Agenda Item D.4
PRESENTATION
Meeting Date: June 7, 2016

TO: Mayor and Councilmembers

FROM: Rosemarie Gaglione, Public Works Director

CONTACT: Teresa Lopes, Senior Project Engineer

SUBJECT: Hollister Class I Bike Path Project Update

RECOMMENDATION:

Receive a presentation on the design of the Hollister Class I Bike Path project.

BACKGROUND:

The Hollister Class I Bikeway Project (Project) proposes to add a Class I bike lane/ multi-use path with a 5 foot wide landscaped buffer along the south side of Hollister Avenue from Pacific Oaks Road to Ellwood Elementary School. The Class I bike lane will be in addition to the existing Class II bike lanes along Hollister Avenue. The area south of Hollister Avenue from Pacific Oaks west to Ellwood Elementary is a dense residential neighborhood. A separated bicycle facility along this route is desirable to increase comfort for bicyclists and encourage both bicycle and pedestrian travel. The new Class I bike lane is intended to serve the many school children living south of Hollister who do not use the existing Class II bike lanes, which are not suited for younger children.

On February 3, 2015, staff presented to Council the design alternatives and options for the bike path layout and typical section. Council selected Alternative 2 (shown in Attachment 1) as the preferred alternative for development of the final design. This alternative includes a 13' wide multi-purpose path for both bicyclists and pedestrians rather than a dedicated 8' wide Class I bike lane adjacent to the existing 5' wide sidewalk. Staff also presented a number of design features or options, which were brought up by the community during the public outreach phase of the project. Staff was directed to explore some of these features, which required additional engineering analysis. This report provides an update on the project's final design, particularly as it relates to the additional design considerations.

DISCUSSION:

Staff and the project design consultants have nearly completed the final design, which is currently at 90% completion. The additional engineering analysis required to evaluate

the various design features or options that were presented back in February 2015 has been completed. These options have been vetted based on traffic engineering and design engineering judgement, and are listed below.

- **Bend Out Design** – When the project was presented to Council in early 2015, one of the possible design features discussed was creating a "Bend-Out" design at the intersections of Palo Alto and Coronado. Attachment 2 shows a typical "Bend-Out" design, whereby a car turning onto a side street has sufficient space to turn onto a side street and stop at a path crossing without blocking traffic on the main road. The design consultant proposed a design which would physically fit within the existing site constraints, which was then reviewed by two traffic engineers. Both traffic engineers agreed that site distance restrictions due to adjacent homes and fencing created potential hazards and determined that "bend outs" were not viable at either location.

- **Speed Tables** –Another design feature discussed in February 2015 related to the "bend out" options for Palo Alto and Coronado was the addition of speed tables at the path crossings at these locations. A speed table is essentially a large flat speed bump that works in tandem with the bend-out design as shown in Attachment 2. One of the drawbacks of a speed table is it interferes with roadway runoff and drainage patterns. The existing drainage pattern for runoff along the adjacent section of Hollister Avenue is for water to travel down Hollister Avenue from west to east and then flow south down the side street intersections to drainage facilities located along Coronado Drive and Palo Alto Drive.

  The design consultant analyzed various options to accommodate a speed table at these path crossings while maintaining existing drainage patterns, including varying the height of the speed table, installing a drainage pipe through the speed table, and sloping/ramping the speed table down to match the flowline of the curb and then back up to match the elevation of the pathway. Ultimately, the designer determined that the speed table option could not accommodate the existing drainage patterns without redesigning the drainage along this stretch of Hollister and constructing new drainage facilities. The cost to do so was deemed prohibitive and the speed table design feature was not included in the final project design.

- **Landscaped Medians** – During the public outreach effort for the project, the public expressed a desire to add landscaped medians along the project corridor to create a "parkway" feel for this portion of Hollister Avenue. This design feature would add considerable additional cost to the construction estimate and is not covered by ATP grant funds, which represent the majority of construction funding for the project. However, landscaped medians can be added with a future project as funding is secured.

- **Signal at Cannon Green Drive** –During project initiation and preliminary design, the addition of a traffic signal at Cannon Green Drive was considered. A warrant analysis was performed and the existing and projected traffic and pedestrian

volumes were not sufficient to meet signal warrants. Therefore, a signal at the Cannon Green intersection was not included in final design. There is an existing driveway which leads to several vacant and occupied parcels north of Hollister at this location. Should these parcels be developed in the future there will be a need for traffic signals at this location. In order to minimize the impacts to new infrastructure and new asphalt, all underground conduits and facilities for a future signal at Cannon Green Drive will be constructed as part of this project so that a signal could be installed in the future without disturbing improvements constructed with this project.

- **Additional Lighting along Hollister Avenue for the Bike Path** –Additional pathway lighting for the new bike/multi-purpose trail was also evaluated during the design phase. New lighting along the length of the proposed bike path would cost an additional $500,000. Staff also consulted with Southern California Edison (SCE) regarding options to install additional lights on existing utility poles as a cost effective alternative. However, SCE stated that new guidelines and standards do not allow for new installations of this type of lighting on existing utility poles. Due to cost considerations, the project design does not include any provisions for new lighting.

Pavement Rehabilitation of Hollister Avenue

Because Hollister pavement will be significantly impacted as a result of construction activity, staff recommends adding pavement rehabilitation of Hollister Avenue from Pacific Oaks Road to Ellwood Elementary School to the project scope of work. Pavement Engineering Inc. (PEI) completed pavement analysis and existing pavement condition testing to develop pavement rehabilitation strategies for the roadway. Deflection analysis conducted by PEI indicates that the structural section on Hollister in this vicinity is deficient for the determined traffic index; therefore, PEI has proposed several possible pavement upgrades. Once the pavement strategy has been confirmed, staff will incorporate this additional work into the project scope. Completing pavement rehabilitation work with the bike lane construction will help reduce disruption to the public and streamline the construction for the corridor.

Staff will return to Council on June 21, 2016, for authorization to execute a new design contract to complete final design and advertise for bids. The City Council must award a construction contract by no later than its September 9, 2016, meeting in order to meet the ATP grant deadline.

GOLETA STRATEGIC PLAN:

The action is consistent with the strategy entitled “Strengthen Infrastructure.”

FISCAL IMPACTS:

The estimated project cost without the pavement rehabilitation work is approximately $3.46 million, including design engineering and construction. A variety of funding

sources have been identified to fund the project, including an ATP grant of $1.644 million to fund estimated construction costs of $3.1 million. A budget amendment will be necessary at contract award to fund the additional pavement rehabilitation scope of work.

ALTERNATIVES:

This information is provided to Council as an update on the status of a project in progress. As such, there are no alternatives for Council consideration.

Legal Review By:

Tim W. Giles
City Attorney

Approved By:

Michelle Greene
City Manager

Attachments:

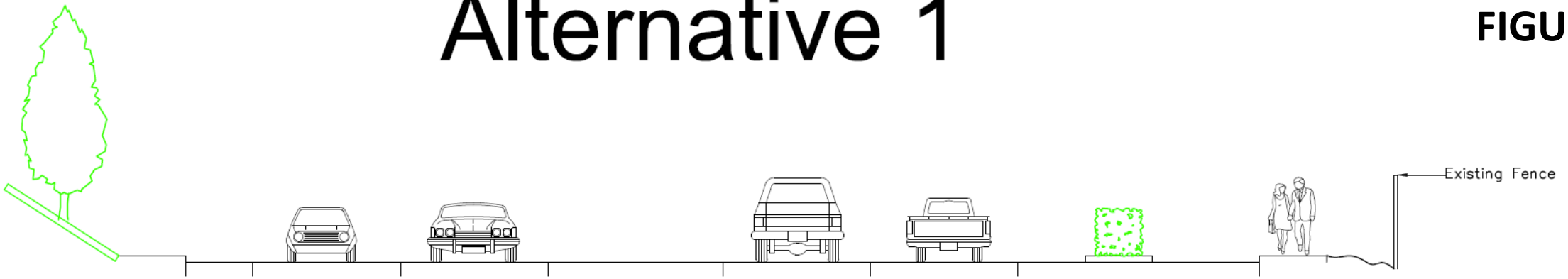
1. Figure 1 - Alternatives 1 and 2
2. Figure 2 – Speed Table

ATTACHMENT 1

Figure 1 - Alternatives 1 and 2

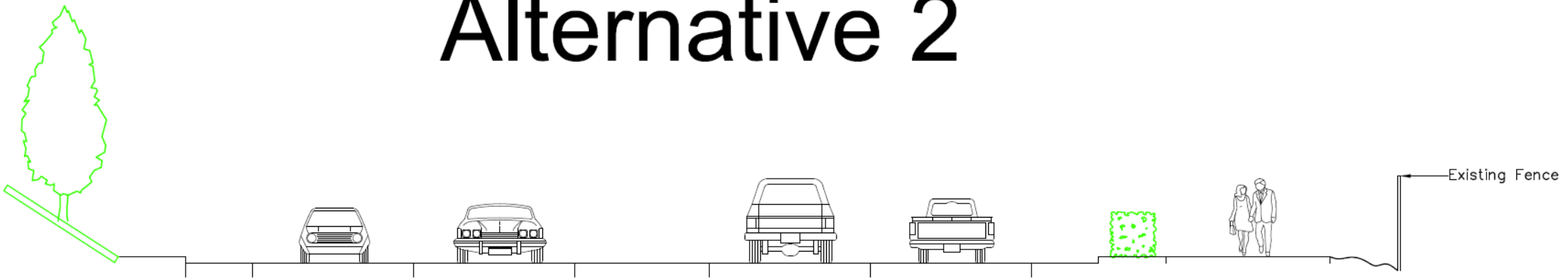
Alternative 1

FIGURE 1



Existing Sidewalk	Existing Bike lane	West bound travel lane	West bound travel lane	Turn lane/median	East bound travel lane	East bound travel lane	Bike lane	Land–scape	Class 1 Bike lane	Existing Sidewalk	Existing Land–scape
5’	5’	11’	11’	13’	11’	11’	5’	5’	8’	5’	VAR

Alternative 2

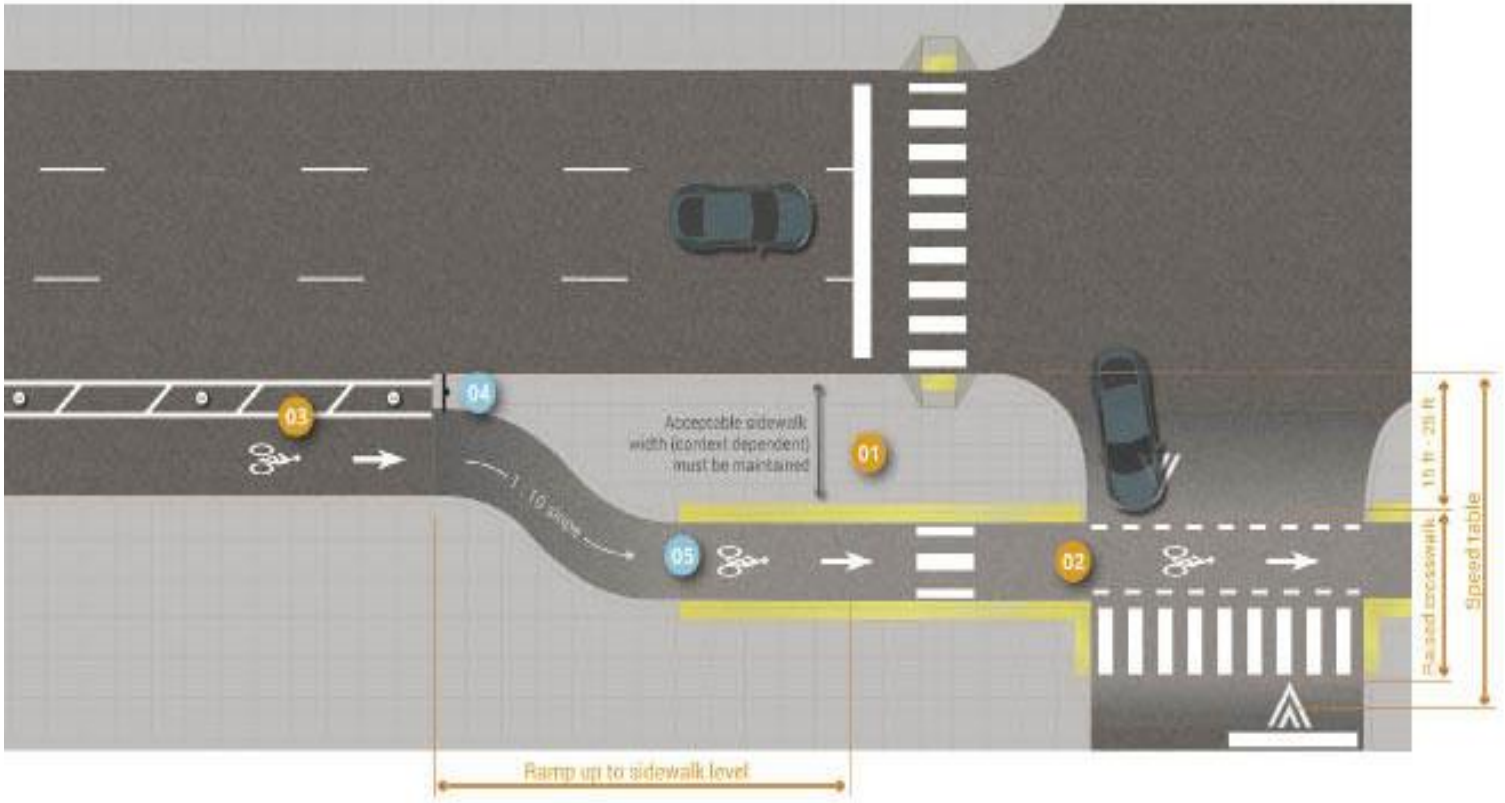


Existing Sidewalk	Existing Bike lane	West bound travel lane	West bound travel lane	Turn lane median	East bound travel lane	East bound travel lane	Bike lane	Land–scape	Class 1 Bike lane	Existing Land–scape
5’	5’	11’	11’	11’	11’	11’	5’	5’	13’	VAR

ATTACHMENT 2

Figure 2 – Speed Table

Figure 2 – Typical Bend Out Design with Speed Table (FHWA Separated Bike Lane Planning and Design Guide)



- The advantage with a “Bend – Out” design is that it allows for vehicle traffic turning across separated bike lane to queue out of the way of through traffic and before the separated path.
- The advantages of a speed table is that the raised crossing provides traffic calming for cars and can also slow bicyclists