

## MEMORANDUM

**TAB 100**

To: CHAIR AND COMMISSIONERS  
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: June 28-29, 2023

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.5e.(5), Action Item - **YELLOW REPLACEMENT ITEM**

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District 07 – Director (Acting)

Subject: **SUPPLEMENTAL FUNDS FOR CONSTRUCTION COMPLETION PHASE  
PPNO 5043/EA 32730 – LOS ANGELES COUNTY – STATE ROUTE 103  
RESOLUTION FA-22-87**

**ACTION UPDATE:** *Additional details for cost increase.*

### **ISSUE:**

Should the California Transportation Commission (Commission) approve the California Department of Transportation's (Department) request for an additional \$10,725,000 in Construction Capital for the State Highway Operation and Protection Program (SHOPP) Drainage System Restoration project on State Route (SR) 103, in Los Angeles 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 SR 103, in the City of Los Angeles, at the Henry Ford Avenue off-ramp, in Los Angeles County. The project will construct a larger pump plant facility to discharge run-off from the bridge and off-ramp.

### **FUNDING AND PROGRAMMING STATUS:**

In March 2018, the project was programmed for \$22,593,000 in Construction Capital in the SHOPP for allocation in Fiscal Year 2020-21. In May 2020, the project was amended to modify the scope and decrease the Construction Capital to \$17,160,000. In June 2021, the project received a two-month allocation time extension for the Construction phase. In August 2021, the project was allocated for \$16,655,000 in Construction Capital. In March 2022, the project

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received a three-month award time extension for the Construction phase. In April 2022, the project was awarded for \$14,003,000 in Construction Capital. In August 2022, construction began with 340 working days. The project has not requested G-12 funds. The remaining funds are currently at \$9,473,000 in Construction Capital. The project is 30 percent complete with 185 working days remaining. The planned Construction Contract Acceptance is scheduled for January 2025.

**REASON FOR COST INCREASE:**

The project proposes to build a pump plant facility between SR 103 and the Henry Ford Avenue off-ramp, replacing an existing pump plant that is too small. However, during construction, unexpected costs arose due to underestimating the need for treating contaminated ground water while removing water from the ground (known as dewatering). The dewatering is necessary to reduce pressure in an underground water source, ensuring that the soil remains stable while constructing the facility's foundation.

Initially, the project was planned based on preliminary drilling information, assuming that the contaminated groundwater would not have a significant impact. However, when the contractor conducted further drilling, they discovered that the rate at which the ground water was seeping was higher than expected. According to the project's plan, a 40-foot-deep pit must be dug close to the underground water source.

To address the increased seepage rate, additional measures for dewatering will be employed to maintain the stability of the soil in the pit during foundation construction. The need for additional dewatering was not anticipated during the initial planning stages of the project.

Per the contract, the contractor submitted their dewatering plan for Department's review and the discharge volume of the contaminated ground water was found to be much higher than what is included in the contract. The contractor's proposed dewatering plan requires the depressurization of an existing confined aquifer to maintain soil stability when excavating to the specified depth to construct the designed concrete slab foundation for the facility. After a drilling sample was taken within the footprint of the foundation, the contractor's projected pumping rate was well above the Department's assumption. The bid item amount estimated by the Department would be depleted within a day. To address the situation and verify the contractor's findings, the Department procured an independent Geotechnical consultant. The consultant provided an independent analysis and mitigation options. According to the consultant's report, the contractor's findings were substantiated. The report was reviewed by the Department and agreed with the consultant's analysis and recommendation. After evaluating various options that included a shallower facility, elimination of the concrete slab, modifying the foundation, and jet grouting to reinforce the soil, the Department agreed to implement jet grouting after the foundation piles are installed to minimize the risk of excessive contaminated ground water from the aquifer.

The cost for the consultant services to perform the analysis and provide mitigation options amounted to \$70,000. Since the jet grouting method was the selected option to continue the construction of the facility, re-sequencing of the construction activities will be required. These activities include additional stockpiling, maintenance of material on site, additional earthwork, disposal of excavated spoils, and removing and reinstalling support beams within the pit. The cost for the additional activities will amount to \$175,000. A jet grouting subcontractor will be procured to perform the work which will amount to \$10,480,000.

**CONSEQUENCES:**

If this allocation request for supplemental funds is not approved, the Department will not be able to complete the construction of this project and maintain the drainage in the area. The off-ramp will continue to flood during rain events and create safety concerns, and would require extensive remediation of contaminated ground water. 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 \$10,725,000 be allocated from the Budget Act of 2022, Budget Act Items 2660-302-0890 and 2660-302-3290 for Construction Capital, to provide funds to complete the construction phase for this SHOPP project.

Attachment