



STAFF REPORT

Complete Streets Commission

Meeting Date: 7/10/2019
Staff Report Number: 19-009-CSC

Regular Business: **Recommend to City Council to select concepts 1 and 3 to advance for the Middle Avenue pedestrian and bicycle rail crossing project**

Recommendation

Staff recommends that the Complete Streets Commission recommend to City Council to select concepts 1 and 3 to advance for the Middle Avenue pedestrian and bicycle rail crossing project.

Policy Issues

The City Council identified the Middle Avenue pedestrian and bicycle rail crossing project (project) as a high priority project in their 2019 work plan March 12, 2019. 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 on April 9, 2019. 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 on April 22, 2019. 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 on May 13, 2019 and a summary of that meeting and a copy of the presentation are available on the project webpage (Attachment A).

Staff provided another update on the project to City Council June 4, 2019 (Attachment B). 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.

Analysis

The current study is evaluating benefits and challenges of three undercrossing concepts near Middle Avenue, included as Attachment C.

Concept 1 proposes to utilize a trenching method to install the tunnel portion of the crossing. This would require the rail tracks to be removed temporarily while the tunnel is installed, putting the rail out of service during the tunnel construction (approximately 2-4 days), but allowing the tunnel to be shallower (approximately 10-11 feet below existing elevations at Alma Street and proposed Middle Plaza). This location of the crossing would coincide with existing crossover tracks, tracks used by Caltrain to move trains from one set of tracks to the other for operational purposes such as single tracking during an incident or mechanical failure that blocks one set of tracks. Some of the main benefits of this concept are the shorter tunnel length, shallower tunnel depth, more efficient and easy to use ramp alignments on both sides of the tunnel and lower construction cost estimate. Caltrain staff has expressed concerns with this concept in that there is possible ground settlement that could cause problems with the connection points of the crossover tracks.

Concept 2 tunnel location also coincides with the existing crossover tracks. This concept proposes to install the tunnel with a directional jack and boring method. This would allow the rail tracks to remain in place during installation of the tunnel, however would require the tunnel to be deeper (approximately 20 feet below existing elevations at Alma Street and proposed Middle Plaza). Concept 2 has many benefits to Caltrain operations as well as more flexibility in tunnel construction time periods and durations since the crossover tracks would not need to be removed.

Concept 3 also proposes to install the tunnel portion using a trenching method. The location of this crossing tunnel is approximately 200 feet north of concepts 1 and 2, allowing the construction to occur outside of the crossover track area and enabling additional flexibility in Caltrain operations during construction over concept 1. For example, the tunnel could potentially be constructed in two phases, allowing one set of rail tracks to remain operational and the trains to single track. The benefits of concept 3 are similar to concept 1 in that it includes a shorter tunnel length, shallower tunnel depth and a construction cost estimate lower than concept 2. There are benefits for the Caltrain rail operations and construction staging as well. Due to the more northern crossing location, this concept will have longer ramps, although they can be less steep than the other two concepts, and the tunnel opening will not be directly visible from the Middle Plaza area. Caltrain staff has preliminarily shown support for this concept since it avoids the crossover track areas.

All three concepts will require a partial property acquisition on the west side of the tracks. There is a 52-foot wide rectangular portion of the 700 El Camino Real property (currently shopping center including Big 5 and BevMo) that extends south between the Stanford-owned property and the Caltrain property that must be utilized for the stairs and ramps into the crossing tunnel. The yellow shading in Attachment C illustrates the portion necessary for each of the three concepts. Currently this portion of the property is an underutilized parking lot. Staff is having on-going discussions with the affected property owner about the project and staff will return to City Council for authorization to negotiate with 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. City staff's current preferred construction method for the crossing is an open cut-and-trench construction method that would require temporary removal of all existing railroad infrastructure and relocation of utilities at the crossing location. This is currently preferred due to the shallower tunnel requiring shorter ramps and stairs and preferred user experience. In this method, a trench is dug, undercrossing supports are placed, material to cover the trench is restored and train tracks are replaced.

One of the benefits of Concept 3 is the flexibility in construction staging that could minimize the construction duration and impacts on service and maintaining operations of service during the trenching, using methods

such as keeping one track operational during construction and building the trench in two phases or bussing Caltrain passengers (a “bus bridge”) between the Menlo Park and Palo Alto stations during the construction. Staff will continue to work with Caltrain to minimize impacts to the system while advancing and expediting construction as much as feasible.

Next steps

City staff anticipates bringing forward the options to City Council along with a summary of the Complete Streets Commission’s feedback and recommendation to select a preferred crossing concept(s) tentatively on August 27, 2019. Negotiations to acquire necessary right-of-way for the project will be brought before City Council for discussion and authorizations in summer 2019.

Upon selection of a preferred crossing location and direction on overall layout, the project team will proceed with completion of the 30 percent design plans and environmental documentation. Staff is also exploring a design-build approach to the next phases of the project to help expedite project delivery. Staff is currently evaluating this possible approach and continues to meet with Caltrain to coordinate and determine the best delivery options. Staff will return to the Rail Subcommittee and City Council with a more detailed update and delivery plan as more information becomes available.

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 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
Complete Streets Commission meeting	July 10, 2019
City Council Rail Subcommittee update	July 16, 2019
City Council selects preferred crossing tunnel alignment and layout	August 27, 2019
City Council authorize negotiations to acquire right-of-way	Summer 2019
Completion of environmental documents and 30% design plans (grant scope)	By February 2020
Construction	2021-2022
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.

Environmental Review

The project will require a complete review under the California Environmental Quality Act. The environmental documentation for this project is expected be completed as an addendum to the El Camino Real and Downtown Specific Plan. More information about the environmental review will be provided in the August 2019 report to City Council.

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. Hyperlink – Middle Avenue pedestrian/bicycle crossing:
menlopark.org/middlecrossing
- B. Hyperlink – City Council staff report, June 4, 2019:
menlopark.org//DocumentCenter/View/21719/F5-20190604-Middle-Ave-ped-bike-cross-CC
- C. Three crossing concepts

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