MEMORANDUM

TAB 66

To: CHAIR AND COMMISSIONERS CTC Meeting: December 6-7, 2023 CALIFORNIA TRANSPORTATION COMMISSION

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.5e.(2), Action Item - YELLOW REPLACEMENT ITEM

Prepared By: Matthew Brady

District 01 - Director

Subject: SUPPLEMENTAL FUNDS FOR CAPITAL OUTLAY SUPPORT PHASE

PPNO 4490/EA 40110 - MENDOCINO COUNTY - STATE ROUTE 1

RESOLUTION FA-23-43

ACTION UPDATE: Adjustment to the requested amount and additional information on project

delivery risks.

ISSUE:

Should the California Transportation Commission (Commission) approve the California Department of Transportation's (Department) request for an additional \$3,400,000 in Capital Outlay Support (COS), for the State Highway Operation and Protection Program (SHOPP) Bridge Rehabilitation and Replacement project on State Route (SR) 1, in Mendocino County, to complete the Project Approval and Environmental Document (PA&ED) phase?

RECOMMENDATION:

The Department recommends that the Commission approve this request for a COS supplemental funds allocation for this SHOPP project.

PROJECT DESCRIPTION:

This project is located on SR 1, near Albion, at the Albion River Bridge (No. 10-0136), in Mendocino County. The project is proposing to replace the bridge.

The bridge is on the National Register of Historic Places due to its ingenuity in design and material, and having been built during strict wartime restrictions. The current 969-foot long and 28-foot-wide structure is comprised of timber trusses, concrete abutments, timber deck with asphalt riding surface, and a mixture of concrete and timber piles for its support. Had there been no wartime restrictions on building materials, the Albion River Bridge would have been a concrete arch structure similar to other bridges along the Mendocino Coast.

Reference No.: 2.5e.(2) December 6-7, 2023 Page 2 of 4

YELLOW REPLACEMENT ITEM

FUNDING AND PROGRAMMING STATUS:

In April 2012, this project's PA&ED phase was programmed for \$3,650,000 in the SHOPP for completion in Fiscal Year 2017-18. In June 2016, the project was amended to account for additional coordination that will be needed to complete the PA&ED phase and increased the programmed amount to \$5,500,000. In December 2016, the project was further amended to move out the completion from 2017-18 to 2019-20. In June 2017, the project received its PA&ED allocation for \$6,147,000. In May 2019, the project received G-12 funds in the amount of \$815,000. In June 2019, the project was amended to move out the completion from 2019-20 to 2021-22 (making it a long lead project) and increased the programmed amount for the remaining phases. In June 2020, the project received a 3-month (instead of a 26-month) expenditure time extension for the PA&ED phase. In December 2021, the project received supplemental funds in the amount of \$2,900,000 to continue work on the PA&ED phase. In March 2022, the project was further amended to move out the completion from 2021-22 to 2023-24 and increased the programmed amount for the remaining phases. In August 2022, a correction was made to the initial expenditure time extension from 3 to 26 months and the project received an amendment to the expenditure time extension for an additional 26 months for the PA&ED phase. In October 2022, the project's delivery method was converted to use the Construction Manager/General Contractor (CMGC) process. The PA&ED phase is currently 60 percent complete. The remaining budget is \$466,000, which is insufficient to complete the phase. The project is scheduled to complete the remaining PA&ED activities by October 2024.

REASON FOR COST INCREASE:

In December 2021, the supplemental funds request included an increase in costs based on the effort to deliver a higher-level environmental document and support to secure a CMGC. Significant progress has been made in the past two years since this last request; however, there have been unforeseen support cost increases. A summary of some of the increases are itemized below:

- An eastern alignment arch option was originally ruled out by Caltrans as infeasible due to constructability and roadway geometry. After the Construction Manager (CM) joined, the project team was able to propose a feasible eastern arch option. The CM brought certainty with their expertise in construction methodology that an eastern alignment arch could be efficiently built. The team added the new alternative because of several advantages including expected greater support from permitting agencies; lower construction costs; lower biological impacts; and greater climate change adaptation. As a result of the new alternative, a few new environmental technical studies had to be performed and the completed environmental technical studies had to be appended or updated.
- The CM identified new staging areas, based on their expertise in construction practices, that expanded and refined the project footprint. The new staging areas required additional field work and studies. Identifying these additional areas of impact before

CHAIR AND COMMISSIONERS CALIFORNIA TRANSPORTATION COMMISSION

Reference No.: 2.5e.(2) December 6-7, 2023 Page 3 of 4

YELLOW REPLACEMENT ITEM

circulation of the Draft Environmental Document (DED) reduces the risk of recirculation, potentially saving the project \$2,000,000 and 9 months. These staging areas and their impacts to the environment had to be incorporated into the completed studies. The updated and refined staging areas will allow for focused coordination with impacted property owners based on known impacts. The greater certainty of the project footprint will streamline the schedule for right of way acquisition by reducing rework during later phases of the project.

- The Project Development Team (PDT) agreed that to meet the project's ambitious goals, the team needed to increase the frequency of internal meetings and coordination. As a result, the PDT meeting frequency was increased to facilitate information sharing and work product development between functional units. Functional unit meetings also increased to address action items and complete staff work efficiently.
- The Department performed additional studies to assess the merits and feasibility of the rehabilitation alternatives. These studies include but are not limited to life-cycle cost analysis, cultural resource analysis, environmental impact analysis, and constructability analysis.
- The Independent Cost Estimator (ICE) was not included in previous programming request. The ICE was brought on to facilitate construction cost estimate development, and identification of assumptions and risks. The ICE works as a third party to reconcile costs between the Department and CM, and acts a constructability expert. This work will improve understanding of project costs and will inform potential innovations that save costs during construction.
- In 2021, the Department had expected to spend \$400,000 on the procurement of the CM. It is now expected that an additional \$800,000 will be spent by the CM during PA&ED.

Future costs:

These items above account for an additional \$1,840,000 of PA&ED expenses that have accrued to date beyond what was anticipated in 2021. We expect an additional need of \$1,560,000 above and beyond what the team had expected before the 2021 supplemental funds request to complete the remainder of PA&ED.

DED and Draft Project Report (DPR):

The DED and DPR require review by the Department's Headquarters and Legal offices. Once reviewed, the DED will be released to the public. The remaining efforts include public engagement and public hearing, responding to public comments, engagement and responding to resource agency comments, and adjusting technical studies and the DED to address the comments.

CHAIR AND COMMISSIONERS CALIFORNIA TRANSPORTATION COMMISSION

Reference No.: 2.5e.(2) December 6-7, 2023

Page 4 of 4

YELLOW REPLACEMENT ITEM

Final Environmental Document (FED) and Project Report (PR):

The FED and PR will include the selection of final alternative. The efforts to complete the FED and PR include coordinating with resource agencies, completing the final alternative's plans, cost estimate, and design studies. The Department will engage the local agency for cooperative and maintenance agreements.

Benefits of utilizing the CMGC project delivery:

Using the CM early in the PA&ED phase of the project has added horsepower to project development by being able to incorporate the expertise of the CM into the environmental document. Construction scenarios and methodologies have been developed with the CM's expertise leading to a more detailed and accurate description of the project eliminating vague or assumed contractor construction techniques. Early onboarding of the CM allows for further development of the project. Assumptions and risks are documented as the project progresses to allow for innovation and cost savings. Early onboarding of the CM reduces the risk of construction contract change orders and recirculation of the environmental document. The opportunity to collaborate with the contractor early in the process allows for innovation integration within the environmental document. The cohesive team will be able to move more efficiently through future design phases with a more thorough understanding of constraints, risks, and opportunities.

Managing Future Costs:

The Department is requesting supplemental funds at the lower range of the estimate at completion. The complexity of this project introduces the risk of a future supplemental funds request if one or more of the following risks come to fruition: inability to complete PA&ED on an aggressive schedule, overtime rates surpassing expectations, additional revisions to technical studies resulting from increased public opposition, and unanticipated delays because of third parties. The Department will perform monthly monitoring of expenditures to ensure the resource expenditures match expected outputs.

CONSEQUENCES:

If this request for supplemental funds is not approved, the Department will not be able to complete the PA&ED phase, funds will be exhausted, and the draft environmental document will be shelved until additional funding is acquired. The project would be delayed until it is reprogrammed in a future SHOPP cycle, which could lead to future cost increases.

FINANCIAL RESOLUTION:

Resolved, that \$3,400,000 be allocated to provide funds to complete the pre-construction PA&ED phase for this SHOPP project.

Attachment

CTC Financial Vote List December 6-7, 2023

2.5 Highway Financial Matters

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description	PPNO Program Phase Program Code Project ID Adv Phase EA	Original Amount	This Supplemental Request
2.5e.(2)	COS Supplemental Funds for Previously Voted Project		Resolution FA-23-43	
\$3,400,000 Department of Transportation Mendocino 01-MEN-1 43.3/44.2	Near Albion, from 3.0 miles north of Route 128 Junction to 0.2 mile north of Albion River Bridge No. 10-0136. Bridge replacement. Outcome/Output: This is a Construction Manager/General Contractor (CMGC) project. (Long Lead Project) Change to the supplemental request amount and allocation amount from \$4,440,000 to \$3,400,000 made via the Yellow Replacement distributed at the December 2023 CTC meeting.	01-4490 SHOPP PA&ED 20.10.201.110 0100000154 0 40110	\$6,147,000	\$3,400,000