

M e m o r a n d u m **TAB 69**

To: CHAIR AND COMMISSIONERS
 CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: December 5-6, 2018

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 Action Item

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Subject: **ALLOCATION FOR PROJECT WITH COSTS THAT EXCEED THE PROGRAMMED AMOUNT BY MORE THAN 20 PERCENT (PPNO 05-2432/EA 1C850 – SANTA CRUZ COUNTY – HIGHWAY 1) RESOLUTION FP-18-40**

ISSUE

Should the California Transportation Commission (Commission) approve the California Department of Transportation’s (Department) allocation request for \$21,388,000 for the State Highway Operation Protection Program (SHOPP) Roadway Preservation project (PPNO 2432) on State Route (SR) 1, in Santa Cruz County?

RECOMMENDATION

The Department recommends that the Commission approve an allocation of \$21,388,000 for the SHOPP Roadway Preservation project (PPNO 2432) on (SR) 1, in Santa Cruz County.

Dist-Co-Rte	Construction Component	Programmed Amount	Program Adjustment	Requested Funds	% Over Programmed Amount
05-SCr-1	Capital	\$14,952,000	\$5,166,000	\$ 20,118,000	35 %
	Support	\$ 1,082,000	\$ 188,000	\$ 1,270,000	17 %
Total Allocation Request				\$ 21,388,000	

PROJECT DESCRIPTION

This project is on SR 1, in and near the City of Santa Cruz, in Santa Cruz County. This project will repair localized areas of distress in Asphalt Concrete (AC) Pavements, replace shoulder dikes, replace non-standard guardrails, replace and upgrade Type 50 concrete barrier with ~~Type 60~~ **Type 60M**, adjust drainage inlets and utility pull boxes to match pavement grade, and place pavement rumble strips on both inside and outside shoulders. In addition, the project will reconstruct 44 existing curb ramps and add two new curb ramps to comply with the Americans with Disabilities Act (ADA).

PROGRAMMING STATUS

The project was programmed in the 2018 SHOPP for Commission allocation of Construction in Fiscal Year 2018-19; which transpires from July 1, 2018 and June 30, 2019. The Commission Interim SHOPP Guidelines does not allow for project amendment changes after the programmed fiscal year has started. Subsequently, the only opportunity for change management updates regarding scope, cost of schedule is with this Construction allocation request.

REASON FOR INCREASE

The estimated cost to advertise this project increased due to changes to meet Traffic Safety Standards (TSS) for barrier height requirements, changes in the bridge rehabilitation strategy, electrical work associated with curb ramps/crosswalks, traffic control related items and the current uptrend in the construction market. Many of these issues were identified during the preparation of the final Plans, Specifications and Estimates (PS&E) late in Fiscal Year 2018, several months after the adoption of the 2018 SHOPP.

Construction Capital Increase

Originally, the project required that 3,700 feet of Type 50 Concrete Barrier be replaced with Type 60M Concrete Barrier. However, while developing the PS&E, it was discovered that there was existing Type 60 Concrete Barrier, within the project limits, that did not meet the (TSS) minimum height requirement of 30 inches as required by the Federal Highway Administration. Consideration was given to grinding down the pavement to meet the height requirement; however, there were concerns of water ponding in the median. Furthermore, with the use of Type 60M Concrete Barrier this will allow this section of highway to accommodate additional future overlays without simultaneously having to also adjust the barrier height. Therefore, instead of replacing 3,700 feet of barrier, it was determined that it was in the best interest of the Department and the traveling public to replace 13,200 feet of barrier with this project. The Department examined the projected cost of implementing these project changes and concluded that the added cost was within the acceptable tolerances of the programmed amount and no amendment to the SHOPP would be needed.

Over the years, bridge decks were paved with asphalt concrete (AC) as a maintenance measure to seal the deck from water intrusion. During PS&E review, a project change was made to grind off the deck asphalt and to better reseal the deck with a clear methacrylate resin. Exposing and

resealing concrete decks in this manner results in improved protection and allows the bridges to be better inspected for damage or future maintenance needs.

During the design of the curb ramps, it was identified that a project to install Audible Pushbutton Signals (APS) at curb ramps had locations within this project. This other project is planned to be constructed in a future year. To eliminate the impacts to the work being constructed on this project, the APS at overlapping locations were added to this project. As a result, this altered the electrical work associated with the curb ramps/crosswalks from what was originally scoped in the Project Report, causing an increase in the estimated costs for these locations.

The Department has noted that Rubberized Hot Mix Asphalt increased by \$10 per ton in recent months. As such, the construction cost estimate has been increased with this allocation request accordingly, and the Engineer's Estimate (EE) was updated to capture this trend.

The Traffic Control System, Maintain Traffic, and Construction Zone Enhanced Enforcement Program (COZEEP) requirements increased due to the need to replace additional concrete barrier. This resulted in higher estimates for these items, based on staging/pricing/working days, as the working days increased from 110 to 230 days.

The other items adding to the Capital Construction increase was Mobilization and Time Related Overhead. The Mobilization is a percentage of the total construction cost and the Time Related Overhead was based on the increase of working days.

The certified EE was completed in June 2018, and upon review of all of the design changes and the projected cost increases for the project in the current bidding environment, the project cost was over the programmed amount. And because this occurred late in the fiscal year, the most efficient way to process the increase in cost is through this project allocation.

Construction Support

While the Construction Support increase is less than 20 percent of the programmed amount, there is an increase. The more extensive barrier work is the main reason behind the \$188,000 estimate increase over the programmed amount, because the barrier will now take more time to construct than originally programmed, with the working days increasing from 110 to 230 days.

CONSEQUENCES

The Department has determined that if this allocation request for \$21,388,000 is not approved, the Department will not be able to advertise this SHOPP, Roadway Preservation project and construction will be delayed.

RESOLUTION

Resolved, that \$20,118,000 in Construction Capital be allocated from the Budget Act of 2017, Budget Act Items 2660-302-0890 and 2660-802-3290, and \$1,270,000 in Construction Support be allocated from Budget Act Items 2660-001-0890 and 2660-505-3290 to provide funds to advertise the following project.