

March 5, 2024
Mayor and City Council
Director of Public Works
Adopt a Resolution Approving Plans and Specifications and Call for Bids for the FY24 Pavement Improvement Project

RECOMMENDATION

That the Council adopts a resolution (Attachment II) approving the plans and specifications and call for bids for the FY24 Pavement Improvement Project (PIP).

SUMMARY

The FY24 PIP calls for the rehabilitation of 38 street sections and preventive maintenance of 90 street sections for a total of 128 street sections (Attachment III). The proposed improvements will repair failed pavement sections and improve street surfaces.

The project budget of \$15,000,000 is funded via the Gas Tax, Measure B, Measure BB, Vehicle Registration Fees, anticipated Road Repair and Accountability Act (RRAA) (SB1), and Street System Improvement funds.

BACKGROUND

On April 25, 2023¹, staff recommended Council approve a project list for the SB1 FY24 PIP Funding. A resolution was required to submit an application to the California Transportation Commission (CTC) to receive an estimated \$4,000,000 in funding for pavement improvement.

On April 25, 2023², staff recommended Council adopt a resolution authorizing the City Manager to execute Amendment No. 5 to the Professional Services Agreement (PSA) with Pavement Engineering, Inc., (PEI) for engineering services associated with the FY24 PIP. The scope of work for PEI is limited to engineering review, pavement evaluation, measurement of field quantities, curb ramp design, and construction support.

The PIP involves one of four types of treatments:

Pavement Rehabilitation:

¹ https://hayward.legistar.com/LegislationDetail.aspx?ID=4544075&GUID=F617FA6F-C198-474E-B133-26C761043039&Options=&Search= ² https://hayward.legistar.com/LegislationDetail.aspx?ID=4548864&GUID=6506EE24-A2C3-455B-9

²E1-8A42B60887B1&Options=&Search=

- 1) Standard overlay of the existing street pavement with new Hot Mix Asphalt surfacing.
- 2) Cold-In-Place Recycling (CIR), which involves removing the top layer of asphalt, mixing the removed aggregates with a recycling agent and other additives on-site, replacing this pavement material onto the same roadway, then applying a Hot Mix Asphalt overlay.
- 3) Full Depth Reclamation (FDR), which consists of pulverizing and mixing distressed asphalt and underlying pavement materials with or without the addition of stabilizing agents; using the resulting material as a base for the renewed pavement structure and adding a new Hot Mix Asphalt cap.

Preventive Maintenance:

4) Varying combinations of: crack sealing, 6" spot repair, and micro-surfacing.

Street selection for the PIP is based on staff's analysis using several criteria described below:

- **Technology** The Pavement Management Program (PMP)³ evaluates current and predicts future roadway conditions. It provides logical and efficient methods of identifying street rehabilitation needs. It also determines the most cost-effective allocation of funds to the street segments needing preventive maintenance, rehabilitation or reconstruction. Staff utilized the PMP to compile an initial list of recommended streets. This list is then revised to consider other criteria and project budget allocation parameters.
- **Internal Reports** Reports from the City's Maintenance Services staff on streets needing repair were considered.
- **Council Members Input** Council member requests for selecting streets were considered.
- **Public Input** Public requests for selecting streets were considered.
- **Geographic Location** Selecting streets in close vicinity to help lower construction bids was considered.
- **Funding Availability** Available funding and potential for obtaining outside grant funding was evaluated.

The Pavement Condition Index (PCI) is an overall rating of road conditions. The PCI of each arterial and collector street segment is evaluated by an independent third-party every other year, and each residential street segment is evaluated every five years.

PCI Rating	Description
100	This rating is given to newly constructed or rehabilitated roadways.
85 - 99	Highly functional roadway. No action required.
70 - 85	Roadway can be maintained ("preventive maintenance") with crack sealing, slurry seals, micro-surfacing, and some minor,

³ The PMP is a Metropolitan Transportation Commission (MTC) recommended software program.

	localized pothole repairs. As the roadway pavement ages, preventive maintenance may not be effective after a few maintenance cycles.
40 - 70	Extensive "dig-outs," grinding, fabric, or asphalt overlays may be required to maintain (or "rehabilitate") roadway.
0 - 40	Roadway requires complete reconstruction using full depth reconstruction, cold in place recycling, or hot in-place recycling methods. If a street deteriorates beyond certain points, it becomes progressively more expensive to bring that street back to the desired standard.

As part of the 2018 Capital Improvement Program (CIP) agenda item at the November 26, 2017⁴ CIP meeting, Council reviewed and agreed to the following budget allocations for annual pavement improvement projects:

- Minimum 20% for preventive maintenance (streets with PCI of 70-85).
- Minimum 15% for streets located in Industrial Hayward as recommended by the Economic Development Strategic Plan in 2014.
- Minimum 10% for deteriorated streets (streets with PCI of 0-30).

DISCUSSION

Based on staff's analysis using the criteria described above, the project parameters are as follows:

Project Budget Allocation	Goal	Current Performance	Difference
Preventive Maintenance Treatment	20% minimum	20%	0%
Streets Located in Industrial Hayward	15% minimum	5%	-10%
Streets with PCI Less than 30	10% minimum	55%	45%

The project budget allocation is skewed away from industrial streets due to heavy emphasis in previous years (FY22 PIP and FY23 PIP) to pave industrial streets including: West Winton Ave, Cabot Blvd, Depot Rd, Mack St, Investment Blvd, Eden Landing Rd, Corporate Ave, etc.

The project budget allocation is skewed towards streets in very poor condition (PCI less than 30) due to various reasons:

• Increasing social equity by paving streets in lower socioeconomic neighborhoods. FY24 PIP is emphasizing streets in the Mt Eden and Glen Eden neighborhoods and

⁴ https://hayward.legistar.com/LegislationDetail.aspx?ID=3162145&GUID=271A23E5-9011-4B2B-9B73-99C315A0FDD1&Options=&Search=

have numerous streets which have not been paved in 25+ years, including West Tennyson Rd, Thayer Ave, Portsmouth Ave, and Panama St.

This selection requires both judgement and experience. Staff has engaged an experienced consultant, Pavement Engineering, Inc., (PEI) to confirm the selection of streets segments, the approximate level of treatment for each and provide engineering support services.

14.9 miles of bike lane striping will be installed at the following locations:

7.3 centerline miles of Class II Bike Lanes:

- Arf Ave, Hesperian Blvd to Baumberg Ave (0.8 miles)
- Corsair Blvd, West Winton Ave to Sabre St (1.5 miles)
- Cryer St, Industrial Blvd to Adrain Ave (0.8 miles)
- Gettysburg Ave, Cryer St to Depot Rd (0.8 miles)
- Portsmouth Ave, West Tennyson Rd to Baumberg Ave (0.7 miles)
- Sleepy Hollow Ave, Industrial Pkwy to Hesperian Blvd (1.2 miles)
- Tyrell Ave, Tennyson rd to Shafer Ave (1.5 miles)

7.6 centerline miles of Class III Bike Lanes:

- Adrian Ave, Cryer St to Depot Rd (0.2 miles)
- Baumberg Ave, Arf Ave to Industrial Pkwy (0.5 miles)
- C St, Fifth St to Seventh St (0.4 miles)
- Everglade St, Florida St to Orlando Ave (0.6 miles)
- Fourth St, B St to D st (0.4 miles)
- Harder Rd, Westview Wy to Cal State Campus (0.4 miles)
- Hayward Blvd, University Ct to Farm hill Dr (2.7 miles)
- Palisade St, Mission Blvd to Overlook Ave (0.8 miles)
- Thayer Ave, Gettysburg Ave to Trafalgar Ave (0.4 miles)
- West Tennyson Rd, Industrial Blvd to Hesperian Blvd, (1.2 miles)

ECONOMIC IMPACT

The project is funded by City's CIP Program and State RRAA (SB1) funds.

FISCAL IMPACT

The estimated project funding sources are as follows:

٠	210 - Gas Tax		\$402,000
•	211 – RRAA (SB1)		\$4,000,000
•	212 - Measure BB – Local Transportation		\$6,198,000
•	218 – Vehicle Registration Fee		\$900,000
٠	406 – Measure C Capital		\$2,000,000
٠	450 – Street System Improvements		<u>\$1,500,000</u>
		Total:	\$15,000,000

STRATEGIC ROADMAP

This agenda item supports the FY24 to FY25+ Strategic Roadmap of Invest in Infrastructure. Specifically, this item relates to the implementation of the following project(s):

Project N6 - Continue to add approximate 10 miles of bike lanes annually, with a focus on protected bike lanes and intersections that have high traffic/incidents.

SUSTAINABILITY FEATURES

The project requires the contractor to recycle all construction and demolition debris generated from the project.

This project is consistent with City's Complete Streets Policy and improves travel for all users including:

- Improved pavement for motorists
- Additional bike lanes and sharrows for bicyclists
- More visible pavement markings for pedestrians, including near school zones
- New or upgraded curb ramps to meet the recently revised Caltrans standards for pedestrians

The project satisfies the following 2040 General Plan policies:

- PFS-7.10 Recycled Products or Processes for Capital Projects
- HQL-2.5 Safe Routes to School
- HQL-2.6 Education on Sharing the Road
- M-1.7 Eliminate Gaps (in pedestrian networks)
- M-3.1 Serving All Users
- M-5.1 Pedestrian Needs
- M-5.6 Safe Pedestrian Crossings
- M-6.2 Encourage Bicycle Use

PUBLIC CONTACT

Immediately after the construction contract is awarded, a preliminary notice explaining the project will be posted and distributed to all residents and businesses along the affected streets. After the construction work has been scheduled, signs on barricades will be posted seventy-two hours prior to commencement of work indicating the date and time of work for each street. Residents will be advised to park their vehicles on side streets outside of the work area during the period when the streets are being treated.

NEXT STEPS

March 2024 Bid Opening

April 2024	Award of Contract
May 2024	Start of Construction
Fall 2024	End of Construction

Prepared by: Kathy Garcia, Deputy Director of Public Works

Recommended by: Alex Ameri, Director of Public Works

Approved by:

Rudoo

Kelly McAdoo, City Manager