



## STAFF REPORT

### City Council

Meeting Date:

8/27/2019

Staff Report Number:

19-176-CC

Regular Business:

**Select concept 3 as the preferred alternative for the Middle Avenue pedestrian and bicycle rail crossing project**

### Recommendation

Staff recommends that the City Council select concept 3 (Attachment A) as the preferred alternative for the Middle Avenue pedestrian and bicycle rail crossing project in order to continue to the next phase of environmental review and design. Concept 3 is an undercrossing approximately 10-12 feet below street and plaza elevation that aligns with a proposed raised crosswalk on Alma Street and is offset from Middle Plaza. This crossing location is outside of the existing Caltrain crossover tracks, therefore is preferable to Caltrain for constructability and maintenance reasons, and has the benefit to the City that construction could potentially be performed with single tracking of the rail service by closure of one set of tracks at a time for approximately 2-3 days each.

### Policy Issues

The City Council identified the Middle Avenue pedestrian and bicycle rail crossing project (project) as a high priority project in the 2019 work plan March 12. The project is consistent with policies stated in the 2016 General Plan Circulation Element, the El Camino Real and Downtown specific plan and is included in the City's capital improvement program (CIP.) These policies seek to maintain a safe, efficient, attractive, user-friendly circulation system that promotes a healthy, safe and active community and quality of life throughout Menlo Park.

### Background

Staff provided an informational update on the project to City Council April 9. Since that time, staff has been coordinating closely with Caltrain staff on the design and construction options.

The City Council Rail Subcommittee received a project update April 22. At the meeting, community members asked questions regarding how the various Ravenswood Avenue railroad crossing study alternatives, including a Caltrain tunnel and a fully elevated rail option, would impact concepts for the Middle Avenue crossing.

The second project community meeting was held May 13 and a summary of that meeting and a copy of the presentation are available on the project webpage (Attachment B.)

Staff provided another update on the project to City Council June 4. A brief summary of the community meeting was included in the analysis section of the June 4 staff report. The analysis section of that staff report also included a discussion of the Ravenswood Avenue railroad crossing study tunnel and fully elevated rail options as requested by the Rail Subcommittee, as well as updates on the construction approach and overall project progress.

On July 10, the Complete Streets Commission received a staff presentation on the project and discussed recommendations for City Council to consider. The staff report (Attachment C) summarizes the project status and staff recommendations. The commission passed the recommendation (6-0-0-3) that City Council select concepts 1 and 3 to advance for the environmental studies for the project. The commission also prepared a summary of additional feedback on the project for City Council, included as Attachment D. The feedback included the following points:

- Turns and path design should accommodate cargo bicycles and trailers;
- Overall design should consider safety functionality such as sightlines and dark areas;
- Bicycle tracks/ramps should be provided on stairs;
- Crosswalks on Alma Street should be optimized and should minimize the incentive to jaywalk;
- Staff should report to City Council regarding construction time, risk and train operational impacts to minimize risk to cost and schedule of the project;
- Mirrors should be considered to improve visibility;
- Burgess Park paths and bike rack locations should be evaluated for improvements;
- Parking restrictions should be considered along Alma Street;
- Bicycle and pedestrian improvements at nearby intersections and streets should be considered; and
- Utility relocation potential impacts should be clearly understood to avoid construction complications.

Staff provided a brief informational update to the City Council Rail Subcommittee July 16. Attachment E includes the presentation presented that evening.

## **Analysis**

The current study is evaluating benefits and challenges of three undercrossing concepts near Middle Avenue. This evaluation is described in detail in the July 10 staff report to the Complete Streets Commission (Attachment C.) Below is a summary:

### Concept 1:

- Trench tunnel construction method, approximately 10-11 feet below street and plaza elevation
- Tunnel aligns with Middle Plaza
- Tunnel coincides with crossover tracks, not ideal for Caltrain
- Tunnel construction requires closure of both tracks for approximately 3-4 days, no single tracking possible

### Concept 2:

- Jack and bore tunnel construction method, approximately 20 feet below street and plaza elevation
- Tunnel aligns with Middle Plaza
- Tunnel coincides with crossover tracks
- Tunnel construction does not require replacement of tracks

### Concept 3:

- Trench tunnel construction method, approximately 10-11 feet below street and plaza elevation
- Tunnel aligns with proposed raised crosswalk on Alma Street
- Tunnel is outside of crossover tracks, therefore is preferable to Caltrain
- Tunnel construction requires closure of at least one set of tracks for approximately 2-3 days each, single tracking may be possible

All three concepts will require a partial property acquisition on the west side of the tracks. Staff is having on-

going discussions with the affected property owner about the project and is scheduled for a City Council closed session August 20 for authorization to negotiate with the property owner as this project progresses.

There are multiple elements still being reviewed by and coordinated with Caltrain related to construction methods and scheduling. City staff and Caltrain staff are currently coordinating on the construction method of the tunnel and the construction requirements within an electrified rail corridor. Staff will continue to work with Caltrain to minimize impacts to the system while advancing and expediting construction as much as feasible.

City staff's previous preferred concept was concept 1 due to public preference of the shallower tunnel and alignment of the tunnel with Middle Plaza. Since that time, City staff has met with Caltrain and learned of their preference for the tunnel location of concept 3, to avoid the crossover tracks and the potential construction impacts associated with the crossover track replacement. There are other benefits to the City with concept 3 such as alignment of the tunnel with the proposed raised crosswalk at Alma Street and more flexibility in tunnel construction durations and periods. For these reasons, City staff's current recommendation is to proceed with environmental studies with concept 3 as the preferred alternative.

Concept 3 has been further revised to reflect some of the feedback from the Complete Streets Commission, for example, the ramp on the Alma Street side has been adjusted to connect to the raised crosswalk to Burgess Park. Other aspects of the commission's feedback will be incorporated in the final design phase, including consideration of lighting locations, mirrors and sight distance features and parking restrictions on Alma Street and the surrounding area.

Next steps

Upon City Council's selection of preferred concept, the project team will complete the environmental studies and the 30 percent design plans. Negotiations to acquire necessary right-of-way for the project will be pursued concurrently and will ultimately be brought to the City Council for approval of a purchase and sale agreement.

Staff is exploring options to expedite project delivery as soon as possible to take advantage of any open construction windows in coordination with Caltrain and their current electrification construction.

The San Mateo County Transportation Authority (SMCTA) grant was initially identified to expire in July 2018, and has received two time extensions to February 2020. It is critical to keep this schedule on track to ensure the project progresses, and in accordance with the funding agreement so that the City is reimbursed the awarded funds from SMCTA. The key milestones for the next steps of the project are summarized below:

Coordination with Caltrain	On-going
City Council authorize negotiations to acquire right-of-way	August 20, 2019
City Council selects preferred crossing tunnel alignment and layout	August 27, 2019
Completion of environmental documents and 30% design plans (grant scope)	By February 2020
Complete design and obtain permits (Caltrain, Heritage tree removals, etc.)	Spring 2020 to mid-2021
Construction	Mid-2021 to mid-2022
Goal for undercrossing opening	Concurrent with Middle Plaza occupation, mid-2022

### **Impact on City Resources**

The project was included in the CIP for fiscal year 2016-17, with a total budget in the amount of \$700,000. Through the Measure A pedestrian and bicycle program grant awarded for this project, the SMCTA will reimburse the City up to \$490,000.

Concept 3 is anticipated to have a construction cost estimate in the range of \$15-20 million, including right-of-way acquisition. As part of the 500 El Camino Real development agreement, Stanford is required to contribute up to \$5 million toward the project. For the remainder of the final design and construction costs, the City is exploring a combination of strategies to fund the project, including reducing the cost of the project through value engineering, contributing local funds from the City general fund and transportation impact fee program, and tracking grant opportunities that could supplement local City contributions to keep the project on the schedule above.

### **Environmental Review**

The project will require a complete review under the California Environmental Quality Act. The environmental documentation for this project will be as an addendum to the El Camino Real and Downtown specific plan and will be completed as part of this scope of work. Staff will return to City Council in early 2020 for action on this addendum.

### **Public Notice**

Public notification was achieved by posting the agenda, with the agenda items being listed, at least 72 hours prior to the meeting. Additionally, an email notification was sent to the public works projects interest list to notify the public about this agenda item.

### **Attachments**

- A. Concept 3 exhibit
- B. Hyperlink – project webpage: [menlopark.org/middlecrossing](http://menlopark.org/middlecrossing)
- C. Hyperlink – Complete Streets Commission staff report and attachments, July 10: [menlopark.org/DocumentCenter/View/22182/E2\\_19-009-CSC](http://menlopark.org/DocumentCenter/View/22182/E2_19-009-CSC)
- D. Complete Streets Commission motion amendment memo
- E. City Council Rail Subcommittee project update presentation slide, July 16

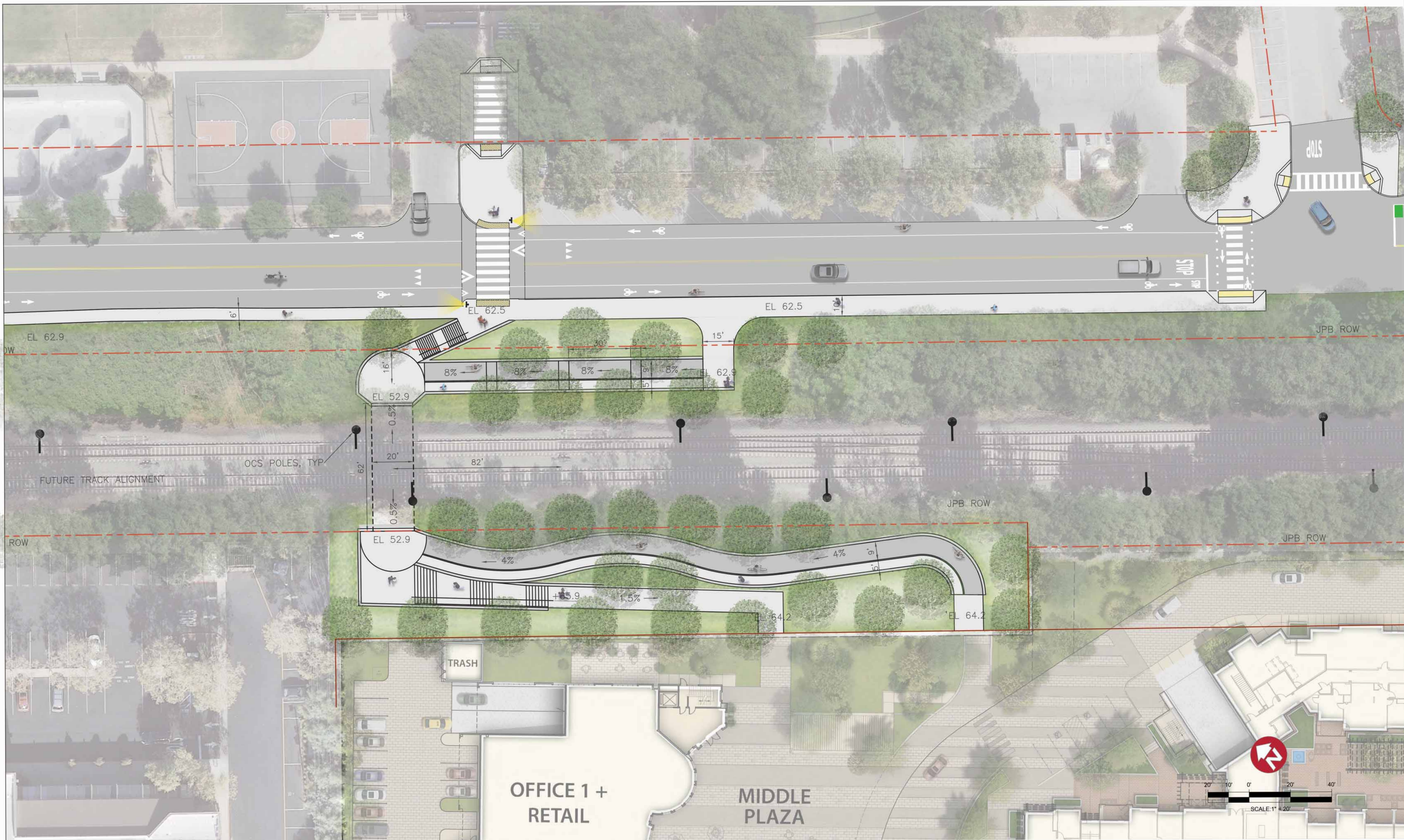
Report prepared by:

Angela R. Obeso, Senior Transportation Engineer

Report reviewed by:

Nicole H. Nagaya, Interim Public Works Director





DRAFT

Middle Avenue Bicycle & Pedestrian Rail Crossing  
CONCEPT 3





## MEMORANDUM

**Date:** 8/6/2019  
**To:** Menlo Park Complete Streets Commissioners  
**From:** Middle Avenue Crossing Project Ad-Hoc Committee  
**Re:** Middle Avenue Crossing Project Commission Feedback Summary from July 10 Complete Streets Commission Meeting

## OVERVIEW

On July 10, the Complete Streets Commission discussed the Middle Ave Crossing Project (see hyperlink to staff report below) as part of their regularly scheduled agenda (see hyperlink to agenda below). A large amount of feedback was agreed upon and shared with city staff, and an ad-hoc Middle Ave Crossing Project Committee was formed to formally summarize feedback to share with City Council and city staff.

As an expensive and important project, the ad-hoc committee wants to ensure that feedback is documented and shared. Recommendations are as follows.

## RECOMMENDATIONS

- **Turns and path design.** City should design ramps so that they allow turning by cargo bikes and trailers (e.g. not sharp turns), and avoid sharp 90-degree turns. Additionally, straighter paths are better than curved, as they maximize the available path width, improving safety. Further, consideration should be given in the overall design to allow for longer sightlines and fewer hiding places.
- **Bike ramps on stairs.** Where stairs are built, the city should make it easy for cyclists to use the stairs if desired. Bike ramps designed for stairs can be a cheap, easy way to allow cyclists to walk their bike up or down a flight of stairs (see this example: <https://www.sarisinfrastructure.com/product/bicycle-access-ramp>). It also allows a pedestrian traveling with a cyclist who is walking their bike to travel together easily.
- **Crosswalks to Burgess.** Depending on the location of the crossing that is selected, there may be pedestrians and cyclists desiring to cross Alma between Burgess Park and the new crossing. The city should attempt to optimize the number and location of crosswalks to minimize the incentive to jaywalk.
- **Construction.** With regard to construction time and risk, staff should please report clearly to Council about the time and risk associated with the ability to continue to run trains with single tracking, vs. the need to shut down the train system for construction.

- **Mirrors.** Especially on the southbound El Camino side where more turns are present in the pathway designs, consider convex mirrors to address visibility concerns if needed, as are present at the California Avenue Caltrain pedestrian underpass.
- **Burgess improvements.** With the crossing done, there will be a lot more people using the paths within Burgess Park, so wider paths should be considered. The bike racks in the park are inadequate now and will even more in demand when the underpass is complete.
- **Parking restrictions.** The underpass will allow people coming from the east and working on the west side of the tracks to save time by parking along Alma and adjacent streets. There is already a problem with people parking on Alma and working in Palo Alto. The city should consider what parking restrictions are appropriate in advance of the crossing opening.
- **Wider connectivity.** The city should design the crossing and surrounding pathways, bike lanes/paths, crosswalks and sidewalks to maximize bike and pedestrian connectivity. The crossing will increase bike and pedestrians in the area, so additional bike/ped improvements at nearby intersections and on nearby streets should be considered.
- **Utilities relocation.** The city should have a clear understanding of the buried utilities to be impacted by the tunnel, and associated project complications experienced by other local cities attempting similar projects.

Hyperlinks:

- July 10, 2019 Complete Streets Commission - Middle Avenue Crossing Project Staff Report: <https://www.menlopark.org/DocumentCenter/View/22105/SR-19-009-CSC>
- July 10, 2019 Complete Streets Commission - Regular Meeting Agenda: [https://www.menlopark.org/AgendaCenter/ViewFile/Agenda/\\_07102019-3304](https://www.menlopark.org/AgendaCenter/ViewFile/Agenda/_07102019-3304)



## MIDDLE AVENUE RAILROAD CROSSING PROJECT STATUS



- April 9 and June 4, 2019 – City Council updates
- July 10, 2019 – Complete Streets Commission recommendation
- August 27, 2019 – Return to City Council for preferred concept
- February 2020 – Complete environmental and 30%
- Spring 2020 – Secure funding for final design and construction