

MEMORANDUM

TAB 84

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: June 27-28, 2024

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.5e.(9), Action Item - **YELLOW REPLACEMENT ITEM**

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District 08 – Director

Subject: **SUPPLEMENTAL FUNDS FOR CONSTRUCTION COMPLETION PHASE
PPNO 3003U/EA 0K122 – SAN BERNARDINO COUNTY – INTERSTATE 15
RESOLUTION FA-23-131**

ACTION UPDATE: *Additional information on the reason for cost increase.*

ISSUE:

Should the California Transportation Commission (Commission) approve the California Department of Transportation's (Department) request for an additional \$10,000,000 in Construction Capital and \$4,500,000 in Construction Support for the State Highway Operation and Protection Program (SHOPP) Roadway Rehabilitation project on Interstate 15 (I-15), in San Bernardino County, to complete the construction contract?

RECOMMENDATION:

The Department recommends that the Commission approve the requested supplemental funds allocation for this SHOPP project.

PROJECT DESCRIPTION:

This project is located on I-15 in the cities of Hesperia and Victorville, from Oak Hill Road to south of Bear Valley Road, in San Bernardino County. The project will rehabilitate the roadway.

FUNDING AND PROGRAMMING STATUS:

In April 2016, the project was programmed in the SHOPP for allocation in Fiscal Year 2019-20. In August 2016, the project was programmed for \$159,029,000 in Construction Capital and \$11,700,000 in Construction Support. In May 2018, the project was amended to modify the project limits. In June 2019, the project was amended again to increase Construction Support to \$16,220,000 as the previous estimate did not account for night work and complex staged

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construction. In June 2020, the project received a 2-month allocation time extension for the Construction phase. In August 2020, the project was further amended to fully program the previously unfunded Construction phase of this G13 Contingency project. The project was also allocated for \$148,257,000 in Construction Capital and \$15,391,000 in Construction Support. In September 2021, the project was awarded for \$133,912,000 in Construction Capital. In November 2021, construction began with 600 working days. In April 2023, the project received partial G-12 funds in the amount of \$10,250,000 for Construction Capital. The remaining funds are currently at \$33,194,000 in Construction Capital and \$2,250,000 in Construction Support. The project is 65 percent complete with 280 working days remaining. The planned Construction Contract Acceptance is scheduled for July 2025.

REASON FOR COST INCREASE:

The project proposes to rehabilitate the roadway pavement and related drainage facilities, remove the existing three beam barrier in the median and replace with concrete barrier. The work also includes realignment and reconstruction of ramps at the Main Street Interchange. During construction, the project realized capital cost increases due to additional removal of pavement as a result of differing site conditions and for profile adjustment. In addition, drainage work at a few channels resulted in additional removal of concrete in one channel due to differing site conditions, reconstruction of another channel, and modifications at a channel which required revisions to a drainage system. Furthermore, revisions were required for concrete barrier work at a few locations to minimize rework due to the Brightline rail project. The project also required changes to traffic control and adjustments to local road tie-ins. The project increased working days and impacted support cost.

Capital Cost Increase:

The roadway rehabilitation work consists of reconstructing the structural section along an approximate 9-mile segment of I-15. During the pavement removal operations, it was found that the thickness of the removal was more than anticipated on the plans. To minimize the impacts from the differing site conditions, the pavement material was processed into suitable base material, and the profile was adjusted to raise the roadway. This work amounted to an increase of \$1,702,000.

The project also has drainage systems and channel work. Differing site conditions were also encountered at a drainage channel. During the concrete removal operations in a drainage channel, it was found that the thickness of the removal was more than anticipated on the plans and as-builts. This required an additional \$730,000 for its removal. Additional capital costs were required at another drainage channel location as a result of changes to the design to adapt to existing field conditions. The channel was reconstructed and required installation of guardrail for safety, at an additional cost of \$403,000. Adding to the drainage cost increase was erosion at an outlet structure that resulted in flooding at a private property. The erosion was caused by severe rainy weather and required the drainage system to be redesigned which

amounted to \$500,000. There were other drainage and channel modifications on the project at an additional cost of \$1,300,000. The total work amounted to an increase of \$2,933,000.

The project also includes removal of the existing three beam barrier along the median and replacement with concrete barrier. As the roadway profile was raised, it led to the reconstruction of the median barrier at one location which was not anticipated. At another location, it was found that the existing median barrier is non-standard and requires replacement to bring it up to standard. This work amounted to an increase of \$240,000.

Due to the Brightline rail project, the proposed median barrier on a segment will not be constructed and instead temporary barriers will be installed as an interim measure. The permanent barrier along this segment will be installed by the Brightline rail project. The temporary barriers and cross section adjustments amounted to an increase of \$1,750,000.

The project includes a complex construction staging and traffic handling plans. The staging and traffic handling activities have required more time and resources than what was anticipated due to the pavement removal thickness being greater than what was shown on the plans, which triggered additional traffic stages. In addition, traffic control has been enhanced with highway patrol units, which have been doubled to improve safety through the project limits. This was done to address multiple incidents of drivers entering ramp closures and include highway patrol presence at multiple locations. In addition, an interim staging plan was required to transition from one main stage to another. The changes in staging and enhanced traffic control amounted to an increase of \$1,800,000.

Adjustments had to be made to the ramp intersections at the Main Street interchange. The existing intersections are at a skewed angle and were reconstructed at a 90-degree angle to meet current standards. As a result, the existing profile of Main Street had to be readjusted to match existing grades and adapt to field conditions. This also resulted in staging and traffic handling plans to perform the intersection work. This work amounted to an increase of \$900,000.

With the additional work that was required to address differing site conditions, revisions to the design, additional traffic control, and including \$675,000 in time-related overhead, the project will need an additional \$10,000,000 in Construction Capital to complete the remaining work.

Support Cost Increase:

An increase to the support cost was driven by the additional work and modifications to existing work mentioned above. In addition, the delays resulted in an increase of 150 working days to the project. An additional \$4,500,000 is necessary for the inspection of these efforts along with completing the project's final estimate, as-builts, project history file, certificate of environmental compliance, final report, and close out of the project.

CONSEQUENCES:

If this request for supplemental funds is not approved, the Department will not be able to complete construction of this project and address all of the deficiencies of the roadway. If the construction contract is further delayed, it will likely result in claims by the contractor. To complete construction at a later time, another project will have to be programmed in a future SHOPP cycle at a possible higher project cost.

FINANCIAL RESOLUTION:

Resolved, that \$10,000,000 be allocated from the Budget Act of 2022, Budget Act Item 2660-302-0890 and Non-Budget Act Item 2660-802-3290 for Construction Capital, and \$4,500,000 in Construction Support, to provide funds to complete the Construction phase for this SHOPP project.

Attachment