



Department: Public Works
Cost Center: 5010
For Agenda of: 7/19/2022
Placement: Consent
Estimated Time: N/A

FROM: Matt Horn, Public Works Director

Prepared By: Justin Wong, Transportation Planner/Engineer I

SUBJECT: AUTHORIZATION TO ADVERTISE 2022 PEDESTRIAN CROSSING IMPROVEMENTS PROJECT, SPECIFICATION NO. 1000069

RECOMMENDATION

1. Approve the project plans and specifications for the 2022 Pedestrian Crossing Improvements Project, Specification Number 1000069; and
2. Authorize staff to advertise for bids; and
3. Authorize the City Manager to award the Construction Contract pursuant to Section 3.24.190 of the Municipal Code for the bid total, if the lowest responsible bid is within the publicly disclosed funding amount of \$776,250; and
4. Authorize the City Engineer to approve Contract Change Orders up to the available project budget.

POLICY CONTEXT

The 2022 Pedestrian Crossing Improvements Project directly supports several key City plans, policies and goals. The project will construct pedestrian/bicycle crossing and access enhancements at five key locations, which are identified as priority improvement recommendations in the City's 2021 Active Transportation Plan. The types of improvements included in this project, such as Rectangular Rapid Flashing Beacon (RRFB) systems, high-visibility crosswalks, and green bike lane markings, are best-practice strategies that have been proven to reduce potential for injury and fatal collisions, supporting the City's Traffic Safety Program and Vision Zero goal to eliminate fatal collisions citywide by 2030. These improvements also support the General Plan mode share targets, the City's Climate Action Plan for Community Recovery, and the current Sustainable Transportation and Climate Action Major City Goal. The proposed procurement process for construction of this project is consistent with the City's current Purchasing Policy.

REPORT-IN-BRIEF

In 2021 the Council adopted the City's Active Transportation Plan (ATP), a blueprint guiding policies, programs and infrastructure investments needed to improve walking and bicycling in San Luis Obispo, which identifies a list of recommended active transportation improvement projects.

Priority is given to projects with the greatest potential to improve safety and increase mode share for walking and bicycling. With the 2019-21 Financial Plan, Transportation staff assembled a list and began planning and design for pedestrian and bicycle crossing improvements at eight locations based on recommendations of the ATP, input from the community and the Active Transportation Committee. Consistent with the adopted CIP budget, and previous policy direction, staff is requesting that Council approve the project plans and specifications and authorize advertisement of the following projects for construction.

1. Johnson Avenue/Sydney Street – RRFB Crossing & 4-to-3 Lane Pilot Road Diet
2. South Street/King Street – RRFB Crossing
3. Islay Street/Broad Street – RRFB Crossing
4. Islay Street/Osos Street – RRFB Crossing
5. King Court Cul-De-Sac Bike Ramp Access to Meadow Park Pathways

DISCUSSION

Background

In 2021, the City adopted its first Active Transportation Plan (ATP), a blueprint guiding policies, programs and infrastructure investments needed to improve access and safety for people walking and bicycling in San Luis Obispo. The ATP identifies a list of recommended active transportation improvement projects, with priority given to projects with the greatest potential to improve safety and increase mode share for walking and bicycling. Based on the project list established in the ATP, input from the public and the City's Active Transportation Committee, the following locations were prioritized for pedestrian/bicycle crossing and access improvements as part of this project:

1. Johnson Avenue/Sydney Street
2. South Street/King Street
3. Islay Street/Broad Street
4. Islay Street/Osos Street
5. King Court Cul-De-Sac Access to Meadow Park Pathways
6. Tank Farm Road/Poinsettia Street*
7. Ramona Drive/Foothill Shopping Center*
8. Monterey Street/Buena Vista Avenue*

Locations listed above with an asterisk (*) required no complex engineering design, sidewalk/curb ramp work or roadway striping modifications; thus, improvements at these locations **have already been installed by City crews and are deemed substantially complete**. The remaining improvement locations, without an asterisk, required more substantive physical improvements and design work. With this report, staff is requesting authorization to advertise these improvements for construction, with final plans provided for reference as Attachment A and project specifications provided as Attachment B.

Rectangular Rapid Flashing Beacons

With exception of the King Court Cul-de-Sac (install bike ramp), the improvements proposed for each of the locations listed above feature installation of a Rectangular Rapid Flashing Beacon (RRFB) system. RRFBs are push-button flashing warning devices that emit a vibrant amber flashing pattern to warn drivers that someone is entering the crosswalk. RRFBs have been used successfully at several existing crossings in the city (e.g. Marsh/Garden, Broad/Buchon, Marsh/Toro), are cost-effective at less than 1/10th the cost of a traffic signal or pedestrian hybrid beacon system, and offer significant safety benefits, with an average reduction in pedestrian collision rates of 47% according to the Federal Highway Administration. A project vicinity map is provided in Figure 1, while design details for each crossing improvement location are described further below.

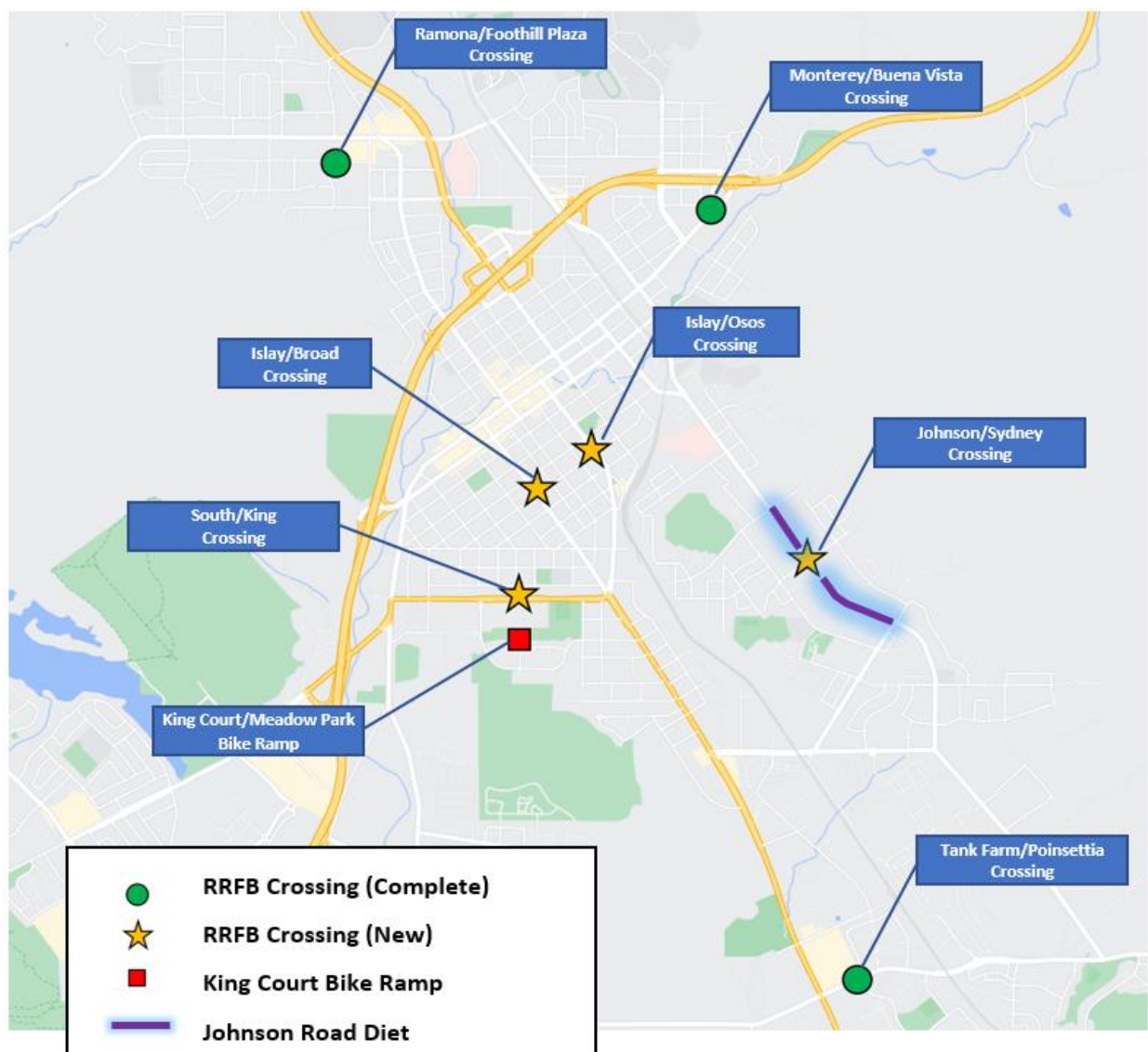


Figure 1: Project Vicinity Map



Figure 2: Example RRFB Install on Morro Street

Project Details

1. Johnson Avenue/Sydney Street Crossing

The initial design proposal for the Johnson/Sydney crossing included elimination of the existing northbound left-turn lane to provide width for a large median refuge to allow pedestrians to cross this four-lane road in two stages. However, staff received comments from nearby residents expressing concern for elimination of this left-turn movement and worry that this change would induce cut-through traffic and speeding along parallel routes. For this reason, staff revised the designs to retain the existing left-turn access. Further, the final design strategy now includes a phased approach to improve safety and access not only at the Johnson/Sydney school crossing, but along a larger segment of Johnson Avenue in the vicinity of this intersection, where City Transportation Engineering and Traffic Enforcement staff receive ongoing complaints from residents about illegal speeding, unsafe driving, and safety concerns for bicyclists and pedestrians. The phased approach to these improvements is summarized as follows:

Design Details: Phase 1 (2022)

- a. A pilot “road diet” on the existing four-lane segment of Johnson Avenue between Bishop Street and Laurel Lane. Proposed street layout would mirror existing striping on Johnson south of Laurel Lane, resulting in one auto lane in each direction, a continuous center turn lane, on-street parking on both sides, wide buffered bike lanes, and additional width for a center median refuge at Johnson/Sydney intersection.
- b. ADA curb ramp upgrades at Johnson/Sydney intersection
- c. Refresh hi-visibility ladder-style crosswalk and add advance yield pavement markings

- d. Green bike lane markings crossing intersections
- e. Advance pedestrian crossing warning signage
- f. Remove existing “passive” school beacon system and replace with solar-powered RRFB beacon system, with one beacon on each corner and one placed within the center median for added visibility. Beacon push buttons located for pedestrians at curb ramps and curbside on Sydney Street approaches for cyclists
- g. Temporary center median refuge using “quick-build” materials during pilot road diet (rubber curbs, flex posts, etc.)

Additional Context:

1. This crossing improves connectivity to Sinsheimer Elementary School and Sinsheimer Park, Johnson Park, the YMCA, and improves access to the Railroad Safety Trail and the future Flora-Fixilini Neighborhood Greenway.
2. Pilot road diet on Johnson Avenue would include temporary striping installed in paint and monitored over the next year to identify any refinements needed to improve operations and safety along this street segment before permanent striping is installed as part of the planned 2023 Paving Project (see Phase 2 below).
3. Current and projected future traffic volumes along Johnson Avenue between Bishop Street and Laurel Lane remain within the thresholds that can operate acceptably with a three-lane road diet configuration (see Table 1 below).
4. Four-lane to three-lane road diets are a proven safety countermeasure to reduce illegal speeding and improve road safety for all users, with average reductions in collision rates from 19-47% according to the Federal Highway Administration. Successful road diets have been deployed in recent years in the city along Laurel Lane, South Street, and segments of Pismo Street.
5. It should be noted that the Johnson/Sydney intersection does not currently meet minimum warrants for a Pedestrian Hybrid Beacon (PHB) or other control options suggested by some residents, such as all-way stop control or full signalization.

Table 1: Johnson Avenue Traffic Volume Thresholds

Roadway Segment	Average Daily Traffic Volume (ADT)		Volume Threshold for 3-Lane Road Diet ³
	Existing ¹	Projected 2040 ²	
Johnson (Bishop to Laurel)	15,200	19,300	<18,000 (Ideal) 25,000 (Max)
<ol style="list-style-type: none"> 1. Existing traffic data collected in 2018, adjusted to 2020 levels based on annual avg. growth rate. 2. 2040 traffic projections from SLO City Travel Demand Forecast Model and reflect buildout of SLO City General Plan. 3. Source: Federal Highway Administration’s <i>Road Diet Informational Guide</i>. 			

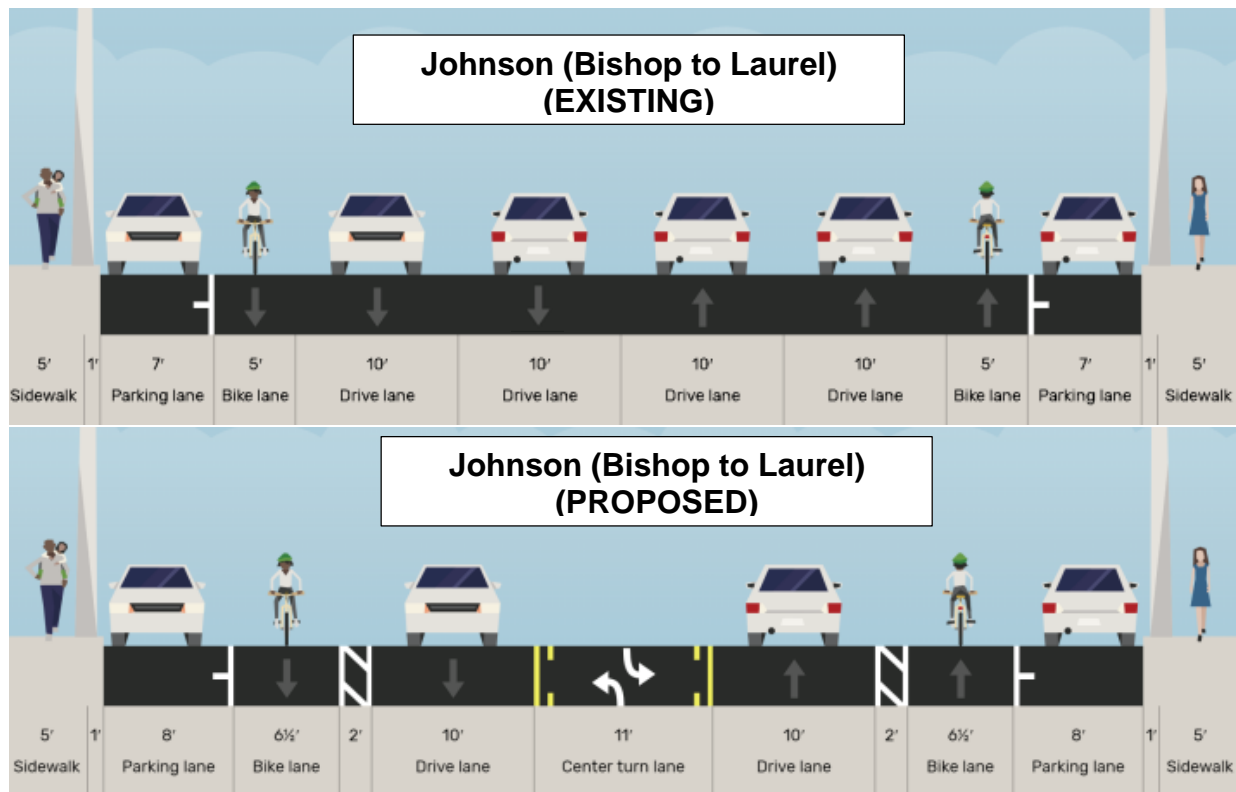


Figure 3: Johnson Avenue Street Cross Sections

Details: Phase 2 (2023)

Johnson Avenue is included in the City's planned roadway pavement maintenance project in summer of 2023. Based on results of this pilot road diet, review of updated traffic volume forecasts, and community input to be collected during outreach for paving project, the three-lane road diet would be made permanent. Permanent features of Phase 2 include:

- Installation of permanent striping and pavement markings
- Upgrading temporary median refuge at Johnson/Sydney to concrete median.

Details: Phase 3 (Beyond 2023)

Staff will continue to monitor traffic conditions along Johnson Avenue, including pedestrian crossing demand and driver behavior at Sydney/Johnson crossing. If future volumes increase to the levels where four auto lanes are required, if pedestrian volumes at this crossing increase significantly, or if driver yield rates do not improve with RRFB installation, staff will pursue funding options to upgrade RRFB crossing to a full PHB system (approximately \$400,000).

2. South Street/King Street

Design Details:

1. Hi-visibility ladder-style crosswalk and advance yield pavement markings
2. Advance pedestrian and bicycle crossing warning signage
3. Green bike lane markings crossing intersection
4. Solar-powered RRFB beacon system, with one beacon on each corner and one placed within the center median for added visibility. Beacon push buttons located for pedestrians at curb ramps and curbside on King Street approaches for cyclists.

Additional Context:

1. This crossing improves connectivity to Hawthorne Elementary School and Meadow Park and addresses the most significant connectivity barrier along the King-Nipomo Neighborhood Greenway—crossing the high-traffic South Street corridor.
2. Kimberly Macias, an eight-year-old student, was tragically struck and killed crossing this intersection in 2005 on Halloween night prior to Caltrans installing a road diet and relinquishing control of South Street (Highway 227) to the City.
3. More than 30 pedestrians per hour currently attempt to cross the South/King intersection during peak periods, mostly students and families traveling to Hawthorne Elementary or Meadow Park.
4. City staff is actively pursuing grant funding opportunities through regional (SLOCOG Local Betterments) and state (Caltrans Active Transportation Program) programs for further upgrades at this intersection to convert the initial RRFB crossing system to a Pedestrian Hybrid Beacon (PHB), similar to the recent crossing upgrades at Foothill/Ferrini and Broad/Woodbridge. A PHB would cost an additional \$400,000 to construct and would likely require another two years for design, PG&E coordination, delivery of signal equipment, and construction.

3 & 4. Islay Street/Broad Street & Islay Street/Osos Street

Design Details:

1. Hi-visibility ladder-style crosswalk and advance yield pavement markings
2. Advance pedestrian and bicycle crossing warning signage
3. Green bike lane markings crossing intersection
4. Solar-powered RRFB beacon system, with one beacon on each corner. Beacon push buttons located for pedestrians at curb ramps and curbside on side street approaches for cyclists.
5. ADA curb ramp upgrades and reconstruction and drainage improvements

Additional Context:

1. This crossing addresses the most significant connectivity barriers along the Islay Neighborhood Greenway, crossing the high-traffic Broad Street and Osos Street corridors.
2. Improves connectivity to King-Nipomo Neighborhood Greenway, Morro Street Neighborhood Greenway, and future Toro Street Greenway.

5. King Court Cul-de-Sac Access to Meadow Park Bikeways

Design Details:

1. Install bicycle access ramp at end of King Court cul-de-sac

Additional Context:

1. Provides bicycle access from King-Nipomo Greenway to Meadow Park shared-use pathways, ultimately connecting with future Woodbridge-Corrida-Bridge Neighborhood Greenway. Currently, cyclists must either ride on sidewalk or dismount their bicycle and lift it up/down from sidewalk to access Meadow Park from King Court.
2. Staff is currently seeking grant funding opportunities for Woodbridge-Corrida-Bridge Neighborhood Greenway along with South/King PHB, which would increase benefits of this connectivity improvement.

Previous Council or Advisory Body Action

In 2020, the City Council approved plans for the 2020 Roadway Sealing Project, which included creation of the King-Nipomo and Islay Neighborhood Greenways. While not included in the 2020 paving project, the previous paving project planning identified future plans for bicycle/pedestrian crossing upgrades at South/King, Islay/Broad and Islay/Osos.

The City's Active Transportation Committee (ATC) reviewed preliminary plans for this pedestrian crossing improvements project in 2021, and 90% complete plans for the project on March 17, 2022. Upon review of the 90% plans, the ATC approved a motion supporting the project as currently designed, with the following comments for staff to consider in completing the final plans:

1. Pursue implementation of the Johnson Avenue road diet between Bishop and Laurel as soon as possible, ideally as part of 2022 Pedestrian Crossing Improvements Project.
2. Request that staff pursue additional grant funding for construction of a PHB at the South/King intersection as soon as possible.

As discussed previously in this report, pursuant to the ATC's recommendations, the Johnson Avenue road diet has been included in the final project plans as a pilot installation, while staff is actively pursuing grant funding for a future PHB installation at the South/King intersection.

Public Engagement

Numerous public engagement activities have been conducted for this project and are summarized as follows:

1. As part of the 2020 Roadway Sealing project, outreach on pedestrian and bicycle improvements for the King-Nipomo and Islay Neighborhood Greenways included an in-person workshop at Emerson Park, project review by the ATC, and final consideration and approval of the project at a City Council hearing.

2. Significant outreach was conducted in developing the 2021 Active Transportation Plan, including numerous public workshops, informal “pop-up” meetings on weekends, online and direct-mail community surveys, a dozen ATC meetings, and ultimately a City Council hearing for adoption of the final plan. The Johnson/Sydney, Tank Farm Poinsettia and South/King intersections were some of the most frequently requested crossing improvement needs voiced by community members during this outreach.
3. Project-specific outreach included creation of a project website¹, two ATC meetings, a community workshop on walking and biking safety at Meadow Park, focused outreach with Hawthorne Elementary School staff and PTA members, and three phases of post card notifications and neighborhood posters distributed within the vicinity of the Johnson/Sydney intersection.

The comments most frequently received from community members during outreach activities for this project were:

1. Support for any form of crossing improvements at Johnson/Sydney and South/King intersections and request for City to pursue further upgrades at these intersections, such as full signalization or installation of PHB crossings when funding allows.
2. Desire to retain existing circulation and left-turn access to/from Sydney Street.
3. Support for further improvements to reduce illegal speeding and improve safety for all road users along Johnson Avenue.

CONCURRENCE

This project has been reviewed and has concurrence from Public Works (Transportation Manager, Active Transportation Manager, City Engineer), City Attorney’s Office, and Finance Department. These improvements are also consistent with recommendations in the City’s latest Annual Traffic Safety Report, which is developed in coordination with the San Luis Obispo Police Department Traffic Enforcement Division.

ENVIRONMENTAL REVIEW

This project is categorically exempt from environmental review pursuant to section 15301 of the CEQA Guidelines (Existing Facilities) since it involves work within existing public streets, sidewalks, gutters and bicycle facilities, and involves construction of transportation facilities that support reductions in vehicle miles traveled (VMT). Additionally, the project improvements are consistent with the Land Use and Circulation Element as well as the Active Transportation Plan, therefore consistent with the environmental review of those documents. A Notice of Exemption will be filed through the Community Development Department.

¹ <https://www.slocity.org/government/department-directory/public-works/programs-and-services/transportation-planning-and-engineering/johnson-sydney>

FISCAL IMPACT

Budgeted: Yes

Budget Year: 2022-23

Funding Identified: Yes

Fiscal Analysis:

Funding Sources	Total Budget Available	Current Funding Request	Remaining Balance	Annual Ongoing Cost
General Fund	\$178,327	\$133,327	\$45,000	\$
LRM	\$566,368	\$566,368	\$0	
TIF	154,501	\$79,055	\$75,446	
Total	\$899,196	\$778,750	\$120,446	\$

ESTIMATED PROJECT COST BY FUNDING SOURCES														
2022 Pedestrian Crossing Improvements, Specification No. 1000069														
	Pedestrian Crossing Improvements (1000069)		Active Transportation Plan Implementation (100502-01)		Pedestrian Crosswalk Beacon on Ramona (1000161)	Pedestrian Imp.at Monterey & Buena Vista (1000160)	Bicycle Facility Improvements (90572)			Traffic Safety Implementati on (91295)	Transportation Safety & Operations (1000073)		Project Total Costs	
	General Fund	Local Revenue Measure	General Fund	Local Revenue Measure	General Fund	Local Revenue Measure	General Fund	Local Revenue Measure	Traffic Impact Fee	Local Revenue Measure	Local Revenue Measure	Traffic Impact Fee		
Construction Estimate	\$98,029	\$259,077	\$0	\$55,000	\$35,000	\$19,234	\$298	\$43,252	\$34,634	\$114,152			\$658,676	
Contingencies (15%)										\$5,801	\$67,352	\$44,421	\$117,574	
Total Construction Est	\$98,029	\$259,077	\$0	\$55,000	\$35,000	\$19,234	\$298	\$43,252	\$34,634	\$119,953	\$67,352	\$44,421	\$776,250	
Materials Testing											\$2,000		\$2,000	
Printing & Advertising											\$500		\$500	
Total Project Est.	\$98,029	\$259,077	\$0	\$55,000	\$35,000	\$19,234	\$298	\$43,252	\$34,634	\$119,953	\$69,852	\$44,421	\$778,750	
Available Project Balance	\$98,029	\$259,077	\$45,000	\$55,000	\$35,000	\$19,234	\$298	\$43,252	\$34,634	\$119,953	\$69,852	\$119,867	\$899,196	
Remaining Balance	\$0	\$0	\$45,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$75,446	\$120,446	

Funding was initially programmed in the City's 2019-21 Financial Plan to initiate development of improvements for the Tank Farm/Poinsettia and Johnson/Sydney crossing locations, with additional funding appropriations added in the 2021-23 Financial Plan and 2021-22 Mid-Year Budget Review to fully fund improvements at additional crossing locations.

Several of the proposed pedestrian/bicycle crossing locations were identified as recommended systematic safety improvements in the previous two publications of the City's Annual Traffic Safety Report; thus, the project funding includes use of Traffic Safety Implementation account funds as well.

The table above shows the total project construction cost, contingency costs, and costs for materials testing and printing of plans and specifications. As also shown in the table above, there is adequate funding available to fund project construction from the current project accounts:

- i. Pedestrian Crossing Improvements (No. 1000069)
- ii. Active Transportation Plan Implementation (No. 1000502)
- iii. Pedestrian Crosswalk Beacon on Ramona (No. 1000161)
- iv. Pedestrian Safety Improvements on Monterey at Buena Vista (No. 1000160)
- v. Bicycle Facility Improvements (No. 90572)
- vi. Traffic Safety Implementation (No. 91295 & No. 1000073)

As also shown in the table above, a balance of \$120,446 is projected to remain beyond the funds needed to proceed with construction of the project. If construction bids come in above the authorized project budget, staff would return to the Council to request use of these funds or alternative funding sources to award the construction contract. Otherwise, these remaining funds would be used to fund future active transportation improvements, as prioritized based on ATC input, and future traffic safety improvements as guided by the latest edition of the City's Traffic Safety/Vision Zero Report.

ALTERNATIVES

Deny authorization to advertise. The City Council may choose not to authorize project advertisement. Staff does not recommend this alternative, as this would delay high-priority projects intended to improve accessibility and safety for people walking and bicycling.

ATTACHMENTS

- A – Project Plans (Spec. No. 1000069)
- B – Project Specifications (Spec. No. 1000069)