additional details about these impacts are provided in the respective sections of Chapter 4, *Project Variant Analysis*.

- **Impact NOI-1: Construction Noise.** Construction equipment proposed for use during daytime hours would be in compliance with the threshold of 85 dBA at 50 feet for individual pieces of powered equipment. Combined construction noise during daytime hours was modeled to result in a noise level that would be more than 10 dB greater than the ambient noise levels at several nearby noise-sensitive land uses. Noise during Phase 1, Phase 2, and Phase 3 construction could reach a maximum of 97 dBA L_{eq} (at a distance of 15 feet from sensitive land uses), which is 10 dB over the daytime ambient noise levels in the area, as conservatively measured without any noise attenuation or reduction measures. In addition, noise levels would be 10 dB over the daytime ambient levels at distances beyond the worst-case distance. Furthermore, concrete pour activities during early-morning hours were modeled to result in a noise level of 72 dBA L_{eq} at the nearest sensitive land use, which would be greater than the applicable noise limit. Although the substantial increase in noise would be temporary, the estimated construction noise levels during daytime and early-morning hours would exceed the applicable thresholds. Implementation of Mitigation Measures NOI-1.2 and NOI-1.3 would reduce noise during Project Variant construction by requiring a construction noise reduction plan and a noise barrier, respectively. However, these mitigation measures may not be able to ensure that noise would be below the applicable thresholds in all circumstances and impacts related to construction noise would be significant and unavoidable with mitigation.
- **Impact NOI-3: Ground-borne Vibration.** During construction, vibration-generating construction equipment may be operated approximately 15 feet from single-family residences. The use of an excavator could result in a vibration level with a PPV of up to 0.191 in/sec at 15 feet. This vibration level would be above the "strongly perceptible" level (i.e., PPV of 0.1 in/sec) and above the thresholds specified in Mitigation Measure NOISE-2a from the ConnectMenlo EIR (0.032 in/sec at residential uses, during the daytime hours). At a distance of 25 feet, however, the vibration level would be below the strongly perceptible level and considered distinctly perceptible (i.e., PPV of 0.4 in/sec); however, it would still be above the ConnectMenlo EIR threshold of 0.032 in/sec. Most construction activities would occur more than 15 feet from offsite uses because construction along the perimeter of the site would be short term compared to the overall duration of construction. However, vibration levels from a large bulldozer or similar equipment could occur within 50 feet of existing residential uses because the proposed townhomes (TH1) would be within 50 feet of the Classics of Burgess Park neighborhood. During the early-morning concrete pours, equipment would operate within the interior of the Project site, not near existing residential uses. However, a loaded concrete truck traveling within approximately 70 feet of existing residential uses could generate a vibration level greater than the

nighttime threshold specified in the ConnectMenlo EIR of 0.016 in/sec. Implementation of Mitigation Measure NOI-3.1 would reduce vibration levels from construction activity during daytime and early-morning hours by requiring larger equipment to operate at distances greater than 15 feet from sensitive land uses to the extent feasible, limiting morning construction activity involving concrete trucks to after 7:00 a.m., and requiring the contractor to appoint a vibration coordinator to address any vibration-related complaints received. However, it may not be possible to ensure that vibration levels at all times and at all locations would be reduced to a level below the "strongly perceptible" level or below the thresholds identified in the ConnectMenlo EIR because larger equipment may need to operate at closer distances to sensitive land uses and impacts related to construction noise would be significant and unavoidable with mitigation.

- **Impact C-NOI-1: Cumulative Construction Noise.** For Project Variant construction noise to combine with noise from other nearby construction projects and expose individual receptors to greater noise levels, the projects would need to be close to one another. Construction of cumulative projects in proximity to the Project Site, including the 333 Ravenswood Avenue project (No. 35) and the 429 University Avenue project (No. 47), could overlap with Project Variant construction. These cumulative projects and the Project Variant could be under construction at the same time and cumulative construction noise impacts would be significant. Because the Project Variant on its own would result in a significant impact, its contribution would be cumulatively considerable. Although implementation of Mitigation Measures NOI-1.2 and NOI-1.3 would reduce the Project Variant's construction noise impacts, such impacts were determined to be significant and unavoidable. The Project Variant's contribution to cumulative impacts related to construction noise would be cumulatively considerable even with mitigation.
- **Impact CR-1: Historical Resources.** Construction of the Project Variant would cause a substantial adverse change in the significance of four individual historical resources (i.e., Building 100, Building A, Building E, and the Chapel at 201 Ravenswood Avenue) and one historic district, all of which are historical resources, as defined in State CEQA Guidelines Section 15064.5. Implementation of Mitigation Measures CR-1.1 (including CR-1.1.a, CR-1.1.b, CR-1.1.c), CR-1.2, CR-1.3, and CR-1.4 would reduce the potential level of impact on the four individually CRHR-eligible historical resources and the potential impact on the CRHR-eligible SRI International Campus Historic District by requiring documentation and interpretation and/or commemoration of the resources to be demolished and the relocation of a contributing landscape feature of the historic district. However, the demolition of historical resources cannot be mitigated to a less-than-significant level, and impacts on built-environment resources would be significant and unavoidable with mitigation.

Significant Irreversible Environmental Changes

CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the project. Specifically, Section 15126.2(d) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The Project Variant would include a new office/research and development (R&D) campus with no increase in office/R&D square footage; up to 800 new rental dwelling units at a range of affordability levels (comprised of 646 multi-family units and townhomes, and a proposed land dedication to an affordable housing developer that could accommodate up to 154 affordable units); new bicycle and pedestrian connections; approximately 29.9 acres of the Project Site to be available as open space; and decommissioning of a 6 megawatt natural gas cogeneration plant. In total, the Project Variant would result in approximately 2,189,602 sf of mixed-use development, with approximately 1,051,600 sf of office/R&D uses, 42,002 sf of amenity uses, and approximately 1,096,000 sf of residential uses. The Project Variant would demolish all buildings on SRI International's Campus, excluding Buildings P, S, and T, which would remain onsite and be operated by SRI International.

As discussed in Chapter 4, *Project Variant Analysis*, under the section, *Energy*, Project Variant construction would result in approximately 101,875 MMBtu being consumed over the approximately 8.5-year construction period. Table 5-2 provides an estimate of the energy consumption of the Project Variant during operation. The Project Variant's net energy consumption is the difference in operational energy consumption between existing (2022) conditions at the Project Site and 2033 with-Project Variant conditions.

Table 5-2. Estimated Operational Energy Consumption of the Project Variant

Condition/Source	MMBtu/Year
Existing (2022)	
Electricity (building + water + mobile)	-10,859
Natural Gas (building)	450,956
Gasoline (mobile)	7,849
Diesel (mobile + stationary sources)	1,259
Total	449,206
Project Variant (2033)	
Electricity (building + water + mobile)	211,217
Natural Gas	0
Gasoline (mobile)	139,780
Diesel (mobile + stationary sources)	19,097
Total	370,094
Net Decrease with Project Variant	
2033 v. Existing	-79,113
Energy per Square Foot (MMBtu/sf)	
Existing (2022)	0.33
With-Project Variant Conditions (2033)	0.17

Source: Ramboll. 2024. *Assessment of Energy Use for the Increased Development Variant—Parkline Menlo Park, Menlo Park, CA.* April 1.
Notes: Values may not total because of rounding.
MMBtu = million British thermal units; sf = square foot

Buildout of the Project Variant would decrease operational energy consumption on the Project Site by approximately 79,113 MMBtu per year compared with existing conditions. Similarly, energy use per square foot would decrease to 0.17 MMBtu per square foot compared with existing conditions (i.e., 0.33 MMBtu per square foot), despite the increase in overall building area. This decrease in energy usage

is largely attributable to the removal of the existing cogeneration plant, which currently provides the Project Site with natural gas as a source of energy, as well as the energy efficiency measures incorporated into the Project Variant. To the extent that electricity for the Project Variant would come from sources that can be renewed, such as hydropower, sun, wind, and geothermal, it would not represent an irreversible use of resources. To the extent that electricity for the Project Variant comes from non-renewable sources, such as natural gas, coal, and nuclear, it would represent an irreversible use of those resources. However, any such irreversible use of those resources is nevertheless an improvement over existing conditions because the Project Variant would decrease operational energy consumption on the Project Site by approximately 79,113 MMBtu per year, which in the first two years of operations would more than offset the 101,875 MMBtu consumed over the approximately 8.5-year construction period. Thus, the irreversible use of any non-renewable energy resources by the Project Variant is justified.

As discussed in Chapter 4, *Project Variant Analysis*, under section, *Hazards and Hazardous Materials*, accidents such as release of hazardous materials may trigger irreversible environmental damage. With respect to accident conditions involving hazardous materials, the use of hazardous materials would be subject to existing laws, regulations, and CUPA programs regarding hazardous materials, including a spill contingency plan. Adherence to these standards would reduce the potential for an accidental release. With respect to routine hazardous materials uses, because of the nature of R&D uses, the possibility exists for hazards related to the handling of hazardous materials. Laboratories associated with R&D/life science uses are categorized as biosafety levels (BSLs) 1 through 4. It is anticipated that the Project Variant could accommodate BSL-1 or BSL-2 laboratories; BSL-3 and BSL-4 laboratories are less common (in fact, there are only four operational BSL-4 labs in the United States).[6] Although laboratory uses in Menlo Park have typically not been regulated by its zoning ordinance, the Proposed Project is proposing a new mixed-use, transit-oriented zoning district allowing for office, commercial, R&D, and residential uses in proximity to each other; zoning could address BSLs for laboratory uses. Regardless of the BSL, the Project Variant would comply with required federal, state, and local standards, including Title 8 of the California Code of Regulations. The Project Sponsor would also consult with San Mateo County Environmental Health Services and apply for applicable permits for any regulated substance that may pose a threat to public health and safety or the environment because of its highly toxic, flammable, or explosive nature. Tenants must comply with the safety procedures mandated by applicable federal, state and local laws and regulations. In addition, hazardous materials would be registered through the San Mateo County Environmental Health Services HazMat Business Plan Program to ensure safe and responsible handling of such materials. Compliance with state and local regulations would ensure that buildings would be equipped with safety devices such as sprinklers and alarms to minimize potential impacts resulting from the presence of hazardous materials. Prior to issuance of a certificate of occupancy for completed structures, the city would require a final inspection from the Menlo Park Fire Protection District to ensure that all building systems are in conformance with the city's Fire Code and National Fire Protection Association requirements. Finally, the Project Variant would comply with California Department of Transportation regulations to ensure that all necessary safety precautions would be taken during the transportation of hazardous materials. The Project Variant is not expected to create a significant hazard to public health or the environment or to result in significant irreversible damage related to environmental accidents associated with the Project Variant.

[6] National Institute of Allergy and Infectious Diseases. 2018. *The Need for Biosafety Labs*. Available: https://www.niaid.nih.gov/research/biosafety-labs-needed. Accessed: July 13, 2023.

Growth-Inducing Impacts

CEQA Section 21100(b)(5) specifies that the growth-inducing impacts of a project must be addressed in an EIR. Section 15126.2(e) of the CEQA Guidelines provides the following guidance for assessing growth-inducing impacts of a project:

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects that would remove obstacles to population growth (a major expansion of a wastewater treatment plant, for example, could allow more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can induce growth directly, indirectly, or both. Direct growth inducement could result if a project involved construction of new housing. Indirect growth inducement would result, for instance, if implementing a project resulted in any of the following:

- Substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or
- Substantial new permanent employment opportunities (e.g., commercial, industrial, or government enterprises) that stimulates the need for additional housing and services to support the new employment demand; and/or
- Removal of an obstacle to additional growth and development, such as remove a constraint on a required utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

Growth inducement itself is not an environmental effect but may lead to foreseeable environmental effects. If substantial growth inducement occurs, it could result in secondary environmental effects, such as increased demand for housing, the construction of which could cause environmental effects; demand for other community and public facilities; demand for infrastructure, the construction of which could cause environmental effects; increased traffic and noise; degradation of air or water quality; degradation or loss of plant or animal habitats; conversion of agricultural and open-space land to urban uses; and other effects.

Growth Inducing Impacts of the Project Variant

Short-term Employment Opportunities

As discussed in Chapter 4, *Project Variant Analysis*, under the section, *Population and Housing*, the size of the construction workforce would vary during the different phases of construction, but it is anticipated that the Project Variant would require between two and 213 construction workers per day. It is anticipated that construction workers would be hired from Bay Area sources. Although some would commute from outside the Bay Area, because of the temporary nature of construction, these workers would not be expected to relocate permanently. Therefore, the Project Variant would not induce population growth by bringing substantial numbers of construction jobs to the area or result in associated increases in demand for housing.

Permanent Employment Opportunities

Operation of the Project Variant would generate up to 3,856 net new jobs onsite, accounting for the existing employees who would no longer work at the Project Site, including employees at 201 Ravenswood Avenue. In addition, the Project Variant would add up to 800 new residential units in Menlo Park, thereby increasing the population and creating net new demand for products and services. The jobs associated with the delivery of these products and services are also assumed to be net new jobs. Although existing offsite health care facilities, schools, and other services may be able to absorb a portion of the new demand, existing establishments would still require additional employees. As a result, the Project Variant would induce approximately 419 offsite jobs that would serve residents of the proposed housing. In total, the Project Variant would result in the creation of approximately 4,275 new jobs in the region. Using the assumption that 5.3 percent of people who live in Menlo Park also work in the city, this would equate to approximately 22 new offsite jobs in Menlo Park. Together with the 3,856 net new jobs onsite, approximately 3,878 new jobs would be created in Menlo Park as a result of the Project Variant.[7]

The new jobs induced by the Project Variant would result in a demand for approximately 2,284 housing units across the region. Although the Project Variant would add up to 800 new residential units to the housing supply in Menlo Park, because of the regional housing demand from the Project Variant's onsite and induced employment, there would be a 1,484-unit deficit in housing supplied by the Project Variant compared to the demand created by the Project Variant in the region.[8] Therefore, the Project Variant is estimated to result in a net decrease in available housing in the region (i.e., approximately 1,484 units).[9] Regardless, due to the Project Variant's development of housing, in addition to office/R&D uses, the Project Variant would generally support a more balanced jobs/housing ratio, furthering the growth objectives of Plan Bay Area.

ABAG estimates that the number of jobs in the city's sphere of influence will grow by approximately 6,065 between 2020 and 2040. Therefore, the number of direct and indirect employees generated by the Project Variant in Menlo Park would equal approximately 64 percent[10] of the anticipated employment growth in the city from 2020 to 2040, which is within employment growth forecasts. Therefore, the number of employees generated by the Project Variant would not exceed ABAG projections, and the Project Variant would not result in an increase in city population or demand for housing that would exceed ABAG projections.

Removal of an Obstacle to Additional Growth

Development of infrastructure could remove obstacles to population growth if it would allow for development in an area that was not previously considered feasible for development because of infrastructure limitations. As discussed in Chapter 4, *Project Variant Analysis,* under the section*, Utilities and Service Systems*, while off-site existing infrastructure would be sufficient to support the majority of the Project Variant, new onsite utility infrastructure would be required. Similar to the Proposed Project, off-site improvements in the public right-of-way are anticipated to be included as part of the Project Variant. In addition, the Project Variant would include the construction of an approximately 2- to 3-million gallon emergency water reservoir. The emergency water reservoir was identified as a needed citywide

7 Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

8 Project Variant demand for 2,284 units minus the Project Variant provision of 800 units = 1,484-unit deficit.

9 Keyser Marston Associates. 2024. *Housing Needs Assessment, Parkline*. April.

10 3,868 net jobs at the Project Site + 22 new jobs in the city induced by the onsite residents/6,065 new jobs in the city between 2020 and 2040 × 100 = 64 percent of anticipated employment growth in the city's sphere of influence.

improvement in the Menlo Park Municipal Water's 2018 Water System Master Plan. The emergency water reservoir, along with the small pump station, emergency well, and related improvements (i.e., emergency generator, disinfection system, surge tank), would not induce additional growth because it would be intended to be only an emergency supply. At the current time, the scope of potential offsite improvements has not been specifically defined. The Project Variant is an infill development within an already-developed area of the city. The infrastructure improvements are intended to serve Project Variant-related demand. These improvements would not extend infrastructure into unserved or underserved areas or provide excess infrastructure capacity. Therefore, no indirect impacts related to population growth as a result of expansion of infrastructure would occur.

In connection with the Project Variant's entitlement review and process, all proposed driveway access points would be evaluated to determine if they warrant new signals or signage. As part of the Project Variant, one driveway would be removed on Ravenswood Avenue along the Project frontage, reducing the number of driveways from six to five. However, this would improve access on Ravenswood Avenue by consolidating the access points on the street. Additional off-site improvements as part of the Project Variant are anticipated within the portion of Seminary Drive that extends from Middlefield Road, bike lane enhancements within Laurel Street and Burgess Drive. The Project Variant would not result in roadway improvements that would provide access to a previously inaccessible area. As such, no indirect impacts related to population growth would occur.

Chapter 6
Alternatives Analysis

6.1 Introduction

The California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.) require that an environmental impact report (EIR) "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" (State CEQA Guidelines Section 15126.6[a]). If mitigation measures or a feasible project alternative that would meet most of the basic project objectives would substantially lessen the significant environmental effects of a proposed project, then the lead agency should not approve the proposed project unless it determines that specific technological, economic, social, or other considerations make the mitigation measures and the project alternative infeasible (PRC Section 21002, State CEQA Guidelines Section 15091[a][3]). The EIR must also identify alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and should briefly explain the reasons underlying the lead agency's determination (State CEQA Guidelines Section 15126.6[c]).

This chapter describes several alternatives to Parkline (Proposed Project) and the Increased Development Variant (Project Variant). Specifically, it compares the impacts of the alternatives to the environmental impacts of the Proposed Project and the Project Variant as proposed, consistent with the guidance in State CEQA Guidelines Section 15126.6(d). At the conclusion of the analysis, the environmentally superior alternative is identified (State CEQA Guidelines Section 15126.6[e][2]).

One of the alternatives that must be analyzed is the "No-Project" Alternative. The purpose of the no-project analysis is to allow decision-makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project. The no-project analysis must discuss the existing conditions at the time the notice of preparation (NOP) is published as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved and development continued to occur in accordance with existing plans and consistent with available infrastructure and community services (State CEQA Guidelines Section 15126.6[e][2]). The CEQA Guidelines recognize that the definition of the no-project alternative will vary depending on the nature of the project proposed for approval (State CEQA Guidelines Section 15126.6[e][3]). The no-project alternative will not necessarily correspond to the baseline for assessing the project's environmental impacts because the no-project alternative is concerned solely with the consequences of disapproving the project (State CEQA Guidelines Section 15126.6[e][1]). In some situations, the existing environment will not change if the project is rejected, and the no-project alternative will be the same as the existing environmental setting. In other situations, however, rejection of the project will not preserve exiting environmental conditions and the no-project alternative will be different from the existing environmental setting. (State CEQA Guidelines Section 15126.6[e]). Pursuant to the State CEQA Guidelines, this section also discusses and analyzes the No-Project Alternative and compares it to both the Proposed Project and the Project Variant.

In addition to the No-Project Alternative, this chapter identifies additional alternatives to the Proposed Project and the Project Variant, respectively, and discloses the impacts of each. The Proposed Project and the Project Variant have their own set of alternatives, which are analyzed separately in this chapter.

However, as described in more detail below, these alternatives are similar in concept but with slightly altered site plans because of the differences between the Proposed Project and the Project Variant. This chapter also provides a description of the alternatives and compares the significant environmental impacts of the alternatives to the significant environmental impacts of the Proposed Project and the Project Variant, respectively. This chapter also identifies alternatives that were considered but rejected from further consideration.

Requirements for Alternatives Analysis

The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those potentially feasible alternatives necessary to foster informed public participation and an informed and reasoned choice by the decision-making body (State CEQA Guidelines Section 15126.6[f]). Therefore, an EIR does not need to address every conceivable alternative or consider infeasible alternatives. State CEQA Guidelines Section 15364 generally defines "feasible" to mean the ability to be accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. State CEQA Guidelines Section 15126.6(f)(1) lists the following factors that may be considered when determining the feasibility of alternatives to be evaluated:

- Site suitability
- Economic viability
- Availability of infrastructure
- General plan consistency
- Other plans or regulatory limitations
- Jurisdictional boundaries
- Ability of a project's proponent to attain site control

An EIR does not need to consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (State CEQA Guidelines Section 15126.6[f][3]).

6.2 Project Objectives and Environmental Impacts

Project Objectives

The Project Sponsor has identified the following objectives for the Proposed Project:

- Redevelop an aging R&D campus into a financially viable residential and commercial mixed-use neighborhood that cohesively balances office/R&D uses, multifamily residential uses, open space, and community-serving uses, with no increase in office/R&D square footage compared to existing conditions.
- Increase the city's housing supply and progress towards its State-mandated housing goals by providing at least 550 new housing units with a mix of types and sizes, including at least 15 percent for low- and moderate-income households, consistent with the city's Below Market Rate Housing Program, and dedicate a portion of the Project Site to an affordable housing developer for future development of up to approximately 100 units of affordable or special-needs housing.

- Ensure the continuity of SRI International's ongoing use of existing satellite transmission equipment onsite, which requires unobstructed sightlines to the horizon to ensure no disruption to ongoing research operations.
- Replace obsolete and unsustainable commercial buildings with new state-of-the-art, highly sustainable commercial buildings with flexible floor plates that can accommodate a variety of office and/or R&D tenants.
- Orient new office/R&D buildings in a configuration that leverages operational efficiencies, such as the ability to share amenity spaces, parking, and ensures that the business and security needs of future commercial tenants are met.
- Improve bicycle and pedestrian connectivity and safety within and between the site and adjacent neighborhoods to promote an active public realm and establish interconnected neighborhoods.
- Create separation between the residential uses along Laurel Street and the office/R&D uses by providing independent vehicular access, circulation, and parking/loading areas.
- Provide accessible open space throughout the Project Site, including a large Central Commons area adjacent to the office/R&D buildings, to create a vibrant park-like setting that emphasizes the preservation of heritage trees where feasible, encourages passive and active recreational activities and promotes health and wellness of residents, tenants, and visitors.
- Use advances in architectural, landscape design, and site planning practices to create distinctive and viable residential and commercial areas within the Project site that complement the adjacent neighborhoods.
- Incorporate complementary community recreational and retail uses that encourage an active and healthy lifestyle for residents, tenants, and visitors.
- Create a thriving transit-oriented development that facilitates efforts to reduce vehicle miles traveled by siting commercial and residential uses near existing transit corridors and public transportation facilities, and promoting alternatives to automobile transit through implementation of TDM, new bicycle/pedestrian access, and ease of movement between buildings.
- Support local and regional efforts to reduce greenhouse gas emissions, respond to climate change, and promote energy and water efficiency and resource conservation by incorporating sustainable design features and resource conservation measures that align with the city's goals.
- Decommission the existing onsite cogeneration plant to achieve significant reductions in greenhouse gas emissions within the city and region.
- Generate a positive fiscal impact on the local economy and revenue for the city and other public agencies by enhancing property values, increasing property tax revenue, creation of jobs, and payment of development fees.
- Ensure the flexibility to phase construction of the Proposed Project in response to market conditions.
- Bolster the city's reputation as a hub for technological advancement and innovation and recognize SRI International's contributions to society and the growth of Silicon Valley.
- Facilitate the city's desire to implement an emergency water supply and storage project on the Project Site, as feasible, to increase Menlo Park's resilience in the event of an emergency.

Proposed Project and Project Variant Significant and Unavoidable Impacts

A central purpose of the discussion of alternatives is to determine whether there are potentially feasible alternatives that could avoid or substantially lessen the significant impacts of a proposed project. Based on the analysis in Chapter 3, *Environmental Impact Analysis*, and Chapter 4, *Project Variant Analysis*, of this EIR, the Proposed Project and the Project Variant would have the following significant and unavoidable impacts:

- **Impact NOI-1: Construction Noise.** Construction of the Proposed Project and the Project Variant would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies.
- **Impact NOI-3: Ground-borne Vibration.** The Proposed Project and the Project Variant would generate excessive ground-borne vibration or ground-borne noise levels.
- **Impact C-NOI-1: Cumulative Construction Noise.** Cumulative development would result in a significant environmental impact related to construction noise; the Proposed Project and the Project Variant would be a cumulatively considerable contributor to a significant environmental impact**.**
- **Impact CR-1: Historical Resources.** The Proposed Project and the Project Variant would cause a substantial adverse change in the significance of historical resources, pursuant to Section 15064.5.

6.3 Description of Proposed Project Alternatives Selected for Evaluation

The alternatives to the Proposed Project are meant to feasibly attain most of the basic Project objectives while avoiding or substantially lessening its significant impacts, which are listed above in Section 6.2. Based on the goal of avoiding or substantially reducing the Proposed Project's significant impacts while meeting the basic Project objectives listed above, the City has developed the following three alternatives to the Proposed Project for evaluation in this Draft EIR: Preservation Alternative 1 (Retain Building 100), Preservation Alternative 2 (Retain Buildings 100, A, and E), and Preservation Alternative 3 (Retain Buildings 100, A, E, and B). In addition, a No-Project Alternative is analyzed in this chapter (Table 6-1).

- **No-Project Alternative.** The No-Project Alternative would continue the existing uses on SRI International's research campus, which consists of 38 buildings with approximately 1.38 million square feet (sf) of mostly R&D space and areas for supporting uses. The existing cogeneration plant would continue to operate. Under the No-Project Alternative, 3,308 employees could work within the existing buildings at the SRI campus, which is the maximum number of employees allowed under the current Conditional Development Permit [CDP]. This would amount to a net increase in 2,208 employees compared to existing conditions. No new construction would occur and no housing would be provided at the Project Site. However, this alternative would include renovations and tenant improvements to the existing buildings, as needed, to ensure modern seismic safety features to meet all standards set forth by the California Building Standards Code, address hazards, remediate known hazardous materials, etc.

Table 6-1. Comparative Description of the Proposed Project Alternatives

	Proposed Project	No-Project Alternative	Preservation Alternative 1	Preservation Alternative 2	Preservation Alternative 3
Site Development					
Total Existing Office Floor Area to Remain	286,730 sf	1.38 million sf	295,736 sf	743,829 sf	878,939 sf
Gross Floor Area to Be Demolished and Replaced	1,094,197 sf	0 sf	1,084,596 sf	636,503 sf	501,393 sf
Residential (sf)	675,200 sf	0 sf	Same as Project	607,200 sf	607,200 sf
Housing Units	550 units	0 units	Same as Project	506 units	506 units
Maximum Building Heights	110 feet (Office/R&D) 85 feet (Residential)	48 feet	Same as Project	Same as Project	Same as Project
Parking	2,800 spaces (Office) 519 spaces (Residential)	~3,000 spaces[a]	Same as Project	2,800 spaces (Office) 456 spaces (Residential)	2,800 spaces (Office) 456 spaces (Residential)
Open Space	26.4 acres	n/a[b]	Same as Project	25.8 acres	26.2 acres
Onsite Activity					
Total Net New Onsite Employees	3,868 employees	2,208 employees[c]	Same as Project	Same as Project	Same as Project
Total Residents	1,305 residents	0 residents	Same as Project	1,200 residents	1,200 residents
Historic Resources					
Buildings Individually Eligible for CRHR (3 total)					
Retained	0	3	1	3	3
Demolished	3	0	2	0	0
Contributing Buildings (26 total)					
Retained	3	26	4	6	7
Demolished	23	0	22	20	19
Contributing Landscape Features (2 total)					
Retained	1	2	1	1	1
Demolished	1	0	1	1	1

Source: Page & Turnbull. 2024. *Parkline Project SRI International Campus Preservation Alternatives Analysis Report Revised & Restated, City of Menlo Park, San Mateo County*. June 4. Refer to Appendix 3.8-2 of this EIR.

Notes:

a. Based on estimates of current parking spaces at the Project Site.

b. Although a limited amount of useable open space is currently present at the Project Site, this is not quantified for purposes of this analysis because information is not available.

c. Per current CDP requirements, up to 3,308 employees could work at the Project Site. Therefore, because approximately 1,100 people are currently employed at the Project Site, the No-Project Alternative would result in a net increase of approximately 2,208 workers on the assumption that the existing buildings on the site would be retrofitted and re-tenanted such that the campus would be occupied at the levels allowed by the existing CDP. Given the current CDP requirement that counts non-SRI employees as 2 employees (i.e., at a 2:1 ratio), it is likely that under the no project alternative fewer than the total number of allowed SRI employees would actually be working on the campus.

- **Preservation Alternative 1 (Retain Building 100).** This alternative would retain the existing office Building 100, a historic resource that is individually eligible for the California Register of Historical Resources (CRHR) and as a district contributor, for support functions/amenity space. As explained in Section 3.8, *Cultural Resources*, historic districts may have contributing and non-contributing buildings, sites, structures, objects, or open spaces. A contributor, like Building 100, adds to the historic associations, historic architectural qualities, or archeological values for which a property is significant. Under this alternative, individually eligible Buildings A and E would be demolished, as would all other contributing buildings proposed for demolition under the Proposed Project. All new office and residential buildings included in the Proposed Project would be built as proposed for the Proposed Project.
- **Preservation Alternative 2 (Retain Buildings 100, A, and E).** This alternative would retain all three individually CRHR eligible buildings: Buildings 100, A, and E. Buildings A and E would continue to be used for office and R&D space but would need to be upgraded. Building 100 would be used for support functions/amenity space. Because the footprints of Buildings A and E are on the site of several proposed office/R&D and residential buildings, the siting, footprint, and massing of several of the new buildings would need to be altered to accommodate the retention of Buildings A and E, and several proposed buildings would not be constructed to meet the objective of no net increase in commercial square footage.
- **Preservation Alternative 3 (Retain Buildings 100, A, E, and B).** This alternative would retain the three buildings that are individually eligible for the CRHR as well as district contributor Building B. Buildings P, S, and T would be retained and renovated, separate from the Proposed Project. Buildings A, E, and B would continue to be used for office and R&D space but would need to be upgraded. Building 100 would be used for support functions/amenity space. Because the footprints of Buildings A, B, and E are on the site of several proposed office/R&D and residential buildings, the siting, footprint, and massing of several of the proposed new buildings would need to be altered to accommodate the retention of Buildings A and E, and several proposed buildings would not be constructed to meet the objective of no net increase in commercial square footage.

No-Project Alternative

The No-Project Alternative would continue the existing uses on SRI International's research campus, which consists of 38 buildings with approximately 1.38 million sf of mostly R&D space and areas for supporting uses. The current land use designation of Commercial (specifically, Professional and Administrative Offices) and the current zoning of C-1(X) (Administrative and Professional District, Restrictive) and P (Parking) for the Project Site would remain. Although other uses are permitted at the Project Site, under the No-Project Alternative, the buildings would continue to support the same uses as under existing conditions with an anticipated increase in occupancy up to the level allowed by the current CDP. The cogeneration plant, a 6-megawatt natural gas facility that currently generates power for the Project Site, would remain.

Approximately 1,100 people are currently employed at the Project Site; there are currently no residents on the Project Site. Under the No-Project Alternative, 3,308 employees could work in the existing buildings on the SRI campus, which is the maximum number of employees allowed under the current CDP. Therefore, the number of employees that would work at the Project Site would increase by approximately 2,208 compared to existing conditions.

Under the No-Project Alternative, onsite parking would be provided primarily in the existing large surface parking areas, which would require extensive impervious areas and limited opportunities for landscaping and accessible open space. No new publicly accessible open space would be created. No new construction would occur, and no housing would be provided at the Project Site. All eligible SRI International historic district contributors, as well as Buildings 100, A, and E, would be retained.

The No-Project Alternative would include renovations and tenant improvements to the existing buildings, as needed, to ensure modern seismic safety features to meet all standards set forth by the California Building Standards Code, address hazards, remediate known hazardous materials, etc. Examples of the type of work anticipated would include installing wheelchair lifts, painting and exterior renovations, interior renovations, and seismic upgrades. These types of improvements would likely be entitled ministerially, but could also require discretionary approvals (e.g., architectural design review). Even if discretionary approvals are required, they would likely qualify for an exemption under CEQA (e.g., Class 1 Categorical Exemption for existing facilities). Since the specific renovations and improvements that would occur are unknown at this time, the analysis in this chapter for the No-Project Alternative is qualitative.

Preservation Alternatives

The Project Site was evaluated by Page & Turnbull and determined to be eligible for listing as a historic district in the CRHR under Criterion 1 (Events) for its association with SRI International, an innovative R&D institute that has contributed numerous advancements in a variety of fields, including computing, business and economics, health and medicine, and the physical sciences.[1] As described in the historic resources technical report prepared by Page & Turnbull, and further analyzed in Section 3.8, *Cultural Resources*, of this Draft EIR, the Proposed Project would have a significant and unavoidable impact on the eligible historic district.[2] The Project, as proposed, would demolish 23 of the 26 contributing buildings, leaving only three contributing buildings intact. Because of the proposed demolition, the eligible historic district would lose its historic integrity and ability to convey its significance. These alterations would cause a significant adverse change that would result in the loss of CRHR eligibility for the SRI Campus as a historic district. Therefore, the impact on the historic district would be significant and unavoidable. The Proposed Project would also result in the demolition of three buildings that are individually eligible as historic resources, which would constitute a separate significant and unavoidable impact.

A preservation alternatives analysis report has been prepared by Page & Turnbull to analyze preservation alternatives for the Proposed Project.[3] Three preservation alternatives were selected for further study, as described in more detail below. In this chapter, each alternative is analyzed as a separate alternative (rather than as one preservation alternative with different variations), as indicated below by their separate descriptions.

[1] Page & Turnbull. 2022. *SRI International Campus Historic Resource Evaluation for Parkline Project*, *City of Menlo Park, San Mateo County*. April 21. Refer to Appendix C of the *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*.

[2] Page & Turnbull. 2024. *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*. June 6. Refer to Appendix 3.8-1 of this EIR.

[3] Page & Turnbull. 2024. *Parkline Project SRI International Campus Preservation Alternatives Analysis Report Revised & Restated, City of Menlo Park, San Mateo County*. June 4. Refer to Appendix 3.8-2 of this EIR.

Project Preservation Alternative 1 (Retain Building 100)

Preservation Alternative 1 (Retain Building 100) would retain the existing two-story Building 100, an individually eligible historic resource and historic district contributor, and rehabilitate it for office or support functions, such as visitor functions, conferences, etc. Alterations to interior floor plans may be required for alternative uses, such as amenity space, but no exterior alterations are likely to be required. The other individually eligible Buildings A and E would be demolished, as would all other contributing buildings proposed for demolition under the Proposed Project. All new office and residential buildings included in the Proposed Project would be built as proposed under this alternative. In addition, as under the Proposed Project, the existing onsite cogeneration plant would be decommissioned. In total, approximately 295,736 sf of existing office floor area would remain, compared to approximately 286,730 sf under the Proposed Project. Approximately 1,084,596 sf of gross floor area would be demolished and replaced under this alternative, compared to 1,094,197 sf under the Proposed Project. However, in total, Preservation Alternative 1 would result in the same amount of total office/research-and-development (R&D) floor area and the same amount of residential floor area as the Proposed Project. Figure 6-1 depicts the conceptual site plan for Preservation Alternative 1.

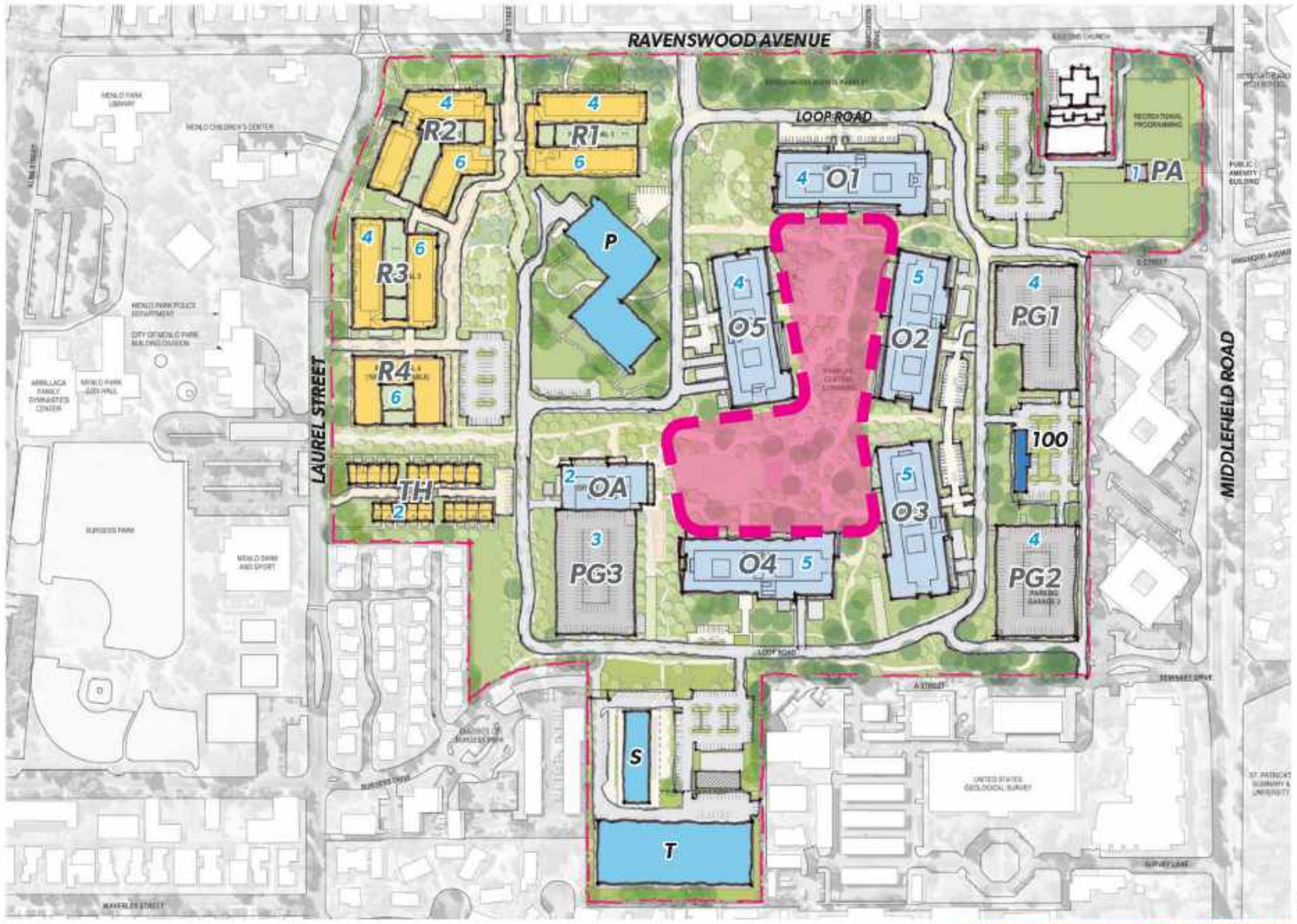
Existing Building Renovation

Building 100 is currently used by SRI International for office space. To maintain ongoing use of the building, significant upgrades would be required, including upgrades for building systems (e.g., mechanical and electrical), seismic upgrades to meet current code requirements, and remediation work related to hazardous materials because the building includes regulated levels of asbestos-containing materials, lead-based paint, and polychlorinated biphenyls (PCBs), as further detailed in the 2021 hazardous materials study. Interior renovations required for ongoing use of Building 100 would most likely include removal of existing hallway and room partitions, ceilings, and other interior features to reconfigure the spaces for more optimal functionality and accommodate Americans with Disabilities Act–(ADA-) compliant accessible elevators, stairs, and restrooms. No exterior alterations to Building 100 would occur as part of Preservation Alternative 1.

Proposed Buildings

For Preservation Alternative 1, the proposed office/R&D buildings would remain the same height and number of stories as under the Proposed Project. The floor area of the proposed office buildings would decrease by approximately 9,000 sf (commensurate with the square footage of Building 100); this could be achieved either by reducing the footprint of Office Buildings 2 (O2) and O3 by 900 sf or by reducing the footprints of Buildings O1, O2, O3, O4, and O5 by approximately 391 sf per building. Therefore, the total floor area for the office/R&D buildings would be the same under Preservation Alternative 1 as under the Proposed Project, resulting in the same number of net new onsite employees (i.e., 3,868 employees).

The proposed residential buildings would not change under this alternative; each residential building would remain the same height and number of stories as under the Proposed Project. Preservation Alternative 1 would result in no loss of residential units (up to 550 units would be provided). The total amount of open space would also remain the same as under the Proposed Project.



Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Source: Page & Turnbull, 2024

ICF

Figure 6-1
Preservation Alternative 1 for the Proposed Project
Parkline

The proposed new amenity buildings and parking garages would remain the same height and include the same number of stories as under the Proposed Project. Preservation Alternative 1 would have no impact on below-grade parking below Buildings O1 and O5. However, Preservation Alternative 1 would displace 50 surface parking spaces in the lot between Parking Garages (PG) 1 and 2. However, the 50 spaces could be provided within PG1 and PG2, resulting in no net loss with respect to parking spaces on the Project Site. Preservation Alternative 1 would have no impact on the total amount of open space.

Project Preservation Alternative 2 (Retain Buildings 100, A, and E)

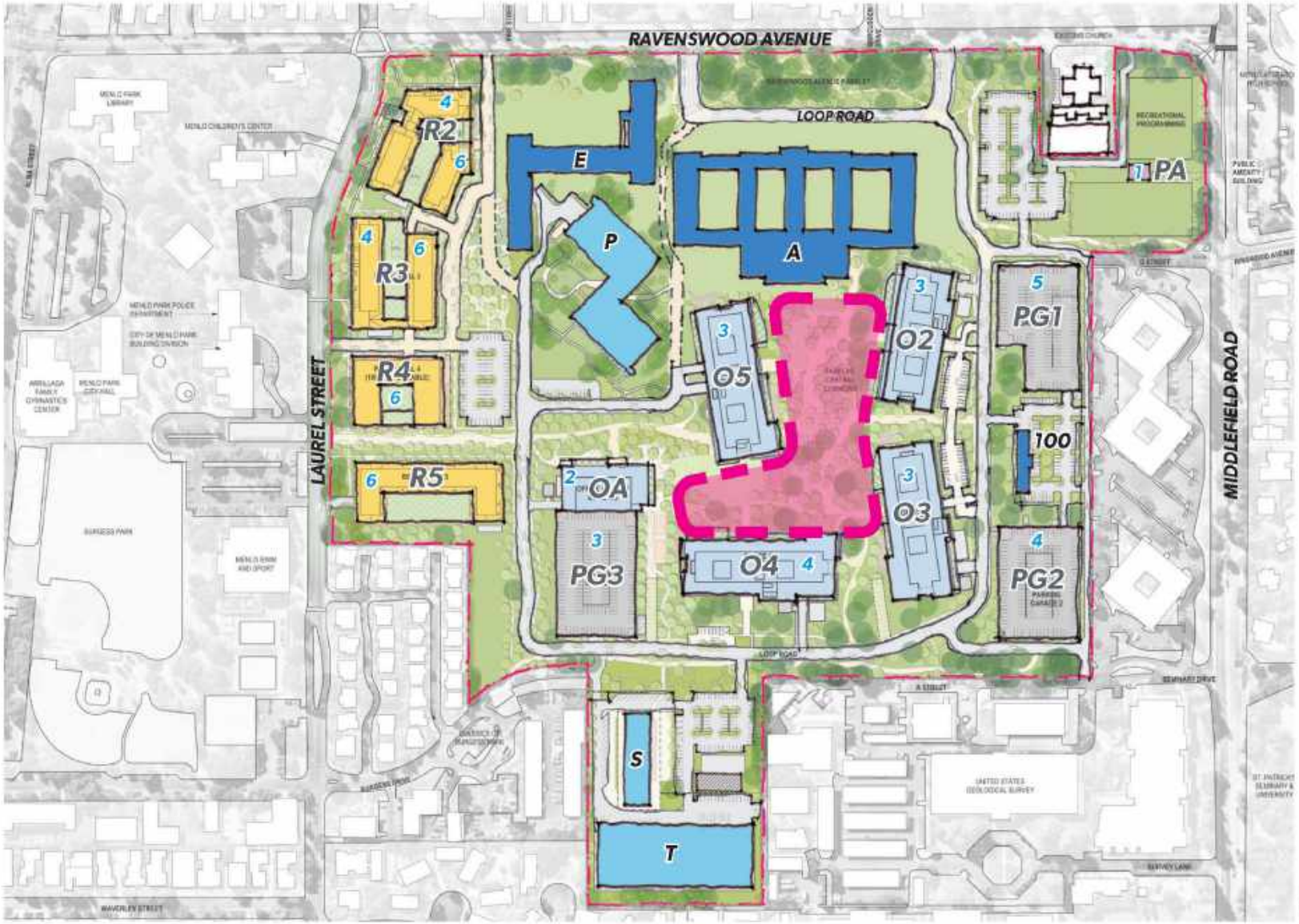
Preservation Alternative 2 (Retain Buildings 100, A, and E) would retain three individually eligible buildings and historic district contributors: the existing two-story office building (Building 100), the existing two-story office/R&D building (Building A), and the existing three-story office/R&D building (Building E). Under Preservation Alternative 2, Building 100 would be rehabilitated for office or support functions, such as visitor functions and conferences. Alterations to the interior floor plans of Building 100 may be required for use as amenity space, but no exterior alterations are likely to be required. Buildings A and E would be rehabilitated and retained for office/R&D use. Buildings A and E would require substantial upgrades to meet current code requirements; however, even with such upgrades, the buildings are not anticipated to meet market demand for contemporary, state-of-the-art office/R&D facilities in Silicon Valley, given the general floor plan configurations and other existing physical constraints. Under Preservation Alternative 2, all other contributing historic district buildings proposed for demolition in the Proposed Project would be demolished. In addition, as under the Proposed Project, the existing onsite cogeneration plant would be decommissioned. In total, approximately 743,829 sf of existing office floor area would remain, compared to approximately 286,730 sf under the Proposed Project. Approximately 636,503 sf of gross floor area would be demolished and replaced under this alternative, compared to 1,094,197 sf under the Proposed Project. In total, Preservation Alternative 2 would result in the same total amount of office/R&D floor area as the Proposed Project but a decrease of 68,000 sf in residential floor area. Therefore, Preservation Alternative 2 would result in slightly less development than the Proposed Project with approximately 44 fewer residential units. Figure 6-2 depicts the conceptual site plan for Preservation Alternative 2.

Existing Building Renovation

As with Preservation Alternative 1, under Preservation Alternative 2, upgrades to Building 100 would be required, including upgrades for building systems (e.g., mechanical and electrical), seismic upgrades to meet current code requirements, and remediation work related to hazardous materials because the building includes regulated levels of asbestos-containing materials, lead-based paint, and PCBs, per the 2021 hazardous materials study. Interior renovations would most likely include removal of existing hallway and room partitions, ceilings, and other interior features to reconfigure the spaces for more optimal functionality and accommodate ADA-complaint accessible elevators, stairs, and restrooms.

Similarly, required upgrades to Buildings A and E would also include upgrades for building systems (e.g., mechanical and electrical), seismic upgrades to meet current code requirements, and remediation work related to hazardous materials because the building includes regulated levels of asbestos-containing materials, lead-based paint, and PCBs, per the 2021 hazardous materials study.

No exterior alterations would be made to Buildings 100, A, and E as part of Preservation Alternative 2. As with the Proposed Project, exterior alterations to Buildings P, S, and T are not included in Preservation Alternative 2. Therefore, adaptive reuse of Buildings 100, A, and E and ongoing use of Buildings P, S, and T would appear to meet the Secretary of the Interior's (SOI's) Standards for Rehabilitation.



Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Source: Page & Turnbull, 2024

Figure 6-2
Preservation Alternative 2 for the Proposed Project
Parkline

Proposed Buildings

Because the footprints of Buildings A and E are on the site of several proposed office/R&D and residential buildings, Preservation Alternative 2 would affect the development feasibility, including the footprint and massing, of several of the proposed new office/R&D buildings to accommodate the retention of Buildings A and E. Specifically, under Preservation Alternative 2, proposed Building O1 would not be constructed, proposed Buildings O2 and O5 would be reduced with respect to footprint and number of stories, and proposed Buildings O3 and O4 would be reduced with respect to number of stories to meet the Project objective of no net increase in office/R&D square footage. In addition, Building O2 would be reduced from five stories under the Proposed Project to three stories, and the footprint would be reduced to accommodate retained Building A. Building O5 would be reduced to three stories (from five) and relocated farther south on the site to accommodate retained Building A. Building O3 would be reduced to three stories (from five), and Building O4 reduced to four stories (from five).

Overall, compared to the Proposed Project, Preservation Alternative 2 would result in a reduction of approximately 457,099 sf of new office/R&D development because 743,829 sf of gross floor area in the existing office/R&D space would remain (compared to the 286,730 sf of gross floor area that would remain under the Proposed Project). As a result, the total amount of commercial square footage within the Project Site would be consistent with that of the Proposed Project but would result in a reduced amount of new, highly sustainable commercial square footage with state-of-the-art facilities with preservation of Buildings 100, A, and E. For the purposes of this analysis, because the total amount of commercial square footage would be the same as under the Proposed Project, it is assumed that this alternative would result in the same number of net new onsite employees (3,868 employees).

Preservation Alternative 2 would also affect development feasibility as well as the footprints and massing of a portion of the Proposed Project's residential component, resulting in a net reduction in the number of total units. Under Preservation Alternative 2, proposed Residential Building 1 (R1) would not be constructed and the footprint of Building R2 would be reduced because the buildings would be on the site for existing Building E, which would be retained. Under Preservation Alternative 2, to accommodate displaced residential units, the area for the proposed two-story townhouses would instead be developed as a new six-story residential building (R5) at the same location. Although Residential Building R2 would decrease with respect to footprint, the massing would remain (i.e., four and six stories); the massing and footprints of Buildings R3 and R4 would remain unchanged. Therefore, Preservation Alternative 2 would result in a net decrease in the number of units, going from 550 to 506 (44 fewer units), and a decrease of 68,000 sf in residential floor area. Building R4 would still be developed in the future by a separate affordable housing developer with 100 units that would be 100 percent affordable housing. The other 406 units would be market-rate housing, with 15 percent of the 406 units meeting the City's below-market-rate (BMR) housing requirements. As a result, approximately 1,200 new residents would live at the Project Site under Preservation Alternative 2 compared to 1,305 residents under the Proposed Project.

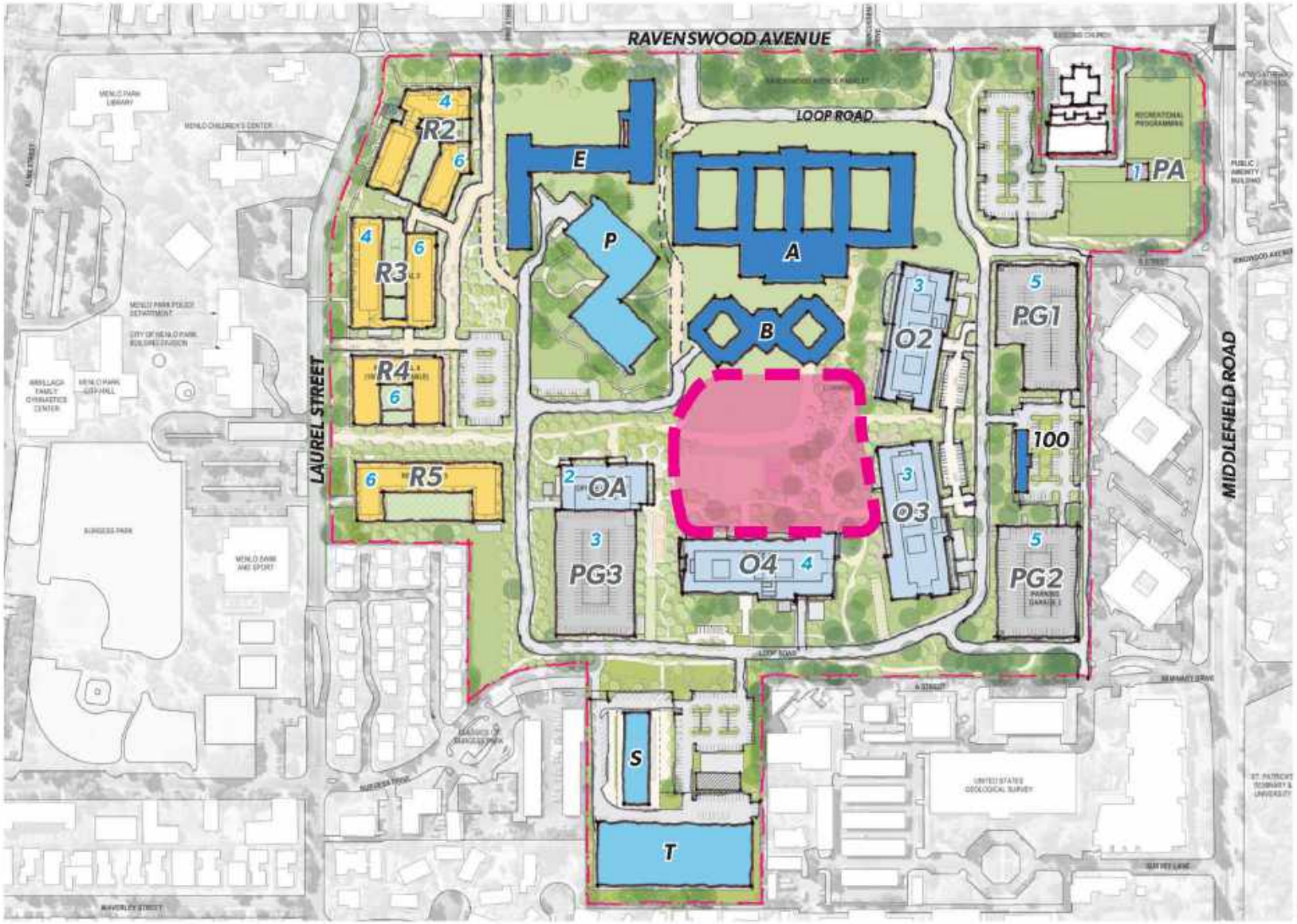
The proposed new office amenity and community amenity buildings under Preservation Alternative 2 would be the same height and number of stories as under the Proposed Project, and the open recreational fields would be retained. However, under this alternative, the size of the Central Commons would be reduced because the commercial office/R&D buildings would shift farther south. Specifically, the retained Building A and the new, but shifted, office/R&D building (O5) would encroach on the Central Commons, including the planned flexible lawn and event pavilion area. The square footage of overall open space would decrease to 25.8 acres, approximately 0.6 acre less than the Proposed Project. Under Preservation Alternative 2, the emergency access road between Building R2 and Commercial Loop Road would need to be shifted to the south, thereby encroaching on the open space between Building P and the residential area.

The net reduction in trails around retained Buildings A and E and proposed Building O2 would reduce the extent of the non-vehicular circulation network on the site, thereby resulting in fewer bicycle and pedestrian connections within the site. Preservation Alternative 2 would also affect the Proposed Project's onsite vehicular circulation. The retention of Buildings A and E would compromise the proposed Commercial Loop Road, creating a "dead end" at Building O5 because the clearance between Buildings A and E would not be adequate for vehicular traffic; as a result, vehicles accessing Building P, Building O5, and PG3 would need to drive around the whole Project Site from the Project entrance on Ravenswood Avenue.

With respect to parking, under Preservation Alternative 2, there would be no net loss in the number of office/R&D parking spaces compared to the Proposed Project. Under Preservation Alternative 2, below-grade parking below Building O1 would not be constructed with retention of Building A. In addition, surface parking in the vicinity of Building P and Building 100 would be reduced from the siting of retained Buildings A, E, and 100. However, commercial parking would be provided by either increasing the height of PG1 with one additional level, going from four to five stories, or increasing PG3 from three to four stories. The number of residential parking spaces would decrease commensurate with the number of parking spaces for the number of residential units that would be built under each of the alternatives. Under Preservation Alternative 2, the loss of 44 residential units would result in a commensurate reduction in parking amounting to 63 spaces, for a total of 456 residential parking spaces.

Project Preservation Alternative 3 (Retain Buildings 100, A, E, and B)

Preservation Alternative 3 (Retain Buildings 100, A, E and B) would retain all three individually eligible buildings as well as historic district contributor Building B. Under Preservation Alternative 3, Building 100 would be rehabilitated for office or support functions such as visitor functions, conferences, etc. Alterations to the interior floor plans of Building 100 may be required for use as amenity space, but no exterior alterations are likely to be required. Buildings A and E would be rehabilitated and retained for office/R&D use. Buildings A, B, and E would require substantial upgrades to meet current code requirements, but even with such upgrades, the buildings are not anticipated to meet market demand for contemporary, state-of-the-art office/R&D facilities in Silicon Valley, given the general floor plan configurations and other existing physical constraints. Under Preservation Alternative 3, all other contributing historic district buildings proposed for demolition under the Proposed Project would be demolished. In addition, as under the Proposed Project, the existing onsite cogeneration plant would be decommissioned. In total, approximately 878,936 sf of existing office floor area would remain compared with approximately 286,730 sf under the Proposed Project. Approximately 501,393 sf of gross floor area would be demolished and replaced under this alternative, compared with 1,094,197 sf under the Proposed Project. In total, Preservation Alternative 3 would result in the same amount of office/R&D floor area as the Proposed Project but a decrease in residential floor area amounting to 68,000 sf. Therefore, Preservation Alternative 3 would result in slightly less development than the Proposed Project with approximately 44 fewer residential units. Figure 6-3 depicts the conceptual site plan for Preservation Alternative 3.



Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Legend

BLUE NUMBER INDICATES # OF STORIES

PARKLINE CENTRAL COMMONS ~3.3 AC

Source: Page & Turnbull, 2024

Figure 6-3
Preservation Alternative 3 for the Proposed Project
Parkline

Existing Building Renovation

Upgrades to Building 100 that would be required include updated building systems (such as mechanical and electrical), seismic upgrades to meet current code requirements, and remediation of hazardous materials because the building includes regulated levels of asbestos-containing materials, lead-based paint, and PCBs, per the 2021 hazardous materials study. Interior renovations would most likely include removal of existing hallway and room partitions, ceilings, and other interior features to reconfigure the spaces for more optimal functionality as well as to accommodate ADA-compliant accessible elevators, stairs, and restrooms.

Similarly, required upgrades to Buildings A, B, and E would also include updated building systems (such as mechanical and electrical), seismic upgrades to meet current code requirements, and remediation of hazardous materials because the building includes regulated levels of asbestos-containing materials, lead-based paint, and PCBs, per the 2021 hazardous materials study.

No exterior alterations to Buildings 100, A, B, and E, are part of Preservation Alternative 3. Similar to the Proposed Project, no exterior alterations to Buildings P, S, and T are included in Preservation Alternative 3. Therefore, the adaptive reuse of Buildings 100, A, B, and E and the ongoing use of Buildings P, S, and T would appear to meet the SOI's Standards for Rehabilitation.

Proposed Buildings

Because the footprints of Buildings A, B, and E are on the site of several proposed office/R&D and residential buildings, Preservation Alternative 3 would affect the development feasibility, as well as the footprints and massing, of the proposed new office/R&D buildings, which would need to be altered to accommodate the retention of Buildings A, B, and E. Specifically, Proposed Buildings O1 and O5 would not be constructed, proposed Building O2 would be reduced in footprint and number of stories, and proposed Buildings O3 and O4 would be reduced in number of stories to meet the Project objective of no net increase in office/R&D square footage (one aspect of Objective #1). Specifically, Building O2 would be reduced to three stories (from five under the Proposed Project) and the footprint would be reduced to accommodate retained Building A. Building 3 would be reduced to three stories (from five) and Building O4 reduced to four stories (from five). Overall, Preservation Alternative 3 would result in the loss of approximately 592,209 sf of new office/R&D development because 878,939 sf of existing office/R&D would remain (compared to the 286,730 sf that would remain under the Proposed Project). As a result, the total commercial square footage within the Project Site would be consistent with the Proposed Project but would result in a reduction in new, highly sustainable commercial square footage with state-of-the-art facilities from of preservation of Buildings 100, A, B and E. For the purposes of this analysis, it is assumed that because the total commercial square footage would be the same as under the Proposed Project, this alternative would result in the same number of net new onsite employees (3,868 employees).

Preservation Alternative 3 would also affect the development feasibility, as well as the footprints and massing, of several of the residential buildings, resulting in a reduction in residential area and total unit count compared to the Proposed Project. Under Preservation Alternative 3, the proposed residential Building R1 would not be constructed and the footprint of Building R2 would be reduced because the buildings are at the location of existing Building E, which would be retained. To accommodate residential units elsewhere, the area for the proposed two-story townhouses would instead be occupied with a new six-story residential building (R5) at the same location. Although Building R2 would decrease in footprint, the massing would remain at four and six stories; the massing and footprints of Buildings R3 and R4 would remain unchanged. Preservation Alternative 3 would result in a net decrease of 44 units (from 550 to 506

units), for a decrease of 68,000 sf in residential gross floor area. Building R4 would still be developed in the future by a separate affordable housing developer with 100 units of 100 percent affordable housing. The other 406 units would be market-rate housing, with 15 percent of the 406 units meeting the city's BMR housing requirements. As a result, approximately 1,200 new residents would live at the Project Site under Preservation Alternative 3, compared to 1,305 residents under the Proposed Project.

Under Preservation Alternative 3, the proposed new office amenity and community amenity buildings would be the same height and number of stories as in the Proposed Project, and the open recreational fields would be retained. The size of the Central Commons open space area would be reduced compared to the Proposed Project because the commercial office/R&D buildings would shift farther south; specifically, the retained existing Building A and the shifted new office/R&D Building O5 would both encroach onto Central Commons, including the planned flexible lawn and event pavilion area. The square footage of overall open space would decrease by approximately 0.2 acre compared to the Proposed Project, resulting in 26.2 acres of open space. The emergency access road between Building R2 and Commercial Loop Road would need to be shifted to the south, encroaching on the open space between Building P and the residential area. In addition, under Preservation Alternative 3, a net loss in trails around retained Buildings A and E and proposed Building O2 would compromise the nonvehicular circulation network on the Project Site.

Preservation Alternative 3 would also affect the Proposed Project's onsite vehicular circulation. The retention of Buildings A and E would compromise Commercial Loop Road, creating a "dead end" at Building O5 because the clearance between Buildings A and E would not be adequate for vehicular traffic; as a result, vehicles accessing Building P, Building O5, and PG3 would need to drive around the Project Site from the Project entrance on Ravenswood Avenue.

With respect to parking, under Preservation Alternative 3, there would be no net loss in the number of office/R&D parking spaces. No below-grade parking would be provided below Buildings O1 and O5 (which would not be constructed with retention of Buildings A and B), and surface parking would be reduced in the vicinity of Building P and Building 100 due to the siting of retained Buildings A, E, and 100. However, the loss of below-grade parking below Buildings O1 and O5 and surface parking in the vicinity of Building P and Building 100 would be made up by increasing the height of PG1 or PG2 with an additional level, with each becoming five stories tall, or increasing PG3 to four stories.

The number of residential parking spaces would decrease commensurate with the necessary number of parking spaces for the number of residential units that would be built under each of the alternatives. Under Preservation Alternative 3, the loss of 44 residential units would result in a commensurate parking reduction of 63 parking spaces, resulting in a total of 456 residential parking spaces.

6.4 Attainment of Project Objectives under Proposed Project Alternatives

Pursuant to State CEQA Guidelines Section 15126.6(a), this analysis evaluates whether the alternatives meet most of the basic objectives of the Proposed Project. As described in detail above, there are three alternatives to the Proposed Project: Preservation Alternative 1, Preservation Alternative 2, and Preservation Alternative 3. In addition, this chapter analyzes a No-Project Alternative. The following analysis describes the extent to which these alternatives meet or do not meet the Project Sponsor's objectives, as described in Chapter 2, *Project Description*, and discussed above. Although some of the Project objectives would be met by the alternatives, as with the Proposed Project, none of the alternatives would meet the objective of providing an emergency water supply and storage facility on the Project Site. Table 6-2 summarizes the ability of the alternatives to meet most of the basic Project objectives.

Table 6-2. Proposed Project Alternatives – Attainment of Project Objectives

Objectives	Proposed Project	No-Project Alternative	Preservation Alternative 1	Preservation Alternative 2	Preservation Alternative 3
Redevelop an aging R&D campus into a financially viable residential and commercial mixed-use neighborhood that cohesively balances office/R&D uses, multifamily residential uses, open space, and community-serving uses, with no increase in office/R&D square footage compared to existing conditions.	Yes	No	Yes	Partially	Partially
Increase the city's housing supply and progress toward its State-mandated housing goals by providing at least 550 new housing units with a mix of types and sizes, including at least 15 for low- and moderate-income households, consistent with the city's Below Market Rate Housing Program, and dedicate a portion of the Project Site to an affordable housing developer for future development of up to approximately 100 units of affordable or special-needs housing.	Yes	No	Yes	No	No
Ensure the continuity of SRI International's ongoing use of existing satellite transmission equipment onsite, which requires unobstructed sightlines to the horizon to ensure no disruption to ongoing research operations.	Yes	Yes	Yes	Yes	Yes
Replace obsolete and unsustainable commercial buildings with new state-of-the-art, highly sustainable commercial buildings with flexible floor plates that can accommodate a variety of office and/or R&D tenants.	Yes	No	Partially	Partially	Partially
Orient new office/R&D buildings in a configuration that leverages operational efficiencies, such as the ability to share amenity spaces and parking, and ensures that the business and security needs of future commercial tenants are met.	Yes	No	Yes	Partially	Partially
Improve bicycle and pedestrian connectivity and safety within and between the site and adjacent neighborhoods to promote an active public realm and establish interconnected neighborhoods.	Yes	No	Yes	Partially	Partially
Create separation between the residential uses along Laurel Street and the office/R&D uses by providing independent vehicular access, circulation, and parking/loading areas.	Yes	No	Yes	Yes	Yes

Objectives	Proposed Project	No-Project Alternative	Preservation Alternative 1	Preservation Alternative 2	Preservation Alternative 3
Provide accessible open space throughout the Project Site, including a large Central Commons area adjacent to the office/R&D buildings, to create a vibrant park-like setting that emphasizes the preservation of heritage trees where feasible, encourages passive and active recreational activities, and promotes health and wellness for residents, tenants, and visitors.	Yes	No	Yes	Partially	Partially
Use advances in architectural, landscape design, and site planning practices to create distinctive and viable residential and commercial areas within the Project Site that complement the adjacent neighborhoods.	Yes	No	Yes	Partially	Partially
Incorporate complementary community recreational and retail uses that encourage an active and healthy lifestyle for residents, tenants, and visitors.	Yes	No	Yes	Yes	Yes
Create a thriving transit-oriented development that facilitates efforts to reduce vehicle miles traveled (VMT) by siting commercial and residential uses near existing transit corridors and public transportation facilities and promoting alternatives to automobile transit through implementation of TDM, new bicycle/pedestrian access, and ease of movement between buildings.	Yes	No	Yes	Yes	Yes
Support local and regional efforts to reduce GHG emissions, respond to climate change, and promote energy and water efficiency and resource conservation by incorporating sustainable design features and resource conservation measures that align with the city's goals.	Yes	No	Yes	Partially	Partially
Decommission the existing onsite cogeneration plant to achieve significant reductions in GHG emissions within the city and region.	Yes	No	Yes	Yes	Yes
Generate a positive fiscal impact on the local economy and revenue for the city's general fund and other public agencies through enhanced property values, increased property tax revenue, creation of jobs, and payment of development fees.	Yes	No	Yes	Yes	Yes
Ensure the flexibility to phase construction of the Proposed Project in response to market conditions.	Yes	No	Yes	Yes	Yes

Objectives	Proposed Project	No-Project Alternative	Preservation Alternative 1	Preservation Alternative 2	Preservation Alternative 3
Bolster the city's reputation as a hub for technological advancement and innovation and recognize SRI International's contributions to society and the growth of Silicon Valley.	Yes	No	Yes	Yes	Yes
Facilitate the city's desire to implement an emergency water supply and storage project on the Project Site, as feasible, to increase Menlo Park's resilience in the event of an emergency.	No	No	No	No	No

Source: Page & Turnbull. 2024. *Parkline Project SRI International Campus Preservation Alternatives Analysis Report, Revised & Restated, City of Menlo Park, San Mateo County.* June 4. Refer to Appendix 3.8-1 of this EIR.

No-Project Alternative

The No-Project Alternative would not meet any of the Project objectives, with the sole exception of allowing for ongoing use of the existing satellite transmission equipment. One of the main objectives is to redevelop an aging R&D campus into a financially viable residential and commercial mixed-use neighborhood that cohesively balances office/R&D uses, multifamily residential uses, open space, and community-serving uses, with no increase in office/R&D square footage compared to existing conditions. Although the No-Project Alternative would not increase floor area compared to existing conditions, the alternative would also not redevelop the aging campus with a variety of uses. In addition, because no housing would be provided at the Project Site, the No-Project Alternative would not meet the objective of increasing the city's market-rate and affordable housing supply and progress toward its State-mandated housing goals. The No-Project Alternative would retain all existing buildings and, therefore, would not meet the objective of replacing obsolete and unsustainable commercial buildings with new state-of-the-art, highly sustainable commercial buildings with flexible floor plates that can accommodate a variety of office and/or R&D tenants. However, because tenant improvements would be implemented within the existing buildings as part of this alternative, the buildings would be somewhat upgraded but not to the extent to sufficiently satisfy the objective. Other objectives, such as those related to amenity spaces, efficient onsite parking, business and security needs, bicycle and pedestrian connectivity, accessible open space, complementary community recreational and retail uses, transit-oriented development, energy and water efficiency, and decommission the existing onsite cogeneration plant would also not be met.

Project Preservation Alternative 1

Preservation Alternative 1 would meet the majority of the basic Proposed Project objectives and partially meet the objective of replacing "existing obsolete and unsustainable commercial buildings." Out of the 35 existing buildings, 34 of the buildings would be replaced; the size of retained Building 100 would not displace a substantial amount of the new commercial square footage. To achieve the objective of no net increase in office/R&D square footage compared to existing conditions, the floor area of proposed new office buildings would be decreased approximately 9,000 *sf* (commensurate with the square footage of Building 100). All other Project objectives (with the exception of the objective regarding emergency water storage) would be met because Preservation Alternative 1 is identical to the Proposed Project, with the exception of Building 100. Preservation Alternative 1 would result in the same amount of housing as the Proposed Project, thereby meeting the objective of increasing the city's housing supply. In addition, the site plan would be the same as the Proposed Project (with the exception of retaining Building 100), meeting objectives such as of orienting the new building in a configuration that leverages operational efficiencies, improving bicycle and pedestrian connectivity, providing approximately 26.4 acres of accessible open space, creating distinctive and viable residential and commercial areas, creating a transit-oriented development, and decommissioning the existing onsite cogeneration plant.

Project Preservation Alternative 2

Preservation Alternative 2 meets eight of the basic Project objectives and partially meets seven objectives. Preservation Alternative 2 would not meet the objective related to residential development under the Proposed Project. Preservation Alternative 2 would retain individual historic resources, Buildings 100, A, and E, in full. However, the retention of the three buildings, particularly Buildings A and E, would result in changes to the site plan for the Proposed Project and reduce the number of residential units compared to the Proposed Project; it would also result in a decrease in new state-of-the-art, highly sustainable

commercial office/R&D square footage by approximately 457,099 sf compared to the Proposed Project. The retention of Buildings 100, A, and E would result in 457,099 sf of new state-of-the-art, highly sustainable commercial square footage not being constructed. This reduction in both unit count and new office/R&D square footage would affect the financial feasibility of the Proposed Project. As such, Preservation Alternative 2 would only partially meet the objectives to "redevelop an aging R&D campus into a financially viable mixed-use neighborhood" and "replace obsolete and unsustainable commercial buildings with new state-of-the-art, highly sustainable commercial buildings with flexible floor plates that can accommodate a variety of office and/or R&D tenants."

The mix of older retained buildings and proposed new office buildings would only partially meet the objective of utilizing "advances in architectural, landscape design and site planning practices to create distinctive and viable residential and commercial areas within the Project Site that complement the adjacent neighborhoods" because the Project Site would be less architecturally cohesive overall and the configuration of the buildings would have to be altered to account for the existing buildings which limits placement options. Preservation Alternative 2 also only partially meets the sustainability objectives related to the incorporation of sustainable design features because the existing buildings may not meet contemporary energy efficiency standards. However, existing buildings have embodied energy, and their reuse would require less use of new construction materials.

Preservation Alternative 2 would not fully meet the objectives related to housing such as increasing the city's housing supply by providing at least 450 new housing units with a mix of unit types and sizes, in addition to dedicating a portion of the Project Site for future development of up to approximately 100 units of affordable or special-needs housing for a total of 550 residential units. Under Preservation Alternative 2, the total residential unit count would be reduced to 506 units (from 550 units). Although Preservation Alternative 2 would still include a dedicated site for future development by an affordable housing developer for 100 units of 100 percent affordable housing, the number of other residential units developed onsite would be reduced to 406 units, 44 less than the Project Sponsor's objective. As such, under Preservation Alternative 2, the objective related to housing would not be met.

Project Preservation Alternative 3

Preservation Alternative 3 meets eight of the Project Sponsor's objectives and partially meets seven objectives. Preservation Alternative 3 would not meet the objective related to residential development under the Proposed Project. The retention of additional existing buildings, particularly Buildings A, B, and E, would change the plan for the Project Site, would reduce the number of residential units compared to the Proposed Project, and would result in a decrease in new state-of-the-art, highly sustainable commercial square footage. Because one of the project objectives is no net increase in office/R&D square footage, the retention of Buildings 100, A, B, and E would result in 592,209 sf of new state-of-the-art, highly sustainable commercial square footage not being constructed. This reduction in both unit count and new office/R&D square footage would affect the financial feasibility of the Proposed Project. As such, Preservation Alternative 3 would only partially meet the objectives to "redevelop an aging R&D campus into a financially viable mixed-use neighborhood" and "replace existing obsolete and unsustainable commercial buildings with new state-of-the-art, highly sustainable commercial buildings with flexible floor plates that can accommodate a variety of office and/or R&D tenants."

The mix of retained older buildings and proposed new office buildings would only partially meet the objective of utilizing "advances in architectural, landscape design and site planning practices to create distinctive and viable residential and commercial areas within the Project Site that complement the adjacent neighborhoods" because the campus would be less architecturally cohesive and the

configuration of the buildings would have to be altered to account for the existing buildings which limits placement options. Preservation Alternative 3 also only partially meets the sustainability objectives related to the incorporation of sustainable design features because the existing buildings may not meet contemporary efficiency standards. However, existing buildings have embodied energy, and their reuse would require less use of new construction materials.

Preservation Alternative 3 would not fully meet the objective related to housing, which is to increase the city's housing supply by providing at least 450 new residential units with a mix of unit types and sizes, in addition to dedicating a portion of the Project Site for the future development of affordable or special-needs housing for a total of 550 residential units. Under Preservation Alternative 3, the total residential unit count would be reduced to 506 units (from 550 units). Although Preservation Alternative 3 would still include a dedicated site for future development by an affordable housing developer for 100 units of 100 percent affordable housing, the number of other residential units developed onsite would be reduced to 406 units, 44 less than under the Proposed Project. As such, under Preservation Alternative 3, the objectives related to housing would not be met.

Preservation Alterative 3 would result in a decrease in the size of the Central Commons and only partially meet objectives related to open space and improved bicycle and pedestrian connectivity. The reconfiguration of the site plan would result in less connectivity within the Project Site and less efficient vehicular traffic flows because Commercial Loop Road would dead end (rather than loop through) the site, resulting in longer vehicle trips and additional trip emissions within the Project Site to access certain buildings.

6.5 Description of Project Variant Alternatives Selected for Evaluation and Attainment of Project Objectives

The alternatives to the Project Variant are meant to feasibly attain most of the basic Project objectives (which are the same objectives for the Project Variant) while avoiding or substantially lessening the significant impacts of the Project Variant, which are listed above in Section 6.1. Based on the goal of reducing the Project Variant's significant impacts while attempting to meet the basic Project objectives listed above, the city has developed the following three alternatives to the Project Variant for evaluation in this Draft EIR, similar to the alternatives selected for the Proposed Project: Variant Preservation Alternative 1 (Retain Building 100 and the Chapel), Variant Preservation Alternative 2 (Retain Buildings 100, A, and E, and the Chapel), and Variant Preservation Alternative 3 (Retain Buildings 100, A, E, and B, and the Chapel). In addition, the impacts of the Project Variant are also compared to the No-Project Alternative. Table 6-3 compares the alternatives to the Project Variant. It is important to note that these alternatives are similar in concept to those selected for the Proposed Project; however, the Project Variant alternatives include slightly altered site plans due to the differences between the Proposed Project and the Project Variant. For the sake of efficiency and to avoid repetitive text, only the key differences of the Project Variant alternatives are discussed below. For complete details of the alternatives, please refer to Section 6.3, above.

No-Project Alternative

This alterative would continue the existing uses on SRI International's research campus, which consists of 38 buildings with approximately 1.38 million sf of mostly R&D space and areas for supporting uses. The No-Project Alternative analyzed for the Project Variant would be the same as analyzed for the Proposed Project, and would also include the continued use at 201 Ravenswood Avenue as the First Church of Christ, Scientist and Alpha Kids Academy.

Table 6-3. Comparative Description of the Project Variant Alternatives

	Project Variant	No-Project Alternative	Variant Preservation Alternative 1	Variant Preservation Alternative 2	Variant Preservation Alternative 3
Site Development					
Total Existing Office Floor Area to Remain	286,730 sf	1.38 million sf	295,736 sf	743,829 sf	878,939 sf
Gross Floor Area to Be Demolished and Replaced	1,094,197 sf	0 sf	1,084,596 sf	636,503 sf	501,393 sf
Residential (sf)	1,096,000 sf	0 sf	990,000 sf	722,000 sf	722,000 sf
Housing Units	800 units	0 units	710 units	510 units	510 units
Maximum Building Heights	90 feet	48 feet	90 feet	90 feet	90 feet
Parking	3,719 spaces	~3,000 spaces[a]	3,670 spaces	3,420 spaces	3,420 spaces
Emergency Water Reservoir	2 to 3 million gallons	n/a	2 to 3 million gallons	2 to 3 million gallons	2 to 3 million gallons
Open Space	29.3 acres	n/a[b]	28.8 acres	28.8 acres	29.3 acres
Onsite Activity					
Total Net New Onsite Employees	3,856 employees	2,208 employees[c]	3,856 employees	3,856 employees	3,856 employees
Total Residents	1,896 residents	0 residents	1,683 residents	1,209 residents	1,209 residents
Historic Resources					
Individually Eligible Buildings (4 total, including the Chapel)					
Retained	0	4	2	4	4
Demolished	4	0	2	0	0
Contributing Buildings (26 total)					
Retained	3	26	4	6	7
Demolished	23	0	22	20	19
Contributing Landscape Features (2 total)					
Retained	1	2	1	1	1
Demolished	1	0	1	1	1

Source: Page & Turnbull. 2024. *Parkline Project SRI International Campus Preservation Alternatives Analysis Report Revised & Restated, City of Menlo Park, San Mateo County*. June 4.

Notes:

a. Based on estimates of current parking spaces at the Project Site.

b. Although a limited amount of useable open space is currently present at the Project Site, this is not quantified for purposes of this analysis because information is not available.

c. Per current CDP requirements, up to 3,308 employees could work at the Project Site. Therefore, because approximately 1,100 people are currently employed at the Project Site, the No-Project Alternative would result in a net increase of approximately 2,208 assuming that the existing buildings are adaptively reused and occupied at the level permitted by the current CDP.

Variant Preservation Alternative 1

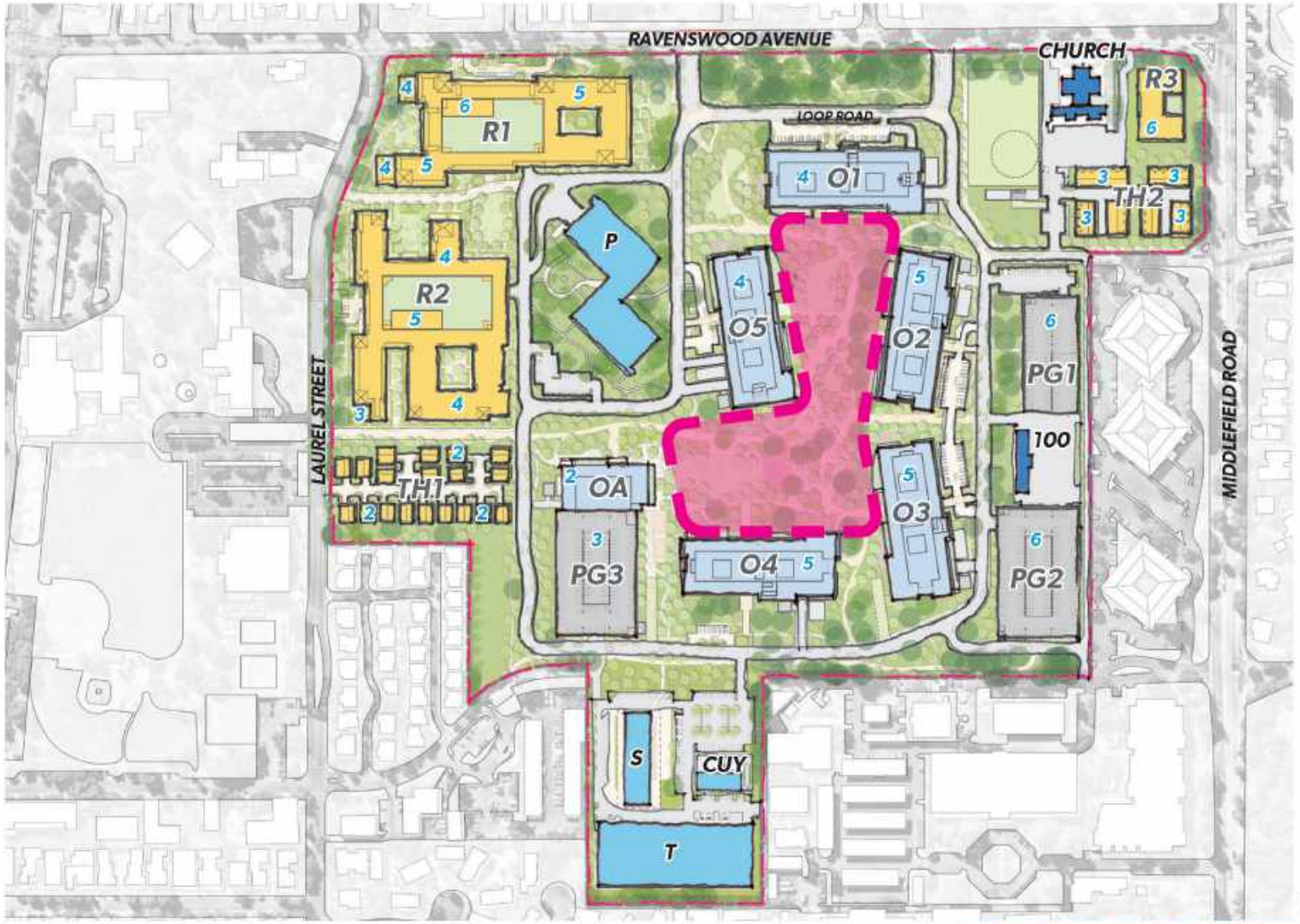
Variant Preservation Alternative 1 would retain Building 100 and the buildings at the First Church of Christ, Scientist property at 201 Ravenswood Avenue (Chapel) in their entirety (see the conceptual site plan for Variant Preservation Alternative 1 depicted in Figure 6-4). Variant Preservation Alternative 1 would have the same open space (29.3 acres) and circulation configuration as both the Project Variant and Project Preservation Alternative 1, as described above. Buildings P, S, and T would also be retained, as described above in Project Preservation Alternative 1. As in Project Preservation Alternative 1, Building 100 would continue to be used as office space with necessary upgrades. A future use of the Chapel is to be determined, but options include use as a community amenity space or leasable tenant space. The buildings to be retained would be renovated as described above for the Project Preservation Alternative 1. Because Buildings 100 and the Chapel would be retained, less ground-disturbance and fewer construction activities would occur. The same emergency water reservoir as proposed under the Project Variant would be included under Variant Preservation Alternative 1. This would include a 2- to 3-million-gallon emergency water reservoir that would be buried below grade in the northeast area of the Project Site, in addition to a small pump station, an emergency groundwater well, and related improvements that would be built at and below grade. The facility would also include an emergency generator, treatment and disinfection system, and a surge tank. Together, this facility is referred to as "emergency water reservoir" throughout this document. The emergency reservoir would be constructed with the same maximum depth of excavation (30 feet below current grade, with a maximum well depth of 430 feet).

The proposed new office buildings, office amenity, and Buildings R1, R2, TH1, TH2, and PG3 would all remain as proposed in the Project Variant. Due to the location and footprint of PG1 in the Project Variant, in Preservation Alternative 1, the footprint of the garage would be reduced to accommodate the retention of Building 100. Variant Preservation Alternative 1 would retain Building 100 and the Chapel in their entirety. Variant Preservation Alternative 1 would have similar open spaces (28.8 acres) and the same circulation configuration as both the Project Variant and Project Preservation Alternative 1, as described above. Buildings P, S, and T would also be retained, as described above in Project Preservation Alternative 1. Buildings PG1 and PG2 would be increased from five to six stories to avoid the loss of any commercial parking spaces; however, the increased scale of the parking garages would result in a less efficient structure in terms of level of service. The alternative would have 49 fewer residential parking spaces than the Project Variant, for a total of 3,670 spaces.

To accommodate the retention of the Chapel in Variant Preservation Alternative 1, the footprint of the 100 percent affordable housing building (R3) would be reduced, resulting in a loss of 90 affordable residential units compared to the Project Variant. In total, Variant Preservation Alternative 1 would include 710 units (compared to 800 units under the Project Variant), resulting in approximately 1,683 onsite residents (compared to 1,896 residents under the Project Variant). Because the same amount of office/R&D space would be provided under Variant Preservation Alternative 1 as the Project Variant, roughly same number of net new employees would work at the Project Site (3,856 employees).[4]

Variant Preservation Alternative 1 would substantively meet 15 of 17 of the Project Sponsor objectives. Variant Preservation Alternative 1 would partially meet the objective related to the stated goal of providing "up to approximately 100 units of affordable or special needs housing" on a dedicated portion of the site because this alternative would include only 64 affordable units, 36 units fewer than stated goal.

[4] Due to the decrease in housing, slightly fewer housing-related employees (such as rental office administrators and maintenance employees) would be needed. However, for the purposes of this analysis, the difference would be negligible.



Source: Page & Turnbull, 2024

Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

ICF

Figure 6-4
Preservation Alternative 1 for the Project Variant
Parkline

Furthermore, the alternative falls short of the upper thresholds of the residential capacity for all residential unit types that is intended in the Project Variant. Variant Preservation Alternative 1 would partially meet the objective of replacing "existing obsolete and unsustainable commercial buildings" as 34 of the buildings would be replaced and the size of retained Building 100 would not displace a substantial amount of the new commercial square footage. Refer to Table 6-4 for a summary of the Project Sponsor's objectives and Variant Preservation Alternative 1.

Variant Preservation Alternative 2

Variant Preservation Alternative 2 would retain Buildings 100, A and E, and the Chapel in full (see the conceptual site plan for Variant Preservation Alternative 2 depicted in Figure 6-5). Variant Preservation Alternative 2 would have the same reduced open space (28.8 acres) in the Central Commons and the circulation configuration of Project Preservation Alternative 2, as described above; the changes to Buildings O1, O2, O3, O4, and O5 would be the same as in Project Preservation Alternative 2. Like Project Preservation Alternative 2, Building 100 would continue to be used as office space, with necessary upgrades. A future use of the Chapel is to be determined, but options might include use as a community amenity space or leasable tenant space. The buildings to be retained would be renovated as described above for the Project Preservation Alternative 2. Because Buildings 100, A and E, and the Chapel would be retained, less ground-disturbance and fewer construction activities would occur. The same emergency water reservoir as proposed under the Project Variant (2 to 3 million gallons) would be constructed with the same maximum depth of excavation (30 feet below current grade, with a maximum well depth of 430 feet) and the same related improvements.

In Variant Preservation Alternative 2, the proposed new office amenity and Buildings R2, TH1, TH2, and PG3 would all remain as proposed. Due to the location and footprint of PG1 in the Variant, in Preservation Alternative 2, the footprint of the garage would be reduced to accommodate the retention of Building 100. PG1 and PG2 would be increased from five to six stories to avoid the loss of any commercial parking spaces; however, the increased scale of the parking garages would result in a less efficient structure in terms of level of service. This alternative would also result in 299 fewer residential parking spaces than the Variant, for a total of 3,420 spaces.

To accommodate the retention of the Chapel in Variant Preservation Alternative 2, the footprint of the 100 percent affordable housing building (R3) would be reduced, resulting in a loss of 90 affordable residential units compared to the Variant. To accommodate the retained Building E, the footprint of Building R1 would have to be significantly reduced as well, resulting in a loss of 200 units from the market-rate residential building.[5] In total, Variant Preservation Alternative 2 would include 510 units (compared to 800 units under the Project Variant), resulting in approximately 1,209 onsite residents (compared to 1,896 residents under the Project Variant). Because the same amount of office/R&D space would be provided under Variant Preservation Alternative 2 as the Project Variant, roughly the same number of net new employees would work at the Project Site (3,856 employees).[6]

[5] The 446 units developed under Preservation Alternative 2 would generally be market-rate units, with 15 percent of the 446 units BMR to meet city requirements.

[6] Due to the decrease in housing, slightly fewer housing-related employees (such as rental office administrators and maintenance employees) would be needed. However, for the purposes of this analysis, the difference would be negligible.

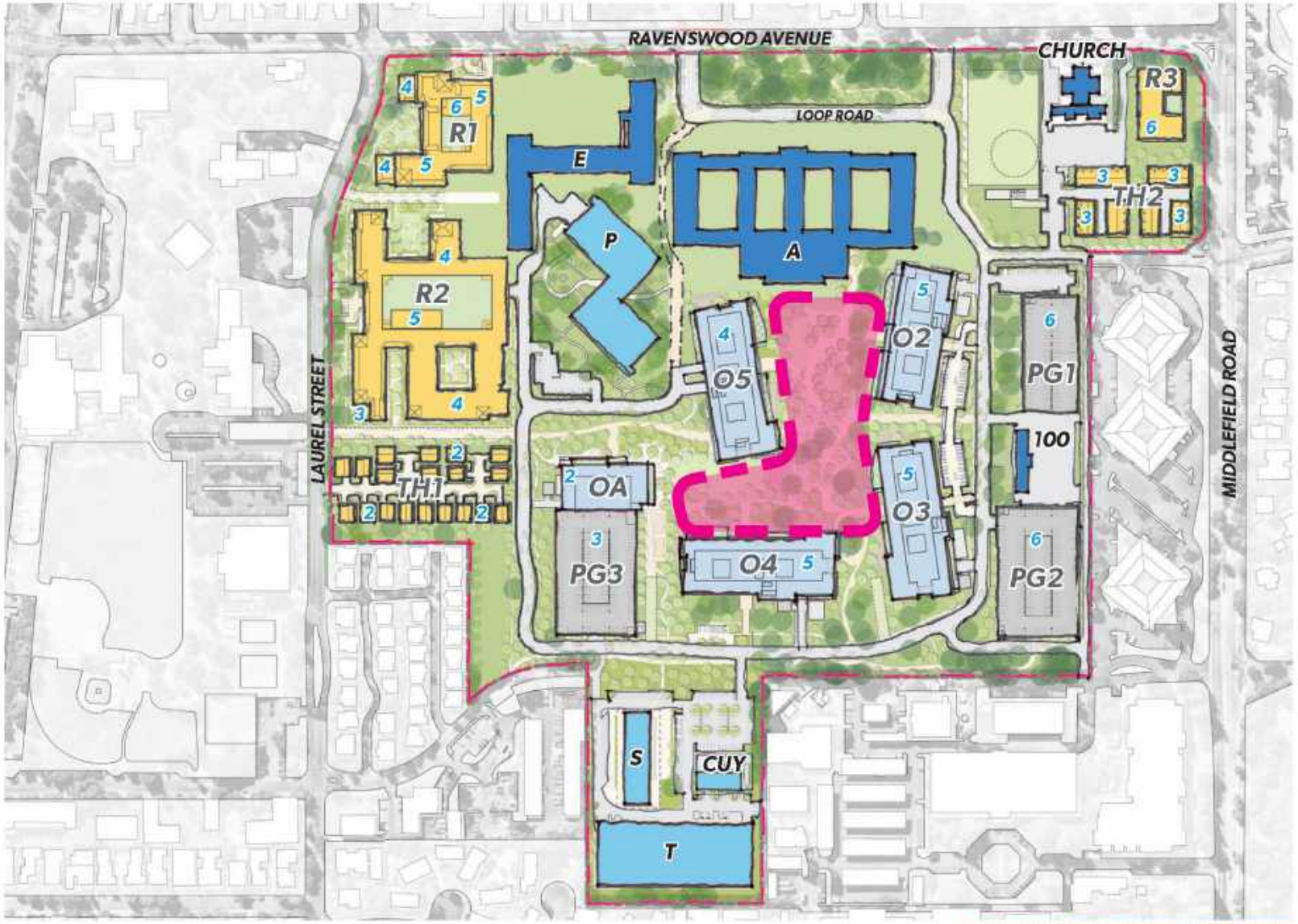
Table 6-4. Project Variant Alternatives – Attainment of Project Objectives

Objectives	Project Variant	No-Project Alternative	Variant Preservation Alternative 1	Variant Preservation Alternative 2	Variant Preservation Alternative 3
Redevelop an aging R&D campus into a financially viable residential and commercial mixed-use neighborhood that cohesively balances office/R&D uses, multifamily residential uses, open space, and community-serving uses, with no increase in office/R&D square footage compared to existing conditions.	Yes	No	Yes	Partially	Partially
Increase the city's housing supply and progress towards its state-mandated housing goals by providing at least 550 new housing units with a mix of types and sizes, including at least 15 percent for low- and moderate-income households, consistent with the city's Below Market Rate Housing Program, and dedicate a portion of the Project Site to an affordable housing developer for future development of up to approximately 100 units of affordable or special-needs housing.	Yes	No	Partially	No	No
Ensure the continuity of SRI International's on-going use of existing satellite transmission equipment on-site, which requires unobstructed sightlines to the horizon to ensure no disruption to ongoing research operations.	Yes	Yes	Yes	Yes	Yes
Replace obsolete and unsustainable commercial buildings with new state-of-the-art, highly sustainable commercial buildings with flexible floor plates that can accommodate a variety of office and/or R&D tenants.	Yes	No	Partially	Partially	Partially
Orient new office/R&D buildings in a configuration that leverages operational efficiencies, such as the ability to share amenity spaces, parking, and ensures that the business and security needs of future commercial tenants are met.	Yes	No	Yes	Partially	Partially
Improve bicycle and pedestrian connectivity and safety within and between the site and adjacent neighborhoods to promote an active public realm and establish interconnected neighborhoods.	Yes	No	Yes	Partially	Partially
Create separation between the residential uses along Laurel Street and the office/R&D uses by providing independent vehicular access, circulation, and parking/loading areas.	Yes	No	Yes	Yes	Yes

Objectives	Project Variant	No-Project Alternative	Variant Preservation Alternative 1	Variant Preservation Alternative 2	Variant Preservation Alternative 3
Provide accessible open space throughout the Project Site, including a large Central Commons area adjacent to the office/R&D buildings, to create a vibrant park-like setting that emphasizes the preservation of heritage trees where feasible, encourages passive and active recreational activities and promotes health and wellness for residents, tenants, and visitors.	Yes	No	Yes	Yes	Yes
Use advances in architectural, landscape design, and site planning practices to create distinctive and viable residential and commercial areas within the Project site that complement the adjacent neighborhoods.	Yes	No	Yes	Partially	Partially
Incorporate complementary community recreational and retail uses that encourage an active and healthy lifestyle for residents, tenants, and visitors.	Yes	No	Yes	Yes	Yes
Create a thriving transit-oriented development that facilitates efforts to reduce vehicle miles traveled by siting commercial and residential uses near existing transit corridors and public transportation facilities, and promoting alternatives to automobile transit through implementation of TDM, new bicycle/pedestrian access, and ease of movement between buildings.	Yes	No	Yes	Yes	Yes
Support local and regional efforts to reduce greenhouse gas emissions, respond to climate change, and promote energy and water efficiency and resource conservation by incorporating sustainable design features and resource conservation measures that align with the city's goals.	Yes	No	Yes	Partially	Partially
Decommission the existing onsite cogeneration plant to achieve significant reductions in greenhouse gas emissions within the city and region.	Yes	No	Yes	Yes	Yes
Generate a positive fiscal impact on the local economy and revenue for the city's general fund and other public agencies through enhancing property values, increasing property tax revenue, creation of jobs, and payment of development fees.	Yes	No	Yes	Yes	Yes
Ensure the flexibility to phase construction of the Proposed Project in response to market conditions.	Yes	No	Yes	Yes	Yes

Objectives	Project Variant	No-Project Alternative	Variant Preservation Alternative 1	Variant Preservation Alternative 2	Variant Preservation Alternative 3
Bolster the city's reputation as a hub for technological advancement and innovation and recognize SRI International's contributions to society and the growth of Silicon Valley.	Yes	No	Yes	Yes	Yes
Facilitate the city's desire to implement an emergency water supply and storage project on the Project Site, as feasible, to increase Menlo Park's resilience in the event of an emergency.	Yes	No	Yes	Yes	Yes

Source: Page & Turnbull. 2024. *Parkline Project SRI International Campus Preservation Alternatives Analysis Report Revised & Restated, City of Menlo Park, San Mateo County*. June 4.



Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Source: Page & Turnbull, 2024

Figure 6-5
Preservation Alternative 2 for the Project Variant
Parkline

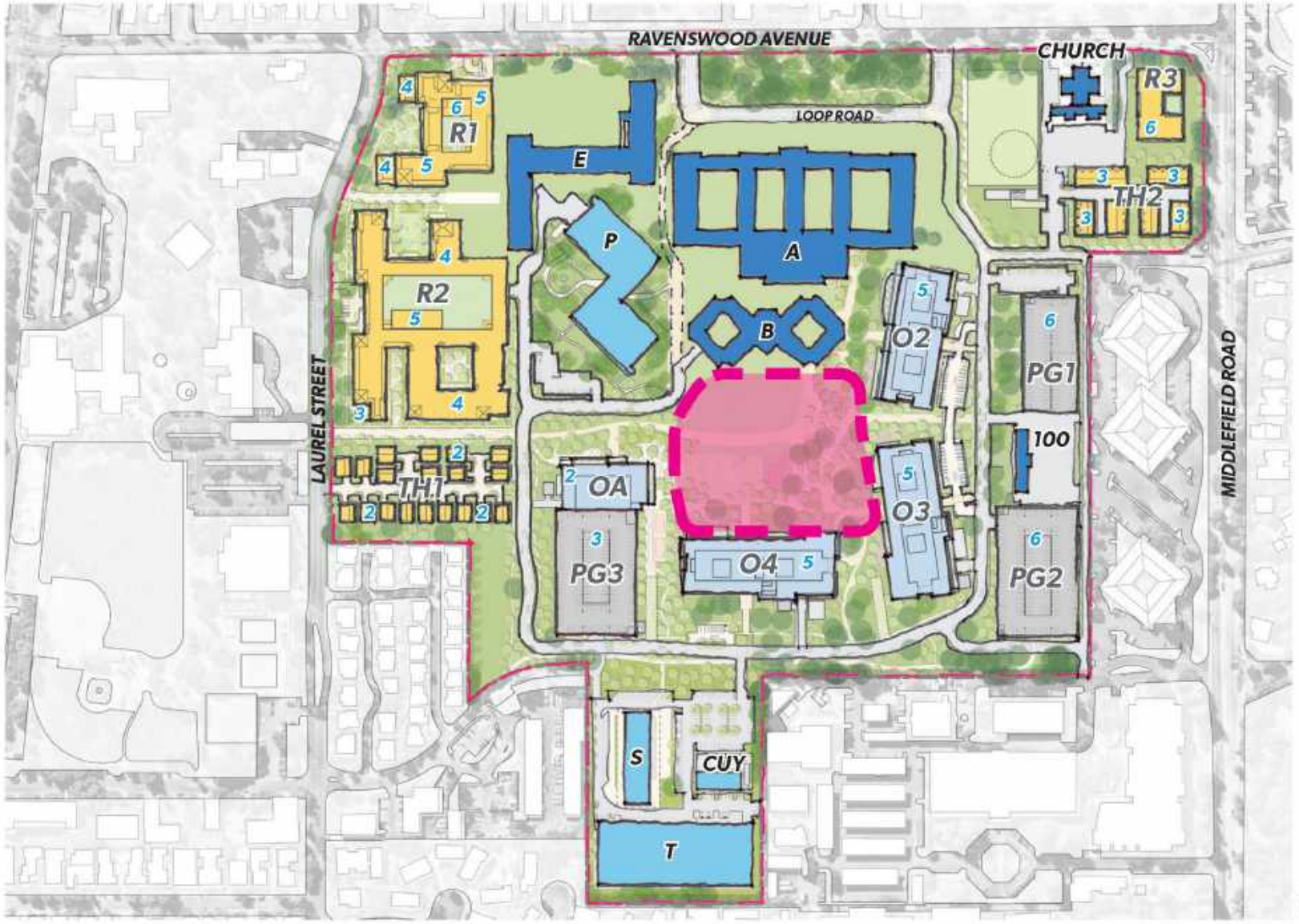
Variant Preservation Alterative 2 would also result in a slight decrease in the total open space area (28.8 acres) and would therefore still meet the objectives related to open space. However, the reconfiguration of the site plan would result in less connectivity within the Project Site and less efficient vehicular traffic flows because Commercial Loop Road would dead end (rather than loop through) the site, resulting in longer vehicle trips and additional trip emissions within the Project Site to access certain buildings. Therefore, Variant Preservation Alternative 2 would only partially meet the objective of improved bicycle and pedestrian connectivity.

Variant Preservation Alternative 2 would not meet the Project Sponsor's objective related to housing, which is to increase the City's housing supply by providing at least 550 new housing units with a mix of unit types and sizes, in addition to dedicating a portion of the Project for the future development of up to approximately 100 units of affordable or special needs housing for an objective of a total of 550 residential units, at minimum. Under the Variant Preservation Alternative 2, the total residential unit count would be reduced to 510 units (from 800 units). In addition, the number of market rate residential units developed on site would be reduced to 446 units, 200 less than the Project Sponsor's objective. Due to issues of construction methods and cost, as well as concerns from the adjacent residential neighbors, it is not feasible to increase the density of the residential buildings along Laurel Street if Building E is retained. Therefore, the net units lost from displacement of Building R1 cannot be regained elsewhere on the Project Site. As such, under the Project Preservation Alternative 2, the Project Sponsor's objective related to housing would not be met, and it falls short of the upper thresholds of the residential capacity for all residential unity types that is intended in the Project Variant. Refer to Table 6-4 for a summary of the Project Sponsor's objectives and Variant Preservation Alternative 2.

Variant Preservation Alternative 3

The Variant Preservation Alternative 3 would retain Buildings 100, A, E, and B, and the Chapel in their entirety (see the conceptual site plan for Variant Preservation Alternative 3 depicted in Figure 6-6). Variant Preservation Alternative 3 would have the same reduced open space for the Central Commons and the same circulation configuration as Project Preservation Alternative 3, as described above. The changes to Buildings O2, O3, and O4 would be the same as under the Project Preservation Alternative 3; Buildings O1 and O5 would be eliminated. Buildings P, S, and T would be retained, as described above in Project Preservation Alternative 3. As in Project Preservation Alternative 3, Building 100 would continue to be used as office space, with necessary upgrades. A future use of the Chapel is to be determined, but options might include use as a community amenity space or leasable tenant space. The buildings to be retained would be renovated as described above for the Project Preservation Alternative 3. Because Buildings 100, A E, B, and the Chapel would be retained, less ground-disturbance and fewer construction activities would occur. The same emergency water reservoir as proposed under the Project Variant (2 to 3 million gallons) would be constructed with the same maximum depth of excavation (30 feet below current grade, with a maximum well depth of 430 feet) and the same related improvements.

In Variant Preservation Alternative 3, the proposed new office amenity and Buildings R2, TH1, TH2, and PG3 would all remain as proposed in the Project Variant. Due to the location and footprint of PG1 in the Project Variant, in Preservation Alternative 3, the footprint of the garage would be reduced to accommodate the retention of Building 100. PG1 and PG2 would be increased from five to six stories to avoid the loss of any commercial parking spaces; however, the increased scale of the parking garages would result in a less efficient structure in terms of level of service. The alternative would have 299 fewer residential parking spaces than the Project Variant, for a total of 3,420 spaces.



Note: The combined utility yard (CUY), which is directly east of Building S, and the associated changes to the parking layout that are shown as existing in this figure are part of a separate architectural control application currently under review by the City for the proposed tenant improvements in Buildings P, S, and T. The proposed tenant improvements in Buildings P, S, and T are not part of the Proposed Project but are included in the cumulative analysis.

Source: Page & Turnbull, 2024

Figure 6-6
Preservation Alternative 3 for the Project Variant
Parkline

To accommodate the retention of the Chapel in Variant Preservation Alternative 3, the footprint of the 100 percent affordable housing building (R3) would be reduced, resulting in a loss of 90 affordable residential units compared to the Project Variant. To accommodate the retained Building E, the footprint of Building R1 would have to be significantly reduced, resulting in a loss of 200 units from the market-rate residential building.[7] In total, Variant Preservation Alternative 3 would include 510 units (compared to 800 units under the Project Variant), resulting in approximately 1,209 onsite residents (compared to 1,896 residents under the Project Variant). Because the same amount of office/R&D space would be provided under Variant Preservation Alternative 3 as the Project Variant, roughly the same number of employees would work at the Project Site (3,856 employees).[8]

Variant Preservation Alterative 3 would result the same amount of total open space area (29.3 acres) compared to the Project Variant; therefore, it would meet the objectives related to open space. However, Variant Preservation Alternative 3 would only partially meet the objective of improved bicycle and pedestrian connectivity. The reconfiguration of the site plan would result in less connectivity within the Project Site and less efficient vehicular traffic flows because Commercial Loop Road would dead end (rather than loop through) in site, resulting in longer vehicle trips and additional trip emissions within the Project Site to access certain buildings.

Variant Preservation Alternative 3 fully or substantively meets nine of the Project Sponsor's 17 objectives, and only partially meets seven objectives. Variant Preservation Alternative 3 would not fully meet the Project Sponsor's objective related to housing, which is to increase the City's housing supply by providing a mix of unit types and sizes, in addition to dedicating a portion of the Project for the future development of up to approximately 100 units of affordable or special needs housing. Under the Variant Preservation Alternative 3, the total residential unit count would be reduced to 510 units (from 800 units under the Project Variant). While Variant Preservation Alternative 3 would still include a dedicated site for future development by an affordable housing developer for 100 percent affordable housing (Building R3), the footprint of R3 would be reduced to accommodate the retained Chapel and only provide 64 affordable units (rather than the 154 included in the Project Variant). Also, the number of market rate residential units developed on site would be reduced to 446 units, which is over 200 units less than the Project Sponsor's minimum objective for delivery of new residential units. Due to issues of construction methods and cost as well as concerns from the adjacent residential neighbors, it is not feasible to increase the density of the residential buildings along Laurel Street if Building E is retained. Therefore, the net units lost from displacement of Building R1 cannot be regained elsewhere on the Project Site. As such, under the Variant Preservation Alternative 3, the Project Sponsor's objective related to housing would not be met, and it falls short of the upper thresholds of the residential capacity under the Project Variant. Refer to Table 6-4 for a summary of the Project Sponsor's objectives and Variant Preservation Alternative 3.

[7] The 446 units developed under Preservation Alternative 3 would generally be market-rate units, with 15 percent of the 446 units BMR to meet city requirements.

[8] Due to the decrease in housing, slightly fewer housing-related employees (such as rental office administrators and maintenance employees) would be needed. However, for the purposes of this analysis, the difference would be negligible.

6.6 Alternatives Considered But Rejected

Section 15126.6(c) of the State CEQA Guidelines provides that an EIR should "identify any alternatives that were considered by the lead agency but rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination." The screening process for identifying the viable EIR alternatives included consideration of the following criteria:

- Ability to meet most of the basic Project objectives,
- Ability to substantially lessen or avoid significant environmental effects associated with the Proposed Project, and
- Potential feasibility, taking into account economic, environmental, social, technological, and legal factors.

The discussion below describes an alternative that was considered during preparation and scoping of this EIR and gives the rationale for eliminating it from detailed consideration. These alternatives were considered for both the Proposed Project and the Project Variant.

Alternative Site Location

State CEQA Guidelines Section 15126.6(f)(2) states that an EIR must consider offsite alternatives if such alternatives reduce the environmental impacts of a project. As stated in State CEQA Guidelines Section 15126.6(f)(1), factors that may be considered when a lead agency is assessing the feasibility of an alternative include:

> site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent).

Any sites outside of the city, to the extent they exist and are available, would not satisfy most of the basic Project objectives, including objectives related to redevelopment of SRI's aging R&D campus into a financially viable residential and commercial mixed-use neighborhood. SRI International has owned and operated the Project Site since the 1940s as an R&D campus, which has a history of innovations such as medical ultrasound applications, cancer drugs, and the computer mouse. The current campus has several physical deficiencies that trigger the need for modernization. Many of the older buildings do not incorporate modern features such as ventilation systems, utility infrastructure, gathering spaces, and communal areas or meet modern code requirements regarding seismic safety and energy efficiency. Therefore, relocating the Proposed Project or Project Variant outside of the city would essentially be a different project rather than an alternative to the Proposed Project or Project Variant.

Other than the Project Site, there are no comparable large areas of land within the city where the Project could be relocated to meet the Project's objectives. If the Project Sponsor were to secure control over a similar large site within the greater Bay Area but outside the city's boundaries, development of that site would not meet multiple objectives that have been specifically designed to benefit the city and its residents concerning long-term development and use of this particular site within the city of Menlo Park. For example, constructing the Proposed Project or Project Variant at an offsite location would not meet the objectives of redeveloping an aging R&D campus into a financially viable residential and commercial mixed-use neighborhood, increasing the city's housing supply, replacing obsolete and unsustainable commercial buildings with new state-of-the-art buildings, improving bicycle and pedestrian connectivity and

safety within and between the site and adjacent neighborhoods, and creating separation between the residential uses along Laurel Street. In addition, relocating the Proposed Project or Project Variant may not ensure proximity to public transit; therefore, an offsite location may not meet the objective of creating a thriving transit-oriented development that facilitates efforts to reduce VMT by siting commercial and residential uses near existing transit corridors and public transportation facilities. Therefore, alternative locations for the Proposed Project are considered infeasible because the applicant does not control a site within the city of Menlo Park that could accommodate the proposed development or meet the basic project objectives and is not aware of such a site. Furthermore, it is unlikely that relocating Proposed Project or Project Variant uses to a different site would avoid or substantially lessen any of the significant environmental impacts of the Proposed Project, with the exception of historic resources, because impacts associated with increased vehicle trips (e.g., air quality and GHG impacts) are likely to be similar anywhere in the Bay Area. Other sites could result in potentially more severe trip-related impacts if the sites are not in areas that are as well served by transit options as the Project Site. Because the amount of development would remain the same, many other impacts under this option would be similar to those of the Proposed Project and Project Variant. Accordingly, an alternative site would result in similar environmental impacts overall and would not substantially lessen or avoid significant and unavoidable environmental effects. Thus, an offsite alternative would be infeasible because it would not attain most of the basic Project objectives and would not substantially reduce Project impacts. Therefore, because of the aforementioned issues related to site suitability, economic viability, acquisition and site control, and inconsistency with Project objectives, consideration of an alternative site for the Proposed Project or Project Variant has been rejected from further review.

Preservation Alternatives

As discussed above, three preservation alternatives have been selected for evaluation in the EIR. However, several other alternatives related to preservation were considered but ultimately rejected,[9] as follows:

- **Relocating Buildings 100, A, and/or E.** The possibility of relocating one or more of the individually eligible Buildings 100, A, and E was considered but rejected as infeasible. Although retaining historic resources in their original location is always a preferred treatment, relocation is often considered as an alternative to demolition. The relocation of Building A would be technically challenging and expensive due to its size, construction methods and materials, and configuration. In addition, relocation of Building A would result in the loss of the spatial relationship of the building to the entrance of the campus and the landscaped interior courtyards. Likewise, the size, construction methods and materials, and configuration of Building E would present substantial technical challenges. In addition, no locations within the larger Project Site were identified as feasible alternate locations for Building A or E. The preservation of Building 100 at its existing location is considered as Preservation Alternative 1 in this analysis, which is preferred over relocation, and no additional benefits to the Proposed Project would be gained by relocating Building 100 on the site.
- **Retain Buildings A and E.** The option of retaining and rehabilitating Building A and Building E, but not Building 100, was considered but rejected because it was not any more feasible than Preservation Alternative 2 (Retain Buildings A, E, and 100) and would not retain the integrity of the eligible historic district. The preservation of Buildings A and E, as discussed in Preservation Alternative 2, would result in a reduction in the number of housing units, reduction in new highly sustainable office/R&D square footage, reduction in open space, and compromise regarding non-vehicular circulation onsite.

[9] Page & Turnbull. 2024. *Parkline Project SRI International Campus Preservation Alternatives Analysis Report Revised & Restated, City of Menlo Park, San Mateo County*. June 4.

As such, the preservation of Building A and Building E would not retain the integrity of the eligible historic district and would not have a better preservation outcome for the individual historic resources than Preservation Alternative 2. Refer to the description of Preservation Alternative 2 (Retain Buildings A, E, and 100) for additional information.

- **Converting Building E to Residential Use.** The conversion of Building E to residential use was considered but rejected because the conversion to residential, particularly in a manner that would retain the historic character of the building at the exterior, would be infeasible. Building E was built primarily for offices, with some laboratory and R&D spaces, and as such does not have the plumbing that would be required for residential use. Mechanical and electrical systems have also reached or exceeded their useful life. The building contains regulated levels of asbestos-containing materials, lead-based paint, and PCBs, per a 2021 hazardous materials study. In addition, the configuration of the double-loaded narrow corridor with small offices would need to be substantially reworked to accommodate residential floor plans. The windows are generally fixed windows, and the upper floors have no exterior egress or outdoor access. Upgrades, including for ADA compliance, would require substantial alteration to architectural components, including stairs, elevators, restrooms, windows, and entrances. Furthermore, 42,000 sf—which constitutes a large amount of the overall floor area of the building—is located in the basement level, which does not have windows to the exterior, making it unusable for residential living or amenity space beyond storage. The exterior alterations required to meet accessibility and seismic codes, as well as requirements for emergency egress, would require substantial alterations to the exterior features of the building and would very likely affect the historic integrity. In addition, a solution to required residential parking could not be identified adjacent to the building, given the constraints of other existing buildings and/or proposed new buildings. Furthermore, the conversion of Building E to residential would necessitate that additional office/R&D square footage be made up elsewhere onsite to achieve the Project objectives. Thus, the conversion of Building E was rejected as an alternative because it does not feasibly address the Project objectives for a balance of housing and office/R&D onsite or preservation impacts.
- **Constructing an Addition to Building A to Accommodate New Office/R&D Space.** An addition to the rear of Building A with new office/R&D space was considered yet rejected because it would very likely result in diminished historic integrity of the individually eligible historic resource and possibly result in its ineligibility for CRHR listing while not providing substantial benefit to the overall Project objectives and development plan. An addition would be limited in size, based on the character-defining interior courtyards and proximity to retained Building P as well as proposed Buildings O2 and O5. An addition to Building A would very likely necessitate the relocation of proposed Buildings O2 and O5 on the site, reducing the amount of open space and reconfiguring circulation patterns. Because this alternative would not reduce potential impacts on historic resources more than Preservation Alternative 2 or Preservation Alternative 3 and would not provide any additional benefit to meeting the Project Sponsor's objectives, the alternative was rejected.

Residential Only Alternative

A Residential Only Alternative would consist of development of residential uses only on the Project Site, while retaining Buildings P, S and T; the buildings would remain onsite and be operated by SRI International. Assuming the maximum density permitted by the C-1 zoning for the Project Site (30 dwelling units per acre), the Residential Only Alternative would result in approximately 1,896 multifamily residential units. This alternative would be consistent with the Proposed Project's objective of increasing the city's housing supply by providing new housing units with a mix of types and sizes. However, this

alternative would be inconsistent with the historical and intended future uses for the SRI property. The Project Site is owned and operated by SRI International and has been used for decades for a range of R&D purposes. SRI International desires to continue operating the property in Menlo Park as a hub for innovative research as an office/R&D campus.

With respect to potential impacts, this alternative would not eliminate all of the significant construction-related impacts associated with the Proposed Project because construction would still occur over the entire Project Site, including immediately adjacent to existing residential units. The employment VMT per capita impact would be reduced compared to the Proposed Project because employment at the Project Site would be limited to employees associated with operation and maintenance of the onsite housing, such as rental office workers and maintenance workers. However, overall residential VMT would increase slightly because the Residential Only Alternative would not allow for reduced trips through internalization of Project trips from a mix of uses onsite, which occurs only with mixed-use development. GHG impacts would similarly increase. In addition, the Residential Only Alternative would not satisfy most of the basic Project objectives, including, but not limited to, redeveloping an aging R&D campus into a financially viable mixed-use neighborhood, constructing new state-of-the-art commercial buildings with flexible floor plates, orienting new office/R&D uses in a configuration that leverages operational efficiencies, and bolstering the city's reputation as a hub for technological advancement and innovation and recognizes SRI International's contributions to society and the growth of Silicon Valley. For these reasons, the Residential Only Alternative is not feasible and has been rejected from further evaluation in this EIR.

Increased Housing Alternative

The Increased Housing Alternative would examine a scenario in which the maximum number of workers allowed under SRI's existing CDP and the number of housing units provided would result in a 1:1 jobs/housing ratio. The maximum number of office/R&D employees allowed per the existing CDP employment cap is 3,308. Using the ratio of 1.87 workers per worker household in San Mateo County, this alternative would result in approximately 1,769 new multifamily units. In comparison, the Proposed Project would include up to 3,868 employees and 550 residential units. The Project Variant would include 800 units.

This number of units under this alternative would be inconsistent with many of the Proposed Project's objectives. The site plan would need to be re-evaluated to accommodate a substantial increase in the number of units compared with the Proposed Project due to a number of constraints, including, but not limited to, restrictions on height to ensure that SRI International's existing satellite transmission equipment could continue to function; the retention of Buildings P, S, and T; and the Project Site's proximity to existing single-family neighborhoods. Additional density would have to be spread throughout the site in new buildings, resulting in a sizable reduction in the proposed 26.4 acres of publicly accessible open space and most likely taller and denser buildings that could compromise SRI's ability to continue operations in Buildings P, S and T. The additional density would conflict with the objective of creating separation between the residential and commercial uses as well as a park-like setting that emphasizes the preservation of heritage trees with passive and active recreational areas. In addition, the additional density would result in an increase of construction and operational impacts compared to the Proposed Project. The Increased Housing Alternative would also not advance the objective of utilizing advances in architectural, landscape design, and site planning practices to create viable residential and commercial areas that complement the adjacent neighborhoods.

A sizable reduction in open space and the addition of new buildings to accommodate the additional density would also conflict with the objective of redeveloping the Project Site into a financially viable residential and commercial mixed-use neighborhood that cohesively balances office/R&D uses, multifamily residential uses, open space, and community-serving uses. The resulting site plan could adversely affect the viability of the commercial component, which is oriented around open space and other amenities to create a modern office/R&D campus that attracts leading companies, bolsters the city's reputation as a hub for technological advancement and innovation, and recognizes SRI International's contributions to society. Without a viable commercial component, the Proposed Project would not be feasible.

Reduced Parking Alternative

The Proposed Project would provide a total of 3,319 parking spaces. Within the residential area, approximately 519 parking spaces would be provided within a combination of below grade and podium garages and limited surface parking areas. Within the office/R&D area, approximately 2,800 parking spaces would be provided in a combination of three above-ground structures, surface lots, and a one-level underground garage below two of the new commercial buildings. The Reduced Parking Alternative would have fewer parking spaces than the Proposed Project. The Project Site's proximity to the Menlo Park Caltrain station and the Proposed Project's Transportation Demand Management (TDM) plan are expected to reduce trips and therefore lower parking demands. The Proposed Project is designed to leverage the Project Site's location to reduce trips by siting commercial and residential uses near existing transit corridors and public transportation facilities to create a transit-oriented development, consistent with that objective.

The key function of alternatives is to avoid or substantially lessen any significant effect of a project (CEQA Guidelines Section 15126.6[a]). A Reduced Parking Alternative is not expected to reduce any significant impacts of the Proposed Project or Project Variant. Significant impacts related to VMT include the VMT impact itself as well as any significant air quality or greenhouse gas (GHG) emissions impact that is tied to VMT. As discussed throughout this document, VMT-related impacts would be less than significant. Regardless, precise changes in traveler behavior in response to constrained parking alone are difficult to predict and are not anticipated to reduce overall VMT. They involve numerous external variables (e.g., availability of alternate travel options and alternate destinations) as well as personal preference (e.g., willingness to seek out alternative travel options and alternate destinations). In fact, fewer parking spaces could have unintended consequences and potentially result in greater impacts. Insufficient parking could cause spillover parking impacts into the adjacent neighborhoods, which generally do not have controlled parking through permits, time-limited parking, or on-street market-rate parking (metered parking). Reductions in the Proposed Project's parking supply could also lead to an increase in vehicles trips if visitors and workers turn to ride hailing to make their trips to the site.

Further, this alternative would affect the Proposed Project's viability. According to the applicant, the Proposed Project provides the minimum amount of parking required for the office/R&D buildings to be marketable to tenants. Any reductions in office/R&D parking could potentially impair the ability to obtain financing if prospective lenders/investors believe the number of spaces is insufficient to attract tenants. In turn, that could affect the ability to generate revenue for the applicant to fund community benefits, leading to a reduction in the scope of community benefits that could be provided to secure project approval or an economically infeasible project. The Reduced Parking Alternative is not feasible and has therefore been rejected from further evaluation in this EIR.

Reduced Construction Alternative

The Proposed Project and Project Variant would result in significant and unavoidable noise impacts during construction. However, due to site constraints and the engineering requirements for construction, a Reduced Construction Alternative to reduce these significant and unavoidable impacts would be infeasible due to the reasons outlined below.

The Proposed Project and Project Variant would result in significant and unavoidable increases in the existing noise levels during construction due to operation of construction equipment in proximity to sensitive land uses. With mitigation, there would need to be a buffer with no construction within approximately 200 feet of the property line of the Classics of Burgess Park homes. This would include no demolition of Building G (approximately 50 feet of the Classics of Burgess Park homes) and any construction of new buildings within 200 feet of the property line in this area. In addition, there are other sensitive land uses in proximity to the Project Site that could be affected by construction. To avoid impacts on all sensitive land uses, there would need to be a buffer between construction activities and each land use. As a conservative scenario, to reduce the significant and unavoidable construction noise impacts, the Reduced Construction Alternative would include a 200-foot buffer around the perimeter of the entire Project Site. However, a Reduced Construction Alternative that imposes a 200-foot buffer around the perimeter of the entire Project Site would be infeasible and would not achieve many of the Project objectives. This alternative would be infeasible because imposing a 200-foot buffer would prevent demolition of many of the existing obsolete and unsustainable commercial buildings (e.g., Buildings I, E, C, G, 412, etc.) and would therefore fail to achieve the overarching Project objective to redevelop an aging R&D campus into a financially viable residential and commercial mixed-use neighborhood that cohesively balances office/R&D uses, multifamily residential uses, open space, and community-serving uses, with no increase in office/R&D square footage compared to existing conditions. As a result, the Reduced Construction Alternative also would not allow for the delivery of adequate new housing units to meet the objectives for making progress toward State-mandated housing goals. This alternative would also prevent creation of the proposed loop road within the Project Site, which is intended to ensure efficient and well-distributed vehicular, pedestrian, and bicycle traffic, thereby impeding the Project objective of creating a well-connected transit-oriented development. Overall, the Reduced Construction Alternative would be financially infeasible, given that it would impede development of the necessary square footage for state-of-the-art commercial facilities, which are intended to attract office/R&D tenants, and also greatly reduce the residential component, which is a critical component in the current macroeconomic market.

The Proposed Project and Project Variant would also result in significant and unavoidable temporary increases in existing noise levels during construction due to concrete pumping 100 feet from the homes on Ravenswood Avenue. To reduce these construction noise impacts to a level of less than significant, concrete pumping locations would require a distance of approximately 360 feet from the residential neighborhood. An alternative that would limit concrete pumping activities at this distance would be infeasible due to construction constraints. The 360-foot buffer would affect concrete pumping activities for PG1 and Buildings O1, O2, and R1. With respect to PG1 and the podium structure for Building R1, concrete pumps must be located close to structures because a post-tensioned system with complex cable profiling would be used. If the concrete pumps were to be restricted and relocated at a greater distance from those structures, then additional concrete hoses would be required to adequately reach the structures. However, due to the necessary construction structural system, structural engineering requirements generally would not allow use of a hose system due to the risk of altering the post-tensioned cable profiling, which could jeopardize the structural integrity of those buildings. In addition, with respect to Buildings O1 and O2, relocating concrete pumps at a greater distance from those buildings would result in increased construction costs and, therefore, would reduce the financial feasibility of the Proposed Project.

The Project Variant would also result in significant and unavoidable temporary increases in existing noise levels due to construction of the emergency well at the emergency water reservoir, which would require 24-hour construction activity for 10 days using a generator, an air compressor, and a drill rig. During nighttime hours, construction of the emergency well would significantly impact existing noise-sensitive land uses, such as the homes north of Ravenswood Avenue. The purpose of the emergency water reservoir and well is to implement the city's Emergency Water Storage/Supply Project, which aims to provide a backup water supply to the city in the event water from the San Francisco Public Utilities Commission (SFPUC) is reduced or unavailable. An alternative to the Project Variant that would not include the emergency water reservoir and well would not implement the Emergency Water Storage/Supply Project and would be undesirable as a matter of policy. In addition, it would be technically infeasible to limit construction of the well to daytime hours only. During construction of a groundwater well, it is necessary to continuously pump or surge water to remove fine sediments and improve well efficiency. Pausing construction at night could disrupt this process, impacting the well's productivity, efficiency, and lifespan. Therefore, a Reduced Construction Alternative to reduce the significant and unavoidable noise impacts during construction to a level of less than significant would be infeasible and has been rejected from further evaluation in this EIR.

6.7 Impact Assessment for the Proposed Project Alternatives

This section evaluates whether the alternatives would avoid or substantially lessen the significant impacts of the Proposed Project and/or generate impacts other than those identified for the Proposed Project. A reference to mitigation measures for each alternative is provided in the analysis below by reference to the impacts of the Proposed Project. These mitigation measures are fully described in each resource section within Chapter 3, *Environmental Impact Analysis*, of this document. In addition, a summary comparative analysis of the Proposed Project and its alternatives is provided in Table 6-12 at the end of this chapter.

No-Project Alternative

Land Use

As with the Proposed Project, the No-Project Alternative would not physically disrupt or divide an established community, resulting in no impact. As described above, the existing buildings would be upgraded and continued to be used by SRI. The No-Project Alternative would not alter the existing buildings at the Project Site and, therefore, would not change the existing land uses. The Project Site would remain designated as Commercial (specifically, Professional and Administrative Offices), with the current zoning of C-1 (Administrative and Professional District, Restrictive) and P (Parking). Although other uses are permitted at the Project Site, under the No-Project Alternative, the buildings would continue to support the same R&D uses as under existing conditions. Because the No-Project Alternative would be consistent with the current general plan designations, it would not require general plan, zoning ordinance text, or zoning map amendment(s). Therefore, the No-Project Alternative would have no impact on land use and would not conflict with existing plans or policies. As a result, the No-Project Alternative would not contribute to any cumulative land use impacts. In comparison, overall, the impacts would be less or the same as the Proposed Project. (NI)

Transportation

The No-Project Alternative would continue existing uses at the Project Site but result in a reduction in the number of employees on the Project Site compared to the Proposed Project (i.e., 1,460 fewer employees). Because there would be no residential units or open space onsite, all vehicle trips associated with those proposed land uses would also be removed. However, the No-Project Alternative would not be subject to the trip reduction requirements of the Proposed Project. As shown in Table 6-5 and Table 6-6, the No Project Alternative would generate a net increase in the number of daily, AM, and PM peak-hour trips under either the 100 percent office or 100 percent R&D scenario. No circulation improvements would be constructed.

Table 6-5. No-Project Alternative – Trip Generation Estimates – 100 Percent Office Scenario

Land Use	ITE Land Use Code[a]	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
				Rate[a]	Total	Rate[a]	IN	OUT	Total	Rate[a]	IN	OUT	Total
Office	710	1,094	ksf	10.84	11,855	1.52	1,462	200	1,662	1.44	268	1,307	1,575
Existing trip generation credit[b]					(518)		(38)	(8)	(46)		(11)	(32)	(43)
Net New Trips Generated on Roadway Network – No Project Alternative					**11,337**		**1,424**	**192**	**1,616**		**257**	**1,275**	**1,532**
Net New Trips Generated on Roadway Network – Proposed Project					**9,508**		**1,023**	**250**	**1,273**		**278**	**949**	**1,227**
Change in Trips Generated on Roadway Network Compared to the Proposed Project					**+1,829**		**+401**	**-58**	**+343**		**-21**	**+326**	**+305**

Source: Hexagon. 2024.

Notes:

ksf = thousand square feet; du = dwelling unit

a. Daily, AM, and PM peak-hour average rates published in the 2021 ITE *Trip Generation Manual*, 11th edition, were used for each land use.

b. Existing-use trip estimates are based on driveway counts conducted by Fehr & Peers in 2021. Of the 1,100 employees onsite, 700 employees were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned, based on employees.

Table 6-6. No-Project Alternative – Trip Generation Estimates – 100 Percent R&D Scenario

Land Use	ITE Land Use Code[a]	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
				Rate[a]	Total	Rate[a]	IN	OUT	Total	Rate[a]	IN	OUT	Total
R&D	760	1,094	ksf	11.08	12,117	1.03	923	203	1,126	0.98	172	900	1,072
Existing trip generation credit[b]					(518)		(38)	(8)	(46)		(11)	(32)	(43)
Net New Trips Generated on Roadway Network					**11,599**		**886**	**195**	**1,081**		**160**	**869**	**1,029**
Net New Trips Generated on Roadway Network – Proposed Project					**9,688**		**646**	**253**	**899**		**212**	**664**	**876**
Change in Trips Generated on Roadway Network Compared to the Proposed Project					**+1,911**		**+240**	**-58**	**+182**		**-52**	**+205**	**+153**

Source: Hexagon. 2024.

Notes:

ksf = thousand square feet; du = dwelling unit

a. Daily, AM, and PM peak-hour average rates published in the 2021 ITE *Trip Generation Manual*, 11th edition, were used for each land use.

b. Existing-use trip estimates are based on driveway counts conducted by Fehr & Peers in 2021. Of the 1,100 employees onsite, 700 employees were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned, based on employees.

The No-Project Alternative would not generate any impacts beyond those currently occurring with the existing use for the following transportation-related impacts:

- Conflict with an applicable plan, ordinance, or policy
- Hazards due to a geometric design feature or incompatible uses
- Inadequate emergency access

Vehicle Miles Traveled. Under the No-Project Alternative, the number of employees working at the Project Site would increase by approximately 2,208 compared to existing conditions, as allowed under the current CDP. The additional 2,208 employees would generate 19.7 VMT per employee because, under the current CDP, uses on the Project Site are not required to achieve any trip reduction through TDM measures and/or internalization. This would be greater than the 13.5 VMT per employee under the Proposed Project and would exceed the city's VMT impact threshold of 13.6 VMT per employee. Therefore, compared to the Proposed Project and the city's VMT threshold, the No-Project Alternative's VMT impact would be significant and unavoidable and greater than the Proposed Project. (SU)

Air Quality

Under the No-Project Alternative, there would be no significant construction or buildout. Although this alternative would include renovations and tenant improvements to the existing buildings, these improvements would likely involve minor construction activities. The No Project Alternative improvement would result in renovations and tenant improvements to the existing buildings, as needed, to ensure modern seismic safety features to meet all standards set forth by the California Building Standards Code, address hazards, remediate known hazardous materials, etc. The type of minor construction work anticipated under the No-Project Alternative could require the minimal and intermittent use of heavy-duty offroad equipment and on-road vehicles during construction. Therefore, for the purposes of this analysis, there would be minimal criteria pollutants generated during construction.

Criteria pollutants would be generated by the increased number of employees during buildout (i.e., operations) but anticipated to remain below applicable Bay Area Air Quality Management District (BAAQMD) thresholds. There would be an increase in toxic air contaminant (TAC) emissions due to the increased number of employees, but health risks are anticipated to remain below applicable BAAQMD thresholds. There would be an increase in the generation of odors due to emissions from the increased number of employee commute vehicles, but impacts would be considered less than significant. Impacts related to construction and operational air quality would be less than significant, and less than the impact of the Proposed Project. As a result, the No-Project Alternative would not contribute to any cumulative air quality impacts. (LTS)

Energy

Under the No-Project Alternative, there would be no construction or buildout. Although this alternative would include renovations and tenant improvements to the existing buildings, as needed, to ensure modern seismic safety features to meet all standards set forth by the California Building Standards Code, address hazards, remediate known hazardous materials, and other similar types of improvements. These improvements would likely involve minor construction activities, which could require minimal energy use in the form of construction equipment and vehicles. Therefore, for the purposes of this analysis, there

would be minimal energy used for construction and no increase in energy use onsite from additional buildout. Sustainability and transportation demand features would not be implemented as part of the No-Project Alternative, and any sustainability requirements applying to new buildings would not be implemented. Therefore, compared to the Proposed Project, the No-Project Alternative would not be as efficient and as sustainable. In addition, increased energy consumption during operations would result from the increased number of employees on the Project Site. Furthermore, the onsite natural gas cogeneration plant would remain operational under the No-Project Alternative, which would result in continued inefficient energy use. Impacts of energy use would be increased compared to the Proposed Project's impacts. As a result, compared to the Proposed Project which would have a less than significant energy impact, the No-Project Alternative would contribute to a significant and unavoidable energy impact and have greater impacts relative to the Proposed Project. (SU)

Greenhouse Gas Emissions

The No-Project Alternative would involve minor construction activities. The No Project Alternative would result in renovations and tenant improvements to the existing buildings, as needed, to ensure modern seismic safety features to meet all standards set forth by the California Building Standards Code, address hazards, remediate known hazardous materials, etc. The type of minor construction work anticipated under the No-Project Alternative could require the minimal and intermittent use of heavy-duty offroad equipment and on-road vehicles during construction. Therefore, for the purposes of this analysis, there would be minimal greenhouse gases generated during construction.

Operational GHG emissions would result from the increased number of employees. In addition, the onsite natural gas cogeneration plant would remain operational under the No-Project Alternative, along with all other existing onsite GHG sources. Although this alternative would include renovations and tenant improvements to the existing buildings, which could lead to reduced GHG emissions associated with onsite buildings, the increased number of employees and continued operation of the onsite natural gas cogeneration plant could lead to increased GHG emissions compared to existing conditions. The possible net increase in GHG emissions associated with the No-Project Alternative would conflict with the goal of the 2022 scoping plan to reach carbon neutrality by 2045. As a result, the impact would be significant and unavoidable, and greater than the Proposed Project. (SU)

Noise

Under the No-Project Alternative, there would be minor construction activities during the renovation of the existing buildings. Therefore, there would be some noise generated during construction, because some equipment and machinery would be required to complete the renovation activities. The noise from these activities would be minor, because much of it would occur within the interior of buildings, and noise generated would thus be largely attenuated by the building shell. Other work could occur external to the existing buildings, but it is anticipated to be substantially less intensive than the activities that would occur for the Proposed Project and to not exceed any thresholds of significance. The work expected to occur for the No-Project Alternative would be limited to renovation type activities on existing buildings, whereas Proposed Project construction would involve demolishing existing structures, grading the site, and building new structures, which would result in larger and more off-road equipment.

There would be minimal generation of vibration during No-Project activities, because the equipment and type of activities would be minor relative to the scope of the Proposed Project construction activities. The increase in employees would result in increased traffic noise compared to existing conditions and the Proposed Project; regardless, this is not expected to exceed thresholds. There would be no impact related

to proximity to an airport or airstrip, which is the same level of impact as the Proposed Project. Impacts related to construction and operational noise and vibration would be reduced compared to the Proposed Project's impacts. As a result, the No-Project Alternative would not contribute to any cumulative noise impact. (LTS)

Cultural Resources

Under the No-Project Alternative, existing Project Site buildings would remain and no further development would occur. Although this alternative would include renovations and tenant improvements to the existing buildings, interior renovations would not affect existing historic resources. No significant modifications would be made to the existing historic resources, including the eligible SRI International historic district contributors and individually eligible buildings, Buildings 100, A, and E. All eligible SRI International historic district contributors, as well as Buildings 100, A, and E, would retain their existing office/R&D uses. All buildings and landscape features that contribute to the historic district would be retained, resulting in no impacts on historic resources. The significant and unavoidable impacts under the Proposed Project would not occur. In addition, because no ground-disturbing excavation or grading activities would occur, there would be no disturbances to other cultural resources, including archeological resources or human remains. As a result, the No-Project Alternative would not contribute to any cumulative cultural resources impacts. Overall, there would be fewer impacts than under the Proposed Project. (NI)

Tribal and Cultural Resources

Under the No-Project Alternative, existing Project Site buildings would remain and no further development would occur. Because no ground-disturbing excavation or grading activities would occur, there would be no disturbances to tribal cultural resources, including those defined in Public Resources Code Section 21074 as a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. The No-Project Alternative would have no impact on tribal cultural resources. As a result, the No-Project Alternative would not contribute to any cumulative tribal and cultural resources impacts. Overall, there would be fewer potential impacts than under the Proposed Project. (NI)

Biological Resources

Under the No-Project Alternative, there would be no construction or buildout. Although this alternative would include renovations and tenant improvements to the existing buildings, as needed, to ensure modern seismic safety features set forth by the California Building Standards Code, address hazards, remediate known hazardous materials, and other similar types of improvements. It is assumed that the building renovations would be accommodated within the existing footprints and no biological resources, such as trees, would be removed. These improvements would not result in the disturbance of bird and bat species, and no new buildings would be constructed that could result in increased bird collisions and mortality. There would be no tree removal and no increase in bird collisions that may trigger local policies and ordinances that protect biological resources (Impact BIO-3). Impacts would be reduced compared to the Proposed Project's impacts. As a result, the No-Project Alternative would not contribute to any cumulative biological resources impact. (NI)

Geology and Soils

The No-Project Alternative would not involve ground-disturbing excavation or grading activities and, therefore, would not change the existing geology or soil conditions. There would be no topographic changes that could alter the erosion potential or disturb unstable soils. Therefore, there would be no impacts related to geology and soils. As a result, the No-Project Alternative would not contribute to any cumulative geology and soils impacts. Overall, there would be fewer impacts than under the Proposed Project. (NI)

Hydrology and Water Quality

The No-Project Alternative would retain the existing uses of the Project Site and not involve ground-disturbing excavation or grading activities. Therefore, the No-Project Alternative would not change existing hydrology at the Project Site related to drainage, flooding, or groundwater recharge. The No-Project Alternative would not alter the use of groundwater supplies and would not alter water quality conditions related to stormwater runoff or groundwater quality. Therefore, there would be no impacts related to hydrology and water quality. However, under this alternative, onsite parking would be provided primarily in large surface parking areas, resulting in extensive impervious areas and limited opportunities for landscaping and accessible open space. Therefore, the No-Project Alternative would not provide the opportunity for a reduction in impervious surfaces, unlike the Proposed Project. Regardless, because there would be no changes in existing conditions, no impacts would occur. As a result, the No-Project Alternative would not contribute to any cumulative hydrology and water quality impacts. Overall, there would be fewer impacts than under the Project. (NI)

Hazards and Hazardous Materials

The No-Project Alternative would not include excavation or dewatering and, therefore, no potential release/movement of known or unknown subsurface contamination. However, building renovations would require remediation of hazardous materials because the building includes regulated levels of asbestos-containing materials, lead-based paint, and PCBs. Any remediation associated with the renovation of existing buildings would comply with existing regulations. The No-Project Alternative would not include any changes to existing public roadways that provide emergency access to the Project Site or surrounding area, and all access driveways to the Project Site would remain the same as under existing conditions. Although there would be an increase in employees compared to existing conditions, the number of added cars to the roadway network would not be expected to affect emergency response/evacuation plans, resulting in less-than-significant impacts. Similar to the Proposed Project, the No-Project Alternative would not be susceptible to airport hazards or wildland fires. Therefore, there would be no impacts related to hazards and hazardous materials, compared to less-than-significant impacts with mitigation under the Proposed Project. As a result, the No-Project Alternative would not contribute to any cumulative hazards and hazardous materials impacts. Overall, there would be fewer impacts than under the Proposed Project. (LTS)

Population and Housing

As with the Proposed Project, the No-Project Alternative would have no impact related to the displacement of people and housing. However, under the No-Project Alternative, the maximum number of employees (i.e., 3,308) could work within the existing buildings. Therefore, there could be approximately 2,208 additional employees at the Project Site. Unlike the Proposed Project, the No-Project

Alternative would not result in a direct population increase due to onsite residents because no residential uses would be constructed. However, the increase in employment at the Project Site (i.e., 2,208 net new employees) would result in an increase in housing demand and new residents in the region. Regardless, the number of new employees at the Project Site under the No-Project Alternative would be less than under the Proposed Project, which would result in less-than-significant impacts related to unplanned growth and displacement. As a result, the No-Project Alternative would not contribute to any cumulative population and housing impacts. Therefore, there would be less-than-significant impacts on population and housing under the No-Project Alternative, and impacts under the No-Project Alternative would be less or the same as under the Proposed Project. (LTS)

Public Services

Under the No-Project Alternative, no new construction (beyond renovation of existing buildings and tenant improvements) would occur and no housing would be provided at the Project Site. However, the No-Project Alternative would assume the maximum number of employees (i.e., 3,308) allowed under the current CDP could work within the existing buildings. Therefore, there would be approximately 2,208 additional employees at the Project Site and, thus, a potential increase in demand compared with current conditions for fire protection services, police protection services, school facilities, parks and recreational facilities, and library facilities. Although the No-Project Alternative could result in increased demand for public services compared to existing conditions, demand for public service providers would still be reduced compared to the Proposed Project, which would generate up to approximately 3,868 net new employees and 1,305 new residents. As a result, impacts related to fire protection services, police services, school facilities, parks and recreational facilities, and library facilities would be reduced compared to the Proposed Project's impacts. Therefore, the No-Project Alternative would not contribute to any cumulative public services impact. (LTS)

Utilities and Service Systems

Under the No-Project Alternative, there would be no buildout on the site. Although, this alternative would include renovations and tenant improvements to the existing buildings, as needed, to ensure modern seismic safety features to meet all standards set forth by the California Building Standards Code, address hazards, remediate known hazardous materials, and other similar types of improvements. These improvements would likely involve minor construction activities, and existing utility connections to these buildings would be maintained. Therefore, for the purposes of this analysis, there would be no impacts to utilities and service systems during construction.

The approximately 2,208 net new employees at the Project Site under the No-Project Alternative would result in slightly higher demand and generation rates than under existing conditions, demand and generation rates for utilities would still be reduced compared to the Proposed Project, which would include up to approximately 3,868 net new employees and 1,305 new residents. As a result, impacts related to water, wastewater treatment, stormwater drainage, electric power, natural gas, telecommunications, and solid waste services would be reduced compared to the Proposed Project. The No-Project Alternative would not contribute to any cumulative utilities and service systems impact. (LTS)

Project Preservation Alternative 1

Project Preservation Alternative 1 would retain the existing office Building 100, a historic resource that is individually eligible for the California Register of Historical Resources (CRHR) and as a district contributor, for support functions/amenity space. As explained in Section 3.8, *Cultural Resources*, historic

districts may have contributing and non-contributing buildings, sites, structures, objects, or open spaces. A contributor, like Building 100, adds to the historic associations, historic architectural qualities, or archeological values for which a property is significant. Under this alternative, individually eligible Buildings A and E would be demolished, as would all other contributing buildings proposed for demolition under the Proposed Project. All new office and residential buildings included in the Proposed Project would be built as proposed for the Proposed Project. The following analysis considers the environmental impacts of Preservation Alternative 1 compared to the Proposed Project.

Land Use

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 1 would result in no impacts related the division of an established community. No further analysis is required. (NI)

Conflicts with Any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect. As with the Proposed Project, Preservation Alternative 1 would be designed with an integrated master plan, with all parcels held in common ownership, allowing for a continuous and complementary site plan and program. To achieve this goal, Preservation Alternative 1 would establish site-specific, tailored land use controls, including development standards, to guide development on the Project Site. Preservation Alternative 1 would result in the same development standards, including density, FAR, and heights, as the Proposed Project. These standards would be established through a general plan amendment, zoning ordinance text amendment, and a zoning map amendment. As with the Proposed Project, Preservation Alternative 1 would be generally consistent with applicable goals and policies in the city's general plan and the regional Plan Bay Area, resulting in less-than-significant impacts. (LTS)

Cumulative Land Use Impacts. Because consistency with land use plans and policies is inherently a project-specific issue, and each jurisdiction would decide on project consistency at the project level, there would be no cumulative impact as a result of cumulative development in the Association of Bay Area Governments (ABAG) region. As with the Proposed Project, Preservation Alternative 1 would have no contribution to cumulative impacts on land use and planning. (NI)

Transportation

Under Preservation Alternative 1, there would be no change in total office/R&D building square footage, residential unit count, or open space acreage. From a transportation perspective, Preservation Alternative 1 would be the same as the Proposed Project. Therefore, transportation-related impact conclusions for Preservation Alternative 1 would be the same as the Proposed Project.

Conflict with an Applicable Plan, Ordinance, or Policy. As part of the city's entitlement process, Preservation Alternative 1 would be required to comply with existing regulations, including city General Plan policies and zoning regulations related to transportation. Preservation Alternative 1 would be reviewed in accordance with the transportation program standards and guidelines of the city Public Works Department. The department would provide oversight during the engineering review, ensuring that construction would be consistent with city specifications. As with the Proposed Project, this alternative would provide adequate bicycle and pedestrian infrastructure and represent an overall improvement in bicycle and pedestrian access and circulation. Preservation Alternative 1 would meet zoning ordinance requirements for vehicle and bicycle parking and implement TDM measures consistent with city and City/County Association of Governments (C/CAG) of San Mateo County requirements. Therefore, Preservation Alternative 1, like the Proposed Project, would have a less-than-significant impact in terms of compliance with applicable plans, ordinances, and policies. (LTS)

Vehicle Miles Traveled. Because Preservation Alternative 1 proposes the same land use mix as the Proposed Project, and would be subject to the same trip reduction required of the Proposed Project, its VMT impacts would be identical to those of the Proposed Project. The Proposed Project would generate office VMT and residential VMT under the respective VMT thresholds established by the city. Therefore, Preservation Alternative 1's VMT impact would be less than significant. (LTS)

Hazards Due to a Geometric Design Feature or Incompatible Uses. Preservation Alternative 1 would provide the same bicycle and pedestrian infrastructure and the same site circulation scheme as the Proposed Project. This would continue to represent an overall improvement compared to existing infrastructure and would not create potentially hazardous conditions for people bicycling, walking, or driving or for public transit operations. In addition, Preservation Alternative 1, as with the Proposed Project, would require approval from the city's Public Works Department to ensure it would be constructed according to city specifications. (LTS)

Inadequate Emergency Access. With Preservation Alternative 1, emergency access to the Project Site and nearby hospitals would be the same as under the Proposed Project. The general increase in vehicle traffic from the Project Site would not be expected to inhibit emergency access to the Project Site or materially affect emergency vehicle response at the nearest fire station. Development on the Project Site, as well as associated increases in bicycle travel and the number of pedestrians and vehicles, would not substantially affect emergency vehicle response times or access to other buildings or land uses in the area or to hospitals. Preservation Alternative 1 would be designed and built according to the same standards as the Proposed Project to ensure that emergency access would not be impaired. (LTS)

Cumulative Impacts. Future development in the city would be required to comply with existing regulations that have been enacted to minimize impacts related to transportation and circulation. VMT generated by Preservation Alternative 1 would be below the city's VMT thresholds; therefore, the contribution of Preservation Alternative 1 to cumulative impacts on VMT would be less than cumulatively considerable. Other projects and future development would be required to comply with existing regulations related to design hazards and emergency access, similar to the Proposed Project and Preservation Alternative 1. (LTS)

Air Quality

Construction Criteria Air Pollutant Emissions. There would be slightly less construction and smaller buildout under Preservation Alternative 1, which would result in a minor reduction in construction criteria pollutant emission sources. It would require less construction equipment and fewer vehicles compared with the Proposed Project. Renovation-type activities may occur at Building 100, but those activities would generate minimal criteria pollutant emissions. Therefore, total construction emissions during Preservation Alternative 1 construction would most likely be similar to or less than those of the Proposed Project. Thus, because average daily construction emissions from operation of onsite equipment and on-road vehicles under the Proposed Project would be below the BAAQMD's significance thresholds for reactive organic gas (ROG) and nitrogen oxides (NO_X), Preservation Alternative 1 would also not exceed any BAAQMD threshold. Mitigation Measure AQ-1.3 would be implemented to reduce particulate matter less than 10 microns in aerodynamic diameter (PM_{10}) and particulate matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$) from fugitive dust emissions. With implementation of the mitigation measure, this impact from PM_{10} and $PM_{2.5}$ fugitive dust emissions would be less than significant. (LTS/M)

Operational Criteria Air Pollutant Emissions. Operational emissions from both the Proposed Project and Preservation Alternative 1 have the potential to create air quality impacts, primarily impacts associated with direct emissions from mobile, laboratory, and consumer product sources. Motor vehicle traffic would include automobiles associated with daily employee trips and delivery trucks. Wet laboratories and consumer products emit ROG. Preservation Alternative 1 would result in a similar number of vehicle trips, a similar amount of lab space, and a similar amount of new building square footage compared with the Proposed Project. Preservation Alternative 1 also would include 13 new emergency generators that would require intermittent testing.

Impacts from net unmitigated operational emissions were found to be below BAAQMD-recommended mass emission NO_X and particulate matter thresholds but above the ROG threshold for the Proposed Project (see Table 3.4-10 in Section 3.4, *Air Quality*). Because Preservation Alternative 1 would be a slightly smaller project than the Proposed Project, operational emissions from Preservation Alternative 1 would be expected to be similar to those of the Proposed Project. Therefore, similar to the Proposed Project, operation of Preservation Alternative 1 would result in a cumulatively considerable net increase in ROG. Implementation of Mitigation Measures AQ-1.1 and AQ-1.2 would reduce operational ROG emissions and result in less-than-significant impacts for Preservation Alternative 1. (LTS/M)

Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations during Construction. Diesel-fueled engines, which generate diesel particulate matter (DPM), would be used during construction of Preservation Alternative 1, similar to the Proposed Project. Multiple sensitive receptors are within 1,000 feet of the Project Site, including residential, worker, recreational, school, day-care, nursing home, and hospital receptors. The Proposed Project's construction would result in a less-than-significant increase in the cancer risk for all receptor types near Project Site. As discussed above, daily construction activity could be comparable to that of the Proposed Project. Renovation-type activities may occur at Building 100, but those activities would generate minimal DPM emissions. However, Preservation Alternative 1's cancer risk and $PM_{2.5}$ concentrations could be less than those of the Proposed Project because the construction period could be shorter and construction activities could be less intensive; thus, sensitive receptors could be exposed to less DPM. Similar to the Proposed Project, Preservation Alternative 1 would not exceed BAAQMD thresholds for cancer risk, chronic hazard index, and $PM_{2.5}$ concentrations. This impact would be less than significant. (LTS)

Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations from Project Operation. Preservation Alternative 1 is also assumed to include 13 new emergency generators. Emissions resulting from the generators would be similar to those of the Proposed Project because the generator testing schedule would not be affected by the differences between Preservation Alternative 1 and the Proposed Project. The amount of wet laboratory space for Preservation Alternative 1 would be similar to that of the Proposed Project; thus, health risks from laboratory-generated TACs would be similar. Traffic generated by the Proposed Project would have the potential to create carbon monoxide (CO) hot spots at nearby roadways and intersections. Because Preservation Alternative 1 would generate a similar amount of traffic, the CO emissions would be similar. For both the Proposed Project and Preservation Alternative 1, CO concentrations would not be expected to contribute to any new localized violations of the 1-hour or 8-hour ambient air quality standards, resulting in less-than-significant impacts. (LTS)

Other Emissions that Would Adversely Affect a Substantial Number of People. In addition, the amount of other emissions, including odors, from Preservation Alternative 1 would be similar to the amount under the Proposed Project during both construction and operations because construction and operational emissions-generating activities, equipment, and vehicles would be similar, resulting in less-than-significant impacts. (LTS)

Cumulative Impacts. For the reasons described above, Preservation Alternative 1 in combination with other development in Menlo Park would not conflict with or obstruct implementation of the applicable air quality plan and would not result in a cumulatively significant impact. In addition, Preservation Alternative 1 in combination with other development in Menlo Park would be consistent with the Clean Air Plan. Similar to the Proposed Project, with implementation of Project Mitigation Measures AQ-1.1, AQ-1.2, and AQ-1.3, Preservation Alternative 1 would not exceed BAAQMD's cumulative criteria pollutant thresholds for ROG, NO_X, and particulate matter or BAAQMD's cumulative health risk thresholds for $PM_{2.5}$ concentrations, the hazard index, or cancer risks associated with construction and operation. Consequently, the cumulative impact on air quality and sensitive receptors would be less than significant with mitigation. (LTS/M)

Energy

Construction. There would be slightly less construction activities under Preservation Alternative 1, which would require less construction equipment and fewer vehicles compared to the Proposed Project. Renovation-type activities may occur at Building 100, but those activities would consume minimal energy resources. Like the Proposed Project, construction activities under Preservation Alternative would require the use of higher-tier engines (Tier 4) or electric motors and recycling more than 80 percent of construction and demolition waste. However, the slightly reduced construction activities under Preservation Alternative 1 would have a minor effect on reducing energy consumption in the form of electricity or diesel. Therefore, total energy consumption during construction activities for Preservation Alternative 1 would most likely be similar to, or slightly less than, that of the Proposed Project, and impacts would be less than significant. (LTS)

Operation. Under Preservation Alternative 1, the total square footage of the office/R&D buildings would be reduced. Up to 550 residential units would still be provided, but the office/R&D building square footage would be reduced by approximately 9,000 sf due to the retention of Building 100. However, the total building area would be the same as under the Proposed Project. Therefore, Preservation Alternative 1 would result in a comparable use of energy in the form of electricity, gasoline, and diesel during operations. In addition, the same sustainability measures, energy use measures, and transportation demand features would be implemented as under the Proposed Project, in compliance with State and local renewable energy and energy efficiency plans, such as Senate Bill (SB) 350 and SB 100. Impacts under Preservation Alternative 1 would therefore be similar to those of the Proposed Project and less than significant. (LTS)

Cumulative Impacts. Cumulative energy impacts under Preservation Alternative 1 would be the same as under the Proposed Project. (LTS)

Greenhouse Gas Emissions

Construction GHG Emissions. There would be slightly less construction and a smaller buildout under Preservation Alternative 1, which would have a minor effect on construction GHG emission sources. It would require less construction equipment and fewer vehicles compared with the Proposed Project. Renovation-type activities may occur at Building 100, but those activities would generate minimal GHG emissions. Therefore, total emissions generated by Preservation Alternative 1 during construction would most likely be similar to or less than those of the Proposed Project. BAAQMD's CEQA Guidelines do not recommend a GHG emission threshold for construction-related emissions; therefore, construction of Preservation Alternative 1 would not exceed thresholds. However, the guidelines recommend

implementation of best management practices (BMPs) to help control or reduce GHG emissions. Preservation Alternative 1 would include the same feasible and practical BMPs to reduce construction-generated GHGs as the Proposed Project. Like the Proposed Project, this impact would be less than significant. (LTS)

Operational GHG Emissions and Conflicts with Applicable GHG Emission Plans, Policies, and Regulations. Operation of Preservation Alternative 1 would generate a similar amount of GHG emissions because the total building area and number of residents and employees would be the same as under the Proposed Project. Therefore, this alternative would result in a comparable number of vehicle trips, similar use of electricity and natural gas, and similar levels of waste and wastewater generation. Preservation Alternative 1 would still decrease direct and indirect GHG emissions compared with existing conditions, like the Proposed Project (see Table 3.6-5 in Section 3.6, *Greenhouse Gas Emissions*).

Preservation Alternative 1, like the Proposed Project, would be consistent with the BAAQMD GHG thresholds for land use projects. Preservation Alternative 1 (like the Proposed Project) would not conflict with the State carbon neutrality goal for 2045, Plan Bay Area 2050, the city of Menlo Park Climate Action Plan, or city of Menlo Park ordinances, general plan, or reach code. Thus, the impact from operation of Preservation Alternative 1 related to GHG emissions and conflicts with applicable GHG emission plans would also be less than significant. (LTS)

Cumulative Impacts. Climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where GHGs are emitted. Climate change is the result of the individual contributions of countless past, present, and future sources. Therefore, GHG impacts are inherently cumulative, and the analysis above is inclusive of cumulative impacts. (LTS)

Noise

Construction. There would be slightly less construction and a slightly smaller buildout under Preservation Alternative 1, which would have a minor effect on both construction noise sources. Less construction activity would reduce the duration of noise impacts in the eastern section of the Project Site where Building 100 is located. However, the construction noise levels indicated in Table 3.7-9 in Section 3.7, *Noise*, would still occur throughout most of the site because simultaneous operation of the loudest equipment would occur in other areas of the Project Site. Like the Proposed Project, this alternative would result in substantial construction noise increases at existing noise-sensitive land uses because new buildings and structures throughout the site would still be constructed, affecting noise-sensitive land uses near the site. Although Building 100 would not be demolished and replaced, PG1 and PG2 would generate construction noise that could affect the single-family residences east of Middlefield Road. Renovation-type activities may occur at Building 100, but noise from these activities would originate mostly within the building shell while the interior of the building is renovated. Thus, noise levels, as experienced outside of the building, from these types of activities would be less than the noise levels in Table 3.7-9 in Section 3.7 from the more intensive construction activities that would happen in this area under the Proposed Project. Therefore, in the area near Building 100, the noise levels would be reduced relative to the Proposed Project; however, this effect would be minor when considering the overall construction noise that would nevertheless be generated at the site and affect existing sensitive land uses. As with the Proposed Project, implementation of Mitigation Measures NOI-1.1 and NOI-1.2 during construction of Preservation Alternative 1 would reduce noise by requiring a construction noise reduction plan and a noise barrier, respectively. However, like the Proposed Project, the substantial increase in noise would be temporary but could nevertheless adversely affect surrounding land uses that are sensitive to noise, even with mitigation. (SU/M)

Operations – Mechanical Equipment. The preservation of Building 100 would not appreciably change noise sources during operation. The new buildings at the Project Site would still require mechanical equipment that would generate noise, and the equipment would need to comply with the city's municipal code for stationary equipment noise limits. Consequently, equipment noise from this alternative is likely to be very similar to that of the Proposed Project. Under this alternative, the equipment at Building 100 would be retained, whereas this source of noise would be removed under the Proposed Project; however, the nearest noise-sensitive land uses from Building 100 are approximately 350 feet away. At that distance, noise from the equipment at Building 100, such as heating, ventilation, and air-conditioning (HVAC) equipment, would be substantially reduced. Overall, mechanical equipment noise and other sources of noise during operations would be the same as under the Proposed Project, except at Building 100 where mechanical noise would continue to occur but would not be considered significant, given compliance with the municipal code and the distance to the nearest sensitive land uses. (LTS)

Operations – Traffic. With respect to traffic noise, there would be the same number of vehicle trips to and from the Project Site as under the Proposed Project because the number of employees and residents would be the same. Therefore, noise levels from vehicles would be the same as under the Proposed Project. (LTS)

Vibration. Vibration impacts during construction would remain the same overall, except for in the immediate area near Building 100. Similar to the discussion above for construction noise, the construction vibration levels indicated in Table 3.7-16 in Section 3.7 would still occur throughout most of the site because a large bulldozer or loaded truck would operate in other areas of the Project Site. The localized reduction in vibration levels near Building 100 would be minor when considering the overall construction activities and vibration that would nevertheless be generated at the site and affect existing sensitive land uses. Vibration impacts at the Classics of Burgess Park neighborhood and other sensitive land uses would be unaffected by this alternative, relative to the Proposed Project, because construction activities would be identical to the Proposed Project, except at Building 100, which is not particularly close to existing sensitive land uses (350 feet away). Like the Proposed Project, building damage would not occur; however, for the reasons discussed in Section 3.7, *Noise*, annoyance and sleep disturbance could occur because the vibration thresholds in the General Plan and M-2 Area Zoning Update (ConnectMenlo) EIR could be exceeded. As with the Proposed Project, implementation of Mitigation Measure NOI-3.1 would reduce vibration levels from construction activity during daytime and early-morning hours by requiring larger equipment to operate at distances greater than 15 feet from sensitive land uses to the extent feasible. The preservation of Building 100 would not avoid these impacts, and mitigation may not be enough to reduce the impact, resulting in similar significant and unavoidable impacts with mitigation. (SU/M)

Cultural Resources

Historical Resources.[10] Preservation Alternative 1 would demolish 22 of the 26 contributing buildings in the CRHR-eligible SRI Campus historic district. The only four buildings that contribute to the historic district that would remain are Buildings 100, P, S, and T. As in the Proposed Project, the Research Field, a contributing landscape feature, would be demolished, and the contributing SRI International monument would be relocated onsite to an as-yet undetermined outdoor location that would be publicly accessible on the Project Site.

[10] Page & Turnbull. 2024. *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*. June 6.

The number of buildings and landscape features that would be demolished under Preservation Alternative 1 would cause the historic district to lose historic integrity. The four buildings proposed to be retained are not sufficiently representative of the significance of SRI International's contributions as a R&D institution and are not clustered in a manner that would remain eligible as a historic district. Furthermore, the spatial relationships and siting of the buildings that convey the sense of a large institutional campus would be lost. As such, the site would no longer be eligible for listing in the CRHR as a historic district. Therefore, the impact of Preservation Alternative 1 on the historic district would remain significant and unavoidable, similar to the Proposed Project.

Preservation Alternative 1 would retain and rehabilitate Building 100 for a new office and/or amenity space. It is not anticipated that reuse would require any exterior alterations. As such, Building 100 would remain individually eligible for listing in the CRHR. However, Preservation Alternative 1 proposes the demolition of individually eligible Buildings A and E, which would result in the two buildings becoming ineligible for listing in the CRHR, constituting a significant adverse change. Therefore, although there would be a less-than-significant impact on Building 100, the impact on Buildings A and E would remain significant and unavoidable, similar to the Proposed Project.

The purpose of Preservation Alternative 1 is to consider a plan that would substantially lessen the significant and unavoidable impacts of the Proposed Project on one of the individually eligible historic resources—Building 100. Preservation Alternative 1 would avoid the impact on Building 100; however, Preservation Alternative 1 would still have a significant and unavoidable impact on the eligible SRI Campus historic district and on individual historic resources Building A and Building E. Therefore, even with implementation of Mitigation Measures CR-1.1, CR-1.2, and CR-1.3, which are also required for the Proposed Project, Preservation Alternative 1 would result in significant and unavoidable impacts. (SU/M)

Archaeological Resources and Human Remains. Similar to the Proposed Project, archaeological deposits and human remains would not be encountered during operation of Preservation Alternative 1. However, as discussed in Section 3.8, *Cultural Resources*, the Proposed Project could result in significant impacts on archaeological resources and human remains during construction. Preservation Alternative 1 could also disturb cultural resources, including archeological resources and human remains. However, there would be slightly fewer impacts under this alternative because existing office Building 100 would be retained, resulting in slightly less soil disturbance than under the Proposed Project. Regardless, because the majority of the Project Site would still be developed (including both below-grade parking areas under Buildings O1 and O5), there would still be a significant cultural resources–related impact under Preservation Alternative 1. Excavation could encounter archaeological deposits or human remains and result in an adverse change to a buried archaeological deposit. Implementation of Mitigation Measures CR-2.1, CR-2.2, and CR-3.1 would reduce impacts to a less-than-significant level, similar to, but slightly less than, impacts under the Proposed Project. (LTS/M)

Cumulative Impacts. As discussed in Section 3.8, *Cultural Resources*, the Proposed Project is not anticipated to result in cumulative impacts related to historic resources on a site or the types of historic resources in Menlo Park. Preservation Alternative 1 would result in the same cumulative historic impacts as the Proposed Project. The cumulative impact would be less than significant and no mitigation is required. Cumulative impacts with respect to archaeological resources and human remains would be less than significant with implementation of Mitigation Measures CR-2.1, CR-2.2, and CR-3.1. This alternative would result in slightly fewer impacts than the Proposed Project because existing Building 100 would remain, resulting in less ground disturbance. Regardless, excavations could still encounter archaeological deposits or human remains and result in an adverse change to a buried archaeological deposit. Therefore, impacts would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Tribal and Cultural Resources

Impacts on Tribal Cultural Resources. Similar to the Proposed Project, there would be no impacts on tribal cultural resources during operation of Preservation Alternative 1. However, as discussed in Section 3.9, *Tribal Cultural Resources*, construction of the Proposed Project could result in impacts during ground-disturbing activities. Impacts would be similar under Preservation Alternative 1 because this alternative would result in similar ground disturbance, including excavation for below-grade parking under Buildings O1 and O5. The Northwest Information Center (NWIC) records search and literature review indicated no previously recorded cultural resources within or adjacent to the Project Site. This includes tribal cultural resources listed or eligible for listing in the CRHR or a local register of historical resources. Regardless, similar to the Proposed Project, under Preservation Alternative 1, archaeological deposits that qualify as tribal cultural resources could be encountered during excavation because similar excavation would be required under this alternative, although to a slightly lesser extent due to the retention of existing Building 100. Such resources would be eligible for listing in the CRHR or a local register of historical resources, or the lead agency, in its discretion and supported by substantial evidence, could determine the resources to be significant pursuant to the criteria set forth in PRC Section 5024.1(c). Thus, significant impacts related to tribal cultural resources could result from construction of Preservation Alternative 1. However, similar to the Proposed Project, implementation of Mitigation Measures CR-2.1, CR-2.2, CR-3.1, and TRC-1 would reduce impacts on tribal cultural resources to less than significant. (LTS/M)

Cumulative Impacts. Future development within the city of Menlo Park could include ground-disturbing activities, construction, or alteration of the landscape. This has the potential to result in development-related impacts on tribal cultural resources. However, new development would be subject to existing federal, State, and local regulations as well as general plan goals, policies, and programs, which would, to the maximum extent practicable, reduce cumulative development-related impacts on tribal cultural resources. Future development would be required to adopt mitigation measures to ensure that project activities would not result in the inadvertent destruction of a tribal cultural resource. Nonetheless, cumulative impacts on tribal cultural resources are considered potentially significant because the reasonably foreseeable projects would most likely involve ground-disturbing activities that could uncover unknown tribal cultural resources. Therefore, Preservation Alternative 1, similar to the Proposed Project, could contribute to a cumulative loss of tribal cultural resources. However, implementation of Mitigation Measures CR-2.1, CR-2.2, CR-3.1, and TRC-1, which require an archaeological monitoring plan, cultural resources sensitivity training for all construction crews participating in ground-disturbing activities, and stopping work if archaeological deposits are encountered during ground-disturbing activities, would reduce impacts to less than significant, similar to the Proposed Project. (LTS/M)

Biological Resources

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 1 would result in no impacts related to riparian habitats and sensitive natural communities, State or federally protected wetlands and non-wetland waters, or an adopted habitat conservation plan or natural community conservation plan. No further analysis is required. (NI)

Special-Status Species and Wildlife Movement and Native Wildlife Nursery Sites. Preservation Alternative 1 would have slightly less construction impacts than the Proposed Project because the construction timeframe may be somewhat reduced because Building 100 would be retained instead of demolished. However, overall the same types of demolition, grading, and ground-disturbing activities would be necessary under Preservation Alternative 1 as under the Proposed Project. Tree removal under

Preservation Alternative 1 would be similar to the Proposed Project (708 trees), though it is possible that the less intense development could result in the preservation of some of the existing trees. This alternative would also be developed on the same site as the Proposed Project and the potential for encountering sensitive species or habitat would be the same. Similar to the Project, the implementation of bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for Preservation Alternative 1. Implementation of mitigation measures would similarly be required, including Mitigation Measures BIO-1.1 BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1 to reduce potential impacts on a species identified as special status and ensure no effect on wildlife movement and native wildlife nursery sites. Likewise, operational impacts on biological resources would be the same or similar to the Proposed Project. (LTS/M)

Conflicts with Local Policies or Ordinances that Protect Biological Resources. Similar to the Proposed Project, Preservation Alternative 1 could result in the removal of up to approximately 708 trees, including heritage trees, and the planting of up to approximately 873 trees, resulting in an overall increase in the number of trees onsite compared to existing conditions. Like the Proposed Project, Preservation Alternative 1 would be required to comply with the city's Heritage Tree Ordinance, Sections 13.24.030 and 13.24.050, by obtaining a permit from the city to remove protected trees, submitting and implementing a tree protection plan to protect remaining heritage trees near work areas, and paying any applicable fees. Preservation Alternative 1 would also include the provision of replacement trees for all heritage trees removed during construction (in accordance with Heritage Tree Ordinance Section 13.24.090). In addition, similar to the Project, the implementation of bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for Preservation Alternative 3. Therefore, impacts related to conflicts with local policies or ordinances would be similar to the Proposed Project and less than significant. (LTS)

Cumulative Impacts. Preservation Alternative 1, as with the Proposed Project, would be required to implement the above-identified mitigation measures to reduce cumulative impacts on biological resources to less than significant. (LTS/M)

Geology and Soils

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 1 would result in no impacts related to surface fault rupture, landslides, loss of topsoil, lateral spreading, unique geologic features, or septic systems. No further analysis is required. (NI)

Strong Seismic Ground Shaking and Seismically Related Ground Failure. Construction and operation of Preservation Alternative 1 would be subject to the same seismic conditions as the Proposed Project because the alternative would be located on the same site and required to comply with existing regulations that address seismic hazards. Strong ground shaking or seismically induced ground failure could destabilize structures that have not been properly designed and constructed, exposing people or structures to potential substantial adverse effects. However, as with the Proposed Project, all new structures under Preservation Alternative 1 would be designed and constructed in compliance with the requirements of the California Building Standards Code and Menlo Park Municipal Code. As part of conformance with the California Building Standards Code, the design-level investigation would confirm the preliminary recommendations and develop detailed recommendations for design and construction. Seismic retrofit of Building 100 would also be subject to the California Building Standards Code. Therefore, similar to the Proposed Project, Preservation Alternative 1 would result in less-than-significant impacts related to exposure of people or structures to seismic ground shaking or liquefaction for the same reasons described for the Proposed Project. (LTS)

Substantial Soil Erosion. As with the Proposed Project, Preservation Alternative 1 would include construction activities that could lead to substantial soil erosion, such as demolition, tree and other vegetation removal, grading, and excavation for construction of new building structures and trenching for utilities. Preservation Alternative 1 would result in the same excavation activities for the construction of the below-grade parking under Buildings O1 and O5. However, Preservation Alternative 1 would result in slightly fewer impacts due to the retention of existing Building 100. Construction and operation of Preservation Alternative 1 would be subject to the same soil conditions as the Proposed Project because the alternative would be located on the same site and would be required to comply with existing regulations that address erosion, such as National Pollutant Discharge Elimination System (NPDES) Construction General Permit requirements and San Mateo County's C.3 Stormwater Technical Guidance criteria. Therefore, similar to the Proposed Project, Preservation Alternative 1 would result in less-than-significant impacts related to soil erosion during construction and operation. No mitigation is required. (LTS)

Unstable Soil or Geologic Units. The potential exists for liquefaction on the Project Site, which, combined with construction activities, could lead to lateral spreading, subsidence, or differential settlement. Construction activities that would create an open, or free, face and potentially allow lateral spreading include excavation for underground parking garages, which could be up to 15 feet below the ground surface, and trenching for utilities. Construction of Preservation Alternative 1 would include a similar amount of excavation and dewatering, as well as the placement of fill material on the site, compared with the Proposed Project because this alternative would include the same below-grade excavation for parking garages. However, as part of the construction permitting process, the Project Sponsor would incorporate all applicable standards and geotechnical design-level recommendations into design and construction. In addition, the Project Sponsor would be required to comply with the California Building Standards Code and the Menlo Park Municipal Code, which would ensure that structures and their associated trenches and foundations would have the maximum practicable protection from soil failure available under static or dynamic conditions. Therefore, similar to the Proposed Project, impacts related to unstable geologic or soil units at the Project Site under Preservation Alternative 1 would be less than significant. Operation of Preservation Alternative 1 would not include the placement of fill material or involve excavation/dewatering; therefore, it would not contribute to collapse, subsidence, or settlement within unstable soil. No mitigation is required. (LTS)

Expansive Soils. Moderately expansive soil occurs at the Project Site. To reduce potential impacts from expansive soils, measures that may be taken to address the potential for damage caused by the shrinking and swelling of these soils include removing the soils and replacing them with non-expansive fill and using slabs engineered for site-specific conditions. As required for the Proposed Project, Preservation Alternative 1 would be designed and constructed in compliance with policies and programs regarding expansive soils and would meet or exceed the California Building Standards Code, including its soil and foundation support parameters, as well as local standards, which also require early design-level geotechnical investigations and recommendations. Therefore, the impacts related to expansive soils at the Project Site under Preservation Alternative 1 would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Paleontological Resources. No known fossils, unique paleontological resources, or unique geologic features are present in the vicinity of the Project Site. However, the Project Site is underlain by nonmarine Pleistocene alluvium that has the potential to contain unique paleontological resources. Preservation Alternative 1 would be located on the same site as the Proposed Project and include the same below-grade excavation for parking under Buildings O1 and O5. Thus, similar to the Proposed Project, Preservation Alternative 1 could include ground-disturbing activities that could destroy unknown paleontological

resources, resulting in potentially significant impacts. Implementation of Mitigation Measure GS-5.1 and GS-5.2 would ensure that the significant impacts related to unknown paleontological resources would be reduced to a less-than-significant level, similar to the Proposed Project. (LTS/M)

Cumulative Impacts. As discussed in Section 3.11, *Geology and Soils*, cumulative construction impacts with respect to geology and soils and paleontological resources would be less than significant with implementation of Mitigation Measures GS-5.1 and GS-5.2. This alternative would result in impacts similar to those of the Proposed Project because the same below-grade parking under Buildings O1 and O5 would be developed; thus, excavation could still result in impacts related to unstable soils and paleontological resources. As discussed in Section 3.11, *Geology and Soils*, cumulative operational impacts with respect to geology and soils and paleontological resources would not occur. Therefore, impacts would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Hydrology and Water Quality

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 1 would result in no impacts related to a release of pollutants due to inundation in flood hazard, tsunami, or seiche zones. (NI)

Surface Water Quality. As with the Proposed Project, construction of Preservation Alternative 1 would be in compliance with the Construction General Permit, including development and implementation of the Stormwater Pollution Prevention Plan (SWPPP), and local stormwater regulations, such as the Menlo Park Municipal Code and other related regulations. Compliance with the requirements would ensure that construction activities would not result in a violation of water quality standards or waste discharge requirements or otherwise result in water quality degradation. In addition, Preservation Alternative 1 would be designed and maintained in accordance with city of Menlo Park, County of San Mateo, and San Francisco Bay Regional Water Board water quality requirements, such as the San Francisco Bay Municipal Regional Permit (MRP) and San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) water quality requirements. Preservation Alternative 1 would be required to comply with existing regulations that protect surface water quality during construction and operation and, therefore, would result in less-than-significant impacts related to surface water quality for the same reasons described for the Proposed Project. (LTS)

Groundwater Quality. Preservation Alternative 1 would result in construction similar to that of the Proposed Project, except that Building 100 would be retained. Although slightly less ground-disturbing activities would occur during construction, the below-grade parking under Buildings O1 and O5 would be constructed under both the Proposed Project and Preservation Alternative 1. Therefore, temporary construction dewatering could be required in isolated areas with shallow groundwater during excavation and trenching for foundation work and underground parking garages. As a result, the potential exists to encounter contaminated groundwater, resulting in a potentially significant impact during construction. As under the Proposed Project, Preservation Alternative 1 would be required to incorporate the recommendations described in the site-specific investigations prepared, including a Phase I environmental site assessment (ESA) and a site assessment report. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2 would reduce impacts to less than significant, similar to the Proposed Project. Operation of Preservation Alternative 1, as with the Proposed Project, would result in an increase in pervious surface area compared to existing conditions. Preservation Alternative 1 would not violate any water quality standards or otherwise result in water quality degradation during operation. Therefore, impacts on water quality during operation would be less than significant. As with the Proposed Project, mitigation would not be required during operation of Preservation Alternative 1. (LTS/M)

Groundwater Supply and Recharge. Groundwater supplies would not be used during construction, operation, or maintenance activities. Therefore, as under the Proposed Project, construction and operation of Preservation Alternative 1 would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. This impact would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Drainage and Flooding. Similar to the Proposed Project, Preservation Alternative 1 would reduce the amount of impervious surface area across the Project Site, compared to existing conditions, by introducing new landscaped areas and open spaces and reducing the area for surface parking and hardscape. All Project-related development would comply with the applicable federal, State, and local requirements regarding water quality, flood control, and stormwater management. Therefore, like the Proposed Project, Preservation Alternative 1 would not result in changes to stormwater runoff rates or volumes that would result in the capacity of existing or planned stormwater drainage systems being exceeded, provide substantial additional sources of polluted runoff, or impede or redirect floodflows during construction and operation. Similar to the Proposed Project, the impact related to stormwater runoff and capacity under Preservation Alternative 1 would be less than significant. No mitigation is required. (LTS)

Conflict or Obstruct a Water Resource Management Plan. As with the Proposed Project, construction and operation of Preservation Alternative 1 would be subject to existing regulatory requirements. Dewatering would be conducted temporarily during the construction phase. Furthermore, groundwater supplies would not be used during construction or operation and the amount of impervious surface area within the Project Site would decrease upon completion of Preservation Alternative 1. Therefore, construction and operation of Preservation Alternative 1, similar to the Proposed Project, would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Construction and operational impacts associated with the Proposed Project would be less than significant. No mitigation is required. (LTS)

Cumulative Impacts. As discussed in Section 3.12, *Hydrology and Water Quality*, cumulative impacts with respect to hydrology and water quality would be less than significant with implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2. This alternative would result in construction and operational impacts that would be similar to those of the Proposed Project because the risks to groundwater would be similar, as described above. Therefore, impacts would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Hazards and Hazardous Materials

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 1 would result in no impact related to airport hazards and wildland fires. No further analysis is required. (NI)

Routine Hazardous Materials Use. Similar to the Proposed Project, construction of Preservation Alternative 1 would involve the routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations. In addition, because of the nature of the proposed R&D uses under Preservation Alternative 1, which are the same as the Proposed Project, the possibility exists for hazards related to the handling of hazardous materials during operation. Mandatory compliance with all applicable federal, State, and local regulations pertaining to the use, storage, transport, and disposal of hazardous materials would ensure that the construction and operation of Preservation Alternative 1 would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. As with the Proposed Project, the impact associated with routine hazardous materials use under Preservation Alternative 1 would be less than significant. No mitigation is required. (LTS)

Upset and Accident Conditions Involving Hazardous Materials. Similar to the Proposed Project, during construction of Preservation Alternative 1, excavated soil would be transported offsite for disposal. In addition, as under the Proposed Project, temporary construction dewatering for the below-grade parking under proposed Buildings O1 and O5 may be required in some isolated areas of the Project Site to mitigate the effects of shallow groundwater. Because residual contaminants exist on the Project Site, ground disturbance, excavation activities, and dewatering conducted during construction could encounter affected soils and contaminated groundwater. In addition, as with the Proposed Project, Preservation Alternative 1 would demolish the majority of buildings at the Project Site, with the exception of Building 100. As such, construction activities associated with Preservation Alternative 1 would create a risk for construction personnel and the surrounding environment related to an exposure to hazardous building materials, which would be a potentially significant impact. Renovation of Building 100 would also require remediation of hazardous materials because the building includes regulated levels of asbestos-containing materials, lead-based paint, and PCBs. Any remediation associated with the renovation of Building 100 and demolition of existing buildings would comply with existing regulations. In addition, similar to the Proposed Project, implementation of Mitigation Measures HAZ-2.1 through HAZ-2.4 would reduce potentially significant impacts related to the release of hazardous materials from affected media under Preservation Alternative 1 to less than significant with mitigation. (LTS/M)

Exposure of Schools to Hazardous Materials. The Project Site is within 0.25 mile of Alpha Kids Academy, Menlo-Atherton High School, and Menlo Children's Center. As discussed above, construction activities associated with Preservation Alternative 1, similar to the Proposed Project, could encounter residual contamination in soil during ground disturbance as well as affected groundwater during dewatering. In addition, demolition activities could expose construction personnel and the surrounding environment to hazardous building materials, which would be a potentially significant impact, although to a slightly lesser extent compared to the Proposed Project due to the retention of Building 100. Implementation of Mitigation Measures HAZ-2.1 through HAZ-2.3 would reduce potential impacts related to the handling of hazardous or acutely hazardous materials near schools to less than significant with mitigation. (LTS/M)

Cortese List. Contamination associated with SRI and SRI International properties was addressed to the satisfaction of the oversight agencies. Thus, potential impacts associated with leaking underground storage tanks (USTs) are considered unlikely. Nonetheless, Preservation Alternative 1 would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in the potential to encounter residual affected media. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2, as required for the Proposed Project, would reduce potential impacts of Preservation Alternative 1 by requiring an environmental site management plan prior to the start of construction. Similar to the Proposed Project, implementation of these mitigation measures under Preservation Alternative 1 would reduce any potential impact from the exposure of construction workers or the public to residual contamination in onsite soils, if encountered, to less than significant with mitigation. (LTS/M)

Impairment of Emergency Response or Evacuation Plans. Development of Preservation Alternative 1 would not include any permanent changes to existing public roadways that provide emergency access to the Project Site or surrounding area. Compliance with city requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times. Structures associated with the Proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, development of Preservation Alternative 1 is not expected to interfere with the County of San Mateo's Emergency

Operations Plan or any evacuation route. Therefore, as with the Proposed Project, Preservation Alternative 1 would not impair implementation of, or interfere with, an adopted emergency response plan or emergency evacuation plan during construction or operation. This impact would be less than significant. No mitigation is required. (LTS)

Cumulative Impacts. Substantive hazardous materials accidents within the Project Site or in the vicinity are expected to be rare. In addition, if such incidents were to occur, only one such incident would be expected at any one time (except during major catastrophes). As with the Proposed Project, Preservation Alternative 1 in combination with other past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site would not result in a significant cumulative impact associated with hazards or hazardous materials. The cumulative impact would be less than significant. No mitigation is required. (LTS)

Population and Housing

Unplanned Population Growth. As with the Proposed Project, operation of Preservation Alternative 1 would generate up to 3,868 net new jobs onsite. With retention of Building 100, as well as the new buildings to be constructed, Preservation Alternative 1 would result in the same amount of office/R&D building area as the Proposed Project. The number of employees generated by Preservation Alternative 1 would not exceed ABAG projections and would not result in an increase in city population or demand for housing that would exceed ABAG projections. The onsite employment, plus the offsite employment induced by onsite residents, would also result in indirect population growth (i.e., approximately 293 new Menlo Park residents), which is the same as the Proposed Project. However, the housing demand in the city as a result of Preservation Alternative 1 can be accommodated in the city, and the anticipated housing demand in the region has been anticipated in regional growth plans. Preservation Alternative 1 would increase the housing supply with the construction of up to 550 units at the Project Site compared to existing conditions, with a total onsite population of approximately 1,305 residents, which is the same as the Proposed Project. The addition of up to 1,305 new onsite residents in the city as a result of Preservation Alternative 1 and the Proposed Project would represent approximately 12.5 percent of the anticipated population growth within the city between 2020 and 2040. The Project Site is an urban infill site and served by existing infrastructure and services. Preservation Alternative 1, like the Proposed Project, would not induce a substantial level of unplanned population growth, either directly or indirectly, resulting in less-than-significant impacts. No mitigation is required. (LTS)

Displacement of People or Housing. Although the majority of the existing buildings would be demolished under Preservation Alternative 1, the existing employees at the SRI International research campus would work out of the retained Buildings P, S T, and 100 and would not be displaced. In addition, as with the Proposed Project, Preservation Alternative 1 would accommodate approximately 3,868 additional employees; therefore, Preservation Alternative 1 would accommodate substantially more employees at the Project Site than under existing conditions. In addition, no housing is currently located at the Project Site; therefore, no existing residents would be displaced. Similar to the Proposed Project, Preservation Alternative 1 would not result in the displacement of substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere, resulting in a less-than-significant impact. No mitigation is required. (LTS)

Cumulative Impacts. Housing demand, beyond that accommodated by the Proposed Project and Preservation Alternative 1, from onsite and offsite employment could be accommodated in the region. Therefore, Preservation Alternative 1 in combination with other past, present, and reasonably

foreseeable future projects within the city and region would not result in a significant cumulative impact associated with unplanned population growth. The cumulative impact related to unplanned population growth would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Public Services

Fire Services, Police Services, School Facilities, Parks and Recreational Facilities, and Library Facilities. Under Preservation Alternative 1, existing Building 100 on the Project Site would be retained instead of demolished. However, with retention of Building 100, Preservation Alternative 1 would still result in the same number of employees and new residents as the Proposed Project (550 residential units and the same amount of overall building area on the Project Site). Therefore, there would be approximately 3,868 additional employees and 1,305 residents at the Project Site and, thus, a potential increase in demand from current conditions for fire protection services, police protection services, school facilities, parks and recreational facilities, and library facilities. As a result, impacts related to fire protection services, police services, school facilities, parks and recreational facilities, and library facilities (Impacts PS-1, Impact PS-2, Impact PS-3, Impact PS-4, and Impact PS-5) would be the same compared to the Proposed Project's impacts. (LTS)

Cumulative Impacts. Preservation Alternative 1 would not contribute to any cumulative public services impact. (LTS)

Utilities and Service Systems

Construction or Relocation of Utilities. Similar to the Proposed Project, Preservation Alternative 1 would include the construction of water, wastewater, stormwater, electricity, and telecommunication infrastructure and upgrades as well as the demolition of the 6-megawatt natural gas facility that generates power and steam for the SRI Campus. No natural gas service would be provided to structures constructed as part of Preservation Alternative 1. The installation of the new or expanded utility infrastructure would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. These construction impacts are evaluated throughout this chapter (e.g., refer to the air quality, GHG emissions, noise and vibration, and hydrology and water quality discussions above). In addition, similar to the Proposed Project, Preservation Alternative 1 would be required to comply with existing regulations, including plans, policies, and zoning requirements that promote water conservation and green building practices. It would not require or result in the relocation of existing utility infrastructure or the construction of new or expanded utility infrastructure, beyond that proposed as part of Preservation Alternative 1 and as analyzed throughout this chapter. Furthermore, any such utility work would be subject to standard conditions of approval like those for the Proposed Project, including city permits/review for construction (e.g., grading permits, private development review, encroachment permits). Therefore, Preservation Alternative 1 would result in less-than-significant impacts with respect to the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities. (LTS)

Water Supply, Wastewater Generation, and Solid Waste Generation. Under Preservation Alternative 1, existing Building 100 on the Project Site would be retained instead of demolished. The total square footage of the office/R&D buildings would be reduced. Up to 550 residential units would still be provided, but the new office/R&D building square footage would be reduced by 9,000 sf due to the retention of Building 100. However, Preservation Alternative 1 would result in the same number of employees and residents and the same total building area as the Proposed Project with the retention of

the existing building. Because total building area under Preservation Alternative 1 would be the same as the Proposed Project, and there would be a net increase of approximately 3,868 employees and 1,305 residents at the Project Site, Preservation Alternative 1 would result in a higher demand and generation rates for utilities than under existing conditions. However, demand and generation rates for utilities would be comparable to the Proposed Project. As a result, impacts related to water, wastewater treatment, stormwater drainage, electric power, natural gas, telecommunications, and solid waste services would be similar compared to the Proposed Project and less than significant. (LTS)

Compliance with Solid Waste Regulations. Like the Proposed Project, Preservation Alternative 1 would be required to comply with all applicable statutes and regulations related to solid waste (e.g., Assembly Bill [AB] 939 and SB 1016). Preservation Alternative 1 would adhere to these laws and require waste to be separated and tracked to divert it from landfills, with a target of recycling more than 80 percent of construction and demolition waste during Project construction. In addition, Preservation Alternative 1 would be required to adhere to the city's construction and demolition recycling and zero-waste management plans during operations. Therefore, Preservation Alternative 1 would result in a less-than-significant impact with respect to compliance with federal, State, and local statutes and regulations related to solid waste. (LTS)

Cumulative Impacts. Preservation Alternative 1 would not contribute to any cumulative utilities and service systems impact. (LTS)

Project Preservation Alternative 2

Preservation Alternative 2 would retain all three individually CRHR eligible buildings: Buildings 100, A, and E. Buildings A and E would continue to be used for office and R&D space but would need to be upgraded. Building 100 would be used for support functions/amenity space. Because the footprints of Buildings A and E are on the site of several proposed office/R&D and residential buildings, the siting, footprint, and massing of several of the new buildings would need to be altered to accommodate the retention of Buildings A and E, and several proposed buildings would not be constructed to meet the objective of no net increase in commercial square footage. The following analysis considers the environmental impacts of Preservation Alternative 2 compared to the Proposed Project.

Land Use

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 2 would result in no impacts related the division of an established community. No further analysis is required. (NI)

Conflicts with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect. As with the Proposed Project, Preservation Alternative 2 would be designed with an integrated master plan, with all parcels held in common ownership, allowing for a continuous and complementary site plan and program. To achieve this goal, Preservation Alternative 2 would establish site-specific, tailored land use controls, including development standards, to guide development on the Project Site. Preservation Alternative 2 would result in the same development standards including density, FAR, and heights as the Proposed Project. These standards would be established through a general plan amendment, zoning ordinance text amendment, and a zoning map amendment. Similar to the Proposed Project, Preservation Alternative 2 would be generally consistent with applicable goals and policies in the city's general plan and the regional Plan Bay Area, resulting in less-than-significant impacts. (LTS)

Cumulative Land Use Impacts. Because consistency with land use plans and policies is inherently a project-specific issue, and each jurisdiction would decide on project consistency at the project level, there would be no cumulative impact as a result of cumulative development in the ABAG region. As with the Proposed Project, Preservation Alternative 2 would have no contribution to cumulative impacts on land use and planning. (NI)

Transportation

Preservation Alternative 2 would generate fewer vehicular trips than the Proposed Project (see Table 6-7 and Table 6-8). However, these changes would be minimal, and Preservation Alternative 2's transportation-related impact conclusions would be the same as under the Proposed Project.

Conflict with an Applicable Plan, Ordinance, or Policy. As part of the city's entitlement process, Preservation Alternative 2 would be required to comply with existing regulations, including city General Plan policies and zoning regulations related to transportation. Preservation Alternative 2 would be reviewed in accordance with the transportation program standards and guidelines of the city Public Works Department. The department would provide oversight during the engineering review, ensuring that construction would be consistent with city specifications. As with the Proposed Project, Preservation Alternative 2 would provide adequate bicycle and pedestrian infrastructure and represent an overall improvement in bicycle and pedestrian access and circulation. Preservation Alternative 2 would meet zoning ordinance requirements for vehicle and bicycle parking and implement TDM measures consistent with city and C/CAG requirements. Therefore, Preservation Alternative 2, like the Proposed Project, would have a less-than-significant impact in terms of compliance with applicable plans, ordinances, and policies. (LTS)

Vehicle Miles Traveled. Preservation Alternative 2 proposes minimal changes to the land use mix compared to the Proposed Project—changes that would not affect the VMT conclusions. In addition, it would be subject to the same trip reduction required of the Proposed Project. Therefore, its VMT impacts would be the same as those of the Proposed Project. The Proposed Project would generate office VMT and residential VMT under the respective VMT thresholds established by the city. Therefore, Preservation Alternative 2's VMT impact would be less than significant. (LTS)

Hazards Due to a Geometric Design Feature or Incompatible Uses. Preservation Alternative 2 would reduce the non-vehicular circulation network on the site compared to the Proposed Project. However, it would continue to represent an overall improvement compared to existing infrastructure and would not create potentially hazardous conditions for people bicycling, walking, or driving or for public transit operations. As with the Proposed Project, Preservation Alternative 2 would require approval from the city's Public Works Department to ensure it would be constructed according to city specifications. (LTS)

Inadequate Emergency Access. With Preservation Alternative 2, emergency access to the Project Site and nearby hospitals would be the same as under the Proposed Project. The general increase in vehicle traffic from the Project Site would not be expected to inhibit emergency access to the Project Site or materially affect emergency vehicle response at the nearest fire station. Development on the Project Site, as well as associated increases in bicycle travel and the number of vehicles and pedestrians, would not substantially affect emergency vehicle response times or access to other buildings or land uses in the area or to hospitals. Preservation Alternative 2 would be designed and built according to the same standards as the Proposed Project to ensure that emergency access would not be impaired. (LTS)

Table 6-7. Preservation Alternative 2 – Trip Generation Estimates – 100 Percent Office Scenario

Land Use	ITE Land Use Code[a]	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
				Rate[a]	Total	Rate[a]	IN	OUT	Total	Rate[a]	IN	OUT	Total
Office	710	1,094	ksf	10.84	11,855	1.52	1,462	200	1,662	1.44	268	1,307	1,575
Market-rate multi-family residential	221	406	du	4.54	1,843	0.37	35	115	150	0.39	96	62	158
Affordable BMR housing	223	100	du	4.81	481	0.50	15	35	50	0.46	27	19	46
Publicly accessible park[b]	488	1	field	71.33	71	0.99	1	0	1	16.43	11	5	16
Gross Project trips (before any reductions)					14,250		1,513	350	1,863		402	1,393	1,795
Gross Project trips after internal capture reduction					13,583		1,467	339	1,806		387	1,349	1,736
Total Project Trips after TDM Reduction[c]					**9,846**		**1,058**	**248**	**1,306**		**283**	**973**	**1,256**
Existing trip generation credit[d]					(518)		(38)	(8)	(46)		(11)	(32)	(43)
Net New Trips Generated on Roadway Network					**9,328**		**1,020**	**240**	**1,260**		**272**	**941**	**1,213**
Net New Trips Generated on Roadway Network – Proposed Project					**9,508**		**1,023**	**250**	**1,273**		**278**	**949**	**1,227**
Change in Trips Generated on Roadway Network Compared to the Proposed Project					**-518**		**-3**	**-10**	**-13**		**-6**	**-8**	**-14**

Source: Hexagon. 2024.

Notes:

ksf = thousand square feet; du = dwelling unit

a. Daily, AM, and PM peak-hour average rates published in the 2021 ITE *Trip Generation Manual*, 11th edition, were used for each land use.

b. The Proposed Project would include active recreational areas in the Ravenswood Avenue parklet. The programmatic design of the park has not been determined. The ITE land use "Soccer Complex" is analyzed as a proxy. To provide a conservative estimate of potential traffic generation, it is assumed that the park would have play structures and open field areas for warm-ups or casual play. The number of soccer fields at the park was estimated, based on the size of a standard soccer field.

c. As discussed under *Transportation Demand Management* in Chapter 2, Project Description, the Proposed Project would include a project-specific TDM plan for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project. The Proposed Project is considered a transit-oriented development (TOD) because of the Project Site's proximity to the Menlo Park Caltrain station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Project Variant by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization.

d. Existing-use trip estimates are based on driveway counts conducted by Fehr & Peers in 2021. Of the 1,100 employees onsite, 700 employees were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned, based on employees.

Table 6-8. Preservation Alternative 2 – Trip Generation Estimates – 100 Percent R&D Scenario

Land Use	ITE Land Use Code[a]	Size	Unit	Daily		AM Peak Hour				PM Peak Hour			
				Rate[a]	Total	Rate[a]	IN	OUT	Total	Rate[a]	IN	OUT	Total
R&D	760	1,094	ksf	11.08	12,117	1.03	923	203	1,126	0.98	172	900	1,072
Market-rate multi-family residential	221	406	du	4.54	1,843	0.37	35	115	150	0.39	96	62	158
Affordable BMR housing	223	100	du	4.81	481	0.50	15	35	50	0.46	27	19	46
Publicly accessible park[b]	488	1	field	71.33	71	0.99	1	0	1	16.43	11	5	16
Gross Project trips (before any reductions)					14,512		974	353	1,327		306	986	1,292
Gross Project trips after internal capture reduction					13,833		944	342	1,286		295	954	1,249
Total Project Trips after TDM Reduction[c]					**10026**		**681**	**251**	**932**		**216**	**689**	**905**
Existing trip generation credit[d]					(518)		(38)	(8)	(46)		(11)	(32)	(43)
Net New Trips Generated on Roadway Network					**9508**		**643**	**243**	**886**		**205**	**657**	**862**
Net New Trips Generated on Roadway Network – Proposed Project					**9,688**		**646**	**253**	**899**		**212**	**664**	**876**
Change in Trips Generated on Roadway Network Compared to the Proposed Project					**-180**		**-3**	**-10**	**-13**		**-7**	**-7**	**-14**

Source: Hexagon. 2024.

Notes:

ksf = thousand square feet; du = dwelling unit

a. Daily, AM, and PM peak-hour average rates published in the 2021 ITE *Trip Generation Manual*, 11th edition, were used for each land use.

b. The Proposed Project would include active recreational areas in the Ravenswood Avenue parklet. The programmatic design of the park has not been determined. ITE land use "Soccer Complex" is analyzed as a proxy. To provide a conservative estimate of potential traffic generation, it is assumed that the park would have play structures and open field areas for warm-ups or casual play. The number of soccer fields at the park was estimated, based on the size of a standard soccer field.

c. As discussed under *Transportation Demand Management* in Chapter 2, Project Description, the Proposed Project would include a project-specific TDM plan for both the residential and commercial uses to reduce the total number of vehicle trips associated with the Proposed Project. The Proposed Project is considered a transit-oriented development (TOD) because of the Project Site's proximity to the Menlo Park Caltrain station. Specifically, the TDM plan would reduce the total number of vehicle trips associated with the Project Variant by at least 25 percent for the proposed residential uses and at least 28 percent for the proposed office/R&D uses, consistent with City/County Association of Governments (C/CAG) TDM policy requirements. For mixed-use projects such as the Proposed Project, this trip reduction would be applied to the net trip generation after accounting for internalization.

d. Existing-use trip estimates are based on driveway counts conducted by Fehr & Peers in 2021. Of the 1,100 employees onsite, 700 employees were in Buildings P, S, and T. The trip credit for the Proposed Project (excluding Buildings P, S, and T) is proportioned, based on employees.

Cumulative Impacts. Future development in the city would be required to comply with existing regulations, including Menlo Park General Plan policies and zoning regulations that have been enacted to minimize impacts related to transportation and circulation. VMT generated by Preservation Alternative 2 would be below the city's VMT thresholds; therefore, the contribution of Preservation Alternative 2 to cumulative impacts on VMT would be less than cumulatively considerable. As with Preservation Alternative 2, other projects and future development would be required to comply with existing regulations that have been enacted to minimize impacts related to design hazards and emergency access. Therefore, Preservation Alternative 2 would not result in a cumulatively considerable impact related to design hazards and emergency access. (LTS)

Air Quality

Construction Criteria Air Pollutant Emissions. There would be less construction and smaller buildout under Preservation Alternative 2 than the Proposed Project, which would decrease average daily construction criteria pollutant emission sources compared to the Proposed Project. Renovation-type activities may occur at Buildings 100, A, and E, but those activities would generate minimal criteria pollutant emissions. Because Proposed Project construction emissions would be below the BAAQMD's significance thresholds for ROG and NO_X, Preservation Alternative 2 would also not exceed any BAAQMD threshold. Mitigation Measure AQ-1.3 would be implemented to reduce PM_{10} and $PM_{2.5}$ in fugitive dust emissions. With implementation of the mitigation measure, the impact from PM_{10} and $PM_{2.5}$ fugitive dust emissions would be less than significant. (LTS/M)

Operational Criteria Air Pollutant Emissions. Preservation Alternative 2 would result in fewer vehicle trips, similar lab space, and less new building square footage compared to the Proposed Project because fewer residents would be associated with Preservation Alternative 2. Preservation Alternative 2 would also include 13 new emergency generators that would require intermittent testing. Because Preservation Alternative 2 is a smaller project than the Proposed Project, net operational emissions from Preservation Alternative 2 are expected to be smaller than those of the Proposed Project. However, it is conservatively assumed that operation of Preservation Alternative 2 would result in a cumulatively considerable net increase in ROG. Implementation of Mitigation Measures AQ-1.1 and AQ-1.2 would reduce operational ROG emissions and result in less-than-significant impacts for Preservation Alternative 2. (LTS/M)

Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations during Construction. Preservation Alternative 2 would result in a reduction in floor area compared with the Proposed Project. Renovation-type activities may occur at Buildings 100, A, and E, but those activities would generate minimal DPM emissions. Thus, Preservation Alternative 2's cancer risk and $PM_{2.5}$ concentrations could be less than those of the Proposed Project because the construction period could be shorter and construction activities could be less intensive; thus, sensitive receptors could be exposed to less DPM. Similar to the Project Preservation Alternative 2 would not exceed BAAQMD thresholds for cancer risk, chronic hazard index, and $PM_{2.5}$ concentration. This impact would be less than significant. (LTS)

Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations from Project Operation. Preservation Alternative 2 is also assumed to include 13 new emergency generators. Emissions resulting from the generators would be similar to the Proposed Project because the generator testing schedule would not be affected by the differences between Preservation Alternative 2 and the Proposed Project. The amount of wet laboratory space for Preservation Alternative 2 would be similar to the Proposed Project; thus, health risks from laboratory generated TACs would be similar. Traffic

generated by the Proposed Project would have the potential to create CO hot spots at nearby roadways and intersections. Because Preservation Alternative 2 would generate less traffic than the Proposed Project due to fewer residents associated with Preservation Alternative 2, the CO emissions would be reduced. For both the Proposed Project and Preservation Alternative 2, CO concentrations are not expected to contribute to any new localized violations of the 1-hour or 8-hour ambient air quality standards, resulting in less-than-significant impacts. (LTS)

Other Emissions that Would Adversely Affect a Substantial Number of People. The amount of other emissions, including odors, from Preservation Alternative 2 would be less than that of the Proposed Project for both construction and operations because there would be less construction and less equipment and fewer operational emissions-generating activities and fewer vehicles, resulting in less-than-significant impacts. (LTS)

Cumulative Impacts. For the reasons described above, Preservation Alternative 2 in combination with other development in Menlo Park would not conflict with or obstruct implementation of the applicable air quality plan and would not result in a cumulatively significant impact. In addition, Preservation Alternative 2 in combination with other development in Menlo Park would be consistent with the Clean Air Plan. Similar to the Proposed Project, with implementation of Project Mitigation Measures AQ-1.1, AQ-1.2, and AQ-1.3, Preservation Alternative 2 would not exceed BAAQMD's cumulative criteria pollutant thresholds for ROG, NO_X, and particulate matter as well as BAAQMD's cumulative health risk thresholds for $PM_{2.5}$ concentrations, the hazard index, or cancer risks associated with construction and operation. Consequently, the cumulative impact on air quality and sensitive receptors would be less than significant with mitigation. (LTS/M)

Energy

Construction. There would be less construction activities under Preservation Alternative 2, which would require less construction equipment and fewer vehicles compared to the Proposed Project. Renovation-type activities may occur at Buildings 100, A, and E, but those activities would consume minimal energy. Like the Proposed Project, construction activities under Preservation Alternative would require the use of higher-tier engines (Tier 4) or electric motors and recycling more than 80 percent of construction and demolition waste. Therefore, the total energy consumption during construction activities for Preservation Alternative 2 would most likely be less than those of the Proposed Project and less than significant. (LTS)

Operation. Under Preservation Alternative 2, the total square footage of new office/R&D buildings would be reduced, as would the number of residential units. Preservation Alternative 2 would reduce the number of residential units by 44 units (i.e., 506 units to be provided), and the new office/R&D building square footage would be reduced by approximately 457,099 sf due to the retention of Buildings 100, A, and E. However, the total building area would be the same when compared to the Proposed Project. Therefore, Preservation Alternative 2 would result in comparable energy use in the form of electricity, gasoline, and diesel during operations. In addition, the same sustainability measures, energy use measures, and transportation demand features would be implemented as under the Proposed Project, and compliance with State and local renewable energy and energy efficiency plans, such as SB 350 and SB 100, would still be required. Impacts under Preservation Alternative 2 would therefore be similar to the Proposed Project and less than significant. (LTS)

Cumulative Impacts. Cumulative energy impacts under Preservation Alternative 2 would also be the same as the Proposed Project. (LTS)

Greenhouse Gas Emissions

Construction GHG Emissions. There would be less construction and a smaller buildout under Preservation Alternative 2 compared to the Proposed Project, which would result in a minor reduction in construction GHG emissions. It would require less construction equipment and fewer vehicles compared with the Proposed Project. Renovation-type activities may occur at Buildings 100, A, and E, but those activities would generate minimal GHG emissions. Therefore, total construction emissions generated by Preservation Alternative 2 during construction would most likely be less than those of the Proposed Project. BAAQMD's CEQA Guidelines do not recommend a GHG emission threshold for construction-related emissions; therefore, construction of Preservation Alternative 2 would not exceed thresholds. However, the guidelines recommend implementation of BMPs to help control or reduce GHG emissions. Preservation Alternative 2 would include the same feasible and practical BMPs to reduce construction-generated GHGs as the Proposed Project. Like the Proposed Project, this impact would be less than significant. (LTS)

Operational GHG Emissions and Conflicts with Applicable GHG Emission Plans, Policies, and Regulations. Operation of Preservation Alternative 2 would generate GHG emissions similar to those of the Proposed Project. This is due to the possible increase in electricity and natural gas consumption within the relatively energy-inefficient existing buildings to be retrofitted in lieu of new buildings that would be offset by a reduction in vehicle trips, waste, and wastewater generation due to a reduction in residents. The total building area and employees would be the same as under the Proposed Project. Preservation Alternative 2 would still decrease direct and indirect GHG emissions compared with existing conditions, like the Proposed Project (see Table 3.6-5 in Section 3.6, *Greenhouse Gas Emissions*). Preservation Alternative 2, like the Proposed Project, would be consistent with the BAAQMD GHG thresholds for land use projects. Preservation Alternative 2 (like the Proposed Project) would not conflict with the State carbon neutrality goal for 2045, Plan Bay Area 2050, the city of Menlo Park Climate Action Plan, or city of Menlo Park ordinances, general plan, or reach code. Thus, the impact from operation of Preservation Alternative 2 related to GHG emissions and conflicts with applicable GHG emission plans would also be less than significant. (LTS)

Cumulative Impacts. Climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where GHGs are emitted. Climate change is the result of the individual contributions of countless past, present, and future sources. Therefore, GHG impacts are inherently cumulative, and the analysis above is inclusive of cumulative impacts. (LTS)

Noise

Construction. There would be less construction and smaller buildout under Preservation Alternative 2, which would have a minor effect on both construction and operational noise sources. Less construction activities would reduce the duration of noise impacts in the northern and eastern sections of the Project Site; however, the construction noise levels indicated in Table 3.7-9 in Section 3.7, *Noise*, would still occur throughout other areas of the site because the simultaneous operation of the loudest equipment would occur in other areas of the Project Site where demolition, building construction, and other activities occur. Like the Proposed Project, this alternative would result in substantial construction noise increases at existing noise-sensitive land uses because new buildings and structures in other areas of the site would still be constructed, affecting noise-sensitive land uses near the site. Although Buildings 100, A, and E would not be demolished and replaced with new buildings, buildings and structures constructed in the western, southern, central, and northeastern sections of the site would generate construction noise that could affect many of the same noise-sensitive land uses discussed in Section 3.7, *Noise*.

Renovation-type activities may occur at Buildings 100, A, and, E, but noise from these activities would originate mostly within the building shells while the interior of the buildings are renovated. Thus, noise levels, as experienced outside of the buildings, from these types of activities would be less than the noise levels in Table 3.7-9 in Section 3.7 from the more intensive construction activities that would happen in this area under the Proposed Project. Therefore, in the areas near Buildings 100, A, and E, the noise levels would be reduced relative to the Proposed Project; however, the reduction would be localized and would not affect construction activities in other areas of the site that would affect existing sensitive land uses. This alternative would very likely reduce the number of residences that would be affected by substantial noise increases from construction. Specifically, several residences north of Ravenswood Avenue would experience lower noise increases during construction, relative to the Proposed Project, because existing Buildings A and E would not be demolished and replaced. As such, this alternative would reduce the number of receptors affected by construction impacts and could reduce the severity of the impact at some sensitive land uses. In other areas, as noted above, construction noise would be the same as under the Proposed Project. As with the Proposed Project, implementation of Mitigation Measures NOI-1.1 and NOI-1.2 during construction of Preservation Alternative 2 would reduce noise by requiring a construction noise reduction plan and a noise barrier, respectively. However, like the Proposed Project, the substantial increase in noise would be temporary but could nevertheless adversely affect surrounding land uses that are sensitive to noise, even with mitigation. (SU/M)

Operations – Mechanical Equipment. The preservation of Buildings 100, A, and E would not appreciably change noise sources during operation. Although preserving these buildings would result in less overall residential square footage compared with the Proposed Project, the new buildings at the Project Site would still require mechanical equipment that would generate noise, and the equipment would need to comply with the city's municipal code for stationary equipment noise limits. Consequently, equipment noise from this alternative is likely to be very similar to the Proposed Project. Under this alternative, the equipment at Buildings 100, A, and E would be retained, whereas these sources of noise would be removed under the Proposed Project in the case of Building 100 and replaced with newer buildings and equipment for Buildings A and E. The nearest noise-sensitive existing or future land uses from Buildings 100, A, and E are approximately 350 feet, 300 feet, and 100 feet away, respectively. At these distances, noise from the equipment, such as HVAC equipment, would be further reduced. Overall, mechanical equipment and other sources of noise during operations would be the same as the Proposed Project, except at Buildings 100, A, and E where mechanical noise from HVAC and other standard equipment would continue to occur but would not be considered significant, given compliance with the municipal code and the distance to the nearest sensitive land uses. (LTS)

Operations – Traffic. With respect to traffic noise, the reduced residential square footage would very likely lead to fewer vehicle trips to and from the site because there would be fewer residents living at the site. However, traffic noise is not particularly sensitive to vehicle volumes. For there to be a noticeable increase in traffic noise, a doubling in traffic volumes typically needs to occur. As such, although this alternative may result in slightly fewer vehicle trips and thus lower noise levels from vehicles, the difference in noise is unlikely to be noticeable relative to the Proposed Project. (LTS)

Vibration. Vibration impacts during construction would remain the same overall, except for in the immediate areas near Buildings 100, A, and E. Similar to the discussion above for construction noise, the construction vibration levels indicated in Table 3.7-16 in Section 3.7 would still occur throughout much of the site because a large bulldozer or loaded truck would operate in other areas of the Project Site. The localized reduction in vibration levels near Buildings 100, A, and E would be minor when considering the overall construction activities and vibration that will nevertheless be generated at the site and affect existing sensitive land uses. Vibration impacts at the Classics of Burgess Park neighborhood and at other

sensitive land uses would be unaffected by this alternative, relative to the Proposed Project, because construction activities would be identical to those of the Proposed Project, except at Buildings 100, A, and E. Building 100 is not particularly close to existing sensitive land uses, but the preservation of Buildings A and E would very likely reduce the construction vibration impacts, relative to the Proposed Project, experienced by the residences north of Ravenswood Avenue. Like the Proposed Project, building damage from vibration would not occur; however, for the reasons discussed in Section 3.7, *Noise*, annoyance and sleep disturbance could occur because the vibration thresholds in the ConnectMenlo EIR could be exceeded. As with the Proposed Project, implementation of Mitigation Measure NOI-3.1 would reduce vibration levels from construction activity during daytime and early-morning hours by requiring larger equipment to operate at distances greater than 15 feet from sensitive land uses to the extent feasible. The preservation of Buildings 100, A, and E would reduce these impacts in some cases but would not avoid the impacts at sensitive land uses, and mitigation may not be enough to reduce the impact, resulting in similar significant and unavoidable impacts with mitigation. (SU/M)

Cultural Resources

Historical Resources.[11] Preservation Alternative 2 would demolish 20 of the 26 contributing buildings in the CRHR-eligible SRI Campus historic district. The six buildings that contribute to the historic district that would remain are Buildings 100, A, E, P, S, and T. As with the Proposed Project, the Research Field, a contributing landscape feature, would be demolished, and the contributing SRI International monument would be relocated on site to an as-yet undetermined outdoor location that would be publicly accessible on the Project Site.

The number of buildings and landscape features that would be demolished in Preservation Alternative 2 would cause the historic district to lose historic integrity. The six buildings proposed to be retained are not sufficiently representative of the significance of SRI International's contributions as an R&D institution and are not clustered in a manner that would remain eligible as a historic district. Furthermore, the spatial relationships and siting of the buildings that convey the sense of a large institutional campus would be lost. As such, the site would no longer be eligible for listing in the CRHR as a historic district. Therefore, the impact of Preservation Alternative 2 on the historic district would remain significant and unavoidable, similar to the Proposed Project.

Preservation Alternative 2 would retain and rehabilitate all three individually eligible buildings on the site: Buildings 100, A, and E. Although interior and structural upgrades are anticipated to be required for all three buildings, it is not anticipated that reuse would require exterior alterations. As such, Buildings 100, A, and E would remain individually eligible for listing in the CRHR. Therefore, Preservation Alternative 2 would result in a less-than-significant impact on Buildings 100, A and E compared to a significant and unavoidable impact under the Proposed Project. This would avoid the impact on individually CRHR eligible properties under the Proposed Project.

The purpose of Preservation Alternative 2 is to consider a plan that would lessen the significant and unavoidable impacts of the Proposed Project on all three individually eligible historic resources: Buildings 100, A, and E. Preservation Alternative 2 would have a less-than-significant impact on individual historic resources, including Buildings 100, A, and E. However, Preservation Alternative 2 would still have a significant and unavoidable impact on the eligible SRI Campus historic district, even with implementation of Mitigation Measures CR-1.1 (Documentation), CR-1.2 (Interpretative Program), and CR-1.3 (Relocation

[11] Page & Turnbull. 2024. *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*. June 6.

of SRI Monument), which are also required for the Proposed Project. Although impacts under Preservation Alternative 2 would be less than under the Proposed Project, impacts on historic resources would remain significant and unavoidable. (SU/M)

Archaeological Resources and Human Remains. Preservation Alternative 2 would result in similar impacts as the Proposed Project, although to a slightly lesser extent because more existing buildings would be retained and below-grade parking would be constructed only under Building O5, resulting in less soil disturbance. Regardless, because the majority of the Project Site would still be developed under Preservation Alternative 2, there would still be a significant cultural resources–related impact. Implementation of Mitigation Measures CR-2.1, CR-2.2, and CR-3.1, would reduce impacts to a less-than-significant level, similar to, but slightly less than, impacts under the Proposed Project. (LTS/M)

Cumulative Impacts. Preservation Alternative 2 would result in the same cumulative historic impacts as the Proposed Project. The cumulative impact would be less than significant and no mitigation is required. Preservation Alternative 2 would result in similar impacts on archaeological resources and human remains as the Proposed Project, although to a slightly lesser extent because more existing buildings would be retained. Impacts would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Tribal and Cultural Resources

Impacts on Tribal Cultural Resources. Similar to the Proposed Project, there would be no impacts on tribal cultural resources during operation of Preservation Alternative 2. However, as discussed in Section 3.9, *Tribal Cultural Resources*, construction of the Proposed Project could result in impacts during ground-disturbing activities. Impacts would be similar under Preservation Alternative 2, although to a slightly lesser extent due to the retention of existing Buildings 100, A, and E and below-grade parking only under Building O5, resulting in slightly less ground disturbance than the Proposed Project. Similar to the Proposed Project, implementation of the Mitigation Measures CR-2.1, CR-2.2, CR-3.1, and TRC-1 would reduce impacts from Preservation Alternative 2 on tribal cultural resources to less than significant. (LTS/M)

Cumulative Impacts. Preservation Alternative 2, similar to the Proposed Project, could contribute to a cumulative loss of tribal cultural resources. However, implementation of Mitigation Measures CR-2.1, CR-2.2, CR-3.1, and TRC-1 would reduce impacts to less than significant, similar to the Proposed Project. (LTS/M)

Biological Resources

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 2 would result in no impacts related to riparian habitat and sensitive natural communities, State or federally protected wetlands and non-wetland waters, or an adopted habitat conservation plan or natural community conservation plan. No further analysis is required. (NI)

Special-Status Species and Wildlife Movement and Native Wildlife Nursery Sites. Preservation Alternative 2 would have slightly less construction impacts than the Proposed Project because the construction timeframe may be somewhat reduced and because Buildings 100, A, and E would be retained instead of demolished. Specifically, demolition, grading, and ground-disturbing activities would still be necessary under Preservation Alternative 2; however, these activities would be reduced because the three existing buildings would be retained instead of being demolished, and the below-grade parking under

Building O1 would no longer be constructed. It is likely that tree removal under Preservation Alternative 2 would be similar to the Project (708 trees), though it is possible that the less intense development could result in the preservation of some of the existing trees. Because Preservation Alternative 2 would be developed on the same site as the Proposed Project, the potential for encountering sensitive species or habitat would be the same. Similar to the Project, the implementation of bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for Preservation Alternative 2. Implementation of mitigation measures would similarly be required, including Mitigation Measures BIO-1.1 BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1 to reduce potential impacts on a species identified as special status and ensure no effect on wildlife movement and native wildlife nursery sites. Likewise, operational impacts on biological resources would be the similar, or slightly less than, the Proposed Project. (LTS/M)

Conflicts with Local Policies or Ordinances that Protect Biological Resources. Similar to the Proposed Project, Preservation Alternative 2 could result in the removal of existing trees, including heritage trees, and the planting of replacement trees. Like the Proposed Project, Preservation Alternative 2 would comply with the city's Heritage Tree Ordinance, Sections 13.24.030 and 13.24.050. Preservation Alternative 2 would also include the provision of replacement trees for all heritage trees removed during construction (in accordance with Heritage Tree Ordinance Section 13.24.090). In addition, similar to the Project, implementation of a bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for Preservation Alternative 2. Therefore, impacts related to conflicts with local policies or ordinances would be similar to the Proposed Project and less than significant. (LTS)

Cumulative Impacts. Preservation Alternative 2, as with the Proposed Project, would be required to implement the above-identified mitigation measures to reduce cumulative impacts on biological resources to less than significant. (LTS/M)

Geology and Soils

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 2 would result in no impacts related to surface fault rupture, landslides, loss of topsoil, lateral spreading, unique geologic features, or septic systems. No further analysis is required. (NI)

Strong Seismic Ground Shaking and Seismically Related Ground Failure. As with the Proposed Project, all new structures under Preservation Alternative 2 would be designed and constructed in compliance with the requirements of the California Building Standards Code and Menlo Park Municipal Code. As part of conformance with the California Building Standards Code, the design-level investigation would confirm the preliminary recommendations and develop detailed recommendations for design and construction. Seismic retrofit of Buildings 100, A, and E would also be subject to the California Building Standards Code. Similar to the Proposed Project, Preservation Alternative 2 would result in less-than-significant impacts related to the exposure of people or structures to seismic ground shaking or liquefaction for the same reasons described for the Proposed Project. No mitigation is required. (LTS)

Substantial Soil Erosion. As with the Proposed Project, Preservation Alternative 2 would include construction activities that could lead to substantial soil erosion. However, Preservation Alternative 2 would result in fewer excavation activities because the below-grade parking area under Building O1 would not be constructed. Regardless, because below-grade parking under Building O5 would still be constructed, and other excavation activities would occur, such as trenching for utilities, Preservation Alternative 2 could still result in soil erosion. Construction and operation of Preservation Alternative 2 would be subject to the same soil conditions as the Proposed Project because they would be located on

the same site and would be required to comply with existing regulations that address erosion, such as NPDES Construction General Permit requirements and San Mateo County's C.3 Stormwater Technical Guidance criteria. Therefore, similar to the Proposed Project, Preservation Alternative 2 would result in less-than-significant impacts related to soil erosion during construction and operation. No mitigation is required. (LTS)

Unstable Soil or Geologic Units. Construction of Preservation Alternative 2 would include a similar amount of excavation and dewatering, as well as the placement of fill material on the site, compared with the Proposed Project. The main difference is that the below-grade parking under Building O1 would not be constructed under Preservation Alternative 2, resulting in less excavation and dewatering. Preservation Alternative 2 would be subject to the same requirements regarding unstable soil and geologic units as the Proposed Project. Therefore, similar to the Proposed Project, construction and operational impacts related to unstable geologic or soil units at the Project Site under Preservation Alternative 2 would be less than significant. No mitigation is required. (LTS)

Expansive Soils. As required for the Proposed Project, Preservation Alternative 2 would be designed and constructed in compliance with policies and programs to reduce impacts related to expansive soils and meet or exceed the California Building Standards Code. Therefore, the impacts related to expansive soils at the Project Site under Preservation Alternative 2 would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Paleontological Resources. Similar to the Proposed Project, Preservation Alternative 2 could include ground-disturbing activities that could destroy unknown paleontological resources, resulting in potentially significant impacts. Although impacts would be potentially significant, these impacts would be slightly less than the Proposed Project because below-grade parking under Building O1 would not occur. Implementation of Mitigation Measure GS-5.1 and GS-5.2 would ensure that the significant impacts related to unknown paleontological resources would be reduced to a less-than-significant level, similar to the Proposed Project. (LTS/M)

Cumulative Impacts. As discussed in Section 3.11, *Geology and Soils*, cumulative construction impacts with respect to geology and soils and paleontological resources would be less than significant with implementation of Mitigation Measures GS-5.1 and GS-5.2. This alternative would result in slightly fewer impacts than the Proposed Project because the below-grade parking under Building O1 would not be developed; all other proposed excavation activities under the Proposed Project would occur. Therefore, excavation could still result in cumulative impacts related to unstable soils and paleontological resources during construction. Impacts would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Hydrology and Water Quality

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 2 would result in no impacts related to release of pollutants due to inundation in flood hazard, tsunami, or seiche zones. (NI)

Surface Water Quality. As with the Proposed Project, construction of Preservation Alternative 2 would be in compliance with the Construction General Permit, including development and implementation of the SWPPP and local stormwater regulations, such as the Menlo Park Municipal Code and other related regulations. Compliance with the requirements would ensure that construction activities would not result in a violation of water quality standards or waste discharge requirements or otherwise result in water quality degradation. In addition, Preservation Alternative 2 would be designed and maintained in

accordance with city of Menlo Park, County of San Mateo, and San Francisco Bay Regional Water Board water quality requirements, such as the San Francisco Bay MRP and SMCWPPP water quality requirements. Preservation Alternative 2 would be required to comply with existing regulations that protect surface water quality during construction and operation and, therefore, would result in less-than-significant impacts related to surface water quality for the same reasons described for the Proposed Project. (LTS)

Groundwater Quality. Preservation Alternative 2 would result in similar construction activities as the Proposed Project, except that Buildings 100, A, and E, would be retained. Therefore, slightly less ground-disturbing activity would occur during construction, including construction of the below-grade parking only under Buildings 5 (while both the Proposed Project would include below-grade parking under both Buildings O1 and O5). Temporary construction dewatering could be required in isolated areas with shallow groundwater during excavation and trenching for foundation work and underground parking garages. As with the Proposed Project, Preservation Alternative 2 would be required to implement Mitigation Measures HAZ-2.1 and HAZ-2.2 to reduce impacts during construction to less than significant. Impacts on water quality during operation of Preservation Alternative 2 would be less than significant, similar to the Proposed Project. (LTS/M)

Groundwater Supply and Recharge. Groundwater supplies would not be used during construction, operation, or maintenance activities. Therefore, as under the Proposed Project, construction and operation of Preservation Alternative 2 would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. This impact would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Drainage and Flooding. Preservation Alternative 2 would result in a slight decrease of open space compared to the Proposed Project. Regardless, compared to existing conditions, Preservation Alternative 2 would reduce the amount of impervious surface area across the Project Site. Therefore, like the Proposed Project, Preservation Alternative 2 would not result in changes to stormwater runoff rates or volumes compared to existing conditions. Similar to the Proposed Project, the impact related to stormwater runoff and capacity under Preservation Alternative 2 would be less than significant. No mitigation is required. (LTS)

Conflict or Obstruct a Water Resource Management Plan. As with the Proposed Project, construction and operation of Preservation Alternative 2 would be subject to existing regulatory requirements. Furthermore, groundwater supplies would not be used during construction or operation and the amount of impervious surface area within the Project Site would decrease upon completion of Preservation Alternative 2 compared to existing conditions (although compared to the Proposed Project, Preservation Alternative 2 would result in slightly more impervious surfaces due to the retention of more existing buildings and slightly less open space). Therefore, construction and operation of Preservation Alternative 2, similar to the Proposed Project, would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, resulting in less-than-significant impacts. No mitigation is required. (LTS)

Cumulative Impacts. As discussed in Section 3.12, *Hydrology and Water Quality*, cumulative impacts with respect to hydrology and water quality would be less than significant with implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2. This alternative would result in construction and operational impacts that would be similar to those of the Proposed Project because the risks to groundwater would be similar, as described above. Therefore, impacts would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Hazards and Hazardous Materials

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 2 would result in no impact related to airport hazards and wildland fires. No further analysis is required. (NI)

Routine Hazardous Materials Use. Similar to the Proposed Project, construction of Preservation Alternative 2 would involve the routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations. In addition, because of the nature of the proposed R&D uses under Preservation Alternative 2, which are the same as the Proposed Project, the possibility exists for hazards related to the handling of hazardous materials during operation. Mandatory compliance with all applicable federal, State, and local regulations pertaining to the use, storage, transport, and disposal of hazardous materials would ensure that the construction and operation of Preservation Alternative 2 would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. As with the Proposed Project, the impact associated with routine hazardous materials use of Preservation Alternative 2 would be less than significant. No mitigation is required. (LTS)

Upset and Accident Conditions Involving Hazardous Materials. Temporary construction dewatering for the below-grade parking under proposed Building O5 may be required in some isolated areas of the Project Site to mitigate the effects of shallow groundwater. Unlike the Proposed Project, Preservation Alternative 2 would not construct below-grade parking under Proposed Building O1, resulting in slightly less construction dewatering. Because residual contaminants exist on the Project Site, ground disturbance, excavation activities, and dewatering conducted during construction could encounter affected soils and contaminated groundwater. In addition, as with the Proposed Project, Preservation Alternative 2 would demolish the majority of buildings at the Project Site, with the exception of Buildings 100, A, and E. As such, construction activities associated with Preservation Alternative 2 would create a risk for construction personnel and the surrounding environment from exposure to hazardous building materials, which would be a potentially significant impact. Renovation of Buildings 100, A, and E would also require remediation of hazardous materials because the buildings include regulated levels of asbestos-containing materials, lead-based paint, and PCBs. Any remediation associated with the renovation of these buildings and demolition of existing buildings would comply with existing regulations. In addition, similar to the Proposed Project, implementation of Mitigation Measures HAZ-2.1 through HAZ-2.4 under Preservation Alternative 2 would reduce potentially significant impacts related to the release of hazardous materials from affected media onsite to less than significant with mitigation. (LTS/M)

Exposure of Schools to Hazardous Materials. Construction activities associated with Preservation Alternative 2, similar to the Proposed Project, could encounter residual contamination in soil during ground disturbance as well as affected groundwater during dewatering. In addition, demolition activities could expose construction personnel and the surrounding environment to hazardous building materials, which would be a potentially significant impact. However, construction impacts would be slightly less under Preservation Alternative 2 due to the retention of Buildings 100, A, and E and the construction of one (rather than two) below-grade parking area. Implementation of Mitigation Measures HAZ-2.1 through HAZ-2.3 would reduce potential impacts related to the handling of hazardous or acutely hazardous materials near schools to less than significant with mitigation. (LTS/M)

Cortese List. Contamination associated with the SRI and SRI International properties were addressed to the satisfaction of the oversight agencies. Thus, potential impacts associated with the aforementioned leaking UST listings are considered unlikely. Nonetheless, Preservation Alternative 2 would be located on

a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in the potential to encounter residual affected media. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2, as required for the Proposed Project, would reduce potential impacts of Preservation Alternative 2 by requiring an environmental site management plan prior to the start of construction. Similar to the Proposed Project, implementation of these mitigation measures under Preservation Alternative 2 would reduce any potential exposure of construction workers or the public to residual contamination in onsite soils, if encountered, to less than significant with mitigation. (LTS/M)

Impairment of Emergency Response or Evacuation Plans. Development of Preservation Alternative 2 would not include any permanent changes to existing public roadways that provide emergency access to the Project Site or surrounding area. Compliance with city requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times. Structures associated with the Proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, development of Preservation Alternative 2 is not expected to interfere with the County of San Mateo's Emergency Operations Plan or any evacuation route. Therefore, as with the Proposed Project, Preservation Alternative 2 would not impair implementation of, or interfere with, an adopted emergency response plan or emergency evacuation plan during construction or operation. This impact would be less than significant. No mitigation is required. (LTS)

Cumulative Impacts. As with the Proposed Project, Preservation Alternative 2 in combination with other past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site would not result in a significant cumulative impact associated with hazards or hazardous materials. The cumulative impact would be less than significant. No mitigation is required. (LTS)

Population and Housing

Unplanned Population Growth. As with the Proposed Project, operation of Preservation Alternative 2 would generate up to 3,868 net new jobs onsite, which would result in indirect population growth from approximately 293 new Menlo Park residents. The number of employees generated by Preservation Alternative 2, along with the indirect population growth, would not exceed ABAG projections.

Preservation Alternative 2 would increase the housing supply compared to existing conditions with the construction of up to 506 units at the Project Site, which would result in a total onsite population of approximately 1,200 residents. However, in comparison, Preservation Alternative 2 would result in fewer units and a smaller onsite population compared to the Proposed Project, which would include 550 units and approximately 1,305 new onsite residents. The addition of up to 1,200 new onsite residents in the city as a result of Preservation Alternative 2 would be within the anticipated population growth within the city between 2020 and 2040, resulting in less-than-significant impacts. However, Preservation Alternative 2 would result in fewer onsite housing units than the Proposed Project, which would result in a further housing deficit within the region, when considering the demand for housing generated by Preservation Alternative 2 employment. Regardless, this housing deficit across the region as a result of Preservation Alternative 2, as induced by onsite and offsite employment, could be accommodated within other allowable construction in the city and housing in the rest of the region. Within the city alone, the Housing Element (2023–2031) EIR evaluates the development of up to 4,000 new residential units within the 8-year planning period. These housing units would be constructed at various sites throughout the city; therefore, it is anticipated that some of the housing demand as a result of Preservation Alternative 2 could be accommodated within the projected housing studied in the Housing

Element. Therefore, Preservation Alternative 2, similar to the Proposed Project, would not induce a substantial level of unplanned population growth, either directly or indirectly, resulting in less-than-significant impacts. No mitigation is required. (LTS)

Displacement of People or Housing. Although the majority of the existing buildings would be demolished under Preservation Alternative 2, the existing employees at the SRI International research campus could work out of the retained Buildings 100, A, E, P, S, and T, and would not be displaced. As with the Proposed Project, Preservation Alternative 2 would accommodate approximately 3,868 additional employees; therefore, Preservation Alternative 2 would accommodate substantially more employees at the Project Site than under existing conditions. In addition, no housing is currently located at the Project Site; therefore, no existing residents would be displaced. Similar to the Proposed Project, Preservation Alternative 2 would not result in the displacement of substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere, resulting in a less-than-significant impact. No mitigation is required. (LTS)

Cumulative Impacts. Housing demand, beyond that accommodated by Preservation Alternative 2, from onsite and offsite employment could be accommodated in the region. Therefore, Preservation Alternative 2 in combination with other past, present, and reasonably foreseeable future projects within the city and region would not result in a significant cumulative impact associated with unplanned population growth. The cumulative impact related to unplanned population growth would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Public Services

Fire Services, Police Services, School Facilities, Parks and Recreational Facilities, and Library Facilities. Under Preservation Alternative 2, existing Buildings 100, A, and E on the Project Site would be retained instead of demolished. However, Preservation Alternative 2 would result in the same number of employees as the Proposed Project but approximately 105 fewer residents because fewer residential units would be constructed on the Project Site with the retention of the three buildings. Specifically, Preservation Alternative 2 would reduce the number of residential units by 44 units (i.e., 506 units to be provided), and the office/R&D building square footage would be reduced by approximately 457,099 sf due to the retention of Buildings 100, A, and E. Therefore, there would approximately 3,868 additional employees and 1,200 residents at the Project Site and, thus, a potential increase in demand from current conditions for fire protection services, police protection services, school facilities, parks and recreational facilities, and library facilities. While Preservation Alternative 2 could result in increased demand for public services, the demand for public service providers would be similar, or negligibly reduced, compared to the Proposed Project, which would generate up to approximately 3,868 net new employees and 1,305 new residents. As a result, impacts related to fire protection services, police services, school facilities, parks and recreational facilities, and library facilities would be similar, or slightly reduced, compared to the Proposed Project's impacts.

Cumulative Impacts. Preservation Alternative 2 would not contribute to any cumulative public services impact. (LTS)

Utilities and Service Systems

Construction or Relocation of Utilities. Similar to the Proposed Project, Preservation Alternative 2 would include the construction of water, wastewater, stormwater, electricity, and telecommunication infrastructure and upgrades as well as the demolition of the 6-megawatt natural gas facility that generates

power and steam for the SRI Campus. No natural gas service would be provided to structures constructed as part of Preservation Alternative 2. The installation of the new or expanded utility infrastructure would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. These construction impacts are evaluated throughout this chapter (e.g., refer to the air quality, GHG emissions, noise and vibration, and hydrology and water quality discussions above). In addition, similar to the Proposed Project, Preservation Alternative 2 would be required to comply with existing regulations, including plans, policies, and zoning requirements that promote water conservation and green building practices, and would not require or result in the relocation of existing or construction of new or expanded utility infrastructure beyond that proposed as part of Preservation Alternative 2 and as analyzed throughout this chapter. Furthermore, any such utility work would be subject to standard conditions of approval like those for the Proposed Project, including city permits/review for construction (e.g., grading permits, private development review, encroachment permits). Therefore, Preservation Alternative 2 would result in less-than-significant impacts with respect to the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities. (LTS)

Water Supply, Wastewater Generation, and Solid Waste Generation. Under Preservation Alternative 2, existing Buildings 100, A, and E on the Project Site would be retained instead of demolished. The total square footage of the new office/R&D buildings would be reduced under Preservation Alternative 2, as would the number of residential units. Preservation Alternative 2 would reduce the number of residential units by 44 units (i.e., 506 units to be provided), and the new office/R&D building square footage would be reduced by approximately 457,099 sf due to the retention of Buildings 100, A, and E. As a result, Preservation Alternative 2 would result in the same number of employees as the Proposed Project but approximately 105 fewer residents. Because total replacement building area under Preservation Alternative 2 would be reduced compared to the Proposed Project, and there would be approximately the same number (3,868) of new employees and fewer new residents (1,200 versus 1,305) at the Project Site in comparison to the Proposed Project, demand and generation rates for utilities would be slightly reduced compared to the Proposed Project. As a result, impacts related to water, wastewater treatment, stormwater drainage, electric power, natural gas, telecommunications, and solid waste services would be similar, or negligibly reduced, compared to the Proposed Project. Therefore, impacts would be less than significant. (LTS)

Compliance with Solid Waste Regulations. Like the Proposed Project, Preservation Alternative 2 would be required to comply with all applicable statutes and regulations related to solid waste (AB 939 and SB 1016). Preservation Alternative 2 would adhere to these laws and require waste to be separated and tracked to divert it from landfills, with a target of recycling more than 80 percent of construction and demolition waste during Project construction. In addition, Preservation Alternative 2 would be required to adhere to the city's Construction and Demolition Recycling and zero-waste management plans during operations. Therefore, Preservation Alternative 2 would result in a less-than-significant impact with respect to compliance with federal, State, and local statutes and regulations related to solid waste. (LTS)

Cumulative Impacts. Preservation Alternative 2 would not contribute to any cumulative utilities and service systems impact. (LTS)

Project Preservation Alternative 3

Preservation Alternative 3 would retain the three buildings that are individually eligible for the CRHR as well as district contributor Building B. Buildings P, S, and T would be retained and renovated, separate from the Proposed Project and Project Preservation Alternative 3. Buildings A, E, and B would continue to

be used for office and R&D space but would need to be upgraded. Building 100 would be used for support functions/amenity space. Because the footprints of Buildings A, B, and E are on the site of several proposed office/R&D and residential buildings, the siting, footprint, and massing of several of the proposed new buildings would need to be altered to accommodate the retention of Buildings A and E, and several proposed buildings would not be constructed to meet the objective of no net increase in commercial square footage. The following analysis considers the environmental impacts of Preservation Alternative 3 compared to the Proposed Project.

Land Use

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 3 would result in no impacts related the division of an established community. No further analysis is required. (NI)

Conflicts with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect. As with the Proposed Project, Preservation Alternative 3 would be designed with an integrated master plan, with all parcels held in common ownership, allowing for a continuous and complementary site plan and program. To achieve this goal, Preservation Alternative 3 would establish site-specific, tailored land use controls, including development standards, to guide development on the Project Site. Preservation Alternative 3 would result in the same development standards, including density, FAR, and heights, as the Proposed Project. These standards would be established through a general plan amendment, zoning ordinance text amendment, and a zoning map amendment. Similar to the Proposed Project, Preservation Alternative 3 would be generally consistent with applicable goals and policies in the city's general plan and the regional Plan Bay Area, resulting in less-than-significant impacts. (LTS)

Cumulative Land Use Impacts. Because consistency with land use plans and policies is inherently a project-specific issue, and each jurisdiction would decide on project consistency at the project level, there would be no cumulative impact as a result of cumulative development in the ABAG region. As with the Proposed Project, Preservation Alternative 3 would have no contribution to cumulative impacts on land use and planning. (NI)

Transportation

Preservation Alternative 3 would generate fewer vehicular trips than the Proposed Project. However, it would generate the same number of vehicular trips as Preservation Alternative 2 (see Table 6-7 and Table 6-8). These changes would be minimal, and the transportation-related impact conclusions for Preservation Alternative 3 would be the same as under the Proposed Project.

Conflict with an Applicable Plan, Ordinance, or Policy. Preservation Alternative 3 would be reviewed in accordance with the transportation program standards and guidelines of the city Public Works Department. The department would provide oversight during the engineering review, ensuring that construction would be consistent with city specifications. As with the Proposed Project, this alternative would provide adequate bicycle and pedestrian infrastructure and represent an overall improvement in bicycle and pedestrian access and circulation. Preservation Alternative 3 would meet zoning ordinance requirements for vehicle and bicycle parking and implement TDM measures consistent with city and C/CAG requirements. Therefore, Preservation Alternative 3, like the Proposed Project, would have a less-than-significant impact in terms of compliance with applicable plans, ordinances, and policies. (LTS)

Vehicle Miles Traveled. Preservation Alternative 3 proposes minimal changes to the land use mix compared to the Proposed Project—changes that would not affect the VMT conclusions. In addition, it would be subject to the same trip reduction required of the Proposed Project. Therefore, its VMT impacts would be the same as under the Proposed Project. The Proposed Project would generate office VMT and residential VMT under the respective VMT thresholds established by the city. Therefore, the VMT impact of Preservation Alternative 3 would be less than significant. (LTS)

Hazards Due to a Geometric Design Feature or Incompatible Uses. Preservation Alternative 3 would reduce the non-vehicular circulation network on the site compared to the Proposed Project. However, it would continue to represent an overall improvement compared to existing infrastructure and would not create potentially hazardous conditions for people bicycling, walking, or driving or for public transit operations. Preservation Alternative 3 would result in a dead-end for on-site circulation at Building O5. As with the Proposed Project, Preservation Alternative 3 would require approval from the city's Public Works Department to ensure it would be constructed according to city specifications. (LTS)

Inadequate Emergency Access. With Preservation Alternative 3, emergency access to the Project Site and nearby hospitals would be the same as under the Proposed Project. The general increase in vehicle traffic from the Project Site would not be expected to inhibit emergency access to the Project Site or materially affect emergency vehicle response at the nearest fire station. Development on the Project Site, as well as associated increases in bicycle travel and the number of vehicles and pedestrians, and would not substantially affect emergency vehicle response times or access to other buildings or land uses in the area or to hospitals. Preservation Alternative 3 would be designed and built according to the same standards as the Proposed Project to ensure that emergency access would not be impaired. (LTS)

Cumulative Impacts. Future development in the city would be required to comply with existing regulations, including Menlo Park General Plan policies and zoning regulations that have been enacted to minimize impacts related to transportation and circulation. VMT generated by Preservation Alternative 3 would be below the city's VMT thresholds; therefore, the contribution of Preservation Alternative 3 to cumulative impacts on VMT would be less than cumulatively considerable. As with Preservation Alternative 3, other projects and future development would be required to comply with existing regulations that have been enacted to minimize impacts related to design hazards and emergency access. Therefore, Preservation Alternative 3 would not result in a cumulatively considerable impact related to design hazards and emergency access. (LTS)

Air Quality

Construction Criteria Air Pollutant Emissions. There would be less construction and a smaller buildout under Preservation Alternative 3 than the Proposed Project, which would decrease average daily construction criteria pollutant emission sources compared to the Proposed Project. Renovation-type activities may occur at Buildings 100, A, E, and B, but those activities would generate minimal criteria pollutant emissions. Because Proposed Project construction emissions would be below the BAAQMD's significance thresholds for ROG and NO_X, Preservation Alternative 3 would also not exceed any BAAQMD threshold. Mitigation Measure AQ-1.3 would be implemented to reduce PM_{10} and $PM_{2.5}$ fugitive dust emissions. With implementation of the mitigation measure, this impact from PM_{10} and $PM_{2.5}$ from fugitive dust emissions would be less than significant. (LTS/M)

Operational Criteria Air Pollutant Emissions. Preservation Alternative 3 would result in fewer vehicle trips, similar lab space, and less new building square footage compared to the Proposed Project because fewer residents would be associated with Preservation Alternative 3. Preservation Alternative 3 also

would include 13 new emergency generators that would require intermittent testing. Because Preservation Alternative 3 would be a smaller project than the Proposed Project, net operational emissions from Preservation Alternative 3 would be expected to be smaller than those of the Proposed Project. However, it is conservatively assumed that operation of Preservation Alternative 3 would result in a cumulatively considerable net increase in ROG. Implementation of Mitigation Measures AQ-1.1 and AQ-1.2 would reduce operational ROG emissions and result in less-than-significant impacts for Preservation Alternative 3. (LTS/M)

Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations during Construction. Preservation Alternative 3 would result in a reduction in floor area compared with the Proposed Project. Renovation-type activities may occur at Buildings 100, A, E, and B, but those activities would generate minimal DPM emissions. Thus, Preservation Alternative 3's cancer risk and $PM_{2.5}$ concentrations could be less than those of the Proposed Project because the construction period could be shorter and construction activities could be less intensive; thus, sensitive receptors could be exposed to less DPM. Similar to the Proposed Project, Preservation Alternative 3 would not exceed BAAQMD thresholds for cancer risk, chronic hazard index, and $PM_{2.5}$ concentrations. This impact would be less than significant. (LTS)

Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations from Project Operation. Preservation Alternative 3 is also assumed to include 13 new emergency generators. Emissions resulting from the generators would be similar to those resulting from the Proposed Project because the generator testing schedule would not be affected by the differences between Preservation Alternative 3 and the Proposed Project. The amount of wet laboratory space for Preservation Alternative 3 would be similar to the Proposed Project; thus, health risks from laboratory generated TACs would be similar. Traffic generated by the Proposed Project would have the potential to create CO hot spots at nearby roadways and intersections. Because Preservation Alternative 3 would generate less traffic than the Proposed Project due to fewer residents associated with Preservation Alternative 3, the CO emissions would be reduced. For both the Proposed Project and Preservation Alternative 3, CO concentrations are not expected to contribute to any new localized violations of the 1-hour or 8-hour ambient air quality standards, resulting in less-than-significant impacts. (LTS)

Other Emissions that Would Adversely Affect a Substantial Number of People. The amount of other emissions, including odors, from Preservation Alternative 3 would be less than under the Proposed Project for both construction and operations because there would be less equipment and fewer construction and operational emissions-generating activities and vehicles, resulting in less-than-significant impacts. (LTS)

Cumulative Impacts. For the reasons described above, Preservation Alternative 3 in combination with other development in Menlo Park would not conflict with or obstruct implementation of the applicable air quality plan and would not result in a cumulatively significant impact. In addition, Preservation Alternative 3 in combination with other development in Menlo Park would be consistent with the Clean Air Plan. Similar to the Proposed Project, with implementation of Project Mitigation Measures AQ-1.1, AQ-1.2, and AQ-1.3, Preservation Alternative 3 would not exceed BAAQMD's cumulative criteria pollutant thresholds for ROG, NO_X, and particulate matter as well as BAAQMD's cumulative health risk thresholds for $PM_{2.5}$ concentrations, the hazard index, or cancer risks associated with construction and operation. Consequently, the cumulative impact on air quality and sensitive receptors would be less than significant with mitigation. (LTS/M)

Energy

Construction. There would be less construction under Preservation Alternative 3, which would require less construction equipment and fewer vehicles compared to the Proposed Project. Specifically, under Preservation Alternative 3, more existing buildings would be retained and no below-grade parking would be constructed under proposed Buildings O1 and O5 compared to the Proposed Project. Renovation-type activities may occur at Buildings 100, A, E, and B, but those activities would consume minimal energy resources. However, like the Proposed Project, construction activities under Preservation Alternative 3 would require the use of higher-tier engines (Tier 4) or electric motors and recycling more than 80 percent of construction and demolition waste. Therefore, total energy consumption during construction activities for Preservation Alternative 3 would most likely be less than under the Proposed Project and less than significant. (LTS)

Operation. Under Preservation Alternative 3, the total square footage of the new office/R&D buildings would be reduced, as would the number of residential units. Preservation Alternative 3 would reduce the number of residential units by 44 units (i.e., 506 units to be provided), and the new office/R&D building square footage would be reduced by approximately 592,209 sf due to the retention of Buildings 100, A, E, and B. As a result, the total building area would be reduced compared to the Proposed Project. Therefore, Preservation Alternative 3 would result in comparable, or slightly less, energy use in the form of electricity, gasoline, and diesel compared with the Proposed Project during operations. In addition, the same sustainability measures, energy use measures, and transportation demand features would be implemented as the Proposed Project, and compliance with State and local renewable energy and energy efficiency plans, such as SB 350 and SB 100, would still be required. Impacts under Preservation Alternative 3 would therefore be similar to the Proposed Project and less than significant. (LTS)

Cumulative Impacts. Cumulative energy impacts under Preservation Alternative 3 would also be the same as the Proposed Project. (LTS)

Greenhouse Gas Emissions

Construction GHG Emissions. There would be less construction and a smaller buildout under Preservation Alternative 3 compared to the Proposed Project, which would result in a minor reduction in construction GHG emissions. It would require less construction equipment and fewer vehicles compared with the Proposed Project. Renovation-type activities may occur at Buildings 100, A, E, and B but those activities would generate minimal GHG emissions. Therefore, total construction emissions generated by Preservation Alternative 3 during construction would most likely be less than those of the Proposed Project. BAAQMD's CEQA Guidelines do not recommend a GHG emission threshold for construction-related emissions; therefore, construction of Preservation Alternative 3 would not exceed thresholds. However, the guidelines recommend implementation of BMPs to help control or reduce GHG emissions. Preservation Alternative 3 would include the same feasible and practical BMPs to reduce construction-generated GHGs as the Proposed Project. Like the Proposed Project, this impact would be less than significant. (LTS)

Operational GHG Emissions and Conflicts with Applicable GHG Emission Plans, Policies, and Regulations. Operation of Preservation Alternative 3 would generate a similar amount of GHG emissions compared with the Proposed Project. This is due to the possible increase in electricity and natural gas consumption from relatively energy-inefficient existing buildings to be retrofitted in lieu of new buildings that would be offset by a reduction in vehicle trips, waste, and wastewater generation due to a reduction in residents. The total building area and employees would be the same as the Proposed Project.

Preservation Alternative 3 would still decrease direct and indirect GHG emissions compared with existing conditions, like the Proposed Project (see Table 3.6-5 in Section 3.6, *Greenhouse Gas Emissions*). Preservation Alternative 3, like the Proposed Project, would be consistent with the BAAQMD GHG thresholds for land use projects. Preservation Alternative 3 (like the Proposed Project) would not conflict with the State carbon neutrality goal for 2045, Plan Bay Area 2050, the city of Menlo Park Climate Action Plan, or city of Menlo Park ordinances, general plan, or reach code. Thus, the impact from operation of Preservation Alternative 3 related to GHG emissions and conflicts with applicable GHG emission plans would also be less than significant. (LTS)

Cumulative Impacts. Climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where GHGs are emitted. Climate change is the result of the individual contributions of countless past, present, and future sources. Therefore, GHG impacts are inherently cumulative, and the analysis above is inclusive of cumulative impacts. (LTS)

Noise

Construction. There would be less construction and a smaller buildout under Preservation Alternative 3, which would have a minor effect on both construction noise sources. Less construction activity would reduce the duration of noise impacts in the northern, central, and eastern sections of the Project Site; however, the construction noise levels indicated in Table 3.7-9 in Section 3.7, *Noise*, would still occur throughout other areas of the site because the simultaneous operation of the loudest equipment would occur in other areas of the Project Site where demolition, building construction, and other activities occur. Like the Proposed Project, this alternative would result in substantial construction noise increases at existing noise-sensitive land uses because new buildings and structures in other areas of the site would still be constructed, affecting noise-sensitive land uses near the site. Although Buildings 100, A, E, and B would not be demolished and replaced with new buildings, buildings and structures constructed in the western, southern, central, and northeastern sections of the site would generate construction noise that could affect many of the same noise-sensitive land uses discussed in Section 3.7, *Noise*.

Renovation-type activities may occur at Buildings 100, A, E, and B, but noise from these activities would originate mostly within the building shells while the interior of the buildings are renovated. Thus, noise levels, as experienced outside of the buildings, from these types of activities would be less than the noise levels in Table 3.7-9 in Section 3.7 from the more intensive construction activities that would happen in this area under the Proposed Project. Therefore, in the areas near Buildings 100, A, E, and B, the noise levels would be reduced relative to the Proposed Project; however, the reduction would be localized and would not affect construction activities in other areas of the site that would affect existing sensitive land uses. This alternative would very likely reduce the number of residences that would be affected by substantial noise increases from construction. Specifically, several residences north of Ravenswood Avenue would experience lower noise increases during construction, relative to the Proposed Project, because existing Buildings A, E, and B would not be demolished and replaced. As such, this alternative would reduce the number of people affected by construction impacts and could reduce the severity of the impact at some sensitive land uses. In other areas, as noted above, construction noise would be the same as it would for the Proposed Project. As with the Proposed Project, implementation of Mitigation Measures NOI-1.1 and NOI-1.2 during construction of Preservation Alternative 3 would reduce noise by requiring a construction noise reduction plan and a noise barrier, respectively. However, like the Proposed Project, the substantial increase in noise would be temporary but could nevertheless adversely affect surrounding land uses that are sensitive to noise, even with mitigation. (SU/M)

Operations – Mechanical Equipment. The preservation of Buildings 100, A, E, and B would not appreciably change noise sources during operation. Although preserving these buildings would result in less overall residential square footage than the Proposed Project, the new buildings at the Project Site would still require mechanical equipment that would generate noise, and the equipment would need to comply with the city's municipal code for stationary equipment noise limits. Consequently, equipment noise from this alternative is likely to be very similar to the Proposed Project. Under this alternative, the equipment at Buildings 100, A, E, and B would be retained, whereas these sources of noise would be removed under the Proposed Project in the case of Building 100 and replaced with newer buildings and equipment for Buildings A, E, and B. The nearest noise-sensitive existing or future land uses from Buildings 100, A, E, and B are approximately 350 feet, 300 feet, 100 feet, and 550 feet away, respectively. At these distances, noise from the equipment, such as HVAC equipment, would be further reduced. Overall, mechanical equipment and other sources of noise during operations would be the same as the Proposed Project, except at Buildings 100, A, E, and B where mechanical noise would continue to occur but would not be considered significant, given compliance with the municipal code and the distance to the nearest sensitive land uses. (LTS)

Operations – Traffic. With respect to traffic noise, the reduced residential square footage would likely lead to fewer vehicle trips to and from the site because there would be fewer residents living at the site. However, traffic noise is not particularly sensitive to vehicle volumes. For there to be a noticeable increase in traffic noise, a doubling in traffic volumes typically needs to occur. As such, although this alternative may result in slightly fewer vehicle trips and thus lower noise levels from vehicles, the difference in noise is unlikely to be noticeable relative to the Proposed Project. (LTS)

Vibration. Vibration impacts during construction would remain the same overall, except for in the immediate areas near Buildings 100, A, E, and B. Similar to the discussion above for construction noise, the construction vibration levels indicated in Table 3.7-16 in Section 3.7 would still occur throughout much of the site because a large bulldozer or loaded truck would operate in other areas of the Project Site. The localized reduction in vibration levels near Buildings 100, A, E, and B would be minor when considering the overall construction activities and vibration that would nevertheless be generated at the site and affect existing sensitive land uses. Vibration impacts at the Classics of Burgess Park neighborhood and at other sensitive land uses would be unaffected by this alternative, relative to the Proposed Project, because construction activities would be identical to the Proposed Project, except at Buildings 100, A, E, and B. Building 100 is not particularly close to existing sensitive land uses, but the preservation of Buildings A, E, and B would very likely reduce the construction vibration impacts, relative to the Proposed Project, experienced by the residences north of Ravenswood Avenue. Like the Proposed Project, building damage would not occur; however, for the reasons discussed in Section 3.7, *Noise*, annoyance and sleep disturbance could occur because the vibration thresholds in the ConnectMenlo EIR could be exceeded. As with the Proposed Project, implementation of Mitigation Measure NOI-3.1 would reduce vibration levels from construction activity during daytime and early-morning hours by requiring larger equipment to operate at distances greater than 15 feet from sensitive land uses to the extent feasible. The preservation of Buildings 100, A, E, and B would reduce these impacts in some cases but would not avoid the impacts at sensitive land uses, and mitigation may not be enough to reduce the impact, resulting in similar significant and unavoidable impacts with mitigation. (SU/M)

Cultural Resources

Historical Resources.[12] Preservation Alternative 3 would retain more contributors to the eligible SRI Campus historic district than the Proposed Project. Preservation Alternative 3 proposes the demolition of 19 of the 26 contributing buildings in the CRHR-eligible SRI Campus historic district. The seven buildings that contribute to the historic district that would remain are Buildings 100, A, B, E, P, S, and T. As with the Proposed Project, the Research Field, a contributing landscape feature, would be demolished, and the contributing SRI International monument would be relocated on site to an as-yet undetermined outdoor location that would be publicly accessible on the Project Site. However, in Preservation Alternative 3, the retention of seven out of 26 contributing buildings (less than one-third of contributing buildings) would still result in the loss of historic integrity of the district. The general standard for determining historic integrity in historic districts is often a ratio of at least two-thirds contributors but always more than half; Preservation Alternative 3 achieves neither metric. Although Buildings A, B, E, and P are clustered together, Buildings 100, S, and T are spread across the remainder of the Project Site and would be physically and visually separated by proposed new office/R&D buildings and a parking garage, which would affect the ability of the remaining contributors to convey a cohesive sense of the historic district's significance. Furthermore, although the contributors that would be retained represent the range of construction eras, ranging from the former Dibble General Hospital (Building 100) to the first purpose-built SRI International building (Building A), and through later construction in the 1980s (Buildings B, P, and S), the buildings are primarily office buildings and do not fully represent the range of research activities that were undertaken on the SRI Campus; for example, the cluster of health research buildings (Buildings K, L, and M) would be demolished, along with the engineering building (Building G), conference building (Building I), and the former Dibble buildings that were converted to R&D use. Due to the extent of demolition of contributing buildings in Preservation Alternative 3, the eligible historic district would not retain sufficient historic integrity to convey its significance even with the retention of Building B. Therefore, the impact of Preservation Alternative 3 on the historic district would remain significant and unavoidable.

Preservation Alternative 3 would retain and rehabilitate all three individually eligible buildings on the site: Buildings 100, A, and E.[13] Although interior and structural upgrades are anticipated to be required for all three buildings, it is not anticipated that reuse would require exterior alterations. As such, Buildings 100, A, and E would remain individually eligible for listing in the CRHR. Preservation Alternative 3 would result in a less-than-significant impact on Buildings 100, A and E, avoiding the significant and unavoidable impact under the Proposed Project.

The purpose of Preservation Alternative 3 is to consider a plan that would lessen the significant and unavoidable impacts of the Proposed Project on all three individually eligible historic resources—Buildings 100, A, and E—as well as on the eligible SRI Campus historic district. Preservation Alternative 3 would have a less-than-significant impact on individual historic resources, including Buildings 100, A, and E, because the buildings would be retained in full. However, Preservation Alternative 3 would still result in a significant and unavoidable impact on the eligible SRI Campus historic district, even with the implementation of Mitigation Measures CR-1.1, CR-1.2, and CR-1.3, which are also required for the Proposed Project and retention of Building B. Although impacts under Preservation Alternative 3 would be less than under the Proposed Project, impacts on historic resources would remain significant and unavoidable. (SU/M)

[12] Page & Turnbull. 2024. *Parkline Project SRI International Campus Historic Resources Technical Report Revised & Restated, City of Menlo Park, San Mateo County*. June 6.

[13] While Building B would be retained under Preservation Alternative 3 and is a contributor to the SRI International Campus Historic District, it is not considered an individual historic resource.

Archaeological Resources and Human Remains. Preservation Alternative 3 would result in impacts similar to those of the Proposed Project, although to a slightly lesser extent because more existing buildings would be retained, resulting in less soil disturbance. Regardless, because the majority of the Project Site would still be developed under Preservation Alternative 3, there would still be a significant cultural resources–related impact. Implementation of Mitigation Measures CR-2.1, CR-2.2, and CR-3.1 would reduce impacts to a less-than-significant level, similar to, but slightly less than, the impact under the Proposed Project. (LTS/M)

Cumulative Impacts. Preservation Alternative 3 would result in the same cumulative historic impacts as the Proposed Project. The cumulative impact would be less than significant and no mitigation is required. Preservation Alternative 3 would result in similar impacts on archaeological resources and human remains as the Proposed Project, although to a slightly lesser extent because more existing buildings would be retained. Impacts would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Tribal and Cultural Resources

Impacts on Tribal Cultural Resources. Similar to the Proposed Project, there would be no impacts on tribal cultural resources during operation of Preservation Alternative 3. However, as discussed in Section 3.9, *Tribal Cultural Resources*, construction of the Proposed Project could result in impacts during ground-disturbing activities. Impacts would be similar under Preservation Alternative 3, although to a slightly lesser extent due to the retention of existing Buildings 100, A, B, and E, resulting in slightly less ground disturbance than the Proposed Project. Similar to the Proposed Project, implementation of the Mitigation Measures CR-2.1, CR-2.2, CR-3.1, and TRC-1 would reduce impacts from Preservation Alternative 3 on tribal cultural resources to less than significant. (LTS/M)

Cumulative Impacts. Preservation Alternative 3, similar to the Proposed Project, could contribute to a cumulative loss of tribal cultural resources. However, implementation of Mitigation Measures CR-2.1, CR-2.2, CR-3.1, and TRC-1 would reduce impacts to less than significant, similar to the Proposed Project. (LTS/M)

Biological Resources

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 3 would result in no impacts related to riparian habitat and sensitive natural communities, State or federally protected wetlands and non-wetland waters, or an adopted habitat conservation plan or natural community conservation plan. No further analysis is required. (NI)

Special-Status Species and Wildlife Movement and Native Wildlife Nursery Sites. Preservation Alternative 3 would have slightly less construction impacts than the Proposed Project because the construction timeframe may be somewhat reduced because Buildings 100, A, E, and B would be retained instead of demolished. Specifically, demolition, grading, and ground-disturbing activities would still be necessary under Preservation Alternative 3; however, these activities would be reduced because the four existing buildings would be retained instead of being demolished, and the below-grade parking under Buildings O1 and O5 would no longer be constructed. It is likely that tree removal under Preservation Alternative 3 would be similar to the Proposed Project (708 trees), though it is possible that the reduced development could result in the preservation of some of the existing trees. Because Preservation Alternative 3 would also be developed on the same site as the Proposed Project, the potential for encountering sensitive species or habitat would be the same. Similar to the Project, the implementation of bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for Preservation

Alternative 3. Implementation of mitigation measures would similarly be required, including Mitigation Measures BIO-1.1 BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1 to reduce potential impacts on a species identified as special status and ensure no effect on wildlife movement and native wildlife nursery sites. Likewise, operational impacts on biological resources would be the similar, or slightly less than, the Proposed Project. (LTS/M)

Conflicts with Local Policies or Ordinances that Protect Biological Resources. Similar to the Proposed Project, Preservation Alternative 3 could result in the removal of up to approximately 708 trees, including heritage trees, and the planting of up to approximately 873 trees, resulting in an overall increase in the number of trees onsite compared to existing conditions. Like the Proposed Project, Preservation Alternative 3 would be required to comply with the city's Heritage Tree Ordinance, Sections 13.24.030 and 13.24.050, as well as the provision of replacement trees for all heritage trees removed during construction in accordance with Heritage Tree Ordinance Section 13.24.090. In addition, similar to the Project, the implementation of bird-friendly design will be required as part of the proposed zoning district to be implemented and approved for Preservation Alternative 3. Therefore, impacts related to conflicts with local policies or ordinances would be similar to the Proposed Project and less than significant. (LTS)

Geology and Soils

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 3 would result in no impacts related to surface fault rupture, landslides, loss of topsoil, lateral spreading, unique geologic features, or septic systems. No further analysis is required. (NI)

Strong Seismic Ground Shaking and Seismically Related Ground Failure. As with the Proposed Project, all new structures under Preservation Alternative 3 would be designed and constructed in compliance with the requirements of the California Building Standards Code and Menlo Park Municipal Code. As part of conformance with the California Building Standards Code, the design-level investigation would confirm the preliminary recommendations and develop detailed recommendations for design and construction. Seismic retrofit of Buildings 100, A, E, and B, if needed, would also be subject to the California Building Standards Code. Similar to the Proposed Project, Preservation Alternative 3 would result in less-than-significant impacts related to the exposure of people or structures to seismic ground shaking or liquefaction for the same reasons described for the Proposed Project. No mitigation is required. (LTS)

Substantial Soil Erosion. As with the Proposed Project, Preservation Alternative 3 would include construction activities that could lead to substantial soil erosion. However, Preservation Alternative 3 would result in fewer excavation activities because the below-grade parking areas under Buildings O1 and O5 would not be constructed. Regardless, because other excavation activities would occur, such as trenching for utilities, Preservation Alternative 3 could still result in soil erosion. Construction and operation of Preservation Alternative 3 would be subject to the same soil conditions as the Proposed Project because they would be located on the same site and would be required to comply with existing regulations that address erosion, such as NPDES Construction General Permit requirements and San Mateo County's C.3 Stormwater Technical Guidance criteria. Therefore, Preservation Alternative 3 would result in less-than-significant impacts related to soil erosion during construction and operation but to a lesser extent than the Proposed Project. No mitigation is required. (LTS)

Unstable Soil or Geologic Units. Construction of Preservation Alternative 3 would include excavation and dewatering, as well as the placement of fill material on the site, but to a lesser extent than the Proposed Project. The below-grade parking under Buildings O1 and O5 would not be construsted under Preservation Alternative 3, resulting in less excavation and dewatering than the Proposed Project. Regardless, Preservation

Alternative 3 would be subject to the same requirements regarding unstable soil and geologic units as the Proposed Project. Therefore, as with the Proposed Project, construction and operational impacts related to unstable geologic or soil units at the Project Site under Preservation Alternative 3 would be less than significant. No mitigation is required. (LTS)

Expansive Soils. As required for the Proposed Project, Preservation Alternative 3 would be designed and constructed in compliance with policies and programs to reduce impacts related to expansive soils and would meet or exceed the California Building Standards Code. Therefore, the impacts related to expansive soils at the Project Site under Preservation Alternative 3 would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Paleontological Resources. Similar to the Proposed Project, Preservation Alternative 3 could include ground-disturbing activities that could destroy unknown paleontological resources, resulting in potentially significant impacts. Although impacts would be potentially significant, these impacts would be less than the Proposed Project because below-grade parking under Buildings O1 and O5 would not occur. Implementation of Mitigation Measure GS-5.1 and GS-5.2 would ensure that the significant impacts related to unknown paleontological resources would be reduced to a less-than-significant level, similar to the Proposed Project. (LTS/M)

Cumulative Impacts. As discussed in Section 3.11, *Geology and Soils*, cumulative construction impacts with respect to geology and soils and paleontological resources would be less than significant with implementation of Mitigation Measures GS-5.1 and GS-5.2. This alternative would result in fewer impacts than the Proposed Project because the below-grade parking under Buildings O1 and O5 would not be developed; all other proposed excavation activities under the Proposed Project would occur. Therefore, excavation could still result in cumulative impacts related to unstable soils and paleontological resources during construction. Impacts as a result of Preservation Alternative 3 would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Hydrology and Water Quality

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 3 would result in no impacts related to release of pollutants due to inundation in flood hazard, tsunami, or seiche zones. (NI)

Surface Water Quality. As with the Proposed Project, construction of Preservation Alternative 3 would be in compliance with the Construction General Permit, including development and implementation of the Stormwater Pollution Prevention Plan, and local stormwater regulations, such as the Menlo Park Municipal Code and other related regulations. Compliance with the requirements would ensure that construction activities would not result in a violation of water quality standards or waste discharge requirements or otherwise result in water quality degradation. In addition, Preservation Alternative 3 would be designed and maintained in accordance with city of Menlo Park, County of San Mateo, and San Francisco Bay Regional Water Board water quality requirements, such as the San Francisco Bay MRP and SMCWPPP water quality requirements. Preservation Alternative 3 would be required to comply with existing regulations that protect surface water quality during construction and operation and, therefore, would result in less-than-significant impacts related to surface water quality for the same reasons described for the Proposed Project. (LTS)

Groundwater Quality. Preservation Alternative 3 would result in generally similar construction activities as the Proposed Project, except that Buildings 100, A, B, and E would be retained. In addition, Preservation Alternative 3 would not include below-grade parking under either Buildings O1 or O5, unlike the Proposed Project. Therefore, fewer ground-disturbing activities would occur during construction. Regardless, temporary construction dewatering could still be required in isolated areas with shallow

groundwater during excavation and trenching for foundation work. As with the Proposed Project, Preservation Alternative 3 would be required to implement Mitigation Measures HAZ-2.1 and HAZ-2.2 to reduce impacts during construction to less than significant. Impacts on water quality during operation of Preservation Alternative 3 would be less than significant, similar to the Proposed Project. (LTS/M)

Groundwater Supply and Recharge. Groundwater supplies would not be used during construction, operation, or maintenance activities. Therefore, as under the Proposed Project, construction and operation of Preservation Alternative 3 would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. This impact would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Drainage and Flooding. Preservation Alternative 3 would result in a slight decrease of open space compared to the Proposed Project. Regardless, compared to existing conditions, Preservation Alternative 3 would reduce the amount of impervious surface area across the Project Site. Therefore, like the Proposed Project, Preservation Alternative 3 would not result in changes to stormwater runoff rates or volumes compared to existing conditions. Similar to the Proposed Project, the impact related to stormwater runoff and capacity under Preservation Alternative 3 would be less than significant. No mitigation is required. (LTS)

Conflict or Obstruct a Water Resource Management Plan. As with the Proposed Project, construction and operation of Preservation Alternative 3 would be subject to existing regulatory requirements. Furthermore, groundwater supplies would not be used during construction or operation and the amount of impervious surface area within the Project Site would decrease upon completion of Preservation Alternative 3 compared to existing conditions (although compared to the Proposed Project, Preservation Alternative 3 would result in slightly more impervious surfaces due to the retention of more existing buildings and slightly less open space). Therefore, construction and operation of Preservation Alternative 3, similar to the Proposed Project, would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, resulting in less-than-significant impacts. No mitigation is required. (LTS)

Cumulative Impacts. As discussed in Section 3.12, *Hydrology and Water Quality*, cumulative impacts with respect to hydrology and water quality would be less than significant with implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2. This alternative would result in construction and operational impacts that would be similar to those of the Proposed Project because the risks to groundwater would be similar, as described above. Therefore, impacts would be less than cumulatively considerable with mitigation, similar to the Proposed Project. (LTS/M)

Hazards and Hazardous Materials

Topics Found to Have No Impact. Similar to the Proposed Project, Preservation Alternative 3 would result in no impact related to airport hazards and wildland fires. No further analysis is required. (NI)

Routine Hazardous Materials Use. Similar to the Proposed Project, construction of Preservation Alternative 3 would involve the routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and caulking. Such transport, use, and disposal must comply with applicable regulations. In addition, because of the nature of the proposed R&D uses under Preservation Alternative 3, which are the same as the Proposed Project, the possibility exists for hazards related to the handling of hazardous materials during operation. Mandatory compliance with all applicable federal, State, and local regulations pertaining to the use, storage, transport, and disposal of hazardous materials would ensure that the construction and operation of Preservation Alternative 3 would not create a significant hazard

for the public or the environment through the routine transport, use, or disposal of hazardous materials. As with the Proposed Project, the impact associated with routine hazardous materials use of Preservation Alternative 3 would be less than significant. No mitigation is required. (LTS)

Upset and Accident Conditions Involving Hazardous Materials. Preservation Alternative 3 would result in fewer construction impacts than the Proposed Project due to the retention of Buildings 100, A, B, and E and no construction of the below-grade parking areas under Buildings O1 and O5. Regardless, because residual contaminants exist on the Project Site, ground disturbance, excavation activities, and dewatering conducted during construction could encounter affected soils and contaminated groundwater. In addition, as with the Proposed Project, Preservation Alternative 3 would demolish the majority of buildings at the Project Site, with the exception of Buildings 100, A, B, and E. As such, construction activities associated with Preservation Alternative 3 would create a risk for construction personnel and the surrounding environment from exposure to hazardous building materials, which would be a potentially significant impact. Renovation of Buildings 100, A, B, and E would also require remediation of hazardous materials because the building includes regulated levels of asbestos-containing materials, lead-based paint, and PCBs. Any remediation associated with the renovation of these buildings and demolition of existing buildings would comply with existing regulations. In addition, similar to the Proposed Project, implementation of Mitigation Measures HAZ-2.1 through HAZ-2.4 under Preservation Alternative 3 would reduce potentially significant impacts related to the release of hazardous materials from affected media onsite to less than significant with mitigation. (LTS/M)

Exposure of Schools to Hazardous Materials. Construction activities associated with Preservation Alternative 3, similar to the Proposed Project, could encounter residual contamination in soil during ground disturbance as well as affected groundwater during dewatering. In addition, demolition activities could expose construction personnel and the surrounding environment to hazardous building materials, which would be a potentially significant impact. However, construction impacts would be slightly less under Preservation Alternative 3 due to the retention of Buildings 100, A, B, and E and no construction of below-grade parking areas. Similar to the Proposed Project, implementation of Mitigation Measures HAZ-2.1 through HAZ-2.3 would reduce potential impacts related to the handling of hazardous or acutely hazardous materials near schools to less than significant with mitigation. (LTS/M)

Cortese List. Contamination associated with the SRI and SRI International properties were addressed to the satisfaction of the oversight agencies. Thus, potential impacts associated with the aforementioned leaking UST listings are considered unlikely. Nonetheless, Preservation Alternative 3 would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in the potential to encounter residual affected media. Implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2, as required for the Proposed Project, would reduce potential impacts of Preservation Alternative 3 by requiring an environmental site management plan prior to the start of construction. Similar to the Proposed Project, implementation of these mitigation measures under Preservation Alternative 3 would reduce any potential exposure of construction workers or the public to residual contamination in onsite soils, if encountered, to less than significant with mitigation. (LTS/M)

Impairment of Emergency Response or Evacuation Plans. Development of Preservation Alternative 3 would not include any permanent changes to existing public roadways that provide emergency access to the Project Site or surrounding area. Compliance with city requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times. Structures associated with the Proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan; thus, development of Preservation Alternative 3 is not expected to interfere with the County of San Mateo's Emergency

Operations Plan or any evacuation route. Therefore, as with the Proposed Project, Preservation Alternative 3 would not impair implementation of, or interfere with, an adopted emergency response plan or emergency evacuation plan during construction or operation. This impact would be less than significant. No mitigation is required. (LTS)

Cumulative Impacts. As with the Proposed Project, Preservation Alternative 3 in combination with other past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site would not result in a significant cumulative impact associated with hazards or hazardous materials. The cumulative impact would be less than significant. No mitigation is required. (LTS)

Population and Housing

Unplanned Population Growth. As with the Proposed Project, operation of Preservation Alternative 3 would generate up to 3,868 net new jobs onsite, which would result in indirect population growth from approximately 293 new Menlo Park residents. The number of employees generated by Preservation Alternative 3, along with the indirect population growth, would not exceed ABAG projections.

Preservation Alternative 3 would increase the housing supply compared to existing conditions with the construction of up to 506 units at the Project Site, which would result in a total onsite population of approximately 1,200 residents. However, in comparison, Preservation Alternative 3 would result in fewer units and a smaller onsite population compared to the Proposed Project, which would include 550 units and approximately 1,305 new onsite residents. The addition of up to 1,200 new onsite residents in the city as a result of Preservation Alternative 3 would be within the anticipated population growth within the city between 2020 and 2040, resulting in less-than-significant impacts. However, Preservation Alternative 3 would result in fewer onsite housing units than the Proposed Project, which would result in a further housing deficit within the region, when considering the demand for housing generated by Preservation Alternative 3 employment. Regardless, this housing deficit across the region as a result of Preservation Alternative 3, as induced by onsite and offsite employment, could be accommodated within other allowable construction in the city and housing in the rest of the region. Within the city alone, the Housing Element (2023–2031) EIR evaluates the development of up to 4,000 new residential units within the 8-year planning period. These housing units would be constructed at various sites throughout the city; therefore, it is anticipated that some of the housing demand as a result of Preservation Alternative 3 could be accommodated within the projected housing studied in the Housing Element. Therefore, Preservation Alternative 3, similar to the Proposed Project, would not induce a substantial level of unplanned population growth, either directly or indirectly, resulting in less-than-significant impacts. No mitigation is required. (LTS)

Displacement of People or Housing. Although the majority of the existing buildings would be demolished under Preservation Alternative 3, the existing employees at the SRI International research campus could work out of the retained Buildings 100, A, E, P, S, and T and would not be displaced. In addition, no housing is currently located at the Project Site; therefore, no existing residents would be displaced. As with the Proposed Project, Preservation Alternative 2 would accommodate approximately 3,868 additional employees; therefore, Preservation Alternative 2 would accommodate substantially more employees at the Project Site than under existing conditions. In addition, no housing is currently located at the Project Site; therefore, no existing residents would be displaced. Similar to the Proposed Project, Preservation Alternative 3 would not result in the displacement of substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere, resulting in a less-than-significant impact. No mitigation is required. (LTS)

Cumulative Impacts. Housing demand, beyond that accommodated by Preservation Alternative 3, from onsite and offsite employment could be accommodated in the region. Therefore, Preservation Alternative 3 in combination with other past, present, and reasonably foreseeable future projects within the city and region would not result in a significant cumulative impact associated with unplanned population growth. The cumulative impact related to unplanned population growth would be less than significant, similar to the Proposed Project. No mitigation is required. (LTS)

Public Services

Fire Services, Police Services, School Facilities, Parks and Recreational Facilities, and Library Facilities. Under Preservation Alternative 3, existing Buildings 100, A, E, and B on the Project Site would be retained instead of demolished. However, Preservation Alternative 3 would result in the same number of employees as the Proposed Project but approximately 105 fewer residents because fewer residential units would be constructed on the Project Site with the retention of the four buildings. Specifically, Preservation Alternative 3 would reduce the number of residential units by 44 units (i.e., 506 units to be provided), and the office/R&D building square footage would be reduced by approximately 592,209 sf due to the retention of Buildings 100, A, E, and B. Therefore, there would be approximately 3,868 additional employees and 1,200 residents at the Project Site and, thus, a potential increase in demand from current conditions for fire protection services, police protection services, school facilities, parks and recreational facilities, and library facilities. Although Preservation Alternative 3 could result in increased demand for public services, demand for public service providers would be similar, or slightly reduced, compared to the Proposed Project, which would generate up to approximately 3,868 net new employees and 1,305 new residents. As a result, impacts related to fire protection services, police services, school facilities, parks and recreational facilities, or library facilities would be similar, or slightly reduced, compared to the Proposed Project's impacts.

Cumulative Impacts. Preservation Alternative 3 would not contribute to any cumulative public services impact. (LTS)

Utilities and Service Systems

Construction or Relocation of Utilities. Similar to the Proposed Project, Preservation Alternative 3 would include the construction of water, wastewater, stormwater, electricity, and telecommunication infrastructure and upgrades as well as the demolition of the 6-megawatt natural gas facility that generates power and steam for the SRI Campus. No natural gas service would be provided to structures constructed as part of Preservation Alternative 3. The installation of the new or expanded utility infrastructure would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. These construction impacts are evaluated throughout this chapter (e.g., refer to the air quality, GHG emissions, noise and vibration, and hydrology and water quality discussions above). In addition, similar to the Proposed Project, Preservation Alternative 3 would be required to comply with existing regulations, including plans, policies, and zoning requirements that promote water conservation and green building practices and would not require or result in the relocation of existing or construction of new or expanded utility infrastructure beyond that proposed as part of Preservation Alternative 3 and as analyzed throughout this chapter. Furthermore, any such utility work would be subject to standard conditions of approval like those for the Proposed Project, including city permits/review for construction (e.g., grading permits, private development review, encroachment permits). Therefore, Preservation Alternative 3 would result in less-than-significant impacts with respect to the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities. (LTS)

Water Supply, Wastewater Generation, and Solid Waste Generation. Under Preservation Alternative 3, existing Buildings 100, A, E, and B on the Project Site would be retained instead of demolished. The total square footage of the office/R&D buildings would be reduced under Preservation Alternative 3, as would the number of residential units. Preservation Alternative 3 would reduce the number of residential units by 44 units (i.e., 506 units to be provided), and the office/R&D building square footage would be reduced by approximately 592,209 sf due to the retention of Building 100, A, E, and B. As a result, Preservation Alternative 3 would result in the same number of employees as the Proposed Project but approximately 105 fewer residents. Because total building area under Preservation Alternative 3 would be reduced compared to the Proposed Project, and there would be approximately 3,868 additional employees and 1,200 net new residents at the Project Site, Preservation Alternative 3 would result in higher demand and generation rates for utilities than under existing conditions. However, demand and generation rates for utilities would still be slightly reduced compared to the Proposed Project, (which would include up to approximately 3,868 net new employees and 1,305 new residents). As a result, impacts related to water, wastewater treatment, stormwater drainage, electric power, natural gas, telecommunications, and solid waste services would be similar, or negligibly reduced compared to the Proposed. Therefore, impacts would be less than significant. (LTS)

Compliance with Solid Waste Regulations. Like the Proposed Project, Preservation Alternative 3 would be required to comply with all applicable statutes and regulations related to solid waste (AB 939 and SB 1016). Preservation Alternative 3 would adhere to these laws and require waste to be separated and tracked to divert it from landfills, with a target of recycling more than 80 percent of construction and demolition waste during Project construction. In addition, Preservation Alternative 3 would be required to adhere to the city's Construction and Demolition Recycling and zero-waste management plans during operations. Therefore, Preservation Alternative 3 would result in a less-than-significant impact with respect to compliance with federal, State, and local statutes and regulations related to solid waste. (LTS)

Cumulative Impacts. Preservation Alternative 3 would not contribute to any cumulative utilities and service systems impact. (LTS)

6.8 Impact Assessment for the Project Variant Alternatives

As noted above, this chapter includes an analysis of the alternatives to the Project Variant (i.e., No-Project Variant Alternative, Variant Preservation Alternative 1, Variant Preservation Alternative 2, Variant Preservation Alternative 3). The alternatives to the Project Variant are similar in concept to those selected for the Proposed Project; however, the Project Variant alternatives include slightly altered site plans due to the differences between the Proposed Project and the Project Variant, mainly the inclusion of 201 Ravenswood Avenue on the Project Site, resulting in an increase in housing and the addition of an emergency water reservoir. For the sake of efficiency, and to avoid repetitive text, only the key differences among the Project Variant alternatives are analyzed in the tables below. However, because the main purpose of the alternatives is to reduce the significant and unavoidable impacts on the historic resources at the Project Site, the impacts resulting from the Project Variant alternatives are discussed in more detail. Within the tables, references to "Preservation Alternatives" refer to the Variant Preservation Alternatives, not the Proposed Project.

No-Project Variant Alternative

This alterative would continue the existing uses on SRI International's research campus, which consists of 38 buildings with approximately 1.38 million sf of mostly R&D space and areas for supporting uses. The No-Project Alternative analyzed for the Project Variant would be the same as analyzed for the Proposed Project and would also include the continued use at 201 Ravenswood Avenue with the First Church of Christ, Scientist and Alpha Kids Academy. Because no construction would occur, and the existing land uses would continue to operate under the No-Project Variant Alternative, impacts would be less than those of the Proposed Project for the following topics: land use, construction air quality emissions, construction noise, cultural resources, tribal and cultural resources, biological resources, geology and soils, hydrology, hazards and hazardous materials, population and housing, public services, and utilities. However, under the No-Project Variant Alternative, the number of employees working at the Project Site would increase by approximately 2,208 compared to existing conditions, as allowed under the current CDP. Employee trips from the Chapel would remain the same as under existing conditions. The additional 2,208 employees would generate 17.7 VMT per employee because, under the current CDP, uses on the Project Site are not required to achieve any trip reduction through TDM measures and/or internalization. This would be greater than the 12.2 VMT per employee under the Proposed Project and would exceed the city's VMT impact threshold of 13.6 VMT per employee. Therefore, compared to the Project Variant and the city's VMT threshold, the No-Project Variant Alternative's VMT impact would be significant and unavoidable. (SU)

Continued operation of the onsite natural gas cogeneration plant under the No-Project Variant Alternative could lead to increased GHG emissions and inefficient energy use compared to operations under the Project Variant. The possible net increase in GHG emissions associated with the No-Project Variant Alternative would conflict with the goal of the 2022 scoping plan to reach carbon neutrality by 2045. In addition, sustainability and transportation demand features would not be implemented as part of the No-Project Variant Alternative, and any sustainability requirements for new buildings would not be implemented. Therefore, compared to the Project Variant, the No-Project Variant Alternative would not be as efficient or as sustainable. In addition, increased energy consumption during operations would result from the increased number of employees on the Project Site. As a result, the No-Project Variant Alternative would contribute to significant and unavoidable GHG and energy impacts compared to the Project Variant. (SU)

Variant Preservation Alternative 1

The analysis for Variant Preservation Alternative 1 is included in Table 6-9. The key difference between the Project Variant and Variant Preservation Alternative 1 is that, under this alternative, Building 100 and the Chapel would remain and be renovated for future uses, resulting in slightly less construction, fewer ground-disturbing activities, fewer residential units (710 units compared to 800 units), and slightly less open space. Because the main purpose of Variant Preservation Alternative 1 would be to reduce significant and unavoidable impacts on historic resources, an analysis of impacts on historic resources is provided in more detail below. For other topics, to avoid repetitive text, the analysis in Table 6-9 focuses on the differences between the Project Variant and Variant Preservation Alternative 1.

Cultural Resources – Historic

The purpose of Variant Preservation Alternative 1 is to consider a plan that would lessen the significant and unavoidable impacts of the Project Variant on two of the individually eligible historic resources—Building 100 and the Chapel. Variant Preservation Alternative 1 would retain Building 100 and demolish Buildings A and E, all of which are individually eligible historic resources. In addition, Variant Preservation

Alternative 1 would retain the Chapel, which is included within the Project Site for the Project Variant. As such, there would be no significant impact on Building 100 or the Chapel. Mitigation Measure CR-1.4, which is required for the Project Variant to document and provide interpretation and/or commemoration of the Chapel, would not be required under Variant Preservation Alternative 1.

Variant Preservation Alternative 1 proposes the demolition of 22 of the 26 contributing buildings in the CRHR-eligible SRI Campus historic district. The only four buildings that contribute to the eligible historic district that would remain are Buildings 100, P, S, and T. As under the Project Variant, the Research Field, a contributing landscape feature, would be demolished, and the contributing SRI International monument would be relocated onsite to an as-yet undetermined outdoor location that would be publicly accessible on the Project Site. The number of buildings and landscape features that would be demolished under Variant Preservation Alternative 1 would cause the eligible historic district to lose historic integrity. The four buildings proposed to be retained are not sufficiently representative of the significance of SRI International's contributions as an R&D institution and are not clustered in a manner that would remain eligible as a historic district. Furthermore, the spatial relationships and siting of the buildings that convey the sense of a large institutional campus would be lost. As such, the Project Site would no longer be eligible for listing in the CRHR as a historic district. Therefore, the impact of Variant Preservation Alternative 1 on the eligible SRI Campus historic district would remain significant and unavoidable, similar to the Project Variant. Even with implementation of Mitigation Measures CR-1.1, CR-1.2, and CR-1.3, which are also required for the Project Variant, Variant Preservation Alternative 1 would result in significant and unavoidable impacts on historic resources. (SU/M)

Table 6-9. Preservation Alternative 1 – Project Variant

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Land Use		
Conflicts with any Land Use Plan, Policy, or Regulation	Preservation Alternative 1 would be generally consistent with applicable goals and policies in the city's general plan and the regional Plan Bay Area, resulting in less-than-significant impacts. (LTS)	**Similar Impacts.** As with the Project Variant, Preservation Alternative 1 would be designed with an integrated master plan, with all parcels held in common ownership, allowing for a continuous and complementary site plan and program. Preservation Alternative 1 would result in the same development standards, including density, FAR, and heights, as the Project Variant. These standards would be established through zoning ordinance text and a zoning map amendment.
Cumulative Impacts	Preservation Alternative 1 would have no contribution to cumulative impacts on land use and planning. (LTS)	**Similar Impacts.** Because consistency with land use plans and policies is inherently a project-specific issue, and each jurisdiction would decide on project consistency at the project level, there would be no cumulative impact as a result of cumulative development in the ABAG region.
Transportation		
Conflicts with Applicable Plans and Policies (Transportation)	Preservation Alternative 1 would not conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (LTS)	**Similar Impacts.** Under Preservation Alternative 1, the pedestrian, bicycle, and transit facilities are expected to be similar to the Project Variant. Preservation Alternative 1 would continue to comply with existing regulations, including city general plan policies and zoning regulations, and would provide adequate infrastructure for bicyclists and pedestrians.
Vehicle Miles Traveled	Preservation Alternative 1 would not exceed an applicable vehicle-miles-traveled threshold of significance for office land uses or for residential land uses. (LTS)	**Similar Impacts.** Preservation Alternative 1 would result in the same number of office employees as the Project Variant (3,856 employees); therefore, VMT for office land uses would be the same. Preservation Alternative 1 would result in fewer residential units than the Project Variant (710 units compared to 800 units)—changes that would not affect the VMT conclusions. In addition, it would be subject to the same trip reduction required of the Project Variant. Therefore, its VMT impacts would be the same as those of the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Design Hazards	Preservation Alternative 1 would not substantially increase hazards due to a design feature or incompatible uses. (LTS)	**Similar Impacts.** As with the Project Variant, Preservation Alternative 1 would not involve any changes to the roadway network outside the Project Site. Furthermore, Preservation Alternative 1 would not include any design features that could cause potentially hazardous conditions. Preservation Alternative 1 would result in the same circulation configuration as the Project Variant. As with the Project Variant, Preservation Alternative 1 would be designed and reviewed in accordance with the city's Public Works Department Transportation Program.
Emergency Access	Preservation Alternative 1 would not result in inadequate emergency access. (LTS)	**Similar Impacts.** Vehicle traffic from Preservation Alternative 1 would be less than under the Project Variant and, therefore, would not inhibit emergency access to the Project Site or materially affect emergency vehicle response from a fire station. Preservation Alternative 1 would be designed and built according to local fire district standards and State building codes and reviewed by city Planning, Engineering, and Building Services Departments as well as the Menlo Park Fire Protection District. This would ensure that Preservation Alternative 1 would not impair emergency access for fire or emergency services.
Cumulative Impacts	Preservation Alternative 1 would not be a cumulatively considerable contributor to any significant environmental impact related to conflicts with applicable plans and policies, vehicle miles traveled, design hazards, or emergency access. (LTS)	**Similar Impacts.** Future development in the city would be required to comply with existing regulations that have been enacted to minimize impacts related to transportation and circulation. VMT generated by Preservation Alternative 1 would be below the city's VMT thresholds; therefore, the contribution of Preservation Alternative 1 to cumulative impacts on VMT would be less than cumulatively considerable. Other projects and future development would be required to comply with existing regulations related to design hazards and emergency access.
Air Quality		
Construction Criteria Air Pollutant Emissions	Preservation Alternative 1 would not result in a cumulative net increase in a criteria pollutant during construction for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard. (LTS/M) MITIGATION MEASURE: AQ-1.3	**Reduced Impacts.** There would be slightly less construction and a slightly smaller buildout under Preservation Alternative 1 compared to the Project Variant, which would result in a minor reduction in construction criteria pollutant emission sources. Renovation-type activities may occur at Building 100 and the Chapel, but those activities would generate minimal criteria pollutant emissions. Therefore, total construction emissions during Preservation Alternative 1 construction would most likely be similar to or less than those of the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Operational Criteria Air Pollutant Emissions	Preservation Alternative 1 would not result in a cumulative net increase in a criteria pollutant during operation for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard. (LTS/M) MITIGATION MEASURES: AQ-1.1 and AQ-1.2	**Similar Impacts.** Preservation Alternative 1 would result in the same number of employee vehicle trips, a similar amount of lab space, and a similar amount of new building square footage compared with the Project Variant. However, there would be fewer residents at the Project Site compared to the Project Variant, resulting in fewer vehicle trips and emissions. Because Preservation Alternative 1 would be a slightly smaller project than the Project Variant, operational emissions from Preservation Alternative 1 would be expected to be similar to those of the Project Variant.
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations during Construction	Preservation Alternative 1 would not expose sensitive receptors to substantial pollutant concentrations during construction. (LTS)	**Similar Impacts.** Daily construction activity for Preservation Alternative 1 could be comparable to that of the Project Variant. Renovation-type activities may occur at Building 100 and the Chapel, but those activities would generate minimal DPM emissions. The cancer risk and $PM_{2.5}$ concentrations under Preservation Alternative 1 could be less than those of the Project Variant because the construction period could be shorter and construction activities could be less intensive; thus, sensitive receptors could be exposed to less DPM. Similar to the Project Variant, Preservation Alternative 1 would not exceed BAAQMD thresholds for cancer risk, chronic hazard index, and $PM_{2.5}$ concentrations.
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations from Project Operation	Preservation Alternative 1 would not expose sensitive receptors to substantial pollutant concentrations during operation. (LTS)	**Similar Impacts.** Emissions resulting from the generators would be similar to those of the Project Variant. The amount of wet laboratory space for Preservation Alternative 1 would be similar to that of the Project Variant; thus, health risks from laboratory-generated TACs would be similar. Traffic generated by the Project Variant would have the potential to create carbon monoxide (CO) hot spots at nearby roadways and intersections. Because Preservation Alternative 1 would generate a similar amount of traffic, the CO emissions would be similar.
Other Emissions That Would Adversely Affect a Substantial Number of People	Preservation Alternative 1 would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. (LTS)	**Similar Impacts.** Preservation Alternative 1 would be similar to the amount under the Project Variant during both construction and operations because construction and operational emissions-generating activities, equipment, and vehicles would be similar.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Cumulative Impacts	Cumulative development could result in a significant environmental impact on air quality; Preservation Alternative 1 would not be a cumulatively considerable contributor to a significant environmental impact. (LTS/M) MITIGATION MEASURES: AQ-1.1, AQ-1.2, and AQ-1.3	**Similar Impacts.** Preservation Alternative 1 in combination with other development in Menlo Park would not conflict with or obstruct implementation of the applicable air quality plan and would not result in a cumulatively significant impact. With implementation of mitigation measures, Preservation Alternative 1 would not exceed BAAQMD's cumulative criteria pollutant thresholds for ROG, NO_X, and particulate matter or BAAQMD's cumulative health risk thresholds for $PM_{2.5}$ concentrations, the hazard index, or cancer risks associated with construction and operation.
Energy		
Construction	Preservation Alternative 1 would not result in environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction. (LTS)	**Similar Impacts**. With the retention of Building 100 and the Chapel, there would be slightly less construction activities under Preservation Alternative 1, which would require less construction equipment and fewer vehicles compared to the Project Variant. Renovation-type activities may occur at Building 100, but those activities would consume minimal energy resources. Therefore, total energy consumption during construction activities for Preservation Alternative 1 would most likely be similar to, or slightly less than, that of the Project Variant.
Operation	Preservation Alternative 1 would not result in environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during operation or conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency. (LTS)	**Similar Impacts**. Under Preservation Alternative 1, the total square footage of the residential buildings would be reduced. The total office/R&D square footage to be provided would remain the same, but the residential units would be reduced by 90 units due to the retention of the chapel. However, the total building area would be the same as the Project Variant; therefore, Preservation Alternative 1 would result in comparable energy use during operations. In addition, Preservation Alternative 1 would also incorporate the same sustainability measures, energy use measures, and transportation demand management measures as the Project Variant, in compliance with State and local renewable energy and energy efficiency plans.
Cumulative Impacts	Cumulative development would not result in a significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. (LTS)	**Similar Impacts**. Continued growth throughout PG&E's service area could contribute to ongoing increases in demand for electricity and natural gas. However, other cumulative development and Preservation Alternative 1 would be required to comply with all adopted State and local renewable energy and energy efficiency plans and regulations. Therefore, the cumulative impact would be less than significant.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Greenhouse Gas Emissions		
Construction GHG Emissions	Construction of Preservation Alternative 1 would not generate greenhouse gas emissions that may have a significant impact on the environment. (LTS)	**Similar Impacts**. With the retention of Building 100 and the Chapel, there would be slightly less construction activities under Preservation Alternative 1, which would require less construction equipment and fewer vehicles compared to the Project Variant. Renovation-type activities may occur at Building 100, but those activities would generate minimal GHG emissions. Therefore, total emissions generated by Preservation Alternative 1 during construction would most likely be similar to or less than those of the Project Variant. In addition, Preservation Alternative 1 would include the same feasible and practical BMPs to reduce construction-related GHGs as the Project Variant.
Operational GHG Emissions and Conflicts with Applicable GHG Emission Plans, Policies, and Regulations	Operation of Preservation Alternative 1 would not generate greenhouse gas emissions that may have a significant impact on the environment, and would not conflict with an applicable plan, policy, or regulation, adopted for purpose of reducing emissions of greenhouse gases. (LTS)	**Similar Impacts**. Operation of Preservation Alternative 1 would generate a similar amount of GHG emissions because the total building area and number of employees would be the same as under the Project Variant. There would be slightly less residents generated under Preservation Alternative 1, however, overall, the alternative would result in a comparable number of vehicle trips, similar use of electricity and natural gas, and similar levels of waste and wastewater generation. Preservation Alternative 1 would still decrease direct and indirect GHG emission compared with existing conditions, like the Project Variant. In addition, Preservation Alternative 1 would be consistent with the BAAQMD GHG thresholds for land use projects, and would not conflict with the State carbon neutrality goal for 2045, Plan Bay Area 2050, the city of Menlo Park Climate Action Plan, or the city's ordinances, general plan, or reach code.
Cumulative Impacts	Cumulative greenhouse gas impacts would be less than significant. (LTS)	**Similar Impacts**. Climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where GHGs are emitted. Climate change is the result of individual contributions of past, present, and future sources. Therefore, GHG impacts are inherently cumulative, and the above analysis is inclusive of cumulative impacts.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Noise		
Construction	Construction of Preservation Alternative 1 would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (SU/M) MITIGATION MEASURES: NOI-1.2 and NOI 1.3	**Similar Impacts.** There would be slightly less construction and a smaller buildout under Preservation Alternative 1 compared to the Project Variant, which would have a minor effect construction noise sources. Because Building 100 and the Chapel would be retained, construction noise levels in these areas would be somewhat reduced relative to the Project Variant. However, the effect would be minor when considering the overall construction noise that would nevertheless be generated at the site and affect existing sensitive land uses. Similar to the Project Variant, the substantial increase in noise during construction would be temporary, but could nevertheless adversely affect surrounding land uses that are sensitive to noise, even with mitigation.
Operations – Mechanical Equipment	Operation of mechanical equipment under Preservation Alternative 1 would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (LTS)	**Similar Impacts.** The preservation of Building 100 and the Chapel would not appreciably change noise sources during operation. Overall, mechanical equipment noise and other sources of noise during operations would be the same as under the Project Variant, except at Building 100 and the Chapel where mechanical noise would continue to occur but would not be considered significant, given compliance with the municipal code and the distance to the nearest sensitive land uses.
Operations – Traffic	Traffic operations under Preservation Alternative 1 would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (LTS)	**Similar Impacts.** Preservation Alternative 1 would result in the same number of employee vehicle trips to and from the Project Site as under the Project Variant; however, residential vehicle trips would be reduced due to the reduction in residential units. Therefore, Preservation Alternative 1 would result in generally similar, if not slightly reduced, traffic noise impacts compared to the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Vibration	Preservation Alternative 1 would generate excessive ground-borne vibration or ground-borne noise levels. (SU/M) MITIGATION MEASURE: NOI-3.1	**Similar Impacts.** Vibration impacts during construction would remain the same overall, except for in the immediate area near Building 100 and the Chapel. The localized reduction in vibration levels near Building 100 and the Chapel would be minor when considering the overall construction activities and vibration that would nevertheless be generated at the site and affect existing sensitive land uses. Therefore, the preservation of the existing buildings under Preservation Alternative 1 would not avoid vibration impacts, resulting in generally similar impacts during construction as the Project Variant.
Cultural Resources		
Historical Resources	Preservation Alternative 1 would cause a substantial adverse change in the significance of historical resources, pursuant to Section 15064.5. (SU/M) MITIGATION MEASURES: CR-1.1, CR-1.2, and CR-1.3	**Reduced Impacts.** See analysis above.
Archaeological Resources and Human Remains	Preservation Alternative 1 could cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5, and could result in a significant impact due to the disturbance of human remains. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, and CR-3.1	**Similar Impacts.** Like the Project Variant, Preservation Alternative 1 could disturb cultural resources, including archeological resources and human remains. However, there would be a slight reduction in the potential for impacts on archaeological resources under this alternative because existing office Building 100 and the Chapel would be retained, resulting in slightly less soil disturbance than under the Project Variant. Regardless, because the majority of the Project Site would still be developed (including below-grade parking areas and the emergency water reservoir), there would still be potentially significant impacts under Preservation Alternative 1.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Cumulative Impacts	Cumulative development would not result in a significant environmental impact on historic resources; Preservation Alternative 1 would not be a cumulatively considerable contributor to any significant environmental impact. Preservation Alternative 1 would not be a cumulatively considerable contributor to any significant environmental impact with implementation of mitigation measures. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, and CR-3.1	**Similar Impacts.** The Project Variant and Preservation Alternative 1 are not anticipated to result in cumulative impacts related to historic resources. Cumulative impacts with respect to archaeological resources and human remains would be less than significant with implementation of mitigation measures. This alternative would result in slightly fewer impacts than the Project Variant because existing Building 100 and the Chapel would remain, resulting in less ground disturbance. Regardless, cumulative impacts from Preservation Alternative 1 would be similar to the Project Variant.
Tribal Cultural Resources		
Impacts on Tribal Cultural Resources	Preservation Alternative 1 would not cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in PRC Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, CR-3.1, and TRC-1	**Similar Impacts.** Impacts would be similar under Preservation Alternative 1 because this alternative would result in similar ground disturbance, including excavation for below-grade parking and the emergency water reservoir. As under the Project Variant, archaeological deposits that qualify as tribal cultural resources could be encountered during excavation because similar excavation would be required under this alternative, although to a slightly lesser extent due to the retention of existing Building 100 and the Chapel. Therefore, similar impacts related to tribal cultural resources could result from construction of Preservation Alternative 1.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Cumulative Impacts	Preservation Alternative 1 Cumulative development could result in a significant environmental impact on tribal cultural resources; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact on tribal cultural resources. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, CR-3.1, and TRC-1	**Similar Impacts.** New development would be subject to existing regulations that would reduce cumulative development-related impacts on tribal cultural resources. Preservation Alternative 1, similar to the Project Variant, could contribute to a cumulative loss of tribal cultural resources. Cumulative impacts would be similar.
Biological Resources		
Special-Status Species and Wildlife Movement and Native Wildlife Nursery Sites	Preservation Alternative 1 would result in less-than-significant impacts related to special-status species and wildlife movement and native wildlife nursery sites for the same reasons described for the Project Variant. (LTS/M) MITIGATION MEASURES: BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1	**Similar impacts**. Preservation Alternative 1 would result in the same impacts to special-status species and wildlife movement and native wildlife nursery sites as the Project Variant because they would be located on the same site and have the same potential for encountering sensitive species or habitat. Preservation Alternative 1 would have slightly less construction impacts than the Project Variant because Building 100 and the Chapel would be retained instead of demolished. However, the overall similar types of demolition, grading, and ground-disturbing activities would occur, resulting in similar impacts. Therefore, the same mitigation measures would apply to Preservation Alternative 1 to reduce impacts.
Conflicts with Local Policies or Ordinances that Protect Biological Resources	Preservation Alternative 1 would result in less-than-significant impacts related to conflicts with local policies or ordinances that protect biological species. (LTS)	**Similar impacts**. Preservation Alternative 1 would result in the removal of existing trees, including heritage trees, on the Project Site. As such, Preservation Alternative 1 would be required to comply with the city's Heritage Tree Ordinance, and include the replacement and planting of new trees. In addition, all new structures under Preservation Alternative 1 would be designed and constructed in compliance with the requirements of the city's bird-friendly design measures.
Cumulative Impacts	Cumulative construction impacts with respect to biological resources would be less than significant with implementation of mitigation. (LTS/M) MITIGATION MEASURES: BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1	**Similar impacts.** Like Preservation Alternative 1, other projects in the vicinity of the Project Site would also be required to each incorporate mitigation measures and comply with permit requirements to reduce impacts related to special-status species, wildlife movement and native wildlife nursery sites, and conflicts with policies or ordinances that protect biological resources. Therefore, similar cumulative impacts would occur.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Geology and Soils		
Strong Seismic Ground Shaking and Seismically Related Ground Failure	Preservation Alternative 1 would result in less-than-significant impacts related to exposure of people or structures to seismic ground shaking or liquefaction-related hazards. (LTS)	**Similar Impacts.** All new structures under Preservation Alternative 1 would be designed and constructed in compliance with the requirements of the California Building Standards Code and Menlo Park Municipal Code. Because Building 100 and the Chapel would be retained, both buildings would be renovated to meet current seismic standards.
Substantial Soil Erosion	Preservation Alternative 1 would result in less-than-significant impacts related to soil erosion during construction and operation. (LTS)	**Similar Impacts.** Preservation Alternative 1 would be subject to the same soil conditions as the Project Variant because they would be located on the same site. In addition, a similar amount of soil disturbance would occur for the construction of the underground parking garages and the emergency water reservoir, with slightly less construction due to a smaller footprint for PG1 and R3. As with the Project Variant, Preservation Alternative 1 would be required to comply with existing regulations that address erosion.
Unstable Soil or Geologic Units	Impacts related to unstable geologic or soil units at the Project Site under Preservation Alternative 1 would be less than significant. (LTS)	**Similar Impacts.** Construction of Preservation Alternative 1 would include a similar amount of excavation and dewatering, as well as the placement of fill material on the site, compared with the Project Variant. This alternative would include similar below-grade excavation for parking garages and the emergency water reservoir, with the exception of PG1, which would be smaller to accommodate Building 100. The same applicable standards and geotechnical design-level recommendations would apply.
Expansive Soils	Impacts related to expansive soils at the Project Site under Preservation Alternative 1 would be less than significant (LTS)	**Similar Impacts.** Preservation Alternative 1 would be designed and constructed in compliance with policies and programs regarding expansive soils and meet or exceed the California Building Standards Code as well as local standards.
Paleontological Resources	Preservation Alternative 1 could include ground-disturbing activities that could destroy these unknown paleontological resources, resulting in potentially significant impacts. (LTS/M) MITIGATION MEASURES: GS-5.1 and GS-5.2	**Similar Impacts.** This alternative would result in impacts similar to those of the Project Variant because similar below-grade parking and emergency water reservoir would be developed, with the exception of PG1. Therefore, excavation could result in impacts related to paleontological resources.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Cumulative Impacts	Cumulative construction impacts with respect to geology and soils and paleontological resources would be less than significant with implementation of mitigation. (LTS/M) MITIGATION MEASURES: GS-5.1 and GS-5.2	**Similar Impacts.** Other projects in the vicinity of the Project Site would also be required to include mitigation measures in compliance with the city General Plan to reduce the impact. In addition, excavation would be limited spatially to the Project Site (i.e., footprint of the Preservation Alternative 1 buildings) and would not combine with other projects to cause a cumulative impact. Therefore, similar cumulative impacts would occur.
Hydrology and Water Quality		
Surface Water Quality	Preservation Alternative 1 would result in less-than-significant impacts related to surface water quality. (LTS)	**Similar Impacts.** As with the Project Variant, Preservation Alternative 1 would be required to comply with existing regulations that protect surface water quality during construction and operation.
Groundwater Quality	Preservation Alternative 1 would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade groundwater quality. (LTS/M) MITIGATION MEASURES: HAZ-2.1 and HAZ-2.2	**Similar Impacts.** Preservation Alternative 1 would result in construction similar to that of the Project Variant, except that Building 100 would be retained. Although slightly less ground-disturbing activities would occur during construction due to a smaller footprint for PG1 and R3, below-grade parking and the emergency water reservoir would still be constructed. Therefore, temporary construction dewatering could be required in isolated areas with shallow groundwater during excavation and trenching for foundation work and underground parking garages. As under the Project Variant, Preservation Alternative 1 would implement Mitigation Measures HAZ-2.1 and HAZ-2.2 to reduce impacts to groundwater quality during construction. Operation of Preservation Alternative 1, as with the Project Variant, would result in an increase in pervious surface area compared to existing conditions. Therefore, Preservation Alternative 1 would not violate any water quality standards or otherwise result in water quality degradation during operation.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Groundwater Supply and Recharge	Preservation Alternative 1 would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded. (LTS)	**Similar Impacts.** Groundwater supplies would not be used during construction of Preservation Alternative 1. Therefore, as under the Project Variant, construction of Preservation Alternative 1 would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. However, as with the Project Variant, the proposed emergency well under Preservation Alternative 1 is expected to withdraw groundwater from the deeper aquifer during operation. Regardless, as under the Project Variant, the emergency well would not be expected to substantially deplete groundwater supplies because it would only be used for municipal supply during emergencies when a back-up source of water is needed to compensate for interruption or reduction in deliveries to the city's usual imported supply from the SFPUC.
Drainage and Flooding	Preservation Alternative 1 would not substantially alter the existing drainage pattern of the Project Site in a manner that would result in substantial erosion or flooding, impede or redirect floodflows, contribute runoff that would exceed the capacity of the stormwater system, or provide substantial additional sources of polluted runoff. (LTS)	**Similar Impacts.** Similar to the Project Variant, Preservation Alternative 1 would reduce the amount of impervious surface area across the Project Site, compared to existing conditions. Therefore, like the Project Variant, Preservation Alternative 1 would not result in changes to stormwater runoff rates or volumes that would result in the capacity of existing or planned stormwater drainage systems being exceeded, provide substantial additional sources of polluted runoff, or impede or redirect floodflows during construction and operation.
Conflict or Obstruct a Water Resource Management Plan	Preservation Alternative 1 would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (LTS)	**Similar Impacts.** As with the Project Variant, construction and operation of Preservation Alternative 1 would be subject to existing regulatory requirements. Dewatering would be conducted temporarily during the construction phase. Furthermore, groundwater supplies would not be used during construction or operation and the amount of impervious surface area within the Project Site would decrease upon completion of Preservation Alternative 1. Although groundwater would be used during operation of Preservation Alternative 1, the Project Site overlies the San Mateo Plain subbasin, which is designated as a very low-priority basin and therefore not subject to a groundwater sustainability plan (GSP).

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Cumulative Impacts	Cumulative development could result in a significant environmental impact on hydrology and water quality; the Preservation Alternative 1 would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M) MITIGATION MEASURES: HAZ-2.1 and HAZ-2.2	**Similar Impacts.** Cumulative impacts with respect to hydrology and water quality would be less than significant with implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2. Preservation Alternative 1 would result in construction impacts that would be similar to those of the Project Variant because the risks to groundwater would be similar.
Hazards and Hazardous Materials		
Routine Hazardous Materials Use	Preservation Alternative 1 would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. (LTS)	**Similar Impacts.** Similar to the Project Variant, construction of Preservation Alternative 1 would involve the routine transport, use, and disposal of hazardous materials, which must comply with applicable regulations. In addition, because of the proposed R&D uses under Preservation Alternative 1, which are the same as the Project Variant, the possibility exists for hazards related to the handling of hazardous materials during operation. Compliance with all applicable regulations pertaining to hazardous materials would ensure that the construction and operation of Preservation Alternative 1 would not create a significant hazard for the public or the environment.
Upset and Accident Conditions Involving Hazardous Materials	Preservation Alternative 1 could create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (LTS/M) MITIGATION MEASURES: HAZ-2.1 through HAZ-2.4	**Similar Impacts.** Similar to the Project Variant, temporary construction dewatering for the below-grade parking may be required to mitigate the effects of shallow groundwater, but to a lesser extent due to the smaller footprint of PG1. Because residual contaminants exist on the Project Site, construction activities could encounter affected soils and contaminated groundwater. In addition, Preservation Alternative 1 would demolish the majority of buildings at the Project Site, with the exception of Building 100 and the Chapel, potentially exposing the surrounding environment to hazardous building materials. Renovation of Building 100 and the Chapel would also require remediation of hazardous building materials. Any remediation associated with the renovation and demolition of existing buildings would comply with existing regulations. In addition, like the Project Variant, Preservation Alternative 1 would include an emergency well to fill the emergency water reservoir. The new emergency well would be

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
		required to produce a potable water supply consistent with standards established by the State Water Resources Control Board Division of Drinking Water. Therefore, Preservation Alternative 1 would not create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation.
Exposure of Schools to Hazardous Materials	Preservation Alternative 1 could emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (LTS/M) MITIGATION MEASURES: HAZ-2.1 through HAZ-2.3	**Similar Impacts.** Preservation Alternative 1, similar to the Project Variant, could encounter residual contamination in soil during ground disturbance as well as affected groundwater during dewatering. In addition, demolition activities could expose nearby schools to hazardous building materials, which would be a potentially significant impact, although to a slightly lesser extent compared to the Project Variant due to the retention of Building 100 and the Chapel.
Cortese List	Preservation Alternative 1 would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard for the public or the environment. (LTS/M) MITIGATION MEASURES: HAZ-2.1 and HAZ-2.2	**Similar Impacts.** Preservation Alternative 1 would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in the potential to encounter residual affected media. Because the Project Site is the same location as under the Project Variant, similar impacts would occur during construction, although to a slightly lesser extent due to the reduced amount of construction activities.
Impairment of Emergency Response or Evacuation Plans	Preservation Alternative 1 would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan. (LTS)	**Similar Impacts.** Development of Preservation Alternative 1 would not include any permanent changes to existing public roadways that provide emergency access to the Project Site or surrounding area. As under the Project Variant, compliance with city requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Cumulative Impacts	Cumulative development would not result in a significant environmental impact related to hazards and hazardous materials; Preservation Alternative 1 would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)	**Similar Impacts.** Substantive hazardous materials accidents within the Project Site or in the vicinity are expected to be rare. In addition, if such incidents were to occur, only one such incident would be expected at any one time. As with the Project Variant, Preservation Alternative 1 in combination with other past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site would not result in a significant cumulative impact associated with hazards or hazardous materials.
Population and Housing		
Unplanned Population Growth	Preservation Alternative 1 would not induce a substantial level of unplanned population growth, either directly or indirectly, resulting in less-than-significant impacts. (LTS)	**Similar Impacts.** As with the Project Variant, operation of Preservation Alternative 1 would generate up to 3,856 net new jobs onsite, resulting in an additional demand for housing. However, the housing demand as a result of Preservation Alternative 1 can be accommodated in the city and the region, and the anticipated housing demand has been anticipated in regional growth plans. Preservation Alternative 1 would increase the housing supply with the construction of up to 710 units at the Project Site compared to existing conditions, with a total onsite population of approximately 1,683 residents. This would be less than the Project Variant (800 units and 1,896 residents). The addition of up to 1,683 new onsite residents in the city as a result of Preservation Alternative 1 would represent approximately 16.2 percent of the anticipated population growth within the city between 2020 and 2040, which is slightly less than the Project Variant (18.2 percent). Regardless, the Project Site is an urban infill site and served by existing infrastructure and services; it would be able to accommodate the proposed development.
Displacement of People or Housing	Preservation Alternative 1 would not result in the displacement of substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere, resulting in a less-than-significant impact. (LTS)	**Similar Impacts.** Although the majority of the existing buildings would be demolished under Preservation Alternative 1, the existing employees at the SRI International research campus could work out of the retained Buildings P, S T, and 100 and would not be displaced. In addition, no housing is currently located at the Project Site; therefore, no existing residents would be displaced.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Cumulative Impacts	Preservation Alternative 1 in combination with other past, present, and reasonably foreseeable future projects within the city and region would not result in a significant cumulative impact associated with unplanned population growth. (LTS)	**Similar Impacts.** Housing demand, beyond that accommodated by the Project Variant and Preservation Alternative 1, from onsite and offsite employment could be accommodated in the region.
Public Services		
Fire Services, Police Services, School Facilities, Parks and Recreational Facilities, and Library Facilities	Preservation Alternative 1 would not result in substantial adverse impacts associated with the provision or the new for new or physically altered fire services, police services, school facilities, parks and recreational facilities, and library facilities. (LTS)	**Similar Impacts**. Under Preservation Alternative 1, existing Building 100 and the Chapel would be retained instead of being demolished. With the retention of the Chapel, there would be a loss of 90 affordable residential units compared to the Project Variant. There would be 710 units under Preservation Alternative 1 compared to 800 units under the Project Variant, resulting in approximately 1,683 onsite residents instead of 1,896 under the Project Variant. However, the same amount of office/R&D space would be provided under Preservation Alternative 1 resulting in roughly the same number of employees at the Project Site (3,856 employees). Therefore, there would be an increase in demand from current conditions for fire protection services, police protection services, school facilities, parks and recreational facilities, and library facilities. As a result, impacts related to fire protection services, police services, school facilities, parks and recreational facilities, and library facilities would be the same, or slightly less, compared to the Project Variant impacts.
Cumulative Impacts	Preservation Alternative 1, in combination with cumulative development, would not result in a significant environmental impact related to public services or recreation. (LTS)	**Similar Impacts**. Preservation Alternative 1 in combination with other projected cumulative growth would result in increased demand on public services and facilities. As such, additional facilities could be required to accommodate the projected cumulative growth to maintain existing service levels. However, the expansion of any facilities would occur in already-urbanized areas, which would reduce the potential for significant environmental impacts. Furthermore, any environmental impacts related to future expansions would require permitting and review in accordance with CEQA, as necessary, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. Therefore, similar cumulative impacts would occur as under the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Utilities and Service Systems		
Construction or Relocation of Utilities	Preservation Alternative 1 would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction of which would cause significant environmental effects. (LTS)	**Similar Impacts**. Like the Project Variant, Preservation Alternative 1 would include the construction of water, wastewater, stormwater, electricity, and telecommunication infrastructure and upgrades, as well as the demolition of the 6-megawatt natural gas facility. No natural gas service would be provided to the structures constructed as part of Preservation Alternative 1. The installation of new or expanded utility infrastructure would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. In addition, any such utility work would be subject to standard conditions of approval like the Project Variant, including city permits/review for construction. Therefore, impacts would be similar to the Project Variant.
Water Supply, Wastewater Generation, and Solid Waste Generation	Preservation Alternative 1 would not result in significant environmental impacts related to water services, wastewater services, and solid waste generation. (LTS)	**Similar Impacts**. Preservation Alternative 1 would result in the same total building area as the Project Variant with the retention of Building 100 and the Chapel. However, with the retention of the Chapel, there would be a loss of 90 affordable residential units compared to the Project Variant resulting in approximately 1,683 onsite residents instead of 1,896 under the Project Variant. However, the same amount of office/R&D space would be provided under Preservation Alternative 1 resulting in roughly the same number of employees at the Project Site (3,856 employees). Nonetheless, there would be a net increase of approximately 3,856 employees and 1,683 residents at the Project Site, and as a result, Preservation Alternative 1 would result in a higher demand and generation rates for utilities than under existing conditions. However, demand and generation rates for utilities would be comparable to the Project Variant. As a result, impacts related to water, wastewater treatment, stormwater drainage, electric power, natural gas, telecommunications, and solid waste services would be similar compared to the Project Variant and less than significant.
Compliance with Solid Waste Regulations	Preservation Alternative 1 would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (LTS)	**Similar Impacts**. Construction and operation of Preservation Alternative 1 would comply with all applicable statutes and regulations related to solid waste, such as AB 939 and SB 1016. Preservation Alternative 1 would target recycling more than 80 percent of construction and demolition waste, and would be required to adhere to the city's Construction and Demolition Recycling Ordinance and zero-waste management plan during the occupancy phase.

Environmental Issue	Impact of Project Variant Preservation Alternative 1	Comparison to the Project Variant
Cumulative Impacts	Cumulative development would not result in significant environmental impacts on utilities and service systems. (LTS)	**Similar Impacts**. Development of past, present, and reasonably foreseeable future projects within each of the utility providers' services areas would have the potential to increase demand. However, as with the Project Variant and Preservation Alternative 1, all cumulative projects would be required to provide adequate water, wastewater, stormwater, and solid waste infrastructure for their anticipated demand, as well as comply with all applicable State and local policies, city requirements, and requirements specified under the city's zoning code related to utilities and service systems.

Notes:
NI = No Impact
LTS = Less than Significant
SU = Significant Unavoidable
SU/M = Significant Unavoidable with Mitigation
LTS/M = Less than Significant with Mitigation

Variant Preservation Alternative 2

The analysis for Variant Preservation Alternative 2 is included in Table 6-10. The key difference between the Project Variant and Variant Preservation Alternative 2 is that, under this alternative, Buildings 100, A, and E, and the Chapel would remain and be renovated for future uses, resulting in slightly less construction, fewer ground-disturbing activities, fewer residential units (510 units compared to 800 units), and slightly less open space. Because the main purpose of Variant Preservation Alternative 2 would be to reduce the significant and unavoidable impacts on historic resources, an analysis of impacts on historic resources is provided in more detail below. For other topics, to avoid repetitive text, the analysis in Table 6-10 focuses on the differences between the Project Variant and Variant Preservation Alternative 2.

Cultural Resources – Historic

The purpose of Variant Preservation Alternative 2 is to consider a plan that would lessen the significant and unavoidable impacts of the Project Variant on all four of the individually eligible historic resources—Building 100, Building A, Building E and the Chapel—by retaining all four buildings in their entirety. Variant Preservation Alternative 2 would have a less-than-significant impact on four individual historic resources (Building 100, Building A, Building E, and the Chapel). Therefore, Mitigation Measure CR-1.4, which is required for the Project Variant to document and provide interpretation and/or commemoration of the Chapel, would not be required under Variant Preservation Alternative 2. However, Variant Preservation Alternative 2 proposes the demolition of 20 of the 26 contributing buildings in the CRHR-eligible SRI Campus historic district. The six buildings that contribute to the eligible historic district that would remain are Buildings 100, A, E, P, S, and T. As under the Project Variant, the Research Field, a contributing landscape feature, would be demolished, and the contributing SRI International monument would be relocated on site to an as-yet undetermined outdoor location that would be publicly accessible on the Project Site. The number of buildings and landscape features that would be demolished under Variant Preservation Alternative 2 would cause the eligible historic district to lose historic integrity. The six buildings proposed to be retained are not sufficiently representative of the significance of SRI International's contributions as an R&D institution and are not clustered in a manner that would remain eligible as a historic district. Furthermore, the spatial relationships and siting of the buildings that convey the sense of a large institutional campus would be lost. As such, the Project Site would no longer be eligible for listing in the CRHR as a historic district. Even with implementation of Mitigation Measures CR-1.1, CR-1.2, and CR-1.3, which are also required for the Project Variant, Variant Preservation Alternative 2 would result in significant and unavoidable impacts on historic resources. (SU/M)

Table 6-10. Preservation Alternative 2 – Project Variant

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Land Use		
Conflicts with any Land Use Plan, Policy, or Regulation	Preservation Alternative 2 would be generally consistent with applicable goals and policies in the city's general plan and the regional Plan Bay Area, resulting in less-than-significant impacts. (LTS)	**Similar Impacts.** As with the Project Variant, Preservation Alternative 2 would be designed with an integrated master plan, with all parcels held in common ownership, allowing for a continuous and complementary site plan and program. Preservation Alternative 2 would result in the same development standards, including density, FAR, and heights, as the Project Variant. These standards would be established through zoning ordinance text and a zoning map amendment.
Cumulative Impacts	Preservation Alternative 2 would have no contribution to cumulative impacts on land use and planning. (LTS)	**Similar Impacts.** Because consistency with land use plans and policies is inherently a project-specific issue, and each jurisdiction would decide on project consistency at the project level, there would be no cumulative impact as a result of cumulative development in the ABAG region.
Transportation		
Conflicts with Applicable Plans and Policies (Transportation)	Preservation Alternative 2 would not conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (LTS)	**Similar Impacts.** Under Preservation Alternative 2, the pedestrian, bicycle, and transit facilities are expected to be generally similar to Project Variant. Preservation Alternative 2 would comply with existing regulations, including city general plan policies and zoning regulations, and would provide adequate infrastructure for bicyclists and pedestrians.
Vehicle Miles Traveled	Preservation Alternative 2 would not exceed an applicable vehicle-miles-traveled threshold of significance for office land uses or for residential land uses. (LTS)	**Similar Impacts.** Preservation Alternative 2 would result in the same number of office employees as the Project Variant (3,856 employees); therefore, VMT for office land uses would be the same. Preservation Alternative 2 would result in fewer residential units than the Project Variant 510 units compared to 800 units) and would generate VMT per capita similar to the Proposed Project (550 units) of 9.7 VMT per capita, which is a minimal change compared to the Project Variant's 9.6 VMT per capita. The Project Variant Preservation Alternative 2's VMT would still be below the City's residential VMT threshold of 11.2. In addition, it would be subject to the same trip reduction required of the Project Variant. Therefore, its VMT impacts would be the same as those of the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Design Hazards	Preservation Alternative 2 would not substantially increase hazards due to a design feature or incompatible uses. (LTS)	**Similar Impacts.** As with the Project Variant, Preservation Alternative 2 would not involve any changes to the roadway network outside the Project Site. The reconfiguration of the site plan would result in less connectivity within the Project Site and less efficient vehicular traffic flows because Commercial Loop Road would dead end (rather than loop through) the site, resulting in longer vehicle trips within the Project Site to access certain buildings. Regardless, Preservation Alternative 2 would not include any design features that could cause potentially hazardous conditions. As with the Project Variant, Preservation Alternative 2 would be designed and reviewed in accordance with the city's Public Works Department Transportation Program.
Emergency Access	Preservation Alternative 2 would not result in inadequate emergency access. (LTS)	**Similar Impacts.** Although there would be a general increase in vehicle traffic from Preservation Alternative 2 compared to existing conditions, it would not inhibit emergency access to the Project Site or materially affect emergency vehicle response from a fire station. Although the reconfigured site plan would result in less efficient interior vehicular traffic flows, Preservation Alternative 2 would nonetheless be designed and built according to local fire district standards and State building codes and reviewed by city Planning, Engineering, and Building Services Departments as well as the Menlo Park Fire Protection District. This would ensure that Preservation Alternative 2 would not impair emergency access for fire or emergency services.
Cumulative Impacts	Preservation Alternative 2 would not be a cumulatively considerable contributor to any significant environmental impact related to conflicts with applicable plans and policies, vehicle miles traveled, design hazards, or emergency access. (LTS)	**Similar Impacts.** Future development in the city would be required to comply with existing regulations, including Menlo Park General Plan policies and zoning regulations that have been enacted to minimize impacts related to transportation and circulation. VMT generated by Preservation Alternative 2 would be below the city's VMT thresholds; therefore, the contribution of Preservation Alternative 2 to cumulative impacts on VMT would be less than cumulatively considerable. As with Preservation Alternative 2, other projects and future development would be required to comply with existing regulations that have been enacted to minimize impacts related to design hazards and emergency access. Therefore, Preservation Alternative 2 would not result in a cumulatively considerable impact related to design hazards and emergency access.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Air Quality		
Construction Criteria Air Pollutant Emissions	Preservation Alternative 2 would not result in a cumulative net increase in a criteria pollutant during construction for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard. (LTS/M) MITIGATION MEASURE: AQ-1.3	**Reduced Impacts.** There would be slightly less construction and smaller buildout under Preservation Alternative 2 compared to the Project Variant, which would result in a minor reduction in construction criteria pollutant emission sources. Renovation-type activities may occur at Buildings 100, A, and E, and the Chapel, but those activities would generate minimal criteria pollutant emissions. Therefore, total construction emissions during Preservation Alternative 2 construction would most likely be slightly less than those of the Project Variant.
Operational Criteria Air Pollutant Emissions	Preservation Alternative 2 would not result in a cumulative net increase in a criteria pollutant during operation for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard. (LTS/M) MITIGATION MEASURES: AQ-1.1 and AQ-1.2	**Reduced Impacts.** Preservation Alternative 2 would result in the same number of employee vehicle trips, a similar amount of lab space, and a similar amount of new building square footage compared with the Project Variant. However, there would be fewer residents at the Project Site compared to the Project Variant, resulting in fewer vehicle trips and emissions. Because Preservation Alternative 2 would be a slightly smaller project than the Project Variant, operational emissions from Preservation Alternative 2 would be expected to be slightly less than those of the Project Variant.
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations during Construction	Preservation Alternative 2 would not expose sensitive receptors to substantial pollutant concentrations during construction. (LTS)	**Reduced Impacts.** Daily construction activity for Preservation Alternative 2 could be comparable to that of the Project Variant. Renovation-type activities may occur at Buildings 100, A, and E, and the Chapel, but those activities would generate minimal DPM emissions. The cancer risk and $PM_{2.5}$ concentrations under Preservation Alternative 2 could be less than those of the Project Variant because the construction period could be shorter and construction activities could be slightly less intensive; thus, sensitive receptors could be exposed to less DPM. Similar to the Project Variant, Preservation Alternative 2 would not exceed BAAQMD thresholds for cancer risk, chronic hazard index, and $PM_{2.5}$ concentrations.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations from Project Operation	Preservation Alternative 2 would not expose sensitive receptors to substantial pollutant concentrations during operation. (LTS)	**Reduced Impacts.** Emissions resulting from the generators would be similar to those of the Project Variant. The amount of wet laboratory space for Preservation Alternative 2 would be similar to that of the Project Variant; thus, health risks from laboratory-generated TACs would be similar. Traffic generated by the Project Variant would have the potential to create carbon monoxide (CO) hot spots at nearby roadways and intersections. Because Preservation Alternative 2 would generate less traffic than the Project Variant due to fewer residents associated with Preservation Alternative 2, the CO emissions would be slightly reduced.
Other Emissions That Would Adversely Affect a Substantial Number of People	Preservation Alternative 2 would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. (LTS)	**Reduced Impacts.** The amount of other emissions, including odors, from Preservation Alternative 2 would be slightly less than that of the Project Variant for both construction and operations because there would be less construction and less equipment and fewer operational emissions-generating activities and fewer vehicles.
Cumulative Impacts	Cumulative development could result in a significant environmental impact on air quality; Preservation Alternative 2 would not be a cumulatively considerable contributor to a significant environmental impact. (LTS/M) MITIGATION MEASURES: AQ-1.1, AQ-1.2, and AQ-1.3	**Reduced Impacts.** Preservation Alternative 2 in combination with other development in Menlo Park would not conflict with or obstruct implementation of the applicable air quality plan and would not result in a cumulatively significant impact. With implementation of mitigation measures, Preservation Alternative 2 would not exceed BAAQMD's cumulative criteria pollutant thresholds for ROG, NO_X, and particulate matter or BAAQMD's cumulative health risk thresholds for $PM_{2.5}$ concentrations, the hazard index, or cancer risks associated with construction and operation.
Energy		
Construction	Preservation Alternative 2 would not result in environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction. (LTS)	**Reduced Impacts**. With the retention of Buildings 100, A, and E, and the Chapel, there would be slightly less construction activities under Preservation Alternative 2, which would require less construction equipment and fewer vehicles compared to the Project Variant. Renovation-type activities may occur at Buildings 100, A, and E, but those activities would consume minimal energy resources. Therefore, total energy consumption during construction activities for Preservation Alternative 2 would most likely be similar to, or slightly less than, that of the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Operation	Preservation Alternative 2 would not result in environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during operation or conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency. (LTS)	**Reduced Impacts**. Under Preservation Alternative 2, the total square footage of the residential buildings would be reduced. The total office/R&D square footage to be provided would remain the same, but the residential units would be reduced by 290 units due to the retention of the chapel and Building E. The total building area would be reduced compared to the Project Variant; therefore, Preservation Alternative 2 would result in comparable, or slightly less, energy use during operations. In addition, Preservation Alternative 2 would also incorporate the same sustainability measures, energy use measures, and transportation demand management measures as the Project Variant, in compliance with State and local renewable energy and energy efficiency plans.
Cumulative Impacts	Cumulative development would not result in a significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. (LTS)	**Reduced Impacts**. Continued growth throughout PG&E's service area could contribute to ongoing increases in demand for electricity and natural gas. However, other cumulative development and Preservation Alternative 2 would be required to comply with all adopted State and local renewable energy and energy efficiency plans and regulations. Therefore, the cumulative impact would be less than significant.
Greenhouse Gas Emissions		
Construction GHG Emissions	Construction of Preservation Alternative 2 would not generate greenhouse gas emissions that may have a significant impact on the environment. (LTS)	**Reduced Impacts**. With the retention of Buildings 100, A and E, and the Chapel, there would be slightly less construction activities under Preservation Alternative 2, which would require less construction equipment and fewer vehicles compared to the Project Variant. Renovation-type activities may occur at Buildings 100, A, and E, but those activities would generate minimal GHG emissions. Therefore, total emissions generated by Preservation Alternative 2 during construction would most likely be similar to or less than those of the Project Variant. In addition, Preservation Alternative 2 would include the same feasible and practical BMPs to reduce construction-related GHGs as the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Operational GHG Emissions and Conflicts with Applicable GHG Emission Plans, Policies, and Regulations	Operation of Preservation Alternative 2 would not generate greenhouse gas emissions that may have a significant impact on the environment, and would not conflict with an applicable plan, policy, or regulation, adopted for purpose of reducing emissions of greenhouse gases. (LTS)	**Similar Impacts**. Operation of Preservation Alternative 2 would generate a similar amount of GHG emissions because the total office/R&D building area and number of employees would be the same as under the Project Variant. There would be less residential units and slightly less residents generated under Preservation Alternative 2. However, the alternative overall would result in a comparable GHG emissions due to the possible increase in electricity and natural gas consumption within the relatively energy-inefficient existing buildings to be renovated in lieu of new buildings that would otherwise be offset by a reduction in vehicle trips, waste, and wastewater generation from the reduction in residents. Nonetheless, Preservation Alternative 2 would still decrease direct and indirect GHG emissions compared with existing conditions, like the Project Variant. In addition, Preservation Alternative 2 would be consistent with the BAAQMD GHG thresholds for land use projects, and would not conflict with the State carbon neutrality goal for 2045, Plan Bay Area 2050, the city of Menlo Park Climate Action Plan, or the city's ordinances, general plan, or reach code.
Cumulative Impacts	Cumulative greenhouse gas impacts would be less than significant. (LTS)	**Similar Impacts**. Climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where GHGs are emitted. Climate change is the result of individual contributions of past, present, and future sources. Therefore, GHG impacts are inherently cumulative, and the above analysis is inclusive of cumulative impacts.
Noise		
Construction	Construction of Preservation Alternative 2 would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (SU/M) MITIGATION MEASURES: NOI-1.2 and NOI-1.3	**Reduced Impacts.** There would be slightly less construction and a smaller buildout under Preservation Alternative 2 compared to the Project Variant, which would have a minor effect construction noise sources. Because Buildings 100, A, and E and the Chapel would be retained, construction noise levels in these areas would be reduced relative to the Project Variant. However, the effect would be minor when considering the overall construction noise that would nevertheless be generated at the site and affect existing sensitive land uses. Similar to the Project Variant, the substantial increase in noise during construction would be temporary, but could nevertheless adversely affect surrounding land uses that are sensitive to noise, even with mitigation.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Operations – Mechanical Equipment	Operation of mechanical equipment under Preservation Alternative 2 would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (LTS)	**Similar Impacts.** The preservation of Buildings 100, A, and E and the Chapel would not appreciably change noise sources during operation. Overall, mechanical equipment noise and other sources of noise during operations would be the same as under the Project Variant, except at Buildings 100, A, and E and the Chapel, where mechanical noise would continue to occur but would not be considered significant, given compliance with the municipal code and the distance to the nearest sensitive land uses.
Operations – Traffic	Traffic operations under Preservation Alternative 2 would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (LTS)	**Similar Impacts.** Preservation Alternative 2 would result in the same number of employee vehicle trips to and from the Project Site as under the Project Variant; however, residential vehicle trips would be reduced due to the reduction in residential units. Therefore, Preservation Alternative 2 would result in generally similar, if not slightly reduced, traffic noise impacts compared to the Project Variant.
Vibration	Preservation Alternative 2 would generate excessive ground-borne vibration or ground-borne noise levels. (SU/M) MITIGATION MEASURE: NOI-3.1	**Similar Impacts.** Vibration impacts during construction would remain the same overall, except for in the immediate area near Buildings 100, A, and E and the Chapel. The localized reduction in vibration levels near the buildings to be retained would be minor when considering the overall construction activities and vibration that would nevertheless be generated at the site and affect existing sensitive land uses. Therefore, the preservation of the existing buildings under Preservation Alternative 2 would not avoid vibration impacts, resulting in generally similar impacts during construction as the Project Variant.
Cultural Resources		
Historical Resources	Preservation Alternative 2 would cause a substantial adverse change in the significance of historical resources, pursuant to Section 15064.5. (SU/M) MITIGATION MEASURES: CR-1.1, CR-1.2, and CR-1.3	**Reduced Impacts.** See analysis above.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Archaeological Resources and Human Remains	Preservation Alternative 2 could cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5, and could result in a significant impact due to the disturbance of human remains. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, and CR-3.1	**Similar Impacts.** Like the Project Variant, Preservation Alternative 2 could disturb cultural resources during construction, including archeological resources and human remains. However, there would be slightly fewer impacts under this alternative because existing office Buildings 100, A, and E, and the Chapel would be retained, resulting in slightly less soil disturbance than under the Project Variant. Regardless, similar to the Project Variant, the majority of the Project Site would still be developed (including below-grade parking areas and the emergency water reservoir), resulting in similar impacts to archaeological resources and human remains.
Cumulative Impacts	Cumulative development would not result in a significant environmental impact on historic resources; Preservation Alternative 2 would not be a cumulatively considerable contributor to any significant environmental impact. Preservation Alternative 2 would not be a cumulatively considerable contributor to any significant environmental impact with implementation of mitigation measures. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, and CR-3.1	**Similar Impacts.** The Project Variant and Preservation Alternative 2 are not anticipated to result in cumulative impacts related to historic resources. Cumulative impacts with respect to archaeological resources and human remains would be less than significant with implementation of mitigation measures. This alternative would result in slightly fewer impacts than the Project Variant because existing Buildings 100, A, and E, and the Chapel would remain, resulting in less ground disturbance. Regardless, cumulative impacts from Preservation Alternative 2 would be similar to the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Tribal Cultural Resources		
Impacts on Tribal Cultural Resources	Preservation Alternative 2 would not cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in PRC Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, CR-3.1, and TRC-1	**Similar Impacts.** Impacts would be similar under Preservation Alternative 2 because this alternative would result in similar ground disturbance, including excavation for below-grade parking and the emergency water reservoir. As under the Project Variant, archaeological deposits that qualify as tribal cultural resources could be encountered during excavation because similar excavation would be required under this alternative, although to a slightly lesser extent due to the retention of existing Buildings 100, A, and E and the Chapel. Therefore, similar impacts related to tribal cultural resources could result from construction of Preservation Alternative 2.
Cumulative Impacts	Preservation Alternative 2 Cumulative development could result in a significant environmental impact on tribal cultural resources; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact on tribal cultural resources. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, CR-3.1, and TRC-1	**Similar Impacts.** New development would be subject to existing regulations that would reduce cumulative development-related impacts on tribal cultural resources. Preservation Alternative 2, similar to the Project Variant, could contribute to a cumulative loss of tribal cultural resources. Cumulative impacts would be similar.
Biological Resources		
Special-Status Species and Wildlife Movement and Native Wildlife Nursery Sites	Preservation Alternative 2 would result in less-than-significant impacts related to special-status species and wildlife movement and native wildlife nursery sites for the same reasons described for the Project Variant. (LTS/M) MITIGATION MEASURES: BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1	**Similar impacts**. Preservation Alternative 2 would result in the same impacts to special-status species and wildlife movement and native wildlife nursery sites as the Project Variant because they would be located on the same site and have the same potential for encountering sensitive species or habitat. Preservation Alternative 2 would have slightly less construction impacts than the Project Variant because Buildings 100, A, and E, and the Chapel would be retained instead of demolished. However, the overall similar types of demolition, grading, and ground-disturbing activities would occur, resulting in similar impacts. Therefore, the same mitigation measures would apply to Preservation Alternative 2 to reduce impacts.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Conflicts with Local Policies or Ordinances that Protect Biological Resources	Preservation Alternative 2 would result in less-than-significant impacts related to conflicts with local policies or ordinances that protect biological species. (LTS)	**Similar impacts**. Preservation Alternative 2 would result in the removal of existing trees, including heritage trees, on the Project Site. As such, Preservation Alternative 2 would be required to comply with the city's Heritage Tree Ordinance, and include the replacement and planting of new trees. In addition, all new structures under Preservation Alternative 2 would be designed and constructed in compliance with the requirements of the city's bird-friendly design measures.
Cumulative Impacts	Cumulative construction impacts with respect to biological resources would be less than significant with implementation of mitigation. (LTS/M) MITIGATION MEASURES: BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1	**Similar impacts.** Like Preservation Alternative 2, other projects in the vicinity of the Project Site would also be required to each incorporate mitigation measures and comply with permit requirements to reduce impacts related to special-status species, wildlife movement and native wildlife nursery sites, and conflicts with policies or ordinances that protect biological resources. Therefore, similar cumulative impacts would occur.
Geology and Soils		
Strong Seismic Ground Shaking and Seismically Related Ground Failure	Preservation Alternative 2 would result in less-than-significant impacts related to exposure of people or structures to seismic ground shaking or liquefaction-related hazards. (LTS)	**Similar Impacts.** All new structures under Preservation Alternative 2 would be designed and constructed in compliance with the requirements of the California Building Standards Code and Menlo Park Municipal Code. Because Buildings 100, A, and E, and the Chapel would be retained, these buildings would be renovated to meet current seismic standards.
Substantial Soil Erosion	Preservation Alternative 2 would result in less-than-significant impacts related to soil erosion during construction and operation. (LTS)	**Similar Impacts.** Preservation Alternative 2 would be subject to the same soil conditions as the Project Variant because they would be located on the same site. In addition, a similar amount of soil disturbance would occur for the construction of the underground parking garages and the emergency water reservoir, although to a slightly lesser extent due to a smaller footprints for PG1, R1, and R3. As with the Project Variant, Preservation Alternative 2 would be required to comply with existing regulations that address erosion.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Unstable Soil or Geologic Units	Impacts related to unstable geologic or soil units at the Project Site under Preservation Alternative 2 would be less than significant. (LTS)	**Similar Impacts.** Construction of Preservation Alternative 2 would include a similar amount of excavation and dewatering, as well as the placement of fill material on the site, compared with the Project Variant. This alternative would include similar below-grade excavation for parking garages and the emergency water reservoir, with the exception of PG1, which would be smaller to accommodate Building 100. The same applicable standards and geotechnical design-level recommendations would apply.
Expansive Soils	Impacts related to expansive soils at the Project Site under Preservation Alternative 2 would be less than significant (LTS)	**Similar Impacts.** Preservation Alternative 2 would be designed and constructed in compliance with policies and programs regarding expansive soils and would meet or exceed the California Building Standards Code, as well as local standards.
Paleontological Resources	Preservation Alternative 2 could include ground-disturbing activities that could destroy these unknown paleontological resources, resulting in potentially significant impacts. (LTS/M) MITIGATION MEASURES: GS-5.1 and GS-5.2	**Similar Impacts.** This alternative would result in impacts similar to those of the Project Variant due to similar excavation for the below-grade parking and emergency water reservoir would be developed, with the exception of PG1. Therefore, excavation as a result of Preservation Alternative 2 could result in impacts related to paleontological resources.
Cumulative Impacts	Cumulative construction impacts with respect to geology and soils and paleontological resources would be less than significant with implementation of mitigation. (LTS/M) MITIGATION MEASURES: GS-5.1 and GS-5.2	**Similar Impacts.** Other projects in the vicinity of the Project Site would also be required to include mitigation measures in compliance with the city General Plan to reduce the impact. In addition, excavation would be limited spatially to the Project Site (i.e., footprint of the Preservation Alternative 2 buildings) and would not combine with other projects to cause a cumulative impact. Therefore, similar cumulative impacts would occur.
Hydrology and Water Quality		
Surface Water Quality	Preservation Alternative 2 would result in less-than-significant impacts related to surface water quality. (LTS)	**Similar Impacts.** Compliance with the requirements related to surface water quality would ensure that construction activities would not result in a violation of water quality standards or waste discharge requirements or otherwise result in water quality degradation. As with the Project Variant, Preservation Alternative 2 would be required to comply with existing regulations that protect surface water quality during construction and operation.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Groundwater Quality	Preservation Alternative 2 would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade groundwater quality. (LTS/M) MITIGATION MEASURES: HAZ-2.1 and HAZ-2.2	**Similar Impacts.** Preservation Alternative 2 would result in construction similar to that of the Project Variant, except that Building 100 would be retained. Although slightly less ground-disturbing activities would occur during construction due to a smaller footprint for PG1, R1, and R3, below-grade parking and the emergency water reservoir would still be constructed. Therefore, temporary construction dewatering could be required in isolated areas with shallow groundwater during excavation and trenching for foundation work and underground parking garages. As under the Project Variant, Preservation Alternative 2 would implement Mitigation Measures HAZ-2.1 and HAZ-2.2 to reduce impacts to groundwater quality during construction. Operation of Preservation Alternative 2, as with the Project Variant, would result in an increase in pervious surface area compared to existing conditions. Therefore, Preservation Alternative 2 would not violate any water quality standards or otherwise result in water quality degradation during operation.
Groundwater Supply and Recharge	Preservation Alternative 2 would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded. (LTS)	**Similar Impacts.** Groundwater supplies would not be used during construction; therefore, as under the Project Variant, construction of Preservation Alternative 2 would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. However, as with the Project Variant, the new emergency well under Preservation Alternative 2 is expected to withdraw groundwater from the deeper aquifer during operation. Regardless, as under the Project Variant, the emergency well would not be expected to substantially deplete groundwater supplies because it would only be used for municipal supply during emergencies when a back-up source of water is needed to compensate for interruption or reduction in deliveries to the city's usual imported supply from the SFPUC.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Drainage and Flooding	Preservation Alternative 2 would not substantially alter the existing drainage pattern of the Project Site in a manner that would result in substantial erosion or flooding, impede or redirect floodflows, contribute runoff that would exceed the capacity of the stormwater system, or provide substantial additional sources of polluted runoff. (LTS)	**Similar Impacts.** Similar to the Project Variant, Preservation Alternative 2 would reduce the amount of impervious surface area across the Project Site, compared to existing conditions, by introducing new landscaped areas and open spaces and reducing the area for surface parking and hardscape. Therefore, like the Project Variant, Preservation Alternative 2 would not result in changes to stormwater runoff rates or volumes that would result in the capacity of existing or planned stormwater drainage systems being exceeded, provide substantial additional sources of polluted runoff, or impede or redirect floodflows during construction and operation.
Conflict or Obstruct a Water Resource Management Plan	Preservation Alternative 2 would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (LTS)	**Similar Impacts.** As with the Project Variant, construction and operation of Preservation Alternative 2 would be subject to existing regulatory requirements. Dewatering would be conducted temporarily during the construction phase. Furthermore, groundwater supplies would not be used during construction or operation and the amount of impervious surface area within the Project Site would decrease upon completion of Preservation Alternative 2. Although groundwater would be used during operation of Preservation Alternative 2, the Project Site overlies the San Mateo Plain subbasin, which is designated as a very low-priority basin and therefore not subject to a GSP.
Cumulative Impacts	Cumulative development could result in a significant environmental impact on hydrology and water quality; the Preservation Alternative 2 would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)	**Similar Impacts.** Cumulative impacts with respect to hydrology and water quality would be less than significant with implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2. Preservation Alternative 2 would result in construction and operational impacts that would be similar to those of the Project Variant because the risks to groundwater would be similar.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Hazards and Hazardous Materials		
Routine Hazardous Materials Use	Preservation Alternative 2 would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. (LTS)	**Similar Impacts.** Similar to the Project Variant, construction of Preservation Alternative 2 would involve the routine transport, use, and disposal of hazardous materials, which must comply with applicable regulations. In addition, because of the proposed R&D uses under Preservation Alternative 2, which are the same as the Project Variant, the possibility exists for hazards related to the handling of hazardous materials during operation. Compliance with all applicable regulations pertaining to hazardous materials would ensure that the construction and operation of Preservation Alternative 2 would not create a significant hazard for the public or the environment.
Upset and Accident Conditions Involving Hazardous Materials	Preservation Alternative 2 could create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (LTS/M) MITIGATION MEASURES: HAZ-2.1 through HAZ-2.4	**Similar Impacts.** Similar to the Project Variant, temporary construction dewatering for the below-grade parking may be required to mitigate the effects of shallow groundwater, but to a lesser extent due to the smaller footprint of PG1. Because residual contaminants exist on the Project Site, construction activities could encounter affected soils and contaminated groundwater. In addition, Preservation Alternative 2 would demolish the majority of buildings at the Project Site, with the exception of Buildings 100, A, and E, and the Chapel, potentially exposing the surrounding environment to hazardous building materials. Renovation of the existing buildings to be retained would also require remediation of hazardous building materials. Any remediation associated with the renovation and demolition of existing buildings would comply with existing regulations. In addition, like the Project Variant, Preservation Alternative 2 would include an emergency well to fill the emergency water reservoir. The new emergency well would be required to produce a potable water supply consistent with standards established by the State Water Resources Control Board Division of Drinking Water. Therefore, Preservation Alternative 2 would not create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Exposure of Schools to Hazardous Materials	Preservation Alternative 2 could emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (LTS/M) MITIGATION MEASURES: HAZ-2.1 through HAZ-2.3	**Similar Impacts.** Preservation Alternative 2, similar to the Project Variant, could encounter residual contamination in soil during ground disturbance as well as affected groundwater during dewatering. In addition, demolition activities could expose nearby schools to hazardous building materials, which would be a potentially significant impact, although to a slightly lesser extent compared to the Project Variant due to the retention of Buildings 100, A, and E, and the Chapel.
Cortese List	Preservation Alternative 2 would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard for the public or the environment. (LTS/M) MITIGATION MEASURES: HAZ-2.1 and HAZ-2.2	**Similar Impacts.** Preservation Alternative 2 would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in the potential to encounter residual affected media. Because the Project Site is the same location as under the Project Variant, similar impacts would occur during construction, although to a slightly lesser extent due to the reduced amount of construction activities.
Impairment of Emergency Response or Evacuation Plans	Preservation Alternative 2 would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan. (LTS)	**Similar Impacts.** Development of Preservation Alternative 2 would not include any permanent changes to existing public roadways that provide emergency access to the Project Site or surrounding area. As under the Project Variant, compliance with city requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times.
Cumulative Impacts	Cumulative development would not result in a significant environmental impact related to hazards and hazardous materials; Preservation Alternative 2 would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)	**Similar Impacts.** Substantive hazardous materials accidents within the Project Site or in the vicinity are expected to be rare. In addition, if such incidents were to occur, only one such incident would be expected at any one time. As with the Project Variant, Preservation Alternative 2 in combination with other past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site would not result in a significant cumulative impact associated with hazards or hazardous materials.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Population and Housing		
Unplanned Population Growth	Preservation Alternative 2 would not induce a substantial level of unplanned population growth, either directly or indirectly, resulting in less-than-significant impacts. (LTS)	**Similar Impacts.** As with the Project Variant, operation of Preservation Alternative 2 would generate up to 3,856 net new jobs onsite, resulting in an additional demand for housing. However, the housing demand as a result of Preservation Alternative 2 can be accommodated in the city and the region, and the anticipated housing demand has been anticipated in regional growth plans. Preservation Alternative 2 would increase the housing supply with the construction of up to 510 units at the Project Site compared to existing conditions, with a total onsite population of approximately 1,209 residents. This would be less than the Project Variant (800 units and 1,896 residents). The addition of up to 1,209 new onsite residents in the city as a result of Preservation Alternative 2 would represent approximately 11.6 percent of the anticipated population growth within the city between 2020 and 2040, which is slightly less than the Project Variant (18.2 percent). Regardless, the Project Site is an urban infill site and served by existing infrastructure and services and would be able to accommodate the proposed development.
Displacement of People or Housing	Preservation Alternative 2 would not result in the displacement of substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere, resulting in a less-than-significant impact. (LTS)	**Similar Impacts.** Although the majority of the existing buildings would be demolished under Preservation Alternative 2, the existing employees at the SRI International research campus could work out of the retained Buildings P, S T, 100, A, and E, and would not be displaced. In addition, no housing is currently located at the Project Site; therefore, no existing residents would be displaced.
Cumulative Impacts	Preservation Alternative 2 in combination with other past, present, and reasonably foreseeable future projects within the city and region would not result in a significant cumulative impact associated with unplanned population growth. (LTS)	**Similar Impacts.** Housing demand, beyond that accommodated by the Project Variant and Preservation Alternative 2, from onsite and offsite employment could be accommodated in the region.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Public Services		
Fire Services, Police Services, School Facilities, Parks and Recreational Facilities, and Library Facilities	Preservation Alternative 2 would not result in substantial adverse impacts associated with the provision or the new for new or physically altered fire services, police services, school facilities, parks and recreational facilities, and library facilities. (LTS)	**Similar Impacts**. Under Preservation Alternative 2, existing Buildings 100, A, and E, and the Chapel would be retained instead of being demolished. With the retention of the Chapel, there would be a loss of 90 affordable residential units compared to the Project Variant. In addition, with the retention of Building E, there would be a loss of 200 units from the market-rate residential building. There would be 510 units under Preservation Alternative 2 compared to 800 units under the Project Variant, resulting in approximately 1,209 onsite residents instead of 1,896 under the Project Variant. However, the same amount of office/R&D space would be provided under Preservation Alternative 2 resulting in roughly the same number of employees at the Project Site (3,856 employees). Therefore, there would be an increase in demand from current conditions for fire protection services, police protection services, school facilities, parks and recreational facilities, and library facilities. As a result, impacts related to fire protection services, police services, school facilities, parks and recreational facilities, and library facilities would be the same, or slightly less, compared to the Project Variant impacts.
Cumulative Impacts	Preservation Alternative 2, in combination with cumulative development, would not result in a significant environmental impact related to public services or recreation. (LTS)	**Similar Impacts**. Preservation Alternative 2 in combination with other projected cumulative growth would result in increased demand on public services and facilities. As such, additional facilities could be required to accommodate the projected cumulative growth to maintain existing service levels. However, the expansion of any facilities would occur in already-urbanized areas, which would reduce the potential for significant environmental impacts. Furthermore, any environmental impacts related to future expansions would require permitting and review in accordance with CEQA, as necessary, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. Therefore, similar cumulative impacts would occur as under the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Utilities and Service Systems		
Construction or Relocation of Utilities	Preservation Alternative 2 would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction of which would cause significant environmental effects. (LTS)	**Similar Impacts**. Like the Project Variant, Preservation Alternative 2 would include the construction of water, wastewater, stormwater, electricity, and telecommunication infrastructure and upgrades, as well as the demolition of the 6-megawatt natural gas facility. No natural gas service would be provided to the structures constructed as part of Preservation Alternative 2. The installation of new or expanded utility infrastructure would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. In addition, any such utility work would be subject to standard conditions of approval like the Project Variant, including city permits/review for construction. Therefore, impacts would be similar to the Project Variant.
Water Supply, Wastewater Generation, and Solid Waste Generation	Preservation Alternative 2 would not result in significant environmental impacts related to water services, wastewater services, and solid waste generation. (LTS)	**Similar Impacts**. With the retention of Buildings 100, A, and E, and the Chapel, Preservation Alternative 2 would result in a reduced total building area when compared to the Project Variant. With the retention of the Chapel, there would be a loss of 90 affordable residential units compared to the Project Variant, and with the retention of Building E there would be a loss of 200 units. As a result, there would be approximately 1,209 onsite residents instead of 1,896 under the Project Variant. However, the same amount of office/R&D space would be provided under Preservation Alternative 2 resulting in roughly the same number of employees at the Project Site (3,856 employees). Nonetheless, there would be a net increase of approximately 3,856 employees and 1,209 residents at the Project Site, and as a result, Preservation Alternative 2 would result in a higher demand and generation rates for utilities than under existing conditions. However, demand and generation rates for utilities would be comparable to the Project Variant. As a result, impacts related to water, wastewater treatment, stormwater drainage, electric power, natural gas, telecommunications, and solid waste services would be similar compared to the Project Variant and less than significant.

Environmental Issue	Impact of Project Variant Preservation Alternative 2	Comparison to the Project Variant
Compliance with Solid Waste Regulations	Preservation Alternative 2 would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (LTS)	**Similar Impacts**. Construction and operation of Preservation Alternative 2 would comply with all applicable statutes and regulations related to solid waste, such as AB 939 and SB 1016. Preservation Alternative 2 would target recycling more than 80 percent of construction and demolition waste, and would be required to adhere to the city's Construction and Demolition Recycling Ordinance and zero-waste management plan during the occupancy phase.
Cumulative Impacts	Cumulative development would not result in significant environmental impacts on utilities and service systems. (LTS)	**Similar Impacts**. Development of past, present, and reasonably foreseeable future projects within each of the utility providers' services areas would have the potential to increase demand. However, as with the Project Variant and Preservation Alternative 2, all cumulative projects would be required to provide adequate water, wastewater, stormwater, and solid waste infrastructure for their anticipated demand, as well as comply with all applicable State and local policies, city requirements, and requirements specified under the city's zoning code related to utilities and service systems.

Notes:
NI = No Impact
LTS = Less than Significant
SU = Significant Unavoidable
SU/M = Significant Unavoidable with Mitigation
LTS/M = Less than Significant with Mitigation

Variant Preservation Alternative 3

The analysis for Variant Preservation Alternative 3 is included in Table 6-11. The key difference between the Project Variant and Variant Preservation Alternative 3 is that, under this alternative, Buildings 100, A, E, and B, and the Chapel would remain and be renovated for future uses, resulting in slightly less construction, fewer ground-disturbing activities, and fewer residential units (510 units compared to 800 units). Because the main purpose of Variant Preservation Alternative 3 is to reduce the significant and unavoidable impacts on historic resources, an analysis of impacts on historic resources is provided in more detail below. For other topics, to avoid repetitive text, the analysis in Table 6-11 focuses on the differences between the Project Variant and Variant Preservation Alternative 1.

Cultural Resources – Historic

The purpose of Variant Preservation Alternative 3 is to consider a plan that would lessen the significant and unavoidable impacts of the Project Variant on all four of the individually eligible historic resources (Building 100, Building A, Building E, and the Chapel) by retaining all four buildings in their entirety. Variant Preservation Alternative 3 would have a less-than-significant impact on four individual historic resources. Therefore, Mitigation Measure CR-1.4, which is required for the Project Variant to document and provide interpretation and/or commemoration of the Chapel, would not be required under Variant Preservation Alternative 3. However, even though Variant Preservation Alternative 3 would retain the four buildings, as well as Building B, it would still affect the eligible SRI Campus historic district, although it would retain more contributors to the eligible historic district than the Project Variant. Project Preservation Alternative 3 proposes the demolition of 19 of the 26 contributing buildings in the CRHR-eligible SRI Campus historic district. The seven buildings that contribute to the eligible historic district that would remain are Buildings 100, A, B, E, P, S, and T. As for the Project Variant, the Research Field, a contributing landscape feature, would be demolished, and the contributing SRI International monument would be relocated onsite to an as-yet undetermined outdoor location that would be publicly accessible on the Project Site. Therefore, the Project Site would no longer be eligible for listing in the CRHR as a historic district. As a result, the impact of Variant Preservation Alternative 3 on the eligible historic district would remain significant and unavoidable. (SU/M)

Table 6-11. Preservation Alternative 3 – Project Variant

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Land Use		
Conflicts with any Land Use Plan, Policy, or Regulation	Preservation Alternative 3 would be generally consistent with applicable goals and policies in the city's general plan and the regional Plan Bay Area, resulting in less-than-significant impacts. (LTS)	**Similar Impacts.** As with the Project Variant, Preservation Alternative 3 would be designed with an integrated master plan, with all parcels held in common ownership, allowing for a continuous and complementary site plan and program. Preservation Alternative 3 would result in the same development standards, including density, FAR, and heights, as the Project Variant. These standards would be established through zoning ordinance text and a zoning map amendment.
Cumulative Impacts	Preservation Alternative 3 would have no contribution to cumulative impacts on land use and planning. (LTS)	**Similar Impacts.** Because consistency with land use plans and policies is inherently a project-specific issue, and each jurisdiction would decide on project consistency at the project level, there would be no cumulative impact as a result of cumulative development in the ABAG region.
Transportation		
Conflicts with Applicable Plans and Policies (Transportation)	Preservation Alternative 3 would not conflict with an applicable plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. (LTS)	**Similar Impacts.** Under Preservation Alternative 3, the pedestrian, bicycle, and transit facilities are expected to be generally similar to Project Variant. Preservation Alternative 3 would comply with existing regulations, including city general plan policies and zoning regulations, and would provide adequate infrastructure for bicyclists and pedestrians.
Vehicle Miles Traveled	Preservation Alternative 3 would not exceed an applicable vehicle-miles-traveled threshold of significance for office land uses or for residential land uses. (LTS)	**Similar Impacts.** Preservation Alternative 3 would result in the same number of office employees as the Project Variant (3,856 employees); therefore, VMT for office land uses would be the same. Preservation Alternative 3 would result in fewer residential units than the Project Variant 510 units compared to 800 units) and would generate VMT per capita similar to the Proposed Project (550 units) of 9.7 VMT per capita, which is a minimal change compared to the Project Variant's 9.6 VMT per capita. The Project Variant Preservation Alternative 3's VMT would still be below the City's residential VMT threshold of 11.2. In addition, it would be subject to the same trip reduction required of the Project Variant. Therefore, its VMT impacts would be the same as those of the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Design Hazards	Preservation Alternative 3 would not substantially increase hazards due to a design feature or incompatible uses. (LTS)	**Similar Impacts.** As with the Project Variant, Preservation Alternative 3 would not involve any changes to the roadway network outside the Project Site. The reconfiguration of the site plan would result in less connectivity within the Project Site and less efficient vehicular traffic flows because Commercial Loop Road would dead end (rather than loop through) the site, resulting in longer vehicle trips within the Project Site to access certain buildings. Regardless, Preservation Alternative 3 would not include any design features that could cause potentially hazardous conditions. As with the Project Variant, Preservation Alternative 3 would be designed and reviewed in accordance with the city's Public Works Department Transportation Program.
Emergency Access	Preservation Alternative 3 would not result in inadequate emergency access. (LTS)	**Similar Impacts.** Although there would be a general increase in vehicle traffic from Preservation Alternative 3 compared to existing conditions, it would not inhibit emergency access to the Project Site or materially affect emergency vehicle response from a fire station. Although the reconfigured site plan would result in less efficient interior vehicular traffic flows, Preservation Alternative 3 would nonetheless be designed and built according to local fire district standards and State building codes and reviewed by city Planning, Engineering, and Building Services Departments as well as the Menlo Park Fire Protection District. This would ensure that Preservation Alternative 3 would not impair emergency access for fire or emergency services.
Cumulative Impacts	Preservation Alternative 3 would not be a cumulatively considerable contributor to any significant environmental impact related to conflicts with applicable plans and policies, vehicle miles traveled, design hazards, or emergency access. (LTS)	**Similar Impacts.** Future development in the city would be required to comply with existing regulations, including Menlo Park General Plan policies and zoning regulations that have been enacted to minimize impacts related to transportation and circulation. VMT generated by Preservation Alternative 3 would be below the city's VMT thresholds; therefore, the contribution of Preservation Alternative 3 to cumulative impacts on VMT would be less than cumulatively considerable. As with Preservation Alternative 3, other projects and future development would be required to comply with existing regulations that have been enacted to minimize impacts related to design hazards and emergency access. Therefore, Preservation Alternative 3 would not result in a cumulatively considerable impact related to design hazards and emergency access.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Air Quality		
Construction Criteria Air Pollutant Emissions	Preservation Alternative 3 would not result in a cumulative net increase in a criteria pollutant during construction for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard. (LTS/M) MITIGATION MEASURE: AQ-1.3	**Reduced Impacts.** There would be slightly less construction and smaller buildout under Preservation Alternative 3 compared to the Project Variant, which would result in a minor reduction in construction criteria pollutant emission sources. Renovation-type activities may occur at Buildings 100, A, E, and B and the Chapel, but those activities would generate minimal criteria pollutant emissions. Therefore, total construction emissions during Preservation Alternative 3 construction would most likely be slightly less than those of the Project Variant.
Operational Criteria Air Pollutant Emissions	Preservation Alternative 3 would not result in a cumulative net increase in a criteria pollutant during operation for which the Project region is classified as a nonattainment area under an applicable federal or State ambient air quality standard. (LTS/M) MITIGATION MEASURES: AQ-1.1 and AQ-1.2	**Reduced Impacts.** Preservation Alternative 3 would result in the same number of employee vehicle trips, a similar amount of lab space, and a similar amount of new building square footage compared with the Project Variant. However, there would be fewer residents at the Project Site compared to the Project Variant, resulting in fewer vehicle trips and emissions. Because Preservation Alternative 3 would be a slightly smaller project than the Project Variant, operational emissions from Preservation Alternative 3 would be expected to be slightly less than those of the Project Variant.
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations during Construction	Preservation Alternative 3 would not expose sensitive receptors to substantial pollutant concentrations during construction. (LTS)	**Reduced Impacts.** Daily construction activity for Preservation Alternative 3 could be comparable to that of the Project Variant. Renovation-type activities may occur at Buildings 100, A, E, and B and the Chapel, but those activities would generate minimal DPM emissions. The cancer risk and $PM_{2.5}$ concentrations under Preservation Alternative 3 could be less than those of the Project Variant because the construction period could be shorter and construction activities could be less intensive; thus, sensitive receptors could be exposed to less DPM. Similar to the Project Variant, Preservation Alternative 3 would not exceed BAAQMD thresholds for cancer risk, chronic hazard index, and $PM_{2.5}$ concentrations.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations from Project Operation	Preservation Alternative 3 would not expose sensitive receptors to substantial pollutant concentrations during operation. (LTS)	**Reduced Impacts.** Emissions resulting from the generators would be similar to those of the Project Variant. The amount of wet laboratory space for Preservation Alternative 3 would be similar to that of the Project Variant; thus, health risks from laboratory-generated TACs would be similar. Traffic generated by the Project Variant would have the potential to create carbon monoxide (CO) hot spots at nearby roadways and intersections. Because Preservation Alternative 3 would generate less traffic than the Project Variant due to fewer residents associated with Preservation Alternative 3, the CO emissions would be slightly reduced.
Other Emissions That Would Adversely Affect a Substantial Number of People	Preservation Alternative 3 would not result in other emissions (such as those leading to odors) that would adversely affect a substantial number of people. (LTS)	**Reduced Impacts.** The amount of other emissions, including odors, from Preservation Alternative 3 would be slightly less than that of the Project Variant for both construction and operations because there would be less construction and less equipment and fewer operational emissions-generating activities and fewer vehicles.
Cumulative Impacts	Cumulative development could result in a significant environmental impact on air quality; Preservation Alternative 3 would not be a cumulatively considerable contributor to a significant environmental impact. (LTS/M) MITIGATION MEASURES: AQ-1.1, AQ-1.2, and AQ-1.3	**Reduced Impacts.** Preservation Alternative 3 in combination with other development in Menlo Park would not conflict with or obstruct implementation of the applicable air quality plan and would not result in a cumulatively significant impact. With implementation of mitigation measures, Preservation Alternative 3 would not exceed BAAQMD's cumulative criteria pollutant thresholds for ROG, NO_X, and particulate matter or BAAQMD's cumulative health risk thresholds for $PM_{2.5}$ concentrations, the hazard index, or cancer risks associated with construction and operation.
Energy		
Construction	Preservation Alternative 3 would not result in environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction. (LTS)	**Reduced Impacts**. With the retention of Buildings 100, A, E, and B, and the Chapel, there would be slightly less construction activities under Preservation Alternative 3, which would require less construction equipment and fewer vehicles compared to the Project Variant. Renovation-type activities may occur at Buildings 100, A, E, and B, but those activities would consume minimal energy resources. Therefore, total energy consumption during construction activities for Preservation Alternative 3 would most likely be similar to, or slightly less than, that of the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Operation	Preservation Alternative 3 would not result in environmental impacts due to the wasteful, inefficient, or unnecessary consumption of energy resources during operation or conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency. (LTS)	**Reduced Impacts**. Under Preservation Alternative 3, the total square footage of the residential buildings would be reduced. The total office/R&D square footage to be provided would remain the same, but the residential units would be reduced by 290 units due to the retention of the chapel and Building E. The total building area would be reduced compared to the Project Variant; therefore, Preservation Alternative 3 would result in comparable, or slightly less, energy use during operations. In addition, Preservation Alternative 3 would also incorporate the same sustainability measures, energy use measures, and transportation demand management measures as the Project Variant, in compliance with State and local renewable energy and energy efficiency plans.
Cumulative Impacts	Cumulative development would not result in a significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. (LTS)	**Reduced Impacts**. Continued growth throughout PG&E's service area could contribute to ongoing increases in demand for electricity and natural gas. However, other cumulative development and Preservation Alternative 3 would be required to comply with all adopted State and local renewable energy and energy efficiency plans and regulations. Therefore, the cumulative impact would be less than significant.
Greenhouse Gas Emissions		
Construction GHG Emissions	Construction of Preservation Alternative 3 would not generate greenhouse gas emissions that may have a significant impact on the environment. (LTS)	**Reduced Impacts**. With the retention of Buildings 100, A, E, and B, and the Chapel, there would be slightly less construction activities under Preservation Alternative 3, which would require less construction equipment and fewer vehicles compared to the Project Variant. Renovation-type activities may occur at Buildings 100, A, E, and B, but those activities would generate minimal GHG emissions. Therefore, total emissions generated by Preservation Alternative 3 during construction would most likely be similar to or less than those of the Project Variant. In addition, Preservation Alternative 3 would include the same feasible and practical BMPs to reduce construction-related GHGs as the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Operational GHG Emissions and Conflicts with Applicable GHG Emission Plans, Policies, and Regulations	Operation of Preservation Alternative 3 would not generate greenhouse gas emissions that may have a significant impact on the environment, and would not conflict with an applicable plan, policy, or regulation, adopted for purpose of reducing emissions of greenhouse gases. (LTS)	**Similar Impacts**. Operation of Preservation Alternative 3 would generate a similar amount of GHG emissions because the total office/R&D building area and number of employees would be the same as under the Project Variant. There would be less residential units and slightly less residents generated under Preservation Alternative 3. However, the alternative overall would result in a comparable GHG emissions due to the possible increase in electricity and natural gas consumption within the relatively energy-inefficient existing buildings to be renovated in lieu of new buildings that would otherwise be offset by a reduction in vehicle trips, waste, and wastewater generation from the reduction in residents. Nonetheless, Preservation Alternative 2 would still decrease direct and indirect GHG emissions compared with existing conditions, like the Project Variant. In addition, Preservation Alternative 3 would be consistent with the BAAQMD GHG thresholds for land use projects, and would not conflict with the State carbon neutrality goal for 2045, Plan Bay Area 2050, the city of Menlo Park Climate Action Plan, or the city's ordinances, general plan, or reach code.
Cumulative Impacts	Cumulative greenhouse gas impacts would be less than significant. (LTS)	**Similar Impacts**. Climate change is a global problem, and GHG impacts are inherently cumulative. This is because GHGs contribute to the global phenomenon that is climate change, regardless of where GHGs are emitted. Climate change is the result of individual contributions of past, present, and future sources. Therefore, GHG impacts are inherently cumulative, and the above analysis is inclusive of cumulative impacts.
Noise		
Construction	Construction of Preservation Alternative 3 would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (SU/M) MITIGATION MEASURES: NOI-1.2 and NOI-1.3	**Reduced Impacts.** There would be slightly less construction and a smaller buildout under Preservation Alternative 3 compared to the Project Variant, which would have a minor effect construction noise sources. Because Buildings 100, A, E, and B and the Chapel would be retained, construction noise levels in these areas would be reduced relative to the Project Variant. However, the effect would be minor when considering the overall construction noise that would nevertheless be generated at the site and affect existing sensitive land uses. Similar to the Project Variant, the substantial increase in noise during construction would be temporary, but could nevertheless adversely affect surrounding land uses that are sensitive to noise, even with mitigation.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Operations – Mechanical Equipment	Operation of mechanical equipment under Preservation Alternative 3 would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (LTS)	**Similar Impacts.** The preservation of Buildings 100, A, E, and B and the Chapel would not appreciably change noise sources during operation. Overall, mechanical equipment noise and other sources of noise during operations would be the same as under the Project Variant, except at Buildings 100, A, E, and B and the Chapel, where mechanical noise would continue to occur but would not be considered significant, given compliance with the municipal code and the distance to the nearest sensitive land uses.
Operations – Traffic	Traffic operations under Preservation Alternative 3 would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project Site in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. (LTS)	**Similar Impacts.** Preservation Alternative 3 would result in the same number of employee vehicle trips to and from the Project Site as under the Project Variant; however, residential vehicle trips would be reduced due to the reduction in residential units. Therefore, Preservation Alternative 3 would result in generally similar, if not slightly reduced, traffic noise impacts compared to the Project Variant.
Vibration	Preservation Alternative 3 would generate excessive ground-borne vibration or ground-borne noise levels. (SU/M) MITIGATION MEASURE: NOI-3.1	**Reduced Impacts.** Vibration impacts during construction would remain the same overall, except for in the immediate area near Buildings 100, A, E, and B and the Chapel. The localized reduction in vibration levels near the buildings to be retained would be minor when considering the overall construction activities and vibration that would nevertheless be generated at the site and affect existing sensitive land uses. Therefore, the preservation of the existing buildings under Preservation Alternative 3 would not avoid vibration impacts, resulting in generally similar impacts during construction as the Project Variant.
Cultural Resources		
Historical Resources	Preservation Alternative 3 would cause a substantial adverse change in the significance of historical resources, pursuant to Section 15064.5. (SU/M) MITIGATION MEASURES: CR-1.1, CR-1.2, CR-1.3	**Reduced Impacts.** See analysis above.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Archaeological Resources and Human Remains	Preservation Alternative 3 could cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5, and could result in a significant impact due to the disturbance of human remains. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, and CR-3.1	**Similar Impacts.** Like the Project Variant, Preservation Alternative 3 could disturb cultural resources during construction, including archeological resources and human remains. However, there would be slightly fewer impacts under this alternative because existing office Buildings 100, A, E, and B, and the Chapel would be retained, resulting in slightly less soil disturbance than under the Project Variant. Regardless, similar to the Project Variant, the majority of the Project Site would still be developed (including below-grade parking areas and the emergency water reservoir), resulting in similar impacts to archaeological resources and human remains.
Cumulative Impacts	Cumulative development would not result in a significant environmental impact on historic resources; Preservation Alternative 3 would not be a cumulatively considerable contributor to any significant environmental impact. Preservation Alternative 3 would not be a cumulatively considerable contributor to any significant environmental impact with implementation of mitigation measures. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, and CR-3.1	**Similar Impacts.** The Project Variant and Preservation Alternative 3 are not anticipated to result in cumulative impacts related to historic resources. Cumulative impacts with respect to archaeological resources and human remains would be less than significant with implementation of mitigation measures. This alternative would result in slightly fewer impacts than the Project Variant because existing Buildings 100, A, E, and B, and the Chapel would remain, resulting in less ground disturbance. Regardless, cumulative impacts from Preservation Alternative 3 would be similar to the Project Variant.
Tribal Cultural Resources		

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Impacts on Tribal Cultural Resources	Preservation Alternative 3 would not cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in PRC Section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, CR-3.1, and TRC-1	**Similar Impacts.** Impacts would be similar under Preservation Alternative 3 because this alternative would result in similar ground disturbance, including excavation for below-grade parking and the emergency water reservoir. As under the Project Variant, archaeological deposits that qualify as tribal cultural resources could be encountered during excavation because similar excavation would be required under this alternative, although to a slightly lesser extent due to the retention of existing Buildings 100, A, E, and B and the Chapel. Therefore, similar impacts related to tribal cultural resources could result from construction of Preservation Alternative 3.
Cumulative Impacts	Preservation Alternative 3 Cumulative development could result in a significant environmental impact on tribal cultural resources; the Project Variant would not be a cumulatively considerable contributor to any significant environmental impact on tribal cultural resources. (LTS/M) MITIGATION MEASURES: CR-2.1, CR-2.2, CR-3.1, and TRC-1	**Similar Impacts.** New development would be subject to existing regulations that would reduce cumulative development-related impacts on tribal cultural resources. Preservation Alternative 3, similar to the Project Variant, could contribute to a cumulative loss of tribal cultural resources. Cumulative impacts would be similar.
Biological Resources		
Special-Status Species and Wildlife Movement and Native Wildlife Nursery Sites	Preservation Alternative 3 would result in less-than-significant impacts related to special-status species and wildlife movement and native wildlife nursery sites for the same reasons described for the Project Variant. (LTS/M) MITIGATION MEASURES: BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1	**Similar Impacts**. Preservation Alternative 3 would result in the same impacts to special-status species and wildlife movement and native wildlife nursery sites as the Project Variant because they would be located on the same site and have the same potential for encountering sensitive species or habitat. Preservation Alternative 3 would have slightly less construction impacts than the Project Variant because Buildings 100, A, E, and B, and the Chapel would be retained instead of demolished. However, the overall same types of demolition, grading, and ground-disturbing activities would occur, resulting in similar impacts. Therefore, the same mitigation measures would apply to Preservation Alternative 3 to reduce impacts.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Conflicts with Local Policies or Ordinances that Protect Biological Resources	Preservation Alternative 3 would result in less-than-significant impacts related to conflicts with local policies or ordinances that protect biological species. (LTS)	**Similar Impacts**. Preservation Alternative 3 would result in the removal of existing trees, including heritage trees, on the Project Site. As such, Preservation Alternative 3 would be required to comply with the city's Heritage Tree Ordinance, and include the replacement and planting of new trees. In addition, all new structures under Preservation Alternative 3 would be designed and constructed in compliance with the requirements of the city's bird-friendly design measures.
Cumulative Impacts	Cumulative construction impacts with respect to biological resources would be less than significant with implementation of mitigation. (LTS/M) MITIGATION MEASURES: BIO-1.1, BIO-1.2, BIO-1.3, BIO-1.4, BIO-1.5, and BIO-2.1	**Similar Impacts.** Like Preservation Alternative 3, other projects in the vicinity of the Project Site would also be required to each incorporate mitigation measures and comply with permit requirements to reduce impacts related to special-status species, wildlife movement and native wildlife nursery sites, and conflicts with policies or ordinances that protect biological resources. Therefore, similar cumulative impacts would occur.
Geology and Soils		
Strong Seismic Ground Shaking and Seismically Related Ground Failure	Preservation Alternative 3 would result in less-than-significant impacts related to exposure of people or structures to seismic ground shaking or liquefaction-related hazards. (LTS)	**Similar Impacts.** All new structures under Preservation Alternative 3 would be designed and constructed in compliance with the requirements of the California Building Standards Code and Menlo Park Municipal Code. Because Buildings 100, A, E, and B, and the Chapel would be retained, these buildings would be renovated to meet current seismic standards.
Substantial Soil Erosion	Preservation Alternative 3 would result in less-than-significant impacts related to soil erosion during construction and operation. (LTS)	**Similar Impacts.** Preservation Alternative 3 would be subject to the same soil conditions as the Project Variant because they would be located on the same site. In addition, a similar amount of soil disturbance would occur for the construction of the underground parking garages and the emergency water reservoir, although to a slightly lesser extent due to a smaller footprints for PG1, R1, and R3. As with the Project Variant, Preservation Alternative 3 would be required to comply with existing regulations that address erosion.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Unstable Soil or Geologic Units	Impacts related to unstable geologic or soil units at the Project Site under Preservation Alternative 3 would be less than significant. (LTS)	**Similar Impacts.** Construction of Preservation Alternative 3 would include a similar amount of excavation and dewatering, as well as the placement of fill material on the site, compared with the Project Variant. This alternative would include similar below-grade excavation for parking garages and the emergency water reservoir, with the exception of PG1, which would be smaller to accommodate Building 100. The same applicable standards and geotechnical design-level recommendations would apply.
Expansive Soils	Impacts related to expansive soils at the Project Site under Preservation Alternative 3 would be less than significant (LTS)	**Similar Impacts.** Preservation Alternative 3 would be designed and constructed in compliance with policies and programs regarding expansive soils and would meet or exceed the California Building Standards Code, as well as local standards.
Paleontological Resources	Preservation Alternative 3 could include ground-disturbing activities that could destroy these unknown paleontological resources, resulting in potentially significant impacts. (LTS/M) MITIGATION MEASURES: GS-5.1 and GS-5.2	**Similar Impacts.** This alternative would result in impacts similar to those of the Project Variant due to similar excavation for the below-grade parking and emergency water reservoir would be developed, with the exception of PG1. Therefore, excavation as a result of Preservation Alternative 3 could result in impacts related to paleontological resources.
Cumulative Impacts	Cumulative construction impacts with respect to geology and soils and paleontological resources would be less than significant with implementation of mitigation. (LTS/M) MITIGATION MEASURES: GS-5.1 and GS-5.2	**Similar Impacts.** Other projects in the vicinity of the Project Site would also be required to include mitigation measures in compliance with the city General Plan to reduce the impact. In addition, excavation would be limited spatially to the Project Site (i.e., footprint of the Preservation Alternative 3 buildings) and would not combine with other projects to cause a cumulative impact. Therefore, similar cumulative impacts would occur.
Hydrology and Water Quality		

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Surface Water Quality	Preservation Alternative 3 would result in less-than-significant impacts related to surface water quality. (LTS)	**Similar Impacts.** Compliance with the requirements related to surface water quality would ensure that construction activities would not result in a violation of water quality standards or waste discharge requirements or otherwise result in water quality degradation. As with the Project Variant, Preservation Alternative 3 would be required to comply with existing regulations that protect surface water quality during construction and operation.
Groundwater Quality	Preservation Alternative 3 would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade groundwater quality. (LTS/M) MITIGATION MEASURES: HAZ-2.1 and HAZ-2.2	**Similar Impacts.** Preservation Alternative 3 would result in construction similar to that of the Project Variant, except that Building 100 would be retained. Although slightly less ground-disturbing activities would occur during construction due to a smaller footprint for PG1, R1, and R3, below-grade parking and the emergency water reservoir would still be constructed. Therefore, temporary construction dewatering could be required in isolated areas with shallow groundwater during excavation and trenching for foundation work and underground parking garages. As under the Project Variant, Preservation Alternative 3 would implement Mitigation Measures HAZ-2.1 and HAZ-2.2 to reduce impacts to groundwater quality during construction. Operation of Preservation Alternative 3, as with the Project Variant, would result in an increase in pervious surface area compared to existing conditions. Therefore, Preservation Alternative 3 would not violate any water quality standards or otherwise result in water quality degradation during operation.
Groundwater Supply and Recharge	Preservation Alternative 3 would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin would be impeded. (LTS)	**Similar Impacts.** Groundwater supplies would not be used during construction; therefore, as under the Project Variant, construction and operation of Preservation Alternative 3 would not substantially decrease groundwater supplies or impede sustainable groundwater management of the basin. However, as with the Project Variant, the new emergency well under Preservation Alternative 3 is expected to withdraw groundwater from the deeper aquifer during operation. Regardless, as under the Project Variant, the emergency well would not be expected to substantially deplete groundwater supplies because it would only be used for municipal supply during emergencies when a back-up source of water is needed to compensate for interruption or reduction in deliveries to the city's usual imported supply from the SFPUC.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Drainage and Flooding	Preservation Alternative 3 would not substantially alter the existing drainage pattern of the Project Site in a manner that would result in substantial erosion or flooding, impede or redirect floodflows, contribute runoff that would exceed the capacity of the stormwater system, or provide substantial additional sources of polluted runoff. (LTS)	**Similar Impacts.** Similar to the Project Variant, Preservation Alternative 3 would reduce the amount of impervious surface area across the Project Site, compared to existing conditions, by introducing new landscaped areas and open spaces and reducing the area for surface parking and hardscape. Therefore, like the Project Variant, Preservation Alternative 3 would not result in changes to stormwater runoff rates or volumes that would result in the capacity of existing or planned stormwater drainage systems being exceeded, provide substantial additional sources of polluted runoff, or impede or redirect floodflows during construction and operation.
Conflict or Obstruct a Water Resource Management Plan	Preservation Alternative 3 would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (LTS)	**Similar Impacts.** As with the Project Variant, construction and operation of Preservation Alternative 3 would be subject to existing regulatory requirements. Dewatering would be conducted temporarily during the construction phase. Furthermore, groundwater supplies would not be used during construction and the amount of impervious surface area within the Project Site would decrease upon completion of Preservation Alternative 3. Although groundwater would be used during operation of Preservation Alternative 3, the Project Site overlies the San Mateo Plain subbasin, which is designated as a very low-priority basin and therefore not subject to a GSP.
Cumulative Impacts	Cumulative development could result in a significant environmental impact on hydrology and water quality; the Preservation Alternative 3 would not be a cumulatively considerable contributor to any significant environmental impact. (LTS/M)	**Similar Impacts.** Cumulative impacts with respect to hydrology and water quality would be less than significant with implementation of Mitigation Measures HAZ-2.1 and HAZ-2.2. Preservation Alternative 3 would result in construction and operational impacts that would be similar to those of the Project Variant because the risks to groundwater would be similar.
Hazards and Hazardous Materials		

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Routine Hazardous Materials Use	Preservation Alternative 3 would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials. (LTS)	**Similar Impacts.** Similar to the Project Variant, construction of Preservation Alternative 3 would involve the routine transport, use, and disposal of hazardous materials, which must comply with applicable regulations. In addition, because of the proposed R&D uses under Preservation Alternative 3, which are the same as the Project Variant, the possibility exists for hazards related to the handling of hazardous materials during operation. Compliance with all applicable regulations pertaining to hazardous materials would ensure that the construction and operation of Preservation Alternative 3 would not create a significant hazard for the public or the environment.
Upset and Accident Conditions Involving Hazardous Materials	Preservation Alternative 3 could create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. (LTS/M) MITIGATION MEASURES: HAZ-2.1 through HAZ-2.4	**Similar Impacts.** Similar to the Project Variant, temporary construction dewatering for the below-grade parking may be required to mitigate the effects of shallow groundwater, but to a lesser extent due to the smaller footprint of PG1. Because residual contaminants exist on the Project Site, construction activities could encounter affected soils and contaminated groundwater. In addition, Preservation Alternative 3 would demolish the majority of buildings at the Project Site, with the exception of Buildings 100, A, E, and B, and the Chapel, exposing the surrounding environment to hazardous building materials. Renovation of the existing buildings to be retained would also require remediation of hazardous building materials. Any remediation associated with the renovation and demolition of existing buildings would comply with existing regulations. In addition, like the Project Variant, Preservation Alternative 3 would include an emergency well to fill the emergency water reservoir. The new emergency well would be required to produce a potable water supply consistent with standards established by the State Water Resources Control Board Division of Drinking Water. Therefore, Preservation Alternative 3 would not create a significant hazard for the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during operation.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Exposure of Schools to Hazardous Materials	Preservation Alternative 3 could emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. (LTS/M) MITIGATION MEASURES: HAZ-2.1 through HAZ-2.3	**Similar Impacts.** Preservation Alternative 3, similar to the Project Variant, could encounter residual contamination in soil during ground disturbance as well as affected groundwater during dewatering. In addition, demolition activities could expose nearby schools to hazardous building materials, which would be a potentially significant impact, although to a slightly lesser extent compared to the Project Variant due to the retention of Buildings 100, A, E, and B, and the Chapel.
Cortese List	Preservation Alternative 3 would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, could create a significant hazard for the public or the environment. (LTS/M) MITIGATION MEASURES: HAZ-2.1 and HAZ-2.2	**Similar Impacts.** Preservation Alternative 3 would be located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in the potential to encounter residual affected media. Because the Project Site is the same location as under the Project Variant, similar impacts would occur during construction, although to a slightly lesser extent due to the reduced amount of construction activities.
Impairment of Emergency Response or Evacuation Plans	Preservation Alternative 3 would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan. (LTS)	**Similar Impacts.** Development of Preservation Alternative 3 would not include any permanent changes to existing public roadways that provide emergency access to the Project Site or surrounding area. As under the Project Variant, compliance with city requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times.
Cumulative Impacts	Cumulative development would not result in a significant environmental impact related to hazards and hazardous materials; Preservation Alternative 3 would not be a cumulatively considerable contributor to any significant environmental impact. (LTS)	**Similar Impacts.** Substantive hazardous materials accidents within the Project Site or in the vicinity are expected to be rare. In addition, if such incidents were to occur, only one such incident would be expected at any one time. As with the Project Variant, Preservation Alternative 3 in combination with other past, present, and reasonably foreseeable future projects in the immediate vicinity of the Project Site would not result in a significant cumulative impact associated with hazards or hazardous materials.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Population and Housing		
Unplanned Population Growth	Preservation Alternative 3 would not induce a substantial level of unplanned population growth, either directly or indirectly, resulting in less-than-significant impacts. (LTS)	**Similar Impacts.** As with the Project Variant, operation of Preservation Alternative 3 would generate up to 3,856 net new jobs onsite, resulting in an additional demand for housing. However, the housing demand as a result of Preservation Alternative 3 can be accommodated in the city and the region, and the anticipated housing demand has been anticipated in regional growth plans. Preservation Alternative 3 would increase the housing supply with the construction of up to 510 units at the Project Site compared to existing conditions, with a total onsite population of approximately 1,209 residents. This would be less than the Project Variant (800 units and 1,896 residents). The addition of up to 1,209 new onsite residents in the city as a result of Preservation Alternative 3 would represent approximately 11.6 percent of the anticipated population growth within the city between 2020 and 2040, which is slightly less than the Project Variant (18.2 percent). Regardless, the Project Site is an urban infill site and served by existing infrastructure and services and would be able to accommodate the proposed development.
Displacement of People or Housing	Preservation Alternative 3 would not result in the displacement of substantial numbers of people or housing, necessitating the construction of replacement housing elsewhere, resulting in a less-than-significant impact. (LTS)	**Similar Impacts.** Although the majority of the existing buildings would be demolished under Preservation Alternative 3, the existing employees at the SRI International research campus could work out of the retained Buildings P, S T, 100, A, E, and B and would not be displaced. In addition, no housing is currently located at the Project Site; therefore, no existing residents would be displaced.
Cumulative Impacts	Preservation Alternative 3 in combination with other past, present, and reasonably foreseeable future projects within the city and region would not result in a significant cumulative impact associated with unplanned population growth. (LTS)	**Similar Impacts.** Housing demand, beyond that accommodated by the Project Variant and Preservation Alternative 3, from onsite and offsite employment could be accommodated in the region.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Public Services		
Fire Services, Police Services, School Facilities, Parks and Recreational Facilities, and Library Facilities	Preservation Alternative 3 would not result in substantial adverse impacts associated with the provision or the new for new or physically altered fire services, police services, school facilities, parks and recreational facilities, and library facilities. (LTS)	**Similar Impacts**. Under Preservation Alternative 3, existing Buildings 100, A, E, and B, and the Chapel would be retained instead of being demolished. With the retention of the Chapel, there would be a loss of 90 affordable residential units compared to the Project Variant. In addition, with the retention of Building E, there would be a loss of 200 units from the market-rate residential building. There would be 510 units under Preservation Alternative 3 compared to 800 units under the Project Variant, resulting in approximately 1,209 onsite residents instead of 1,896 under the Project Variant. However, the same number of office/R&D space would be provided under Preservation Alternative 3 resulting in roughly the same number of employees at the Project Site (3,856 employees). Therefore, there would be an increase in demand from current conditions for fire protection services, police protection services, school facilities, parks and recreational facilities, and library facilities. As a result, impacts related to fire protection services, police services, school facilities, parks and recreational facilities, and library facilities would be the same, or slightly less, compared to the Project Variant impacts.
Cumulative Impacts	Preservation Alternative 3, in combination with cumulative development, would not result in a significant environmental impact related to public services or recreation. (LTS)	**Similar Impacts**. Preservation Alternative 3 in combination with other projected cumulative growth would result in increased demand on public services and facilities. As such, additional facilities could be required to accommodate the projected cumulative growth to maintain existing service levels. However, the expansion of any facilities would occur in already-urbanized areas, which would reduce the potential for significant environmental impacts. Furthermore, any environmental impacts related to future expansions would require permitting and review in accordance with CEQA, as necessary, which would ensure that any environmental impacts would be disclosed and mitigated to the extent feasible. Therefore, similar cumulative impacts would occur as under the Project Variant.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Utilities and Service Systems		
Construction or Relocation of Utilities	Preservation Alternative 3 would not require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction of which would cause significant environmental effects. (LTS)	**Similar Impacts**. Like the Project Variant, Preservation Alternative 3 would include the construction of water, wastewater, stormwater, electricity, and telecommunication infrastructure and upgrades, as well as the demolition of the 6-megawatt natural gas facility. No natural gas service would be provided to the structures constructed as part of Preservation Alternative 3. The installation of new or expanded utility infrastructure would require excavation, trenching, soil movement, and other activities that are typical during construction of development projects. In addition, any such utility work would be subject to standard conditions of approval like the Project Variant, including city permits/review for construction. Therefore, impacts would be similar to the Project Variant.
Water Supply, Wastewater Generation, and Solid Waste Generation	Preservation Alternative 3 would not result in significant environmental impacts related to water services, wastewater services, and solid waste generation. (LTS)	**Similar Impacts**. With the retention of Buildings 100, A, E, and B, and the Chapel, Preservation Alternative 3 would result in a reduced total building area when compared to the Project Variant. With the retention of the Chapel, there would be a loss of 90 affordable residential units compared to the Project Variant, and with the retention of Building E, there would be a loss of 200 units. As a result, there would be approximately 1,209 onsite residents instead of 1,896 under the Project Variant. However, the same number of employees would be generated at the Project Site (3,856 employees) under Preservation Alternative 3 as the Project Variant. Nonetheless, there would be a net increase of approximately 3,856 employees and 1,209 residents at the Project Site, and as a result, Preservation Alternative 3 would result in a higher demand and generation rates for utilities than under existing conditions. However, demand and generation rates for utilities would be comparable to the Project Variant. As a result, impacts related to water, wastewater treatment, stormwater drainage, electric power, natural gas, telecommunications, and solid waste services would be similar compared to the Project Variant and less than significant.
Compliance with Solid Waste Regulations	Preservation Alternative 3 would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. (LTS)	**Similar Impacts**. Construction and operation of Preservation Alternative 3 would comply with all applicable statutes and regulations related to solid waste, such as AB 939 and SB 1016. Preservation Alternative 3 would target recycling more than 80 percent of construction and demolition waste, and would be required to adhere to the city's Construction and Demolition Recycling Ordinance and zero-waste management plan during the occupancy phase.

Environmental Issue	Impact of Project Variant Preservation Alternative 3	Comparison to the Project Variant
Cumulative Impacts	Cumulative development would not result in significant environmental impacts on utilities and service systems. (LTS)	**Similar Impacts**. Development of past, present, and reasonably foreseeable future projects within each of the utility providers' services areas would have the potential to increase demand. However, as with the Project Variant and Preservation Alternative 3, all cumulative projects would be required to provide adequate water, wastewater, stormwater, and solid waste infrastructure for their anticipated demand, as well as comply with all applicable State and local policies, city requirements, and requirements specified under the city's zoning code related to utilities and service systems.

Notes:
NI = No Impact
LTS = Less than Significant
SU = Significant Unavoidable
SU/M = Significant Unavoidable with Mitigation
LTS/M = Less than Significant with Mitigation

6.9 Comparison of Impacts

Comparison of Proposed Project and Alternatives

Table 6-12 summarizes the comparison of the Proposed Project alternatives analysis and determinations described in Section 6.7, *Impact Assessment for the Proposed Project Alternatives.* The table includes the impact conclusions by subtopic, along with a comparison of impacts to the Proposed Project. Impacts of the Proposed Project alternatives are either similar to, less than, or more than those of the Proposed Project.

Comparison of Variant and Alternatives

Table 6-13 summarizes the comparison of the Project Variant alternatives analysis and determinations described in Section 6.8, *Impact Assessment for the Project Variant Alternatives.* The table includes the impact conclusions by subtopic, along with a comparison of impacts to the Project Variant. Impacts of the Project Variant alternatives are either similar to, less than, or more than those of the Project Variant.

6.10 Environmentally Superior Alternative

PRC Section 21002 requires lead agencies to adopt feasible mitigation measures or feasible environmentally superior alternatives to substantially lessen or avoid otherwise significant adverse environmental effects, unless specific economic, social, or other conditions make such mitigation measures or alternatives infeasible. CEQA also requires an environmentally superior alternative to be identified among the alternatives analyzed. In general, the environmentally superior alternative is the project that avoids or substantially lessens some or all of the significant and unavoidable impacts of a proposed project (State CEQA Guidelines Section 15126.6). For purposes of this discussion, because the alternatives to the Proposed Project and the alternatives to the Project Variant would generally be the same, with only some differences in the site plan, and would result in the same similar impacts, both are discussed here.

For comparing the extent to which the alternatives would reduce or avoid the significant impacts of the Proposed Project and Project Variant, the No-Project Alternative for both the Proposed Project and the Project Variant would be the environmentally superior alternative for most (but not all) topics for the reasons discussed below. Because no new construction would occur under this alternative, the significant and unavoidable impacts associated with the demolition of historic resources, construction noise, and construction vibration would be avoided. Other construction-related impacts that would require mitigation measures under the Proposed Project and the Project Variant would also not occur, such as impacts on archaeological and paleontological resources and potential impacts on groundwater quality. These would be avoided under the No-Project Alternative. However, because employment would be anticipated to increase at the Project Site under the No-Project Alternatives compared to existing conditions and no trip reduction requirements would be implemented, the No-Project Alternatives would result in new significant and unavoidable increased VMT impacts relative to the Proposed Project and the Project Variant. In addition, because the No-Project Alternatives would result in continued operation of the onsite natural gas cogeneration plant, this could lead to increased GHG emissions and inefficient energy use compared to operations under the Proposed Project and Project Variant. Furthermore,

sustainability and transportation demand features would not be implemented as part of the No-Project Variant Alternative, and any sustainability requirements that apply to new buildings would not be implemented. Therefore, compared to the Proposed Project and the Project Variant, the No-Project Alternatives would not be as efficient or as sustainable. As a result, the No-Project Alternatives would contribute to significant and unavoidable GHG and energy impacts compared to the Project Variant. Therefore, it is unlikely that the No-Project Alternatives would be the environmentally superior alternatives. Regardless, CEQA requires the EIR to also specify which of the build alternatives would be environmentally superior (State CEQA Guidelines Section 15126.6[e][2]).

As shown in Tables 6-12 and 6-13, which summarize the impacts of the preservation (i.e., build) alternatives compared to the impacts of the Proposed Project and Project Variant, all topics would result in the same significance conclusions under the build alternatives. None of the proposed alternatives would lessen the impacts of the Proposed Project or the Project Variant to a level of less than significant. All impacts that would be significant and unavoidable under the Proposed Project or Project Variant would continue to be significant and unavoidable under the various preservation build alternatives. Although impacts associated with construction (such as construction noise and construction air quality emissions) would be slightly less under the build various preservation alternatives, the impact levels would remain the same (less than significant with mitigation or significant and unavoidable).

Impacts on historic resources would also be significant and unavoidable under all build preservation alternatives but to a lesser extent than under the Proposed Project and the Project Variant. Preservation Alternatives 1, 2, and 3 would retain more contributing individually eligible buildings and landscape features than the Proposed Project and Project Variant; however, each would still pose a significant and unavoidable impact on the eligible historic district because they would cause the SRI Campus to no longer be eligible for the CRHR, even with implementation of Mitigation Measures CR-1.1, CR-1.2, and CR-1.3. Preservation Alternative 1 would lessen the impacts on individually eligible historic resources because it would retain Building 100 (and the Chapel (under the Project Variant); however, because of demolition of Buildings A and E, Preservation Alternative 1 would still have a significant and unavoidable impact on individually eligible historic resources. In addition, all build preservation alternatives under the Project Variant would avoid impacts on the Chapel because the Chapel would be retained. Therefore, Mitigation Measure CR-1.4 would not apply, and impacts on the Chapel would be considered less than significant.

Preservation Alternatives 2 and 3 would both retain all four individually eligible resources and, thus, have a less-than-significant impact on individually eligible historic resources. Because Preservation Alternative 3 would result in slightly less construction than Preservation Alternative 2, slightly fewer construction-related impacts would occur under Preservation Alternative 3.

For these reasons, Preservation Alternative 3 would be the environmentally superior alternative for both the Proposed Project and the Project Variant.

Table 6-12. Comparison of Impacts among Proposed Project Alternatives

Environmental Issue	Proposed Project	No-Project Alternative	Project Preservation Alternative 1	Project Preservation Alternative 2	Project Preservation Alternative 3
Land Use					
Conflicts with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	NI	NI (Less)	NI (Similar)	NI (Similar)	NI (Similar)
Transportation					
Conflicts with Applicable Plans and Policies (Transportation)	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Vehicle Miles Traveled	LTS	SU (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Design Hazards	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Emergency Access	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	SU (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Air Quality					
Construction Criteria Air Pollutant Emissions	LTS/M	NI (Less)	LTS/M (Less)	LTS/M (Less)	LTS/M (Less)
Operational Criteria Air Pollutant Emissions	LTS/M	LTS (More)	LTS/M (Similar)	LTS/M (Less)	LTS/M (Less)
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations during Construction	LTS	NI (Less)	LTS (Similar)	LTS (Less)	LTS (Less)
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations from Project Operation	LTS	LTS (Less)	LTS (Similar)	LTS (Less)	LTS (Less)
Other Emissions That Would Adversely Affect a Substantial Number of People	LTS	LTS (Less)	LTS (Similar)	LTS (Less)	LTS (Less)
Cumulative Impacts	LTS/M	LTS (Less)	LTS/M (Similar)	LTS/M (Less)	LTS/M (Less)
Energy					
Construction	LTS	NI (Less)	LTS (Less)	LTS (Less)	LTS (Less)
Operation	LTS	SU (More)	LTS (Similar)	LTS (Less)	LTS (Less)
Cumulative Impacts	LTS	SU (More)	LTS (Similar)	LTS (Less)	LTS (Less)

Environmental Issue	Proposed Project	No-Project Alternative	Project Preservation Alternative 1	Project Preservation Alternative 2	Project Preservation Alternative 3
Greenhouse Gas Emissions					
Construction GHG Emissions	LTS	NI (Less)	LTS (Less)	LTS (Less)	LTS (Less)
Operational GHG Emissions and Conflicts with Applicable GHG Emission Plans, Policies, and Regulations	LTS	SU (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	SU (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Noise					
Construction	SU/M	NI (Less)	SU/M (Less)	SU/M (Less)	SU/M (Less)
Operations – Mechanical Equipment	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Operations – Traffic	LTS	LTS (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Vibration	SU/M	NI (Less)	SU/M (Similar)	SU/M (Similar)	SU/M (Similar)
Cumulative Impacts	SU/M	LTS (Less)	SU/M (Less)	SU/M (Less)	SU/M (Less)
Cultural Resources					
Historical Resources	SU/M	NI (Less)	SU/M (Similar)	SU/M (Less)	SU/M (Less)
Archaeological Resources and Human Remains	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Tribal Cultural Resources					
Impacts on Tribal Cultural Resources	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Biological Resources					
Special-Status Species and Wildlife Movement and Native Wildlife Nursery Sites	LTS/M	NI (Less)	LTS/M (Less)	LTS/M (Similar)	LTS/M (Similar)
Conflicts with Local Policies or Ordinances that Protect Biological Resources	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)

Environmental Issue	Proposed Project	No-Project Alternative	Project Preservation Alternative 1	Project Preservation Alternative 2	Project Preservation Alternative 3
Geology and Soils					
Strong Seismic Ground Shaking and Seismically Related Ground Failure	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Substantial Soil Erosion	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Unstable Soil or Geologic Units	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Expansive Soils	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Paleontological Resources	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Hydrology and Water Quality					
Surface Water Quality	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Groundwater Quality	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Groundwater Supply and Recharge	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Drainage and Flooding	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Conflict or Obstruct a Water Resource Management Plan	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Hazards and Hazardous Materials					
Routine Hazardous Materials Use	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Upset and Accident Conditions Involving Hazardous Materials	LTS/M	LTS (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Exposure of Schools to Hazardous Materials	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Cortese List	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Impairment of Emergency Response or Evacuation Plans	LTS	LTS (Similar)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Population and Housing					

Environmental Issue	Proposed Project	No-Project Alternative	Project Preservation Alternative 1	Project Preservation Alternative 2	Project Preservation Alternative 3
Unplanned Population Growth	LTS	LTS (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Displacement of People or Housing	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Public Services					
Fire Services, Police Services, School Facilities, Parks and Recreational Facilities, and Library Facilities	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Utilities and Service Systems					
Construction or Relocation of Utilities	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Water Supply, Wastewater Generation, and Solid Waste Generation	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Compliance with Solid Waste Regulations	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)

Notes:
NI = No Impact
LTS = Less than Significant
SU = Significant Unavoidable
SU/M = Significant Unavoidable with Mitigation
LTS/M = Less than Significant with Mitigation

Table 6-13. Comparison of Impacts among Project Variant Alternatives

Environmental Issue	Project Variant	No-Project Variant Alternative	Variant Preservation Alternative 1	Variant Preservation Alternative 2	Variant Preservation Alternative 3
Land Use					
Conflicts with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	NI	NI (Less)	NI (Similar)	NI (Similar)	NI (Similar)
Transportation					
Conflicts with Applicable Plans and Policies (Transportation)	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Vehicle Miles Traveled	LTS	SU (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Design Hazards	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Emergency Access	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	SU (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Air Quality					
Construction Criteria Air Pollutant Emissions	LTS/M	NI (Less)	LTS/M (Less)	LTS/M (Less)	LTS/M (Less)
Operational Criteria Air Pollutant Emissions	LTS/M	LTS (More)	LTS/M (Similar)	LTS/M (Less)	LTS/M (Less)
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations during Construction	LTS	NI (Less)	LTS (Similar)	LTS (Less)	LTS (Less)
Exposure of Existing Sensitive Receptors to Substantial Pollutant Concentrations from Project Operation	LTS	LTS (Less)	LTS (Similar)	LTS (Less)	LTS (Less)
Other Emissions That Would Adversely Affect a Substantial Number of People	LTS	LTS (Less)	LTS (Similar)	LTS (Less)	LTS (Less)
Cumulative Impacts	LTS/M	LTS (Less)	LTS/M (Similar)	LTS/M (Less)	LTS/M (Less)
Energy					
Construction	LTS	NI (Less)	LTS (Similar)	LTS (Less)	LTS (Less)
Operation	LTS	SU (More)	LTS (Similar)	LTS (Less)	LTS (Less)
Cumulative Impacts	LTS	SU (More)	LTS (Similar)	LTS (Less)	LTS (Less)

Environmental Issue	Project Variant	No-Project Variant Alternative	Variant Preservation Alternative 1	Variant Preservation Alternative 2	Variant Preservation Alternative 3
Greenhouse Gas Emissions					
Construction GHG Emissions	LTS	NI (Less)	LTS (Similar)	LTS (Less)	LTS (Less)
Operational GHG Emissions and Conflicts with Applicable GHG Emission Plans, Policies, and Regulations	LTS	SU (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	SU (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Noise					
Construction	SU/M	NI (Less)	SU/M (Similar)	SU/M (Less)	SU/M (Less)
Operations – Mechanical Equipment	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Operations – Traffic	LTS	LTS (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Vibration	SU/M	NI (Less)	SU/M (Similar)	SU/M (Similar)	SU/M (Similar)
Cumulative Impacts	SU/M	LTS (Less)	SU/M (Less)	SU/M (Less)	SU/M (Less)
Cultural Resources					
Historical Resources	SU/M	NI (Less)	SU/M (Less)	SU/M (Less)	SU/M (Less)
Archaeological Resources and Human Remains	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Tribal Cultural Resources					
Impacts on Tribal Cultural Resources	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Biological Resources					
Special-Status Species and Wildlife Movement and Native Wildlife Nursery Sites	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Conflicts with Local Policies or Ordinances that Protect Biological Resources	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)

Environmental Issue	Project Variant	No-Project Variant Alternative	Variant Preservation Alternative 1	Variant Preservation Alternative 2	Variant Preservation Alternative 3
Geology and Soils					
Strong Seismic Ground Shaking and Seismically Related Ground Failure	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Substantial Soil Erosion	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Unstable Soil or Geologic Units	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Expansive Soils	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Paleontological Resources	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Hydrology and Water Quality					
Surface Water Quality	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Groundwater Quality	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Groundwater Supply and Recharge	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Drainage and Flooding	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Conflict or Obstruct a Water Resource Management Plan	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Hazards and Hazardous Materials					
Routine Hazardous Materials Use	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Upset and Accident Conditions Involving Hazardous Materials	LTS/M	LTS (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Exposure of Schools to Hazardous Materials	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Cortese List	LTS/M	NI (Less)	LTS/M (Similar)	LTS/M (Similar)	LTS/M (Similar)
Impairment of Emergency Response or Evacuation Plans	LTS	LTS (Similar)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	NI (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Population and Housing					

Environmental Issue	Project Variant	No-Project Variant Alternative	Variant Preservation Alternative 1	Variant Preservation Alternative 2	Variant Preservation Alternative 3
Unplanned Population Growth	LTS	LTS (More)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Displacement of People or Housing	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Public Services					
Fire Services, Police Services, School Facilities, Parks and Recreational Facilities, and Library Facilities	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Utilities and Service Systems					
Construction or Relocation of Utilities	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Water Supply, Wastewater Generation, and Solid Waste Generation	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Compliance with Solid Waste Regulations	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Cumulative Impacts	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)

Notes:
NI = No Impact
LTS = Less than Significant
SU = Significant Unavoidable
SU/M = Significant Unavoidable with Mitigation
LTS/M = Less than Significant with Mitigation

Chapter 7
Report Preparers

7.1 Lead Agency

City of Menlo Park

- Kyle Perata, Assistant Community Development Director
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- Payal Bhagat, Contract Principal Planner
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- Ebby Sohrabi, Senior Civil Engineer
- Rambod Hakhamaneshi, Senior Civil Engineer
- Pam Lowe, Senior Civil Engineer
- Michael Biddle, Special Counsel

7.2 City's Consultants

ICF (EIR Prime Consultant)

- Heidi Mekkelson — Project Director
- Jessica Viramontes — Project Manager
- Devan Atteberry — Deputy Project Manager; Energy, Public Services, and Recreation
- Kirsten Chapman — Senior Project Advisor; Land Use and Planning, Population and Housing, Aesthetics Memorandum, Alternatives Analysis, Variant Analysis
- Kristi Black — Senior Reviewer
- Darrin Trageser — Air Quality, Greenhouse Gases and Emissions, and Energy
- Cory Matsui — Noise
- Noah Schumaker — Noise
- Jenny Wildt — Cultural Resources (Archaeological Resources), Tribal Cultural Resources
- Megan Watson — Cultural Resources (Archaeological Resources), Tribal Cultural Resources
- Leann Taagepera — Cultural Resources (Archaeological Resources), Tribal Cultural Resources
- Adrienne Furniss — Cultural Resources (Archaeological Resources), Tribal Cultural Resources
- Allison Lyons Medina — Cultural Resources (Historic Resources)
- Nicole Felicetti — Cultural Resources (Historic Resources)

- Lisa Webber — Biological Resources
- Ellen Unsworth — Geology and Soils
- Katrina Sukola — Hydrology and Water Quality
- Mario Barrera — Hazards and Hazardous Materials
- Rabiya Oberoi — Introduction, Impacts Found Not to Be Significant, and Utilities and Service Systems
- Pauline Fadakaran — Executive Summary and Other CEQA Considerations
- John Mathias — Editor
- Anthony Ha — Publications Specialist
- John Conley — Graphics
- Brent Read — Geographic Information System Graphics

Hexagon (Transportation Consultant)

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- Ling Jin, Associate
- Shikha Jain, Associate
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- Katie Ruitta, Planner
- Joice Chang, Graphics
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- David Doezema, Senior Principal
- Alfredo Reyes-Vega, Analyst

West Yost (Water Supply Assessment Consultant)

- Elizabeth Drayer, PE, Project Manager
- Whitney Jones, PE, Project Engineer
- Rhodora Biagtan, PE, QA/QC Review

7.3 Project Sponsor and Project Sponsor's Consultants

Lane Partners (Project Sponsor)

- Mark Murray

Project Sponsor's Consultants

- STUDIOS Architecture (Architect)
- Fehr & Peers (Transportation Consultant)
- Ramboll Americas Engineering Solutions, Inc. (Air Quality and Greenhouse Gas Consultant)
- Page & Turnbull (Historic Resources Consultant)
- H.T. Harvey & Associates (Biological Resources Consultant)
- Cornerstone Earth Group (Geology and Soils Consultant)
- ATC Group Services (Hazards and Hazardous Materials Consultant)
- Kier + Wright (Hydrology Consultant)
- Shen Milsom & Wilke (Noise Consultant)