

TO: TOWN COUNCIL

FROM: TOWN MANAGER 

RE: I-80 BRIDGE RAISING STRATEGIES
OWNERS

ISSUE

CalTrans is planning a major work along I-80 to raise a number of bridges three of which are in Loomis and given where the planning process is it would be prudent to consider a Town response to this planning and be prepared to respond when the environmental document is released in July 2010.

RECOMMENDATION

Discuss and decide on a response to the CalTrans bridge raising planning process. There is still plenty of time to craft a response and prepare for a final response after the environmental document is reviewed.

MONEY

Money issues mainly involve Town businesses that could be adversely affected by the temporary closing of the Horseshoe Bar bridge. It is unknown what that affect would be. The Town may incur legal costs if special legal counsel is needed. That cost is not expected to exceed \$25,000 unless the matter goes to court.

CEQA

There are no CEQA issues at this time. CalTrans is preparing documents to address both the California Environmental Quality Act (CEQA) and because Federal money is involved, the National Environmental Protection Act (NEPA).

DISCUSSION

CalTrans has been planning to raise bridges along I-80 for some time. The planning will result in a environmental document that is expected to be released in July 2010. At the present time the attached information has been provided, most recently at a workshop in Loomis in March. Council is asked to start discussing the project and developing a response. It is not expected that a response will be developed at tonight's meeting but whatever information comes about can be submitted to CalTrans. The official response will be done in the course of the CEQA document review and staff would suggest that Council may wish to retain special legal counsel to assist in the endeavor in case the matter has to be taken to court.

In short the CalTrans project calls for raising bridges along I-80 to allow for trucks with large loads to pass under the bridges. In the case of Loomis there are three bridges (Brace, Horseshoe Bar Rd and King Rd) but the work will not affect more than one bridge at a time. Ideas that have been mentioned in the course of recent discussions on the bridge closing (not in priority order) follow. State and Federal elected officials

representing this area may be enlisted to help in obtaining additional funds needed to address impacts:

1. LOWER THE ROAD BENEATH THE HORSESHOE BAR ROAD BRIDGE INSTEAD OF RAISING THE BRIDGE AND THEREBY KEEP THE BRIDGE OPEN FOR USE. This would require a phased construction with a leapfrogging of construction around the on/off ramps and final excavation by the on/off ramps immediately before the entire project is paved to minimize the amount of time the ramps would be closed like recently done at Sunset Blvd and Route 65. This would cost more (\$3.7 million instead of \$2.2 million) but would not result in closing the Horseshoe Bar overpass thereby helping Loomis businesses, particularly those at the Raley's Center. It would cause more congestion on I-80 during construction due to the way phasing would work. The on/off ramps could each be closed for up to a week. The drainage from the lowered road would need to be engineered to drain off into the "unnamed creek" and pond by Heritage Park (as I-80 presently does about 150 feet to the west). CalTrans may have other line items that could contribute to funding the added cost associated with economic impacts of projects.
2. EXPAND THE BRIDGES TO INCLUDE BETTER, SAFER SIDEWALKS, SAFER BIKE LANES AND FOR ELECTRIC CAR LANES. Could be accomplished by a cantilever construction off the side of the existing bridge. CalTrans would not be interested in constructing a new bridge for these improvements. CalTrans also is open to Town input on landscaping around the bridge work to save trees as much as possible, and design the bridges to include architectural features to help provide some unique features to highlight Loomis (e.g. surface treatments desired by the Town, adding the Town Seal, eggplants and/or horses on chain link fence that will be installed on the side where there is pedestrian access. CalTrans may have other line items that could contribute to funding the added cost associated with improving safety of projects.
3. EXPAND THE HORSESHOE BAR ROAD BRIDGE TO 3 OR 4 lanes AND THUS KEEP THE BRIDGE OPEN AS WAS DONE ON THE SIERRA COLLEGE BLVD BRIDGE IMPROVEMENTS. This would enable CalTrans to keep a bridge open by use of the new lane(s) once constructed while the existing bridge is raised. CalTrans may have other line items that could contribute to funding the added cost associated with the economic impacts of projects.
4. ELIMINATE THE BRACE ROAD BRIDGE AND PUT THE MONEY TO THE HORSESHOE BAR BRIDGE FOR SUCH THINGS AS SIDEWALK, BIKE AND TRAVEL LANE ENHANCEMENTS. There may not be much money remaining after the cost of removal is factored in and this idea would require a separate environmental report that may not be accomplished in the timeframe remaining. To accommodate traffic to the southeast of I-80, a connection between Horseshoe Bar Road and Brace Road may be needed to provide an alternate

route so Horseshoe Bar Road between Laird and I-80 would not need to be upgraded.

5. CONSTRUCT THE WALNUT TO BRACE CONNECTION (THROUGH THE HERITAGE PARK SUBDIVISION) BY THE TIME OF THE BRIDGE RAISINGS. This could provide a better alternate route and help the Town in its internal circulation.
6. CONSTRUCT THE DOC BARNES RD EXTENSION BETWEEN HORSEHOE BAR RD AND KIND RD BY THE TIME OF THE BRIDGE RAISINGS. This could provide a better alternate route that will benefit businesses on Horseshoe Bar Rd, help the Town in its internal circulation, and assist in economic development by helping property owners along the extension who have been seeking to develop their property.
7. EXPLORE CONSTRUCTING ON/OFF RAMPS WESTBOUND AT KING ROAD AT THE TIME THAT BRIDGE IS RAISED. If this is one of the last bridges raised there may be enough time to get the necessary studies, plans and specifications.
8. EXPLORE THE POSSIBILITY OF CALTRANS PLANTING MITIGATION TREES IN HORSESHOE BAR ROAD INTERCHANGE OPEN SPACES. Town would need to commit to on-going maintenance of the trees if CalTrans installs irrigation water and involves Town in the selection of trees that require minimum maintenance.

What's being planned on Interstate 80?



Interstate 80 Vertical Clearance Project

The California Department of Transportation (Caltrans) is developing a project to increase the vertical clearance of eight overcrossings (OC) and one railroad underpass (UP) on Interstate 80 (I-80) in Placer County. The overall goal of this project is to bring clearance up to the current standard of 16 feet 6 inches. Additional work includes new bridge rails, seismic upgrades, improved curb ramps, guardrail replacement and drainage facility extensions.

Insufficient mainline vertical clearance impedes commerce and national defense needs on I-80 in Placer County. The purpose of this project is to enable over height loads to continue along the I-80 corridor.

The Nine Selected Structures Are:

Brace Road OC	(PM 8.13)
Horseshoe Bar OC	(PM 8.72)
King Road OC	(PM 9.53)
Penryn Road OC	(PM 10.35)
Gilardi Road OC	(PM 12.30)
Newcastle Road OC	(PM 13.81)
Newcastle UP	(PM 13.99)
Weimar Cross Road OC	(PM 29.32)
Magra OC	(PM 37.78)

Tentative Project Schedule

Construction to begin: Spring 2013

Project completion: Winter 2014

Project Cost

The construction cost is estimated at \$27 million.

What is Caltrans Doing to Keep the Community Informed?

Caltrans will be holding several open houses to inform the affected communities about the project, the potential traffic impacts during construction and to establish an open communication between the Department and residents.

Who Do I Contact for More Information?

For more information regarding the vertical clearance project, please contact Rochelle Jenkins, Public Information Officer at (530) 634-7640 or e-mail rochelle_jenkins@dot.ca.gov.

For individuals with sensory disabilities, this document is available in Braille, large print, audiocassette or computer disk. To obtain a copy in one of these alternate formats, please call or write: Mark Dinger, Public Information Officer, Caltrans – District 3, 703 B Street, Marysville, CA 95901 (530) 741-4572 (voice) or (530) 741-4509 (TTY).

How the Structures Will be Raised

The existing eight overcrossing structures will be raised by installing a temporary support system, cutting the existing columns, and raising the bridge approximately 2 feet using hydraulic jacks. Reinforcing steel will then be spliced at the bridge supports before the concrete is added. The roadway approaches will be rebuilt to meet the taller structures.

How the Project Impacts Local Traffic

Local roads crossing the structures will be closed to traffic for approximately two months at each location to perform the work. Most freeway ramps will remain open during construction.

Designated detour routes will be clearly signed. Work at overcrossings will be staggered so no adjacent structures are closed at the same time.

How the Project Impacts I-80 Traffic

During the jacking operation at the overcrossing structures, both directions of I-80 must be closed for an estimated period of four to six hours at each location while the jacks are moving the bridge. I-80 traffic will be controlled by either using CHP traffic breaks, detoured using on and off ramps, or detoured using local roads.

Limited alternate detour routes for the Magra Overcrossing structure may require complete I-80 closures for several hours.

At the Newcastle railroad underpass, the westbound lanes of I-80 will be lowered during shoulder and traffic lane closure staging to excavate and rebuild the roadway at a lower elevation.

ARNOLD SCHWARZENEGGER
Governor

DALE E. BONNER
Secretary, Business, Transportation and Housing Agency

RANDELL H. IWASAKI
Director, Department of Transportation

JODY JONES
District 3 Director, Department of Transportation

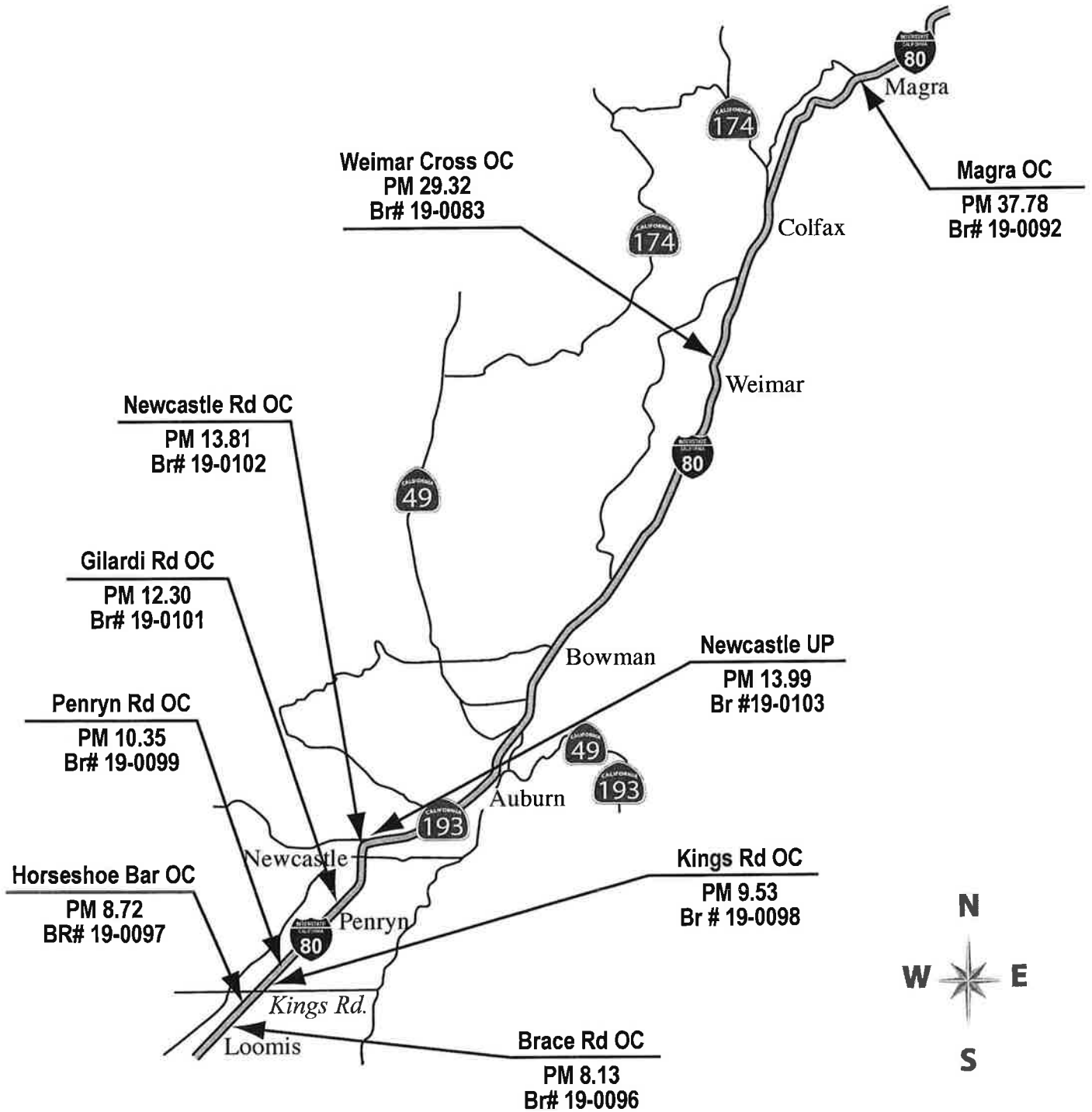


INTERSTATE 80



Vertical Clearance Project

Interstate 80 Vertical Clearance Project



INTERSTATE 80 VERTICAL CLEARANCE PROJECT

Frequently Asked Questions

How will the structures be raised?

The existing eight overcrossing structures will be raised by installing a temporary support system, cutting the existing columns and raising the bridge approximately 2 feet using hydraulic jacks. Reinforcing steel will then be spliced at the bridge supports and abutments before the concrete is added. The roadway approaches will be rebuilt to meet the taller structures.

How does the Project Impact Local Traffic?

Local roads crossing the structures will be closed to traffic for approximately two months at each location to perform the work. Most freeway ramps will remain open and designated detour routes will be clearly signed. Work at overcrossings will be staggered so no adjacent structures are closed at the same time. Contractor incentive and disincentive payments are being considered to encourage on-time or early project completion.

How Does the Project Impact Interstate 80 Traffic?

During the jacking operation at the overcrossing structures, both directions of Interstate 80 (I-80) must be closed for an estimated period of two nights at each location while the jacks are in operation. I-80 traffic will be controlled by either using CHP traffic breaks, detoured using on and offramps, or detoured using local roads.

Limited alternate detour routes for the Magra Overcrossing structure will require complete I-80 closures for several hours during low volume nighttime hours.

At the Newcastle railroad underpass, the westbound lanes of I-80 will be lowered during shoulder and traffic lane closure staging to excavate and rebuild the roadway at a lower elevation.

Why doesn't Caltrans Lower I-80 Instead of Raising the Local Road Overcrossings?

Approximate traffic volumes on Route I-80 are many times higher than the traffic volumes on the local overcrossing structures. Consequently, accumulated traffic delays and road user costs are much larger for lowering Route I-80. Furthermore, construction costs to lower I-80 are greater than costs to raise the structures.

How Does the Existing Insufficient I-80 Vertical Clearance Impede Commerce?

Special permits are issued to vehicles over standard height. Approximately 3,000 special over-height trucks were issued permits in the past year for this section of I-80 through Placer County. The alternate detour route for some of these vehicles is as much as 350 miles in length depending on vehicle size.

How is the Project Funded?

The projected construction cost is estimated at \$27 million. The project is funded by Federal and State programs to ensure standard vertical clearances on the Department of Defense Rural and Single Interstate Routing System. I-80 is a designated corridor for goods movement as well as military defense emergency movement.



WHY RAISING THE OVERCROSSING IS BETTER FOR LOOMIS

Raising the Horseshoe Bar Road overcrossing is better for the Loomis community since it allows the off and on ramps to remain open during construction. Open ramps, along with signed local detours will promote stable local traffic circulation during the approximately two month period that the overcrossing is closed.

Lowering Interstate 80 alternative will require three construction stages. Duration of the lowering operation is approximately two months. The structural section under the overcrossing would be removed, requiring excavation on the order of five feet. The limits of excavation would extend out about seven hundred feet from each side of the structure to allow for a smooth pavement transition. .Stage One Construction: westbound I-80 reduced from 3 – 12' lanes with shoulders, to 2 – 11' lanes and no shoulders. Westbound off ramp is closed. Time to complete this stage is about 2.5 weeks. Stage Two Construction: would construct median area and partial westbound and eastbound lanes. Both westbound and eastbound I-80 reduced to 2 – 11' lanes with limited shoulders. All ramps are open. Time to complete this stage is 3 weeks. Stage Three Construction: has the eastbound I-80 reduced to 2 11' lanes and no shoulders. Eastbound off ramp is closed. Time to complete this stage is about 2.5 weeks.

Due to the reduction of I-80 capacity within the construction work zone, the westbound direction is expected to form significant queues between 9 am to 9 pm Sunday thru Thursday and from 10 am to 11 pm on Friday and Saturday. In the eastbound direction significant queues will form between 1 pm to midnight from Sunday thru Thursday and from noon to midnight on Friday and Saturday.

Closed off ramps during stage construction along with traffic queues will have a negative affect on mobility and local traffic circulation. It is expected that local I-80 commuters will seek their own local routes to avoid recurring I-80 traffic congestion through the construction zone. Caltrans also expects that I-80 vehicles with onboard GPS will use alternative local routes, thus avoiding construction zone traffic congestion on I-80.

Caltrans believes that the overcrossing raising construction techniques minimizes the overall delays to local traffic during commuting hours and provides for an easy to understand and consistent local detour route.

Another concern is access of emergency personnel to the work zone in case of accident. During periods of I-80 work zone congestion, one or both directions of I-80 may be temporarily closed to allow emergency vehicles access.

By not lowering the pavement a sag location, under the structure, is eliminated, thus preventing a potentially flooding problem which would create safety and operational issues on I-80.

No two adjoining structures will be closed at a time allowing for easier local detour access, along with detour signage and public outreach during construction will help to minimize local traffic circulation disruptions.

Interstate 80 Vertical Clearance Project HORSESHOE BAR OVERCROSSING POTENTIAL DETOUR ROUTES DURING CONSTRUCTION



LONG-TERM CLOSURES FOR LOCAL TRAFFIC

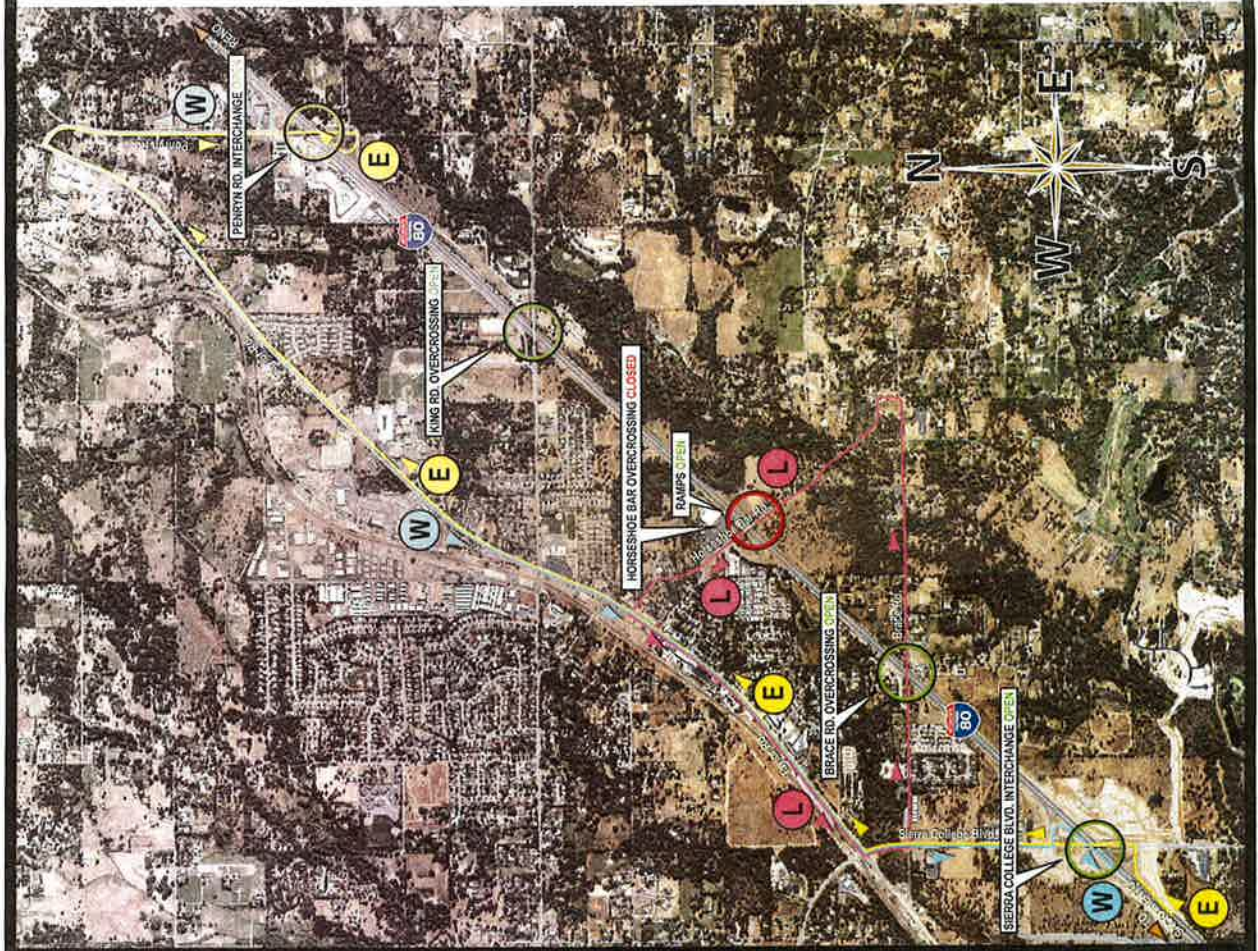
L Detour 1 - Horseshoe Bar OC
Length - Approximately 3.3 miles
From Horseshoe Bar Rd. take Taylor Rd. southwest towards Sierra College Blvd.
Take Sierra College Blvd. south towards Brace Rd.
Take Brace Rd. east towards Horseshoe Bar Rd.

EASTBOUND I-80

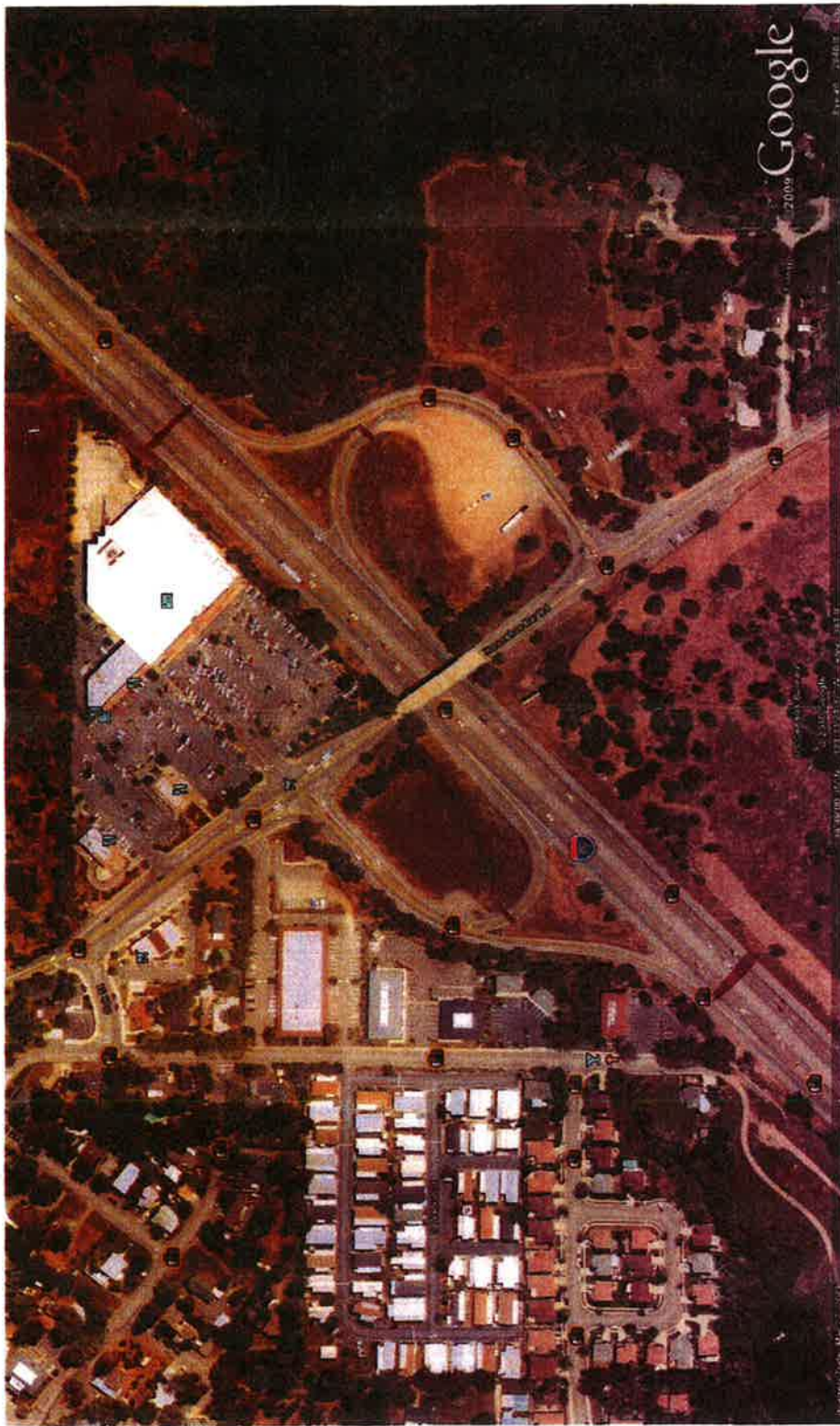
E Detour 1 - Eastbound Interstate 80 Traffic
Length - Approximately 5.1 miles
Take the Sierra College Blvd off-ramp towards Sierra College Blvd.
Take Sierra College Blvd. north towards Taylor Rd.
Take Taylor Rd. northeast towards Penryn Rd. Interchange.
Take Penryn Rd. south towards the Penryn Rd. Interchange.
Head east on Interstate 80 at the Penryn Rd. Interchange.

WESTBOUND I-80

W Detour 1 - Westbound Interstate 80 Traffic
Length - Approximately 5.1 miles
Take the Penryn Rd. off-ramp towards Penryn Rd.
Take Penryn Rd. north towards Taylor Rd. Interchange.
Take Taylor Rd. southwest towards Sierra College Blvd.
Take Sierra College Blvd. south towards the Sierra College Blvd. Interchange.
Head west on Interstate 80 at the Sierra College Blvd. Interchange.



3/26/10



1372'

Alternative to Lower I-80 at Horseshoe Bar Rd Over-Crossing:

- Proposed Conform lines shown in Red.
- I-80 reconstruction length = 1372'
- I-80 lowering done using 3 traffic stages.
- I-80 off-ramp closed in stage 1. I-80 off-ramp closed in stage 2. On-ramps remain open all stages.



03	03	80	8.13/37.9	03
PROJECT NO.	COUNTY	ROUTE	TOTAL MILES	SHEET NO.
03	Plata	80	8.13/37.9	03
REGISTERED CIVIL ENGINEER DATE				
PLANS APPROVAL DATE				
THE STATE OF CALIFORNIA BY ITS OFFICERS IN WITNESS WHEREOF I HAVE HEREBY SET MY HAND AND SEAL OF OFFICE AT SACRAMENTO CALIFORNIA THIS 13TH DAY OF SEPTEMBER 2010				

Alternative to raise Horseshoe Bar
 Overcrossing.
 Local road conforms
 Slope.

LAYOUT

SCALE: 1"=50'

L-2

CP M 6.727

3/6/10