

State of California
Business, Transportation and Housing Agency
Department of Transportation

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HIGHWAY FINANCIAL MATTERS
Project Greater Than 120%
Resolution: FP-01-07
CTC Meeting: July 11-12, 2001

Agenda Item: 2.5d

Original Signed By _____

W. J. EVANS
Chief Financial Officer
July 1, 2001

**ALLOCATIONS FOR PROJECTS WITH VALUE GREATER THAN 120 PERCENT OF
PROGRAMMED AMOUNT**

RESOLUTION FP-01-07

RECOMMENDATION

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

FINANCIAL RESOLUTION

Resolved, that \$66,382,000 be allocated from Budget Act Items 2660-301-0042 and 2660-301-0890, Budget Act of 2000 for the five (5) projects on the attached sheets.

The Department has complied with the National Environmental Policy Act and the California Environmental Quality Act requirements in preparing these projects.

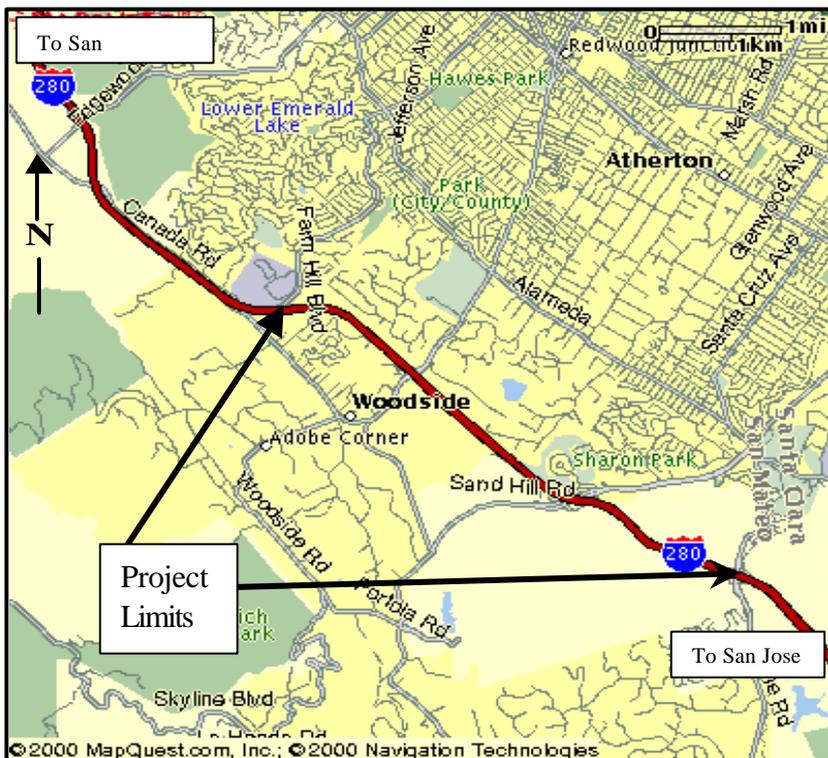
These major construction projects proposed for funding are included in the State Highway Operation and Protection Program (SHOPP).

SUMMARY AND CONCLUSIONS

This resolution allocates State and Federal funds of \$66,382,000 for five (5) new major construction projects. These projects have a total cost greater than 120 percent of the programmed amount.

The additional funds of \$18,243,000 requested for these SHOPP projects will come from SHOPP savings.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Project Support Expenditures	EA (PPNO) Program (Prog Year) Prog Amount	Budget Year Item # Program Codes	State Federal Total Amount
1 \$7,403,000 Department of Transportation San Mateo 04N-SM-280 R0.0/R5.6	Near Woodside from Santa Clara County Line to Farm Hill Boulevard. Rehabilitate roadway. Support Expenditures to Date: \$752,328	135991 04-0721A SHOPP/ 00-01 \$3,152,000	2001-02 301-0042 301-0890 20.20.201.120	\$625,000 \$6,778,000 \$7,403,000



PROJECT DESCRIPTION

The project is on Route 280 in San Mateo County, in Atherton, Menlo Park and Woodside, from the Santa Clara County Line to Farm Hill Boulevard. The project will rehabilitate pavement at three locations over a 5.6-mile, 8-lane section of freeway.

FUNDING STATUS

The project is programmed in the 2000 SHOPP for \$3,152,000 for construction in the 2000/01 Fiscal Year. This request for \$7,403,000 is an increase of 135% over the programmed amount for this project.

BACKGROUND

The project will rehabilitate pavement by repairing and replacing damaged Portland Cement Concrete (PCC) slabs, repairing longitudinal joints between PCC slabs and Asphalt Concrete (AC) shoulders, grinding PCC slabs, replacing existing PCC approach slabs, and overlaying a short section of AC pavement with a new AC riding surface.

The existing pavement is in an advanced state of deterioration. There have not been any major rehabilitation projects along this section of freeway since it was originally constructed in the 1970s.

REASON FOR INCREASE

The Project Scope Summary Report (PSSR) for this project was approved in August 1993, but due to highway funding limitations in 1994, the project was postponed. Later, when a funding source was identified, the project was programmed in the 1996 SHOPP for construction in the 2000/2001 Fiscal Year for \$3,152,000. A field review during design revealed that further deterioration of the roadway had occurred, so a supplemental PSSR was approved in March 2001. The revised estimate is now \$7,403,000.

The items for Replacing Concrete Pavement and Grinding Existing Pavement have increased by \$2,348,000 due to the continued deterioration of the pavement, newly identified broken slabs, and recently approved environmental regulations relating to disposal of pavement grindings.

The pavement rehabilitation strategy has been modified as part of a pilot study to reduce noise levels and analyze maintenance impacts of the new pavement surfaces. Different strategies will be evaluated at each of the three locations where PCC slabs will be removed and replaced. The pilot study calls for using a conventional pavement grinding method at one location, using a micro grinding method at another location and placing an open graded rubberized AC riding surface at a third location. An additional \$1,303,000 is needed to implement the pilot study.

An additional \$600,000 in traffic control and Construction Zones Enhanced Enforcement Program (COZEEP) is needed due to higher volumes of traffic in this area and newer, more stringent, traffic control requirements.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$7,403,000 to allow this project to be advertised.

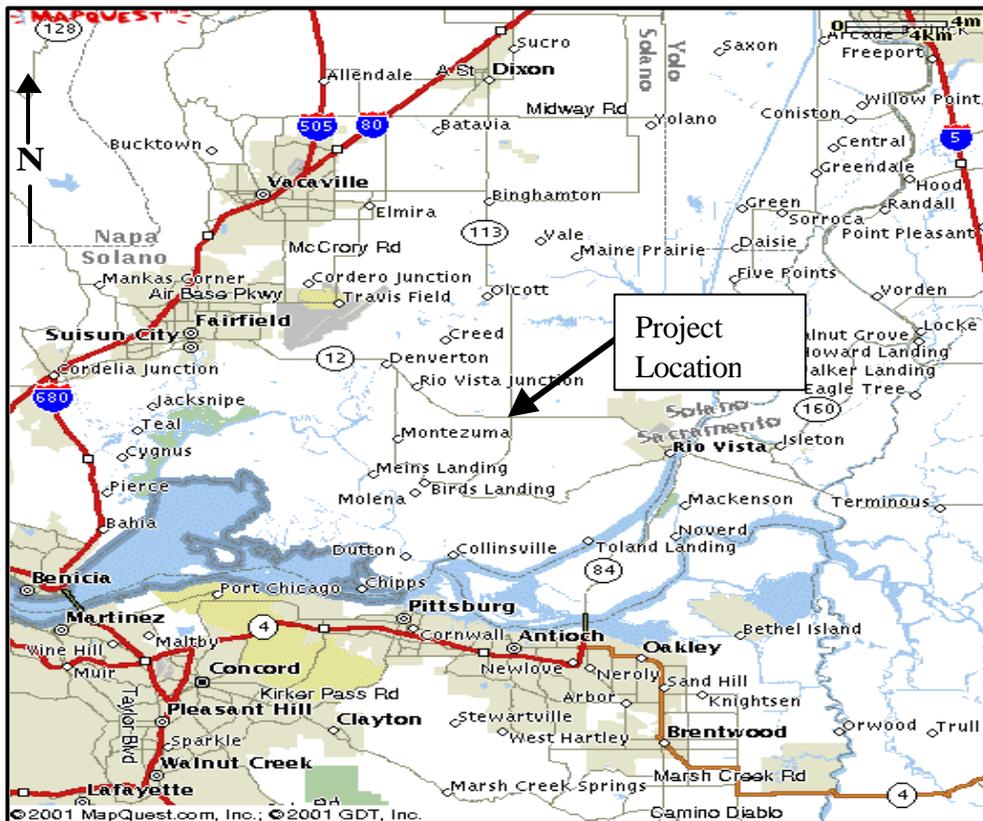
OPTION B: Deny this request and direct the Department to redesign the project to bring the cost within the programmed amount.

The Department considered this option. The project as submitted provides the best solution for this section of freeway. The pavement is in an advanced state of deterioration that requires rehabilitation and the pilot program will be used to test the noise reductions and maintenance impacts on the rehabilitated pavement.

RECOMMENDED OPTION

The Department recommends that this request for \$7,403,000, as presented in OPTION A above, be approved to allow this project to be advertised.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Project Support Expenditures	EA (PPNO) Program (Prog Year) Prog Amount	Budget Year Item # Program Codes	State Federal Total Amount
2 \$1,850,000 Department of Transportation Solano 04N-Sol-113 0.1	Near Rio Vista at Round Hill Creek Bridge. Replace bridge (scour). Support Expenditures to Date: \$718,895	4C0201 04-5501A SHOPP/ 00-01 \$865,000	2001-02 301-0042 301-0890 20.20.201.111	\$213,000 \$1,637,000 \$1,850,000



PROJECT DESCRIPTION

The project is on Route 113 in Solano County, near Rio Vista, at Round Hill Creek Bridge. The project will replace the Round Hill Creek Bridge.

FUNDING STATUS

The project is programmed in the 2000 SHOPP for \$865,000 for construction in the 2000/01 Fiscal Year. This request for \$1,850,000 is an increase of 114% over the programmed amount for this project.

BACKGROUND

The project site is located just north of the Route 12/113 intersection. The project proposes to remove the existing scour critical Round Hill Creek Bridge and replace it with a new structure that has a higher profile than the existing bridge. The bridge approaches and roadway profile will be modified to meet the bridge surface.

The existing bridge has a single 26'-7" span over Round Hill Creek and is founded on spread footings with no pilings. The bridge has been rated as scour critical, and the Department is concerned that exposure or undermining of bridge pier and abutment foundations from the erosive action of flowing water could result in structural failure of the bridge. Because the creek is wider both upstream and downstream from the bridge, the contraction at the bridge opening increases bridge scour at the abutments. The existing bridge was constructed in 1934 and widened in 1965.

To limit future scour and erosion after the bridge is replaced, the project will construct retaining walls on the downstream side of the bridge, widen and reshape the creek channel underneath the bridge, and construct rock slope protection along the banks of the creek. The new structure will have a higher profile and a longer span over Round Hill Creek.

REASON FOR INCREASE

When the bridge Advance Planning Study (APS) for this project was prepared, the strategy called for replacing the existing Round Hill Creek Bridge with a new 34-foot long bridge. After further hydraulic data became available and analyzed, a Hydraulics Report was prepared that recommended the bridge length be increased to 42 feet, the bridge profile be raised and the foundations for the abutments be placed at a lower elevation. An additional \$425,000 is needed to comply with the recommendations to protect against future scour damage to the bridge foundations.

After Round Hill Creek flows under the bridge, the creek alters course and runs parallel to Route 113. A recent project added a right-turn lane from southbound Route 113 to westbound Route 12 that widened both sides of the roadway and placed the edge of the roadway closer to the creek. A retaining wall was added along the northbound shoulder adjacent to the new bridge in this project to protect the recently widened roadway from high storm flows which might otherwise undermine the pavement and erode the fill behind the abutments of the bridge. An additional \$560,000 is needed to construct the retaining wall.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$1,850,000 to allow this project to be advertised.

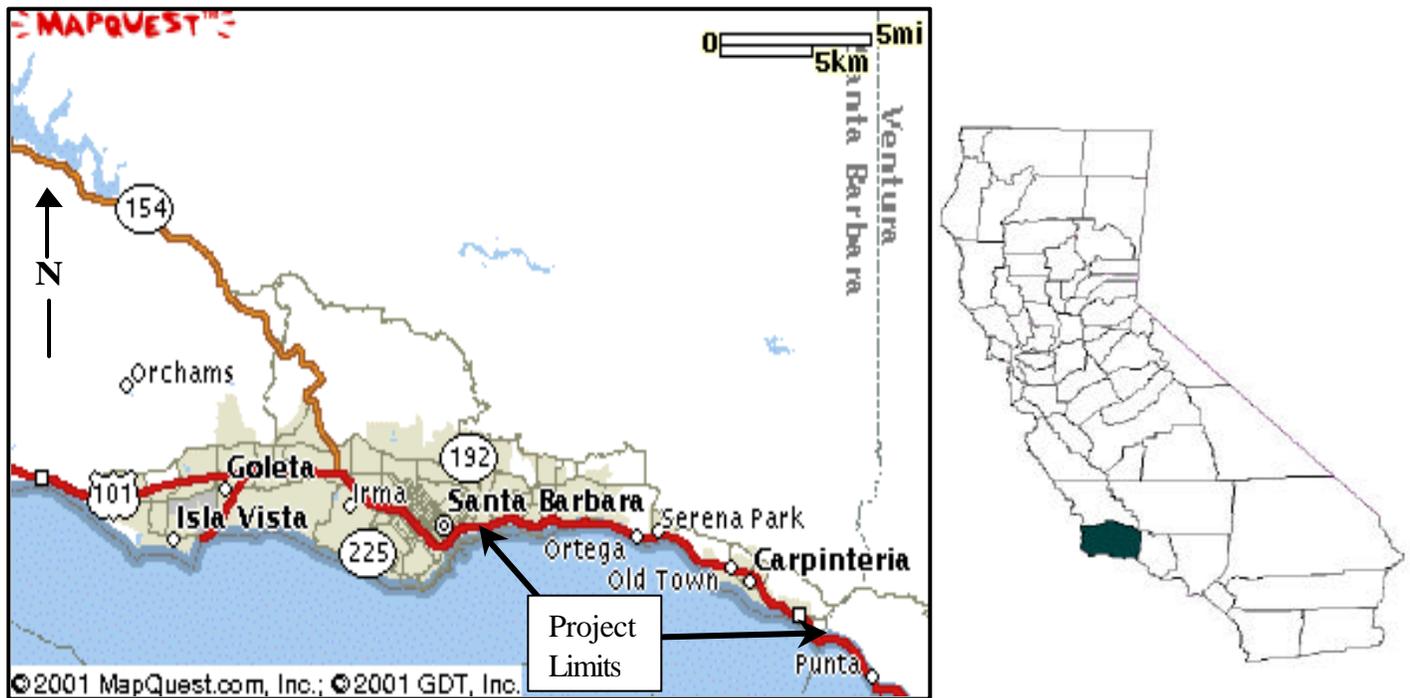
OPTION B: Deny this request and direct the Department to redesign the project to bring the cost within the programmed amount.

The Department considered this option. The project as submitted provides the best solution for this location. Delaying the project could jeopardize this scour critical structure.

RECOMMENDED OPTION

The Department recommends that this request for \$1,850,000, as presented in OPTION A above, be approved to allow this project to be advertised.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Project Support Expenditures	EA (PPNO) Program (Prog Year) Prog Amount	Budget Year Item # Program Codes	State Federal Total Amount
3 \$17,900,000 Department of Transportation Santa Barbara 05N-SB-101 R0.0/R12.7	Near Carpinteria and Santa Barbara from Ventura County Line to Milpas Street. Rehabilitate roadway. (This project will be split as \$17,300,000 into Pavement Rehabilitation, EA 448311; and \$600,000 into Public Awareness Campaign, EA 448321).	448301 05-0483 SHOPP/ 00-01 \$13,800,000	2001-02 301-0042 301-0890 20.20.201.120	\$2,054,000 \$15,846,000 \$17,900,000
Support Expenditures to Date: \$2,094,561				



PROJECT DESCRIPTION

The project is on Route 101 in Santa Barbara County, near Carpinteria and Santa Barbara, from near the Ventura County Line to Milpas Street. The project will rehabilitate the mainline pavement and implement a Public Awareness Campaign.

FUNDING STATUS

The project is programmed in the 2000 SHOPP for \$13,800,000 for construction in the 2000/01 Fiscal Year. This request for \$17,900,000 is an increase of 30% over the programmed amount for this project.

BACKGROUND

The original Project Scope Summary Report (PSSR) for this project was approved in 1996. This section of highway had not been improved in several decades awaiting completion of the Santa Barbara Six-Lane Project. In the early 1990s, the Six-Lane Project was downscoped into several operation improvement projects and this pavement rehabilitation project. This project will grind the existing mainline Portland Cement Concrete (PCC) pavement, replace Asphalt Concrete (AC) shoulders and grind and replace AC pavement at ramp locations.

REASON FOR INCREASE

The Santa Barbara and Carpinteria area weather consists primarily of cool, moist mornings and evenings with warm, dry afternoons. Lime treatment, which enhances the ability of asphalt concrete aggregate to adhere to the pavement in climates subject to moist/dry cycles, was specified to increase the life of the pavement. The use of lime treatment for asphalt concrete and higher oil prices have resulted in a cost increase of \$2,025,000 for the Asphalt Concrete (Type B) item.

To perform the rehabilitation work, 48 ramps will be closed at some time during the life of the project. Measures have been taken to reduce the impacts of traffic delays on the travelling public by limiting the number of ramps closed at one time, utilizing changeable message signs, and performing a portion of the work at night. The sensitivity of closing several ramps along this highly congested four-lane section, the noise associated with the construction of the project, and the need to provide the community with timely information requires a formal Public Awareness Campaign. An additional \$600,000 is needed for the Public Awareness Campaign.

Additional traffic control and Construction Zone Enhancement Enforcement Program (COZEEP) patrols are needed. An additional \$675,000 is needed for traffic controls.

Soil testing revealed high levels of Aerially Deposited Lead (ADL) in the shoulder, ramp and median areas that require removal and disposal in a facility capable of handling lead contaminated soil. An additional \$600,000 is needed to remove and dispose of the ADL that is located in the shoulder, ramp and median areas.

Traffic counter loops that are used to monitor traffic at each ramp were to be placed in the AC riding surface as part of a future project. To minimize the impacts of additional ramp closures on the travelling public, the traffic counter loops will be installed in the pavement as part of this project when the riding surface is replaced. An additional \$200,000 is needed to place the counter loops.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$17,900,000 to allow this project to be advertised.

OPTION B: Deny this request and direct the Department to redesign the project to bring the cost within the programmed amount.

The Department considered this option. The project as submitted provides the best solution for this section of highway. The pavement is in an advanced state of deterioration that requires rehabilitation.

RECOMMENDED OPTION

The Department recommends that this request for \$17,900,000, as presented in OPTION A above, be approved to allow this project to be advertised.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Project Support Expenditures	EA (PPNO) Program (Prog Year) Prog Amount	Budget Year Item # Program Codes	State Federal Total Amount
4 \$38,000,000 Department of Transportation Los Angeles 07S-LA-5 R53.7	In Santa Clarita at Santa Clara River. Replace bridge (scour). (Contribution from other sources: \$2,600,000. Project will be combined with EA 187001 under EA 1760U1 for construction). Support Expenditures to Date: \$370,275	176001 07-2087 SHOPP/ 00-01 \$29,476,000	2001-02 301-0042 301-0890 20.20.201.111	\$3,204,000 \$34,796,000 \$38,000,000



PROJECT DESCRIPTION

The project is on Route 5 in Los Angeles County, in Santa Clarita, north of the Valencia Boulevard Overcrossing. The project will replace two bridges with one bridge.

FUNDING STATUS

The project is programmed in the 2000 SHOPP for \$29,476,000 for construction in the 2000/01 Fiscal Year. The Newhall Land Company, a private developer, is also contributing \$2,600,000 to the project. This request for \$38,000,000 is an increase of 29% over the programmed amount for this project.

BACKGROUND

The Santa Clara River Bridge was originally built in 1964 with separate structures for northbound and southbound traffic. Each of these bridges has been rated as scour critical, requiring replacement of both bridges. Several scour mitigation projects have been implemented in the past but each has proven to be ineffective at controlling scour. Recently, an interim project to protect the existing bridge piers has been completed to prevent further degradation of the existing foundations. The new Santa Clara River Bridge will

have eight 3.6-meter wide mixed flow lanes, an 11.0-meter wide decked median, a 3.0-meter wide southbound shoulder and a 2.4-meter wide northbound shoulder. The extra width for the southbound shoulder and the decked median are needed to accommodate the bridge construction staging. The current configuration of this segment has three lanes of traffic in each direction.

REASON FOR INCREASE

Traffic studies have shown that the volume of truck and automobile traffic has increased at a rapid rate due to economic growth along the freeway corridor and new housing developments opening in the Santa Clarita area. As a result of the increasing number of vehicles utilizing this portion of Route 5 and the potential for traffic delays associated with construction, revisions to the project have been made to mitigate traffic delays. Because there is no suitable detour away from the project site during construction of the bridge, the bridge will be constructed in stages to maintain three lanes of traffic in both directions of travel. To maintain three lanes of traffic in both directions during construction, four bridges on the corridor are to be widened in the southbound direction and the Traffic Management Plan (TMP) has been modified to include such items as Freeway Service Patrol. An additional \$8,524,000 is needed to stage construction of the bridge to maintain three lanes of traffic in each direction during construction and minimize the construction impacts on the travelling public.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$38,000,000 to allow this project to be advertised.

OPTION B: Deny this request and direct the Department to redesign the project to bring the cost within the programmed amount.

The Department considered this option. The project as submitted provides the best solution for this location. Delaying the project could jeopardize this scour critical structure.

RECOMMENDED OPTION

The Department recommends that this request for \$38,000,000, as presented in OPTION A above, be approved to allow this project to be advertised.

Project # Allocation Amount Recipient County Dist-Co-Rte Postmile	Location Project Description Project Support Expenditures	EA (PPNO) Program (Prog Year) Prog Amount	Budget Year Item # Program Codes	State Federal Total Amount
5 \$1,229,000 Department of Transportation Stanislaus 10N-Sta-132 6.1/6.6	Near Modesto at Paradise and Gates Roads. Improve intersection. Support Expenditures to Date: \$345,952	1A6601 10-9763 SHOPP/ 01-02 \$846,000	2001-02 301-0042 301-0890 20.20.201.010	\$123,000 \$1,106,000 \$1,229,000



PROJECT DESCRIPTION

The project is on Route 132 in Stanislaus County, near Modesto, at the intersection of Paradise Road and Gates Road. The project will improve the intersection by constructing right turn lanes, widening and paving shoulders and lengthening the left turn lanes.

FUNDING STATUS

The project is programmed in the 2000 SHOPP for \$846,000 for construction in the 2001/02 Fiscal Year. This request for \$1,229,000 is an increase of 45% over the programmed amount for this project..

BACKGROUND

The project is located just west of Modesto in a flat rural farmland setting. This segment of Route 132 varies from a two-lane roadway to a three-lane roadway with unpaved shoulders. It connects Route 5 in the west with Modesto and Route 99 in the east. Paradise Road intersects Route 132 from the south while Gates Road intersects Route 132 directly across from Paradise Road from the north.

REASON FOR INCREASE

The majority of the cost increase can be attributed to a need for additional traffic controls that were not identified in the Project Study Report (PSR). An additional \$250,000 is needed to provide additional traffic control through the project site.

Asphalt Concrete (AC) and Roadway Excavation quantities have increased from the estimate in the PSR. Additional AC and roadway excavation is needed to construct the temporary detour through the project site, to extend the limits of a drainage ditch and to construct a Maintenance Vehicle Pullout. An additional \$133,000 is needed to adjust the quantities for Asphalt Concrete and Roadway Excavation and to update the unit costs of each item.

FUNDING OPTIONS

OPTION A: Approve this request as presented above for \$1,229,000 to allow this project to be advertised.

OPTION B: Deny this request and direct the Department to redesign the project to bring the cost within the programmed amount.

The Department considered this option. This section of highway has a higher accident rate per mile than comparable types of facilities. The project as submitted provides the best solution for this section of highway.

RECOMMENDED OPTION

The Department recommends that this request for \$1,229,000, as presented in OPTION A above, be approved to allow this project to be advertised.