## **APPENDIX B**

## **INITIAL STUDY**



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# MENLO PORTAL PROJECT INITIAL STUDY

MENLO PARK, CALIFORNIA



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# MENLO PORTAL PROJECT INITIAL STUDY

## MENLO PARK, CALIFORNIA

#### Submitted to:

City of Menlo Park
Community Development Department
Planning Division
701 Laurel Street
Menlo Park, California 94025

Prepared by:

LSA 157 Park Place Pt. Richmond, California 94801 510.236.6810

Project No. CMK1903



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#### LIST OF ABBREVIATIONS AND ACRONYMS

AB 52 Assembly Bill 52

APN Assessor's Parcel Number

BAAQMD Bay Area Air Quality Management District

Bay San Francisco Bay

BMPs Best Management Practices

CalEEMod California Emissions Estimator Model

Cal/EPA California Environmental Protection Agency

Caltrans California Department of Transportation

CAP Climate Action Plan

CEQA California Environmental Quality Act

CGS California Geological Survey

CH<sub>4</sub> Methane

City of Menlo Park

CO<sub>2</sub> Carbon dioxide

ConnectMenlo General Plan Land Use and Circulation Elements

ConnectMenlo Final EIR ConnectMenlo Final Environmental Impact Report

DPR California Department of Parks and Recreation

DTSC California Department of Toxic Substances Control

ESLs Environmental Screening Levels

EV Electric vehicle

EVA Emergency vehicle access

FEMA Federal Emergency Management Agency

GHG Greenhouse gases

gsf Gross square feet

GWh Gigawatt-hours

I-280 Interstate 280

kWh Kilowatt-hours

LID Low Impact Development

MGD Million gallons per day

MGY Million gallons per year

MLD Most Likely Descendant

MPFPD Menlo Park Fire Protection District

mpg Miles per gallon

MPMW Menlo Park Municipal Water

MPPD Menlo Park Police Department

N<sub>2</sub>O Nitrous oxide

NAHC Native American Heritage Commission

NWIC Northwest Information Center

PCB Polychlorinated biphenyls

PCE Peninsula Clean Energy

PG&E Pacific Gas & Electric

Phase I ESA Phase I Environmental Site Assessment

R-MU-B Residential – Mixed Use District – Bonus

SamTrans San Mateo County Transit District

SB 50 Senate Bill 50

SFPUC San Francisco Public Utilities Commission

SHPO State Historic Preservation Office



SMCWPPP San Mateo Countywide Water Pollution Prevention Program

SR 84 State Route 84

SRA State Responsibility Area

Stanford HCP Stanford University Habitat Conservation Plan

SVCW Silicon Valley Clean Water

TCE Trichloroethene

TDM Transportation Demand Management

TIA Transportation Impact Analysis

TIF Transportation Impact Fee

UPRR Union Pacific Railroad

US 101 US Highway 101

USEPA United States Environmental Protection Agency

UWMP Urban Water Management Plan

VMT Vehicle miles traveled

Water Board San Francisco Bay Regional Water Quality Control Board

WBSD West Bay Sanitary District

WTP Water Treatment Plant

WWTP Waste Water Treatment Plant



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#### 1.0 PROJECT INFORMATION

#### 1. Project Title:

Menlo Portal Project

#### 2. Lead Agency Name and Address:

City of Menlo Park
City Hall – 1st Floor
701 Laurel Street
Menlo Park, California 94025

#### 3. Contact Person and Phone Number:

Kaitie Meador, Senior Planner
City of Menlo Park
Community Development Department, Planning Division

Phone: 650-330-6731

Email: KMMeador@menlopark.org

#### 4. Project Location:

115 Independence Drive and 104-110 Constitution Drive Menlo Park, San Mateo County Assessor's Parcel Numbers (APN): 056-236-10, 055-236-020, 055-236-190

#### 5. Project Sponsor's Name and Address:

Menlo Park Portal Venture, LLC 450 Sansome Street, Suite 500 San Francisco, California 94111

- 6. General Plan Designation: Mixed Use Residential, Bayfront Area
- 7. Zoning: Residential Mixed Use District Bonus (R-MU-B)

#### 8. Description of Project:

This section describes the proposed Menlo Portal Project (proposed project) submitted by Menlo Park Portal Venture, LLC (project sponsor) and evaluated in this Initial Study. A description of the proposed project's location, context and objectives is followed by details of the proposed project itself and a summary of required approvals and entitlements.



#### **Project Site**

The following describes the geographic context of the site for the proposed project and provides a brief overview of the existing land uses within and in the vicinity of the site.

#### **Regional Location and Access**

The approximately 3.20-acre triangular project site is comprised of three parcels located at 104 Constitution Drive, 110 Constitution Drive, and 115 Independence Drive within the City of Menlo Park, San Mateo County. Menlo Park is located approximately 30 miles south of San Francisco, at the southern end of San Francisco Bay (Bay).

Regional vehicular access to the project site is provided by US Highway 101 (US 101), via the Marsh Road on- and off-ramps located to the west and State Route 84 (SR 84 or the Bayfront Expressway) located to the north. Direct local access is via Independence Drive and Constitution Drive which border the site immediately to the north, west, and south. The Menlo Park and Palo Alto Caltrain stations are located within 3 miles of the site to the south, providing weekday service from San Francisco to Gilroy and weekend service from San Francisco to San Jose.

Figure 1-1 depicts the site's regional and local context. Figure 1-2 is an aerial photograph of the project site and the vicinity.

#### Site Characteristics and Current Site Conditions

The generally-level project site is currently developed with two single-story office buildings and one warehouse/industrial building with a small office component totaling approximately 64,832 square feet in size. Table 1.A provides a summary of the existing conditions on the project site. Ingress and egress to the project site is provided by three driveways along Constitution Drive and two driveways along Independence Drive.

**Table 1.A: Existing Conditions Summary** 

Address	APN	Parcel Size (acres)	Building Size (square feet)	Current Use	Parking Spaces
104 Constitution	055-236-010	1.25	23,212	Office	60
110 Constitution	055-236-020	1.05	25,091	Industrial	29
115 Independence	055-236-190	0.91	16,529	Office	39

Source: Menlo Park, City of, 2019.

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The street grid in the immediate vicinity of the project site generally extends northeast-southwest and northwest-southeast. To simplify the direction descriptions used in this document, roadways progressing parallel to US 101 are designated eastbound-westbound and roadways parallel to Marsh Road are designated northbound-southbound. The directional descriptions throughout this document use this geographic convention. However, with respect to transportation and circulation, US 101 is considered to be a northbound-southbound roadway and SR 84 is considered to be an eastbound-westbound roadway.



Menlo Portal Project Initial Study
Project Location and Regional Vicinity Map



LSA







Menlo Portal Project Initial Study
Aerial Photograph of the Project Site and Surrounding Land Uses

The existing buildings on the project site were constructed between 1960 and 1966 and are currently occupied by office and industrial tenants. A total of 128 parking spaces are provided across all three parcels. Vegetation on the project site consists of small landscaped areas and approximately 13 mature trees along both the southern and northern borders of the project site, approximately 10 of which are Heritage Trees.<sup>2</sup> Figure 1-3 depicts an aerial view of the project site and Figure 1-4 depicts current site conditions. Figure 1-5 includes representative photos of the existing buildings on the project site (Photo 1, 115 Independence Drive and Photo 2, 104 Constitution Drive); viewpoint locations are depicted in Figure 1-3.

#### **Regulatory Setting**

The project site is designated Mixed Use Residential on the City of Menlo Park's (City) General Plan Land Use Designations Map, which was updated as part of the City's General Plan Land Use and Circulation Elements Update (referred to herein as ConnectMenlo). One purpose of ConnectMenlo was to create live/work/play environments and to encourage office, research and development, residential, commercial uses, and hotels, all in close proximity or integrated with one another in the Bayfront Area, which is generally located north of US 101. The Mixed Use Residential designation provides for higher density housing to meet the needs of all income levels. This designation is intended to promote live/work/play environments oriented towards pedestrians, transit, and bicycle use, especially for commuting to nearby jobs.<sup>3</sup>

The project site is located within the Residential Mixed Use Bonus (R-MU-B) zoning district. The purpose and intent of the R-MU-B zoning district, identified in the Zoning Ordinance, is to: 1) provide high density housing to nearby employment; 2) encourage mixed use development with a quality living environment and neighborhood-serving retail and services on the ground floor that are oriented to the public, and promote a live/work/play environment with pedestrian activity; and 3) blend with and complement existing neighborhoods through site regulations and design standards that minimize impacts to adjacent uses. The maximum base residential density is 30 units per acre, a floor area ratio (FAR) of up to 90 percent for residential uses and a height of up to 40 feet. In addition, the bonus-level zoning standard allows for a density of up to 100 dwelling units per acre, a FAR of up to 225 percent for residential uses and 25 percent for non-residential uses, and a height of up to 85 feet in exchange for providing community amenities.

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<sup>&</sup>lt;sup>2</sup> Hort Science | Bartlett Consulting, 2019. *Arborist Report, Menlo Portal, Menlo Park, CA*. September 25.

<sup>&</sup>lt;sup>3</sup> Menlo Park, City of, 2016. *Menlo Park General Plan*. November 29.

Menlo Park, City of, 2019. City of Menlo Park GIS Viewer. Available online at: <a href="mailto:cmpweb2.menlopark.org/">cmpweb2.menlopark.org/</a> <a href="https://cmpweb2/Geocortex/Essentials/REST/sites/Menlo-Park/viewers/MPGVH/virtualdirectory/Resources/Config/Default">cmpweb2.menlopark.org/</a> <a href="https://cmpweb2/Geocortex/Essentials/REST/sites/Menlo-Park/viewers/MPGVH/virtualdirectory/Resources/Config/Default">Menlo Park</a>, //cmpweb2/Geocortex/Essentials/REST/sites/Menlo-Park/viewers/MPGVH/virtualdirectory/Resources/Config/Default</a> (accessed March 13, 2019).

<sup>&</sup>lt;sup>5</sup> Menlo Park, City of, 2019. Menlo Park Municipal Code. January 15.



#### **Background**

On November 29, 2016, the Menlo Park City Council certified the ConnectMenlo Final Environmental Impact Report (ConnectMenlo Final EIR)<sup>6, 7</sup> and approved updates to the Land Use and Circulation Elements of the General Plan.<sup>8</sup> ConnectMenlo also included changes to the City's zoning map and rezoned specific properties to reflect the General Plan updates, including the new land uses within the Bayfront Area of the city. The ConnectMenlo Final EIR provided a program-level analysis of the development potential envisioned for the entire City, including the increased development potential in the Bayfront Area. The Land Use Element specifically identifies new development potential in the Bayfront Area of up to 2.3 million square feet of non-residential space, 400 hotel rooms, and 4,500 residential units. The buildout potential for future development is expected to occur over a 24-year buildout horizon (from approximately 2016 to 2040).<sup>9</sup>

On December 29, 2016, the City of East Palo Alto filed suit challenging the certification of the ConnectMenlo Final EIR. The City of East Palo Alto alleged that the City of Menlo Park did not comply with the California Environmental Quality Act (CEQA) because the Final EIR underestimated the amount of new employment and failed to adequately analyze the traffic impacts that would result from development under ConnectMenlo. To resolve the litigation, the City of Menlo Park and the City of East Palo Alto entered into a settlement agreement. The key terms of the settlement agreement are as follows:

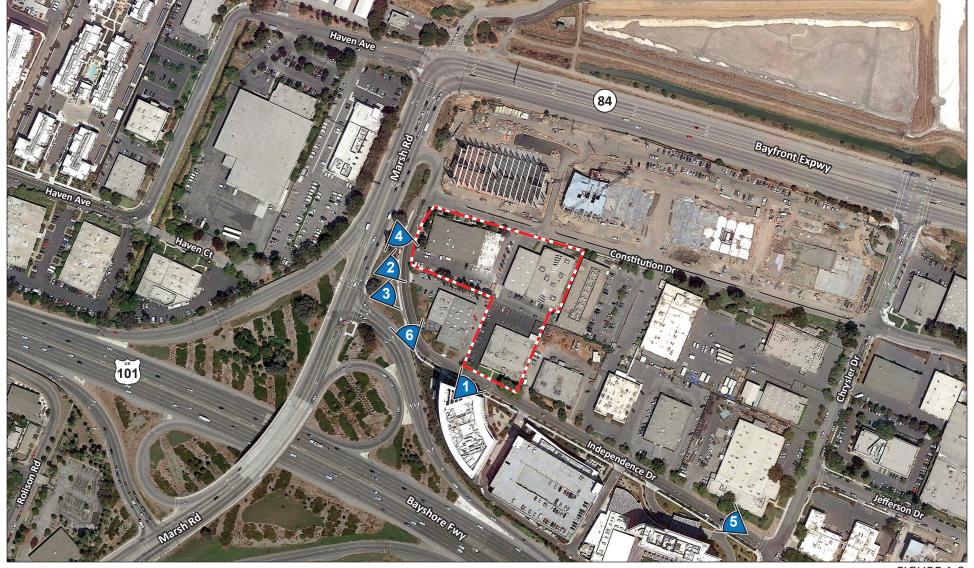
1. Reciprocal Environmental Review for Future Development Projects. Menlo Park will prepare an EIR for any project located in the Office (O), Life Science (LS) or Residential Mixed Use (R-MU) district that exceeds 250,000 net new square feet and would require a use permit, that proposes bonus level development, that proposes a master plan project, or that may have a significant environmental impact. Menlo Park may, with the exception of housing and traffic (which were the focus of East Palo Alto's challenge), simplify the environmental review for future development projects by incorporating analysis and discussions from the ConnectMenlo Final EIR pursuant to CEQA Guidelines Section 15168(d). East Palo Alto will prepare an initial study for future development projects to determine the appropriate level of environmental review and will conduct that review, which can be simplified by incorporating by reference analysis and discussions from its General Plan update referred to as Vista 2035.

Menlo Park, City of, 2016a. ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Area Zoning Update, Public Review Draft Environmental Impact Report, SCH#2015062054. June 1.

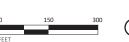
Menlo Park, City of, 2016b. *ConnectMenlo: General Plan Land Use and Circulation Elements and M-2 Area Zoning Update, Response to Comments Document*, SCH#2015062054. October 10.

Menlo Park, City of, 2016c. General Plan: ConnectMenlo, Menlo Park Land Use and Mobility Update. November 29.

Although the ConnectMenlo Final EIR assumed a buildout horizon of 2040, the maximum development potential may be reached sooner than anticipated. Nevertheless, the pace of development would not create additional impacts beyond those identified in the ConnectMenlo Final EIR for topic areas identified in this Initial Study. The ConnectMenlo Final EIR evaluated the maximum development potential that could occur at any given time and did not consider the phased buildout of the development potential.



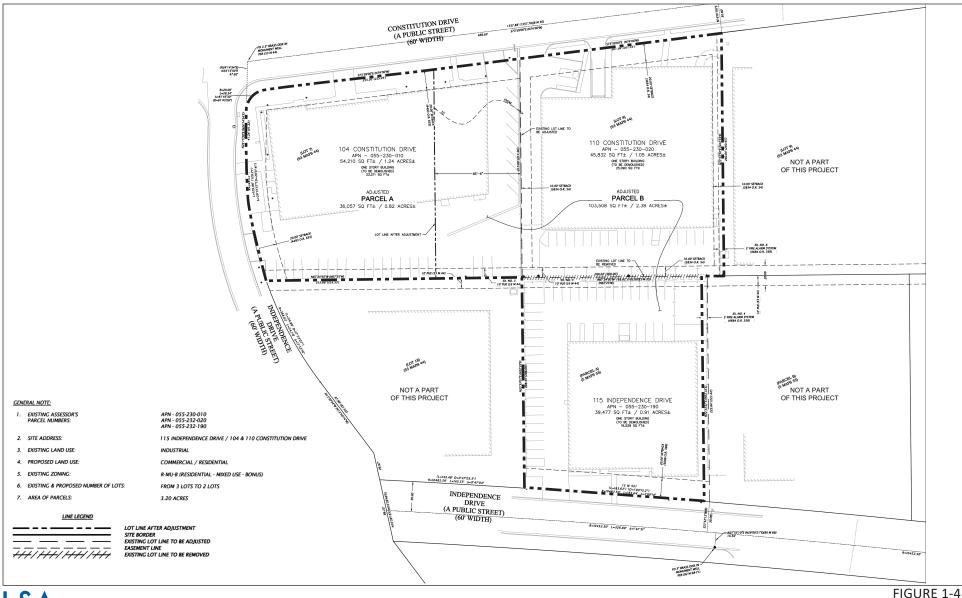








Menlo Portal Project Initial Study **Photo Locations** 



LSA





Menlo Portal Project Initial Study
Existing Site Conditions



Photo 1: Existing building at 115 Independence Drive, as seen from Independence Drive



Photo 2: Existing building at 104 Constitution Drive, as seen from Independence Drive

LSA

FIGURE 1-5



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- 2. <u>Reciprocal Traffic Studies</u>. Menlo Park and East Palo Alto will work together to ensure that future development projects' potentially significant traffic impacts on the other jurisdiction are analyzed and mitigated.
- 3. Reciprocal Study of Multiplier Effect. When the preparation of an EIR is required as described above, Menlo Park or East Palo Alto, as applicable, will conduct a Housing Needs Assessment, which to the extent possible, will include an analysis of the multiplier effect for indirect and induced employment.<sup>10</sup>

This Initial Study was prepared in accordance with the terms of the settlement agreement, which allows simplification in accordance with CEQA Guidelines Section 15168 for all topic areas except housing and transportation and incorporates by reference the information contained in the ConnectMenlo Final EIR. Per CEQA Guidelines Section 15168 later activities occurring under a program EIR may be examined in light of the program EIR and tier from the program EIR as provided for in CEQA Guidelines Section 15152. Per CEQA Guidelines Section 15152, "where an EIR has been prepared and certified for a program... consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program... should limit the EIR... on the later project to effects which: 1) were not examined as significant effects on the environment in the prior EIR; or 2) are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means." The analysis provided in this Initial Study tiers from the ConnectMenlo Final EIR, as appropriate.

The proposed project would be required to comply with all applicable mitigation measures identified in the ConnectMenlo Mitigation Monitoring and Reporting Program (MMRP), which is a requirement of any proposed development project in the city. The proposed project has been determined to have less than significant impacts in a number of topic areas within this Initial Study (refer to Section 3.0) based on compliance with the ConnectMenlo mitigation measures. A copy of the ConnectMenlo MMRP is included in Appendix A.

#### **Proposed Project**

This section provides a description of the proposed project as identified in the project sponsor's application materials submitted to the City, dated May 20, 2019. The proposed project would result in the demolition of the existing office and industrial buildings and associated improvements and redevelopment of the project site with an approximately 327,970-gross-square-foot, seven-story multi-family apartment building with approximately 335 dwelling units and an approximately 34,819-gross-square-foot commercial office building, as well as associated open space, circulation and parking, and infrastructure improvements. The project sponsor is currently proposing that 15 percent of the units would comply with the City's Below Market Rate (BMR) Housing Program

Nothing in the settlement agreement was intended to suggest such an analysis is required by CEQA.

Menlo Park Portal Venture, LLC, 2019. City of Menlo Park Development Permit Application for the Menlo Portal Project. May 20. It should be noted that project plans may be subject to refinement prior to City action on project entitlements.



Ordinance, Chapter 16.96, and the City's Below Market Rate Guidelines (Guidelines). Individual project components are further described below.

Figure 1-6 through Figure 1-12 depict the currently available conceptual site plans for the first through eighth floors of the proposed buildings. Figure 1-13 depicts conceptual building sections of the proposed buildings. Conceptual landscaping plans are shown in Figure 1-14 and Figure 1-15.

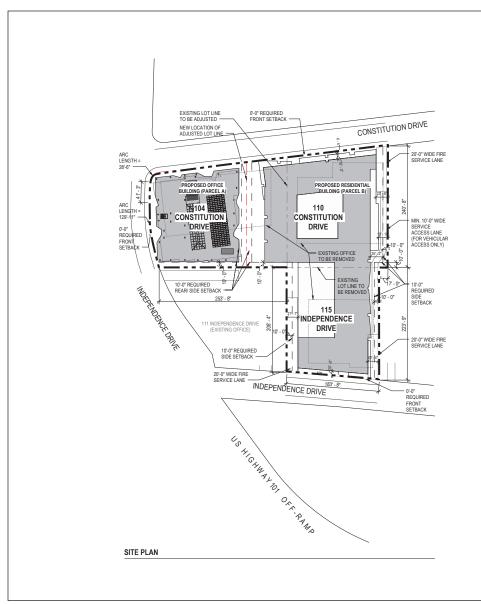
#### **Building Program**

The proposed project would result in redevelopment of the project site with a seven-story multifamily apartment building including two levels of above ground parking and a three-story commercial office building. The ground floor of each building would be raised 3 to 5 feet above grade to accommodate flood plain design requirements. A landscaped central plaza area would separate the residential and commercial office buildings and provide a connection between Independence Drive and Constitution Drive. Components of each individual building are described below.

Residential Building. The residential building would contain a total of approximately 327,970 square feet of residential uses (approximately 335 rental units), would be built with a maximum height of approximately 84 feet 9 inches, and would front to both Constitution Drive and Independence Drive. The ground floor of the residential building would include a lobby, storage, residential amenities (which could include a fitness or business center), a portion of the parking garage, and stairwells and elevators providing access to the residential portion of the building. The second level would include the remaining portion of the parking garage (the program for which is further described below), as well as approximately 27 residential units. The third level would include approximately 58 residential units and an approximately 18,342-square-foot amenities deck that would include a pool, social area with a fire pit (if allowed), outdoor room, outdoor kitchen, and dining area. The fourth level would include approximately 60 residential units, and the fifth and sixth levels would each include approximately 63 residential units. The seventh level would include approximately 64 residential units.

Residential units would consist of approximately 68 studio units at an average size of 550 square feet, approximately86 junior one-bedroom units at an average of 630 square feet, approximately 135 one-bedroom units at an average of 700 square feet, approximately 36 two-bedroom units at an average of 1000 square feet, and approximately 10 three-bedroom at an average size of 1300 square feet.

The project sponsor is currently proposing that a total of approximately 48 residential units (minimum of 15 percent) be affordable to low income households. Low income households are those earning up to 80 percent of the area median income. The proposed allotment of affordable housing units would continue to be refined with the City. Density and gross floor area above the maximum allowed density and gross floor area ratio would be achieved through the density bonus provision of the City's Below Market Rate Housing Program. In addition, this program would also allow exemptions for the total parking requirement for the residential units.





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FIGURE 1-6



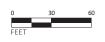




Menlo Portal Project Initial Study Conceptual Site Plan



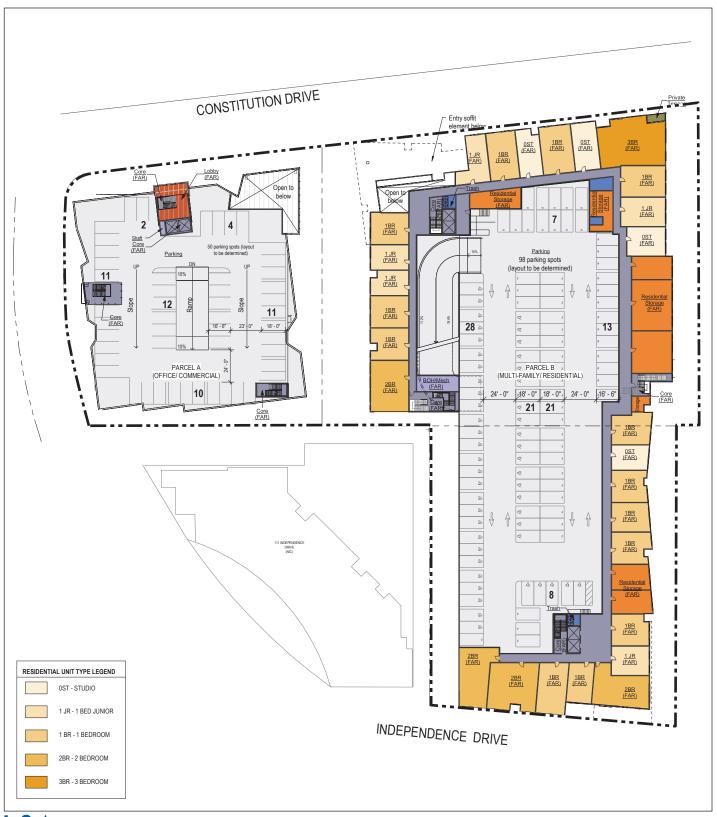
IS ↑ FIGURE 1-7



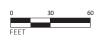


Project Boundary

Menlo Portal Project Initial Study Conceptual Ground Level Site Plan



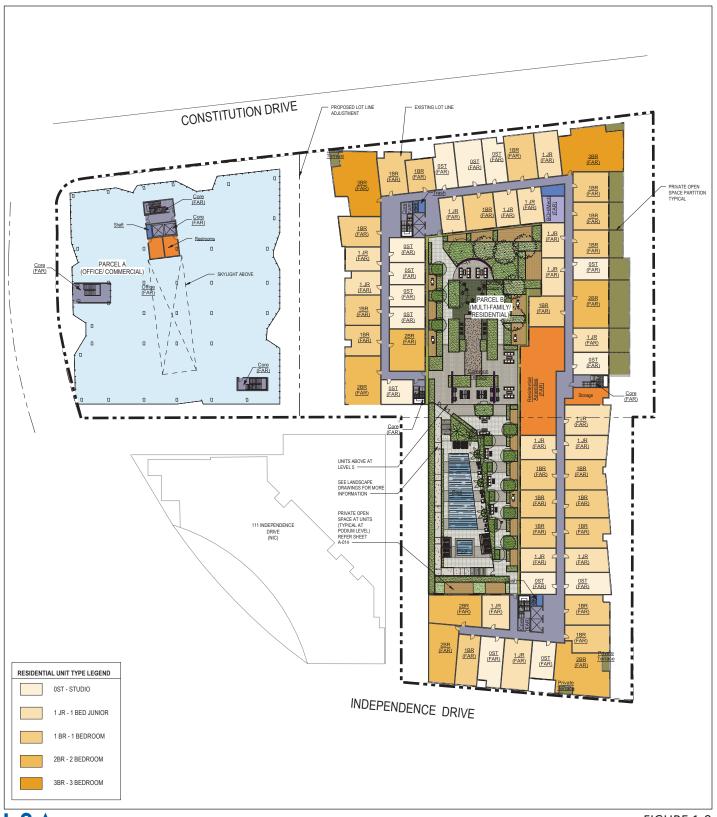
IS ↑ FIGURE 1-8





Project Boundary

Menlo Portal Project Initial Study Conceptual Second Level Site Plan



IS ↑ FIGURE 1-9





Project Boundary

Menlo Portal Project Initial Study Conceptual Third Level Site Plan



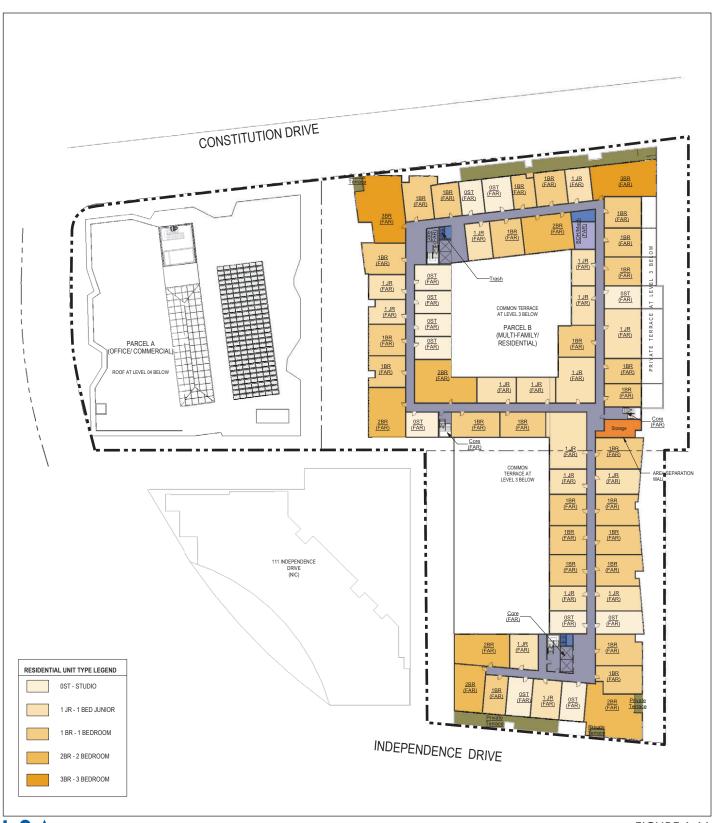
FIGURE 1-10





Project Boundary

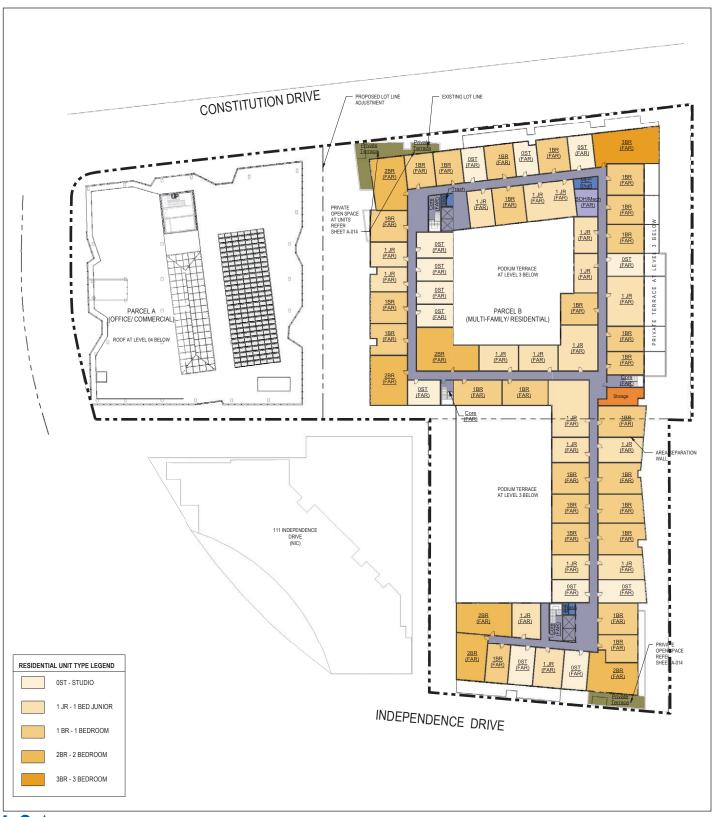
Menlo Portal Project Initial Study Conceptual Fourth Level Site Plan







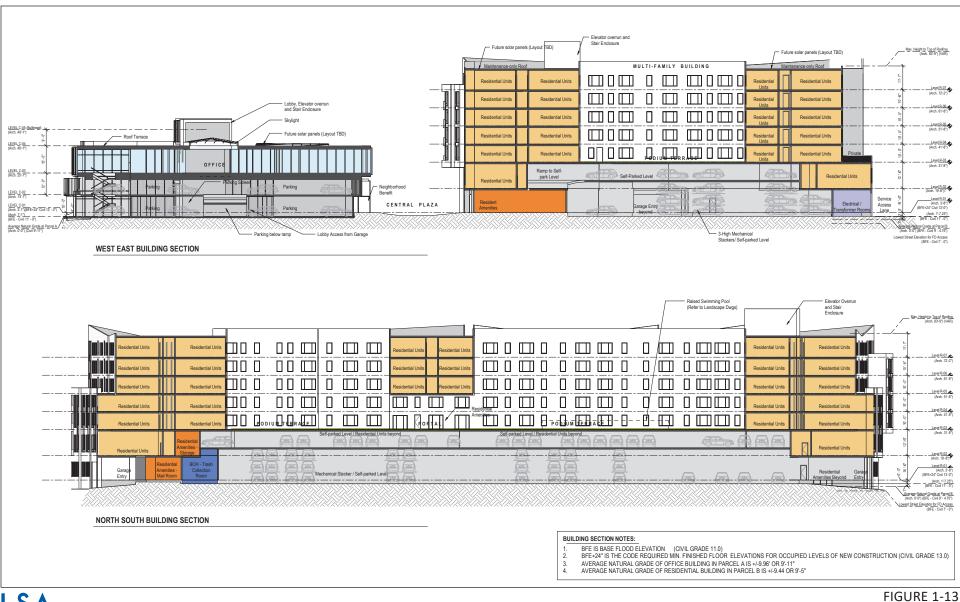
Menlo Portal Project Initial Study
Conceptual Fifth and Sixth Levels Site Plan







Menlo Portal Project Initial Study Conceptual Seventh Level Site Plan

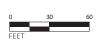








LSA FIGURE 1-14





Project Boundary

Menlo Portal Project Initial Study Conceptual Street Level Landscape Plan



NOT TO SCALE Project Boundary (Partial)

Menlo Portal Project Initial Study
Conceptual Third and Roof Level Landscape Plans

Commercial Office Building. The commercial office building would front to both Constitution and Independence Drives and would consist of three floors with a total of approximately 34,819 gross square feet of commercial uses. In addition, the ground floor would include approximately 1,608 gross square feet of retail/commercial space allocated for a potential neighborhood benefit space that would be open to the public. The commercial office building would be a maximum of approximately 56 feet, 7 inches in height and would include an approximately 9,000 square-footroof deck with seating areas for use by occupants of the office building.

#### Open Space and Landscaping

A total of approximately 51,319 square feet of open space would be provided across the entire project site, including private residential open space, common open space, and publicly accessible open space. Private residential open space would consist of private balconies and terraces, totaling approximately 11,108 square feet. Total common open space of approximately 27,342 square feet for the project would include an approximately 9,000-square-foot roof deck at the commercial office building and the approximately 8,342-square-foot amenity decks on the third floor of the residential building.

The City's Zoning Ordinance requires a minimum of approximately 6.25 percent (8,722 square feet) of the project site to be publicly accessible open space. Approximately 9 percent of the project site would consist of publicly-accessible open space, including the approximately 12,870-square-foot central plaza on the ground floor between the residential and commercial office buildings that would provide access to Constitution Drive.

All of the existing 13 trees on the project site would be removed. Approximately 20 new trees would be planted on the project site, including between both buildings and along Independence Drive and Constitution Drive. In addition, landscaping would be provided throughout the project site in the open space areas mentioned above. Figure 1-14 shows the conceptual landscape plan for the ground floor, and Figure 1-15 shows the conceptual landscape plans for the third floor and roof.

#### Access, Circulation and Parking

Pedestrian access to the proposed buildings would be provided by Independence Drive and Constitution Drive and from within the site interior. The residential building would include two residential lobbies on the ground floor; one near the Constitution Drive entrance and another near the Independence Drive entrance. The residential units would be accessed via a stairwell and two elevators within either lobby, or via stairwells located adjacent to the plaza between the two buildings. The central plaza would provide access to both buildings.

The residential building would include an at-grade, two-level, approximately 93,716-square-foot, 324-space parking garage. The first level of the parking garage would include approximately 226 parking spaces in a stacker parking system while the second level would include approximately 98 standard parking spaces.

One parking space per residential unit is required to be provided; however, the residential parking garage would include 11 fewer parking spaces. The reduced parking would be incorporated into the residential building parking garage and would not affect the commercial building parking.

Approximately 320 parking spaces would be designated for residents, and 4 would be designated as visitor parking. The parking garage for the residential building would be accessed via a ramp located along Constitution Drive to the north or Independence Drive to the south of the building. A total of 528 bicycle parking spaces would be provided throughout the residential building, consisting of 480 long-term spaces located in a storage room on the ground floor and 48 short-term parking spaces located along Constitution Drive and Independence Drive and throughout the central plaza.

The commercial office building would also include an at-grade, two-level approximately 42,338 square foot parking garage. Across both levels, the parking garage at the commercial office building would include approximately 93 standard parking spaces. A total of 24 bicycle parking spaces would be included at the commercial office building with 12 long-term spaces at the office garage and 12 short-term spaces located near the commercial office building entry. The parking garage for the commercial office building would be accessed via a ramp located along Independence Drive at the west side of the building.

#### Utilities, Infrastructure and Easements

The project site is located in an urban area with existing utilities and infrastructure. The proposed project would be required to install the following utility connections to the satisfaction of the applicable utility providers: water; wastewater; stormwater drainage; power; and telecommunications services. The proposed buildings would be required to be all electric and no natural gas connections would be installed. Connections to existing infrastructure would occur within the adjacent public right-of-way. The proposed project would incorporate drought-tolerant, non-invasive plants, efficient irrigation, and low-flow fixtures.

The existing project site includes approximately 126,700 square feet of impervious surfaces and approximately 12,800 square feet of pervious surfaces. The proposed project would result in a net decrease in impervious surface coverage of approximately 1,200 square feet compared to existing conditions for a total of 125,500 square feet of impervious surface and 14,000 square feet of pervious surface.

The on-site stormwater would be collected, treated per C.3 treatment methods and conveyed to the City's storm drain main to Constitution Drive. The proposed project would increase the amount of landscaping and pervious area on-site as noted above; therefore, the amount of storm water run-off from the site is expected to decrease.

#### Demolition, Grading and Construction

The proposed project would include demolition of the existing buildings and surface parking lots on the project site. Construction debris, such as old foundations, pavements, and structures, would be collected and hauled off-site for disposal. Approximately 14,300 cubic yards of demolition waste would be generated by the proposed project.

Approximately 5,000 cubic yards of soils are anticipated to be imported to the site to raise the grade to meet Federal Emergency Management Agency (FEMA) requirements. Foundation footings may extend up to 4 feet below grade.

If approved, construction of the proposed project is anticipated to begin in September 2020. The proposed project would include phased construction, which would consist of a two-month demolition phase, a three-month grading phase, and approximately 34 months of building construction. Overall, construction of the proposed project is anticipated to last approximately 37 months, and is anticipated to be fully operational and occupied by late 2023.

#### 9. Surrounding Land Uses and Setting:

The project site is located in the northern area of the City, within the Bayfront Area near Bedwell Bayfront Park and the Bay. The Bayfront Area is generally bounded by US 101, the Bay, and the County of San Mateo, Redwood City, and East Palo Alto. The site is generally surrounded by a mix of uses, including older buildings and new construction, as depicted in Figure 1-2 and further described below. Figure 1-16 and Figure 1-17 include photos of surrounding land uses; refer to Figure 1-3 for photo viewpoint locations.

- North of the Project Site. The project site is bordered immediately to the north by Constitution
  Drive, a two-lane roadway that connects Marsh Road to the Facebook West Campus to the east.
  Further north of the project site is the Constitution Site of the Menlo Gateway project, which is
  currently under construction and anticipated to be complete in April 2020 (Photo 3); SR 84; and
  the Bedwell Bayfront Park, an approximately 160-acre park managed by the City.
- East of the Project Site. The project site is bordered to the east by commercial and light
  manufacturing uses (Photo 4). The Facebook campus, consisting of approximately 14 buildings
  along SR 84, begins approximately 0.7 mile east of the project site. Union Pacific Railroad (UPRR)
  tracks, commonly referred to as the Dumbarton Rail corridor, are also located just east of the
  Facebook campus. Across the UPRR tracks and approximately 1.2 miles east and south of the
  site is the Belle Haven residential neighborhood, which is generally occupied by single family
  residences.
- South of the Project Site. The project site is bordered immediately to the south by a single-story commercial office building (Photo 5). The City has received a development application, which would result in the construction of an approximately 105-unit multi-family residential building for the neighboring property of 111 Independence Drive. Further south of the site is the Independence Site of the Menlo Gateway project, which consists of multiple office buildings and an 11-story hotel. Further south is US 101 and the Marsh Road off-ramp, across which are commercial and healthcare uses.
- West of the Project Site. The project site is immediately bordered to the west by Independence
  Drive and Marsh Road, which includes on- and off-ramps to US 101 (Photo 6). Across Marsh
  Road are office and light manufacturing uses, as well as single- and multi-family residential uses
  south of US 101.



# 10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

A number of permits and approvals would be required to allow development of the proposed project. As lead agency for consideration of the proposed project, the City of Menlo Park would be responsible for the majority of the approvals required for project development. Other agencies also may have some authority related the proposed project and its approvals. A list of required permits and approvals, including the discretionary actions described above, which may be required by the City and other agencies, is provided in Table 1.B.

**Table 1.B: Anticipated Permits and Approvals for Project Implementation** 

Lead Agency	Permit/Approval
City of Menlo Park	EIR Certification
	Use Permit
	Architectural Control
	Lot Line Adjustment
	Major Subdivision
	Lot Merger
	Heritage Tree Removal Permit
	Below Market Rate Housing Agreement
Responsible Agencies	
Pacific Gas & Electric (PG&E)	Undergrounding of electrical infrastructure
	Approval of electric improvements and connection permits
California Department of	Review of traffic circulation effects and consultation on potential traffic
Transportation (Caltrans)	improvements that may affect state highway facilities, ramps, and
	intersections
California Department of Toxic	Approval of Environmental Site Management Plan
Substances Control (DTSC)	
California Regional Water Quality	<ul> <li>Approval of National Pollutant Discharge Elimination System (NPDES)</li> </ul>
Control Board/San Mateo	permit for stormwater discharge
Countywide Water Pollution	Approval of Environmental Site Management Plan
Prevention Program	
City/County Association of	Review of potential effects on Routes of Regional Significance
Governments	
Bay Area Air Quality Management	Permits for onsite generators, boilers, and other utility equipment
District (BAAQMD)	
San Mateo County Transportation	Review of potential effect on public transit
Authority	
San Mateo County Environmental	Review of onsite generators
Health Division	
Menlo Park Fire Protection District	Residential Site Plan review
West Bay Sanitary District	Approval of wastewater hookups

Source: LSA (2019).

There will be a fiscal impact analysis conducted regarding the project. In order to qualify for bonus-level development within the R-MU-B zoning district, the proposed project will also be required to complete an appraisal process to identify the value of the community amenities to be provided in exchange for the opportunity to develop at the bonus level.



Photo 3: Photo of Constitution Site of Menlo Gateway Project, as seen from Independence Drive, north of the project site



Photo 4: Photo of 111 Independence and Independence Site of Menlo Gateway Project, east of the project site.

LSA

FIGURE 1-16



Photo 5: Existing buildings south of the project site, as seen from Independence Drive, south of the project site.

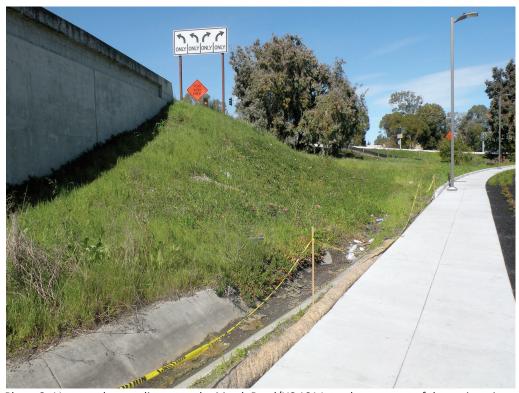


Photo 6: Vegetated area adjacent to the Marsh Road/US 101 Interchange, west of the project site



FIGURE 1-17

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

A request form describing the proposed project was sent to the Native American Heritage Commission (NAHC) in West Sacramento requesting a list of tribes eligible to consult with the City, pursuant to Public Resources Code section 21080.3.1. The consultation process and its conclusion will be further discussed in the EIR.



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## 2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 3.0. ☐ Aesthetics ☐ Agriculture and Forestry Resources □ Air Quality ☐ Biological Resources ☐ Cultural Resources ☐ Energy ☐ Geology/Soils □ Greenhouse Gas Emissions ☐ Hazards & Hazardous Materials ☐ Hydrology/Water Quality ☐ Land Use/Planning ☐ Mineral Resources Noise □ Population/Housing<sup>13</sup> ☐ Public Services ☐ Recreation ☐ Utilities/Service Systems ☐ Wildfire ☐ Mandatory Findings of Significance 2.1 DETERMINATION On the basis of this initial evaluation: I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. □ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. 1/6/2020

2-1

Because the proposed project is a housing project, it is not anticipated to have potentially significant impacts on population and housing; however, this topic area is being identified to comply with the settlement agreement.



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# 3.0 CEQA ENVIRONMENTAL CHECKLIST

#### 3.1 **AESTHETICS**

		Less Than		
	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?			$\boxtimes$	
<ul> <li>Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway</li> </ul>				
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable				
zoning and other regulations governing scenic quality? d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

Pursuant to Public Resources Code Section 21099(d)(1), aesthetic impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment. A transit priority area is an area within one-half mile of a major transit stop, which is defined by Section 51064.3 as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

The nearest public transit stop to the project site is served by SamTrans Route 270 and is located approximately 0.3 miles to the west on Haven Avenue. Route 270 operates on an hourly timetable and provides access to the Redwood City Transit Center, located approximately 4.5 miles northwest of the site. The Atherton Caltrain Station is located approximately 2.8 miles south of the site; however, direct local public transit service to this station is not provided within the vicinity of the site. Facebook is currently constructing a new bus stop to serve the Chilco Campus at 180-200 Jefferson Drive, a few blocks from the project site; however, this bus stop serves buses and trams used by Facebook employees only and does not provide public transit service. Therefore, the project site is not within a transit priority area.

Although the proposed project is a residential development located on an infill site, because the project is not located within a transit priority area the proposed project's potential impacts related to aesthetics are discussed below.



# a. Would the project have a substantial effect on a scenic vista? (Less-Than-Significant Impact)

As stated in the ConnectMenlo Final EIR, scenic corridors are considered public views as seen along a linear transportation route and scenic vistas are views of a specific scenic feature. Scenic vistas are generally interpreted as long-range views, while scenic corridors are short-, middle-, and long-range views. The City has not designated any official scenic corridors or vistas. However, the ConnectMenlo Final EIR considered views of the Santa Cruz Mountain Range, views to the Bay, and views of the foothills and San Francisquito Creek within the City as scenic vistas.

The ConnectMenlo Final EIR determined that due to the natural topography and location of the Bayfront Area at the city's northern border, the far-field views of the Santa Cruz Mountain Range, foothills and San Francisquito Creek would not be impacted by new development occurring within the Bayfront Area. Potential building heights in the Bayfront Area, where the project site is located, could block views of the Bay and its scenic resources from various vantage points. Because the topography in the Bayfront Area is essentially flat, the views from street-level to the scenic resources are currently inhibited by existing conditions such as buildings, structures, overhead utilities, and mature trees/vegetation. The ConnectMenlo Final EIR determined that even before the height increases permitted by ConnectMenlo, the opportunity for views of scenic vistas from street-level public viewing areas was limited. Therefore, the height increases permitted with ConnectMenlo would not cause any further substantial obstruction from the street level view to any scenic resource.

The developed parcels in the Bayfront Area are not considered public Bay-viewing destination points. Public Bay-viewing destination points include the Bayfront Expressway and the San Francisco Bay Trail. No new development is planned for between the Bay and these viewing points; thus, no obstruction of views would occur under ConnectMenlo. Furthermore, potential future development would be subject to the City's existing architectural control process, in accordance with Section 16.68.020 of the Zoning Ordinance and would be required to comply with existing design standards outlined in the Zoning Ordinance. The design standards, which apply to all new construction, ensure development results in high-quality design.

Because the project site is located within a developed portion of the Bayfront Area and does not provide public views of the Bay, and because the proposed project would be subject to the City's existing architectural control process, the proposed project would have a less-than-significant impact on scenic vistas and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

 Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Less-Than-Significant Impact)

As noted in the ConnectMenlo Final EIR, the section of Interstate 280 (I-280) within the City is considered a State scenic highway. However, the Bayfront Area is not located within the viewshed of I-280 and development in the Bayfront Area, as identified in the ConnectMenlo EIR, would have a less-than-significant impact.

Because the project site is located in the Bayfront Area, the proposed project would have a less-than-significant impact on scenic resources and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR. In addition, the existing buildings were built between 1960 and 1966 and are not considered to be historic resources, as noted in Section 3.5, Cultural Resources. Therefore, this impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

c. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that future development occurring under ConnectMenlo would create a shift in uses in the Bayfront Area from light industrial and business park uses to office, technology, research and development, life sciences and mixed-use with multi-family residential and commercial, and involve notable changes in building intensity and height from 35 feet to 120 feet. However, given the existing commercial, industrial, and residential uses surrounding the areas of potential new growth, the development of future projects would continue to be compatible with the existing visual character and quality of the Bayfront Area and its surroundings.

The proposed project would consist of a seven-story multi-family residential building and three-story office building within the Bayfront Area with a maximum height of approximately 84 feet, 9 inches and an average height of approximately 61.02 feet. The maximum allowed average height for the project site is 62.5 feet. As noted above, the proposed project would be subject to the City's existing architectural control process, which would ensure the proposed project complies with the existing design standards outlined in the Zoning Ordinance. Therefore, the proposed project would have a less-than-significant impact related to existing visual character or quality of public views and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Less-Than-Significant Impact)

As stated in the ConnectMenlo Final EIR, the City contains many existing sources of nighttime illumination. These include street and parking area lights, security lighting, and exterior lighting on existing residential, commercial, and institutional buildings. Additional onsite light and glare is caused by surrounding land uses and traffic, specifically from US 101 and the Bayfront Expressway in the Bayfront Area. In addition to new building, security, and lighting for parking areas, buildout of the Bayfront Area would also include lighting aimed at properly illuminating the overall Bayfront Area. Additionally, new larger buildings with more exterior glazing could result in new sources of glare.

New development in the Bayfront Area, including the proposed project, would be required to comply with General Plan policies that ensure new land uses do not generate excessive light levels



that would spill on to adjacent sensitive receptors and reduce light and glare spillover from future development to surrounding land uses.

Specifically, Policy LU-2.3 requires that new development with residential units address potential compatibility issues such as light spillover. The proposed project would be required to comply with this policy as part of the site plan review and architectural control process Therefore, the proposed project would have a less-than-significant impact related to substantial light or glare and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

### 3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

		Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No
		Impact	Incorporated	Impact	Impact
W	ould the project:				
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				$\boxtimes$
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				$\boxtimes$
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				
d.	Result in the loss of forest land or conversion of forest land to non-forest use?				$\boxtimes$
e.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				$\boxtimes$

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (No Impact)

The ConnectMenlo Final EIR determined that impacts related to the conversion of farmland to non-agricultural uses would not occur. There are no agricultural resources located on or near the project site. The project site is classified as "Urban and Built-Up land" by the State Department of Conservation<sup>14</sup> and, as identified in the ConnectMenlo Final EIR, there are no agricultural resources located on or near the project site.

<sup>&</sup>lt;sup>14</sup> California Department of Conservation, 2016. California Important Farmland Finder (map). Website: <u>maps.conservation.ca.gov/dlrp/ciff</u> (accessed October 2019).



The physical conditions on and in the vicinity of the site related to agricultural resources have not changed since certification of the ConnectMenlo Final EIR; therefore, development of the proposed project would not convert agricultural land to non-agricultural uses, would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, or result in new or more severe impacts beyond those examined in the ConnectMenlo Final EIR.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? (No Impact)

The ConnectMenlo Final EIR determined that impacts related to existing zoning for agricultural uses or Williamson Act contracts would not occur. The project site is within the R-MU-B zoning district and is not under a Williamson Act contract. The physical conditions on and in the vicinity of the site related to agricultural resources have not changed since certification of the ConnectMenlo Final EIR; therefore, development of the proposed project would not conflict with existing zoning for an agricultural use or a Williamson Act contract and would not result in new or more severe impacts beyond those examined in the ConnectMenlo Final EIR.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? (No Impact)

The ConnectMenlo Final EIR determined that impacts related to existing zoning for forest land or timberland would not occur. The developed project site is located within an urban area in the City of Menlo Park and is within the City's R-MU-B zoning district. The physical conditions on and in the vicinity of the site related to forest land and timberland resources have not changed since certification of the ConnectMenlo Final EIR; therefore, development of the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland and would not result in new or more severe impacts beyond those examined in the ConnectMenlo Final EIR.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use?(No Impact)

Refer to Section 3.2.c. The proposed project would not result in the loss of forest land or conversion of forestland to non-forest uses and would not result in new or more severe impacts beyond those examined in the ConnectMenlo Final EIR.

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California Department of Conservation, 2012. San Mateo County Williamson Act FY 2006/2007 (map). Available online at: <a href="ftp.consrv.ca.gov/pub/dlrp/wa">ftp.consrv.ca.gov/pub/dlrp/wa</a> (accessed October 2019).

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (No Impact)

Refer to Sections 3.2.a and 3.2.c. The project site is located within an existing urban environment and would not result in the extension of infrastructure into an undeveloped area, the development of urban uses on a previously undeveloped greenfield site, or other physical changes that would result in the conversion of farmland to non-agricultural uses or forest land to non-forest uses. The proposed project would not adversely affect agricultural or forestry resources and would not result in new or more severe impacts beyond those examined in the ConnectMenlo Final EIR.



## 3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	$\boxtimes$			
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?				
c. Expose sensitive receptors to substantial pollutant concentrations?				
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

#### a. through c. (Potentially Significant Impact)

The ConnectMenlo Final EIR found that future development would result in a substantial long-term increase in criteria air pollutants. The ConnectMenlo Final EIR identified Mitigation Measures AQ-2a, AQ-2b, and AQ-2b2, which require a technical assessment evaluating potential project operationand construction phase-related air quality impacts and compliance with the Bay Area Air Quality Management District's (BAAQMD) basic control measures for reducing construction emissions. In addition, based on the proposed project's location in proximity to US 101, Marsh Road, and SR 84, and consistent with the requirements of Mitigation Measure AQ-3b from the ConnectMenlo Final EIR, a health risk assessment is required. These assessments will be completed as part of the EIR; therefore, this impact is potentially significant.

As noted in Section 3.17, a transportation evaluation will be prepared. This evaluation may identify new or more significant impacts related to transportation, and therefore air quality, than was previously analyzed in the ConnectMenlo Final EIR. Development activity associated with implementation of the proposed project could increase pollutant concentrations in Menlo Park through increased vehicle trips and construction. This increase could contribute to existing air pollution in the San Francisco Bay Area Air Basin and has the potential to exceed regional air emission thresholds established by the BAAQMD. Construction activities associated with project development, including building demolition, grading, and ground disturbance, could increase concentrations of particulate matter and could expose sensitive receptors to toxic air contaminants. Therefore, the criteria identified above for topics 3.a through 3.c are potentially significant and will be evaluated in an EIR. The EIR will recommend appropriate mitigation measures.

# d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR concluded that buildout potential analyzed under ConnectMenlo could include potential odor sources that could affect new sensitive receptors, such as composting, greenwaste, and recycling operations; food processing; and painting/coating operations. Responses to odors are subjective, and vary by individual and type of land use. Residential and office uses are not included in Table 4.2-9 of the ConnectMenlo Final EIR, which lists uses that could be required to undergo environmental review to ensure sensitive land uses are not exposed to objectionable odors, and the proposed project would not be a source of odors. Therefore, the proposed project would not result in other emissions, such as those leading to odors, that would adversely affect a substantial number of people, and this impact would be less-than-significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.



## 3.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:  a. 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 Wildlife or U.S. Fish and Wildlife Service?				
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d. 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?				
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			$\boxtimes$	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

a. Would the project 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 Wildlife or U.S. Fish and Wildlife Service? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that the potential for occurrence of special-status species in developed areas is generally very remote in comparison to undeveloped lands with natural habitat that contain essential habitat characteristics for the range of species known to occur in the Menlo Park vicinity. ConnectMenlo included goals, policies, and programs and bird-safe regulations for the Bayfront Area that would help protect special-status species and birds and minimize impacts.

The project site is currently developed and does not include any sensitive habitat, nor is it located near any sensitive habitats, and therefore a project-specific baseline biological resources assessment pursuant to Mitigation Measure BIO-1 from the ConnectMenlo Final EIR would not be required.

In addition, the proposed project would be required to comply with the bird-safe design measures included in the building regulations for the Bayfront Area. Therefore, the proposed project would not result in direct or indirect adverse effects on special-status plant or wildlife species and this impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? (Less-Than-Significant Impact)

As stated in the ConnectMenlo Final EIR, sensitive natural communities within the City consist of areas of coastal salt marsh vegetation in the baylands, native valley oaks in Saint's Patrick's Seminary, and possibly areas of riparian scribs and woodland along San Francisquito Creek and other drainages. The project site is currently developed and is not located within or in the immediate vicinity of one of these areas, and therefore would have a less-than-significant impact related to riparian habitat and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that development could have a significant adverse effect on wetlands by allowing development on previously undeveloped parcels in the Bayfront Area with mapped wetlands, which are along University Avenue. The project site is currently developed and does not support any federally protected wetlands. Compliance with all applicable requirements associated with the protection of water quality in stormwater runoff would further ensure that there are no impacts to wetlands within or beyond the Bayfront Area as a result of the proposed project. Compliance with stormwater quality requirements is discussed in Section 3.10, Hydrology and Water Quality, of this Initial Study. Therefore, the proposed project would have a less than significant impact related to wetlands and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

d. Would the project 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? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that development and land use activities consistent with ConnectMenlo would result in a reduction in the remaining natural habitat within the City. However, most wildlife in these areas are already acclimated to human activity in the urbanized portions of the City. As noted above, the project site is currently developed and does not contain, nor is it located near, any sensitive habitats. Ornamental landscaping located throughout the project site would be removed. Vegetation and landscaping generally have the potential to support nests of common native bird species. All native birds and their nests, regardless of their regulatory status, are protected under the federal Migratory Bird Treaty Act and California Fish and Game Code.



However, because the project site is located in a busy urban area and vegetation on the project site is limited, potential impacts to nesting birds would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Less-Than-Significant Impact)

There are a total of approximately 13 existing trees on the project site, approximately 10 of which are considered heritage trees, as defined by the City's Municipal Code. All existing trees on the site would be removed with the proposed project. The City's Tree Preservation Ordinance requires a permit to remove protected trees and replacement of protected trees at a 2:1 ratio. The proposed project would include the planting of a minimum of 20 new trees; therefore, the proposed project would not conflict with the City's Tree Preservation Ordinance. In addition, the proposed project would include the installation of new landscaping that would comply with Municipal Code Chapter 12.44, Water-Efficient Landscaping, and therefore would not conflict with any local policies or ordinances protecting biological resources. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (No Impact)

As noted in the ConnectMenlo Final EIR, portions of the City are within the Stanford University Habitat Conservation Plan (Stanford HCP).<sup>17</sup> However, the Stanford HCP only applies to land owned by Stanford University. The project site is not owned by Stanford University, and therefore is not located within the boundaries of an adopted conservation plan. Therefore, the proposed project would not conflict with the provisions of a habitat conservation plan, natural community plan or other approved local, regional or State habitat conservation plan, and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

HortScience, 2019. Arborist Report, Menlo Portal, Menlo Park, CA. September 25.

<sup>&</sup>lt;sup>17</sup> Stanford University, 2015. Stanford University Habitat Conservation Plan. December 22.

#### 3.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
c. Disturb any human remains, including those interred outside of formal cemeteries?	e 🗌	$\boxtimes$		

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? (Less-Than-Significant Impact)

As noted in the ConnectMenlo Final EIR, the two main categories of historical resources that are subject to adverse impacts, and that may be adversely affected by development allowed under ConnectMenlo, are historical archaeological deposits and historical architectural resources. Refer to Section 3.5.b, below for a discussion of archaeological deposits.

There are several recognized historic properties within the City; however, none of these are located within the Bayfront Area, where the project site is located. The ConnectMenlo Final EIR Mitigation Measure CULT-1 requires site-specific historic resources evaluations for individual projects that are proposed on sites with a building more than 50 years old or any site adjoining with a building more than 50 years old. The existing buildings on the project site were constructed between 1960 and 1966, and therefore meet the 50-year-old threshold. A Historic Resources Assessment prepared for the project site determined that none of the buildings appear to be eligible for listing in the National Register of Historical Places or the California Register of Historical Resources. In addition, adjoining properties include buildings that are 50 years or older; however, as noted above, none of the recognized historic properties within the City are located within the Bayfront Area or within the immediate project vicinity. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5 and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Less-Than-Significant with Mitigation Incorporated)

The ConnectMenlo Final EIR determined that it is highly improbable that archaeological deposits associated with the historic period of Menlo Park and Native American prehistoric archeological sites exist on the locations identified for future development, because these locations are concentrated on sites either already developed, and/or in close proximity to existing development, where development will have a lesser impact on historical archeological resources.

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FirstCarbon Solutions, 2019. *Historic Resources Assessment, Menlo Portal Multi-family Housing and Office Project, City of Menlo Park, San Mateo County, California.* September 17.

However, future projects that require substantial excavation reaching significant depths below the ground surface could result in the disturbance of unidentified subsurface materials that have the potential to contain prehistoric archaeological resources, including unrecorded Native American prehistoric archaeological sites. The ConnectMenlo Final EIR identified Mitigation Measure CULT-2a, which is presented below, to ensure this impact would be reduced to a less-than-significant level. This mitigation measure would be applicable to the proposed project and would be required to ensure that potential impacts of the proposed project to archaeological deposits would be less than significant and that no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Connect Menlo Final EIR Mitigation Measure CULT-2a: 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 archeologist determines whether the resource requires further study. All developers in the study area shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction activities shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of the CEQA criteria by a qualified archeologist. If the resource is determined significant under CEQA, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant. The archaeologist shall also perform appropriate technical analyses; prepare a comprehensive report complete with methods, results, and recommendations; and provide for the permanent curation of the recovered resources. The report shall be submitted to the City of Menlo Park, Northwest Information Center (NWIC), and State Historic Preservation Office (SHPO), if required.

c. Would the project disturb any human remains, including those interred outside of formal cemeteries? (Less-Than-Significant with Mitigation Incorporated)

The ConnectMenlo Final EIR determined that human remains associated with pre-contact archaeological deposits could exist within the City and could be encountered at the time potential future development occurs. The associated ground-disturbing activities, such as site grading and trenching for utilities, have the potential to disturb human remains interred outside of formal cemeteries. Any human remains encountered during ground-disturbing activities are required to be treated in accordance with California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e), which state the mandated procedures of conduct following the discovery of human remains. The ConnectMenlo Final EIR identified Mitigation Measure CULT-4, which is presented below, to ensure this impact would be reduced to a less-than-significant level. This mitigation measure would be applicable to the proposed project and would be required to ensure that potential impacts of the proposed project to pre-contact human remains would be less than significant and that no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Connect Menlo Final EIR Mitigation Measure CULT-4: Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the 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, who will, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, 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.



#### 3.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of				
energy resources during project construction or operation?  b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			$\boxtimes$	

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? (Less-Than-Significant Impact)

Energy conservation was evaluated in Section 4.15.5 of the ConnectMenlo Final EIR, consistent with CEQA Guidelines Appendix F. The ConnectMenlo Final EIR did not quantify energy demand associated with buildout of ConnectMenlo; however, a brief discussion of energy use and conservation, including the City's Climate Change Action Plan, was included. The ConnectMenlo Final EIR determined that development pursuant to ConnectMenlo would be subject to new requirements under rule making developed at the State and local level regarding greenhouse gas (GHG) emissions. Specifically, the ConnectMenlo Final EIR found that individual projects would be required to adhere to the Heavy Duty National Program, which has been adopted by the United States Environmental Protection Agency (USEPA). The Heavy Duty National Program establishes fuel efficiency and GHG emission standards in the heavy-duty highway sector, which include combination tractors (semi-trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). In addition, as required by Mitigation Measure AQ-2b1 in the ConnectMenlo Final EIR, individual development projects would be required to comply with the current BAAQMD's basic control measures for reducing construction emissions, which would also improve the energy efficiency of the project during construction.

The ConnectMenlo Final EIR determined that new development pursuant to ConnectMenlo would be constructed using energy efficient modern building materials and construction practices, in accordance with the CALGreen Building Code, the California Public Utility Commission's Long Term Energy Efficiency Strategic Plan, and Chapter 12.18 of the Menlo Park Municipal Code which contains the Green Building Ordinance. In addition, the ConnectMenlo Final EIR found that new buildings would also use new modern appliances and equipment, in accordance with the 2006 Appliance Efficiency Regulations.

As discussed in the ConnectMenlo Final EIR, implementation of ConnectMenlo inherently furthers objectives of energy conservation by focusing activities in areas of existing infrastructure and services. In addition, the Land Use, Circulation, and Open Space/Conservation elements of ConenctMenlo contain goals, policies, and programs that would require local planning and development decisions to consider impacts to energy resources.

As a part of ConnectMenlo, all new building within the Bayfront Area are required to comply with specific green building requirements for LEED certification, provide outlets for Electric Vehicle (EV) charging, provide on-site renewable energy generation, and enroll in the USEPA's Energy Star Building Portfolio Manager.

Similar to buildout of ConnectMenlo, the proposed project would increase the demand for energy during construction of the proposed project and would increase the demand for electricity and gasoline during operation of the proposed project. The proposed project would not increase the demand for natural gas as the City's reach codes would require the buildings to be all electric. The discussion and analysis provided below is based on data included in the California Emissions Estimator Model (CalEEMod) output, which is included in Appendix B.

The anticipated construction schedule for the proposed project assumes that the proposed project would be built over 37 months. The proposed project would require demolition, grading, site preparation, and building activities during construction. Construction of the proposed project would require energy for the manufacture and transportation of construction materials, preparation of the site for demolition and grading activities, and construction of the project. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. In order to increase energy efficiency on the site during project construction, the project would restrict equipment idling times to 5 minutes or less and would require construction workers to shut off idle equipment, as required by the ConnectMenlo Final EIR Mitigation Measure AQ-2b1. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the project. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Similar to buildout of ConnectMenlo, energy use consumed during operation of the proposed project would be associated with electricity consumption and fuel used for vehicle trips associated with the proposed project. Energy consumption was estimated for the proposed project using default energy intensities by building type in CalEEMod. In addition, the proposed buildings would be constructed to current CALGreen standards, which was included in CalEEMod inputs. Electricity usage estimates associated with the proposed project are shown in Table 3.A.

The proposed project would result in energy usage associated with gasoline to fuel project-related trips. Based on the CalEEMod analysis, the proposed project would result in approximately 5,048,812 vehicle miles traveled (VMT) per year.<sup>19</sup>

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It should be noted that a Transportation Impact Analysis (TIA) will be prepared as part of the EIR. The TIA and EIR may include a refined estimate of VMT; however, any variation in estimated VMT would not affect the analysis or conclusions related to energy as presented in this section.



The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.0 mpg in 2015.<sup>20</sup> Therefore, using the USEPA fuel economy estimates for 2015, the proposed project would result in the consumption of approximately 229,491 gallons of gasoline per year. Table 3.A below, shows the estimated potential increased electricity and gasoline demand associated with the proposed project.

**Table 3.A: Estimated Annual Energy Use of Proposed Project** 

	Electricity Use	Gasoline
Land Use	(kWh per year)	(gallons per year)
Residential	141,370	201,264
Retail	433,156	27,867
Parking Structure	260,618	0
Open Space	0	0
Total	2,108,144	229,491

Source: LSA (October 2019).

As shown in Table 3.A, the estimated potential increased electricity demand associated with the proposed project is 2,108,144 kilowatt-hours (kWh) per year. In 2017, California consumed approximately 288,614 gigawatt-hours (GWh) or 288,614,000,000 kWh.<sup>21</sup> Of this total, San Mateo County consumed 4,367 GWh or 4,367,541,850 kWh.<sup>22</sup> Therefore, electricity demand associated with the proposed project would only be approximately 0.05 percent of San Mateo County's total electricity demand.

In addition, the proposed project would result in energy usage associated with gasoline to fuel project-related trips. As shown above in Table 3.A, vehicle trips associated with the proposed project would consume approximately 229,491 gallons of gasoline per year. In 2015, vehicles in California consumed approximately 15.1 billion gallons of gasoline.<sup>23</sup> Therefore, gasoline demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in California.

Consistent with ConnectMenlo requirements, the proposed project would comply with specific green building requirements for LEED certification, provide outlets for EV charging, provide on-site renewable energy generation, enroll in the USEPA's Energy Star Building Portfolio Manager, use new

U.S. Department of Transportation. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.gov/archive/publications/national\_transportation\_statistics/table\_04\_23/ (accessed October 2019).

California Energy Commission. 2017. Energy Consumption Data Management Service. Electricity Consumption by County. Available online at: <a href="http://www.ecdms.energy.ca.gov/elecbycounty.aspx">http://www.ecdms.energy.ca.gov/elecbycounty.aspx</a> (accessed October 2019).

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<sup>&</sup>lt;sup>23</sup> California Energy Commission. 2017. California Gasoline Data, Facts, and Statistics. Available online at: http://www.energy.ca.gov/almanac/transportation\_data/gasoline/ (accessed October 2019).



modern appliances and equipment, and comply with current CALGreen standards, which would help to reduce energy consumption.

The proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment use, and transportation. Therefore, construction and operation period impacts related to consumption of energy resources would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

# b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (Less-Than-Significant Impact)

As previously stated, the proposed project would be required to comply with the CALGreen Code, which includes provisions related to insulation and design aimed at minimizing energy consumption. In addition, as described in the ConnectMenlo Final EIR, new development as envisioned in ConnectMenlo would be constructed using modern and energy efficient building materials and construction practices, in accordance with the CALGreen Building Code, the California Public Utility Commission's Long Term Energy Efficiency Strategic Plan, and Chapter 12.18 of the Menlo Park Municipal Code, which contains the Green Building Ordinance. In addition, the ConnectMenlo Final EIR found that new buildings would also use new modern appliances and equipment, in accordance with the 2006 Appliance Efficiency Regulations.

As discussed in the ConnectMenlo Final EIR, implementation of ConnectMenlo inherently furthers objectives of energy conservation by focusing activities in areas of existing infrastructure and services. In addition, the Land Use, Circulation, and Open Space/Conservation elements of ConnectMenlo contain goals, policies, and programs that would require local planning and development decisions to consider impacts to energy resources. As a part of ConnectMenlo, all new buildings within the Bayfront Area are required to comply with specific green building requirements for LEED certification, provide outlets for EV charging, provide on-site renewable energy generation, and enroll in the USEPA's Energy Star Building Portfolio Manager.

The ConnectMenlo Final EIR also found that future development under ConnectMenlo, as part of the City's project approval process, would be required to comply with existing regulations, including General Plan policies and Zoning Ordinance regulations that have been prepared to promote energy conservation and efficiency by implementing sustainable building practices and reducing automobile dependency. Furthermore, the ConnectMenlo Final EIR found that with continued implementation of the City's Climate Action Plan (CAP), compliance with the CALGreen Building Code, and the other applicable State and local energy efficiency measures cited above, significant energy conservation and savings would be realized from future development under ConnectMenlo.

In addition, as discussed in the ConnectMenlo Final EIR, as infill development, ConnectMenlo inherently furthers objectives of energy conservation related to transportation by focusing activities in areas of existing infrastructure and services. Transportation features that are priorities of ConnectMenlo promote non-motorized transportation within and to anticipated development within the Bayfront Area, as well as city-wide, thereby potentially reducing energy consumption that would otherwise be related to motorized vehicle use (i.e., automobiles).



Consistent with ConnectMenlo requirements, the proposed project would comply with specific green building requirements for LEED certification, provide outlets for electric vehicle charging, provide on-site renewable energy generation, enroll in the USEPA's Energy Star Building Portfolio Manager, use new modern appliances and equipment, and comply with current CALGreen standards, which would help to reduce energy consumption. The proposed project would also be consistent with the ConnectMenlo energy conservation policies, as noted above, and the City's Climate CAP. In addition, the project site consists of an infill site in an urban area and the proposed project would provide residential uses to help balance high job-generating uses in the project vicinity.

The proposed project would also implement Transportation Demand Management (TDM) measures, which would help reduce transportation energy usage consistent with ConnectMenlo requirements.

In addition, as indicated above, energy usage on the project site during construction would be temporary in nature and energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed project's total impact to regional energy supplies would be minor, the proposed project would not conflict with energy conservation plans. Thus, as shown above, the proposed project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy. Therefore, the proposed project would be consistent with applicable plans related to renewable energy and energy efficiency. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

# 3.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:			-	-
a. Directly or indirectly cause potential substantial adve effects, including the risk of loss, injury, or death invo i. Rupture of a known earthquake fault, as delineate the most recent Alquist-Priolo Earthquake Fault Z Map issued by the State Geologist for the area or on other substantial evidence of a known fault? R	olving: ed on oning based efer to			$\boxtimes$
Division of Mines and Geology Special Publication ii. Strong seismic ground shaking?	42.			$\boxtimes$
iii. Seismic-related ground failure, including liquefact	ion?			$\boxtimes$
iv. Landslides?				
b. Result in substantial soil erosion or the loss of topsoil	?		$\boxtimes$	
c. Be located on a geologic unit or soil that is unstable, a would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			$\boxtimes$	
d. Be located on expansive soil, as defined in Table 18-1 the Uniform Building Code (1994), creating substantia or indirect risks to life or property?				
<ul> <li>Have soils incapable of adequately supporting the use septic tanks or alternative waste water disposal syste where sewers are not available for the disposal of wa</li> </ul>	ms			$\boxtimes$
<ul><li>water?</li><li>f. Directly or indirectly destroy a unique paleontologica resource or site or unique geologic feature?</li></ul>	ı 🗆	$\boxtimes$		

The information presented in this section is based on data and findings provided in the Preliminary Geotechnical Investigation<sup>24</sup> prepared for the project site, unless otherwise noted.

Rockridge Geotechnical, Inc., 2018. Preliminary Geotechnical Investigation to Support Due Diligence Evaluation, Menlo Park III, 115 Independence Drive, 104 & 110 Constitution Drive, Menlo Park, California. October 24.

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i. 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. ii. Strong seismic ground shaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides? (No Impact)

The California Supreme Court concluded in its *CBIA vs. BAAQMD* decision that "CEQA generally does not require an analysis of how existing environmental conditions will affect a project's future users or residents." With this ruling, CEQA no longer considers the impact of the environment on a project (such as the impact of existing seismic hazards on new project occupants) to be an environmental impact, unless the project could exacerbate an existing environmental hazard. The proposed project would not change existing seismic hazards and, therefore, would not exacerbate existing hazards related to surface fault rupture and seismic ground shaking. As such, the following discussions of seismic hazards related to surface fault rupture and seismic ground shaking are provided for informational purposes only.

**Fault Rupture.** Surface fault rupture occurs when the ground surface is broken due to fault movement during an earthquake. Fault rupture is generally expected to occur along active fault traces.

Areas susceptible to fault rupture are delineated by the California Geological Survey Alquist-Priolo Earthquake Fault Zones and require specific geological investigations prior to development to reduce the threat to public health and safety and to minimize the loss of life and property posed by an earthquake-induced ground failure.

The ConnectMenlo Final EIR determined that no Alquist-Priolo Earthquake Fault Zones have been mapped within the Bayfront Area. There are no mapped faults going through or adjacent to the project site, and the project site is not located within an Earthquake Fault Zone. The closest active fault to the project site is the San Andreas Fault, which is located approximately 6.2 miles southwest. Therefore, the proposed project would have no impact related to fault rupture and no new or more severe impacts beyond those examined in the ConnectMenlo Final EIR.

**Ground Shaking.** Seismic ground shaking generally refers to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The magnitude of a seismic event is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude of seismic waves. The intensity of an earthquake is a subjective measure of the perceptible effects of a seismic event at a given point.

In the future, the proposed project would likely experience severe ground shaking during moderate and large magnitude earthquakes produced along the San Andreas Fault or other active Bay Area fault zones. Using information from recent earthquakes, improved mapping of active faults, ground motion modeling, and a new model for estimating earthquake probabilities, there is a 72 percent chance that at least one earthquake of Magnitude 6.7 or greater will occur in the Bay Area before

2043. The Hayward Fault, located approximately 13 miles northeast of the project site, has the highest likelihood of an earthquake greater than or equal to Magnitude 6.7 in the Bay Area, estimated at 33 percent.

The risk of ground shaking impacts is reduced through adherence to the design and materials set forth in building codes. The City of Menlo Park has adopted the 2016 California Building Code (Title 24, California Code of Regulations), which provides for stringent construction requirements on projects in areas of high seismic risk. The Preliminary Geotechnical Investigation prepared for the project site recommends seismic design parameters to be used in accordance with the 2016 California Building Code to account for earthquake ground motions.

As noted in the ConnectMenlo Final EIR, the design and construction for the proposed project is required to conform with, or exceed, current best standards for earthquake resistant construction in accordance with the most current California Building Code and with the generally accepted standards of geotechnical practice for seismic design in Northern California.

Seismic hazards cannot be completely eliminated, even with site-specific geotechnical investigation/design and advanced building practices. However, the seismic design standards of the California Building Code are intended to prevent catastrophic building failure in the most severe earthquakes currently anticipated. Therefore, compliance with current building codes would ensure that there would be no impact associated with ground shaking and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

**Seismic-Related Ground Failure and Liquefaction.** The potential for different types of ground failure to occur during a seismic event is discussed below. As noted above, the ConnectMenlo Final EIR determined that compliance with existing regulations, including General Plan policies that have been prepared to minimize impacts related to strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landsliding, impacts related to seismic-related ground failure and liquefaction would be less than significant. Because geotechnical and soil conditions can vary by geographic location, a site-specific analysis is presented below.

Liquefaction. Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire a "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (silt and clay) may also liquefy. Based on testing at the project site, some of the fine grained soils encountered with a low plasticity may be prone to liquefaction settlement. Total settlement that could occur at the ground surface as a result of liquefaction is estimated to range from approximately 0.25 to 0.75 inches.

The Preliminary Geotechnical Investigation provided a preliminary recommendation that the proposed buildings be supported on a shallow foundation system bearing on a ground improvement system. Final grading, foundation, and building plans must be designed in accordance with the California Building Code, which requires preparation of and compliance with the recommendations of a site-specific geotechnical investigation. These designs would



include measures that would address the potential for differential settlement related to liquefaction. Therefore, compliance with the California Building Code would ensure that the potential impacts associated with liquefaction would not occur and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Lateral Spreading. Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial soils are transported downslope or in the direction of a free face by earthquake and gravitational forces. The project site is not susceptible to lateral spreading due to the lack of a nearby free slope face and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

**Surface Settlement.** Settlement can occur when non-saturated, cohesionless soil is densified by earthquake vibrations. The fill and native soils above the ground water at the project site are typically composed of stiff to very stiff clays, and therefore the potential for settlement of these surface soils during a major earthquake is low. In addition, recompaction of any poorly-compacted or undocumented fills encountered during earthwork construction, as recommended by the Geotechnical Investigation, would further reduce the risk of differential compaction during a major earthquake. Therefore, the proposed project would have no impact related to surface settlement and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Landslides. Seismically-induced landslides occur as the rapid movement of large masses of soil on unstable slopes during an earthquake. The Seismic Hazard Zones mapped by the California Geological Survey (CGS) delineate areas susceptible to seismically-induced landslides that require additional investigation to determine the extent and magnitude of potential ground failure. According to CGS, the project site is not located within a Seismic Hazard Zone for seismically-induced landslides.<sup>25</sup> Therefore, the proposed project would have no impact related to landslides and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

# b. Would the project result in substantial soil erosion or the loss of topsoil? (Less-Than-Significant Impact)

The Geotechnical Investigation does not identify topsoil on the project site. The project site is developed and has been mapped as an "urban land" area by the Natural Resources Conservation Service. Areas designated as "urban land" have essentially no exposed soil and are covered by streets, parking lots, buildings, and other structures. The redevelopment of the project site would involve demolition and construction activities, such as grading and excavation, which could result in temporary soil erosion when the disturbed soils are exposed to wind or rainfall. However, this would be temporary and limited to the period of grading. Upon completion of construction, the project site would be covered with structures, pavement, and landscaping and would not include areas of

<sup>&</sup>lt;sup>25</sup> California Geological Survey, 2006. Seismic Hazard Zones; Palo Alto Quadrangle. October 18.

Natural Resources Conservation Service. Web Soils Survey, USDA Mapping. Website: websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (accessed October 2019).

exposed soil. In addition, the ConnectMenlo Final EIR determined that compliance with the City's Engineering Division's Grading and Drainage Control Guidelines would reduce the impacts from erosion and the loss of topsoil to the extent practicable. Therefore, the proposed project would result in less-than-significant impacts related to soil erosion or loss of top soil and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

c. Would the project 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 on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (Less-Than-Significant Impact)

As previously discussed in Section 3.7.a, above, the soils at the project site are susceptible to liquefaction and seismically-induced settlement, but they are not susceptible to lateral spreading or landslides. As noted in the ConnectMenlo Final EIR, the proposed project's required compliance with the California Building Code would reduce the potential risks to people and structures as a result of liquefaction and seismically-induced settlement to a less-than-significant level and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

**Subsidence.** Subsidence or collapse can result from the removal of subsurface water resulting in either catastrophic or gradual depression of the surface elevation of the project site. Since the proposed project would connect to the Menlo Park Municipal Water (MPMW) water system, groundwater extraction that could potentially result in subsidence is not expected on the project site and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

**Consolidation.** Consolidation of soils is a process by which the soil volume decreases as water is expelled from saturated soils under static loads. As the water moves out from the pore space of the soil, the solid particles realign into a denser configuration that results in settlement. Consolidation typically occurs as a result of new buildings or fill materials being placed over compressible soils.

Final grading, foundation, and building plans must be designed in accordance with the California Building Code. These designs would include foundation alternatives, such as conventional shallow spread footing foundations combined with ground improvement methods (e.g., Geopiers or drilled displacement columns) or deeper foundation options (e.g., auger-cast piles) to transfer structural building loads to deeper, dense supporting strata below the soft, compressible clay layers onsite. Therefore, compliance with the existing building codes would ensure that the potential impacts associated with consolidation would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

d. Would the project 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? (Less-Than-Significant Impact)

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume.



The ConnectMenlo Final EIR determined that expansive soils are most prevalent in the neighborhoods that lie closest to the Bay. Testing at the project site determined that the near-surface soils encountered at the project site are highly expansive and subject to expansion and contraction during wetting/drying cycles.

As stated in the ConnectMenlo Final EIR, final grading, foundation, and building plans must be designed in accordance with the California Building Code. As noted in Section 3.7.a, the City has adopted the 2016 California Building Code, and the proposed project would be required to comply with the current code in effect, which includes the City's recently adopted reach code. Project designs would include measures to excavate the existing soils that are susceptible to expansion and either replace the materials with engineered fill or further evaluate the possible reuse of the materials as engineered fill.

Compliance with the existing building codes would ensure that the potential impacts associated with expansive soils would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? (No Impact)

The project site would be served by a wastewater conveyance system maintained by the West Bay Sanitary District (WBSD). Wastewater from the WBSD's collection system is conveyed to the Silicon Valley Clean Water (SVCW) Waste Water Treatment Plant (WWTP) in Redwood Shores. Development of the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would have no impact related to septic tanks or alternative waste water disposal systems and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less-Than-Significant with Mitigation Incorporated)

The ConnectMenlo Final EIR determined that no known fossils or unique paleontological resources or unique geologic features are present within the study area; however, geological formations underlying Menlo Park have the potential for containing paleontological resources (i.e., fossils). Demolition, site preparation, and construction activities associated with the proposed project could reach significant depths below the ground surface where no such excavation has previously occurred and unrecorded fossils of potential scientific significance and other unique geologic features could exist. The ConnectMenlo Final EIR identified Mitigation Measure CULT-3, Which is presented below, to ensure this impact would be reduced to a less-than-significant level. This

<sup>27</sup> Menlo Park, City of, 2016a, op. cit.

In December 2018, after certification of the ConnectMenlo Final EIR, the CEQA Guidelines were revised. As a part of this revision, the consideration of impacts to paleontological resources was moved from Cultural Resources to Geology and Soils. For ease of reference, this document identifies Mitigation Measures consistent with their labelling in the ConnectMenlo Final EIR.

mitigation measure would be applicable to the proposed project and would be required to ensure that potential impacts of the proposed project to paleontological resources would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

ConnectMenlo Final EIR Mitigation Measure CULT-3: 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 1995]), 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.



## 3.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b. Conflict with an applicable plan, policy or regulation adop for the purpose of reducing the emissions of greenhouse gases?	ted			

# a. and b. (Potentially Significant Impact)

The ConnectMenlo Final EIR identified two significant and unavoidable impacts related to GHG emissions as a result of implementation of ConnectMenlo (Impact GHG-1 and GHG-2). The ConnectMenlo Final EIR identified Mitigation Measure GHG-1, which requires the City to update its Climate Action Plan (CAP) prior to January 1, 2020. However, because there are no post-2020 federal and State measures that would assist the City in achieving the efficient target at the ConnectMenlo buildout year of 2040, these impacts remained significant and unavoidable.

Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Furthermore, CH<sub>4</sub> is emitted during the fueling of heavy equipment. Exhaust emissions from on-site operation of the proposed project (i.e., residential-based trips, including commuting) would generate GHG emissions from area and mobile sources as well as indirect emissions from sources associated with energy consumption. As noted in Section 3.17, Transportation, a transportation evaluation of the proposed project will be prepared, which could indicate more significant impacts related to transportation, and therefore GHGs, than were previously analyzed in the ConnectMenlo Final EIR. Mobile-source GHG emissions would also include project-generated vehicle trips associated with activities such as landscaping and maintenance on the project site, and other sources. Therefore, the proposed project could potentially conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The criteria identified above for topics 3.8.a and 3.8.b will be evaluated in the EIR. Mitigation measures for project-specific impacts will be recommended if necessary.

## 3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e. For a project located within 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less-Than-Significant Impact)

The proposed project includes the demolition of the existing structures and surface parking lots on the project site and the construction of new residential apartments, a commercial building, and associated site improvements. The ConnectMenlo Final EIR determined that these types of land uses typically do not involve transport, use, or disposal of significant quantities of hazardous materials. Generally, small quantities of hazardous materials, such as paints, cleaning chemicals, and fertilizers would be used for routine maintenance and landscaping. Therefore, a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials would not occur and potential impacts related to operational use of hazardous materials would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.



During the construction period, hazardous materials such as fuel, lubricants, paint, sealants, and adhesives would be transported to and used at the project site. However, compliance with existing regulations that govern the transportation of hazardous materials and the use and disposal of such materials would ensure that the proposed project would not result in spills or leaks that could create a significant hazard to the public or the environment during and after construction by ensuring that these materials are properly handled, and if spills or leaks occur, they are properly and promptly cleaned up and the materials disposed of at an appropriate waste-handling facility. Therefore, potential impacts of the proposed project associated with routine transport, use, or disposal of hazardous materials would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Less-Than-Significant with Mitigation Incorporated)

The public and/or the environment could be affected by the release of hazardous materials from the project site into the environment by: 1) exposing workers and/or the public to potentially contaminated soil and groundwater during construction and/or operation of the project; or 2) exposing workers and/or the public to hazardous building materials (e.g., Polychlorinated Biphenyls [PCBs], lead paint, asbestos) during demolition of the existing commercial structure.

The ConnectMenlo Final EIR determined that future development associated with ConnectMenlo could occur on properties that possibly are contaminated. Future development would be required to comply with existing regulations, including General Plan policies that have been identified to minimize impacts related to accidents and spills of hazardous materials. In particular, Policy S-1.18, which requires 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 to identify and implement mitigation measures to avoid adversely affecting the environment or the health and safety of residents or new uses.

A Phase I Environmental Site Assessment (Phase I ESA) was prepared for the project site in October 2018.<sup>29</sup> The Phase I ESA reviewed past uses of the project site and surrounding vicinity to evaluate whether past uses or releases of hazardous materials may have impacted the project site. The Phase I ESA indicated that historical site operations included the use of chlorinated solvents. Limited subsurface investigations conducted at the site in the 1980s and 1990s indicated that volatile organic compounds (VOCs) were present above the San Francisco Regional Water Quality Control Board's (Regional Water Board) Environmental Screening Levels for residential and commercial/industrial land uses in soil, soil vapor, and groundwater. Detected VOCs include trichloroethene (TCE), dichloroethene (DCE), tricholoethane (TCA), Freon, and xylenes.

Ramboll US Corporation, 2018. *Phase I Environmental Site Assessment, 104 and 110 Constitution Drive, 115 Independence Drive, Menlo Park, California*. October 22.

A Phase II ESA was prepared for the project site in October 2018.<sup>30</sup> The Phase II ESA found that soil samples on the project site contained concentrations of metals, organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPHs), VOCs, and polycyclic aromatic hydrocarbons (PAHs), though all levels were less than their respective ESLs for residential land use. Groundwater samples at the project site contained TCE, PCE and TPH above residential ESLs, however, these levels are lower than historical levels at and within the vicinity of the project site. No detections of VOCs in sub-slab vapor exceeded current residential ESLs. The ConnectMenlo Final EIR identified Mitigation Measures HAZ-4a and HAZ-4b, which are presented below, to ensure that impacts associated with potential exposure to hazardous soil vapor and groundwater conditions during project construction and operation would be reduced to a less-than-significant level. These mitigation measures would be applicable to the proposed project and would be required to ensure that potential impacts of the proposed project would be less than significant and that no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

ConnectMenlo Final EIR Mitigation Measure HAZ-4a: Construction at the sites of any site in the City with known contamination, shall be conducted under a project-specific Environmental Site Management Plan (ESMP) that is prepared in consultation with the Regional Water Quality Control Board (RWQCB) or the Department of Toxic Substances Control (DTSC), as appropriate. 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.

**ConnectMenlo Final EIR Mitigation Measure HAZ-4b:** For those sites throughout the city with potential residual contamination in soil, gas, or groundwater that are planned for redevelopment with an overlying occupied building, a vapor intrusion assessment shall be performed by a licensed environmental professional. If the results of the vapor intrusion assessment indicate the potential for significant vapor intrusion into an occupied building, project design shall include vapor controls or source removal, as appropriate, in accordance with regulatory agency requirements. Soil vapor mitigations or controls could include vapor

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Ramboll US Corporation, 2018. *Phase II Investigation Report, 104-110 Constitution Drive and 115 Independence Drive, Menlo Park, California*. October 19.

barriers, passive venting, and/or active venting. The vapor intrusion assessment and associated vapor controls or source removal can be incorporated into the ESMP (Mitigation Measure HAZ-4a).

With implementation of the above mitigation measures, the proposed project would have a less-than-significant impact related to the release of hazardous materials into the environment and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Would the project emit hazardous emissions or handle hazardous or acutely hazardous
materials, substances, or waste within one-quarter mile of an existing or proposed school? (No
Impact)

The proposed project would not involve handling or emissions of acutely hazardous materials, substances, or wastes. The Tide Academy, a high school within the Sequoia Union High School District, began operation in Fall 2019 at 150 Jefferson Drive, and is located approximately 0.25-mile east of the project site. However, as noted in Sections 3.9.a and 3.9.b, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste, and therefore no impact related to hazardous emissions within proximity to a school would occur and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Less-Than-Significant Impact)

The provisions of Government Code Section 65962.5 require the California Department of Toxic Substances Control (DTSC), the State Water Resources Control Board, the California Department of Health Services, and the California Department of Resources Recycling and Recovery (formerly the California Integrated Waste Management Board) to submit information pertaining to sites associated with solid waste disposal, hazardous waste disposal, leaking underground tank sites, and/or hazardous materials releases to the Secretary of the California Environmental Protection Agency (Cal/EPA). Based on a review of regulatory databases performed as part of the Phase I ESA prepared for the project site, including listed hazardous materials release sites compiled pursuant to Government Code Section 65962.5, the project site is listed as a hazardous materials release site related to the historical uses of the project site, including potential contaminants of concern for soil and groundwater. The Phase II ESA performed for the site confirmed these findings. However, the project site is not an active site included on the State's Hazardous Waste and Substances Site List (Cortese List), and as noted in Section 3.9.b. implementation of ConnectMenlo Final EIR Mitigation Measures HAZ-4a and HAZ-4b, would ensure the proposed would not result in the release of hazardous materials. Therefore, this impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

e. Would the project be located within 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area? (No Impact)

The ConnectMenlo Final EIR determined that the study area would not be subject to any airport safety hazards, and no impact would occur. The project site is located approximately 4 miles west of the Palo Alto Airport and approximately 4.5 miles east of the San Carlos Airport. The project site is not located within an airport land use plan, or within 2 miles of a public airport. Therefore, no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that implementation of ConnectMenlo does not include potential land use changes that would impair or physically interfere with the ability to implement the City's Emergency Operation Plan.

The proposed project would be consistent with the policies outlined in ConnectMenlo and would not obstruct emergency evacuation routes. The proposed project would not substantially alter the adjacent roadways and, therefore, would not be expected to impair the function of nearby evacuation routes. Therefore, the proposed project would have a less-than-significant impact on implementation of an adopted emergency response plan or emergency evacuation plan and new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (Less-Than-Significant Impact)

As noted in the ConnectMenlo Final EIR, the City is located in a highly urbanized area, is not surrounded by woodlands or vegetation, and does not contain areas of moderate, high, or very high Fire Hazard Severity Zones for the Local Responsibility area, nor does it contain any areas of moderate, high, or very high Fire Hazard Severity for the State Responsibility area. Future development within the City, including the proposed project, would be required to comply with the existing regulations as described in Section 4.7.1.1 of the ConnectMenlo Final EIR. In particular, all development in the study area would be constructed pursuant to the California Building Code, California Fire Code, and the Menlo Park Fire Protection District Code. Therefore, because the project site is in an urban area, is not within or adjacent to a wildland fire hazard area, and would be required to comply with existing regulations, the proposed project would not expose people or structures to a significant loss, injury, or death involving wildland fires and new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Santa Clara County Airport Land Use Commission, 2008. *Comprehensive Land Use Plan, Santa Clara County, Palo Alto Airport*. November 19.

<sup>&</sup>lt;sup>32</sup> City/County Association of Governments of San Mateo County, 2015. *Comprehensive Airport Land Use Compatibility Plan for the Environs of San Carlos Airport*. October 2015.



# 3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
<ul> <li>Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?</li> </ul>				
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c. 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 which would:				
i. Result in substantial erosion or siltation on- or off-site;			$\boxtimes$	
<ul> <li>Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;</li> </ul>				
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of				
polluted runoff; or iv. Impede or redirect flood flows?			$\boxtimes$	
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			$\boxtimes$	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? (Less-Than-Significant Impact)

As noted in the ConnectMenlo Final EIR, water quality in stormwater runoff is regulated locally by the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP), which includes the C.3 provisions set by the Regional Water Board. Adherence to these regulations requires new development or redevelopment projects to incorporate treatment measures, an agreement to maintain them, and other appropriate source control and site design features that reduce pollutants in runoff to the maximum extent practicable. As the project site would include more than 1 acre of ground disturbance, a SWPPP would also be required. Many of the requirements consider Low Impact Development (LID) practices such as the use of on-site infiltration through landscaping and vegetated swales that reduce pollutant loading. Incorporation of these measures can even improve existing conditions.

In addition, all projects must comply with the requirements of the City's Municipal Code Chapter 7.42, Stormwater Management Program. The City of Menlo Park Public Works Department also requires development or redevelopment projects that replace or introduce more than 10,000 square feet of impervious surfaces to prepare a Hydrology Report that requires site design measures to maximize pervious areas, source control measures to keep pollutants out of stormwater, use of construction Best Management Practices (BMPs), and post construction treatment measures. Additionally, as part of the Zoning Ordinance update, ConnectMenlo includes design standards for development in the Bayfront Area. These design standards require future development to provide on-site infiltration of stormwater runoff and implement sustainable stormwater features in open space areas.

Construction and demolition activities of the proposed project would involve disturbance, grading, and excavation of soil, which could result in temporary erosion and movement of sediments into the storm drain system, particularly during precipitation events. The potential for chemical releases is present at most construction sites due to the use of paints, solvents, fuels, lubricants, and other hazardous materials associated with heavy construction equipment. Once released, these hazardous materials could be transported to nearby surface waterways in stormwater runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters. The release of sediments and other pollutants during construction and demolition could adversely affect water quality in receiving waters. In order to prevent pollution runoff during the construction period, BMPs from the SMCWPPP would be implemented. These BMPs include, but are not limited to, temporary erosion controls, performing clearing and earth moving activities only during dry weather, and storing, handling, and disposing of construction materials/wastes properly to prevent contact with stormwater.

As noted above, the proposed project would be required to comply with the City's Stormwater Management Program and would be required to prepare a Hydrology Report and a SWPPP. The proposed project would incorporate site design measures to reduce stormwater runoff during the operation period, including directing runoff onto vegetated areas, maximizing permeability by clustering development and preserving open space, and using micro-detention. In addition, the proposed project would also implement source controls to reduce pollution runoff during the operation period, including marking on-site inlets with the words "No Dumping! Flows to Bay," plumbing interior parking garage floor drains to the sanitary sewer and providing landscaping that is drought and/or disease resistant and minimizes runoff.

Compliance with existing stormwater control regulations, preparation of a SWPPP, and implementation of site design measures, source control measures, and BMPs would reduce potential construction and operation phase impacts on water quality to a less-than-significant level and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.



b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Less-Than-Significant Impact)

As noted in the ConnectMenlo Final EIR, the San Mateo Subbasin of the Santa Clara Valley Groundwater Basin underlies the City. Development throughout the City associated with implementation of ConnectMenlo could result in an overall decrease in groundwater recharge through the increase in impervious surfaces or dewatering during the construction phase.

The proposed project would result in a decrease of impervious surfaces on the project site from 126,700 square feet of existing impervious surface coverage to 125,500 square feet of impervious surface coverage. Additionally, the proposed project would include stormwater control features, as described above, that would enhance infiltration of stormwater to the subsurface and would therefore increase the amount of groundwater recharge compared to existing conditions.

The proposed project would connect to the MPMW water system and would not use groundwater at the site. Although no use of groundwater is proposed as part of the project, dewatering would likely be required during construction due to the depth of excavations performed and the shallow water table within the Bayfront Area. This dewatering would be temporary and would focus on the uppermost shallow groundwater zone (a zone that contains a relatively small amount of groundwater that is generally not utilized for water supply). Therefore, potential impacts related to depletion of groundwater supplies would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

c. Would the project 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 which would: i. Result in substantial erosion or siltation on- or off-site; ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv. Impede or redirect flood flows? (Less-Than-Significant Impact)

The proposed project would not result in the alteration of the course of a stream or river, but would slightly alter the existing drainage pattern on the site with the introduction of new building footprints and surface pavements. However, the completed project would result in a decrease in impervious surface coverage compared to existing conditions and the project would reflect preproject drainage conditions by directing runoff to the existing 24-inch storm drain main within Constitution Drive. Potential impacts associated with alteration of the existing drainage pattern are discussed below.

**Erosion.** As described above, the proposed project would reflect pre-project drainage conditions by directing runoff towards the corresponding City drainage facilities that currently serve the project site. As described in the ConnectMenlo Final EIR, all stormwater runoff from the project site would be treated in accordance with the City's Storm Water Management Program, ensuring that storm water is treated for sediments prior to discharge from the site, particularly during construction activities.

Consequently, the potential of the proposed project to result in substantial erosion or siltation onor off-site associated with altering the drainage pattern of the project site would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

**On- or Off-Site Flooding.** As noted above, the completed project would reflect pre-project drainage conditions and would result in no net increase in the rate or amount of stormwater runoff, and therefore would not result in on- or off-site flooding. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

**Stormwater Runoff.** As described above and in the ConnectMenlo Final EIR, all stormwater runoff from the project site would be treated in accordance with the City's Storm Water Management Program, which also requires no net increase in the rate or amount of stormwater runoff. Therefore, the proposed project would not create or contribute runoff water exceeding the capacity of the storm drain system or provide an additional source of polluted runoff. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Flood Flows. As noted in Section 3.10.d, below, the project site is located within a flood zone. However, the ground floor of each building would be raised three to five feet above grade to accommodate flood plain design requirements and each building would generally occupy the same footprint as the existing structure on the site. Additionally, as discussed above in Section 3.10.a, although the proposed project would alter the existing drainage pattern on the site, the proposed project would be required to comply with SMCWPPP requirements and implement on-site infiltration of stormwater runoff and sustainable stormwater features in open space areas, which would reduce the potential for on-site flooding to occur. Although the proposed project would alter the existing drainage pattern on the site by raising the base flood elevation, the proposed project would not impede flood flows or redirect flood flows in a manner which would result in on- or off-site flooding. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that compliance with the City's existing stormwater regulations, described above, implementation of LID design guidelines, and engineering review of drainage calculations and development plans by the City's Public Works Department would ensure that there are no significant increases in peak flow rates or stormwater runoff volume.

The project site is located within a special flood zone, as mapped by FEMA, with a base flood elevation of 11 feet.<sup>33</sup> As noted in Section 1.0, Project Information, the grade of the project site would be raised three to five feet to meet FEMA requirements.

Federal Emergency Management Agency, 2019. *National Flood Insurance Program, Flood Rate Insurance Map, San Mateo County, California.* Map No. 06081C0306F. April 5.



Therefore, because the proposed project would be elevated out of the flood zone, comply with existing stormwater regulations, and implement site design measures, source control measures, and SMCWPPP's construction BMPs, the proposed project would not risk release of pollutants due to project inundation. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Less-Than-Significant Impact)

As noted above, the proposed project would be required to comply with the City's existing stormwater regulations, and would include implementation of site design measures, source control measures, and SMCWPPP's construction BMPs. In addition, the proposed project would connect to the MPMW water system and would not use groundwater at the site, and would raise the grade of the site out of the flood zone. Therefore, the proposed project would not conflict or obstruct the implementation of a water quality control plan or sustainable groundwater management plan. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

## 3.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a. Physically divide an established community?				
b. 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?				

a. Would the project physically divide an established community? (Less-Than-Significant Impact)

The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community, or between a community and outlying areas. The ConnectMenlo Final EIR concluded that implementation of ConnectMenlo would not include any new major roadways or other physical features through existing residential neighborhoods or other communities that would create new barriers in the City, but rather would implement measures to increase connectivity. Therefore, because the proposed project would be consistent with ConnectMenlo, as described below, and would not substantially alter any existing roadways or include any new barriers, this impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

b. Would the project 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? (Less-Than-Significant Impact)

The project site is located within the R-MU-B zoning district. The intent of the R-MU-B district is to: 1) provide high density housing to complement nearby employment; 2) encourage mixed use development with a quality living environment and neighborhood-serving retail and services on the ground floor that are oriented to the public, and promote a live/work/play environment with pedestrian activity; and 3) blend with and complement existing neighborhoods through site regulations and design standards that minimize impacts to adjacent uses. The R-MU-B district allows for bonus level development along Independence Drive and Constitution Drive to be a maximum of 85 feet in height. Additionally, because the project site is located within a special flood zone, as noted in Section 3.10.d, an additional 10-foot increase in maximum building height is allowed, for a total maximum building height of 95 feet. As noted in Section 1.0, Project Information, the proposed project would be a maximum of approximately 84 feet, 9 inches in height and an average of approximately 61.02 feet across the project site. The proposed project would be consistent with the mix and intensity of development contemplated by ConnectMenlo. The proposed project would be generally consistent with the applicable goals, policies, and programs included in ConnectMenlo, and therefore would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigation an environmental effect.



Because it is anticipated that the transportation analysis will be released while use of Level of Service (LOS) as the threshold of significance is still legally acceptable, it is anticipated that if any mitigation is necessary to achieve compliance with goals, policies or programs of the Circulation Element relative to LOS it would be done through the transportation analysis. However, if necessary, the focused EIR will consider compliance the Circulation Element and identify mitigation if appropriate. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

## 3.12 MINERAL RESOURCES

Potentially Significant with Less Than Significant Mitigation Significant No Impact Incorporated Impact Impact
of availability of a known mineral resource alue to the region and the residents of the
of availability of a locally-important mineral site delineated on a local general plan,
· · · · · · · · · · · · · · · · · · ·

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (No Impact)

The ConnectMenlo Final EIR determined that future development associated with ConnectMenlo would not have an impact on mineral resources as there are no mineral resource recovery operations within the City. Therefore, the proposed project would have no impact related to the availability of a known mineral resource and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (No Impact)

Refer to Section 3.12.a. The proposed project would have no impact related to locally-important mineral resource recovery sites and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.



## **3.13 NOISE**

			Less Than		
		Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	ould the project result in:				
	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or				
b.	noise ordinance, or applicable standards of other agencies? Generation of excessive groundborne vibration or groundborne 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, would the project expose people residing or working in the project area to excessive noise levels?				

 a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Potentially Significant Impact)

Demolition, site preparation, and construction would require the use of heavy construction equipment including pile drivers, bulldozers, scrapers, loaders, excavators, cranes, and trucks could have a potentially significant noise impact. Demolition and site preparation phases are typically the loudest phases of construction due to the types of equipment used. There are sensitive receptors within 200 feet of the project site, which could be exposed to construction period noise. The ConnectMenlo Final EIR identified Mitigation Measure NOISE-1c, which is presented below, to ensure that construction-period noise impacts would be reduced to a less-than-significant level.

ConnectMenlo Final EIR Mitigation Measure NOISE-1c: Project applicants for all development projects in the city shall minimize the exposure of nearby properties to excessive noise levels from construction-related activity through CEQA review, conditions of approval and/or enforcement of the City's Noise Ordinance. Prior to issuance of demolition, grading, and/or building permits for development projects, a note shall be provided on development plans indicating that during on-going grading, demolition, and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise:

- Construction activity is limited to the daytime hours between 8:00 a.m. to 6:00 p.m. on Monday through Friday, as prescribed in the City's municipal code.
- All internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers, air intake silencers, and/or engine shrouds that are no less effective than as originally equipped by the manufacturer.

- Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive uses.
- Stockpiling is located as far as feasible from nearby noise-sensitive receptors.
- Limit unnecessary engine idling to the extent feasible.
- Limit the use of public address systems.
- Construction traffic shall be limited to the haul routes established by the City of Menlo Park.

The proposed project would be required to comply with this mitigation measure to reduce any potential impacts to a less-than-significant level.

Mitigation Measure NOISE-1a requires the preparation of an acoustical study for development of new noise-sensitive uses, which include residential uses. The ConnectMenlo Final EIR determined that transportation-related noise, including an increase in traffic level, would be less than significant with compliance with General Plan Policies N-1.6 and N-1.9 and Programs N-1.B and N-1.C. However, as noted in Section 3.17, a transportation evaluation for the proposed project will be prepared, which could result in new or more severe impacts related to transportation, and therefore transportation-related noise, than was previously analyzed in the ConnectMenlo Final EIR. The proposed project could result in an increase in ambient noise levels generated by mobile sources within and around the site, and could expose proposed and existing sensitive land uses in the surrounding neighborhood to unacceptable noise levels. Therefore, impacts related to operation-period noise would be potentially significant, and this topic will be included in the EIR. Mitigation measures for potential project-specific impacts will be recommended, as necessary.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels? (Less-Than-Significant with Mitigation Incorporated)

The proposed project would generate vibration during the construction period. The ConnectMenlo Final EIR identified Mitigation Measure NOISE-2a, which is presented below, to ensure this impact would be reduced to a less-than-significant level. This mitigation measure would be applicable to the proposed project and would be required to ensure that potential impacts of the proposed project related to the generation of vibration would be less than significant.

**ConnectMenlo Final EIR Mitigation Measure NOISE-2a:** To prevent architectural damage citywide as a result of construction-generated vibration:

 Prior to issuance of a building permit for any development project requiring pile driving or blasting, the project applicant/developer shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. The maximum levels shall not exceed 0.2 inch/second, which is the level that can cause architectural damage for typical residential construction. If maximum levels would exceed these thresholds, alternative methods such static rollers, non-explosive blasting, and drilling piles as opposed to pile driving shall be used.



To prevent vibration-induced annoyance as a result of construction-generated vibration:

• Individual projects that involve vibration-intensive construction activities, such as blasting, pile drivers, jack hammers, and vibratory rollers, within 200 feet of sensitive receptors shall be evaluated for potential vibration impacts. A vibration study shall be conducted for individual projects where vibration-intensive impacts may occur. The study shall be prepared by an acoustical or vibration engineer holding a degree in engineering, physics, or allied discipline and who is able to demonstrate a minimum of two years of experience in preparing technical assessments in acoustics and/or groundborne vibrations. The study is subject to review and approval of the Community Development Department.

Vibration impacts to nearby receptors shall not exceed the vibration annoyance levels (in RMS inches/second) as follows:

- Workshop = 0.126
- Office = 0.063
- Residential Daytime (7:00 AM 10:00 PM) = 0.032
- Residential Nighttime (10:00 PM 7:00 AM) = 0.016

If construction-related vibration is determined to be perceptible at vibration-sensitive uses, additional requirements, such as use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction (e.g., nonexplosive blasting methods, drilled piles as opposed to pile driving, preclusion for using vibratory rollers, use of small- or medium-sized bulldozers, etc.). Vibration reduction measures shall be incorporated into the site development plan as a component of the project and applicable building plans, subject to the review and approval of the Community Development Department.

c. 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, would the project expose people residing or working in the project area to excessive noise levels? (Less-Than-Significant Impact)

Refer to Section 3.9.e. The project site is not located within the vicinity of a private airstrip or an airport land use plan, or within 2 miles of a public use airport. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

## 3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of				
<ul><li>roads or other infrastructure)?</li><li>b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</li></ul>				

a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (Potentially Significant Impact)

The proposed project would result in the removal of existing office and industrial uses and construction of new residential and commercial uses on the project site. Pursuant to a settlement agreement between the cities of East Palo Alto and Menlo Park, any project located in the City's R-MU zone that includes 250,000 net new square feet or that proposes to develop at the bonus level, both of which apply to the proposed project, shall prepare an EIR with an analysis of transportation and housing impacts, at a minimum.<sup>34</sup> Therefore, this topic will be included in the EIR, and mitigation measures will be recommended, if necessary.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (Less-Than-Significant Impact)

The proposed project is not anticipated to displace substantial numbers of people, as the project itself would provide additional housing opportunities within the City. Nevertheless, as discussed above under Section 3.14.a, pursuant to a settlement agreement between the cities of East Palo Alto and Menlo Park, this topic will be further discussed in the EIR.

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Menlo Park, City of, 2017. Staff Report Number 17-305-CC. December 5.



## 3.15 PUBLIC SERVICES

		Less Than		
	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 public services: i. Fire protection?			$\boxtimes$	
ii. Police protection?			$\boxtimes$	
iii. Schools?			$\boxtimes$	
iv. Parks?			$\boxtimes$	
v. Other public facilities?			$\boxtimes$	

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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 public services: i. Fire protection? ii. Police protection? iii. Schools? Iv. Parks? V. Other public facilities? (Less-Than-Significant Impact)

The following section addresses the proposed project's potential effects on: fire service, police service, schools, parks, and other public facilities. Impacts to public services would occur if the propose project increases demand for services such that new or expanded facilities would be required, and these new facilities would themselves cause environmental impacts.

**Fire Protection.** The ConnectMenlo Final EIR states that future development throughout the City pursuant to ConnectMenlo would be required to comply with existing regulations, including General Plan policies and Zoning Ordinance regulations that have been prepared to minimize impacts related to fire protection services and the need for new facilities throughout the City. In particular, General Plan Policy S-1.30 requires coordination with the Menlo Park Fire Protection District (MPFPD), which provides fire protection services throughout the City, in the planning process and requires all development applications to be reviewed and approved by the MPFPD prior to approval.

Primary service to the project site would be provided by Station 77, which is located at 1467 Chilco Street. This station is located approximately 1.3 miles west of the project site. Station 77 houses one engine company and is continually staffed by three firefighting personnel.<sup>35</sup>

As noted in the ConnectMenlo Final EIR, ConnectMenlo does not in and of itself require the expansion of Station 77. The expansion of Station 77 was already planned and budgeted for prior to ConnectMenlo. Station 5 would also serve the project site and is located approximately 2 miles south of the project site. Station 5 also houses one engine company and is continually staffed by three firefighting personnel.

Consistent with the ConnectMenlo Final EIR ongoing compliance with State local laws, compliance with the MPFPD permitting process, and payment of applicable development fees would ensure that impacts of new development related to the need for remodeled or expanded MPFPD facilities would be less-than-significant. Because the proposed project would comply with all applicable laws and would also be required to pay all applicable fees, the proposed project would not result in the need for remodeled of expanded MPFPD facilities. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

**Police Protection.** The ConnectMenlo Final EIR states that future development pursuant to ConnectMenlo would be required to comply with existing regulations, including General Plan policies and Zoning regulations that have been prepared to minimize impacts related to police protection services. The Menlo Park Police Department (MPPD) indicated that full buildout of ConnectMenlo would require an additional 17 police officers to maintain a staffing ratio of 1.29 officers per 1,000 residents. However, the MPPD confirmed that no expansion or addition of facilities would be required to accommodate the additional sworn officers or equipment.

In addition, as part of the Zoning update, ConnectMenlo includes TDM standards for development in the Bayfront Area. These TDM standards require future development to reduce associated vehicle trips to at least 20 percent below standard generation rates. Each individual project sponsor will be required to prepare a TDM and provide an impact analysis to the satisfaction of the City's Transportation Manager. The reduction in trips would help to alleviate roadway congestion that could interfere with MPPD access and response times.

The MPPD has indicated that it can address maintaining adequate response times through staffing, rather than facility expansion, and therefore it was determined that implementation of ConnectMenlo would result in a less-than-significant impact related to the need for remodeled or expanded MPPD facilities. Therefore, because the proposed project is consistent with the type and intensity of development anticipated in the ConnectMenlo Final EIR, the proposed project would not result in the need for remodeled or expanded MPPD facilities. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Menlo Park Fire Protection District, 2019. Stations (map). Website: <a href="www.menlofire.org/maps/stations">www.menlofire.org/maps/stations</a> (accessed October 2019).



Schools. The ConnectMenlo Final EIR determined that any development associated with ConnectMenlo would be subject to payment of development impact fees, which under Senate Bill 50 (SB 50) are deemed to be full and complete mitigation. In addition, future development would be required to comply with existing regulations, including General Plan policies and Zoning regulations that have been prepared to minimize impacts related to schools. Therefore, because the proposed project would comply with existing regulations prepared to minimize impacts related to schools and would be subject to the mandatory payment of developer impact fees pursuant to SB 50, the proposed project would have a less-than-significant impact related to the need for remodeled or expanded school facilities and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final FIR.

**Parks.** Refer to Section 3.16.a. The proposed project would be consistent with the type and intensity of development and population projections assumed for the project site in ConnectMenlo and would include private and public open space, and therefore the proposed project would not result in substantial or accelerated physical deterioration of recreational facilities. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Other Public Facilities. The ConnectMenlo Final EIR determined that future development, as part of the City's project approval process, would be required to comply with existing regulations, including General Plan policies that have been prepared to minimize impacts related to public facilities. The City, throughout the 2040 buildout horizon, would implement the General Plan programs that require the adoption of development impact fees to address infrastructure and service needs in the community. Therefore, because the proposed project would be required to pay development impact fees, impacts related to the need for remodeled or expanded public facilities would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

#### 3.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			$\boxtimes$	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				$\boxtimes$

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that the increase in residents associated with future development under ConnectMenlo would lead to an increase in the demand for recreational opportunities and facilities within the City. However, the demand would be distributed throughout the City. The City has an adopted goal of maintaining a ratio of 5 acres of developed parkland per 1,000 residents. At full buildout, with an estimated population of approximately 14,150 new residents, the ratio of parkland per 1,000 residents would be approximately 5.2 acres.

In addition to the existing parkland within the City, the proposed project would include a total of 53,675 square feet of open space, which would include common courtyards, a roof terrace, a pool, landscaping, and a publicly-accessible plaza, which would make up approximately 9 percent of the project site. Therefore, because the proposed project would be consistent with the type and intensity of development and population projections assumed for the project site in ConnectMenlo and would include private and public open space, the proposed project would not result in substantial or accelerated physical deterioration of recreational facilities. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

 Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (No Impact)

The proposed project would include redevelopment of the project site with residential and commercial uses. The proposed project does not include or require the construction or expansion of existing public recreational facilities. Therefore, development of the proposed project and associated recreational opportunities for use by project residents and commercial tenants would not result in additional environmental effects beyond those described in this document and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.



## 3.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle				
<ul><li>and pedestrian facilities?</li><li>b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?</li></ul>	$\boxtimes$			
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or	$\boxtimes$			
incompatible uses (e.g., farm equipment)? d. Result in inadequate emergency access?				

## a. through d. (Potentially Significant Impact)

The ConnectMenlo Final EIR identified significant and unavoidable impacts related to increased delays of peak hour motor vehicle traffic at some study intersections and to routes of regional significance. Per Mitigation Measure TRANS-1b, new development would be required to contribute fair share contributions to the City's updated Transportation Impact Fee (TIF) program (once adopted) to guarantee funding for identified roadway and infrastructure improvements. Any project proposed prior to the adoption of an updated TIF is required to conduct a project-specific Transportation Impact Analysis (TIA) to determine the impacts and necessary transportation mitigations that are to be funded by that project. Regardless of whether the TIF has been updated, the settlement agreement, as noted in Section 1.0, Project Information, requires a transportation analysis to be completed.

A transportation evaluation will be prepared for the proposed project and will be included in the EIR. The EIR is currently anticipated to include an analysis of 15 intersections, as follows:

- 1. Marsh Road and Bayfront Expressway (State)
- 2. Marsh Road and US-101 NB Off-Ramp (State)
- 3. Marsh Road and US-101 SB Off-Ramp (State)
- 4. Marsh Road and Scott Drive (Menlo Park)
- 5. Marsh Road and Bay Road (Menlo Park)
- 6. Marsh Road and Middlefield Road (Atherton)
- 7. Marsh Road and Florence Street-Bohannon Drive (Menlo Park)

- 8. Chrysler Drive and Bayfront Expressway (State)
- 9. Chrysler Drive and Constitution Drive (Menlo Park)
- 10. Chrysler Drive and Jefferson Drive (Menlo Park)
- 11. Chrysler Drive and Independence Drive (Menlo Park)
- 12. Chilco Street and Bayfront Expressway (State)
- 13. Chilco Street and Constitution Drive (Menlo Park)
- 14. Willow Road and Bayfront Expressway (State)
- 15. University and Bayfront Expressway (State)

The analysis will also consider impacts related to vehicular, bicycle, pedestrian, and transit facilities and access. Mitigation measures will be recommended if necessary.



## 3.18 TRIBAL CULTURAL RESOURCES

	Less Than			
	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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 that is:				
<ul> <li>Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or</li> </ul>				
ii. 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 Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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 that is: i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or ii. 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 Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (Potentially Significant Impact)

As noted in the ConnectMenlo Final EIR, no tribal cultural resources have been identified in the Bayfront Area. However, as noted in Section 3.5, Cultural Resources, impacts from future development in the study area could impact unknown archeological resources including Native American artifacts and human remains. Impacts would be reduced to less-than-significant levels with implementation of Mitigation Measures CULT-2a and CULT-4 from the ConnectMenlo Final EIR.

AB 52 provides for consultation between lead agencies and Native American tribal organizations during the CEQA process. Prior to the release of an Environmental Impact Report or Negative Declaration/Mitigated Negative Declaration for public review, a lead agency must provide the opportunity to consult with local tribes.

A request form describing the proposed project was sent to the NAHC in West Sacramento requesting a list of tribes eligible to consult with the City, pursuant to Public Resources Code section 21080.3.1. On May 24, 2019, the NAHC responded in a letter with a list of tribal contacts. The City sent a letter providing the opportunity for consultation pursuant to AB 52 for the project to these individuals. No requests for consultation have been received to date. The consultation process and its conclusion will be further discussed in the EIR. Mitigation measures will be recommended if necessary.



## 3.19 UTILITIES AND SERVICE SYSTEMS

		Less Than		
	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could caus significant environmental effects?	ns		$\boxtimes$	
<ul> <li>b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</li> </ul>				
c. Result in a determination by the wastewater treatment provider which 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?				
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise				
<ul><li>impair the attainment of solid waste reduction goals?</li><li>e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?</li></ul>				

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (Less-Than-Significant Impact)

**Domestic Water.** As noted in the ConnectMenlo Final EIR, the MPMW receives 100 percent of its potable water from the San Francisco Public Utilities Commission (SFPUC). The City does not own or operate a water treatment plant (WTP). The water purchased from the SFPUC may be treated at one or more WTPs operated by SFPUC. SFPUC periodically makes improvements to its WTPs in order to improve system reliability and accommodate projected growth in its regional service areas. As noted above, the proposed project would be consistent with the type and intensity of development and population projections assumed for the project site in ConnectMenlo. In addition, the West Bay Sanitary District (WSB) plans to build a Recycled Water Facility that would provide the ConnectMenlo area with recycled water, which would further reduce demand for water from SFPUC.<sup>36</sup> Therefore, the proposed project would not prompt a need to expand treatment facilities or regional water system conveyance and storage facilities. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

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West Bay Sanitary District, 2019. *Bayfront Recycled Water Facilities Plan*. February.

The proposed project would connect to existing water delivery systems within the vicinity of the project site. It is anticipated that these pipelines would have sufficient capacity to support delivery of water to the proposed project. However, as noted in Table 1.A, the project sponsor would be required to coordinate with the City and the MPFPD to assess water flow requirements, and ensure the existing water delivery infrastructure is sufficient to serve the proposed project.

**Wastewater.** As noted in the ConnectMenlo Final EIR, the SVCW WWTP treats raw wastewater from the City and discharges to the deep water channel of the Bay. The SVCW WWTP has an average dry weather design flow of 29 million gallons per day (MGD) and a peak wet weather flow of 71 MGD. In general, conveyance systems and treatment plants are designed and constructed to accommodate future capacity expansion including additional base flows due to approved growth plus estimated wet weather flows. The ConnectMenlo Final EIR determined that the increase in wastewater flows from implementation of ConnectMenlo would add to the capacity demands on the WWTP and its conveyance system, however, the effect is not substantial and would be integrated into the ongoing planning and budgeting processes to improve the conveyance system, treatment processes and capacity. As noted above, the proposed project would be consistent with the type and intensity of development and population projections assumed for the project site in ConnectMenlo. Therefore, the proposed project would not prompt a need to expand the SVCW WWTP. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

The proposed project would connect to the existing sanitary sewer systems within the vicinity of the site. It is anticipated that these pipelines would have sufficient capacity to support the proposed project's wastewater flows. However, as noted in Table 1.A, the project applicant would be required to coordinate with the West Bay Sanitary to assess wastewater flow requirements, and ensure the existing wastewater infrastructure is sufficient to serve the proposed project.

**Stormwater Drainage.** Refer to Section 3.10. The proposed project would include new connections and upgrades to the existing stormwater infrastructure within the vicinity of the site. Development of the proposed project would result in a decrease of impervious surfaces on the site from 126,700 square feet of existing impervious surface coverage to 125,500 square feet of impervious surface coverage. In addition, the proposed project would include stormwater control features, as described previously, that would reduce the total stormwater runoff from the project site. Runoff would be treated in accordance with the SMCWPPP before flowing to the City's storm drain system.

The proposed project would include the following elements to reduce the demand for and impacts to stormwater infrastructure: a landscaped area providing stormwater treatment on the western edge of ground floor; stormwater treatment systems within the central plaza; drought-tolerant landscaping; flow-through planters; and energy-efficient appliances and efficient irrigation systems. Therefore, the proposed project would not require in the relocation or construction of new stormwater drainage facilities that are not already evaluated in this document. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

**Electricity, Natural Gas, and Telecommunications.** As noted in the ConnectMenlo Final EIR, new development under ConnectMenlo would continue to be served by Pacific Gas & Electric (PG&E) or Peninsula Clean Energy (PCE) when it commences transmission of energy over PG&E facilities. Buildout of ConnectMenlo would not significantly increase energy demands within the service territory and would not require new energy supply facilities. The proposed project would also be allelectric and would not use natural gas, pursuant to the City's recently adopted REACH Code that would apply to the proposed project. As noted above, the proposed project would be consistent with the type and intensity of development and population projections assumed for the project site in ConnectMenlo and the proposed buildings would be all electric.

Therefore, the proposed project would not prompt a need to expand electrical or natural gas facilities. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

Similar to electrical power services, the project site is already served with telecommunications infrastructure. Telecommunication service would continue to be provided to the project site with implementation of the proposed project. In addition, the proposed project would include undergrounding of existing utilities, and would be required to coordinate with the applicable telecommunications provider. Therefore, the proposed project would not require the relocation or construction of new telecommunications infrastructure beyond that which is already analyzed. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that there would be an increase in water demand as a result of buildout of ConnectMenlo – average daily demand would be 343 million gallons per year (MGY), which represents 21 percent of the planning level water demand forecasted in the Urban Water Management Plan (UWMP). The ConnectMenlo Final EIR concluded that water supply is adequate to meet increased demands in normal years and would be sufficient to supply the additional demand generated by the increase in development associated with implementation of ConnectMenlo.

During single- and multiple-dry years by 2040, MPMW's total annual water demand, including development associated with ConnectMenlo, is estimated to exceed total annual supply by approximately 333 MGY and 506 MGY, respectively. However, with MPMW's Water Shortage Contingency Plan in place, the shortages in multiple dry years would be managed through demand reductions of up to 50 percent.

In addition, as part of the Zoning update, ConnectMenlo includes green and sustainable building standards in the Bayfront Area. These standards require all new buildings within the Bayfront Area to be maintained without the use of well water and include dual plumbing systems for the use of potential future recycled water. Under the Zoning update, no potable water shall be used for decorative features, unless the water recirculates, and single pass cooling systems are prohibited.

Also, future development with a gross floor area of 100,000 square feet or more must submit a proposed water budget for review by the City's Public Works Director prior to certification of occupancy. The ConnectMenlo Final EIR determined that implementation of MPMW's Water Shortage Contingency Plan and green and sustainable building standards would ensure this impact would be less than significant.

As noted above, the proposed project would be consistent with the type and intensity of development and population projections assumed for the project site in ConnectMenlo. Therefore, there would be sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, single- and multiple-dry years.

This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

c. Would the project result in a determination by the wastewater treatment provider which 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? (Less-Than-Significant Impact)

As noted above, the SVCW WWTP has an average dry weather design flow of 29 MGD and a peak wet weather flow of 71 MGD. The SVCW WWTP has an average currently dry weather flow of 16 MGD. The ConnectMenlo Final EIR determined that full buildout of ConnectMenlo would result in an estimated net increased wastewater generation rate of 309 MGY, or 0.85 MGD, which would not be significant relative to currently available excess dry weather design capacity flow of 13 MGD.

The proposed project would be consistent with the type and intensity of development and population projections assumed for the project site in ConnectMenlo. Therefore, there would be sufficient wastewater treatment capacity available to serve the proposed project's projected demand in addition to the provider's existing commitments. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

d. Would the project 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? (Less-Than-Significant Impact)

As noted in the ConnectMenlo Final EIR, the majority (approximately 74.4 percent or 21,658 tons) of solid waste from the City is transported to the Corinda Los Trancos Landfill (Ox Mountain Landfill). The three other landfills that received the second, third, and fourth most waste accounted for 20.5 percent (or 5,966 tons) combined. The ConnectMenlo Final EIR determined that the estimated additional solid waste generated by development associated with implementation of ConnectMenlo would be approximately 58.3 tons per day, which represents less than 1.5 percent of the daily capacity of the Ox Mountain Landfill, and less than 2 percent of the permitted daily capacity of the landfill with the smallest daily capacity that could receive waste as a result of implementation.



The ConnectMenlo Final EIR determined that the Ox Mountain Landfill is likely to reach its permitted maximum capacity prior to 2040 (the anticipated buildout horizon for implementation of ConenctMenlo). However, the other three landfills that serve the City are not estimated to close until 2048, 2077, and 2107. In addition, there are 15 other landfills that received waste from Menlo Park in 2014. If one or more of the four landfills were unavailable in the future, it is likely the City's solid waste volume would be increased at one or more of the other landfills that already serve the City.

As a part of the Zoning Update, ConnectMenlo includes green and sustainable building standards in the Bayfront Area that require all applicants to submit a zero-waste management plan to the City. The zero-waste management plan must clearly outline the applicant's plan to reduce, recycle, and compost waste from demolition, construction and occupancy phases of the building. Zero waste is defined as 90 percent overall diversion of non-hazardous waste from landfill and incineration.

The proposed project would be consistent with the type and intensity of development and population projections assumed for the project site in ConnectMenlo and would be required to comply with existing regulations related to solid waste. Therefore, there would be solid waste capacity available to serve the proposed project. This impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (Less-Than-Significant Impact)

Refer to Section 3.19.d. The proposed project would comply with all federal, State, and local solid waste statutes and/or regulations related to solid waste and this impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

## 3.20 WILDFIRE

		Less Than		
	Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: a. Substantially impair an adopted emergency response plan or emergency evacuation plan?			$\boxtimes$	
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts				$\boxtimes$
to the environment?  d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				$\boxtimes$

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan? (Less-Than-Significant Impact)

The ConnectMenlo Final EIR determined that the Bayfront Area, which includes the project site, does not contain areas of moderate, high, or very high Fire Hazard Severity for the Local Responsibility area, nor does it contain any areas of moderate, high, or very high Fire Hazard Severity for the State Responsibility Area (SRA). In addition, as noted in Section 3.9.f, the proposed project would not impair the implementation of, or physically interfere with, and adopted emergency response plan. Therefore, this impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (No Impact)

Refer to Section 3.20.a. Additionally, as noted in Section 1.0, Project Information, the proposed project site is generally level, and is bound by existing development on all sides. Therefore, the proposed project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.



c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (No Impact)

Refer to Section 3.20.a. The proposed project is not located within an SRA for fire service and is not within a very high fire hazard severity zone. Therefore, the proposed project would not require the installation or maintenance of associated infrastructure and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? (No Impact)

Refer to Section 3.20.a and 3.20.b. The project site is generally level and is not located within an SRA for fire service or a very high fire hazard severity zone. Therefore, the proposed project would not expose people or structures to significant risks as a result of post-fire slope instability or drainage and runoff changes and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

## 3.21 MANDATORY FINDINGS OF SIGNIFICANCE

		Less Than			
		Potentially Significant Impact	Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a.	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b.	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project 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.)	$\boxtimes$			
C.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Less-Than-Significant Impact)

The project site consists of an infill site in an urban area. The site does not support habitat for special-status plant or animal species. With mitigation, development of the proposed project would not: 1) degrade the quality of the environment; 2) substantially reduce the habitat of a fish or wildlife species; 3) cause a fish or wildlife species population to drop below self-sustaining levels; 4) threaten to eliminate a plant or animal community; 5) reduce the number or restrict the range of a rare or endangered plant or animal; or 6) eliminate important examples of the major periods of California history or prehistory. Therefore, this impact would be less than significant and no new or more severe impacts would occur beyond those examined in the ConnectMenlo Final EIR.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project 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)? (Potentially Significant Impact)

As discussed in this Initial Study, potentially significant impacts related to air quality, greenhouse gas emissions, noise, and transportation may result from the proposed project. These impacts, as well as any cumulatively considerable impacts that may result from the proposed project related to these



issues, will be evaluated in an EIR. In addition, the topic of population and housing will also be discussed.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Potentially Significant Impact)

The proposed project's potential to result in environmental effects that could directly or indirectly impacts human beings have been evaluated in this Initial Study. With implementation of the recommended mitigation measures identified in the ConnectMenlo Final EIR, most environmental effects that could adversely affect human beings would be less than significant. The proposed project's potential to result in environmental effects related to transportation, air quality emissions, or noise that could directly or indirectly impact human beings will be evaluated in the EIR.

## 4.0 LIST OF PREPARERS

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## **APPENDIX A**

# CONNECTMENLO FINAL EIR: MITIGATION MONITORING AND REPORTING PROGRAM



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## Mitigation Monitoring or Reporting Program

This Mitigation Monitoring or Reporting Program (MMRP) has been prepared for the proposed Menlo Park General Plan (Land Use & Circulation Elements) and M-2 Area Zoning Update (proposed project). The purpose of the MMRP is to ensure the implementation of mitigation measures identified as part of the environmental review for the proposed project. The MMRP includes the following information:

- The full text of the mitigation measures;
- The party responsible for implementing the mitigation measures;
- The timing for implementation of the mitigation measure;
- The agency responsible for monitoring the implementation; and
- The monitoring action and frequency.

The mitigation measures in this MMRP shall be applied to all future development anywhere in the city unless otherwise specified in the specific mitigation measure. The City of Menlo Park must adopt this MMRP, or an equally effective program, if it approves the proposed project with the mitigation measures that were adopted or made conditions of project approval.

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
Air Quality						
AQ-2a: Prior to issuance of a building permits, all development projects in the city that are subject to CEQA and exceed the screening sizes in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines shall prepare and submit to the City's Planning Division a technical assessment evaluating potential project-related operational air quality impacts. The evaluation shall be prepared in conformance with the BAAQMD methodology for assessing air quality impacts. If operational-related criteria air pollutants are determined to have the potential to exceed the BAAQMD thresholds of significance, as identified in BAAQMD's CEQA Guidelines, the project applicant is required to incorporate mitigation measures into the development project to reduce air pollutant emissions during operation. The identified measures shall be incorporated into all appropriate construction documents, subject to the review and approval of the Planning Division prior to building permit issuance.		permit and site development review process and prior to permit issuance	City of Menlo Park Planning Division	Plan review and approval	Once for the preparation of the technical assessment	Initials: Date:
AQ-2b1: Prior to building permit issuance, the City shall require applicants for all development projects in the city to comply with the current Bay Area Air Quality Management District's (BAAQMD) basic control measures for reducing construction emissions of PM10 (Table 8-1, Basic Construction Mitigation Measures Recommended for All Proposed Projects, of the BAAQMD CEQA Guidelines).	Project applicant	During the building permit and site development review process and prior to permit issuance	City of Menlo Park Planning Division	Plan review and approval	Prior to approval and during scheduled site visits	Initials: Date:
AQ-2b2: Prior to issuance of a building permit, development projects in the City that are subject to CEQA and exceed the screening sizes in the BAAQMD's CEQA Guidelines shall prepare and submit to the City of Menlo Park a technical assessment evaluating potential project construction-related air quality impacts. The evaluation shall be prepared in conformance with the BAAQMD methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the BAAQMD thresholds of significance, as		During the building permit and site development review process and prior to permit issuance	City of Menlo Park Planning Division	Plan review and approval	Once for the preparation of the technical assessment	Initials: Date:

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
identified in the BAAQMD CEQA Guidelines, the project applicant is required to incorporate mitigation measures to reduce air pollutant emissions during construction activities to below these thresholds (e.g., Table 8-2, Additional Construction Mitigation Measures Recommended for projects with Construction Emissions Above the Threshold of the BAAQMD CEQA Guidelines, or applicable construction mitigation measures subsequently approved by BAAQMD). These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans), subject to the review and approval of the Planning Division prior to building permit issuance.						
AQ-3a: As part of the discretionary review process for development applications, applicants for all non-residential projects within the City that: 1) have the potential to generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered TRUs, and 2) are within 1,000 feet of a sensitive land use (e.g., residential, schools, hospitals, nursing homes), as measured from the property line of a proposed project to the property line of the nearest sensitive use, shall submit a health risk assessment (HRA) to the City's Planning Division. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment and the Bay Area Air Quality Management District. If the HRA shows that the incremental cancer risk exceeds 10 in one million (10E-06), PM2.5 concentrations exceed 0.3 μg/m3, or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and noncancer risks to an acceptable level, including appropriate enforcement mechanisms. Mitigation measures may include but are not limited to:  Restricting idling on-site beyond Air Toxic Control Measures idling restrictions, as feasible.	Project applicant	During the building permit and site development review process and prior to permit issuance	City of Menlo Park Planning Division	Plan review and approval	Once for the preparation of the HRA	Initials: Date:
Electrifying warehousing docks.						

### MITIGATION MONITORING AND REPORTING PROGRAM

* Restricting off-site truck travel through the creation of truck routes.  Mitigation measures identified in the project-specific HRA shall be incorporated into the site development plan as a component of a proposed project, subject to the review and approval of the Community Development Department.  AQ-3b: As part of the discretionary review process, applicants for all residential and other sensitive land use projects (e.g., hospitals, nursing homes, day care centers) anywhere in the City within 1,000 feet of a major sources of toxic cair contaminants (TACs) (e.g., warehouses, industrial areas, freeways, and roadways with traffic volumes over 10,000 vehicle per day), as measured from the property line of the project to the project to the property line of the project to the property line of the project to the property line of the project line pro	Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
incorporated into the site development plan as a component of a proposed project, subject to the review and approval of the Community Development Department.  AQ-3b: As part of the discretionary review process, applicants for all residential and other sensitive land use projects (e.g., hospitals, nursing homes, day care centers) anywhere in the City within 1,000 feet of a major sources of toxic air contaminants (TACs) (e.g., warehouses, industrial areas, freeways, and roadways with traffic volumes over 10,000 vehicle per day), as measured from the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City's Planning Division. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (DEHHA) and the Bay Area Air Quality Management District. The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children ages 0 to 16 years. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06), PM2.5 concentrations exceed 0.3 μg/m3, or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:	Restricting off-site truck travel through the creation of truck						
all residential and other sensitive land use projects (e.g., hospitals, nursing homes, day care centers) anywhere in the City within 1,000 feet of a major sources of toxic air contaminants (TACs) (e.g., warehouses, industrial areas, freeways, and roadways with traffic volumes over 10,000 vehicle per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City's Planning Division. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the Bay Area Air Quality Management District. The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children ages 0 to 16 years. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06), PM2.5 concentrations exceed 0.3 µg/m3, or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:	incorporated into the site development plan as a component of a proposed project, subject to the review and approval of the						
<ul> <li>Air intakes located away from high volume roadways and/or truck loading zones.</li> <li>Heating, ventilation, and air conditioning systems of the</li> </ul>	AQ-3b: As part of the discretionary review process, applicants for all residential and other sensitive land use projects (e.g., hospitals, nursing homes, day care centers) anywhere in the City within 1,000 feet of a major sources of toxic air contaminants (TACs) (e.g., warehouses, industrial areas, freeways, and roadways with traffic volumes over 10,000 vehicle per day), as measured from the property line of the project to the property line of the source/edge of the nearest travel lane, shall submit a health risk assessment (HRA) to the City's Planning Division. The HRA shall be prepared in accordance with policies and procedures of the State Office of Environmental Health Hazard Assessment (OEHHA) and the Bay Area Air Quality Management District. The latest OEHHA guidelines shall be used for the analysis, including age sensitivity factors, breathing rates, and body weights appropriate for children ages 0 to 16 years. If the HRA shows that the incremental cancer risk exceeds ten in one million (10E-06), PM2.5 concentrations exceed 0.3 μg/m3, or the appropriate noncancer hazard index exceeds 1.0, the applicant will be required to identify and demonstrate that mitigation measures are capable of reducing potential cancer and non-cancer risks to an acceptable level (i.e., below ten in one million or a hazard index of 1.0), including appropriate enforcement mechanisms. Measures to reduce risk may include but are not limited to:  Air intakes located away from high volume roadways and/or truck loading zones.	Project applicant	permit and site development review process and prior to permit	Park Planning		preparation of	

#### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
buildings provided with appropriately sized maximum efficiency rating value (MERV) filters.  Measures identified in the HRA shall be incorporated into the site development plan as a component of the proposed project subject to the review and approval of the Community Development Department. The air intake design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the City, subject to the review and approval of the Community Development Department.  AQ-5: Implementation of Mitigation Measures AQ-2a through AQ-3b.						Initials: Date:
Biological Resources						
BIO-1: As part of the discretionary review process for development projects, new construction and building additions regardless of size, in addition to appropriate CEQA review, the City shall require all project applicants to prepare and submit project-specific baseline biological resources assessments (BRA) if the project would occur on or adjacent to a parcel containing natural habitat with features such as mature and native trees, unused structures that could support special-status bat species, other sensitive biological resources, and/or active nests of common birds protected under the Migratory Bird Treaty Act (MBTA). Sensitive biological resources triggering the need for the baseline BRA shall include: wetlands, occurrences or suitable habitat for special-status species, sensitive natural communities, and important movement corridors for wildlife such as creek corridors and shorelines.		During the building permit and site development review process and prior to permit issuance	A qualified biologist approved by the City of Menlo Park Planning Division	Plan review and approval	Once for the preparation of a biological assessment and again, if determined further assessment is required as specified in this mitigation measure	Initials: Date:
The baseline BRA shall be prepared by a qualified biologist.						
The baseline BRA shall provide a determination on whether any sensitive biological resources are present on the site, including jurisdictional wetlands and waters, essential habitat for special-						

#### MITIGATION MONITORING AND REPORTING PROGRAM

#### Party Agency Responsible for Implementation Responsible for Monitoring Monitoring Verified Mitigation Measures Implementation Trigger/Timing Monitoring Action Frequency Implementation status species, and sensitive natural communities. If jurisdictional

The baseline BRA shall also include consideration of possible sensitive biological resources on any adjacent undeveloped lands that could be affected by the project, and lands of the Don Edwards San Francisco Bay National Wildlife Refuge (Refuge).

wetlands and/or waters are suspected to be present on the site, a jurisdictional delineation confirmed by the U.S. Army Corps of Engineers (USACE) will be provided as part of the baseline BRA.

The baseline BRA shall incorporate guidance from relevant regional conservation plans, including, but not limited to, the then current Don Edwards San Francisco Bay National Wildlife Refuge Comprehensive Conservation Plan, South Bay Salt Pond Restoration Project, Tidal Marsh Recovery Plan and the United States Fish and Wildlife Service (USFWS) Recovery Plan for the Pacific Coast Population of the Western Snowy Plover, for determining the potential presence or absence of sensitive biological resources; however, the presence or absence of sensitive biological resources will be determined by on-site surveys. If the adjacent property is the Refuge, Refuge staff shall be contacted regarding the presence or absence of sensitive biological resources.

If sensitive biological resources are determined to be present on the site or may be present on any adjacent parcel containing natural habitat, coordination with the appropriate regulatory and resource agencies must occur. Appropriate measures, such as preconstruction surveys, establishing no-disturbance zones and restrictive time periods during construction, protective development setbacks and restrictions, and applying bird-safe building design practices and materials, shall be developed by the qualified biologist in consultation with the regulatory and resource agencies to provide adequate avoidance, or provide

#### MITIGATION MONITORING AND REPORTING PROGRAM

	Party		Agency			
	Responsible for	Implementation	Responsible for	Monitoring	Monitoring	Verified
Mitigation Measures	Implementation	Trigger/Timing	Monitoring	Action	Frequency	Implementation
compensatory mitigation if avoidance is infeasible. With respect						
to fully protected species, if the BRA for any development project						
determines that any of the following Fully Protected Charles are						

to fully protected species, if the BRA for any development project determines that any of the following Fully Protected Species are present, then neither take of such species will be permitted nor will mitigation measures including species collection or relocation. The Fully Protected Species include American Peregrine Falcon (Falco peregrinus anatum), California Black Rail (Laterallus jamaicensis coturniculus), California Clapper Rail - Ridgway's Rail (Rallus longirostris obsoletus), California Least Tern (Sterna albifrons browni), White-tailed Kite (Elanus leucurus), Salt-marsh harvest mouse (Reithrodontomys raviventris), and San Francisco garter snake (Thamnophis sirtalis tetrataenia).

The qualified biologist shall consult with the Refuge management and where appropriate, the Endangered Species Office of the USFWS, the National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW) for determining the potential presence or absence of sensitive biological resources and appropriate avoidance or compensatory mitigation measures, if required.

Where jurisdictional waters or federally and/or State-listed special-status species would be affected, appropriate authorizations (i.e., the USACE, San Francisco Bay Regional Water Quality Control Board (RWQCB), San Francisco Bay Conservation and Development Commission (BCDC), USFWS, NMFS, Refuge and CDFW), shall be obtained by the project applicant, and evidence of such authorization provided to the City prior to issuance of grading or other construction permits.

For sites that are adjacent to-undeveloped lands with federally and/or State-listed special status species, or sensitive habitats, or lands of the Refuge, the BRA shall include evaluation of the potential effects of:

#### MITIGATION MONITORING AND REPORTING PROGRAM

	Party		Agency			
	Responsible for	Implementation	Responsible for	Monitoring	Monitoring	Verified
Mitigation Measures	Implementation	Trigger/Timing	Monitoring	Action	Frequency	Implementation

- additional light,
- glare,
- shading (i.e., shadow analysis),
- noise,
- urban runoff,
- water flow disruption,
- water quality degradation/sedimentation,
- attraction of nuisance species/predators (e.g., attraction to refuse) and their abatement (e.g., adverse impacts of rodenticides),
- and pesticides,

generated by the project, as well as the possibility for increased activity from humans and/or domesticated pets and their effects on the nearby natural habitats. The BRA shall include proposed avoidance, minimization, and mitigation of these adverse impacts.

The City of Menlo Park Planning Division may require an independent peer review of the adequacy of the baseline BRA as part of the review of the project to confirm its adequacy. Mitigation measures identified in the project-specific BRA shall be incorporated as a component of a proposed project and subsequent building permit, subject to the review and approval of the Community Development Department and the appropriate regulatory and resource agencies.

The following zoning regulations enacted by ordinances (including but not limited to 16.43 O-Office District, 16.43.080 Corporate housing, 16.43.140 Green and sustainable building; 16.44 LS-Life Science District, 16.44.130 Green and sustainable building) to minimize impacts to biological resources are incorporated by reference into this mitigation measure and shall be a component of the project building permits:

#### MITIGATION MONITORING AND REPORTING PROGRAM

Mit	igatic	on Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
1.	Setl	backs (A) Minimum of two hundred (200) feet from the	•					<u> </u>
	wat	erfront; waterfront is defined as the top of the levee.						
2.	Wa	terfront and Environmental Considerations. The following						
	pro	visions are applicable when the property is adjacent to						
	the	waterfront or other sensitive habitat.						
	a.	Non-emergency lighting shall be limited to the						
		minimum necessary to meet safety requirements and						
		shall provide shielding and reflectors to minimize light						
		spill and glare and shall not directly illuminate sensitive						
		habitat areas. Incorporate timing devices and sensors to						
		ensure night lighting is used only when necessary.						
	b.	Landscaping and its maintenance shall not negatively						
		impact the water quality, native habitats, or natural						
		resources.  Pets shall not be allowed within the corporate housing						
	C.	due to their impacts on water quality, native habitats,						
		and natural resources.						
3.	Rirc	d-friendly design.						
٥.	a.	No more than ten percent (10%) of façade surface area						
	u.	shall have non-bird- friendly glazing.						
	b.	Bird- friendly glazing includes, but is not limited to						
		opaque glass, covering the outside surface of clear glass						
		with patterns, paned glass with fenestration, frit or						
		etching patterns, and external screens over						
		nonreflective glass. Highly reflective glass is not						
		permitted.						
	c.	Occupancy sensors or other switch control devices shall						
		be installed on non-emergency lights and shall be						
		programmed to shut off during non-work hours and						
		between 10 PM and sunrise.						

### MITIGATION MONITORING AND REPORTING PROGRAM

	Party Responsible for	Implementation	Agency Responsible for	Monitoring	Monitoring	Verified
Mitigation Measures	Implementation	Trigger/Timing	Monitoring	Action	Frequency	Implementation
d. Placement of buildings shall avoid the potential						
funneling of flight paths towards a building façade.						
e. Glass skyways or walkways, freestanding (see-through)						
glass walls and handrails, and transparent building						
corners shall not be allowed.						
f. Transparent glass shall not be allowed at the rooflines						
of buildings, including in conjunction with roof decks,						
patios and green roofs.						
g. Use of rodenticides shall not be allowed.						
If it is determined through the BRA or CEQA review that further assessment/monitoring/reporting is required by appropriate regulatory or resource agencies, it shall be the responsibility of the City to ensure all project requirements are implemented.						
Cultural Resources						
CULT-1: At the time that individual projects are proposed on any	Project applicant	During the building	Qualified	Plan review	Once at time of	Initials:
site citywide with a building more than 50 years old or any site		permit and site	archeologist	and approval	preliminary	Date:
adjoining a property with a building more than 50 years old, the		development	approved by the		assessment and	
City shall require the project applicant to prepare a site-specific		review process and	,		again, if	
evaluation to determine if the project is subject to completion of a site-specific historic resources study. If it is determined that a		prior to permit	Park Planning Division		determined further	
site-specific historic resources study. If it is determined that a	2	issuance	DIVISION		assessment is	
prepared by a qualified architectural historian meeting the	-				required as	
Secretary of the Interior's Standards for Architecture or					specified in this	
Architectural History. At a minimum, the study shall consist of a					mitigation	
records search of the California Historical Resources Information					measure	
System, an intensive-level pedestrian field survey, an evaluation of	f					
significance using standard National Register Historic Preservation	1					
and California Register Historic Preservation evaluation criteria,						
and recordation of all identified historic buildings and structures						
on California Department of Parks and Recreation 523 Site Record	1					
forms. The study shall describe the historic context and setting,						
methods used in the investigation, results of the evaluation, and						

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures  recommendations for management of identified resources. If applicable, the specific requirements for inventory areas and documentation format required by certain agencies, such as the Federal Highway Administration and California Department of Transportation (Caltrans), shall be adhered to.	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
If the project site or adjacent properties are found to be eligible for listing on the California Register, the project shall be required to conform to the current Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, and Restoring Historic Buildings, which require the preservation of character defining features which convey a building's historical significance, and offers guidance about appropriate and compatible alterations to such structures.						
CULT-2a: If a potentially significant subsurface cultural resource is encountered during ground disturbing activities on any parcel in the city, all construction activities within a 100-foot radius of the find shall cease until a qualified archeologist determines whether the resource requires further study. All developers in the study area shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction activities shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of the California Environmental Quality Act (CEQA) criteria by a qualified archeologist. If the resource is determined significant under CEQA, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan that will capture those categories of data for which the site is significant. The archaeologist shall also perform appropriate technical analyses; prepare a comprehensive report complete with methods, results, and recommendations; and provide for the permanent curation of the recovered resources. The report shall be submitted to the City of Menlo Park, Northwest Information Center (NWIC), and State Historic	Project applicant	During construction	Qualified archaeologist approved by the City of Menlo Park Planning Division	Initiated after a find is made during construction	During regularly scheduled site inspections that would be initiated after a find is made during construction	Initials: Date:

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures Preservation Office (SHPO), if required.	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
CULT-2b: As part of the City's application approval process and prior to project approval, the City shall consult with those Native American Tribes with ancestral ties to the Menlo Park city limits regarding General Plan Amendments in the city and land use policy changes. Upon receipt of an application for proposed project that requires a General Plan Amendment or a land use policy change, the City shall submit a request for a list of Native American Tribes to be contacted about the proposed project to the Native American Heritage Commission (NAHC). Upon receipt of the list of Native American Tribes from the NAHC, the City shall submit a letter to each Tribe on the provided list requesting consultation with the Native American Tribe about the proposed project via the via the City's preferred confirmation of receipt correspondence tracking method (e.g., Federal Express, United States Postal Service Certified Mail, etc.).	The City of Menlo Park	During the project approval process	The City of Menlo Park Planning Division in conjunction with Native American Tribes with ancestral ties to the Menlo Park city limits	Initiated once Native American Tribes request consultation	To be determined by consulting parties	Initials:
CULT-3: In the event that fossils or fossil bearing deposits are discovered during ground disturbing activities anywhere in the city, 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 1995]), 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	Project applicant	During construction	Qualified paleontologist approved by the City of Menlo Park Planning Division	Initiated after a find is made during construction	During regularly scheduled site inspections initiated after a find is made during construction	Initials:

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures  approval prior to implementation, and all construction activity shall adhere to the recommendations in the excavation plan.	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
CULT-4: Procedures of conduct following the discovery of human remains citywide have been mandated by Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98 and the California Code of Regulations Section 15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the 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, who will, in turn, notify the person the NAHC identifies as the Most Likely Descendant (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, 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.	Project applicant	During construction	The San Mateo County Coroner	Initiated after a find is made during construction	During regularly scheduled site inspections initiated after a find is made during construction	Initials:
Greenhouse Gas Emissions						
GHG-1: Prior to January 1, 2020, the City of Menlo Park shall update the Climate Action Plan (CAP) to address the GHG reduction goals of Executive Order B-30-15 and Executive Order S-03-05 for GHG sectors that the City has direct or indirect jurisdictional control over. The City shall identify a GHG emissions reduction target for year 2030 and 2040 that is consistent with the GHG reduction goals identified in Executive Order B-30-15 and	City of Menlo Park	Prior to January 1, 2020	City of Menlo Park Planning Division	Update the Climate Action Plan (CAP)	Once for update to the CAP	Initials: Date:

#### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
Executive Order S-03-05. The CAP shall be updated to include						
measures to ensure that the City is on a trajectory that aligns with						
the state's 2030 GHG emissions reduction target.						
GHG-2: Implement of Mitigation Measure GHG-1.						

#### Hazards and Hazardous Materials

HAZ-4a: Construction at the sites of any site in the City with known contamination, shall be conducted under a project-specific Environmental Site Management Plan (ESMP) that is prepared in consultation with the Regional Water Quality Control Board (RWQCB) or the Department of Toxic Substances Control (DTSC), as appropriate. 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.

Project applicant During the building The appropriate Initials: Plan review Prior to permit and site "Oversight and approval construction and Date:\_\_\_\_\_ development Agency" during regularly review process and designated by the scheduled site City of Menlo prior to permit inspections Park Planning issuance Division

#### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
HAZ-4b: For those sites throughout the city with potential residual contamination in soil, gas, or groundwater that are planned for redevelopment with an overlying occupied building, a vapor intrusion assessment shall be performed by a licensed environmental professional. If the results of the vapor intrusion assessment indicate the potential for significant vapor intrusion into an occupied building, project design shall include vapor controls or source removal, as appropriate, in accordance with regulatory agency requirements. Soil vapor mitigations or controls could include vapor barriers, passive venting, and/or active venting. The vapor intrusion assessment and associated vapor controls or source removal can be incorporated into the ESMP (Mitigation Measure HAZ-4a).	Project applicant	During the building permit and site development review process and prior to permit issuance	environmental professional in	Plan review and approval	Prior to construction and during regularly scheduled site inspections	Initials: Date:
Land Use Planning						
LU-2: As part of the discretionary review process for development projects, all proposed development anywhere in Menlo Park is required to demonstrate consistency with the applicable goals, policies, and programs in the General Plan and the supporting Zoning standards to the satisfaction of the City of Menlo Park's Community Development Department. A future project is consistent with the General Plan and Zoning standards if, considering all its aspects, it will further the goals, policies and programs of the General Plan and supporting Zoning standards and not obstruct their attainment.	Project applicant	During the building permit and site development review process and prior to permit issuance	City of Menlo Park Planning Division	Plan review and approval	Once prior to plan review and approval	Initials: Date:
Noise						
<b>NOISE-1a:</b> To meet the requirements of Title 24 and General Plan Program N1.A, project applicants shall perform acoustical studies prior to issuance of building permits for citywide development of new noise-sensitive uses. New residential dwellings, hotels, motels, dormitories, and school classrooms must meet an interior noise limit of 45 dBA CNEL or L <sub>dn</sub> . Developments in areas exposed to more than 60 dBA CNEL must demonstrate that the structure	Project applicant	Prior to the issuance of construction permits	City of Menlo Park Planning Division	Plan review and approval	Once for preparation of acoustical studies as outlined in the mitigation measure	Initials: Date:

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
has been designed to limit interior noise in habitable rooms to acceptable noise levels. Where exterior noise levels are projected to exceed 60 dBA CNEL or $L_{dn}$ at the façade of a building, a report must be submitted with the building plans describing the noise control measures that have been incorporated into the design of the project to meet the 45 dBA noise limit. Project applicants for all new multi-family residential projects subject to the review and approval of the Community Development Department, prior to building permit issuance, must perform acoustical studies within the projected Ldn 60 dB noise contours, so that noise mitigation measures can be incorporated into project design and site planning, subject to the review and approval of the Community Development Department.						
<b>NOISE-1b:</b> Stationary noise sources and landscaping and maintenance activities citywide shall comply with Chapter 8.06, Noise, of the Menlo Park Municipal Code.	Project applicant	Prior to the issuance of construction permits	City of Menlo Park Planning Division	Plan review and approval	During construction	Initials: Date:
NOISE-1c: Project applicants for all development projects in the city shall minimize the exposure of nearby properties to excessive noise levels from construction-related activity through CEQA review, conditions of approval and/or enforcement of the City's Noise Ordinance. Prior to issuance of demolition, grading, and/or building permits for development projects, a note shall be provided on development plans indicating that during on-going grading, demolition, and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise:  Construction activity is limited to the daytime hours between 8:00 a.m. to 6:00 p.m. on Monday through Friday, as prescribed in the City's municipal code.  All internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers, air intake silencers, and/or engine shrouds that are no less	Project applicant	Prior to the issuance of construction permits	City of Menlo Park Planning Division	Plan review and approval	During construction	Initials: Date:

#### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
<ul> <li>effective than as originally equipped by the manufacturer.</li> <li>Stationary equipment such as generators and air compressors shall be located as far as feasible from nearby noise-sensitive</li> </ul>						
<ul><li>Stockpiling is located as far as feasible from nearby noise-sensitive receptors.</li></ul>						
<ul> <li>Limit unnecessary engine idling to the extent feasible.</li> </ul>						
<ul> <li>Limit the use of public address systems.</li> <li>Construction traffic shall be limited to the haul routes established by the City of Menlo Park.</li> </ul>						
<b>NOISE-2a:</b> To prevent architectural damage citywide as a result of construction-generated vibration:	Project applicant	Prior to the issuance of	City of Menlo Park Planning	Plan review and approval	During construction	Initials: Date:
Prior to issuance of a building permit for any development project requiring pile driving or blasting, the project applicant/developer shall prepare a noise and vibration analysis to assess and mitigate potential noise and vibration impacts related to these activities. The maximum levels shall not exceed 0.2 inch/second, which is the level that can cause architectural damage for typical residential construction. If maximum levels would exceed these thresholds, alternative methods such static rollers, non-explosive blasting, and drilling piles as opposed to pile driving shall be used		construction permits	Division			
To prevent vibration-induced annoyance as a result of construction-generated vibration:						
Individual projects that involve vibration-intensive construction activities, such as blasting, pile drivers, jack hammers, and vibratory rollers, within 200 feet of sensitive receptors shall be evaluated for potential vibration impacts. A vibration study shall be conducted for individual projects where vibration-intensive impacts may occur. The study shall be prepared by an acoustical or vibration engineer holding a degree in engineering, physics, or allied discipline and who is able to demonstrate a minimum of two years of experience in						

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
preparing technical assessments in acoustics and/or groundborne vibrations. The study is subject to review and approval of the Community Development Department.						
Vibration impacts to nearby receptors shall not exceed the vibration annoyance levels (in RMS inches/second) as follows:						
Workshop = 0.126						
Office = 0.063						
Residential Daytime (7AM-10PM)= 0.032						
Residential Nighttime (10PM to 7 AM) = 0.016  If construction-related vibration is determined to be perceptible at vibration-sensitive uses, additional requirements, such as use of less-vibration-intensive equipment or construction techniques, shall be implemented during construction (e.g., nonexplosive blasting methods, drilled piles as opposed to pile driving, preclusion for using vibratory rollers, use of small- or medium-sized bulldozers, etc.). Vibration reduction measures shall be incorporated into the site development plan as a component of the project and applicable building plans, subject to the review and approval of the Community Development Department.						
NOISE-2b: To reduce long-term vibration impacts of future	Project applicant		City of Menlo	Plan review	Once prior to	Initials:
development citywide on existing or potential future sensitive		issuance of construction	Park Planning Division	and approval	plan review and approval	Date:
uses:		permits	DIVISION		арргочаг	
<ul> <li>Locate sensitive uses away from vibration sources.</li> <li>Design industrial development to minimize vibration 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.</li> <li>Work with the railroad operators (e.g., Caltrain, Union Pacific, etc.) to reduce, to the extent possible, the contribution of railroad train noise and vibration to Menlo Park's noise</li> </ul>						
environment.						

## MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
Transportation and Circulation						
<b>TRANS-1a:</b> Widen impacted roadway segments at appropriate locations throughout the city to add travel lanes and capacity to accommodate the increase in net daily trips.	City of Menlo Park	Ongoing	City of Menlo Park Transportation Division	Ongoing	Ongoing	Initials: Date:
TRANS-1b: The City of Menlo Park shall update the existing Transportation Impact Fee (TIF) program to guarantee funding for citywide roadway and infrastructure improvements that are necessary to mitigate impacts from future projects based on the then current City standards. The fees shall be assessed when there is new construction, an increase in square footage in an existing building, or the conversion of existing square footage to a more intensive use. The fees collected shall be applied toward circulation improvements. The fees shall be calculated by multiplying the proposed square footage, dwelling unit, or hotel room by the appropriate rate. Transportation Impact fees shall be included with any other applicable fees payable at the time the building permit is issued. The City shall use the Transportation Impact Fees to fund construction (or to recoup fees advanced to fund construction) of the transportation improvements identified below, among other things that at the time of potential future development may be warranted to mitigate traffic impacts. It should be noted that any project proposed prior to the adoption of an updated TIF will be required to conduct a project-specific Transportation Impact Assessment to determine the impacts and necessary transportation mitigations that are to be funded by that project.	City of Menlo Park	Ongoing	City of Menlo Park Transportation Division	Ongoing	Ongoing	Initials:
As part of the update to the TIF program, the City shall also prepare a "nexus" study that will serve as the basis for requiring development impact fees under Assembly Bill (AB) 1600 legislation, as codified by California Code Government Section 66000 et seq., to support implementation of the proposed						

#### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
project. The established procedures under AB 1600 require that a						
"reasonable relationship" or nexus exist between the						
improvements and facilities required to mitigate the impacts of						
new development pursuant to the proposed project. The						

Sand Hill Road (westbound) and I-280 Northbound On-ramp (#1): Modify the signal-timing plan during the PM peak hour to increase the maximum allocation of green time to the westbound approach during the PM peak hour.

following examples of improvements and facilities would reduce impacts to acceptable level of service standards and these, among other improvements, could be included in the TIF program impact

fees nexus study:

- Sand Hill Road (eastbound) and I-280 Northbound Off-ramp (#2): Add an additional northbound right-turn lane on the off-ramp to improve operations to acceptable LOS D during the AM peak hour.
- **El Camino Real and Ravenswood Avenue (#28):** One eastbound right-turn lane on Menlo Avenue to improve conditions.
- Willow Road and Newbridge Street (#33): Implement measures on Chilco Street south of Constitution Drive to reduce or prevent cut-through traffic through the Belle Haven neighborhood, such as peak-hour turn restrictions from Constitution Drive to southbound Chilco Street, and measures to enhance east/west circulation from Willow Road via O'Brien Drive and the proposed mixed-use collector street opposite Ivy Drive, extending east to University Avenue, to discourage use of Newbridge Street.
- Willow Road and Hamilton Avenue (#36): Provide primary access to potential future development sites east of Willow Road via O'Brien Drive and/or the proposed Mixed-Use Collector that would intersect Willow Road between Hamilton Avenue and O'Brien Drive. Implement measures on Chilco Street south of Constitution Drive to prevent cut-through

#### MITIGATION MONITORING AND REPORTING PROGRAM

# Party Agency Responsible for Implementation Responsible for Monitoring Monitoring Verified Mitigation Measures Implementation Trigger/Timing Monitoring Action Frequency Implementation

traffic through the Belle Haven neighborhood, such as peakhour turn restrictions from Constitution Drive to southbound Chilco Street. Although the provision of an eastbound left-turn lane on Hamilton Avenue where it approaches Willow Road would reduce the delay, this potential mitigation is not recommend because it would encourage cut-through traffic via Chilco Street and Hamilton Avenue, potentially affecting the Belle Haven neighborhood. Therefore, to avoid facilitating the use of Chilco Street and Hamilton Avenue as cut-through routes in the adjacent residential neighborhood, mitigating this traffic impact is not recommended at this time, consistent with City policies that discourage cut-through traffic in residential neighborhoods. The improvements should be incorporated into the updated fee program for ongoing consideration.

- Bayfront Expressway and Willow Road (#37): Evaluate the potential for grade separation to allow conflicting movements to occur simultaneously. The evaluation must consider traffic improvements, along with potential secondary impacts caused by potential right-of-way acquisition, impacts to adjacent wetlands and the Dumbarton Rail corridor, as well as potential impacts or benefits for multi-modal accommodation. If found feasible, the updated fee program should incorporate fair-share contributions from future development towards grade separation.
- Bayfront Expressway and University Avenue (#38): Evaluate the potential for grade separation to allow conflicting movements to occur simultaneously. The evaluation must consider traffic improvements, along with potential secondary impacts caused by potential right-of-way acquisition, impacts to adjacent wetlands and the Dumbarton Rail corridor, as well as potential impacts or benefits for multi-modal accommodation. If found feasible, the updated fee program should incorporate fair-share contributions from future development towards grade separation.

#### MITIGATION MONITORING AND REPORTING PROGRAM

	Party		Agency			
	Responsible for	Implementation	Responsible for	Monitoring	Monitoring	Verified
Mitigation Measures	Implementation	Trigger/Timing	Monitoring	Action	Frequency	Implementation

- Chilco Street and Constitution Drive (#45): Install a traffic signal and signalized crosswalks at the intersection. Construct three southbound lanes on the one-block segment of Chilco Street, between Bayfront Expressway and Chilco Street, to include two southbound left-turn lanes to accommodate the volume of left-turning vehicles entering the project site. In addition, during the AM peak hour, provide a "split-phase" signal operation on Chilco Street. Construct a northbound left-turn lane on Chilco Street approaching Constitution Drive. Construct two outbound lanes on Chilco Street between Constitution Drive and Bayfront Expressway. If the Facebook Campus Expansion Project is approved, this mitigation measure would be required to be constructed as a requirement of that project.
- Chrysler Drive and Constitution Drive (#46): Construct a southbound left-turn on Chrysler Drive, approaching Constitution Drive.
- University Avenue and Adams Drive (#47): Install a traffic signal at this intersection.
- University Avenue and Bay Road (#51): Realign the eastbound and westbound approaches to allow replacement of the east/west "split-phase" signal on Bay Street with standard protected signal phases in order to allow eastbound and westbound pedestrian crossings to occur simultaneously, which would allow for an increase in green time allocated to northbound/southbound movements on University Avenue and reduce peak-hour delay at this intersection. This intersection is located in the City of East Palo Alto and under the control of Caltrans. If this measure if found feasible by the City of East Palo Alto, the improvements should be incorporated into the City of Menlo Park's updated fee program to collect fair-share contributions from future development towards such improvements.
- University Avenue and Donohoe Street (#54): Mitigating this

#### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
impact would require providing additional westbound lane		<u> </u>				
capacity on Donohoe Street, including an extended dual left-						
turn pocket, dedicated through lane, and dual right-turn lanes;						
providing a southbound right-turn lane on University Avenue						
and lengthening the northbound turn pockets. However, this						
mitigation is likely to be infeasible given right-of-way						
limitations, proximity to existing US 101 on- and off-ramps, and						
adjacent properties. In addition, this intersection is located in						
the City of East Palo Alto and under the control of Caltrans. If						
this measure if found feasible by the City of East Palo Alto, the						
improvements should be incorporated into the City of Menlo						
Park's updated fee program to collect fair-share contributions						
from future development towards such improvements.						
University Avenue and US 101 Southbound Ramps (#56):						
Mitigating this impact would require modifications to the US						
101 Southbound On/Off Ramps and at this location This						
intersection is located in the City of East Palo Alto and under						
the control of Caltrans. If this measure if found feasible by the						
City of East Palo Alto, the improvements should be						
incorporated into the City of Menlo Park's updated fee						
program to collect fair-share contributions from future						
development towards such improvements.						
• Chilco Street and Hamilton Avenue (#60): Installation of a traffic						
signal would mitigate this impact to less than significant levels,						
but would have the undesirable secondary effect of						
encouraging the use of Chilco Street as a cut-through route,						
which conflicts with City goals that aim to reduce cut-through						
traffic in residential neighborhoods. Therefore, to avoid						
facilitating cut-through traffic, mitigating this traffic impact by						
increasing capacity is not recommended at this time, but						
should be incorporated into the updated fee program for						
ongoing consideration.						
<b>TRANS-6a:</b> The City of Menlo Park shall update the Transportation	City of Menlo	Ongoing	City of Menlo	Ongoing	Ongoing	Initials:
Impact Fee (TIF) program to provide funding for citywide bicycle	Park		Park			Date:

Party

Responsible for

Implementation

### MITGATION MONITORING OR REPORTING PROGRAM

#### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures
and pedestrian facilities that are necessary to mitigate impacts
from future projects based on the then current City standards.
The fees shall be assessed when there is new construction, an
increase in square footage in an existing building, or the
conversion of existing square footage to a more intensive use. The
fees collected shall be applied toward improvements that will
connect development sites within the area circulation system,
including the elimination of gaps in the citywide pedestrian and
bicycle network. The fees shall be calculated by multiplying the
proposed square footage, dwelling unit, or hotel room by the
appropriate rate. Transportation Impact fees shall be included
with any other applicable fees payable at the time the building
permit is issued. The City shall use the transportation Impact fees
to fund construction (or to recoup fees advanced to fund
construction) of the transportation improvements identified in
this mitigation measure, among other things that at the time of
potential future development may be warranted to mitigate
traffic impacts. It should be noted that any project proposed prior
to the adoption of an updated TIF will be required to conduct a
project-specific Transportation Impact Assessment to determine
the impacts and necessary pedestrian or bicycle facilities
mitigations that are to be funded by that project.

As part of the update to the TIF program, the City shall also prepare a "nexus" study that will serve as the basis for requiring development impact fees under Assembly Bill (AB) 1600 legislation, as codified by California Code Government Section 66000 et seq., to support implementation of the proposed project. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the bicycle and pedestrian improvements and facilities required to mitigate the traffic impacts of new development pursuant to the proposed project. The following examples of pedestrian and bicycle improvements would reduce impacts to acceptable standards,

Trigger/Timing Monitoring
Transportation
Division

Implementation

Agency

Responsible for

Monitoring

Action

Monitoring

Frequency

Verified

Implementation

#### MITIGATION MONITORING AND REPORTING PROGRAM

updated TIF program, also described under TRANS-1:

#### Party Agency Responsible for Implementation Responsible for Monitoring Monitoring Verified Mitigation Measures Implementation Trigger/Timing Monitoring Action Frequency Implementation and these, among others improvements, could be included in the

- US 101 Pedestrian & Bicycle Overcrossing at Marsh Road, and Marsh Road Corridor Pedestrian & Bicycle Improvements (Haven Avenue to Marsh Road/Bay Road): Provide pedestrian and bicycle circulation between the Bayfront Area east of US 101 with the area circulation system west of US 101 along Marsh Road, including access to schools and commercial sites west of Marsh Road that are accessed via Bay Road and Florence Street. Improvements should facilitate pedestrian and bicycle circulation between Haven Avenue and across US 101 near Marsh Road. The recommended improvement would include a dedicated pedestrian and bicycle crossing adjacent to Marsh Road. Alternatively, the provision of continuous sidewalks with controlled pedestrian crossings and Class IV protected bicycle lanes on the Marsh Road overpass, if feasible, could mitigate this impact.
- Ringwood Avenue Corridor Pedestrian & Bicycle Improvements (Belle Haven to Middlefield Road): Eliminate pedestrian and bicycle facility gaps on primary access routes to the Ringwood Avenue bicycle/pedestrian overcrossing of US 101 (located near the terminus of Ringwood Avenue and Market Place). Improvements should include complete sidewalks on the north side of Pierce Road and bicycle facility improvements on the proposed Ringwood Avenue-Market Place-Hamilton Avenue bicycle boulevard (see Street Classification Map in Chapter 3, Project Description). These improvements would also enhance pedestrian and bicycle access to Menlo-Atherton High School.
- University Avenue Pedestrian Improvements: Eliminate gaps in the sidewalk network on those portions of University Avenue that are within the Menlo Park City limits. The TIF Program should also include a contribution towards elimination of sidewalk gaps outside the City limits (within the City of East Palo Alto) to ensure that continuous sidewalks are provided on

#### MITIGATION MONITORING AND REPORTING PROGRAM

Trail, located north of Purdue Avenue.

	Party		Agency			
	Responsible for	Implementation	Responsible for	Monitoring	Monitoring	Verified
Mitigation Measures	Implementation	Trigger/Timing	Monitoring	Action	Frequency	Implementation

- Willow Road Bikeway Corridor (Bayfront Expressway to Alma Street): Provide a continuous bikeway facility that eliminates bicycle lane gaps, provides Class IV bicycle lanes on the US 101 overpass and where Willow Road intersects US 101 northbound and southbound ramps, and upgrades existing Class II bicycle lanes to Class IV protected bicycle lanes where feasible, particularly where the speed limit exceeds 35 miles per hour (mph).
- Willow Road Pedestrian Crossings (Bayfront Expressway to Newbridge Street): Provide enhanced pedestrian crossings of Willow Road at Hamilton Avenue, Ivy Drive (including proposed new street connection opposite Ivy Drive), O'Brien Drive and Newbridge Street. Enhanced crossings should include straightened crosswalks provided on each leg, high visibility crosswalk striping, accessible pedestrian signals, and pedestrian head-start signal timing (leading pedestrian intervals) where feasible. These enhanced crossings would provide improved access between the Belle Haven neighborhood and potential future development between Willow Road and University Avenue.
- Dumbarton Corridor Connections: Through separate projects, Samtrans is currently considering the potential for a bicycle/pedestrian shared-use trail along the Dumbarton Corridor right-of-way between Redwood City and East Palo Alto, through Menlo Park. If found feasible, the City's TIF Program should incorporate walking and bicycling access and connections to the proposed trail, including a potential rail crossing between Kelly Park and Onetta Harris Community Center and Chilco Street and pedestrian and bicycle improvements on streets that connect to the Dumbarton Corridor: Marsh Road, Chilco Street, Willow Road, and University Avenue.

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring	Monitoring Action	Monitoring Frequency	Verified Implementation
TRANS-6b: The City of Menlo Park shall update the existing Shuttle	City of Menlo	Ongoing	City of Menlo	Ongoing	Ongoing	Initials:
Fee program to guarantee funding for citywide operations of City-	Park		Park			Date:
sponsored shuttle service that is necessary to mitigate impacts			Transportation			
from future projects based on the then current City standards.			Division			
The fees shall be assessed when there is new construction, an						
increase in square footage in an existing building, or the						
conversion of existing square footage to a more intensive use. The						
fees collected shall be applied toward circulation improvements						
and right-of-way acquisition. The fees shall be calculated by						
multiplying the proposed square footage, dwelling unit, or hotel						
room by the appropriate rate. Shuttle fees shall be included with						
any other applicable fees payable at the time the building permit						
is issued. The City shall use the Shuttle fees to fund operations of						
City-sponsored shuttle service to meet the increased demand.						
As part of the update to the Shuttle Fee program, the City shall						
also prepare a "nexus" study that will serve as the basis for						
requiring development impact fees under Assembly Bill (AB) 1600						
legislation, as codified by California Code Government Section						
66000 et seq., to support implementation of the proposed						
project. The established procedures under AB 1600 require that a						
"reasonable relationship" or nexus exist between the transit						
improvements and facilities required to mitigate the transit						
impacts of new development pursuant to the proposed project.						
The types of transit-related improvements and facilities that						
would reduce impacts to acceptable standards including						
increasing the fleet of City-sponsored Shuttles and adding						
additional transit stop facilities within one-quarter mile from						
residential and employment centers These, among other						
improvements, could be included in the Shuttle Fee program						
impact fees nexus study.						
<b>TRANS-6c:</b> The City should continue to support the Dumbarton	City of Menlo	Ongoing	City of Menlo	Ongoing	Ongoing	Initials:
Corridor Study, evaluating the feasibility of providing transit	Park		Park			Date:
service to the existing rail corridor and/or operational			Transportation			

### MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measures improvements to Bayfront Expressway, Marsh Road and Willow Road, such as a dedicated high-occupancy vehicle (HOV) lane, bus queue-jump lanes, or transit-signal priority that could reduce travel time for current bus operations.	Party Responsible for Implementation	Implementation Trigger/Timing	Agency Responsible for Monitoring Division	Monitoring Action	Monitoring Frequency	Verified Implementation
Utilities and Service Systems						
UTIL-10: The City shall continue its reduction programs and diversion requirements in an effort to further reduce solid waste that is diverted to the landfill and lower its per capita disposal rate citywide. In addition, the City shall monitor solid waste generation volumes in relation to capacities at receiving landfill sites to ensure that sufficient capacity exists to accommodate future growth. The City shall ensure any waste management firm it contracts with has access to a new landfill site(s) to replace the Ox Mountain landfills, at such time that this landfill is closed.		Ongoing	City of Menlo Park Planning Division	Ongoing	Ongoing	Initials: Date:

## **APPENDIX B**

## **CALEEMOD OUTPUT SHEETS**



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## 115 Independence Drive Project - Energy Analysis Bay Area AQMD Air District, Annual

## 1.0 Project Characteristics

## 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	34.71	1000sqft	0.80	34,708.00	0
Unenclosed Parking with Elevator	420.00	Space	0.00	134,339.00	0
City Park	1.21	Acre	1.21	52,767.54	0
Apartments Mid Rise	335.00	Dwelling Unit	1.19	324,881.00	958

## 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64			
Climate Zone	5			Operational Year	2023			
Utility Company	Pacific Gas & Electric Company							
CO2 Intensity (lb/MWhr)	328.8	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006			

## 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - CO2 intensity based on 5-year average (PG&E, 2015)

Land Use - The propsed project would develop the project site with an approximately 134,339-gross-square-foot (gsf), seven-story multi-family apartment building with approximately 335 dwelling units, an approximately 34,708 gsf commercial office building, as well as associated open space, circulation and parking, and infrastructure improvements.

Construction Phase - Construction of the proposed project is anticipated to begin in September 2020 and is anticipated to last approximately 37 months.

Grading - A total of 5,000 cubic yards of soils would be imported.

Demolition - The proposed project would result in the demolition of existing office and industrial square footage.

Vehicle Trips - Defaults

Mobile Land Use Mitigation -

Area Mitigation - Assuming only natural gas hearth.

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	680.00
tblConstructionPhase	NumDays	8.00	20.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblGrading	AcresOfGrading	10.00	4.00
tblGrading	MaterialImported	0.00	500.00
tblLandUse	LandUseSquareFeet	34,710.00	34,708.00
tblLandUse	LandUseSquareFeet	168,000.00	134,339.00
tblLandUse	LandUseSquareFeet	52,707.60	52,767.54
tblLandUse	LandUseSquareFeet	335,000.00	324,881.00
tblLandUse	LotAcreage	3.78	0.00
tblLandUse	LotAcreage	8.82	1.19
tblProjectCharacteristics	CO2IntensityFactor	641.35	328.8
tblTripsAndVMT	HaulingTripNumber	63.00	62.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

# 2.0 Emissions Summary

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# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	√yr		
2020	2.6563	1.5496	1.1025	2.3900e- 003	0.3256	0.0733	0.3989	0.1511	0.0680	0.2191	0.0000	213.2814	213.2814	0.0437	0.0000	214.3744
2021	0.4105	3.3478	3.3769	9.2400e- 003	0.4029	0.1295	0.5324	0.1086	0.1217	0.2303	0.0000	834.5079	834.5079	0.0914	0.0000	836.7923
2022	0.3726	3.0376	3.2436	9.0600e- 003	0.4014	0.1092	0.5106	0.1082	0.1027	0.2109	0.0000	818.5068	818.5068	0.0894	0.0000	820.7406
2023	0.1767	1.3798	1.6267	4.6100e- 003	0.2084	0.0488	0.2572	0.0562	0.0459	0.1021	0.0000	416.0436	416.0436	0.0450	0.0000	417.1676
Maximum	2.6563	3.3478	3.3769	9.2400e- 003	0.4029	0.1295	0.5324	0.1511	0.1217	0.2303	0.0000	834.5079	834.5079	0.0914	0.0000	836.7923

# 2.1 Overall Construction

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tor	ns/yr							MT	/yr		
2020	2.6563	1.5496	1.1025	2.3900e- 003	0.3256	0.0733	0.3989	0.1511	0.0680	0.2191	0.0000	213.2813	213.2813	0.0437	0.0000	214.3743
2021	0.4105	3.3478	3.3768	9.2400e- 003	0.4029	0.1295	0.5324	0.1086	0.1217	0.2303	0.0000	834.5075	834.5075	0.0914	0.0000	836.7919
2022	0.3726	3.0376	3.2436	9.0600e- 003	0.4014	0.1092	0.5106	0.1082	0.1027	0.2109	0.0000	818.5064	818.5064	0.0894	0.0000	820.7403
2020	0.1767	1.3798	1.6267	4.6100e- 003	0.2084	0.0488	0.2572	0.0562	0.0459	0.1021	0.0000	416.0435	416.0435	0.0450	0.0000	417.1674
Maximum	2.6563	3.3478	3.3768	9.2400e- 003	0.4029	0.1295	0.5324	0.1511	0.1217	0.2303	0.0000	834.5075	834.5075	0.0914	0.0000	836.7919
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-7-2020	12-6-2020	1.1701	1.1701
2	12-7-2020	3-6-2021	0.9579	0.9579
3	3-7-2021	6-6-2021	0.9450	0.9450
4	6-7-2021	9-6-2021	0.9424	0.9424
5	9-7-2021	12-6-2021	0.9391	0.9391
6	12-7-2021	3-6-2022	0.8712	0.8712
7	3-7-2022	6-6-2022	0.8609	0.8609
8	6-7-2022	9-6-2022	0.8586	0.8586

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9	9-7-2022	12-6-2022	0.8554	0.8554
10	12-7-2022	3-6-2023	0.7743	0.7743
11	3-7-2023	6-6-2023	0.7573	0.7573
12	6-7-2023	9-6-2023	0.2545	0.2545
		Highest	1.1701	1.1701

# 2.2 Overall Operational

# **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	2.5114	0.0465	3.5565	2.2500e- 003		0.1660	0.1660		0.1660	0.1660	15.2726	10.3445	25.6170	0.0285	1.0000e- 003	26.6273
Energy	0.0194	0.1677	0.0850	1.0600e- 003		0.0134	0.0134	       	0.0134	0.0134	0.0000	506.2854	506.2854	0.0314	9.2600e- 003	509.8286
Mobile	0.5623	2.4910	6.3964	0.0238	2.1303	0.0195	2.1498	0.5717	0.0182	0.5899	0.0000	2,187.495 4	2,187.495 4	0.0759	0.0000	2,189.392 8
Waste						0.0000	0.0000	,       	0.0000	0.0000	37.8538	0.0000	37.8538	2.2371	0.0000	93.7811
Water						0.0000	0.0000	1   	0.0000	0.0000	8.8818	32.5017	41.3834	0.9151	0.0221	70.8568
Total	3.0931	2.7052	10.0378	0.0271	2.1303	0.1989	2.3291	0.5717	0.1976	0.7693	62.0081	2,736.626 9	2,798.634 9	3.2880	0.0324	2,890.486 6

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# 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category					ton	s/yr					MT/yr						
Area	1.7399	0.0403	2.4971	2.1000e- 004		0.0147	0.0147		0.0147	0.0147	0.0000	17.4541	17.4541	4.1900e- 003	2.5000e- 004	17.6318	
Energy	0.0194	0.1677	0.0850	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	506.2854	506.2854	0.0314	9.2600e- 003	509.8286	
Mobile	0.5387	2.3476	5.8428	0.0212	1.8789	0.0175	1.8964	0.5043	0.0163	0.5206	0.0000	1,948.718 3	1,948.718 3	0.0694	0.0000	1,950.453 3	
Waste			1       			0.0000	0.0000		0.0000	0.0000	37.8538	0.0000	37.8538	2.2371	0.0000	93.7811	
Water			,			0.0000	0.0000		0.0000	0.0000	8.8818	32.5017	41.3834	0.9151	0.0221	70.8568	
Total	2.2979	2.5555	8.4249	0.0225	1.8789	0.0456	1.9245	0.5043	0.0444	0.5487	46.7355	2,504.959 4	2,551.694 9	3.2572	0.0316	2,642.551 6	

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	25.71	5.53	16.07	17.11	11.80	77.07	17.37	11.80	77.51	28.67	24.63	8.47	8.82	0.94	2.32	8.58

# 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/7/2020	10/2/2020	5	20	
2	Site Preparation	Site Preparation	10/5/2020	10/30/2020	5	20	
3	Grading	Grading	11/2/2020	11/27/2020	5	20	
4	Building Construction	Building Construction	11/30/2020	7/7/2023	5	680	
5	Paving	Paving	7/13/2020	8/7/2020	5	20	
6	Architectural Coating	Architectural Coating	7/13/2020	8/7/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 657,884; Residential Outdoor: 219,295; Non-Residential Indoor: 52,062; Non-Residential Outdoor: 17,354; Striped Parking Area: 8,060 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	! 1	8.00	158	0.38
Grading	Graders	! 1	8.00	187	0.41
Grading	Rubber Tired Dozers	! 1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	! 1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	<u>.</u> 1	6.00	78	0.48

**Trips and VMT** 

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	295.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	62.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	331.00	72.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

#### 3.2 Demolition - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0319	0.0000	0.0319	4.8300e- 003	0.0000	4.8300e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e- 004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e- 003	0.0000	34.2386
Total	0.0331	0.3320	0.2175	3.9000e- 004	0.0319	0.0166	0.0485	4.8300e- 003	0.0154	0.0203	0.0000	33.9986	33.9986	9.6000e- 003	0.0000	34.2386

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3.2 Demolition - 2020
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.2300e- 003	0.0431	8.6700e- 003	1.2000e- 004	2.4900e- 003	1.4000e- 004	2.6300e- 003	6.9000e- 004	1.3000e- 004	8.2000e- 004	0.0000	11.3040	11.3040	5.8000e- 004	0.0000	11.3186
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e- 004	3.6000e- 004	3.6800e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.1900e- 003	3.2000e- 004	1.0000e- 005	3.2000e- 004	0.0000	1.0384	1.0384	3.0000e- 005	0.0000	1.0391
Total	1.7300e- 003	0.0435	0.0124	1.3000e- 004	3.6800e- 003	1.5000e- 004	3.8200e- 003	1.0100e- 003	1.4000e- 004	1.1400e- 003	0.0000	12.3424	12.3424	6.1000e- 004	0.0000	12.3576

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	ii ii ii				0.0319	0.0000	0.0319	4.8300e- 003	0.0000	4.8300e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e- 004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e- 003	0.0000	34.2385
Total	0.0331	0.3320	0.2175	3.9000e- 004	0.0319	0.0166	0.0485	4.8300e- 003	0.0154	0.0203	0.0000	33.9986	33.9986	9.6000e- 003	0.0000	34.2385

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3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.2300e- 003	0.0431	8.6700e- 003	1.2000e- 004	2.4900e- 003	1.4000e- 004	2.6300e- 003	6.9000e- 004	1.3000e- 004	8.2000e- 004	0.0000	11.3040	11.3040	5.8000e- 004	0.0000	11.3186
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e- 004	3.6000e- 004	3.6800e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.1900e- 003	3.2000e- 004	1.0000e- 005	3.2000e- 004	0.0000	1.0384	1.0384	3.0000e- 005	0.0000	1.0391
Total	1.7300e- 003	0.0435	0.0124	1.3000e- 004	3.6800e- 003	1.5000e- 004	3.8200e- 003	1.0100e- 003	1.4000e- 004	1.1400e- 003	0.0000	12.3424	12.3424	6.1000e- 004	0.0000	12.3576

# 3.3 Site Preparation - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0408	0.4242	0.2151	3.8000e- 004		0.0220	0.0220	] 	0.0202	0.0202	0.0000	33.4307	33.4307	0.0108	0.0000	33.7010
Total	0.0408	0.4242	0.2151	3.8000e- 004	0.1807	0.0220	0.2026	0.0993	0.0202	0.1195	0.0000	33.4307	33.4307	0.0108	0.0000	33.7010

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3.3 Site Preparation - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e- 004	4.3000e- 004	4.4200e- 003	1.0000e- 005	1.4200e- 003	1.0000e- 005	1.4300e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.2461	1.2461	3.0000e- 005	0.0000	1.2469
Total	6.0000e- 004	4.3000e- 004	4.4200e- 003	1.0000e- 005	1.4200e- 003	1.0000e- 005	1.4300e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.2461	1.2461	3.0000e- 005	0.0000	1.2469

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0408	0.4242	0.2151	3.8000e- 004		0.0220	0.0220		0.0202	0.0202	0.0000	33.4306	33.4306	0.0108	0.0000	33.7009
Total	0.0408	0.4242	0.2151	3.8000e- 004	0.1807	0.0220	0.2026	0.0993	0.0202	0.1195	0.0000	33.4306	33.4306	0.0108	0.0000	33.7009

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3.3 Site Preparation - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e- 004	4.3000e- 004	4.4200e- 003	1.0000e- 005	1.4200e- 003	1.0000e- 005	1.4300e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.2461	1.2461	3.0000e- 005	0.0000	1.2469
Total	6.0000e- 004	4.3000e- 004	4.4200e- 003	1.0000e- 005	1.4200e- 003	1.0000e- 005	1.4300e- 003	3.8000e- 004	1.0000e- 005	3.9000e- 004	0.0000	1.2461	1.2461	3.0000e- 005	0.0000	1.2469

# 3.4 Grading - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	<sup>-</sup> /yr		
Fugitive Dust					0.0624	0.0000	0.0624	0.0333	0.0000	0.0333	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0243	0.2639	0.1605	3.0000e- 004		0.0127	0.0127		0.0117	0.0117	0.0000	26.0588	26.0588	8.4300e- 003	0.0000	26.2694
Total	0.0243	0.2639	0.1605	3.0000e- 004	0.0624	0.0127	0.0751	0.0333	0.0117	0.0451	0.0000	26.0588	26.0588	8.4300e- 003	0.0000	26.2694

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3.4 Grading - 2020
Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	2.6000e- 004	9.0600e- 003	1.8200e- 003	2.0000e- 005	5.2000e- 004	3.0000e- 005	5.5000e- 004	1.4000e- 004	3.0000e- 005	1.7000e- 004	0.0000	2.3758	2.3758	1.2000e- 004	0.0000	2.3788
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e- 004	3.6000e- 004	3.6800e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.1900e- 003	3.2000e- 004	1.0000e- 005	3.2000e- 004	0.0000	1.0384	1.0384	3.0000e- 005	0.0000	1.0391
Total	7.6000e- 004	9.4200e- 003	5.5000e- 003	3.0000e- 005	1.7100e- 003	4.0000e- 005	1.7400e- 003	4.6000e- 004	4.0000e- 005	4.9000e- 004	0.0000	3.4142	3.4142	1.5000e- 004	0.0000	3.4179

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0624	0.0000	0.0624	0.0333	0.0000	0.0333	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.2639	0.1605	3.0000e- 004		0.0127	0.0127		0.0117	0.0117	0.0000	26.0587	26.0587	8.4300e- 003	0.0000	26.2694
Total	0.0243	0.2639	0.1605	3.0000e- 004	0.0624	0.0127	0.0751	0.0333	0.0117	0.0451	0.0000	26.0587	26.0587	8.4300e- 003	0.0000	26.2694

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3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	2.6000e- 004	9.0600e- 003	1.8200e- 003	2.0000e- 005	5.2000e- 004	3.0000e- 005	5.5000e- 004	1.4000e- 004	3.0000e- 005	1.7000e- 004	0.0000	2.3758	2.3758	1.2000e- 004	0.0000	2.3788
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0000e- 004	3.6000e- 004	3.6800e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.1900e- 003	3.2000e- 004	1.0000e- 005	3.2000e- 004	0.0000	1.0384	1.0384	3.0000e- 005	0.0000	1.0391
Total	7.6000e- 004	9.4200e- 003	5.5000e- 003	3.0000e- 005	1.7100e- 003	4.0000e- 005	1.7400e- 003	4.6000e- 004	4.0000e- 005	4.9000e- 004	0.0000	3.4142	3.4142	1.5000e- 004	0.0000	3.4179

# 3.5 Building Construction - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0254	0.2302	0.2022	3.2000e- 004		0.0134	0.0134		0.0126	0.0126	0.0000	27.7932	27.7932	6.7800e- 003	0.0000	27.9627
Total	0.0254	0.2302	0.2022	3.2000e- 004		0.0134	0.0134		0.0126	0.0126	0.0000	27.7932	27.7932	6.7800e- 003	0.0000	27.9627

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# 3.5 Building Construction - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3400e- 003	0.0997	0.0251	2.4000e- 004	5.6700e- 003	4.9000e- 004	6.1500e- 003	1.6400e- 003	4.7000e- 004	2.1000e- 003	0.0000	22.6212	22.6212	1.1700e- 003	0.0000	22.6504
Worker	0.0132	9.4200e- 003	0.0976	3.0000e- 004	0.0314	2.1000e- 004	0.0316	8.3500e- 003	1.9000e- 004	8.5400e- 003	0.0000	27.4974	27.4974	6.7000e- 004	0.0000	27.5140
Total	0.0165	0.1091	0.1226	5.4000e- 004	0.0371	7.0000e- 004	0.0378	9.9900e- 003	6.6000e- 004	0.0106	0.0000	50.1186	50.1186	1.8400e- 003	0.0000	50.1644

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0254	0.2302	0.2022	3.2000e- 004		0.0134	0.0134		0.0126	0.0126	0.0000	27.7932	27.7932	6.7800e- 003	0.0000	27.9627
Total	0.0254	0.2302	0.2022	3.2000e- 004		0.0134	0.0134		0.0126	0.0126	0.0000	27.7932	27.7932	6.7800e- 003	0.0000	27.9627

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# 3.5 Building Construction - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3400e- 003	0.0997	0.0251	2.4000e- 004	5.6700e- 003	4.9000e- 004	6.1500e- 003	1.6400e- 003	4.7000e- 004	2.1000e- 003	0.0000	22.6212	22.6212	1.1700e- 003	0.0000	22.6504
Worker	0.0132	9.4200e- 003	0.0976	3.0000e- 004	0.0314	2.1000e- 004	0.0316	8.3500e- 003	1.9000e- 004	8.5400e- 003	0.0000	27.4974	27.4974	6.7000e- 004	0.0000	27.5140
Total	0.0165	0.1091	0.1226	5.4000e- 004	0.0371	7.0000e- 004	0.0378	9.9900e- 003	6.6000e- 004	0.0106	0.0000	50.1186	50.1186	1.8400e- 003	0.0000	50.1644

# 3.5 Building Construction - 2021

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirrioda :	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251	 	0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	0.2481	2.2749	2.1631	3.5100e- 003	·	0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

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# 3.5 Building Construction - 2021 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0298	0.9814	0.2450	2.5400e- 003	0.0616	2.1300e- 003	0.0638	0.0178	2.0400e- 003	0.0199	0.0000	243.6796	243.6796	0.0120	0.0000	243.9791
Worker	0.1326	0.0915	0.9688	3.1900e- 003	0.3413	2.2300e- 003	0.3436	0.0908	2.0600e- 003	0.0929	0.0000	288.5416	288.5416	6.4700e- 003	0.0000	288.7034
Total	0.1624	1.0729	1.2138	5.7300e- 003	0.4029	4.3600e- 003	0.4073	0.1086	4.1000e- 003	0.1127	0.0000	532.2212	532.2212	0.0185	0.0000	532.6824

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	0.2481	2.2749	2.1631	3.5100e- 003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

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# 3.5 Building Construction - 2021 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0298	0.9814	0.2450	2.5400e- 003	0.0616	2.1300e- 003	0.0638	0.0178	2.0400e- 003	0.0199	0.0000	243.6796	243.6796	0.0120	0.0000	243.9791
Worker	0.1326	0.0915	0.9688	3.1900e- 003	0.3413	2.2300e- 003	0.3436	0.0908	2.0600e- 003	0.0929	0.0000	288.5416	288.5416	6.4700e- 003	0.0000	288.7034
Total	0.1624	1.0729	1.2138	5.7300e- 003	0.4029	4.3600e- 003	0.4073	0.1086	4.1000e- 003	0.1127	0.0000	532.2212	532.2212	0.0185	0.0000	532.6824

# 3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirricad	0.2218	2.0300	2.1272	3.5000e- 003		0.1052	0.1052	 	0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total	0.2218	2.0300	2.1272	3.5000e- 003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471

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# 3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0277	0.9259	0.2294	2.5000e- 003	0.0614	1.8400e- 003	0.0632	0.0178	1.7600e- 003	0.0195	0.0000	240.3657	240.3657	0.0114	0.0000	240.6508
Worker	0.1231	0.0817	0.8869	3.0600e- 003	0.3400	2.1700e- 003	0.3422	0.0905	2.0000e- 003	0.0925	0.0000	276.8983	276.8983	5.7800e- 003	0.0000	277.0428
Total	0.1508	1.0076	1.1164	5.5600e- 003	0.4014	4.0100e- 003	0.4054	0.1082	3.7600e- 003	0.1120	0.0000	517.2640	517.2640	0.0172	0.0000	517.6936

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.2218	2.0300	2.1272	3.5000e- 003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total	0.2218	2.0300	2.1272	3.5000e- 003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467

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# 3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0277	0.9259	0.2294	2.5000e- 003	0.0614	1.8400e- 003	0.0632	0.0178	1.7600e- 003	0.0195	0.0000	240.3657	240.3657	0.0114	0.0000	240.6508
Worker	0.1231	0.0817	0.8869	3.0600e- 003	0.3400	2.1700e- 003	0.3422	0.0905	2.0000e- 003	0.0925	0.0000	276.8983	276.8983	5.7800e- 003	0.0000	277.0428
Total	0.1508	1.0076	1.1164	5.5600e- 003	0.4014	4.0100e- 003	0.4054	0.1082	3.7600e- 003	0.1120	0.0000	517.2640	517.2640	0.0172	0.0000	517.6936

# 3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1062	0.9710	1.0965	1.8200e- 003		0.0472	0.0472		0.0444	0.0444	0.0000	156.4682	156.4682	0.0372	0.0000	157.3987
Total	0.1062	0.9710	1.0965	1.8200e- 003		0.0472	0.0472		0.0444	0.0444	0.0000	156.4682	156.4682	0.0372	0.0000	157.3987

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# 3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0108	0.3707	0.1066	1.2600e- 003	0.0319	4.3000e- 004	0.0323	9.2200e- 003	4.1000e- 004	9.6300e- 003	0.0000	121.3075	121.3075	5.0500e- 003	0.0000	121.4337
Worker	0.0598	0.0381	0.4236	1.5300e- 003	0.1766	1.1000e- 003	0.1777	0.0470	1.0200e- 003	0.0480	0.0000	138.2679	138.2679	2.6900e- 003	0.0000	138.3352
Total	0.0706	0.4088	0.5303	2.7900e- 003	0.2084	1.5300e- 003	0.2100	0.0562	1.4300e- 003	0.0576	0.0000	259.5754	259.5754	7.7400e- 003	0.0000	259.7689

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1062	0.9710	1.0965	1.8200e- 003		0.0472	0.0472		0.0444	0.0444	0.0000	156.4680	156.4680	0.0372	0.0000	157.3986
Total	0.1062	0.9710	1.0965	1.8200e- 003		0.0472	0.0472		0.0444	0.0444	0.0000	156.4680	156.4680	0.0372	0.0000	157.3986

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# 3.5 Building Construction - 2023 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0108	0.3707	0.1066	1.2600e- 003	0.0319	4.3000e- 004	0.0323	9.2200e- 003	4.1000e- 004	9.6300e- 003	0.0000	121.3075	121.3075	5.0500e- 003	0.0000	121.4337
Worker	0.0598	0.0381	0.4236	1.5300e- 003	0.1766	1.1000e- 003	0.1777	0.0470	1.0200e- 003	0.0480	0.0000	138.2679	138.2679	2.6900e- 003	0.0000	138.3352
Total	0.0706	0.4088	0.5303	2.7900e- 003	0.2084	1.5300e- 003	0.2100	0.0562	1.4300e- 003	0.0576	0.0000	259.5754	259.5754	7.7400e- 003	0.0000	259.7689

# 3.6 Paving - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Off-Road	0.0118	0.1180	0.1228	1.9000e- 004		6.5100e- 003	6.5100e- 003		6.0100e- 003	6.0100e- 003	0.0000	16.3720	16.3720	5.1400e- 003	0.0000	16.5006
	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0118	0.1180	0.1228	1.9000e- 004		6.5100e- 003	6.5100e- 003		6.0100e- 003	6.0100e- 003	0.0000	16.3720	16.3720	5.1400e- 003	0.0000	16.5006

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3.6 Paving - 2020
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e- 004	4.7000e- 004	4.9100e- 003	2.0000e- 005	1.5800e- 003	1.0000e- 005	1.5900e- 003	4.2000e- 004	1.0000e- 005	4.3000e- 004	0.0000	1.3846	1.3846	3.0000e- 005	0.0000	1.3854
Total	6.6000e- 004	4.7000e- 004	4.9100e- 003	2.0000e- 005	1.5800e- 003	1.0000e- 005	1.5900e- 003	4.2000e- 004	1.0000e- 005	4.3000e- 004	0.0000	1.3846	1.3846	3.0000e- 005	0.0000	1.3854

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0118	0.1180	0.1228	1.9000e- 004		6.5100e- 003	6.5100e- 003		6.0100e- 003	6.0100e- 003	0.0000	16.3720	16.3720	5.1400e- 003	0.0000	16.5006
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0118	0.1180	0.1228	1.9000e- 004		6.5100e- 003	6.5100e- 003		6.0100e- 003	6.0100e- 003	0.0000	16.3720	16.3720	5.1400e- 003	0.0000	16.5006

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3.6 Paving - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e- 004	4.7000e- 004	4.9100e- 003	2.0000e- 005	1.5800e- 003	1.0000e- 005	1.5900e- 003	4.2000e- 004	1.0000e- 005	4.3000e- 004	0.0000	1.3846	1.3846	3.0000e- 005	0.0000	1.3854
Total	6.6000e- 004	4.7000e- 004	4.9100e- 003	2.0000e- 005	1.5800e- 003	1.0000e- 005	1.5900e- 003	4.2000e- 004	1.0000e- 005	4.3000e- 004	0.0000	1.3846	1.3846	3.0000e- 005	0.0000	1.3854

# 3.7 Architectural Coating - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	2.4960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	2.4200e- 003	0.0168	0.0183	3.0000e- 005		1.1100e- 003	1.1100e- 003		1.1100e- 003	1.1100e- 003	0.0000	2.5533	2.5533	2.0000e- 004	0.0000	2.5582
Total	2.4984	0.0168	0.0183	3.0000e- 005		1.1100e- 003	1.1100e- 003		1.1100e- 003	1.1100e- 003	0.0000	2.5533	2.5533	2.0000e- 004	0.0000	2.5582

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# 3.7 Architectural Coating - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1900e- 003	1.5700e- 003	0.0162	5.0000e- 005	5.2200e- 003	4.0000e- 005	5.2500e- 003	1.3900e- 003	3.0000e- 005	1.4200e- 003	0.0000	4.5691	4.5691	1.1000e- 004	0.0000	4.5718
Total	2.1900e- 003	1.5700e- 003	0.0162	5.0000e- 005	5.2200e- 003	4.0000e- 005	5.2500e- 003	1.3900e- 003	3.0000e- 005	1.4200e- 003	0.0000	4.5691	4.5691	1.1000e- 004	0.0000	4.5718

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	2.4960					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e- 003	0.0168	0.0183	3.0000e- 005		1.1100e- 003	1.1100e- 003	       	1.1100e- 003	1.1100e- 003	0.0000	2.5533	2.5533	2.0000e- 004	0.0000	2.5582
Total	2.4984	0.0168	0.0183	3.0000e- 005		1.1100e- 003	1.1100e- 003		1.1100e- 003	1.1100e- 003	0.0000	2.5533	2.5533	2.0000e- 004	0.0000	2.5582

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# 3.7 Architectural Coating - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1900e- 003	1.5700e- 003	0.0162	5.0000e- 005	5.2200e- 003	4.0000e- 005	5.2500e- 003	1.3900e- 003	3.0000e- 005	1.4200e- 003	0.0000	4.5691	4.5691	1.1000e- 004	0.0000	4.5718
Total	2.1900e- 003	1.5700e- 003	0.0162	5.0000e- 005	5.2200e- 003	4.0000e- 005	5.2500e- 003	1.3900e- 003	3.0000e- 005	1.4200e- 003	0.0000	4.5691	4.5691	1.1000e- 004	0.0000	4.5718

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

Increase Density

Increase Diversity

Improve Walkability Design

Improve Destination Accessibility

Increase Transit Accessibility

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.5387	2.3476	5.8428	0.0212	1.8789	0.0175	1.8964	0.5043	0.0163	0.5206	0.0000	1,948.718 3	1,948.718 3	0.0694	0.0000	1,950.453 3
Unmitigated	0.5623	2.4910	6.3964	0.0238	2.1303	0.0195	2.1498	0.5717	0.0182	0.5899	0.0000	2,187.495 4	2,187.495 4	0.0759	0.0000	2,189.392 8

# **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,227.75	2,140.65	1963.10	5,029,170	4,435,728
City Park	0.00	0.00	0.00		
General Office Building	382.85	85.39	36.45	695,107	613,084
Unenclosed Parking with Elevator	0.00	0.00	0.00		
Total	2,610.60	2,226.04	1,999.55	5,724,277	5,048,812

# **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Mid Rise	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
City Park	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
General Office Building	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749
Unenclosed Parking with Elevator	0.578638	0.038775	0.193686	0.110919	0.015677	0.005341	0.018293	0.026358	0.002641	0.002200	0.005832	0.000891	0.000749

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	314.4105	314.4105	0.0277	5.7400e- 003	316.8135
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	314.4105	314.4105	0.0277	5.7400e- 003	316.8135
NaturalGas Mitigated	0.0194	0.1677	0.0850	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8749	191.8749	3.6800e- 003	3.5200e- 003	193.0151
NaturalGas Unmitigated	0.0194	0.1677	0.0850	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8749	191.8749	3.6800e- 003	3.5200e- 003	193.0151

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# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Mid Rise	2.92469e +006	0.0158	0.1348	0.0574	8.6000e- 004		0.0109	0.0109	1 1 1 1	0.0109	0.0109	0.0000	156.0728	156.0728	2.9900e- 003	2.8600e- 003	157.0003
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	670906	3.6200e- 003	0.0329	0.0276	2.0000e- 004		2.5000e- 003	2.5000e- 003		2.5000e- 003	2.5000e- 003	0.0000	35.8021	35.8021	6.9000e- 004	6.6000e- 004	36.0148
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	r	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0194	0.1677	0.0850	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8749	191.8749	3.6800e- 003	3.5200e- 003	193.0151

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# **5.2 Energy by Land Use - NaturalGas**

# **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Mid Rise	2.92469e +006	0.0158	0.1348	0.0574	8.6000e- 004		0.0109	0.0109	1 1 1 1	0.0109	0.0109	0.0000	156.0728	156.0728	2.9900e- 003	2.8600e- 003	157.0003
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	670906	3.6200e- 003	0.0329	0.0276	2.0000e- 004		2.5000e- 003	2.5000e- 003		2.5000e- 003	2.5000e- 003	0.0000	35.8021	35.8021	6.9000e- 004	6.6000e- 004	36.0148
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	r	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0194	0.1677	0.0850	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8749	191.8749	3.6800e- 003	3.5200e- 003	193.0151

# 5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments Mid Rise	1.41437e +006	210.9403	0.0186	3.8500e- 003	212.5525
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	433156	64.6014	5.7000e- 003	1.1800e- 003	65.0951
Unenclosed Parking with Elevator	260618	38.8688	3.4300e- 003	7.1000e- 004	39.1659
Total		314.4105	0.0277	5.7400e- 003	316.8135

# 5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Mid Rise	1.41437e +006	210.9403	0.0186	3.8500e- 003	212.5525
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	433156	64.6014	5.7000e- 003	1.1800e- 003	65.0951
Unenclosed Parking with Elevator	260618	38.8688	3.4300e- 003	7.1000e- 004	39.1659
Total		314.4105	0.0277	5.7400e- 003	316.8135

#### 6.0 Area Detail

# **6.1 Mitigation Measures Area**

Use only Natural Gas Hearths

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												МТ	-/yr		
Mitigated	1.7399	0.0403	2.4971	2.1000e- 004		0.0147	0.0147		0.0147	0.0147	0.0000	17.4541	17.4541	4.1900e- 003	2.5000e- 004	17.6318
Unmitigated	2.5114	0.0465	3.5565	2.2500e- 003		0.1660	0.1660		0.1660	0.1660	15.2726	10.3445	25.6170	0.0285	1.0000e- 003	26.6273

# 6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											MT	<sup>7</sup> /yr		
Architectural Coating	0.2496					0.0000	0.0000	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4136		,			0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.7730	0.0178	1.0644	2.1200e- 003		0.1522	0.1522	1	0.1522	0.1522	15.2726	6.2732	21.5457	0.0246	1.0000e- 003	22.4578
Landscaping	0.0753	0.0287	2.4922	1.3000e- 004		0.0138	0.0138	1 1 1 1	0.0138	0.0138	0.0000	4.0713	4.0713	3.9300e- 003	0.0000	4.1695
Total	2.5114	0.0465	3.5565	2.2500e- 003		0.1660	0.1660		0.1660	0.1660	15.2726	10.3445	25.6170	0.0285	1.0000e- 003	26.6273

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# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											MT	/yr		
Architectural Coating	0.2496			 		0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.4136	 	i i	 		0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.3500e- 003	0.0116	4.9200e- 003	7.0000e- 005		9.3000e- 004	9.3000e- 004	! ! !	9.3000e- 004	9.3000e- 004	0.0000	13.3828	13.3828	2.6000e- 004	2.5000e- 004	13.4623
Landscaping	0.0753	0.0287	2.4922	1.3000e- 004		0.0138	0.0138	! !	0.0138	0.0138	0.0000	4.0713	4.0713	3.9300e- 003	0.0000	4.1695
Total	1.7398	0.0403	2.4971	2.0000e- 004		0.0147	0.0147		0.0147	0.0147	0.0000	17.4541	17.4541	4.1900e- 003	2.5000e- 004	17.6318

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
ga.ea	41.3834	0.9151	0.0221	70.8568
Unmitigated	41.3834	0.9151	0.0221	70.8568

# 7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Apartments Mid Rise	21.8266 / 13.7602	31.7215	0.7134	0.0173	54.6959
City Park	0 / 1.44169	0.7526	7.0000e- 005	1.0000e- 005	0.7583
General Office Building	6.16914 / 3.78108	8.9094	0.2016	4.8700e- 003	15.4025
Unenclosed Parking with Elevator	0/0	0.0000	0.0000	0.0000	0.0000
Total		41.3834	0.9151	0.0221	70.8568

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# 7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Apartments Mid Rise	21.8266 / 13.7602	31.7215	0.7134	0.0173	54.6959
City Park	0 / 1.44169	0.7526	7.0000e- 005	1.0000e- 005	0.7583
General Office Building	6.16914 / 3.78108	8.9094	0.2016	4.8700e- 003	15.4025
Unenclosed Parking with Elevator	0/0	0.0000	0.0000	0.0000	0.0000
Total		41.3834	0.9151	0.0221	70.8568

#### 8.0 Waste Detail

# **8.1 Mitigation Measures Waste**

# Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	-/yr	
gatea	37.8538	2.2371	0.0000	93.7811
Unmitigated	37.8538	2.2371	0.0000	93.7811

# 8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Apartments Mid Rise	154.1	31.2809	1.8487	0.0000	77.4971
City Park	0.1	0.0203	1.2000e- 003	0.0000	0.0503
General Office Building	32.28	6.5526	0.3872	0.0000	16.2337
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		37.8538	2.2371	0.0000	93.7811

# 8.2 Waste by Land Use

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Apartments Mid Rise	154.1	31.2809	1.8487	0.0000	77.4971
City Park	0.1	0.0203	1.2000e- 003	0.0000	0.0503
General Office Building	32.28	6.5526	0.3872	0.0000	16.2337
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		37.8538	2.2371	0.0000	93.7811

# 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
= 4		110 0.10 1.1	, , , ,			, , , ,

# **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

	Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

### **User Defined Equipment**

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Equipment Type	Number
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# 11.0 Vegetation