PROJECT STUDY REPORT LOCAL REHABILITATION

Responsible Agency:

City of Eureka

Project Name:

Highland Avenue and Koster Street Rehabilitation

APPROVAL RECOMMENDED:

Project Manager

APPROVED:

City Engineer

12.13.2017

Date

Transportation Problem

Weathering, aging, and loading have led to structurally deficient asphalt and poor ride-ability. Routine maintenance is no longer adequate to preserve or extend the pavement life.

Location

The project is located in the City of Eureka on Highland and Koster Streets. Highland Avenue carries traffic between the State Highway (Broadway) and Utah Street (0.53 miles) which services Fort Humboldt, Highland Park/Ball Field, and Alice Birney Elementary School. The project limits on Koster Street are from Del Norte Street at Broadway (State Highway 101) to Washington Street (0.51 miles). Net road mileage is 1.04 miles. See attached vicinity map.

Project Scope/ Pavement Rehabilitation

The proposed project includes removal and replacement of failed surface asphalt and/or subsurface material and hot mix asphalt overlay. Overlay thickness will be determined by study of existing subgrade, surface condition, and traffic loading. Sidewalks will be repaired and/or replaced in compliance with ADA standards, filling sidewalk gaps when possible, including truncated dome mats being installed at intersection curb returns. This work is expected to extend the service life for at least fifteen to twenty years. The consequence of not doing the project is further deterioration of the roadway which will lead to a much higher cost requiring future reconstruction.

Functional Classification/Traffic Data

Highland Avenue is a two lane, two way street, 40' wide, classified as an urban local street, with an average daily traffic volume of 1,500 vehicles. This street has parking and sidewalks on both sides (with a few gaps) and is located in a single family residential area connecting to State Highway 101. Fort Humboldt and Highland Park are located on Highland Avenue and the street leads to Alice Birney Elementary School.

Koster Street is a two lane, two way street, 44' wide, with parking and sidewalks on both sides, classified as an urban collector, with an average daily traffic volume of 2,300 vehicles. This section of Koster Street is located in industrial and service commercial areas and is used by commercial vehicles and logging trucks to access State Highway 101.

Environmental Status/ Roadway Geometrics

Due to the scope of work being primarily asphalt paving, with minimal subsurface excavation, and all work being within the City's right-of-way in the previously disturbed roadway prism, this project is expected to be categorically exempt from the environmental clearance process. Construction will occur during dry summer months, the project will not change the existing geometrics, so there will be no increase in capacity for any of the streets, and this project does not include any bridge rehabilitation.

Condition of Existing Facility

The City of Eureka maintains a pavement management program, StreetSaver, which contains the pavement condition index (PCI) for all city streets. This program was implemented through HCAOG to help prioritize the pavement needs of the region to maximize the efficient use of limited resources available. PCI's per StreetSaver (as determined in 2017) for the roadway segments proposed are as listed:

Roadway Section	PCI
Highland (Broadway to Albee)	13
Highland (Albee to Utah)	27
Koster (Del Norte to 14 th)	35
Koster (14 th to Washington)	27

Pavement Condition	PCI Category
Good to Excellent	71 - 100
Fair	51 - 70
Poor	26 - 50
Very Poor/Failed	0 - 25

Cost Estimate Breakdown

Pavement structural section work	Unit	Quantity	Unit Price	Total
Mobilization	LS	1	\$25,000.00	\$25,000
Traffic Control	LS	1	\$25,000.00	\$25,000
AC Overlay	TON	2,300	\$125.00	\$299,000
Remove & replace localized failed areas	SY	5,000	\$30.00	\$150,000
Concrete sidewalk replacement	SF	1,000	\$22.00	\$22,000
Thermoplastic striping	LF	5,500	\$2.00	\$11,000
Thermoplastic marking	SF	120	\$5.00	\$600
Truncated dome mats	EA	48	\$500.00	\$24,000
Adjust manhole cover to grade	EA	24	\$600.00	\$14,400
Adjust water valve cover to grade	EA	36	\$500.00	\$18,000
SUBTOTAL				\$589,000
Contingency				\$61,000
TOTAL CONSTRUCTION COST				\$650,000

Scheduling

Project Component	Start Date	Estimated Completion
Environmental Signoff	August 2018	February 2019
Plans, Specifications, and Estimate	August 2018	February 2019
Construction	February 2019	October 2019

Other Agencies

No permits or approvals should be required.

Proposed Funding

		Local	STIP	Total
		Commitment*	Request†	
Environmental		\$1,000		\$1,000
Plans, Specifications, and Estimate		\$15,000		\$15,000
Construction			\$589,000	\$589,000
Contingencies and Supplemental Work			\$61,000	\$61,000
To	otal		\$650,000	\$666,000

^{*}Gas tax and general fund

Attachments

A. Vicinity Map

Report Preparation

Prepared by	Date 12/13/2017
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This Project Study Report (Local Rehabilitation) has been prepa	red under the direction of the following

This Project Study Report (Local Rehabilitation) has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

Registered Civil Engineer Date



seal

[†]State-only funding

Highland Avenue and Koster Street Rehabilitation

