

**FOR CONTRACT NO.: 04-4S0304**

# **INFORMATION HANDOUT**

## **WATER QUALITY**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
NORTH COAST REGION**

401Database No.: 02-28-C0388

## **PERMITS**

**STATE OF CALIFORNIA  
DEPARTMENT OF FISH AND GAME**

NOTIFICATION NO. 1600-2011-0364-R3

**UNITED STATES ARMY CORPS OF ENGINEERS**

NON-REPORTING NATIONWIDE 404 PERMIT

## **AGREEMENTS**

**CALIFORNIA DEPARTMENT OF FISH AND GAME**

NOTIFICATION NO. 1600-2011-0364-R3

## **MATERIALS INFORMATION**

**GEOTECHNICAL REPORTS**

MARCH 30, 2011 and JUNE 15, 2011

**ROUTE: 04-NAP-128-10.2/10.4**

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**San Francisco Bay Regional Water Quality Control Board**

April 26, 2012  
CIWQS Place No. 779425  
401 Database No.: 02-28-C0388

*Sent via electronic mail--no hard copy to follow*

California Department of Transportation  
Attn: Mr. Ahmad Rahimi  
[Ahmad\\_Rahimi@dot.ca.gov](mailto:Ahmad_Rahimi@dot.ca.gov)  
111 Grand Ave.  
Oakland, CA 94612-3717

**Subject: Water Quality Certification for the Napa State Route 128 Sheet Pile Wall and Culvert Replacement Project, Napa County**

Department Project No.: EA 04-4S030

Dear Mr. Rahimi:

We have reviewed and hereby issue water quality certification to the California Department of Transportation (Department) for the Napa State Route 128 Sheet Pile Wall and Culvert Replacement Project (Project). The Department has claimed coverage under a U.S. Army Corps of Engineers Non-Reporting Nationwide Permit No. 14, *Linear Transportation*, pursuant to Section 404 of the Clean Water Act (33 U.S.C. § 1344). As such, the Department has applied to the San Francisco Bay Regional Water Quality Control Board (Water Board) for a Clean Water Act Section 401 water quality certification that the Project will not violate State water quality standards.

**Project:** The Department is proposing to improve an existing drainage system and reconstruct an approximately 34-foot wide by 185-foot long slumping segment of State Route 128 (SR 128) between post miles 10.2 and 10.4. SR 128 is aligned through the Project limits along the southern boundary of Lake Hennessey, a drinking water reservoir serving the city of Napa. The roadway has slumped due to erosion of the roadbed fill material by the waters of Lake Hennessey.

The proposed Project elements include:

- Excavation of approximately 1,600 cubic yards of the existing structural section and placement of approximately 1,400 cubic yards of lightweight cellular concrete, to a depth of seven feet;

- Replacement of the existing, deteriorated 36-inch culvert with a 72-inch, 60-foot long corrugated metal pipe culvert. The new culvert will have a sand and gravel bottom substrate;
- Construction of a new headwall at the culvert inlet. The headwall would be approximately 8 feet high and 34 feet long. The headwall would be aligned three feet upstream of the existing headwall. There would be no downstream headwall;
- Construction of a roadway dike to control drainage along the westbound side of new pavement;
- Installation of an approximately 20 to 30-foot deep sheet pile retaining wall near the roadway centerline to provide shoring during roadway reconstruction; and
- Temporary placement of a sheet pile cofferdam to provide a dry work area for construction. The cofferdam would have dimensions no greater than 20 feet deep with two ten-foot sides and one forty-foot side. The pile walls would be placed by a pile driver staged on the roadway.

**Impacts:** Project implementation would result in the permanent fill of approximately 0.0006 acres and seven linear feet of jurisdictional waters.

Project implementation would result in temporary impacts to approximately 0.009 acres of jurisdictional waters due to the sheet pile cofferdam installation and water diversion activities.

**Avoidance and Minimization:** The Department has avoided and minimized impacts to wetland and waters by: incorporating an oversized culvert to facilitate wildlife passage; incorporating a natural bottom culvert with natural stream material placed to a depth of two feet at the inlet; decreasing the culvert slope to encourage natural sedimentation; moving the culvert inlet back three to four feet towards the road instead of the original proposed design that would have encroached upstream by five feet; eliminating rock slope protection from jurisdictional waters; and reducing headwall dimensions and bank modification associated with headwall placement.

**Mitigation:** Because avoidance and minimization measures have reduced the proposed impacts to a de minimis level, no mitigation is required.

**CEQA Compliance:** In August 2010, the Department found that the project was categorically exempt from CEQA pursuant to 14 CCR § 15301, existing facilities.

**Certification:** I hereby issue an order certifying that any discharge from the referenced project will comply with the applicable provisions of sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and

Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 – DWQ, “General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification” which requires compliance with all conditions of this Water Quality Certification. The following conditions are associated with this certification:

1. The Department shall restore all jurisdictional wetlands and waters to their pre-project or improved conditions, within the first growing season following cessation of construction activity in those areas. All temporarily disturbed areas shall be re-vegetated using only native plant species;
2. The Project shall be constructed in conformance with the Project Description described in this certification and certification application materials. Any change in the Project may require modification to the certification and shall be reported to the Water Board prior to implementation of the changes;
3. The Department shall adhere to the Standard and Regional conditions imposed by the Nationwide Permit issued to the Department by the U.S. Army Corps of Engineers and to the Streambed Alteration Agreement issued to the Department by the California Department of Fish and Game;
4. Placement of rock slope protection is prohibited. The embankment confinement system shall not extend below the Lake Hennessey ordinary high water level;
5. Regardless of date, erosion control measures shall be utilized throughout all phases of construction where sediment-laden runoff threatens to enter waters of the State. At no time shall sediment-laden runoff be allowed to enter waters of the State;
6. No fueling, cleaning or maintenance of vehicles or equipment shall take place within jurisdictional waters or within any areas where an accidental discharge to waters of the State may occur;
7. The discharge, or creation of the potential for discharge, to waters of the State of any construction wastes and/or soil materials including cement, fresh concrete, or washings thereof, silts, clay, sand, oil or petroleum products and other organic materials to waters of the State is prohibited;
8. This certification does not allow for the take, or incidental take, of any special status species. The Department shall use the appropriate protocols, as approved by the California Department of Fish and Game and the U.S. Fish and Wildlife Service, to

ensure that Project activities do not impact the Beneficial Use of the Preservation of Rare and Endangered Species;

9. The Department shall maintain a copy of this water quality certification at the Project site so as to be available at all times to site operating personnel. It is the responsibility of the Department to assure that all personnel (employees, contractors, and subcontractors) are adequately informed and trained regarding the conditions of this certification;
10. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Section 13330 of the California Water Code (CWC) and Section 3867 of Title 23 of the California Code of Regulations(23 CCR);
11. This certification action does not apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to California Code of Regulations (CCR) Title 23, Subsection 3855(b) and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought; and
12. Certification is conditioned upon total payment of the full fee required in State regulations (23 CCR Section 3833). Water Board staff received full payment of \$946.00 on April 17, 2012.

We anticipate your cooperation in implementing these conditions. However, please be advised that any violation of water quality certification conditions is a violation of State law and subject to administrative civil liability pursuant to California Water Code (CWC) section 13350. Failure to respond, inadequate response, late response, or failure to meet any condition of this certification may subject you to civil liability imposed by the Water Board to a maximum of \$5,000 per day per violation or \$10 for each gallon of waste discharged in violation of this certification.

We anticipate no further action on this request. Should new information come to our attention that indicates a water quality problem with this project, the Water Board may issue Waste Discharge Requirements pursuant to 23 CCR Section 3857.

If you have any question, please contact Brendan Thompson at (510) 622-2506, or via e-mail to [BThompson@waterboards.ca.gov](mailto:BThompson@waterboards.ca.gov).

Sincerely,

Bruce H. Wolfe  
Executive Officer

cc (via e-mail): Mr. Bill Orme SWRCB-DWQ  
Ms. Laurie Monarres, USACE  
Ms. Jane Hicks, Regulatory Branch, USACE  
Ms. Suzanne Gilmore, CDFG  
Ms. Paula Gill, USACE  
Mr. Dale Bowyer, Water Board  
Mr. Cyrus Vafai, Caltrans  
Mr. Hardeep Takhar, Caltrans  
Mr. Jason Brush, USEPA



State of California – The Natural Resources Agency  
DEPARTMENT OF FISH AND GAME  
Bay Delta Region  
7329 Silverado Trail  
Napa, CA 94558  
(707) 944-5500  
[www.dfg.ca.gov](http://www.dfg.ca.gov)

*EDMUND G. BROWN, JR., Governor*  
*CHARLTON H. BONHAM, Director*



May 1, 2012

California Department of Transportation  
Attn: Jeffrey Jensen  
111 Grand Avenue  
Oakland, California 94623

Subject: Draft Lake or Streambed Alteration Agreement  
Notification No. 1600-2011-0364-R3  
Lake Hennessey Sheet Pile Wall Project

Dear Mr. Jensen:

Enclosed is the final Streambed Alteration Agreement (“Agreement”) for the Lake Hennessey Sheet Pile Wall Project (“Project”). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act (“CEQA”). In this case, the Department, acting as a Lead agency, determined your project is exempt from CEQA and filed a notice of exemption (“NOE”) on May 1, 2012.

Under CEQA, filing a NOE starts a 35-day period within which a party may challenge the filing agency’s approval of the project. You may begin your project before the 35-day period expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact Suzanne Gilmore, Environmental Scientist, at (707) 944-5536 or [sgilmore@dfg.ca.gov](mailto:sgilmore@dfg.ca.gov).

Sincerely,

Craig Weightman  
Acting Environmental Program Manager  
Bay Delta Region

cc: Suzanne Gilmore  
Warden Morton  
Lieutenant Jones  
Melissa Escaron

*Conserving California's Wildlife Since 1870*

**CALIFORNIA DEPARTMENT OF FISH AND GAME**

BAY DELTA REGION  
7329 SILVERADO TRAIL  
NAPA, CALIFORNIA 94558  
(707) 944-5520

[WWW.DFG.CA.GOV](http://WWW.DFG.CA.GOV)



**STREAMBED ALTERATION AGREEMENT**

NOTIFICATION No. 1600-2011-0364-R3

Unnamed tributary; Lake Hennessey

CALIFORNIA DEPARTMENT OF TRANSPORTATION

LAKE HENNESSEY SHEET PILE WALL PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Game (DFG) and California Department of Transportation (Permittee) as represented by Jeffrey G. Jensen acting on behalf of Permittee.

**RECITALS**

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on October 11, 2011 and submitted additional information on December 9, 2011, January 23, 2012 and February 10, 2012 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, DFG has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement

**PROJECT LOCATION**

The project is located approximately 4 miles east of Rutherford on State Route 128, post mile 10.31 at an unnamed tributary to Lake Hennessey, in the County of Napa, State of California; Latitude 38 28' 54" N, Longitude 122 21' 37" E.

**PROJECT DESCRIPTION**

The project is limited to replacement of an existing 36-inch corrugated metal pipe (CMP) drainage culvert. The new 72-inch CMP culvert will be approximately 60 feet in length. The upstream end of the new 72-in culvert will have a standard straight headwall with 4-

ft deep cutoff wall. The upstream headwall will be approximately 8-ft high and with 6-ft wide base. The new upstream headwall will be aligned 3-ft upstream from the existing headwall to facilitate the construction of a flatter slope embankment on top of the headwall to retain roadway. The headwall excavation volume will be 46 Cubic Yards (CY) of soil. The headwall concrete volume will be 23 CY. The permanently disturbed area will be 148 SQFT (111 SQFT of re-alignment + 37 SQFT of headwall). The downstream end of the culvert will be buried by 1-ft. The culvert will consist of a natural bottom.

Project design revisions reduced permanent habitat impacts from 1438 SQFT to a total of 148 SQFT, increased the culvert size from 36 inch to a 72 inch diameter accommodating wildlife passage, and modified the culvert alignment to provide a natural bottom.

## **PROJECT IMPACTS**

Existing fish or wildlife resources the project could substantially adversely affect include: Pacific chorus frog (*Pseudacris regilla*), California newt (*Taricha torosa*), foothill yellow legged frog (*Rana boylei*), western pond turtle (*Actinemys marmorata*), rainbow trout (*Oncorhynchus mykiss*) and valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*).

The adverse effects the project could have on the fish or wildlife resources identified above include:

Permanent impacts to bed, channel, or bank due to the loss of natural bank, changes in countour of the stream bed, channel or bank, changes in gradient of stream bed, channel or bank, and possible changes in channel cross-section. Temporary impacts to bed, channel, or bank could occur due to the loss of bank stability during construction, increase of bank erosion during construction, and/or changes in composition of channel materials.

Permanent impacts to fish, wildlife, and their habitat could occur due to colonization by exotic plant or animal species. Temporary impacts to bed, channel, or bank and direct effect on fish, wildlife, and their habitat could occur during construction due to construction pits and trenches that can capture terrestrial organisms, disruption to nesting birds and other wildlife, direct take of terrestrial species, disturbance from project activity, loss or impediment of terrestrial animal species travel routes due to temporary structures (e.g., survey tape, sandbags, erosion protection materials etc.), and possible changes in shading or insolation leading to vegetative change.

## **MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES**

## 1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to DFG personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, DFG shall contact Permittee to resolve any conflict.
- 1.4 Project Site Entry. Permittee agrees that DFG personnel may enter the project site at any time to verify compliance with the Agreement.
- 1.5 Start and Stop of Work. The Permittee shall notify the Department of the date of commencement of operations and the date of completion.

## 2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

- 2.1. Work within the stream/riparian corridor shall be confined to the period June 15 to October 15. Revegetation work is not confined to this time period but must be completed in the same calendar year.
- 2.2. The culvert shall be properly aligned within the stream and otherwise engineered, installed and maintained, to assure resistance to washout, and erosion of the stream bed, stream banks and/or fill.
- 2.3. The culvert shall maintain the natural stream width and grade and shall be installed to ensure a slope of 5% or greater to allow for positive drainage flow. Culvert shall not cause damming or pooling.

- 2.4. The culvert shall be installed a minimum of 6 inches below the streambed and shall be maintained and kept open year round. The Permittee is responsible for such maintenance as long as the culvert remains in the stream.
- 2.5. Within 24 hours prior to construction, a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) hired by the Permittee, will survey the area at the appropriate time of day for presence of special status species including the western pond turtle (*Actinemys marmorata*) and yellow-legged frog (*Rana boylei*). If any individuals are found, the biologist shall notify DFG immediately and incorporate protection measures into the project. The results of the survey and protection measures shall be sent to the Department within one week of survey completion.
- 2.6. If any wildlife is encountered during the course of construction, all wildlife shall be allowed to leave the construction area unharmed, and shall be flushed, hazed, or herded in a safe direction away from the project site.
- 2.7. The work period for completing the work within the project area as defined in the project description, shall be restricted to periods of dry weather. The project area is defined as bed bank channel and associated riparian habitat. The Permittee will monitor the forecasted precipitation. When a ¼ inch or more of precipitation is forecasted to occur, the Permittee will stop work before precipitation commences. No activity of the project may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-two hour forecasts from the National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less than a 30% forecast for precipitation for the following 24-hour period.
- 2.8. Work must be performed in isolation from the flowing stream or wet areas. *If a cofferdam is necessary*, the Permittee shall submit a De-watering Plan to DFG for review and approval prior to construction. The De-watering Plan shall include a written description of how coffer dams will be constructed upstream and downstream of the project site, specific dam locations, the method water will be diverted, methods to treat turbid water, material of proposed coffer dams, measures to reduce acoustic impacts from pile driving, biological avoidance measures including fish rescue operations/survey reports, and site restoration methods once the project is completed.
- 2.9. The perimeter of the work site shall be adequately flagged to prevent damage to adjacent riparian habitat.

- 2.10. The disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Precautions shall be taken to avoid other damage to vegetation by people or equipment. The disturbed portions of the stream channel within the normal high-water mark of the stream shall be restored to as near their original condition as possible.
- 2.11. The disturbed riparian area shall be restored to pre-existing conditions with native riparian species.
- 2.12. Equipment shall not be operated in wetted areas (including but not limited to ponded or flowing areas) or within the stream channel below the level of top-of-bank.
- 2.13. No castings or spoil from the trenching operations shall be placed on the stream side of the trench.
- 2.14. Topsoil shall be stockpiled and redistributed as topsoil as close to its original location as possible over the construction area before revegetation procedures are undertaken.
- 2.15. Erosion control measures shall be utilized throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waters of the State. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream.
- 2.16. All exposed/disturbed areas and access points within the stream zone left barren of vegetation as a result of the construction activities shall be restored by seeding with a blend of native erosion control grass seeds. Seeded areas shall be mulched. All other areas of disturbed soil which drain toward the stream channel shall be seeded with erosion control grass seeds. Revegetation shall be completed as soon as possible after construction activities in those areas cease. Seeding placed after October 15 must be covered with broadcast straw, jute netting, coconut fiber blanket or similar erosion control blanket.
- 2.17. At a minimum, all plants shall be monitored and maintained as necessary for five years with two reports being submitted, one at the end of three years and another at the end of five years. All planting shall have a minimum of 80% survival at the end of 5 years and shall attain 70% cover after three years and 75% coverage after 5 years. If the survival and/or cover requirements are not meeting these goals, the Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for five years after planting.

- 2.18. If construction, grading, or other project-related improvements are scheduled during the nesting season of protected raptors and migratory birds (February 1 to August 31), a focused survey for active nests of such birds shall be conducted by a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) within 15 days prior to the beginning of project-related activities. The results of the survey shall be faxed to (707) 944-5595. Refer to the appropriate Lake and Streambed Alteration Notification Number when submitting the survey to the Department. If active nests are found, the Permittee shall consult with the Department and the United States Fish & Wildlife Service (USF&WS) regarding appropriate action to comply with the Migratory Bird Treaty Act and the Fish & Game Code of California. If a lapse in project-related work of 15 days or longer occurs, another focused survey and if required, consultation with the Department and USF&WS, will be required before project work can be reinitiated.
- 2.19. If any sensitive species are observed in project surveys, the Permittee shall submit California Natural Diversity Data Base (CNDDDB) forms to the CNDDDB for all preconstruction survey data within five working days of the sightings, and provide DFG Region 3 with copies of the CNDDDB forms and survey maps.
- 2.20. In the event that the project scope, nature, or environmental impact is altered by the imposition of subsequent permit conditions by any local, state or federal regulatory authority, the Permittee shall notify the Department of any imposed project modifications that interfere with compliance to Department conditions.
- 2.21. A copy of this agreement must be provided to the contractor and all subcontractors who work within the stream zone and must be in their possession at the work site.
- 2.22. Building materials and/or construction equipment shall not be stockpiled or stored where they could be washed into the water or where they will cover aquatic or riparian vegetation.
- 2.23. Debris, soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter a stream or lake, by Permittee or any party working under contract, or with the permission of the Permittee, shall be removed immediately.
- 2.24. The contractor shall not dump any litter or construction debris within the riparian/stream zone. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.

2.25. Department personnel or its agents may inspect the work site at any time.

2.26. All construction debris and associated materials shall be removed from the work site upon completion of the project.

### **3. Compensatory Measures**

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement the following measures:

3.1 All areas temporarily affected by project construction shall be restored to pre-existing conditions. A Restoration and Revegetation Plan shall be completed and submitted to DFG for approval prior to the issuance of a final agreement. The plan shall document preconstruction conditions, discuss restoration implementation, a vegetation planting plan, identify success criteria, and establish a monitoring program. The plan shall require the use of native plants and describe invasive species control measures. The portions of unnamed tributary to be restored shall be monitored annually for a minimum of three years following restoration. If restored areas do not meet the success criteria outlined in the DFG-approved Restoration and Revegetation plan by the end of the 5-year monitoring period, remedial actions to be taken will be developed in consultation with DFG.

3.2 Project designs were modified to provide enhanced terrestrial and aquatic movement (such as *Actinemys marmorata*). The revised design is without vertical barriers, increased the culvert size for wildlife passage and includes maintenance of a natural stream bottom to minimize impacts of the culvert.

### **4. Reporting Measures**

Permittee shall meet each reporting requirement described below.

4.1 Prior to commencement of work within the stream zone, the Permittee shall photograph the project site. Upon completion of work activities, the Permittee shall photograph the project site from the same location and angle as original photographs. Labeled copies of before and after photographs shall be sent to the Department of Fish and Game within 60 days of completion of the project. Notification shall be sent to the Department at 7329 Silverado Trail, Napa CA 94558. Refer to Notification 1600-2011-0364-3 when notifying the Department.

4.2 A status report on the re-vegetation shall be provided to the Department of Fish and Game by December 31 of year 3 and year 5 after construction for a minimum of 5 years or until success criteria identified in Measure 2.17 are met. This report shall include the Streambed Alteration number (1600-2011-0364-3),

survival of planted species, percent cover, and height of shrub species. Photos from designated photo stations shall be included.

## **CONTACT INFORMATION**

Any communication that Permittee or DFG submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or DFG specifies by written notice to the other.

### To Permittee:

California Department of Transportation  
Attn: Ahmad Rahimi  
111 Grand Avenue  
Oakland, California 94623  
Fax (510) 622-0174  
ahmad\_rahimi@dot.ca.gov

### To DFG:

Department of Fish and Game  
Bay Delta Region  
7329 Silverado Trail  
Napa, CA 94558  
Attn: Lake and Streambed Alteration Program – S. Gilmore  
Notification #1600-2011-0364-R3  
Fax (707) 944-5553  
sgilmore@dfg.ca.gov

## **LIABILITY**

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute DFG's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

## **SUSPENSION AND REVOCATION**

DFG may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees,

representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before DFG suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before DFG suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused DFG to issue the notice.

### **ENFORCEMENT**

Nothing in the Agreement precludes DFG from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects DFG's enforcement authority or that of its enforcement personnel.

### **OTHER LEGAL OBLIGATIONS**

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

### **AMENDMENT**

DFG may amend the Agreement at any time during its term if DFG determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by DFG and Permittee. To request an amendment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

### **TRANSFER AND ASSIGNMENT**

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter DFG approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

### **EXTENSIONS**

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to DFG a completed DFG "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). DFG shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

### **EFFECTIVE DATE**

The Agreement becomes effective on the date of DFG's signature, which shall be: 1) after Permittee's signature; 2) after DFG complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at [http://www.dfg.ca.gov/habcon/ceqa/ceqa\\_changes.html](http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html).

### **TERM**

This Agreement shall expire on December 31, 2013, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

#### **ATTACHMENTS**

The documents listed below are attached to the Agreement for reference.

- A. Hennessey Project Culvert Designs (Sent to DFG on 3/15/2012)

## AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

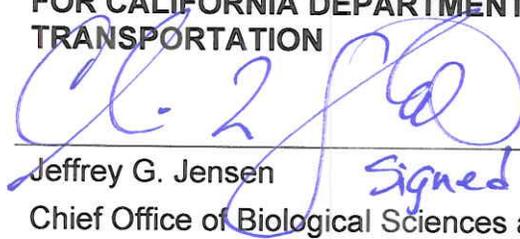
## AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify DFG in accordance with FGC section 1602.

## CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

### FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION

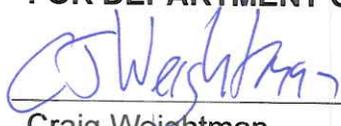
  
\_\_\_\_\_  
Jeffrey G. Jensen  
Chief Office of Biological Sciences and Permits

*Signed for*

4.30.12

Date

### FOR DEPARTMENT OF FISH AND GAME

  
\_\_\_\_\_  
Craig Weightman  
Acting Environmental Program Manager

May 1, 2012

Date

Prepared by: S. Gilmore  
Environmental Scientist

Date Prepared: 1/18/2012  
Revised: 3/30/2012  
Date Sent: 4/5/2012  
Date revised: 4/25/2012  
Date revised: 4/30/2012

FOR DEPARTMENT USE ONLY

Date Received	Amount Received	Amount Due	Date Complete	Notification No.
10/11/11	\$448275	\$		1600-2011-0364-3



CP# 082-960745  
CA Dept of Transportation

STATE OF CALIFORNIA  
DEPARTMENT OF FISH AND GAME  
NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Gilmore  
Morton



Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

Fish & Game

1. APPLICANT PROPOSING PROJECT

Name	Ahmad Rahimi	OCT 11 2011		
Business/Agency	California Department of Transportation	Yountville		
Street Address	111 Grand Avenue			
City, State, Zip	Oakland, California, 94623-0660			
Telephone	(510) 622-0174	Fax	(510) 622-0174	
Email	ahmad_rahimi@dot.ca.gov			

2. CONTACT PERSON (Complete only if different from applicant)

Name	Azadeh Faghihi			
Street Address	111 Grand Avenue			
City, State, Zip	Oakland, California, 94623-0660			
Telephone	(510) 286-6032	Fax	(510) 286-5600	
Email	azadeh_faghihi@dot.ca.gov			

3. PROPERTY OWNER (Complete only if different from applicant)

Name				
Street Address				
City, State, Zip				
Telephone		Fax		
Email				

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name		Lake Hennessey Sheet Pile Wall Project		
B. Agreement Term Requested		<input checked="" type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
2012	2012	06/15	10/15	80.00

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.

A.	<input checked="" type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A) <span style="float: right;">Mine I.D. Number: _____</span>
C.	<input type="checkbox"/> Timber Harvesting (Attachment B) <span style="float: right;">THP Number: _____</span>
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C) <span style="float: right;">SWRCB Number: _____</span>
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)
F.	<input type="checkbox"/> DFG Fisheries Restoration Grant Program (FRGP) <span style="float: right;">FRGP Contract Number: _____</span>
G.	<input type="checkbox"/> Master
H.	<input type="checkbox"/> Master Timber Harvesting

### 6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. **Note: The Department may not process this notification until the correct fee has been received.**

	A. Project	B. Project Cost	C. Project Fee
1	Lake Hennesy Sheet Pile Wall Project Napa 128 Storm Damage Project	\$4,000,000.00	\$4,482.75
2			
3			
4			
5			
		D. Base Fee (if applicable)	
		<b>E. TOTAL FEE ENCLOSED</b>	<b>\$840.25</b>

### 7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

Yes (Provide the information below)       No

Applicant: \_\_\_\_\_ Notification Number: \_\_\_\_\_ Date: \_\_\_\_\_

B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?

No     Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)

Continued on additional page(s)

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 8. PROJECT LOCATION

<p>A. Address or description of project location.  <i>(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)</i></p> <p>The proposed project is located approximately 4 miles east of Rutherford on State Route 128, PM 10.31 in Napa County. Coordinates NAD 83, 38°28' 54" N, 122° 21' 37" E.</p> <p>Driving directions from CDFG Yountville Office: proceed North on Silverado Trail for 4.3 miles. At the intersection of Silverado Trail and SR 128 at Sage Canyon Road turn right and drive 2.8 miles east to PM 10.31 on South shore of Lake Hennessey.                  please see attached Figure 1.</p> <p style="text-align: right;"><input checked="" type="checkbox"/> Continued on additional page(s)</p>				
B. River, stream, or lake affected by the project.		Lake Hennessey		
C. What water body is the river, stream, or lake tributary to?		Napa River		
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		
E. County	Napa			
F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Yountville	7N	5W	1	South East
<input type="checkbox"/> Continued on additional page(s)				
K. Meridian (check one)	<input type="checkbox"/> Humboldt <input checked="" type="checkbox"/> Mt. Diablo <input type="checkbox"/> San Bernardino			
L. Assessor's Parcel Number(s)				
None				
<input type="checkbox"/> Continued on additional page(s)				
M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)				
Latitude/Longitude	Latitude:	38°28' 54" N	Longitude:	122° 21' 37" E
	<input checked="" type="checkbox"/> Degrees/Minutes/Seconds <input type="checkbox"/> Decimal Degrees <input type="checkbox"/> Decimal Minutes			
UTM	Easting:	Northing:	<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11	
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 or WGS 84		

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 9. PROJECT CATEGORY AND WORK TYPE *(Check each box that applies)*

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal – pond, stream, or marina	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Other</b> <i>(specify):</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

#### GENERAL DESCRIPTION:

Caltrans proposes to reconstructing a portion of the roadway by replacing the structural section with lightweight cellular concrete to a depth of 7 feet. A drainage system will be upgraded and a dike will be constructed to eliminate water sheet flow over the roadway surface. A sheet pile retaining wall placed near the centerline of roadway will be used for shoring to facilitate stage construction of the roadway. All work is to be done within existing State Right of Way. No Temporary Construction Easements will be needed.

#### DETAILED DESCRIPTION

##### ROADWAY RECONSTRUCTION:

This item of work involves reconstructing a portion of the roadway (34' wide x 185' long) by excavating to a depth of 7' and backfilling with lightweight cellular concrete with a final layer of 0.80' HMA (Type A). To accommodate Stage Construction a sheet pile retaining wall will be placed near the centerline of the roadway for shoring during stages. The depth of the sheet pile will be between 20' to 30' max. The volume of roadway excavation is 1,600 cubic yards (CY). The volume of lightweight cellular concrete is approximately 1,400 CY of concrete. To accommodate one-way traffic during each stage of construction, the roadway structural section will be widened 7' to the west as shown on Stage Construction Plans. The pavement structural section for the widening will be 0.80' HMA (Type A). The additional disturbed soil from widening is approximately 3,360 square feet (0.077 acre).

Please refer to Attachment 1.

Continued on additional page(s)

B. Specify the equipment and machinery that will be used to complete the project.

The equipment to be used during construction includes, but is not limited to: Paving machine, end loaders, dump trucks, vibratory compactors, concrete trucks, concrete pumps, backhoe, and pile driving machines (used for roadwork only).

Continued on additional page(s)

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).

Yes     No (Skip to box 11)

D. Will the proposed project require work in the wetted portion of the channel?

Yes (Enclose a plan to divert water around work site)

No

Revised

11. PROJECT IMPACTS

FEB 10 2012

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

Drainage work consists of replacing an existing culvert, and adding headwalls to both upstream and downstream of the new culvert. This project may require the construction of a cofferdam at the outlet at lake Hennessey.

Continued on additional page(s)

B. Will the project affect any vegetation?  Yes (Complete the tables below)  No

Vegetation Type	Temporary Impact	Permanent Impact
Roadside annual grasses, scirpus, Baccharis pilularis, and Juncus	Linear feet: <u>21</u> Total area: <u>2532 SQFT</u>	Linear feet: <u>1</u> Total area: <u>34 SQFT</u>
Annual grasses and forbs, Baccharis pilularis, snowbush, and poison oak	Linear feet: <u>25</u> Total area: <u>750 SQFT</u>	Linear feet: <u>4</u> Total area: <u>148 SQFT</u>

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)

Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Yes (List each species and/or describe the habitat below)  No  Unknown

Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

Natural Environmental Study Minimal Impacts.

Continued on additional page(s)

E. Has a biological study been completed for the project site?

Yes (Enclose the biological study)  No

Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.

F. Has a hydrological study been completed for the project or project site?

Yes (Enclose the hydrological study)  No

Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.

Work will be limited to the dry season (June 15-October 15). Erosion control measures will be used to address site soil stabilization and reduce the deposition of sediments into adjacent surface waters. Typical measures include soil stabilizers such as hydroseeding, netting, compost blankets and rock slope protection. During construction, procedures may be used such as mulch on disturbed areas and fiber rolls along slopes.

Please refer to attached BMPs (Attachment 2).

Continued on additional page(s)

B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.

Please see Attachment 2.

Continued on additional page(s)

C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.

Caltrans is not proposing any mitigation or compensation measures for this action.

Caltrans will provide soil stabilization measures, including hydroseeding with appropriate seed mix as outlined in the Caltrans standard BMPs, as described above.

Continued on additional page(s)

13. PERMITS

List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.

A. \_\_\_\_\_ 401 \_\_\_\_\_  Applied  Issued

B. \_\_\_\_\_  Applied  Issued

C. \_\_\_\_\_  Applied  Issued

D. Unknown whether  local,  state, or  federal permit is needed for the project. (Check each box that applies)

Continued on additional page(s)

## NOTIFICATION OF LAKE OR STREAMBED ALTERATION

### 14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?			
<input type="checkbox"/> Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each)			
<input checked="" type="checkbox"/> No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)			
<input type="checkbox"/> Notice of Exemption	<input type="checkbox"/> Mitigated Negative Declaration	<input checked="" type="checkbox"/> NEPA document (type): <u>CE</u>	
<input type="checkbox"/> Initial Study	<input type="checkbox"/> Environmental Impact Report	<input checked="" type="checkbox"/> CESA document (type): <u>CE</u>	
<input type="checkbox"/> Negative Declaration	<input type="checkbox"/> Notice of Determination (Enclose)	<input type="checkbox"/> ESA document (type): _____	
<input type="checkbox"/> THP/ NTMP	<input type="checkbox"/> Mitigation, Monitoring, Reporting Plan		
B. State Clearinghouse Number (if applicable)			
C. Has a CEQA lead agency been determined?		<input checked="" type="checkbox"/> Yes (Complete boxes D, E, and F)	<input type="checkbox"/> No (Skip to box 14.G)
D. CEQA Lead Agency	<b>Caltrans</b>		
E. Contact Person	Azadeh Faghihi	F. Telephone Number	(510) 286-6032
G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.			
<input type="checkbox"/> Continued on additional page(s)			
H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?			
<input checked="" type="checkbox"/> Yes (Enclose proof of payment)			
<input type="checkbox"/> No (Briefly explain below the reason a filing fee has not been paid)			
Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.			

### 15. SITE INSPECTION

Check one box only.
<input type="checkbox"/> In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.
<input checked="" type="checkbox"/> I request the Department to first contact (insert name) <u>Azadeh Faghihi</u> at (insert telephone number) <u>(510) 286-6032</u> to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

Yes (Please enclose the information via digital media with the completed notification form)

No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.



Signature of Applicant or Applicant's Authorized Representative

Date

10-5-2011

Ahmad Rahimi

Print Name



DEPARTMENT OF THE ARMY  
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
1455 MARKET STREET, 16<sup>TH</sup> FLOOR  
SAN FRANCISCO, CALIFORNIA 94103-1398

REPLY TO  
ATTENTION OF

Regulatory Division

Subject: File Number 2012-00109N

APR 16 2012

California Department of Transportation  
Mr. Amad Rahimi  
111 Grand Avenue  
Oakland, California 94623

Dear Mr. Rahimi:

This correspondence is in reference to your submittal of January 24, 2012, revised on April 11, 2012, concerning Department of the Army (DA) authorization to repair a portion of State Route 128 and replace a culvert located 2.8 miles east of the intersection of State Route 128 (Post Mile 10.31) and Silverado Trail adjacent to Lake Hennessy in Napa County, California (38.48205, -122.36124).

Project implementation will require reconstruction of a section of the roadway by replacing a portion of the roadway to a depth of 7 feet. A drainage system will be upgraded by replacing the existing 36-in culvert with a 72-in corrugated metal pipe (CMP) culvert. The new culvert will require the replacement of the existing upstream headwall. A downstream headwall will be removed. A dike will be constructed to eliminate water sheet flow over the roadway surface. A sheet pile retaining wall placed near the centerline of roadway will be used for shoring to facilitate stage construction of the roadway. Work within U.S. Army Corps of Engineers' jurisdiction would include construction of a headwall, realignment of the roadway, installation of a new culvert, and installation of a sheet pile coffer dam. All work shall be completed in accordance with the plans and drawings titled "*USACE File #2012-00109N, Lake Hennessey PM 10.31 SR 128, April 11, 2012, Figures 1 to 5*" (enclosure 1). Work will result in permanent impacts to 150 square feet and temporary impacts to 380 square feet of jurisdictional wetlands and Waters of the U.S.

Section 404 of the Clean Water Act (CWA) generally regulates the discharge of dredged or fill material below the plane of ordinary high water in non-tidal waters of the United States, below the high tide line in tidal waters of the United States, and within the lateral extent of wetlands adjacent to these waters. Section 10 of the Rivers and Harbors Act generally regulates construction of structures and work, including excavation, dredging, and discharges of dredged or fill material, occurring below the plane of mean high water in tidal waters of the United States; in former diked baylands currently below mean high water; outside the limits of mean high water but affecting the navigable capacity of tidal waters; or below the plane of ordinary high water in non-tidal waters designated as navigable waters of the United States. Navigable

use to transport interstate or foreign commerce. A Preliminary JD has been completed for your site. Preliminary JDs are written indications that there may be waters of the U.S. on a parcel or indications of the approximate location(s) of waters of the U.S. on a parcel. Preliminary JDs are advisory in nature and may not be appealed. Please see the enclosed PJD map titled, "*Lake Hennessey PM 10.31 SR 128, Preliminary Jurisdictional Determination*" and dated April 11, 2012 (enclosure 2). The basis for this preliminary jurisdictional determination is fully explained in the enclosed *Preliminary Jurisdictional Determination Form*. You are requested to sign and date this form and return it to this office within two (2) weeks of receipt.

Based on a review of the information in your submittal, the project qualifies for authorization under Department of the Army Nationwide Permit (NWP) 14 for Linear Transportation Projects, 77 Fed. Reg. 10, February 21, 2012, pursuant to Section 404 of the CWA of 1972, as amended, 33 U.S.C. § 1344 *et seq.* The project must be in compliance with the terms of the NWP, the general conditions of the Nationwide Permit Program, and the San Francisco District regional conditions cited in enclosure 3. You must also be in compliance with any special conditions specified in this letter for the NWP authorization to remain valid. Non-compliance with any term or condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This NWP authorization does not obviate the need to obtain other State or local approvals required by law.

This verification will remain valid for two years from the date of this letter. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon an NWP will remain authorized provided the activity is completed within 12 months of the date of an NWP's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5 (c) or (d). The Chief of Engineers will periodically review NWPs and their conditions and will decide to either modify, reissue, or revoke the permits. If an NWP is not modified or reissued within five years of its effective date, it automatically expires and becomes null and void. It is incumbent upon you to remain informed of any changes to the NWPs. Changes to the NWPs would be announced by Public Notice posted on our website (<http://www.spn.usace.army.mil/regulatory/index.html>). Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, enclosure 4, verifying that you have complied with the terms and conditions of the permit.

This authorization will not be effective until you have obtained a Section 401 water quality certification from the San Francisco Bay Regional Water Quality Control Board. If the RWQCB fails to act on a valid request for certification within two (2) months after receipt of a complete application, the Corps will presume a waiver of water quality certification has been obtained. You shall submit a copy of the certification to the Corps prior to the commencement of work.

In order to ensure compliance with this NWP authorization, the following special conditions shall be implemented:

1. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills will consist of materials, and be placed in a manner, that will not be eroded by expected high flows.
2. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations.
3. Only the minimum amount of vegetation shall be cleared as a result of project construction.
4. California native plants and/or seeds shall be used to revegetate all exposed areas throughout the project site at project completion.

You may refer any questions on this matter to Paula Gill of my Regulatory staff by telephone at 415-5036776 or by e-mail at Paula.C.Gill@usace.army.mil. All correspondence should be addressed to the Regulatory Division, referencing the file number at the head of this letter.

The San Francisco District is committed to improving service to our customers. My Regulatory staff seeks to achieve the goals of the Regulatory Program in an efficient and cooperative manner, while preserving and protecting our nation's aquatic resources. If you would like to provide comments on our Regulatory Program, please complete the Customer Service Survey Form available on our website: <http://www.spn.usace.army.mil/regulatory/>.

Sincerely,



 Jane M. Hicks  
Chief, Regulatory Division

Enclosures

Copy Furnished (w/ encl 1 only):

CA RWQCB, Oakland, CA

Copies Furnished (w/o encls):

U.S. EPA, San Francisco, CA  
CA SWRCB, Sacramento, CA

## Memorandum

*Flex your power!  
Be energy efficient!*

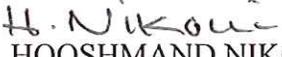
To: MR. ZIAD ABUBEKR  
Office Chief  
Design North Counties

Date: March 30, 2011

Attention: KANWARJIT GONDARA

File: 04-NAP-128 (PM 10.31)  
04-4S0301  
Roadway Settlement

From:   
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Division of Engineering Services

  
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Geotechnical Services  
Division of Engineering Services

Subject : Geotechnical Design Report

This Memo is in response to your request dated May 3, 2010 to provide final recommendation for roadway settlement repair at State Route 128, PM 10.31 in Napa County.

### Introduction

In March 2007, Maintenance requested our office to investigate a storm damage at Napa SR 128 PM 10.31, along the shoreline of Lake Hennessy (Fig. 1). Our office conducted a series of field investigations, laboratory testing, as well as analyses. This report summarizes our investigations, analyses, and final recommendations.

### Pertinent Reports and Investigations

Two reports were prepared by our office for this project:

- Preliminary Recommendations for Roadway Settlement – Project Initiation, dated 4/18/2007, by Anna Sojourner and Grant Wilcox to Kim Le and Steven Kakihara.
- Recommendations for Roadway Settlement, dated 10/26/2009, by Sunny Yang and Hooshmand Nikoui to James Ley and Rajendra Bhalla.

Sojourner and Wilcox (2007) conducted initial site investigation and observed cracking and settlement in the WB lane. They recommended installing a Slope Inclinator (SI) and a piezometer in the WB shoulder to monitor the site before final recommendations are made. Two 60-foot boreholes were drilled in June 2007 and were converted to a SI and a piezometer (Fig. 2). The borings were logged and laboratory index tests were conducted on select samples taken from

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the boreholes. Lateral ground movement and groundwater level have been monitored for the last three years. The field monitoring and laboratory test results are discussed in detail below.

Our site visit in September 2009 found a number of new cracks developing at the same location. The pattern of cracks (Fig. 2) is similar to those observed by Sojourner and Wilcox (2007). It is inferred from site topography that the problem area is situated on fill material, and the alignment of the cracks is parallel approximately to the assumed boundary of cut and fill (Fig. 2). From the direction of observed lateral ground movement (Fig. 2, more detail below), the ground is slipping gradually toward lakeside, inducing the cracking and settlement of roadway (Fig. 3).

### **Analysis of Field Monitoring and Laboratory Testing Results**

The field logs of the borings indicated that the top 18 feet of subsurface soil is lean or fat clay (CL-CH), with an average corrected SPT blow count  $N_{60}$  of 20. Laboratory index tests on select samples from this layer show average water content of 30% and PI of 47. Below this layer are very dense clayey/sandy gravel (GW-GC) and shale decomposed into hard sandy clay (CL). The SPT blow counts in these deeper materials are significantly higher ( $N_{60} > 60$ ). These data suggest that the top 18 feet of relatively soft soil is possibly fill material for the roadway.

Figure 4 shows measured lateral displacement of the SI in north-south (A axis) and east-west (B axis) directions. The majority of the displacement is towards lakeside (north). A slide plane is at approximately 14 to 18 feet depth, near the bottom of the fill layer (Fig. 3). Of the 1.9-inch total surface displacement from the latest reading, 1.4 inches are concentrated within this zone; the rest is distributed along surface to 14 feet depth. Furthermore, the displacement between 14 and 18 feet depth accumulated nearly linearly with time, at a rate of approximately 0.4 in per year; whereas the movement along the top 14 feet seemed to have been stabilized.

Figure 5 shows variation of groundwater table with time from the piezometer reading. A great range of seasonal fluctuation of water level can be seen. Since the piezometer is located very close to the lake, it is expected that this seasonal fluctuation be directly caused by the variation of water level in the lake. Typically, near the end of the dry season (September or October), the water level is the lowest at approximately 21 feet depth, which is below the fill layer. When the wet season starts, the water level gradually rises above the slide zone, up to 4 to 10 feet depth.

The limited amount of displacement data from the first year of monitoring shows that the lateral movement within the slide zone mostly occurred around the time when the water level was high.

### **Recommendations**

We initially recommended stopping the lateral movement by installing sheet pile along the WB

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shoulder (Yang and Nikoui 2009). However, based on the boring logs, pile driveability might be an issue in the hard material below 18 feet depth. After comparing several options, we recommend replacing a portion of the fill below the roadway with lightweight cellular concrete to a depth of 7 feet (Figs. 6 and 7). The length of the replacement area is 185 feet, at a distance of 25 feet from the existing culvert (Fig. 6). As specified in the Special Provisions (see Appendix A), the minimum unit weight of the cellular concrete should be 35 to 42 pcf with a minimum compressive strength of 80 psi.

To maintain one-way traffic, construction will be performed in two stages (Fig. 7). In the first stage, temporary sheet pile retaining wall is first installed near the centerline of the roadway (see Appendix B for Non-Standard Special Provision for Temporary Retaining Wall). Then traffic is restricted to the eastbound side only, while roadway excavation, lightweight fill, and pavement are done on the westbound side of the road. In the second stage, traffic is shifted to the westbound side, while construction is done on the eastbound side.

If you have any questions, please contact Sunny Yang at (510) 286-4808 or Hooshmand Nikoui, Branch Chief, at (510) 286-4811.

Appendix A: Special Provisions for Cellular Concrete

Appendix B: Non-Standard Special Provision (NSSP) for Temporary Retaining Wall

c: TJPokrywka, HNikoui, ARahimi, RBhalla, Daily File, Route File, J Stayton (DES Office Engineer)

SYang/mm



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Figure 1. Project location.

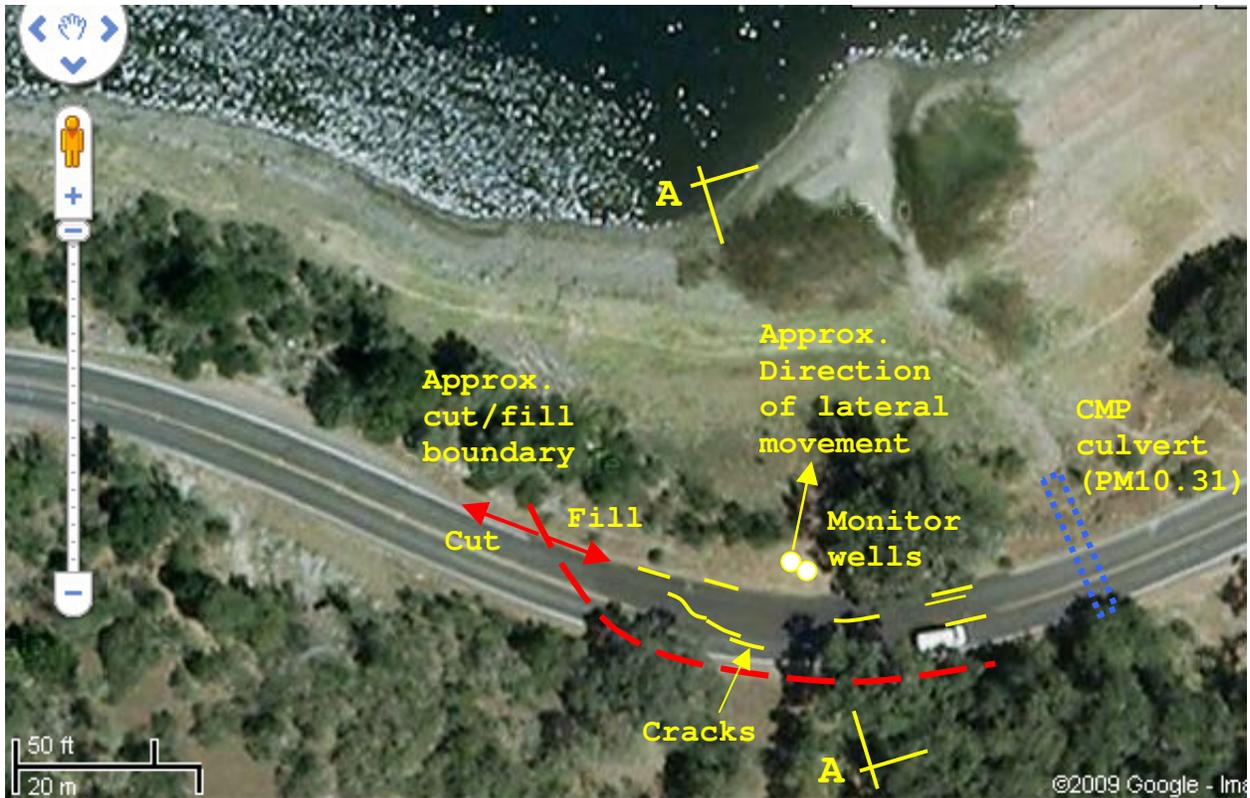


Figure 2. Plan view of project site (see Fig. 3 for cross section A-A).



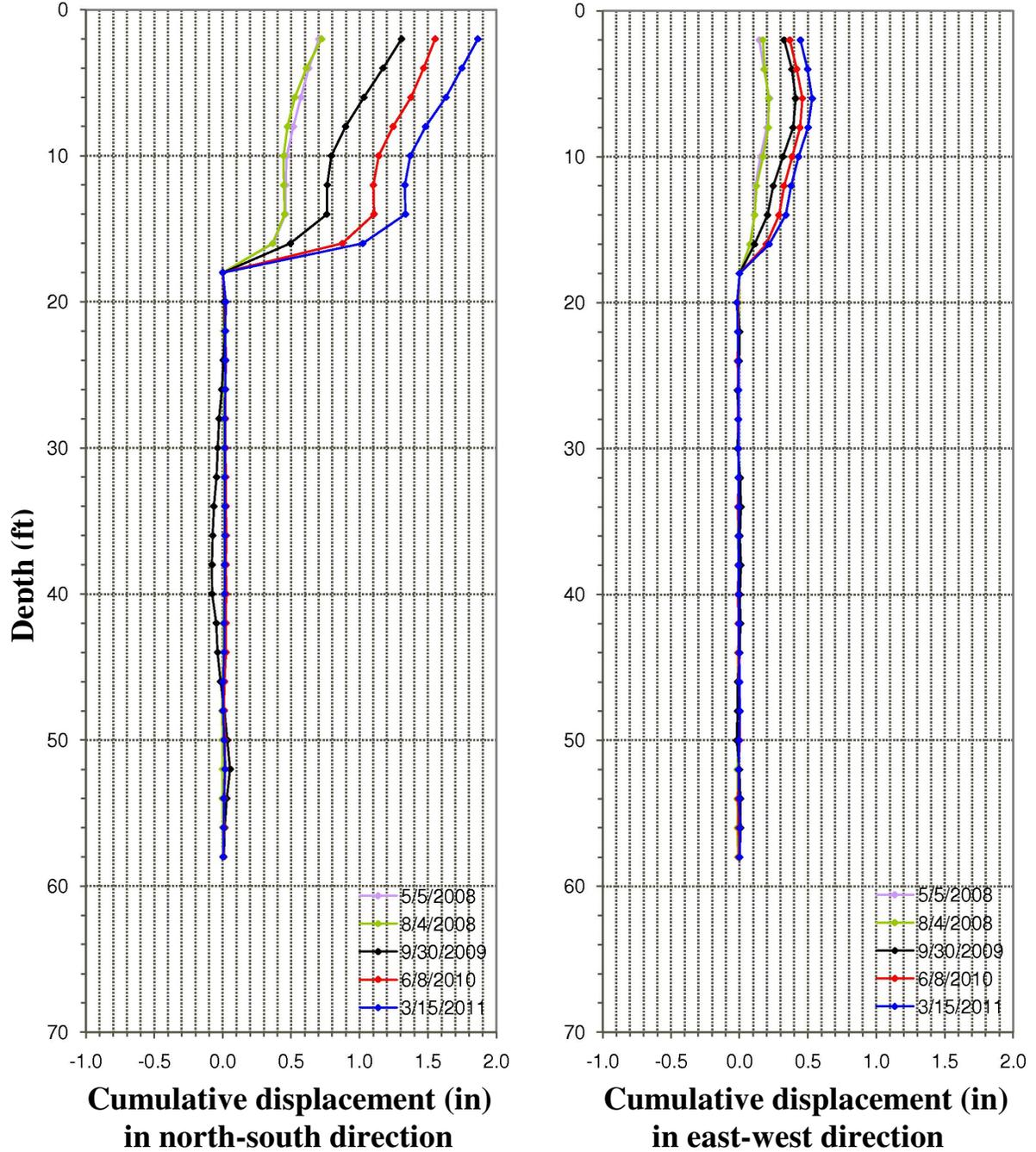


Figure 4. Cumulative displacement since 7/9/2007

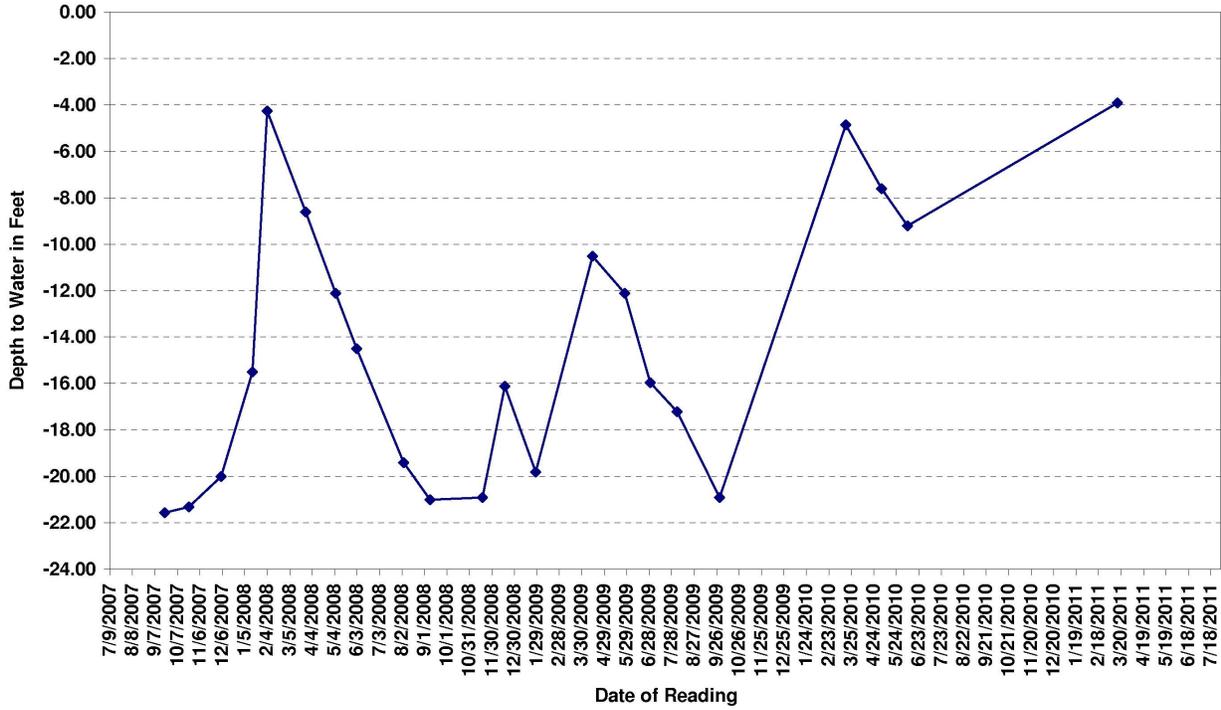


Figure 5. Measured groundwater table variation in Piezometer.

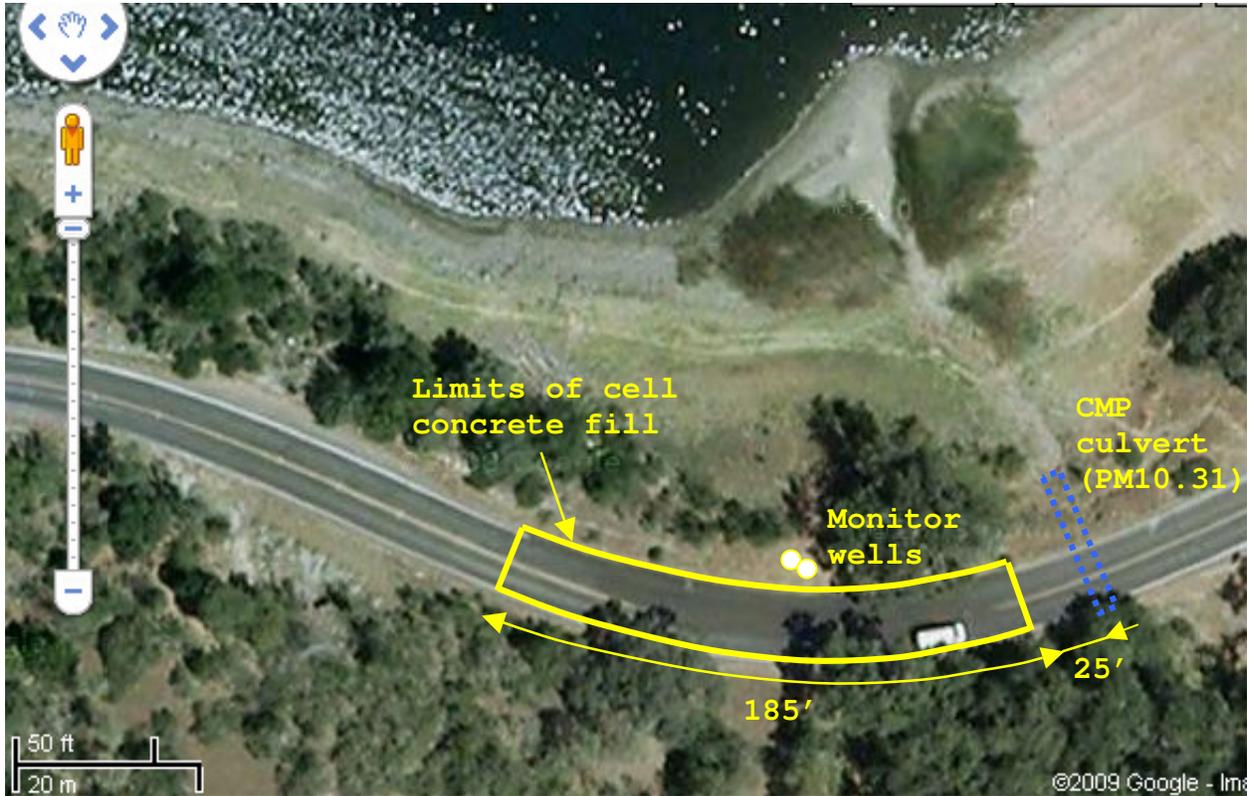
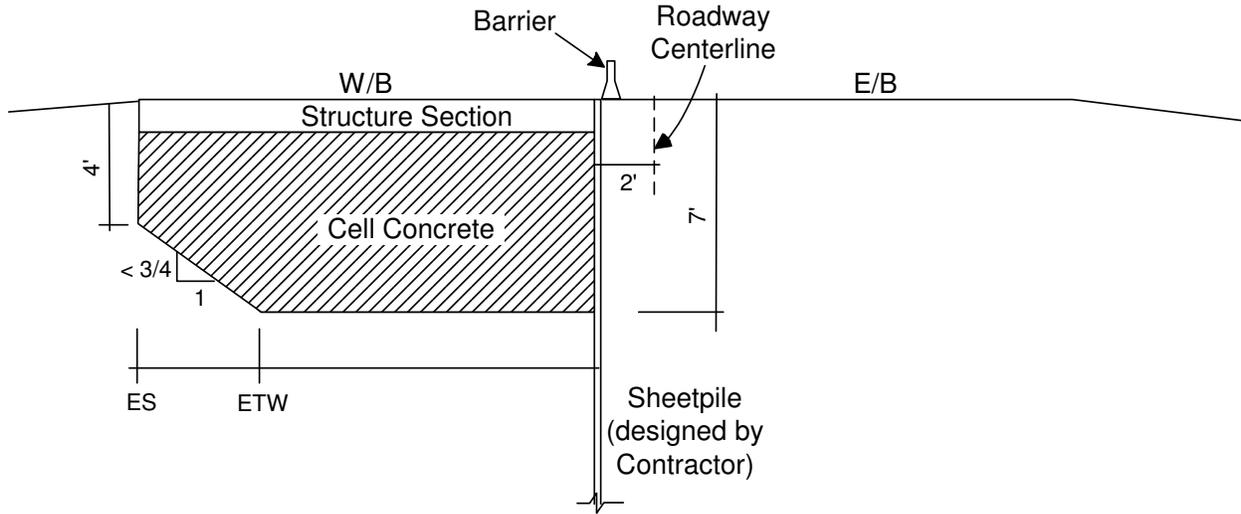


Figure 6. Proposed limits of cellular concrete fill.

**Stage 1**



**Stage 2**

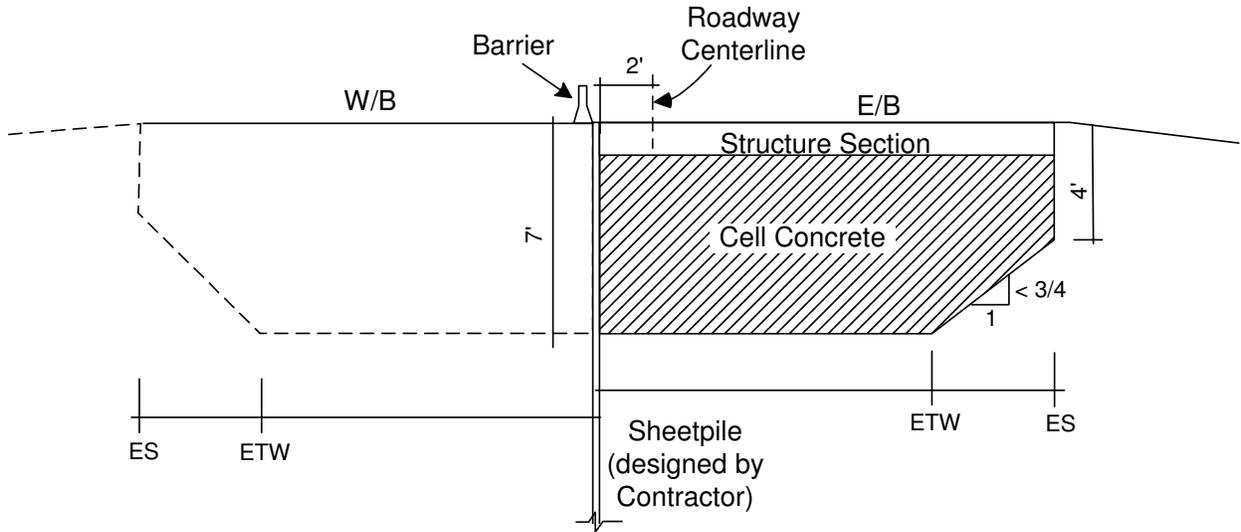


Figure 7. Illustration of staged construction.

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### **Appendix A: Special Provisions for Cellular Concrete**

The work shall consist of constructing a lightweight embankment material (cellular concrete) to the lines, grades, and dimensions shown on the plans, in accordance with the Standard Specifications, these special provisions and as directed by the Engineer.

The Contractor shall furnish a mix design, which will produce a cast density (at point of placement) of 35 to 42 pcf with a minimum compressive strength of 80 psi at 28 days. The Contractor shall provide the Engineer with a Work Plan of the equipment and procedures proposed at least 10 working days prior to placement; items in the submittal shall include:

1. Material list of items; manufacturer's specifications;
2. Mix design(s), including laboratory data using the mix design verifying mass and strength requirements.

Admixtures for accelerating the set time may be used in accordance with the manufacturer's recommendations. A foaming agent shall be used and shall be tested in accordance with ASTM C 796. Mixing water shall be potable and free of deleterious amounts of acids, alkali, salts, oils, and organic materials which would adversely affect the setting or strength of the cellular concrete.

Portland Cement shall comply with ASTM C150, Types I, II, or III. Pozzolans and other cementitious materials may be used when specifically approved by the manufacturer of the foaming agent.

At the point of placement, the density shall be in accordance with the specified cast density. A single cast density test shall represent the lesser of 230 cubic meters or one day's production.

The compressive strength shall be tested in accordance with ASTM C 495 except as follows:

1. Unless otherwise approved by the Engineer, the specimens shall be 3-inch by 6-inch cylinders. During molding, place the concrete in two approximately equal layers, and raise and drop the cylinders approximately 1 inch three times on a hard surface after placing each layer; no rodding shall be allowed.
2. Specimens shall be covered and protected immediately after casting to prevent damage and loss of moisture. Specimens shall be moist cured in the molds for a period of 7 days prior to the 28-day compressive strength test. Specimens shall not be oven dried.

Cellular concrete shall be placed to the designated dimensions as specified in Sections 19-1.03, "Grade Tolerance".

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Lift thickness for lightweight embankment material (cellular concrete) shall not exceed 2 feet. If more than one lift is required, the layer to receive the next lift shall be scarified with a broom or rake to provide surface roughness. After curing for 12 hours, any crumbling area on the surface should be removed and scarified before the next layer is placed. Surface stepping shall be limited to 5 inches. Grades of up to 5 percent may be made by adding a thickening agent to the mix, in conformance with the manufacturer's recommendations.

A minimum 12-hour waiting time between lifts shall be required. If ambient temperatures are anticipated to be below 4.5 C within 24 hours after placement, the mixing water should be heated when specifically approved by the manufacturer of the foaming agent, or placement shall be prohibited during such period. Placement shall not be allowed on frozen ground.

Cellular concrete shall be job site batched, mixed with the foaming agent, and placed with specialized equipment certified by the manufacturer. Cement and water may be premixed and delivered to the site; and foam shall be added at the site. Slurry coats and multilayer casting are acceptable methods of installation. Subgrade to receive lightweight embankment material (cellular concrete) shall be free of all loose and extraneous material. Subgrade shall be uniformly moist, and any excess water standing on the surface shall be removed prior to placing cellular concrete.

After placing the final lift of cellular concrete, the exposed surface of shall be covered with a prime coat. The prime coat shall conform to the requirements in Section 94, "Asphaltic Emulsions," of the Standard Specifications. A prime coat of SS-1 shall be applied uniformly at a rate of between 0.15 and 0.25 gallons per square-yard, with the exact rate determined by the Engineer.

Pay quantities for cellular concrete will be measured by cubic yard, to the lines and grade shown on the plans and as directed by the Engineer.

The contract price paid per cubic yard for cellular concrete shall include full compensation for furnishing all labor, materials (including furnishing and applying the prime coat), tools, equipment, and incidentals, and for doing all the work involved in furnishing and placing, the cellular concrete, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

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## **Appendix B: Non-Standard Special Provision (NSSP) for Temporary Retaining Wall**

### **10-1. TEMPORARY RETAINING WALL**

Temporary retaining wall shall be designed, constructed, and maintained as shown on the plans, as specified in these special provisions, and as directed by the Engineer.

The temporary retaining wall shall be steel sheet pile walls.

The Contractor shall be responsible for designing, constructing, and maintaining a temporary retaining wall that shall support all loads imposed, including traffic loads. The Engineer may reject any design which, in the Engineer's judgment, may not provide the necessary support of the roadway.

Within 30 days after the approval of the contract, the Contractor shall submit complete working drawings for the temporary retaining wall to the Engineer for review in accordance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. Four sets of drawings and 2 copies of the design calculations shall be furnished to the Engineer. The Contractor shall allow the Engineer 30 working days to review the drawings and design calculations after a complete submittal has been received. If revisions are required, as determined by the Engineer, the Contractor shall revise and resubmit the drawings and calculations within 15 working days of receipt of the Engineer's comments and shall allow 30 working days for the Engineer to review the revisions. Upon the Engineer's approval of the drawings and design calculations, 4 additional sets of drawings and 2 copies of the design calculations, incorporating the required changes, shall be submitted to the Engineer.

Working drawings shall be either 11in.x 17 in., or 22 in. x34in. in size and each drawing and calculation sheet shall include the State assigned designations for the contract number and District-County-Route-Postmile. The design firm's name, address, and phone number shall be shown on the working drawings. Each sheet shall be numbered in the lower right hand corner and shall contain a blank space in the upper right hand corner for future contract sheet numbers.

The Contractor shall verify the existing ground elevations at the site prior to preparing the working drawings. Said working drawings shall contain all information required for the proper construction of the temporary retaining wall, including existing ground line at face of wall as verified at the site and any required revisions or additions to drainage systems or other facilities. The working drawings shall be supplemented as necessary with calculations for the particular installation. Said working drawings and calculations shall be stamped and signed by an engineer who is registered as a Civil Engineer in the State of California.

The Contractor shall not commence constructing temporary retaining wall until the Engineer has reviewed and approved the working drawings in writing.

Approval by the Engineer of the temporary retaining wall drawings or the inspection performed by the Engineer will in no way relieve the Contractor of full responsibility for the temporary retaining wall.

When no longer required as determined by the Engineer, the Contractor may choose to remove the temporary wall or leave it in place. If left in place, the top portion of the temporary

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wall shall be removed to a depth of 3 feet below finished grade. In either case, the voids created during the removal shall be filled with 3-sack cement slurry. Removed portion of the wall shall be disposed of outside the highway right of way as provided in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

#### **MEASUREMENT AND PAYMENT**

Temporary retaining wall will be measured and paid for by the square foot. Regardless of the type of temporary retaining wall actually constructed, the square foot area for payment will be based on the vertical height and length of each section that was constructed. The vertical height of each section will be taken as the difference in elevation on the outer face, from the existing ground elevation to the top of wall profile complete in place.

The contract price paid per square foot for temporary retaining wall shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in temporary retaining wall, complete in place, including designing, constructing (including excavation and backfill), maintaining, removing and disposing of, and leaving in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

## Memorandum

*Flex your power!  
Be energy efficient!*

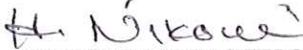
To: MR. ZIAD ABUBEKR  
Office Chief  
Design North Counties

Date: June 15, 2011

Attention: J. LEY / P. BATIO / R. BHALLA

File: 04-NAP-128 (PM 10.31)  
EA 04-4S0301  
E-FIS 0400001200  
Embankment Erosion

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Geotechnical Services  
Division of Engineering Services

  
HOOSHMAND NIKOUI  
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Division of Engineering Services

Subject : Geotechnical Design Report

This Memo is in response to your request dated June 7, 2011 to provide geotechnical recommendations for embankment erosion repair at State Route 128, PM 10.31 in Napa County.

### Current Condition

In 2010, Maintenance observed erosion on westbound embankment slope, right above a 24-inch CMP culvert. Field visits in April and June 2011 indicated that there were sporadic shallow erosions on the slope. An abandoned downdrain pipe was also observed on the slope. The possible causes of the erosion are: (1) surface water overflow from the roadway as this location is at a lower point, (2) the abandoned downdrain may have collected surface water that in turn undermined the slope. We understand that District Hydraulics is proposing to build a dike and an inlet on the roadside to prevent surface water from flowing onto the embankment slope.

### Recommendations

We recommend the following steps to repair the eroded slope (refer to Figs. 1 and 2):

- Remove the abandoned downdrain pipe.
- Excavate the eroded area as specified in Fig. 1, to a depth of 3 feet.
- Place RSP fabric at the bottom of the excavated area per Standard Specifications 72-2.025.
- Place ¼-ton RSP using Method B placement per Standard Specifications 72-2.03.
- Place 2 inches of soil on top of the RSP and apply erosion control.

MR. ZIAD ABUBEKR  
Attn: J. LEY / P. BATIO / R. BHALLA  
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If you have any questions, please contact Sunny Yang at (510) 286-4808 or Hooshmand Nikoui, Branch Chief, at (510) 286-4811.

c: TJPokrywka, HNikoui, ARahimi, Daily File, Route File, J Stayton (DES Office Engineer)

SYang/mm



Figure 1. Limits of repair.

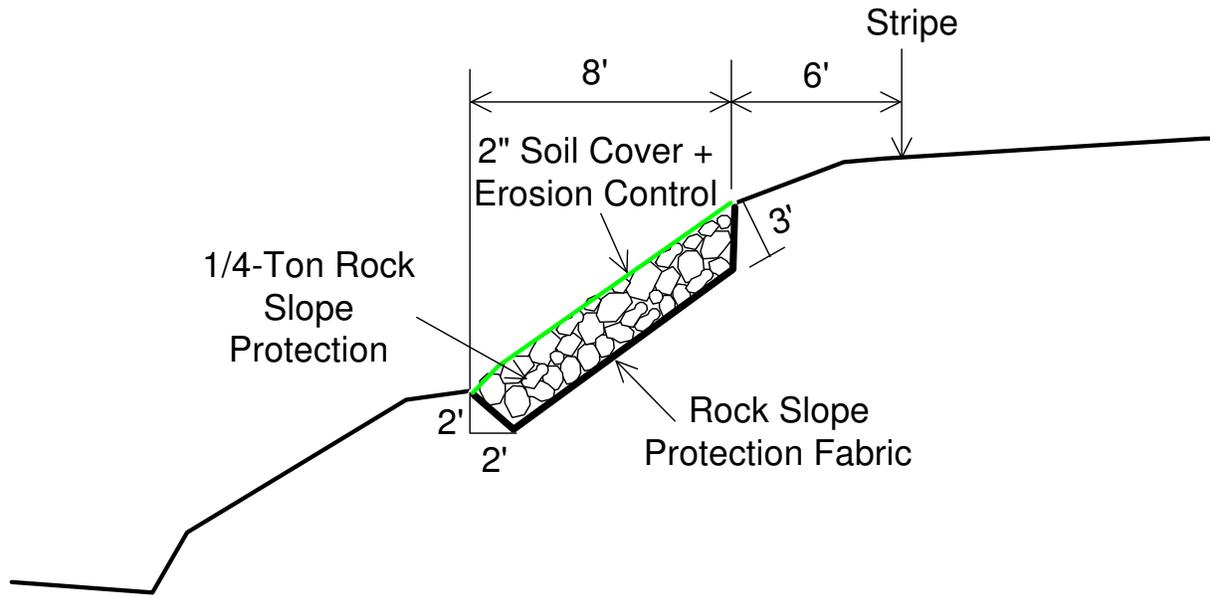


Figure 2. Illustration of repair method.