

# Memorandum

To: CHAIR AND COMMISSIONERS

Meeting Date: March 15-16, 2006

Reference No.: 2.5e.(2)  
Action Item

From: CINDY McKIM  
Chief Financial Officer

Prepared by: Ross A. Chittenden  
Division Chief  
Transportation Programming

Ref: **ALLOCATION FOR SUPPLEMENTAL FUNDS FOR PREVIOUSLY VOTED PROJECTS  
RESOLUTION FA-05-12**

## **RECOMMENDATION:**

The Department of Transportation (Department) recommends that the California Transportation Commission (Commission) approve the following Resolution.

## **FINANCIAL RESOLUTION:**

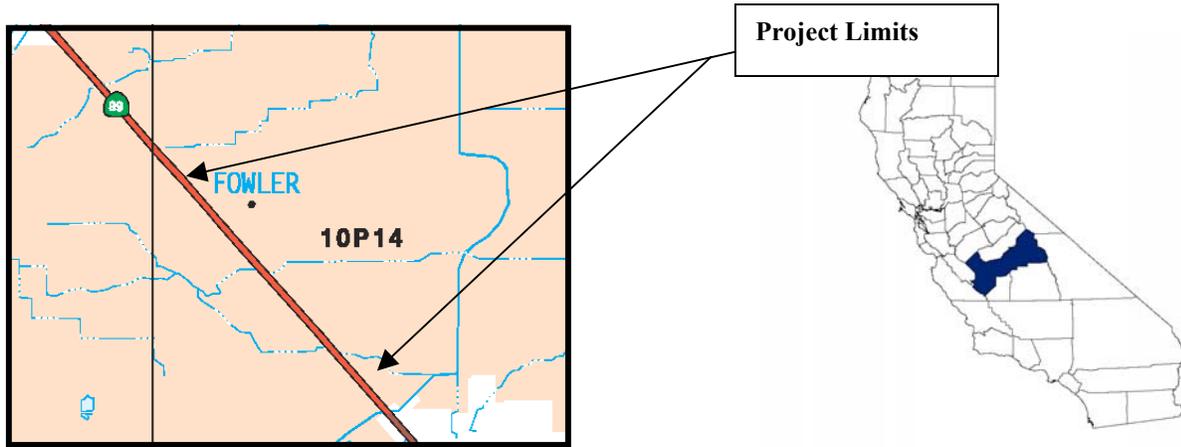
Resolved that \$4,815,000 be allocated from the Budget Act of 2005, Budget Act Items 2660-302-0042 and 2660-302-0890, to provide additional funds to pay construction claims.

## **SUMMARY AND CONCLUSIONS:**

This resolution allocates \$4,815,000 of additional State and federal funds for the previously approved project listed below:

<u>Project</u>	<u>Dist-Co-Rte</u>	<u>Original Allocation Amount</u>	<u>Award Amount</u>	<u>Current Budget Amount</u>	<u>Current Allocation Revision</u>	<u>Revised Budget Amount</u>	<u>Total Increase Vote/Award</u>
1	06-Fre-99	\$18,820,000	\$17,360,000	\$17,360,000	\$3,525,000	\$20,885,000	20% A
2	07-LA-10	\$2,306,000	\$2,306,000	\$2,736,000	\$1,140,000	\$3,876,000	42% A
3	07-LA-27	\$350,000	\$350,000	\$500,000	\$150,000	\$650,000	30% A
Total		\$21,476,000	\$20,016,000	\$20,596,000	\$4,815,000	\$25,411,000	24%

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Reason for Supplemental Funds	EA PPNO Budget Year Prgm Codes Program	State Federal Current Budget Amount	State Federal Additional Allocation	State Federal Revised Total Amount
<b>2.5e.(2) Supplemental Funds for Previously Voted Projects</b>					<b>Resolution FA-05-12</b>
1 \$3,525,000 Fresno 06N-Fre-99 10.7/1539	Near Fowler from Merced Street to Central Avenue. Asphalt concrete overlay.  Supplemental funds are needed for construction claims.	420301 06-1593 2003-04 302-0042 302-0890 20.20.201.130 SHOPP  2005-06 302-0042 302-0890 20.20.201.130 SHOPP	\$1,990,000 \$15,370,000      -	-   \$405,000 \$3,120,000	\$1,990,000 \$15,370,000  405,000 \$3,120,000 \$20,885,000
			\$17,360,000	\$3,525,000	\$20,885,000



**PROJECT DESCRIPTION**

This project is located in Fresno County near Fowler, from Merced Street to Central Avenue. When completed, the project will rehabilitate 31.3 lane miles of Route 99. The inside shoulders will be widened from 2 feet to 10 feet and the outside shoulders from 7.8 feet to 10 feet. The completed shoulders will be standard width for this freeway facility.

**FUNDING STATUS**

The contract was awarded in January 2005 for \$17,360,000.

**REASONS FOR COST INCREASE**

Some of the areas with the most significant impact on the project cost increases are summarized below.

- Incorrect quantity calculations in the Engineers Estimate for Asphalt Concrete (\$900,000)  
A review of the Engineer's Estimate by construction staff after contract award revealed an error in the quantity calculation for one segment of the project. Since the error was only found in one segment of the project, the error can be attributed to a miscalculation that was not found prior to advertising the contract.

- Substantially higher than anticipated Asphalt Price Index adjustment (\$677,000)  
Since the bid and award of the project, the price of Asphalt has significantly increased due to many economic factors. The Special Provisions of the contract allow for an adjustment (paid to or reduced payment) in the Asphalt price when market conditions change.
- Additional work (K-rail, Paving and Thrie Beam Guardrail Re-construction) to complete planned detours (\$670,000)  
Inside shoulder widening is required to detour traffic for a portion of construction. The widened shoulder does not allow an adequate distance between the edge of shoulder and the median barrier for the side slope to reach the existing ground level. The required height of the metal beam guardrail is currently established based on the existing ground level. The widened shoulder will result in the median barrier height below minimum standard height. The design engineer and staff overlooked this issue. The widened shoulder is to remain even after the detour has been removed, therefore, it is proposed to reconstruct and raise the height of the median barrier.

During this winter, temporary K-railing will be used in the northbound direction where finished paving has occurred and shoulder widening is complete. In the southbound direction, the paving has not started. The inside shoulder is currently compacted aggregate base and the major paving effort is suspended due to winter temperatures. A 1-meter temporary shoulder will be paved to provide an adequate shoulder surface for public safety through the winter.

- Notice of Potential Claim Settlement for median compaction work (\$620,000)  
The construction contractor spent considerable time and effort to obtain required compaction of existing material in the median. The median area contained three to four distinct material types. The State performed compaction verification testing as if a homogeneous material was present and did not perform compaction test on each specific type of material present. Many tests indicated failure to meet compaction requirements. The State has verified the amount of contractor effort to achieve the required compaction. Due to the State's exposure of not testing the individual materials, the settlement of this potential claim is payment of 50% of the verifiable compaction effort.

### **FUNDING OPTIONS**

The Department reviewed the following options:

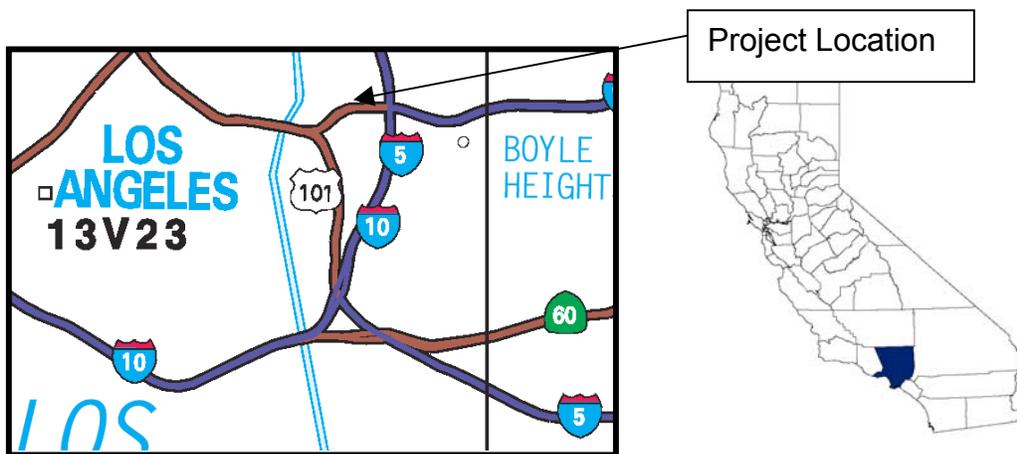
OPTION A: Approve this request, as presented above, for \$3,525,000 to settle construction claims.

OPTION B: Deny this request and let the claims be settled through arbitration.

### **RECOMMENDED OPTION**

The Department recommends that this request for \$3,525,000, as presented in Option A above, be approved to pay construction claims.

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<b>2.5e.(2) Supplemental Funds for Previously Voted Projects</b>			<b>Resolution FA-05-12</b>		
2 \$1,140,000 Los Angeles 07U-LA-10 0.0/1.0	In Los Angeles, at Route 101/10 Separation. Repair slope erosion and improve drainage.  Supplemental funds are needed for construction claims.	250801 07-3667 2005-06 302-0042 302-0890 20.20.201.130 SHOPP	\$313,000 \$2,423,000 \$2,736,000	\$1,140,000 - \$1,140,000	\$1,453,000 \$2,423,000 \$3,876,000



**PROJECT DESCRIPTION**

This project is located in Los Angeles County, at the Route 101 / Route 10 Interchange. The Project will construct a soldier pile wall and slope protection.

**FUNDING STATUS**

The contract was awarded in November 2005 for \$2,306,000.

**REASONS FOR COST INCREASE**

The original contract allotment was to construct various slope protection elements (tieback wall, soil nail wall, crib wall and wire mesh) to stabilize the slope, which was impacted during the heavy winter storms of 2005. Since the award of the contract and during field review with the contractor, various items that need to be upgraded to meet the current field situations have been identified and are summarized below. Supplemental funds in the amount of \$1,140,000 are needed to include these items.

- Water Pollution Control (\$25,000): This contract was awarded during the rain season. Extra measures are being taken for temporary soil stabilization, temporary sediment control, wind erosion controls, and tracking controls. In addition, due to field conditions, the implementation of Best Management Practices (BMPs) is being impeded and require extra time.

- Aerially Deposited Lead (\$90,000): The original contract anticipated the contaminated soil to be reused as structural backfill. However, after discussions with the Department's district designer and geologists, it has been determined that the soil cannot be reused on this job. Therefore, extra efforts are necessary, such as, additional soil testing, Lead Compliance Plan, Excavation Transportation Plan, Lead Awareness Training and the cost to haul out contaminated soil.
- Traffic Control (\$195,000): The original contract anticipated the bulk of the work to be completed during daytime behind temporary railing (Type K). However, due to insufficient sight distance and existing horizontal curve just prior to work area, the connector from SB 101 to EB 10 needs to be closed to safely conduct day-to-day operations. Due to the need for additional funds, the Department anticipates holding the contractor and needs to compensate for rental of temporary railing (Type K) and temporary crash cushions. In addition, COZEEP funding is requested because of the location of the job site. This is downtown area, and we anticipate heavy traffic at high speeds.
- Highway Irrigation Systems and Planting (\$20,000): The original contract plan does not incorporate highway irrigation systems and plants to serve the soil nail wall and techno mesh.
- Location 1 – Wire Mesh (\$50,000): The original contract quantity of 770 M<sup>2</sup> was under estimated. The existing slope length was measured as 23 M, where the design computation was based on 14 M. The extra 9 M of slope length increases the total area by 490 M<sup>2</sup>.
- Import Borrow and Structure Excavation (\$540,000): The original plan to reuse the soil has been determined to be unfeasible. Therefore, all materials will need to be hauled out and new backfill material will need to be hauled in.
- Shoring (\$100,000): The access to location 2 (Tieback Wall) needs shoring to stabilize the top of embankment prior to accessing with heavy equipment. The slope at this location already failed, therefore, without knowing the exact location of the circular failure plane, it would be prudent to stabilize and shore the slope prior to access.

### **FUNDING OPTIONS**

The Department reviewed the following options:

OPTION A: Approve this request, as presented above, for \$1,140,000 to allow the contractor to perform the necessary work to stabilize the slope.

OPTION B: Eliminate all crib walls and associated item work for this project. However, the project was initiated due to failed slopes where the crib walls are design to be constructed, in conjunction with other areas. This may increase the possibility of greater slope failure in the future.

### **RECOMMENDED OPTION**

The Department recommends that this request for \$1,140,000, as presented in Option A above, be approved to allow the contractor to continue with the proposed work.

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3 \$150,000 Los Angeles 07U-LA-27 7.0	Near Glenview at Kelly's Gulph. Rebuild slope.  Supplemental funds are needed for construction claims.	4L5901 07-3761 2005-06 302-0042 302-0890 20.20.201.130 SHOPP	\$57,000 \$443,000     \$500,000	\$150,000 -     \$150,000	\$207,000 \$443,000     \$650,000



Project Location



**PROJECT DESCRIPTION**

This project is located in Los Angeles County on Route 27, at Postmile 7. This project repairs storm damage caused by high creek flows and saturated soil, which occurred during the 2005 winter storms. The creek flows eroded out the toe of a slope, which supports Route 27 at this location. The damage continued to expand with each storm, eventually eroding the soil supporting the shoulder of Route 27. As a result of the erosion, cracks appeared on the roadway. Geotechnical analysis recommended immediate repair to prevent the eventual loss of the roadway.

**FUNDING STATUS**

The contract was awarded in October 2005 for \$350,000. Prior G-12 funding was approved on January 11, 2006 for \$150,000. This funding allowed the contract to continue with the minimum identified work necessary to stabilize the upper 2/5ths of the slope.

**REASONS FOR COST INCREASE**

An additional \$150,000 in supplemental funds is necessary to complete all of the final repairs of this site. These final repairs will finish-grade the rebuilt slope, place erosion control on the repaired slope, replace oak trees "taken" during the necessary excavation and grading, move the creek back to the original alignment adjacent to the base of the (completed) rebuilt and rock-reinforced and protected slope, and finally, restore the private property (private access road, fencing & meadow) that was adjacent to, utilized and impacted during the necessary construction. This final repair work

has to be completed in order to fulfill the requirements of the necessary environmental agency permits.

**FUNDING OPTIONS**

The Department reviewed the following options:

OPTION A: Approve this request, as presented above, for \$150,000 to allow the contractor to perform the necessary work to complete the slope stabilization work.

OPTION B: Deny this request and let the claims be settled through arbitration.

**RECOMMENDED OPTION**

The Department recommends that this request for \$150,000, as presented in Option A above, be approved to allow the contractor to continue with the proposed work. If we do not continue to complete the remaining work as rapidly as possible, storm erosion of the remaining unprotected portion of the damaged slope will continue and threaten to collapse the roadway supported by this slope. Should this occur, total repair costs and long-term disruption of the highway will greatly increase.