

INFORMATION HANDOUT

For Contract No. **10-0A8304**

At **SJ - 88 - 6.1/8.9**

Identified by
Project ID **100000009**
PERMITS

California Department of Fish and Wildlife dated

U.S. Fish and Wildlife Service

WATER QUALITY

Central Valley Regional Water Quality Control Board

ENCROACHMENT PERMITS

[Central Valley Flood Protection Board Encroachment Permit - Calaveras River Bridge](#)

[Central Valley Flood Protection Board Encroachment Permit - Bear Creek Bridge](#)

[San Joaquin County Encroachment Permit - Moshier Creek Bridge](#)

MATERIALS INFORMATION

[Manufacturer's Drawings for Alternative In-line Terminal System](#)

[Manufacturer's Drawings for Alternative Flared Terminal System](#)

[Manufacturer's Drawing for QuadGuard](#)



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2011-I-0644-1

NOV 08 2012

Mr. Frank Meraz
Chief, Central Region Biology North Branch
California Department of Transportation, District 6
855 M Street, Suite 200
Fresno, California 93721

Subject: Informal Consultation for the Lockeford Bridge Rail Replacement Project in San Joaquin County, California (California Department of Transportation EA 10-0A830; 10-SJ-88-PM 6.1-9.3)

Dear Mr. Meraz:

This is the U.S. Fish and Wildlife Service's (Service) response to the California Department of Transportation's (Caltrans) request for concurrence on the proposed Lockeford Bridge Rail Replacement Project (project) in San Joaquin County, California. Under the provisions of the July 1, 2007, Pilot Program Memorandum of Understanding between the Federal Highway Administration (FHWA) and Caltrans, FHWA assigned, and Caltrans assumed, FHWA's responsibilities under the National Environmental Policy Act as well as its responsibilities for environmental review, consultation, and coordination under other Federal environmental laws.

Your letter, dated February 21, 2012, was received in this office on March 1, 2012. At issue are the effects of this proposed project on the federally-listed as threatened giant garter snake (*Thamnophis gigas*). Caltrans has determined that the proposed project may affect, but is not likely to adversely affect the giant garter snake, and therefore requests concurrence from the Service with its determination. This response was prepared in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

The findings and recommendations of this letter are based on: (1) Caltrans' February 21, 2012, letter requesting concurrence; (2) the accompanying February 2012, *Lockeford Bridge Rail Project Natural Environment Study-Minimal Impacts (NES-MI)*; (3) a site visit attended by Caltrans and the Service on June 15, 2011, to assess the project area and the potential for giant garter snake impacts due to construction; (4) telephone calls and electronic-mail (e-mail) correspondence between the Service and Caltrans; and (5) other information available to the Service.

Project Description

State Route (SR) 88 within the limits of the proposed project, between post miles (PM) 6.1 and 9.3, is a two-lane conventional highway with standard lane widths of 11.8 ft. and paved shoulders that range from 0 ft. to 4 ft. Caltrans proposes to replace the existing bridge approach metal beam guardrails and guardrail end treatments at the Calaveras River, Moshier Creek, and Bear Creek Bridges; replace or extend existing drainage culverts and headwalls; realign levee access roads and private driveways; and relocate utility poles and re-grade ditches. Replacement work will serve to upgrade structures to the current highway standard and to remove fixed obstacles in the clear recovery zone, which is designated as an unobstructed, flat or gently sloping area approximately 20 ft. beyond the edge of the traveled way where out-of-control drivers have the opportunity to regain vehicle control. The proposed project is a Clean Up and Roadside Environmental (CURE) project, the purpose of which is to improve public safety.

Construction activities will require the acquisition of 0.89 acres (ac) of additional right-of-way (ROW) for the realignment of the levee access roads. This work will require fill, which will be imported from off-site. Staging areas will be located in areas contained within the existing and proposed ROW. Realignments will occur on the outside of the existing roads, away from the waterways, so no work will be conducted in any of the waterways. The original levee roads will be left in place undisturbed; no road removal work and therefore no re-vegetation is proposed. The project is anticipated to begin in April 2014 and will last for one construction season.

Proposed Bridge Work

In all four quadrants of the Calaveras River Bridge site (#29-60; PM 6.094), bridge approach and metal beam guardrails will be removed and replaced; concrete foundations and backup walls will be installed to support the new QuadGuard attenuators, which is a type of crash cushion system with a minimal footprint used to provide crash protection; and a portion of the concrete approach curbs and return walls will be removed.

In all four quadrants of the Moshier Creek Bridge site (#29-61; PM 7.526), concrete foundations will be installed to support the new QuadGuard attenuators, and concrete curbs will be reconstructed. No trees will be removed at this location, but levee access roads will be realigned in the southeast and southwest quadrants. As a result of these realignments, two culverts (drainage numbers #1, 2) will be extended within the southeast quadrant of the bridge. Additionally, four utility poles will be relocated in the southern quadrants.

In all four quadrants of the Bear Creek Bridge site (#29-62; PM 8.909), bridge approach and metal beam guardrails will be removed and replaced, and concrete foundations and backup walls will be installed to support the new QuadGuard attenuators. Levee access roads, which are located in all four bridge quadrants, will be realigned. As a result of these realignments, three culverts (drainage numbers #7, 8, 9) will be extended, one in each of the northwest, northeast, and southeast quadrants, respectively. Additionally, two utility poles will be relocated in the southern quadrants.

All culverts at both bridge sites will be extended only in one direction, that is, away from the waterways/banks and towards the new levee access road realignments so no work will occur in areas on the waterway/bank side of the existing levee access roads.

Culvert Work between Moshier Creek Bridge and Bear Creek Bridge

Four drainage culverts (drainage numbers #3-6) will be extended; their associated headwalls will be relocated 20 ft. from the edge of the travel way within the existing ROW. These culverts and headwalls are located at PM 7.6, 7.9, 8.4, and 8.4, away from the bridge sites.

Action Area

The action area is defined in 50 CFR § 402.02, as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” For the proposed project, the action area consists of the construction footprint, which is composed of the SR 88 hardscape; and portions of ruderal/disturbed land within the existing and proposed Caltrans ROW that will be affected directly by construction and construction-related activities such as equipment access routes and staging.

Proposed Avoidance and Minimization Measures

According to the NES-MI and further discussion with Caltrans, Caltrans anticipates that the project is unlikely to adversely affect the giant garter snake. The following are proposed as precautionary measures in the unlikely event that the species is encountered.

1. Special Standard Provisions for Species Protection will be included in the contractor bid package, specifically referencing the giant garter snake.
2. A qualified biologist(s) will conduct environmental awareness training for all construction personnel prior to the start of ground-breaking. The training will cover life history of the giant garter snake, how to identify the species and its habitat, what to do if a giant garter snake is encountered during construction, and penalties for not complying with biological minimization requirements.
3. Prior to the start of construction, environmentally sensitive areas (ESAs) will be established using exclusionary fencing at Moshier Creek Bridge and at Bear Creek Bridge, as well as along the segment of roadway between Moshier and Bear Creeks, in order to enclose each work area, thereby preventing the giant garter snake from entering these work areas; the fencing also will prevent the encroachment of equipment and personnel outside of the designated work areas.
4. Levee road realignment work and culvert replacement work will be confined to the period between May 1 and October 1 (the approximate giant garter snake active season). No work will be conducted within or on the banks of any of the waterways.

5. A qualified biologist(s) will conduct preconstruction surveys for the giant garter snake no more than 24 hours prior to the start of ground-breaking (e.g. site preparation and grading). If construction stops for a period of two weeks or longer, a new survey will be completed no more than 24 hours prior to the reinitiation of construction work.
6. Any vegetation or ground clearing required for facilitating construction activities will be confined to the minimum area necessary within 200 ft. of aquatic habitat. No native oaks (*Quercus* sp.) or riparian vegetation will be removed.
7. No plastic, monofilament, jute, or similar erosion control matting that could entangle the giant garter snake will be used. Possible substitutions include coconut coir matting and tactified hydro-seeding compounds, or other materials approved by the Service.
8. All equipment and machinery will be checked for the presence of the giant garter snake prior to the start of each work day to preclude their becoming trapped or stuck underneath the vehicles.
9. If a live giant garter snake is encountered within the work areas during construction, the qualified biologist(s) will be notified immediately, and in coordination with the Resident Engineer, will stop all construction activity in the vicinity of the species. The giant garter snake will be monitored and allowed to leave without harassment; if it does not leave on its own within one working day, the Service and the California Department of Fish and Game (CDFG) will be consulted. Escape routes for the giant garter snake will be determined in advance of construction.

Effects Analysis

Field surveys were first conducted by Caltrans biologists on April 27, 1999, and botanical surveys on May 5, 2001. Further field surveys were conducted on June 25 and August 27, 2001. A re-evaluation of the site was performed by Caltrans biologists on March 21, April 14, and June 14, 2011, in which habitat assessments were conducted at all locations potentially suitable for the giant garter snake. These assessments found that potential, but impaired, upland habitat exists within 200 ft. of the segments of Bear Creek, Moshier Creek, and the Calaveras River located within the action area: upland areas have been modified for agricultural practices that include plowing, planting, and spraying; the roadside areas in proximity to the waterways are of poor quality and also have been mowed, sprayed, and trenched for roadside drainage. Non-native ruderal vegetation dominates the roadside and stormwater runoff ditches. The assessments also found that there is potential, but impaired, aquatic habitat. The water in Bear Creek, Moshier Creek, and the Calaveras River contain algae and other high nitrogen level indicators, while non-native tree species such as eucalyptus (*Eucalyptus* sp.) and oleander (*Nerium oleander*) exist along the banks of Bear Creek; riparian vegetation also grows along the banks of all three waterways. According to the California Natural Diversity Database (CNDDDB, 2012)¹, there are no records of the giant garter snake within the Waterloo United States

¹ California Natural Diversity Database (CNDDDB). 2012. Natural Heritage Division, California Department of Fish and Game. RareFind 4. Accessed June 11, 2012. Sacramento, California.

Geological Survey (USGS) 7.5-minute quadrangle, in which the project area is located. The two closest historical occurrences date from 1976 in Pixley Slough (within the Lodi South USGS 7.5-minute quadrangle), located approximately 7.4 mi west of the project footprint, and in the Stockton Diverting Canal (within the Stockton East USGS 7.5-minute quadrangle), located approximately 6 mi southwest of the project footprint.

There will be no in-water work; all levee access road realignments and associated culvert extension work at the bridge sites will be restricted to the outside of the existing levee roads (i.e. in the direction away from the waterways/banks). Of the four culverts that will be extended between the Moshier Creek and Bear Creek Bridges, one features an unnamed seasonal creek with aquatic vegetation on its western side. Caltrans biologists observed no water present in the seasonal creek during site visits in the spring and summer of 2011, so it is unlikely to provide suitable aquatic habitat for the species. Furthermore, all four culverts are separated from the two waterways, Moshier Creek and Bear Creek, by a 1.4 mile segment of SR 88, on which they are located: neither the culverts nor the seasonal creek are hydrologically connected to either of these waterways or to the Calaveras River, and the culverts are not situated in areas considered to be suitable upland habitat areas for the giant garter snake.

Given the absence of observed small mammal burrows that could function as upland refugia for the giant garter snake, and the presence of poor quality upland and aquatic habitat, it is unlikely that the giant garter snake will utilize or inhabit the action area; rather, it is reasonably likely that any individuals present outside of the action area will disperse through the project site to other locations up- or downstream with more suitable upland habitat.

Determination

Given the relatively small-scale scope of work, the existing impaired conditions of both aquatic and upland habitat, and the absence of known occurrences in the action area or proximate to the action area, Caltrans concludes that it is reasonably likely that any effects to the giant garter snake will be insignificant or discountable. Therefore, Caltrans has determined that the project may affect, but is unlikely to adversely affect the giant garter snake and has requested concurrence with its determination. After reviewing Caltrans' request letter, the NES-MI, information from the site visit, and further discussing the project with Caltrans, the Service concurs with the determination that the proposed project is not likely to adversely affect the giant garter snake.

Conclusion

This concludes the Service's review of the proposed Lockeford Bridge Rail Replacement Project and its consideration of the project's effects to the species. No further coordination with the Service under the Act is necessary at this time. Note that take of listed species is not exempted from the prohibitions described under section 9 of the Act. If conditions change so that the project may adversely affect listed species, initiation of formal consultation, as provided in 50 CFR § 402.14, is required.

Mr. Frank Meraz

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Please contact Jen Schofield, Fish and Wildlife Biologist, at (916) 414-6600 if you have any questions regarding this letter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Leeman', with a long horizontal flourish extending to the right.

Thomas Leeman
Chief, San Joaquin Valley Division

cc:

Mr. Dan Gifford, California Department of Fish and Game, Rancho Cordova, California



2013 JUN 20 AM 10 01



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

17 June 2013

Mark McAvoy
California Department of Transportation
1976 Dr Martin Luther King Jr. Boulevard
Stockton, CA 95201

CERTIFIED MAIL
7011 2970 0003 8939 9206

***CLEAN WATER ACT §401 TECHNICALLY CONDITIONED WATER QUALITY
CERTIFICATION; CALIFORNIA DEPARTMENT OF TRANSPORTATION, LOCKEFORD
BRIDGE RAIL PROJECT (WDID#5B39CR00223), SAN JOAQUIN COUNTY***

This Order responds to the 3 January 2013 application submitted by the California Department of Transportation (Applicant) for the Water Quality Certification of a bridge improvement project permanently impacting 0.009 acre and temporarily impacting 0.049 acre of waters of the United States.

This Order serves as certification of the United States Army Corps of Engineers' Nationwide Permit# 14 (Non-Reporting) under § 401 of the Clean Water Act, and a Waste Discharge Requirement under the Porter-Cologne Water Quality Control Act.

WATER QUALITY CERTIFICATION STANDARD CONDITIONS:

1. This Order serves as a Water Quality Certification (Certification) action that is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to § 13330 of the California Water Code and § 3867 of the California Code of Regulations.
2. This Certification action is not intended and shall not be construed to 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 § 3855(b) of the California Code of Regulations, and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity of any non-denial Certification action shall be conditioned upon total payment of the full fee required under § 3860(c) of the California Code of Regulations.
4. This Certification is no longer valid if the project (as described) is modified, or coverage under § 404 of the Clean Water Act has expired.

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCÉE, EXECUTIVE OFFICER

11020 Sun Center Drive #200, Rancho Cordova, CA 95670 | www.waterboards.ca.gov/centralvalley

5. All reports, notices, or other documents required by this Certification or requested by the Central Valley Regional Water Quality Control Board (Central Valley Water Board) shall be signed by a person described below or by a duly authorized representative of that person.
 - (a) For a corporation: by a responsible corporate officer such as (1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (2) any other person who performs similar policy or decision-making functions for the corporation; or (3) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (b) For a partnership or sole proprietorship: by a general partner or the proprietor.
 - (c) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

6. Any person signing a document under Standard Condition number 5 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

TECHNICAL CERTIFICATION CONDITIONS:

In addition to the above standard conditions, the Applicant shall satisfy the following:

1. The Applicant shall notify the Central Valley Water Board in writing seven (7) days in advance of the start of any work within waters of the United States. The notification shall include the name of the project and the WDID number, and shall be sent to the Central Valley Water Board Contact indicated in this Certification.
2. Except for activities permitted by the United States Army Corps of Engineers under § 404 of the Clean Water Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.
3. The Applicant shall maintain a copy of this Certification and supporting documentation (Project Information Sheet) at the Project site during construction for review by site personnel and agencies. All personnel (employees, contractors, and subcontractors) performing work on the proposed project shall be adequately informed and trained regarding the conditions of this Certification.

4. The Applicant shall perform surface water sampling:
- a) when performing any in-water work;
 - b) in the event that project activities result in any materials reaching surface waters; or
 - c) when any activities result in the creation of a visible plume in surface waters. The monitoring requirements in Table 1 shall be conducted upstream out of the influence of the project, and 300 feet downstream of the work area. The sampling frequency may be modified for certain projects with written approval from Central Valley Water Board staff.

Table 1:

Parameter	Unit	Type of Sample	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	Grab ⁽¹⁾	Every 4 hours during in-water work	(2)
Settleable Material	mL/L	Grab ⁽¹⁾	Every 4 hours during in-water work	(2)
Visible construction related pollutants ⁽³⁾	Observations	Visual Inspections	Continuous throughout the construction period	—

⁽¹⁾ Grab samples shall not be collected at the same time each day to get a complete representation of variations in the receiving water.

⁽²⁾ Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136; where no methods are specified for a given pollutant, the method shall be approved by Central Valley Water Board staff.

⁽³⁾ Visible construction-related pollutants include oil, grease, foam, fuel, petroleum products, and construction-related, excavated, organic or earthen materials.

Surface water monitoring shall occur at mid-depth. A surface water monitoring report shall be submitted to the Central Valley Water Board Contact indicated in this Certification within two weeks of initiation of sampling and every two weeks thereafter. In reporting the monitoring data, the Applicant shall arrange the data in tabular form so that the sampling locations, date, constituents, and concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the project complies with Certification requirements. The report shall include surface water sampling results, visual observations, and identification of the turbidity increase in the receiving water applicable to the natural turbidity conditions specified in the turbidity criteria below.

If no monitoring is conducted, the Applicant shall submit a written statement to the Central Valley Water Board Contact indicated in the Certification stating, "No monitoring was required."

5. The Central Valley Water Board adopted a *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011 (Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Turbidity and settleable matter limits are based on water quality objectives contained in the Basin Plan and are part of this Certification as follows:

- a) Activities shall not cause turbidity increases in surface water to exceed:
 - i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTUs;
 - ii. where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU;
 - iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent;
 - iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs; and
 - v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.

Except that these limits will be eased during in-water working periods to allow a turbidity increase of 15 NTUs over background turbidity. In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior approval of the Central Valley Water Board staff.

- b) Activities shall not cause settleable matter to exceed 0.1 mL/L in surface waters as measured in surface waters within 300 feet downstream of the project.
6. The Applicant shall notify the Central Valley Water Board immediately if the above criteria for turbidity, settleable matter, or other water quality objectives are exceeded.
7. In-water work shall occur during periods of no flow and no precipitation.
8. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Applicant must perform frequent inspections of construction equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.

9. The Applicant shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the project. The Plan must detail the project elements, construction equipment types and location, access and staging and construction sequence. The Plan must also address the potential of responding to a spill or prevention of spills occurring within the project site.
10. A method of containment must be used below the bridges to prevent debris from falling into the water body through the entire duration of the project.
11. Silt fencing, straw wattles, or other effective management practices must be used along the construction zone to minimize soil or sediment along the embankments from migrating into the waters of the United States through the entire duration of the project.
12. The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic dependent wildlife is prohibited within the project area, as indicated in the attached map (Figure 1).
13. All areas disturbed by project activities shall be protected from washout or erosion.
14. All temporarily affected areas shall be restored to pre-construction contours and conditions upon completion of construction activities.
15. All materials resulting from the project shall be removed from the site and disposed of properly.
16. This Certification does not allow permanent water diversion of flow from the receiving water. This Certification is invalid if any water is permanently diverted as a part of the project.
17. The discharge of petroleum products or other excavated materials to surface water is prohibited. Activities shall not cause visible oil, grease, or foam in the receiving water. The Applicant shall notify the Central Valley Water Board immediately of any spill of petroleum products or other organic or earthen materials.
18. If unanticipated discharges to the waters of the United States and/or soil occur, the Applicant shall notify the Central Valley Water Board Contact indicated in this Certification in writing within five (5) calendar days of occurrence. Unanticipated discharges may include, but are not limited to, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete, asphalt, paint, coating material, drilling fluids, or other construction-related potentially hazardous substances.
19. The Applicant shall comply with all California Department of Fish and Wildlife requirements, including but not limited to those requirements described in Lake or Streambed Alteration Agreement No. 1600-2012-0002-R2.

20. The Applicant shall submit a copy of the final, signed and dated Lake or Streambed Alteration Agreement issued by the California Department of Fish and Wildlife within 14 days of issuance to the Central Valley Water Board Contact indicated in this Certification.
21. The Applicant shall submit a copy of the Letter of Concurrence issued by the United States Fish and Wildlife Service within 14 days of issuance to the Central Valley Water Board Contact indicated in this Certification.
22. The Applicant shall comply with all United States Fish and Wildlife Service requirements, including, but not limited to those requirements described in the Letter of Concurrence.
23. The Applicant shall obtain coverage under the National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2009-0009-DWQ for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres.
24. The Conditions in this Certification are based on the information in the attached "Project Information Sheet." If the actual project, as described in the attached Project Information Sheet, is modified or changed, this Certification is no longer valid until amended by the Central Valley Water Board.
25. In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. The applicability of any state law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to ensure compliance with this Certification.
 - (a) If the Applicant or a duly authorized representative of the project fails or refuses to furnish technical or monitoring reports, as required under this Certification, or falsifies any information provided in the monitoring reports, the applicant is subject to civil liability, for each day of violation, and/or criminal liability.
 - (b) In response to a suspected violation of any condition of this Certification, the Central Valley Water Board may require the Applicant to furnish, under penalty of perjury, any technical or monitoring reports the Central Valley Water Board deems appropriate, provided that the burden, including cost of the reports, shall be in reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

- (c) The Applicant shall allow the staff(s) of the Central Valley Water Board, or an authorized representative(s), upon the presentation of credentials and other documents, as may be required by law, to enter the project premises for inspection, including taking photographs and securing copies of project-related records, for the purpose of assuring compliance with this Certification and determining the ecological success of the project.

26. The Applicant shall provide a Notice of Completion (NOC) no later than 30 days after the project completion. The NOC shall demonstrate that the project has been carried out in accordance with the project description in the Certification and in any amendments approved. The NOC shall include a map of the project location(s), including final boundaries of any on-site restoration area(s), if appropriate, and representative pre and post construction photographs. Each photograph shall include a descriptive title, date taken, photographic site, and photographic orientation.

CENTRAL VALLEY WATER BOARD CONTACT:

Trevor Cleak, Environmental Scientist
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-8114
tcleak@waterboards.ca.gov
(916) 464-4684

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

The Central Valley Water Board has determined that this project meets the Categorical Exemption, under § 15301 of the California Code of Regulations which exempts operation, repair, maintenance, permitting, leasing, licensing, or minor alterations of existing public or private structures, facilities, mechanical equipment, or topological features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination.

WATER QUALITY CERTIFICATION:

I hereby issue an Order certifying that any discharge from the California Department of Transportation, Lockeford Bridge Rail Project (WDID#5B39CR00223) will comply with the applicable provisions of § 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. This discharge is also regulated under State Water Resources Control Board Water Quality Order No. 2003-0017 DWQ "Statewide General Waste Discharge Requirements For Dredged Or Fill Discharges That Have Received State Water Quality Certification (General WDRs)".

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in compliance with the conditions of this Certification, the California Department of Transportation's application package, and the attached Project Information Sheet, and (b) compliance with all applicable requirements of the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011.


Pamela C. Creedon
Executive Officer

Enclosure: Project Information Sheet

Attachment: Figure 1 – Project Location Map

cc: Distribution List, page 12

PROJECT INFORMATION SHEET

Application Date: 3 January 2013

Applicant: Mark McAvoy
California Department of Transportation
1976 Dr Martin Luther King Jr. Boulevard
Stockton, CA 95201

Applicant Representative: Kirti Uppal
California Department of Transportation
1976 Dr Martin Luther King Jr. Boulevard
Stockton, CA 95201

Project Name: Lockeford Bridge Rail Project

Application Number: WDID#5B39CR00223

Type of Project: Bridge improvement project

Timeframe of Project Implementation: 1 May through 30 October

Project Location: Section 3, 23, 26, and 34, Township 2 and 3 North, Range 7 East, MDB&M.
Latitude: 38°00'00"N and Longitude: 121°07'30" W

County: San Joaquin County

Receiving Water(s) (hydrologic unit): Moshier Creek and Bear Creek San Joaquin
Hydrologic Basin, North Valley Floor Hydrologic Unit #531.30, Lower Calaveras HA

Water Body Type: Streambed

Designated Beneficial Uses: The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011 (Basin Plan) has designated beneficial uses for surface and ground waters within the region. Beneficial uses that could be impacted by the project include, but are not limited to: Municipal and Domestic Water Supply (MUN); Agricultural Supply (AGR); Industrial Supply (IND); Hydropower Generation (POW); Groundwater Recharge (GWR); Water Contact Recreation (REC-1); Non-Contact Water Recreation (REC-2); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Preservation of Biological Habitats of Special Significance (BIOL); Rare, Threatened, or Endangered Species (RARE); Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN); and Wildlife Habitat (WILD). A comprehensive and specific list of the beneficial uses applicable for the project area can be found at http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/index.shtml.

303(d) List of Water Quality Limited Segments: Moshier Creek and Bear Creek are the receiving waters for the Lockeford Bridge Rail Project. This project does not impact an already impaired water body. The most recent list of approved water quality limited segments is found at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml

Project Description: The Lockeford Bridge Rail Project consists of improving the bridges over the Calaveras River, Moshier Creek, Bear Creek and the road approaches to the bridges on State Route 88. The project is located on California State Route 88 between Bear Creek Bridge and the Calaveras River Bridge in San Joaquin County.

The impacts to waters of the United States will consist of replacing ten culverts with new ones of the same diameter as shown in the table below.

Culvert Diameter (Inches)	Culvert Location	Culvert Extended	Existing Culvert Length (Feet)	Culvert Extension (Feet)
30	Moshier Creek	Yes	35.6	31.1
30	Moshier Creek	Yes	24.4	41.3
24	Bear Creek	Yes	34.2	28.6
24	Bear Creek	Yes	41.6	45.0
24	Bear Creek	Yes	41.5	34.0
36	Unnamed drainage	No	39.4	-
24	Unnamed drainage	No	36.7	-
48	Unnamed drainage	Yes	43.3	23
48	Unnamed drainage	Yes	48.3	10.5
48	Unnamed drainage	Yes	48.3	10.5

No wet concrete will be placed into waters of the United States. Construction equipment will not enter waters of the United States. No dewatering will occur within the project area. The Calaveras River will not be impacted by activities related to this project. All other activities such as removing guardrails and installing bridge foundations will not impact waters of the United States.

The project will permanently impact 0.009 acre and temporarily impact 0.049 acre of waters of the United States.

Preliminary Water Quality Concerns: Construction activities may impact surface waters with increased turbidity and settleable matter.

Proposed Mitigation to Address Concerns: The Applicant will implement Best Management Practices to control sedimentation and erosion. All temporary affected areas will be restored to pre-construction contours and conditions upon completion of construction activities. The Applicant will conduct turbidity and settleable matter testing during in-water work, stopping work if Basin Plan criteria are exceeded or are observed.

Excavation/Fill Area: Approximately 43.4 cubic yards of rock will be placed into 0.009 acre of waters of the United States.

Dredge Volume: None

United States Army Corps of Engineers File Number: Non-Reporting

United States Army Corps of Engineers Permit Type: Nationwide Permit# 14

California Department of Fish and Wildlife Lake or Streambed Alteration Agreement:
1600-2012-0002-R2

Possible Listed Species: Giant garter snake

Status of CEQA Compliance: The Central Valley Water Board concurs that this project meets the Categorical Exemption, under § 15301 of the California Code of Regulations, which exempts operation, repair, maintenance, permitting, leasing, licensing, or minor alterations of existing public or private structures, facilities, mechanical equipment, or topological features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination.

The Central Valley Water Board filed a Notice of Exemption with the State Clearinghouse within five (5) days of the date of this Certification.

Compensatory Mitigation: The Central Valley Water Board is not requesting compensatory mitigation for the Lockeford Bridge Rail Project.

Application Fee Provided: Total fees of \$1179.00 have been submitted to the Central Valley Water Board as required by § 3833(b)(3)(A) and § 2200(a)(3) of the California Code of Regulations.

DISTRIBUTION LIST

Erin Hess
United States Army Corps of Engineers
Sacramento District Office
Regulatory Division
1325 J Street, Suite 1350
Sacramento, CA 95814-2922

Jennifer Schofield
United States Fish & Wildlife Service
Sacramento Fish & Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

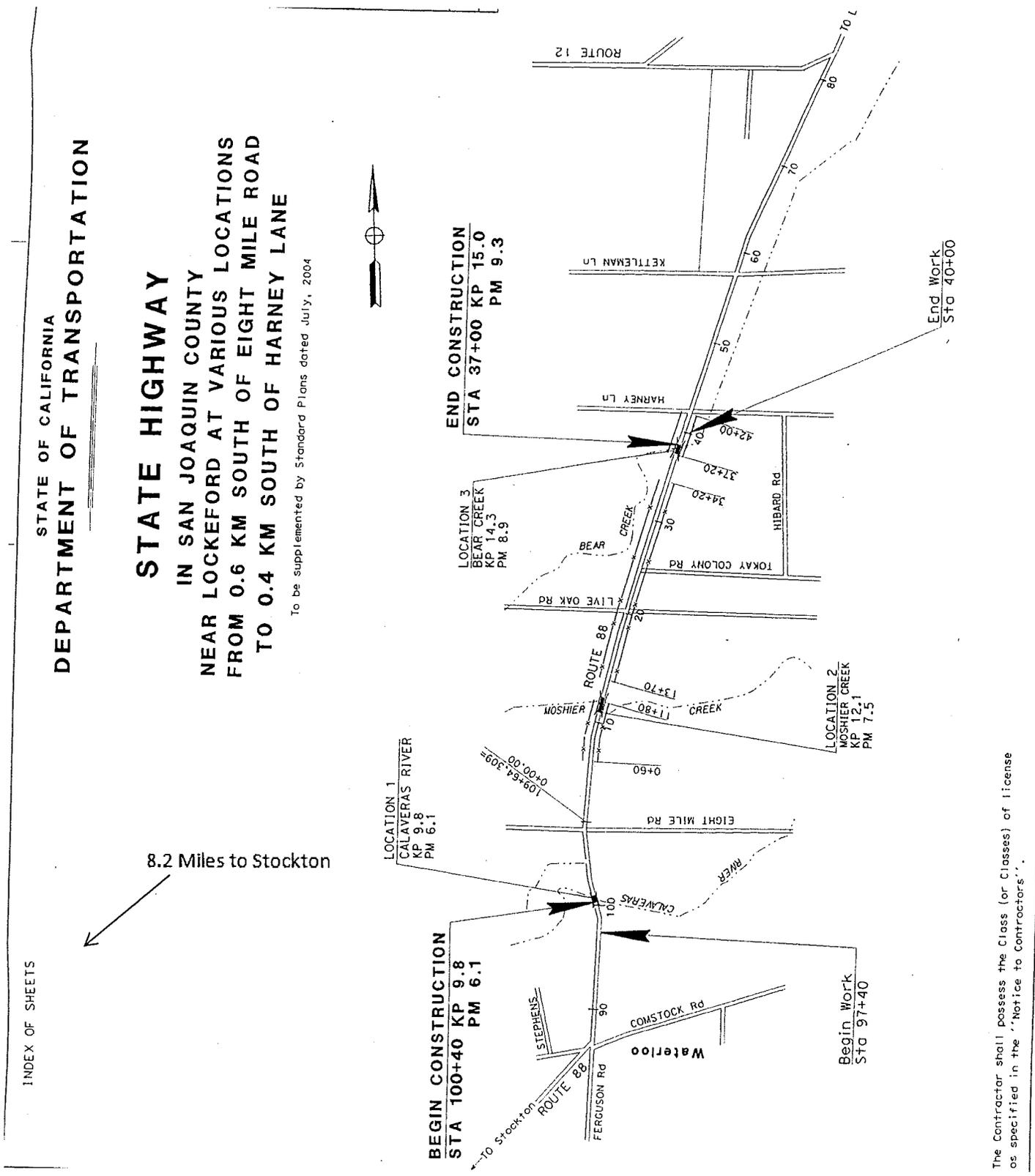
Tim Nosal
Department of Fish and Wildlife
1701 Nimbus Road
Rancho Cordova, CA 95670

Bill Jennings
CA Sportfishing Protection Alliance
3536 Rainier Avenue
Stockton, CA 95204

Bill Orme (Electronic copy only)
401 Certification and Wetlands Unit Chief
State Water Resources Control Board

Jason A. Brush (Electronic copy only)
Wetlands Office Supervisor (WTR-8)
United States Environmental Protection Agency

Kriti Uppal
California Department of Transportation
1976 Dr Martin Luther King Jr. Boulevard
Stockton, CA 95201



The Contractor shall possess the Class (or Classes) of license as specified in the "Notice to Contractors".

Figure 1 - Project Location Map



JAN 28 2013

Date

Mark McAvoy
California Department of Transportation
1976 East Dr. Martin Luther King Jr. Blvd.
Stockton, CA 95205

Subject: Final Streambed Alteration Agreement
Notification No. 1600-2013-0002 -R2
Lockeford Bridge Rail Project

Dear Mr. McAvoy:

Enclosed is the final Streambed Alteration Agreement (Agreement) for the Lockeford Bridge Rail Project (Project). Before the Department of Fish and Wildlife (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 the same date it signed the Agreement.

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 Tim Nosal at (916) 358-2853 or tim.nosal@wildlife.ca.gov.

Sincerely,

Tina Bartlett
Regional Manager

cc: Tim Nosal, Environmental Scientist
tim.nosal@wildlife.ca.gov

Kriti Uppal, Associate Environmental Planner
kriti_uppal@dot.ca.gov

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
NORTH CENTRAL REGION
1701 NIMBUS ROAD, SUITE A
RANCHO CORDOVA, CA 95670



STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2013-0002-R2
Unnamed Seasonal Creek

California Department of Transportation
SR 88 LOCKEFORD BRIDGE RAIL PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and California Department of Transportation (Caltrans) (Permittee) as represented by Mark McAvoy.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on January 3, 2013 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, CDFW 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 along SR 88, about 5 miles south of Lockeford at Moshier Creek and Bear Creek, tributaries to the Calaveras River, in the County of San Joaquin, State of California; U.S. Geological Survey (USGS) map Waterloo, Mount Diablo base and meridian (Attachment A).

Site 1: Calaveras River	Lat 38.0520N, Long -121.1880E	SR 88 Post Mile 7.5
Site 2: Moshier Creek	Lat 38.0725N, Long -121.1872E	SR 88 Post Mile 7.5
Site 3: Bear Creek	Lat 38.0920N, Long -121.1813E	SR 88 Post Mile 8.9

PROJECT DESCRIPTION

The Project will replace existing bridge metal beam guardrails on SR 88 over the Calaveras River, Moshier Creek and Bear Creek; realign levee access roads and private driveways adjacent to Moshier Creek and Bear Creek; replace or extend existing drainage culverts and headwalls on the 'land-side' of the levees along the two creeks; and relocate utility poles and re-grade ditches along the two creeks. No work will be conducted in the waterways.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include: nesting migratory birds, amphibians, other aquatic and terrestrial plant and wildlife species.

The adverse effects the project could have on the fish or wildlife resources identified above include: temporary diversion of flow water from, or around, activity site; short-term increased turbidity; increased sedimentation from adjacent construction; short-term release of sediment (e.g. incidental from construction; disturbance from project activity; direct take of terrestrial species and of non-fish aquatic species; disruption to nesting birds and other wildlife.

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 CDFW 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 CDFW 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, CDFW shall contact Permittee to resolve any conflict.

- 1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with the Agreement.
- 1.5 Notification of Project Modification. Permittee agrees to notify CDFW of any modifications made to the project plans submitted to CDFW.

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 Period. The time period for completing the work within the project area shall be restricted to periods of low stream flow and dry weather and shall be confined to the period of May 1 to October 30 of the same calendar year. Construction activities shall be timed with awareness of precipitation forecasts and likely increases in stream flow. Construction activities within the project area shall cease until all reasonable erosion control measures, inside and outside of the project area, have been implemented prior to all storm events. Revegetation, restoration and erosion control work is not confined to this time period.
- 2.2 Work Period Modification. If Permittee needs more time to complete the project activity, the work may be permitted outside of the work period and extended on a day-to-day basis (or for some other set period of time) by the CDFW representative who reviewed the project, or if unavailable, through contact with the Regional office. Permittee shall submit a written request for a work period variance to the CDFW. The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. The work period variance request should consider the effects of increased stream flows and rain delays. Work period variances are issued at the discretion of the CDFW. The CDFW will review the written request to work outside of the established work period. The CDFW reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the variance. The CDFW will have ten (10) calendar days to review the proposed work period variance.
- 2.3 Bird Nests. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird except as otherwise provided by the Fish and Game Code. No trees that contain active nests of birds shall be disturbed until all eggs have hatched and young birds have fledged without prior consultation and approval of a CDFW representative.

- 2.4 **Swallow Avoidance.** To avoid potential impacts to nesting swallows, paint removal and bridge painting shall take place between August 16 and March 31 or swallows shall be excluded from nesting on the bridge between April 1 and August 15. If netting is used to exclude swallows from nesting on bridge, a fine mesh material (plastic, cloth, sun shade material, etc.) shall be used to prevent swallows and/or bats from getting tangled in the net. In lieu of use of a material barrier, all nest precursors (mud placed by swallows for construction of nests) shall be scraped or washed down at least once daily until swallows cease trying to construct nests. This activity shall begin no later than April 1, and shall not result in harm or death to adult swallows.
- 2.5 **Special Status Plants** Should a special status plant species [as per CEQA sections 15380 and 15125 (c)] be discovered before or during the life of the project, a 25-foot no-operations buffer shall be flagged around the area and the CDFW shall be immediately notified. Consultation with the CDFW and/or USFWS shall ensure that potential impacts are avoided or minimized, and that project activities do not inhibit long-term conservation efforts for the survival of special status plant species.
- 2.6 **Vegetation Removal.** Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Except for the trees specifically identified for removal in the notification, no native trees with a trunk diameter at breast height (DBH) in excess of four (4) inches shall be removed or damaged without prior consultation and approval of a CDFW representative. Using hand tools (clippers, chain saw, etc.), trees may be trimmed to the extent necessary to gain access to the work sites. All cleared material/vegetation shall be removed out of the riparian/stream zone.
- 2.7 **Sediment Control.** Precautions to minimize turbidity/siltation shall be taken into account during project planning and implementation. This may require the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches. Monofilament mesh, jute netting and non-biodegradable synthetic erosion blankets are not authorized. Passage of sediment beyond the sediment barrier(s) is prohibited. If any sediment barrier fails to retain sediment, corrective measures shall be taken. The sediment barrier(s) shall be maintained in good operating condition throughout the construction period and the following rainy season. Maintenance includes, but is not limited to, removal of accumulated silt and/or replacement of damaged siltation barriers. The Permittee is responsible for the removal of non-biodegradable silt barriers (such as plastic silt fencing) after the disturbed areas have been stabilized with erosion control vegetation (usually after the first growing season). Upon CDFW determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective CDFW approved control devices are installed or abatement procedures are initiated.

- 2.8 **Pollution Control.** Utilize Best Management Practices (BMPs) to prevent spills and leaks into water bodies. If maintenance or refueling of vehicles or equipment must occur on-site, use a designated area and/or a secondary containment, located away from drainage courses to prevent the runoff of storm water and the runoff of spills. Ensure that all vehicles and equipment are in good working order (no leaks). Place drip pans or absorbent materials under vehicles and equipment when not in use. Ensure that all construction areas have proper spill clean up materials (absorbent pads, sealed containers, booms, etc.) to contain the movement of any spilled substances. 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 the Applicant or any party working under contract or with the permission of the Permittee, shall be removed immediately. CDFW shall be notified immediately by the Permittee of any spills and shall be consulted regarding clean-up procedures.

3. Reporting Measures

Permittee shall meet each reporting requirement described below.

- 3.1 The Permittee shall notify CDFW within two working days of beginning work within the project area. Notification shall be submitted as instructed in Contact Information section below. Email notification is preferred.
- 3.2 Upon completion of the project activities described in this agreement, the project area shall be digitally photographed. Photographs shall be submitted to CDFW within fifteen (15) days of project completion. Photographs and notification of project completion shall be submitted as instructed in Contact Information section below. Email submittal is preferred.

CONTACT INFORMATION

Any communication that Permittee or CDFW 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 CDFW specifies by written notice to the other.

To Permittee:

Mark McAvoy
California Department of Transportation
1976 East Dr. Martin Luther King Jr. Blvd

Stockton, CA 95205
mark_mcavoy@dot.ca.gov

To CDFW:

Department of Fish and Wildlife
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
Attn: Lake and Streambed Alteration Program – Tim Nosal
Notification #1600-2013-0002 R2

Fax: 916-358-2912
Email: r2lsa@wildlife.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 CDFW'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

CDFW 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 CDFW 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 CDFW 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 CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW 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 CDFW'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

CDFW may amend the Agreement at any time during its term if CDFW 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 CDFW and Permittee. To request an amendment, Permittee shall submit to CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in CDFW'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 CDFW 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 CDFW a completed CDFW "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in CDFW'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 CDFW a completed CDFW "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in CDFW's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW 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 CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW 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.CDFW.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall expire within five (5) years of CDFW's signature, 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.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

Attachment A:
Project Map (Exhibit 1)

The document listed below is attached to the Agreement:

Attachment A: Project Map

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.

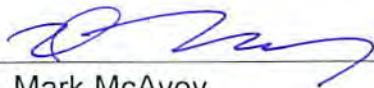
AUTHORIZATION

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 CDFW in accordance with FGC section 1602.

CONCURRENCE

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

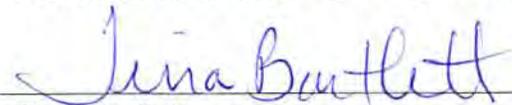
FOR CALTRANS



Mark McAvoy
Project Manager

1/18/13
Date

FOR DEPARTMENT OF FISH AND WILDLIFE



Tina Bartlett
Regional Manager

1/28/13
Date

Prepared by: Tim Nosal
Environmental Scientist

CENTRAL VALLEY FLOOD PROTECTION BOARD

3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682

2013 APR 8 AM 10 30



APR 5 - 2013

Permit No. 18810 BD

California Department of Transportation
1976 E. Dr. Martin Luther King Jr. Blvd.
Stockton, California 95201

Enclosed is your approved Central Valley Flood Protection Board Encroachment Permit Conditions.

Under General Condition Four (4) of the permit, you are required to accomplish the work under direction and supervision of the Department of Water Resources; therefore, you must advise the Department at 3310 El Camino Avenue, Sacramento, California 95821, attention Lorraine Pendlebury, telephone (916) 574-0609, at least ten days prior to starting your project. An addressed postcard is enclosed for your convenience.

Please note that the permit grants the work proposed and constructed in your project description. This permit, in addition to the twelve (12) standard conditions, includes special conditions, which may place limitations on or require modifications to your project. You are advised to read all conditions prior to starting the project. Commencing any work under this permit shall constitute an acceptance of the provisions of the permit and an agreement to perform accordingly. This permit does not relieve you from the responsibility for obtaining authorization from any State, local, or federal agencies for your proposed project.

Please refer to your permit number when communicating with this office. For further information, contact Ashley Cousin at (916) 574-2380.

Sincerely,

David Williams, Chief
Projects Section
Central Valley Flood Protection Board

Enclosure

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18810 BD

This Permit is issued to:

California Department of Transportation
1976 E. Dr. Martin Luther King Jr. Blvd.
Stockton, California 95201

To remove and replace bridge approaches and bridge rails with Quad guard attenuators at Calaveras River Bridge (No. 29-60). The project is located at the crossing of State Route 88 and Calaveras River in San Joaquin County (Section 34, T3N, R7E, MDB&M, San Joaquin County Flood Control and Water Conservation District, Calaveras, San Joaquin County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: APR 5 - 2013


Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15

days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18810 BD

THIRTEEN: All work completed under this permit, as directed by the general and special conditions herein, shall be accomplished to ensure that the work is not injurious to the adopted plans of flood control, regulated streams, and designated floodways under Board jurisdiction, as defined in California Code of Regulations, Title 23. This permit only applies to the completion of work in the project description located within, or adjacent to and having bearing on Board jurisdiction, and which directly or indirectly affects the Board's jurisdiction. This special condition shall apply to all subsequent conditions herein.

FOURTEEN: The permittee shall contact the Department of Water Resources, Inspection Branch by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. The permittee shall also contact the Central Valley Flood Protection Board's Construction Supervisor at (916) 574-2646 for quality assurance inspection. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

FIFTEEN: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board. A professional engineer registered in the State of California shall certify that all work was inspected and performed in accordance with submitted drawings, specifications, and permit conditions.

SIXTEEN: At the request of either the permittee or Central Valley Flood Protection Board the permittee and Board shall conduct joint inspections of the project and floodway after significant flood events or flood seasons to assess the integrity and operation of the project, and to assess and respond to any adverse impacts on the floodway or adjacent properties.

SEVENTEEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the Central Valley Flood Protection Board, the Department of Water Resources, the United States of America, a local district or other maintaining agencies and the

officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim. This condition shall supersede condition TEN, above.

EIGHTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

NINETEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

TWENTY: The letter from the Department of the Army dated November 9, 2012 is attached to this permit as Exhibit A in reference to this project.

TWENTY-ONE: The permittee shall comply with all conditions set forth by the San Joaquin County Flood Control and Water Conservation District dated August 15, 2012 which is attached to this permit as Exhibit B in reference to this project.

TWENTY-TWO: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

TWENTY-THREE: The permittee agrees to incur all costs for compliance with local, State, and Federal permitting and resolve conflicts between any of the terms and conditions that agencies might impose under the laws and regulations it administers and enforces.

TWENTY-FOUR: The Central Valley Flood Protection Board, Department of Water Resources, and San Joaquin County Flood Control and Water Conservation District shall not be held liable for damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

TWENTY-FIVE: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

TWENTY-SIX: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than

that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

TWENTY-SEVEN: Prior to commencement of excavation, the permittee shall create a photo record, including associated descriptions, of the levee conditions. The photo record shall be certified (signed and stamped) by a licensed land surveyor or professional engineer registered in the State of California and submitted to the Central Valley Flood Protection Board within 30 days of beginning the project.

TWENTY-EIGHT: Thirty (30) calendar days prior to start of any demolition and/or construction activities within the floodway, the permittee shall submit to the Chief Engineer two sets of plans, specifications and supporting geotechnical and/ or hydraulic impact analyses, for any and all temporary, in channel cofferdam(s), gravel work pad(s), work trestle(s), scaffolding, piles, and/or other appurtenances that are to remain in the floodway during the flood season from November 1 through April 15. The Central Valley Flood Protection Board shall acknowledge receipt of this submittal in writing within ten (10) working days of receipt, and shall work with the permittee to review and respond to the request as quickly as possible. Time is of the essence. The Central Valley Flood Protection Board may request additional information as needed and will seek comment from the U.S. Army Corps of Engineers and / or local maintaining agency when necessary. The Central Valley Flood Protection Board will provide written notification to the permittee if the review period is likely to exceed thirty (30) calendar days.

TWENTY-NINE: All addendums or other changes made to the submitted documents by the permittee after issuance of this permit are subject to submittal and review for approval by the Central Valley Flood Protection Board prior to incorporation into the permitted project. Upon review and approval of any new submitted documents the permit shall be revised, if needed, prior to construction related to the proposed changes. The Central Valley Flood Protection Board shall have up to 90 days after receipt of any documents, plans, drawings, and specifications for the review process. The Central Valley Flood Protection Board and/or the Department of Water Resources may extend this review period by written notification.

THIRTY: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Central Valley Flood Protection Board.

THIRTY-ONE: All debris generated by this project shall be disposed of outside the floodway.

THIRTY-TWO: All debris that may accumulate around the poles and guy wires within the floodway shall be completely removed from the floodway following each flood season.

THIRTY-THREE: Any lock on the gate must be accessible to maintenance and inspection personnel and must not be casehardened.

THIRTY-FOUR: The work area shall be restored to the condition that existed prior to start of work.

THIRTY-FIVE: Backfill material for excavations shall be placed in 4- to 6-inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

THIRTY-SIX: All fill material shall be imported impervious material with 20 percent or more passing

the No. 200 sieve, a plasticity index of 8 or more, and a liquid limit of less than 50 and free of lumps or stones exceeding 3 inches in greatest dimension, vegetative matter, or other unsatisfactory material. Fill material shall be compacted in 4- to 6-inch layers to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91 or Board approved equal.

THIRTY-SEVEN: Compaction tests by a certified soils laboratory will be required to verify compaction of backfill within the levee section or within 10 feet of the levee toe.

THIRTY-EIGHT: Trees, brush, sediment, and other debris shall be kept cleared from the bridge site and disposed of outside the floodway to maintain the design flow capacity and flowage area.

THIRTY-NINE: No further tree planting or work, other than that covered by this application, shall be performed in the area without prior approval of the Central Valley Flood Protection Board.

FORTY: If the permitted encroachment(s) result in any adverse hydraulic impact or if the flows being conveyed in an overland release result in scouring the permittee shall provide appropriate mitigation acceptable to the Central Valley Flood Protection Board.

FORTY-ONE: A copy of any geotechnical studies and tests that may be performed during or prior to construction that are in addition to studies that were submitted in the application package shall be provided to and approved by the Central Valley Flood Protection Board prior to project completion.

FORTY-TWO: Upon completion of the project, the permittee shall submit a final completion letter to: The Central Valley Flood Protection Board, 3310 El Camino Avenue, Suite 162, Sacramento, California 95821 and the Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite 256, Sacramento, California 95821.

FORTY-THREE: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

FORTY-FOUR: If the bridge is damaged to the extent that it may impair the channel or floodway capacity, it shall be repaired or removed prior to the next flood season.

FORTY-FIVE: Within 120 days of completion of the project, the permittee shall submit to the Central Valley Flood Protection Board a certification report, stamped and signed by a professional engineer registered in the State of California, certifying the work was performed and inspected in accordance with the Central Valley Flood Protection Board permit conditions and submitted drawings and specifications.

FORTY-SIX: A civil engineer registered in the State of California representing the permittee shall provide periodic reports and records to the Department of Water Resources that are acceptable to the Central Valley Flood Protection Board which certifies that all work accomplished by contract to the permittee was thoroughly inspected and performed in accordance with submitted drawings, specifications, and permit conditions.

FORTY-SEVEN: The permittee shall submit as-built drawings to the Department of Water Resources' Flood Project Inspection Section upon completion of the project.

FORTY-EIGHT: The permittee shall be responsible for repair of any damages to the Calaveras River floodway due to construction, operation, or maintenance of the proposed project.

FORTY-NINE: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources, or any other agency responsible for maintenance.

FIFTY: If erosion occurs adjacent to the permitted encroachment(s), the permittee shall repair the eroded areas and place adequate revetment on the affected areas to prevent further erosion.

FIFTY-ONE: The permitted encroachment(s) shall not interfere with the flood carrying capacity of the Calaveras River floodway. If the permitted encroachment(s) are determined to interfere with the flood carrying capacity, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

EXHIBIT - A



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Flood Protection and Navigation Section (18810)

NOV 09 2012

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, California 95821

Dear Mr. Punia:

We have reviewed a permit application by Caltrans (application number 18810). This project includes removing and replacing bridge approaches and bridge rails with Quad guard attenuators at Calaveras River Bridge (No. 29-60). The project is located at the crossing of State Route 88 and the Calaveras River, at 38.05188°N 121.18800°W NAD83, San Joaquin County, California.

The District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project.

Based upon the information provided no Section 10 permit is needed.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821.

Sincerely,

A handwritten signature in black ink, appearing to read "Meegan G. Nagy".

Meegan G. Nagy, P.E.
Chief, Flood Protection and Navigation Section

EXHIBIT - B



SAN JOAQUIN COUNTY

FLOOD CONTROL & WATER CONSERVATION DISTRICT

P. O. BOX 1810
1810 EAST HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
TELEPHONE (209) 468-3000
FAX NO. (209) 468-2999

THOMAS M. GAU
DIRECTOR OF PUBLIC WORKS
FLOOD CONTROL ENGINEER

August 15, 2012

The Central Valley Flood Protection Board
3310 El Camino Avenue
Sacramento, California 95821

Attention: Central Valley Flood Protection Board
Floodway Protection Section

SUBJECT: CENTRAL VALLEY FLOOD PROTECTION BOARD PERMIT APPLICATION
OF THE CALIFORNIA STATE DEPARTMENT OF TRANSPORTATION TO
REPLACE BRIDGE APPROACH STEEL RAILS AT CALAVERAS RIVER AND
STATE HIGHWAY ROUTE 88 ADJACENT TO ASSESSOR'S PARCEL
NOS. 089-020-29, 089-030-23, 089-140-02, AND 089-140-22
ENDORSEMENT NO. PW-1200027

Gentlemen:

Reference is made to the Central Valley Flood Protection Board (Board) Permit Application (Permit) of State Department of Transportation (Caltrans) to replace bridge approach steel Metal Beam Guard Rails with Quad Guard Systems.

The Project is located at Calaveras River Bridge No. 29-60 and State Highway Route 88, in San Joaquin County, in Sections 34, Township 3 North, Range 7 East, Mount Diablo Base and Meridian, adjacent to San Joaquin County Assessor's Parcel Nos. 089-020-29, 089-030-23, 089-140-02 and 089-140-22.

The San Joaquin County Flood Control and Water Conservation District (District) has reviewed the Board's Permit Application of Caltrans (Permittee) and endorses the Project subject to the following conditions:

1. The District shall not be responsible for the maintenance of the facilities, within Caltrans right-of-way specified in this Permit.
2. The District shall not be held liable for damage(s) to the permitted encroachment(s) due to the District's operation, maintenance, flood fight, inspection, or emergency repairs.
3. The Permittee or the Successors-in-Interest shall be responsible for the modification or possible removal of the facilities, as requested by the District, if required for any future flood control plans at the Permittee or the Successors-in-Interest sole cost and expense.
4. The Permittee shall be liable for any damage to Calaveras River that may occur as a result of this Project.
5. The Project shall be constructed in accordance with the plans dated April 25, 2012, submitted with

CENTRAL VALLEY FLOOD PROTECTION BOARD

3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-0685 FAX: (916) 574-0682



APR 3 - 2013

Permit No. 18809 BD

California Department of Transportation
1976 E Dr. Martin Luther King Jr. Blvd
Stockton, California 95201

Enclosed is your approved Central Valley Flood Protection Board Encroachment Permit Conditions.

Under General Condition Four (4) of the permit, you are required to accomplish the work under direction and supervision of the Department of Water Resources; therefore, you must advise the Department at 3310 El Camino Avenue, Sacramento, California 95821, attention Lorraine Pendlebury, telephone (916) 574-0609, at least ten days prior to starting your project. An addressed postcard is enclosed for your convenience.

Please note that the permit grants the work proposed and constructed in your project description. This permit, in addition to the twelve (12) standard conditions, includes special conditions, which may place limitations on or require modifications to your project. You are advised to read all conditions prior to starting the project. Commencing any work under this permit shall constitute an acceptance of the provisions of the permit and an agreement to perform accordingly. This permit does not relieve you from the responsibility for obtaining authorization from any State, local, or federal agencies for your proposed project.

Please refer to your permit number when communicating with this office. For further information, contact Ashley Cousin at (916) 574-2380.

Sincerely,

David Williams, Chief
Projects Section
Central Valley Flood Protection Board

Enclosure

STATE OF CALIFORNIA
THE RESOURCES AGENCY
THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18809 BD

This Permit is issued to:

California Department of Transportation
1976 E Dr. Martin Luther King Jr. Blvd
Stockton, California 95201

To remove and replace the bridge approaches and bridge rails with Quad Guard System; realign the levee access roads; and extend existing drainage systems at the Bear Creek Bridge (No. 29-62). The project is located at the crossing of State Route 88 and Bear Creek in San Joaquin County (Section 23, T3N, R7E, MDB&M, San Joaquin County Flood Control and Water Conservation District, Bear Creek, San Joaquin County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated: APR 3 - 2013



Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18809 BD

THIRTEEN: All work completed under this permit, as directed by the general and special conditions herein, shall be accomplished to ensure that the work is not injurious to the adopted plans of flood control, regulated streams, and designated floodways under Board jurisdiction, as defined in California Code of Regulations, Title 23. This permit only applies to the completion of work in the project description located within, or adjacent to and having bearing on Board jurisdiction, and which directly or indirectly affects the Board's jurisdiction. This special condition shall apply to all subsequent conditions herein.

FOURTEEN: Within three years from the completion of the work authorized under this permit, the permittee shall provide the Sacramento and San Joaquin Drainage District, acting by and through the Central Valley Flood Protection Board of the State of California, a permanent easement and/or a joint use agreement granting all flood control rights upon, over, and across the property that will be occupied by the area of the realigned access road. The easement must include the areas of fifteen (15) feet from the landside access road toe, if the areas are not presently encumbered by a Central Valley Flood Protection Board easement. For information regarding the existing Central Valley Flood Protection Board easements, please contact Angelica Aguilar at (916) 653-5782.

FIFTEEN: The permittee shall contact the Department of Water Resources, Inspection Branch by telephone, (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. The permittee shall also contact the Central Valley Flood Protection Board's Construction Supervisor at (916) 574-2646 for quality assurance inspection. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

SIXTEEN: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board. A professional engineer registered in the State of California shall certify that all work was inspected and performed in accordance with submitted drawings, specifications, and permit conditions.

SEVENTEEN: At the request of either the permittee or Central Valley Flood Protection Board the permittee and Board shall conduct joint inspections of the project and floodway after significant flood events or flood seasons to assess the integrity and operation of the project, and to assess and respond to any adverse impacts on the floodway or adjacent properties.

EIGHTEEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the Central Valley Flood Protection Board, the Department of Water Resources, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim. This condition shall supersede condition TEN, above.

NINETEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Central Valley Flood Protection Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

TWENTY: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

TWENTY-ONE: The letter from the Department of the Army dated February 12, 2013 is attached to this permit as Exhibit A in reference to this project.

TWENTY-TWO: The permittee shall comply with all conditions set forth by the San Joaquin County Flood Control and Water Conservation District dated August 15, 2012 which is attached to this permit as Exhibit B in reference to this project.

TWENTY-THREE: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

TWENTY-FOUR: The permittee agrees to incur all costs for compliance with local, State, and Federal permitting and resolve conflicts between any of the terms and conditions that agencies might impose under the laws and regulations it administers and enforces.

TWENTY-FIVE: The Central Valley Flood Protection Board, Department of Water Resources, and San Joaquin County Flood Control and Water Conservation District shall not be held liable for damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood

fight, operation, maintenance, inspection, or emergency repair.

TWENTY-SIX: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

TWENTY-SEVEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

TWENTY-EIGHT: Prior to commencement of excavation, the permittee shall create a photo record, including associated descriptions, of the levee conditions. The photo record shall be certified (signed and stamped) by a licensed land surveyor or professional engineer registered in the State of California and submitted to the Central Valley Flood Protection Board within 30 days of beginning the project.

TWENTY-NINE: Thirty (30) calendar days prior to start of any demolition and/or construction activities within the floodway, the permittee shall submit to the Chief Engineer two sets of plans, specifications and supporting geotechnical and/ or hydraulic impact analyses, for any and all temporary, in channel cofferdam(s), gravel work pad(s), work trestle(s), scaffolding, piles, and/or other appurtenances that are to remain in the floodway during the flood season from November 1 through April 15. The Central Valley Flood Protection Board shall acknowledge receipt of this submittal in writing within ten (10) working days of receipt, and shall work with the permittee to review and respond to the request as quickly as possible. Time is of the essence. The Central Valley Flood Protection Board may request additional information as needed and will seek comment from the U.S. Army Corps of Engineers and / or local maintaining agency when necessary. The Central Valley Flood Protection Board will provide written notification to the permittee if the review period is likely to exceed thirty (30) calendar days.

THIRTY: All addendums or other changes made to the submitted documents by the permittee after issuance of this permit are subject to submittal and review for approval by the Central Valley Flood Protection Board prior to incorporation into the permitted project. Upon review and approval of any new submitted documents the permit shall be revised, if needed, prior to construction related to the proposed changes. The Central Valley Flood Protection Board shall have up to 90 days after receipt of any documents, plans, drawings, and specifications for the review process. The Central Valley Flood Protection Board and/or the Department of Water Resources may extend this review period by written notification.

THIRTY-ONE: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Central Valley Flood Protection Board.

THIRTY-TWO: All debris generated by this project shall be disposed of outside the floodway.

THIRTY-THREE: All debris that may accumulate around the poles and guy wires within the floodway shall be completely removed from the floodway following each flood season.

THIRTY-FOUR: Any lock on the gate must be accessible to maintenance and inspection personnel and must not be casehardened.

THIRTY-FIVE: The work area shall be restored to the condition that existed prior to start of work.

THIRTY-SIX: Backfill material for excavations shall be placed in 4- to 6-inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

THIRTY-SEVEN: All fill material shall be imported impervious material with 20 percent or more passing the No. 200 sieve, a plasticity index of 8 or more, and a liquid limit of less than 50 and free of lumps or stones exceeding 3 inches in greatest dimension, vegetative matter, or other unsatisfactory material. Fill material shall be compacted in 4- to 6-inch layers to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91, or appropriate Board approved equal.

THIRTY-EIGHT: Compaction tests by a certified soils laboratory will be required to verify compaction of backfill within the levee section or within 10 feet of the levee toe.

THIRTY-NINE: Trees, brush, sediment, and other debris shall be kept cleared from the bridge site and disposed of outside the floodway to maintain the design flow capacity and flowage area.

FORTY: No further tree planting or work, other than that covered by this application, shall be performed in the area without prior approval of the Central Valley Flood Protection Board.

FORTY-ONE: If the permitted encroachment(s) result in any adverse hydraulic impact or if the flows being conveyed in an overland release result in scouring the permittee shall provide appropriate mitigation acceptable to the Central Valley Flood Protection Board.

FORTY-TWO: A copy of any geotechnical studies and tests that may be performed during or prior to construction that are in addition to studies that were submitted in the application package shall be provided to and approved by the Central Valley Flood Protection Board prior to project completion.

FORTY-THREE: Upon completion of the project, the permittee shall submit a final completion letter to: The Central Valley Flood Protection Board, 3310 El Camino Avenue, Suite 162, Sacramento, California 95821 and the Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite 256, Sacramento, California 95821.

FORTY-FOUR: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

FORTY-FIVE: If the bridge is damaged to the extent that it may impair the channel or floodway capacity, it shall be repaired or removed prior to the next flood season.

FORTY-SIX: Within 120 days of completion of the project, the permittee shall submit to the Central Valley Flood Protection Board a certification report, stamped and signed by a professional engineer registered in the State of California, certifying the work was performed and inspected in accordance with the Central Valley Flood Protection Board permit conditions and submitted drawings and specifications.

FORTY-SEVEN: A civil engineer registered in the State of California representing the permittee shall provide periodic reports and records to the Department of Water Resources that are acceptable to the Central Valley Flood Protection Board which certifies that all work accomplished by contract to the permittee was thoroughly inspected and performed in accordance with submitted drawings, specifications, and permit conditions.

FORTY-EIGHT: The permittee shall submit as-built drawings to the Department of Water Resources' Flood Project Inspection Section upon completion of the project.

FORTY-NINE: The permittee shall be responsible for repair of any damages to the project levee and other flood control facilities due to construction, operation, or maintenance of the proposed project.

FIFTY: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources, or any other agency responsible for maintenance.

FIFTY-ONE: If erosion occurs adjacent to the permitted encroachment(s), the permittee shall repair the eroded areas and place adequate revetment on the affected areas to prevent further erosion.

FIFTY-TWO: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

EXHIBIT - A



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Flood Protection and Navigation Section (18809)

FEB 12 2013

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Avenue, Room 151
Sacramento, CA 95821

Dear Mr. Punia:

We have reviewed a permit application by Caltrans (application number 18809). This project includes removing and replacing the bridge approaches and bridge rails with Quad Guard System; realigning the levee access roads; and extending the existing drainage systems at the Bear Creek Bridge (Bridge Number 29-62). The project is located at the crossing of State Route 88 and Bear Creek, at 38.09182°N 121.18132°W NAD83, San Joaquin County, California.

The District Engineer has no objection to approval of this application by your Board from a flood control standpoint, subject to the following conditions:

- a. That the embankment fill shall be acceptable levee fill, free of organic material, with a maximum particle size of 2 inches, with a plasticity index between 8 and 20, and a maximum Liquid Limit of 45.
- b. That the soil shall be placed in 6 inch maximum lifts compacted to at least 95% of the maximum density as obtained by the Standard Proctor Test conforming to ASTM D 698, at a moisture content between -2 and +3 percent of the optimum moisture content. ASTM 1557 is acceptable with a minimum compaction of 90% of the maximum density and a moisture content between 0 and +4% of the optimum moisture content.
- c. That the proposed work shall not interfere with the integrity or hydraulic capacity of the flood damage reduction project; easement access; or maintenance, inspection, and flood fighting procedures.
- d. That the drainage from the proposed work shall not be directed to flow water on the banks without adequate protection from erosion.
- e. That no work shall be performed during the flood season of November 1 to April 15, unless otherwise approved in writing by your Board.

EXHIBIT - A

-2-

f. That the condition of the drainage system pipes shall be verified using video or sonar equipment at least once every 5 years or annual pressure readings showing no significant loss in pressure. The results shall be submitted through the Central Valley Flood Protection Board to the Department of Water Resources, Flood Project Integrity and Inspection Branch and this office.

Based upon the information provided, no Section 10 or Section 404 permit is needed.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite LL30, Sacramento, CA, 95821.

Sincerely,

A handwritten signature in cursive script, reading "Rick L. Poepelman".

Rick L. Poepelman, P.E.
Chief, Engineering Division

EXHIBIT - B



SAN JOAQUIN COUNTY

**FLOOD CONTROL & WATER
CONSERVATION DISTRICT**

P. O. BOX 1810
1810 EAST HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
TELEPHONE (209) 468-3000
FAX NO. (209) 468-2999

THOMAS M. GAU
DIRECTOR OF PUBLIC WORKS
FLOOD CONTROL ENGINEER

August 15, 2012

The Central Valley Flood Protection Board
3310 El Camino Avenue
Sacramento, California 95821

Attention: Central Valley Flood Protection Board
Floodway Protection Section

SUBJECT: CENTRAL VALLEY FLOOD PROTECTION BOARD PERMIT APPLICATION OF THE CALIFORNIA STATE DEPARTMENT OF TRANSPORTATION TO REPLACE BRIDGE APPROACH STEEL RAILS AT BEAR CREEK AND STATE HIGHWAY ROUTE 88 ADJACENT TO ASSESSOR'S PARCEL NOS. 063-140-03, 063-140-09, 063-180-22, AND 063-180-24 – ENDORSEMENT NO. PW-1200026

Gentlemen:

Reference is made to the Central Valley Flood Protection Board (Board) Permit Application (Permit) of Department of Transportation (Caltrans) to replace bridge approach steel Metal Beam Guard Rails with Quad Guard Systems, realign existing levee access roads at all quadrants, and extend existing drainage systems.

The Project is located at Bear Creek Bridge No. 29-62 and State Highway Route 88, in San Joaquin County, in Sections 23, Township 3 North, Range 7 East, Mount Diablo Base and Meridian, adjacent to San Joaquin County Assessor's Parcel Nos. 063-140-03, 063-140-09, 063-180-22, and 063-180-24.

The San Joaquin County Flood Control and Water Conservation District (District) has reviewed the Board's Permit Application of Caltrans (Permittee) and endorses the Project subject to the following conditions:

1. The District shall not be responsible for the maintenance of the facilities, within Caltrans right-of-way specified in this Permit.
2. The District shall not be held liable for damage(s) to the permitted encroachment(s) due to the District's operation, maintenance, flood fight, inspection, or emergency repairs.
3. The Permittee or the Successors-in-Interest shall be responsible for the modification or possible removal of the facilities, as requested by the District, if required for any future flood control plans at the Permittee or the Successors-in-Interest sole cost and expense.
4. The Permittee shall be liable for any damage to Bear Creek that may occur as a result of this Project.
5. The Project shall be constructed in accordance with the plans dated April 25, 2012, submitted with the application dated May 4, 2012. Any revisions to the Project will require the submittal of the revised plans to the District for review and approval.
6. No work shall be allowed in the channel of Bear Creek between November 1st and April 15th without prior approval of the District.

EXHIBIT - B

The Central Valley Flood Protection Board 2
REPLACE BRIDGE APPROACH STEEL RAILS AT
BEAR CREEK AND STATE HIGHWAY ROUTE 88

7. The Permittee or Successors-in-Interest shall keep the encroachments properly maintained in accordance with applicable current or future local, State and Federal standards.
8. Future maintenance of the improvements, within Caltrans right-of-way shall be the ongoing responsibility of the Permittee or Successors-in-Interest.
9. Fill on levee slopes must be keyed into the existing levee section. Each layer of fill material applied on the levee must be keyed into the levee section individually in four (4) to six (6) inch layers.
10. Fill material must be placed in four (4) to six (6) inch layers and compacted with a sheepsfoot roller, or equivalent, to a relative compaction of not less than ninety (90) percent per ASTM D1557-91, dated 1991, which is incorporated by reference and above optimum moisture content, or ninety-seven (97) percent per ASTM D698-91, dated 1991, which is incorporated by reference and at or above optimum moisture content.
11. Fill material placed within two (2) feet of a structure must be compacted by appropriate hand operated compaction equipment.
12. Levee fill material must be free of stones or lumps exceeding three (3) inches in greatest dimension, and must be free of vegetative matter or other unsatisfactory material.
13. Fill material may only be placed within the area indicated on the submitted plans.
14. District approved access gates shall be installed at right angles across Bear Creek patrol roads at all quadrants to replace the existing gates. The gates shall be set back a minimum of sixty (60) feet from the back of sidewalk.
15. Access roads shall be kept open for maintenance at all times.
16. Upon completion of the Project, the Permittee shall submit a hard copy and an electronic copy in AutoCAD and PDF format of the as-built drawings to:

San Joaquin County Flood Control and Water Conservation District
1810 East Hazelton Avenue
Stockton, California 95205

Should there be any questions regarding these comments, please contact me at (209) 953-7617.

Sincerely,



JOHN J. MAGUIRE, P.E.
Engineering Services Manager

JM:SS:rc
FM-12F006-R2



SAN JOAQUIN COUNTY
**FLOOD CONTROL & WATER
CONSERVATION DISTRICT**

P. O. BOX 1810
1810 EAST HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
TELEPHONE (209) 468-3000
FAX NO. (209) 468-2999

THOMAS M. GAU
DIRECTOR OF PUBLIC WORKS
FLOOD CONTROL ENGINEER

June 8, 2012

California Department of Transportation
Attention: Mr. Sam Wong
1976 Martin Luther King Jr. Boulevard
Stockton, California 95201

SUBJECT: WATERCOURSE ENCROACHMENT PERMIT NO. PW-1200028 FOR THE CALIFORNIA
DEPARTMENT OF TRANSPORTATION TO REPLACE BRIDGE APPROACH STEEL
METAL BEAM GUARD RAILS AT MOSHER CREEK AND STATE HIGHWAY ROUTE 88

Dear Mr. Wong:

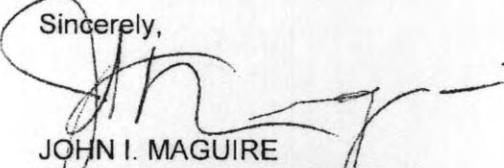
Enclosed is Encroachment Permit (Permit) No. PW-1200028 to replace bridge approach steel Metal Beam Guard Rails with Quad Guard Systems, realign existing levee access roads at the southeast and the southwest quadrants and extend existing drainage systems. The project is located at Mosher Creek Bridge No. 29-61 (PM 7.53) and State Highway Route 88, in San Joaquin County, in Sections 26, 27, 34 and 35, Township 3 North, Range 7 East, Mount Diablo Base and Meridian, adjacent to San Joaquin County Assessor's Parcel Nos. 063-120-16, 063-110-24, 063-120-13, 063-100-15, and 063-130-07.

You are required to accomplish the work under the General and Special Conditions of Encroachment Permit No. PW-1200028 of the San Joaquin County Department of Public Works. Please note that your Permit describes the work as proposed in your application and plans. This Permit is subject to 12 General Conditions and certain Special Conditions, which could place limitations on or require modifications to your project. Therefore, you are advised to read all Conditions prior to starting work.

This Encroachment Permit does not relieve you of the responsibility of obtaining authorization for your proposed project from any other local, State or Federal agency.

Should you have any further questions on this matter, please contact me at (209) 953-7617.

Sincerely,



JOHN I. MAGUIRE
Engineering Services Manager

Enclosure

JIM:SS:rc
FM-12F006-R4

DEPARTMENT OF PUBLIC WORKS

PERMIT NO. PW-1200028

This Permit is issued to:

California Department of Transportation
1976 Martin Luther King Jr. Boulevard
Stockton, California 95201

Date: October 22, 2012

Approved: 
Engineering Services Manager

COUNTY OF SAN JOAQUIN

The Department of Public Works (Department) has approved the Application and the Plans, which were submitted as part of the Application. Permission is granted to proceed with the work described in the Application, which is incorporated herein by reference, subject to the following General and Special Conditions:

Special Conditions are attached.

GENERAL CONDITIONS:

- ONE: Only work described in the subject Application is hereby authorized.
- TWO: This Permit does not grant a right to use or construct works on land not owned by or under legal control of the Permittee.
- THREE: The approved work shall be accomplished under the conditions of this Permit and shall conform to all San Joaquin County Ordinances and other applicable laws governing such action.
- FOUR: Unless the work herein contemplated has commenced within one year after issuance of this Permit, the Department reserves the right to change any conditions in this Permit as may be consistent with current flood control standards and policies of the Department.
- FIVE: This Permit shall remain in effect until revoked. In the event any conditions in this Permit are not complied with, it may be revoked on 15-day notice.
- SIX: It is understood and agreed to by the Permittee that the start of any work under this Permit shall constitute an acceptance of the conditions in this Permit and an agreement to perform in accordance therewith.
- SEVEN: This Permit does not establish any precedent with respect to any other Application received by the Department.
- EIGHT: The Permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction over the proposed work.

- NINE:** The Permittee is responsible for all personal liability and property damage which may arise out of failure on the Permittee's part to perform the obligations under this Permit. If any claim of liability is made against the United States of America, the State of California, a local district or the County of San Joaquin and the officers, agents or employees thereof, as a result of Permittee's failure to perform the said obligations, the Permittee shall defend and shall hold each of them harmless from each claim.
- TEN:** The Permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any work necessary to any plan of flood control, or interfere with the successful execution, functioning or operation of any plan of flood control.
- ELEVEN:** Should any of the work not conform to the Conditions of this Permit, the Permittee, upon order by the authorized representative of the Department shall, in the manner prescribed by the Department, be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.
- TWELVE:** Permittee acknowledges that the plan of flood control encompasses the real property, which is the subject of this Permit, and agrees that the plan of flood control is of primary importance to the health, safety, and welfare of residents within the environs of the real property which is the subject of this Permit. Therefore, Permittee agrees that Permittee shall, at the Permittee's sole cost and expense, remove, alter, relocate, or reconstruct all or any part of the work herein approved, within 30 days after receiving written notice, and in the manner prescribed thereby, should said work or any portion thereof not conform to the provisions of this Permit, or should said work or any portion thereof be injurious to or damage any work necessary to any plan of flood control of San Joaquin County or any Federal or State agency or should it interfere with the successful execution, functioning, or operation of any such plan of flood control, or should such removal, alteration, relocation, or reconstruction be necessary under, or in conjunction with, any present or future flood control plans for the area in which the work herein approved is to be accomplished, and in case Permittee delays acting upon any such written notice of the Department, the Department may proceed to perform the required work and the cost shall be paid by Permittee. In executing this Application, Permittee specifically acknowledges that from time-to-time, there may be emergency situations in which the Department may not be able to reasonably notify Permittee to remove, alter, relocate, or reconstruct all or any part of the work herein approved, and in such emergency situations, Permittee agrees the Department may proceed to perform the required work and the cost shall be paid by the Permittee.

PERMIT NO. PW-1200028
Date May 14, 2012

SPECIAL CONDITIONS:

1. The District shall not be responsible for the maintenance of the facilities, within Caltrans right-of-way specified in this Permit.
2. The District shall not be held liable for damage(s) to the permitted encroachment(s) due to the District's operation, maintenance, flood fight, inspection, or emergency repairs.
3. The Permittee or the Successors-in-Interest shall be responsible for the modification or possible removal of the facilities, as requested by the District, if required for any future flood control plans at the Permittee or the Successors-in-Interest sole cost and expense.
4. The Permittee shall be liable for any damage to Mosher Creek that may occur as a result of this Project.
5. The Project shall be constructed in accordance with the plans dated April 9, 2012, submitted with the application dated May 10, 2012. Any revisions to the Project will require the submittal of the revised plans to the District for review and approval.
6. No work shall be allowed in the channel of Mosher Creek between November 1st and April 15th without prior approval of the District.
7. The Permittee or Successors-in-Interest shall keep the encroachments properly maintained in accordance with applicable current or future local, State and Federal standards.
8. Future maintenance of the improvements, within Caltrans right-of-way shall be the ongoing responsibility of the Permittee or Successors-in-Interest.
9. Fill on levee slopes must be keyed into the existing levee section. Each layer of fill material applied on the levee must be keyed into the levee section individually in four (4) to six (6) inch layers.
10. Fill material must be placed in four (4) to six (6) inch layers and compacted with a sheepsfoot roller, or equivalent, to a relative compaction of not less than ninety (90) percent per ASTM D1557-91, dated 1991, which is incorporated by reference and above optimum moisture content, or ninety-seven (97) percent per ASTM D698-91, dated 1991, which is incorporated by reference and at or above optimum moisture content.
11. Fill material placed within two (2) feet of a structure must be compacted by appropriate hand operated compaction equipment.
12. Levee fill material must be free of stones or lumps exceeding three (3) inches in greatest dimension, and must be free of vegetative matter or other unsatisfactory material.
13. Fill material may only be placed within the area indicated on the submitted plans.

14. District approved access gates shall be installed at right angles across Mosher Creek patrol roads at all quadrants to replace the existing gates. The gates shall be set back a minimum of sixty (60) feet from the back of sidewalk.
15. Access roads shall be kept open for maintenance at all times.
16. Upon completion of the Project, the Permittee shall submit a hard copy and an electronic copy in AutoCAD and PDF format of the as-built drawings to:

San Joaquin County Flood Control and Water Conservation District
1810 East Hazelton Avenue
Stockton, California 95205

APPLICANT

I hereby agree to the General and Special
Conditions of this Permit

Print Name Caroline Reyes

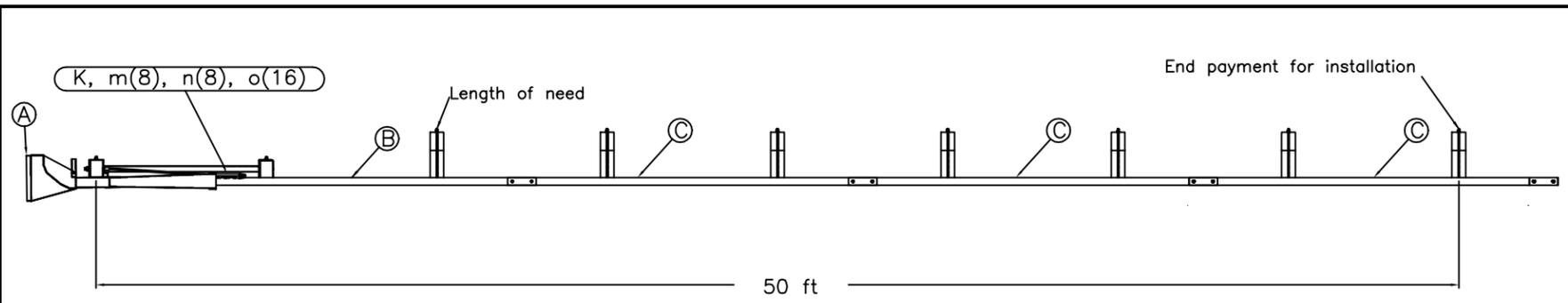
For Caltrans- PSD

Address 1976 E. Charter Way

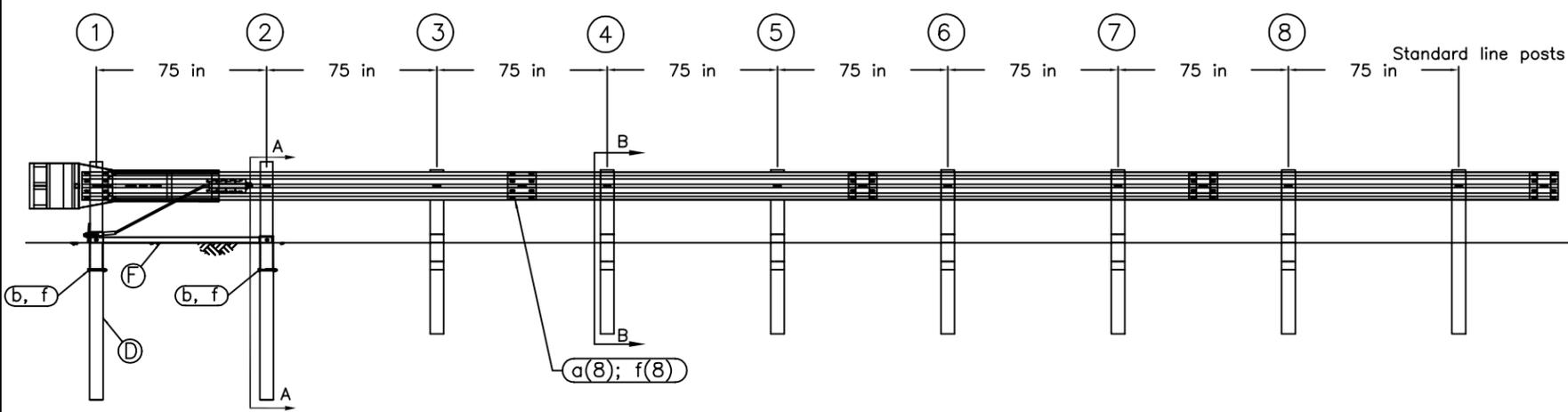
Telephone No. (209) 948 7761

Signature (Caroline Reyes)
Owner or Authorized Agent

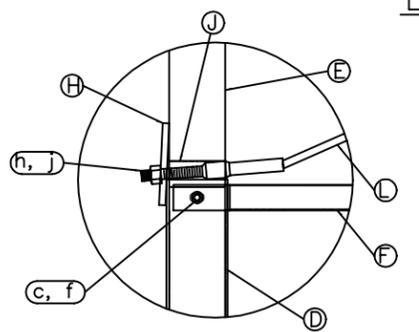
Date 8/21/12



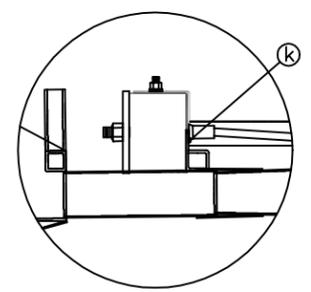
TRAFFIC → PLAN



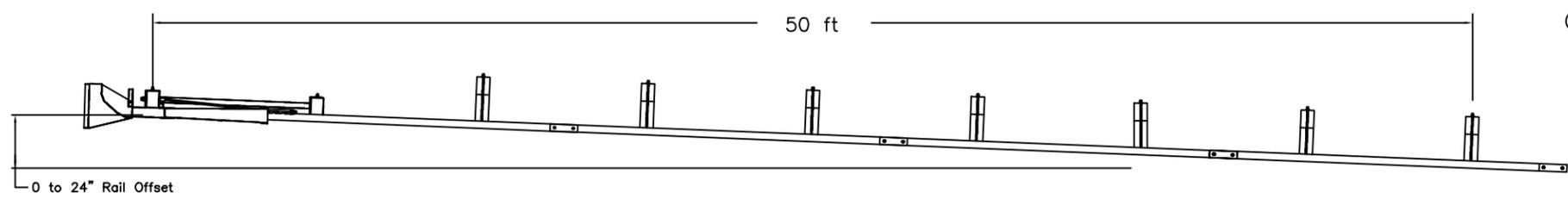
ELEVATION



POST #1 CONNECTION DETAIL



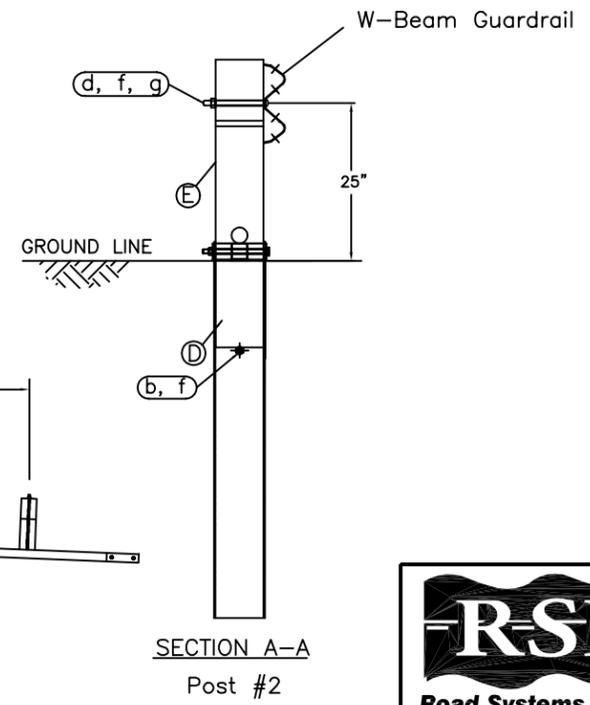
IMPACT HEAD CONNECTION DETAIL



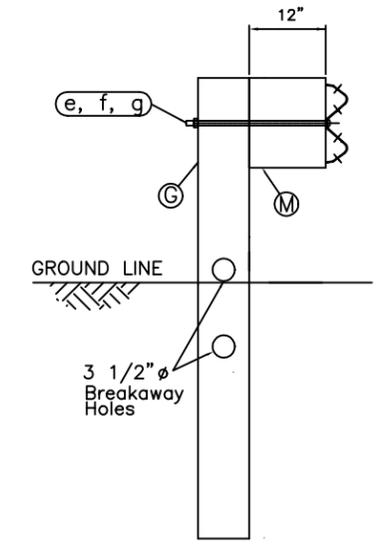
OPTIONAL FLARED INSTALLATION
25:1 maximum flare rate

- GENERAL NOTES:
1. Breakaway posts are required with the SKT.
 2. All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
 3. The SKT can be flared at a rate of up to 25:1 to prevent the impact head from encroaching on the shoulder.
 4. The foundation tubes shall not protrude more than 4" above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
 5. When rock is encountered, a 12" Ø post hole, 20" into the rock surface may be used if approved by the engineer. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first two posts can be field cut to length, placed in the hole and backfilled with adequately compacted material excavated from the hole.
 6. The breakaway cable assembly must be taut. A locking device (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening nuts.
 7. A site evaluation should be considered if there is less than 25' between the outlet side of the terminal and any adjacent driving lane.
 8. The soil tubes may be driven with an approved driving head. They shall not be driven with the post in the tube.
 9. The wood blockouts should be "toe-nailed" to the rectangular wood posts to prevent them from turning when the wood shrinks.

ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	S3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 Ga.	S1303 MGS
C	3	W-BEAM GUARDRAIL, 12 Ga.	G1203 MGS
D	2	FOUNDATION TUBE	E731
E	2	BCT WOOD POST	P650 MGS
F	1	GROUND STRUT	E780
G	6	CRT WOOD POST	P671 MGS
H	1	BEARING PLATE	E750
J	1	PIPE SLEEVE	E740
K	1	CABLE ANCHOR BOX	S760
L	1	BCT CABLE ANCHOR ASSEMBLY	E770
M	6	MGS TIMBER BLOCKOUT OR EQUIV.	P618
HARDWARE (ALL DIMENSIONS IN INCHES)			
a	24	5/8Ø x 1 1/4 SPLICE BOLT	B580122
b	2	5/8Ø x 7 1/2 HEX BOLT	B580754
c	2	5/8Ø x 10 HEX BOLT	B581004
d	1	5/8Ø x 10 H.G.R. BOLT	B581002
e	6	5/8Ø x 22 H.G.R. BOLT	B582202
f	35	5/8Ø H.G.R. NUT	N050
g	7	H.G.R. WASHER	W050
h	2	1 ANCHOR CABLE HEX NUT	N100
j	2	1 ANCHOR CABLE WASHER	W100
k	2	3/8 x 3 LAG SCREW	E350
m	8	CABLE ANCHOR BOX SHOULDER BOLT	SB58A
n	8	1/2 A325 STRUCTURAL NUT	N055A
o	16	1 1/16 OD x 9/16 ID A325 STR. WASHER	W050A



SECTION A-A
Post #2



SECTION B-B
Posts 3 thru 8

RSI
Road Systems, Inc.
Big Spring, TX
Phone: 432-263-2435
or Phone: 330-346-0721

Sequential Kinking Terminal
SKT - Assembly

Midwest Guardrail System
Wood Post System

Drawing Name: SKT-MGS-W-US Scale: NONE

Sheet: A1
Date: 12/01/04
By: JRR
Rev: 0

**ET-31™ Guardrail End Treatment
NCHRP Report 350 Test Level 3
System Length 53'-1 1/2" (16.19 m)**

For specific assembly, maintenance, or repair details refer to the state or specifying agency's standard drawings and/or Trinity standard layout drawings.

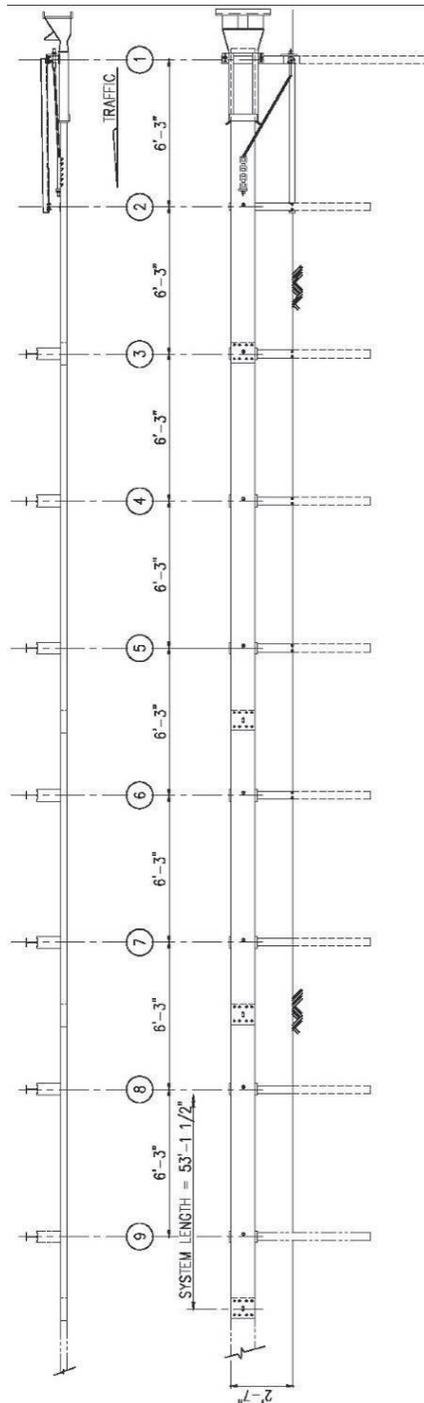
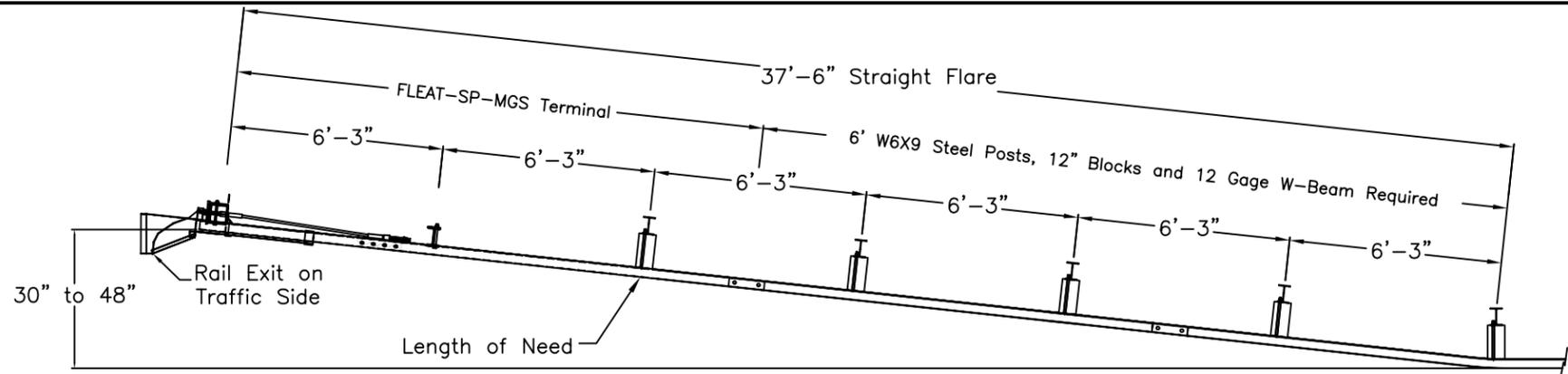
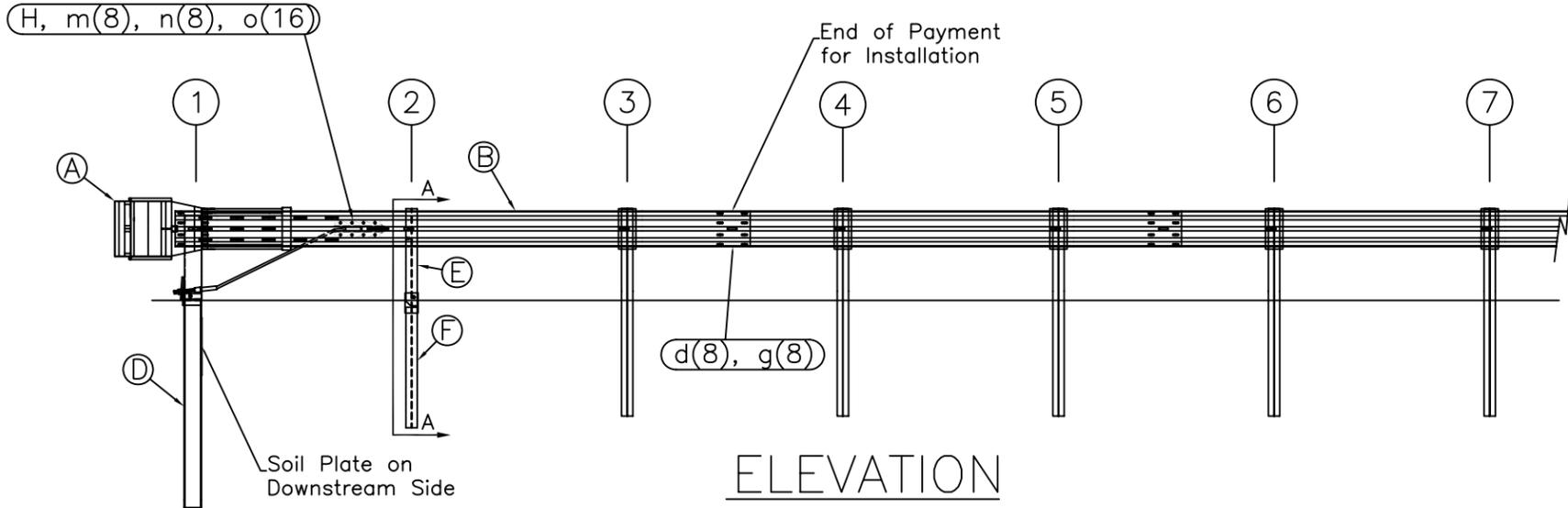


Figure 4 (TL-3)

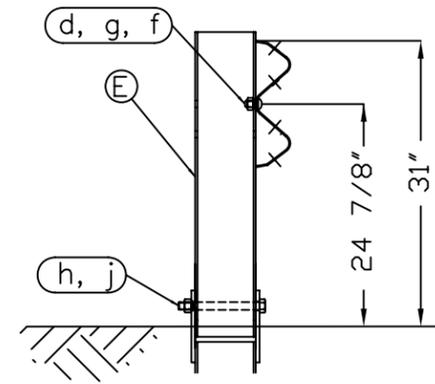
[This drawing represents one version of the 53'-1 1/2" (16.19 m) system]



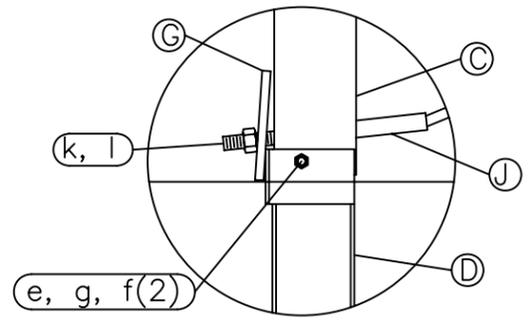
PLAN



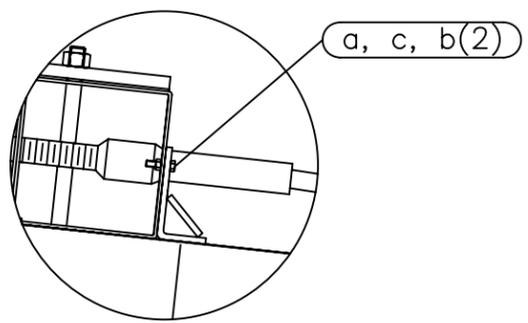
ELEVATION



SECTION A-A
Post #2



Post #1 Connection Detail



Impact Head Connection Detail

ITEM	QTY	BILL OF MATERIALS	ITEM NO.
A	1	IMPACT HEAD	F3000
B	1	W-BEAM GUARDRAIL END SECTION, 12 Ga.	MGS-SF1303
C	1	FIRST POST TOP (6X6X $\frac{1}{8}$ " Tube)	TPHP1A
D	1	FIRST POST BOTTOM (6' W6X15)	TPHP1B
E	1	SECOND POST ASSEMBLY TOP	UHP2A
F	1	SECOND POST ASSEMBLY BOTTOM	HP3B
G	1	BEARING PLATE	E750
H	1	CABLE ANCHOR BOX	S760
J	1	BCT CABLE ANCHOR ASSEMBLY	E770

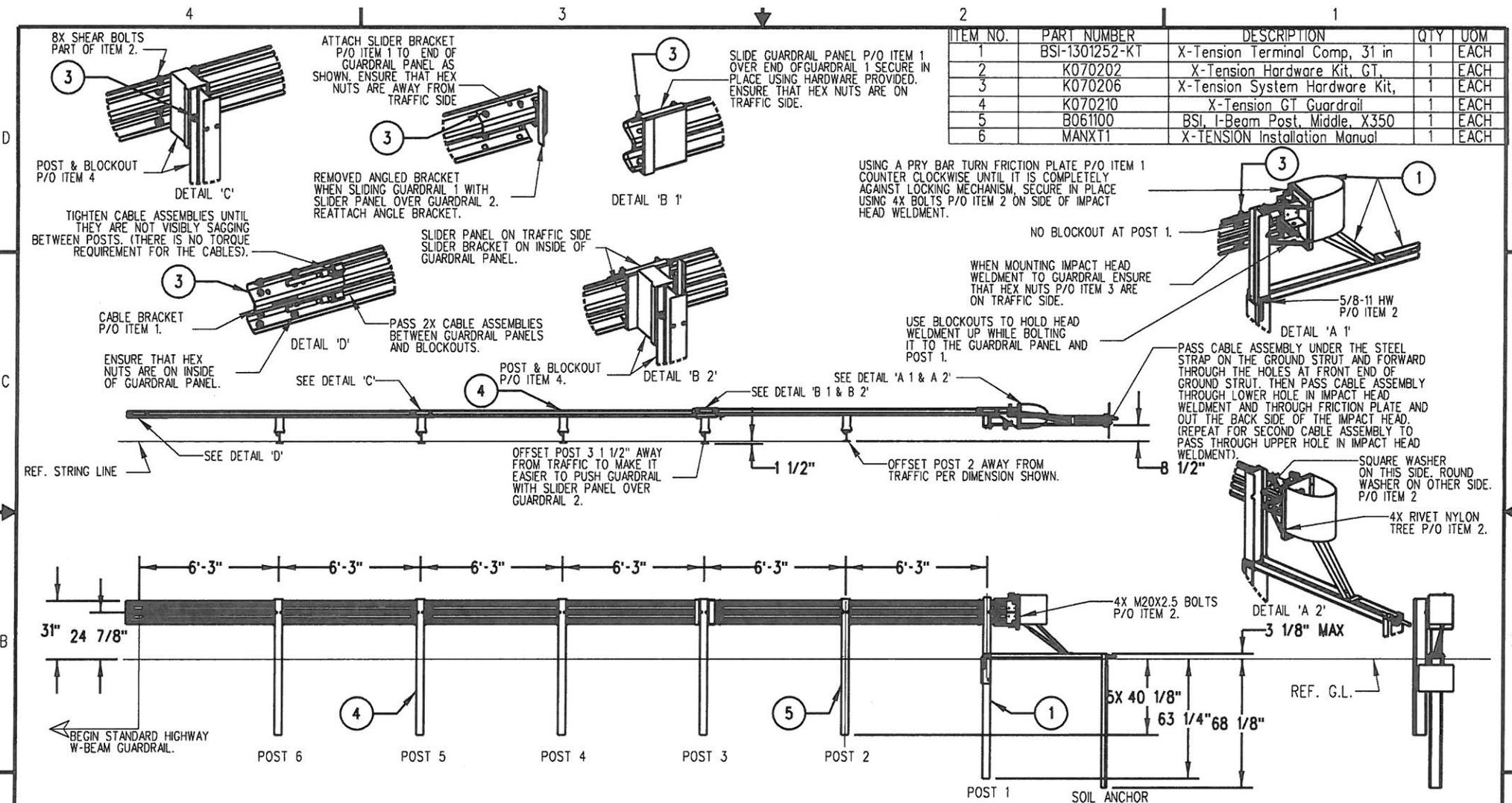
HARDWARE (ALL DIMENSIONS IN INCHES)			
a	2	5/16 x 1 HEX BOLT GRD 5	B5160104A
b	4	5/16 WASHER	W0516
c	2	5/16 HEX NUT	N0516
d	9	5/8 Dia. x 1 1/4 SPLICE BOLT (POST #2)	B580122
e	1	5/8 Dia. x 9 HEX BOLT GRD 5	B580904A
f	3	5/8 WASHER	W050
g	10	5/8 Dia. H.G.R NUT	N050
h	1	3/4 Dia. x 8 1/2 HEX BOLT GRD A449	B340854A
j	1	3/4 Dia. HEX NUT	N030
k	2	1 ANCHOR CABLE HEX NUT	N100
l	2	1 ANCHOR CABLE WASHER	W100
m	8	CABLE ANCHOR BOX SHOULDER BOLT	SB58A
n	8	1/2 A325 STRUCTURAL NUT	N055A
o	16	1 1/16 OD x 9/16 ID A325 STR. WASHER	W050A

GENERAL NOTES:

- All bolts, nuts, cable assemblies, cable anchors and bearing plates shall be galvanized.
- The lower sections of the Posts 1&2 shall not protrude more than 4 in above the ground (measured along a 5' cord). Site grading may be necessary to meet this requirement.
- The lower sections of the hinged posts should not be driven with the upper post attached. If the post is placed in a drilled hole, the backfill material must be satisfactorily compacted to prevent settlement.
- When competent rock is encountered, a 12" Ø post hole, 20 in. deep cored into the rock surface may be used if approved by the engineer for post 1. Granular material will be placed in the bottom of the hole, approximately 2.5" deep to provide drainage. The first post can be field cut to length, placed in the hole and backfilled with suitable backfill. The soil plate may be trimmed if required.
- The breakaway cable assembly must be taut. A locking device (vice grips or channel lock pliers) should be used to prevent the cable from twisting when tightening nuts.

Big Spring, TX
Phone: 432-263-2435
or Phone: 330-346-0721

FLEAT-SP-MGS Terminal Midwest Guardrail System 31" Top of Rail		Sheet:	1
		Date:	02/24/10
Drawing Name: FLT-SP-S-MGS		By:	JRR
		Scale:	None
		Rev:	0

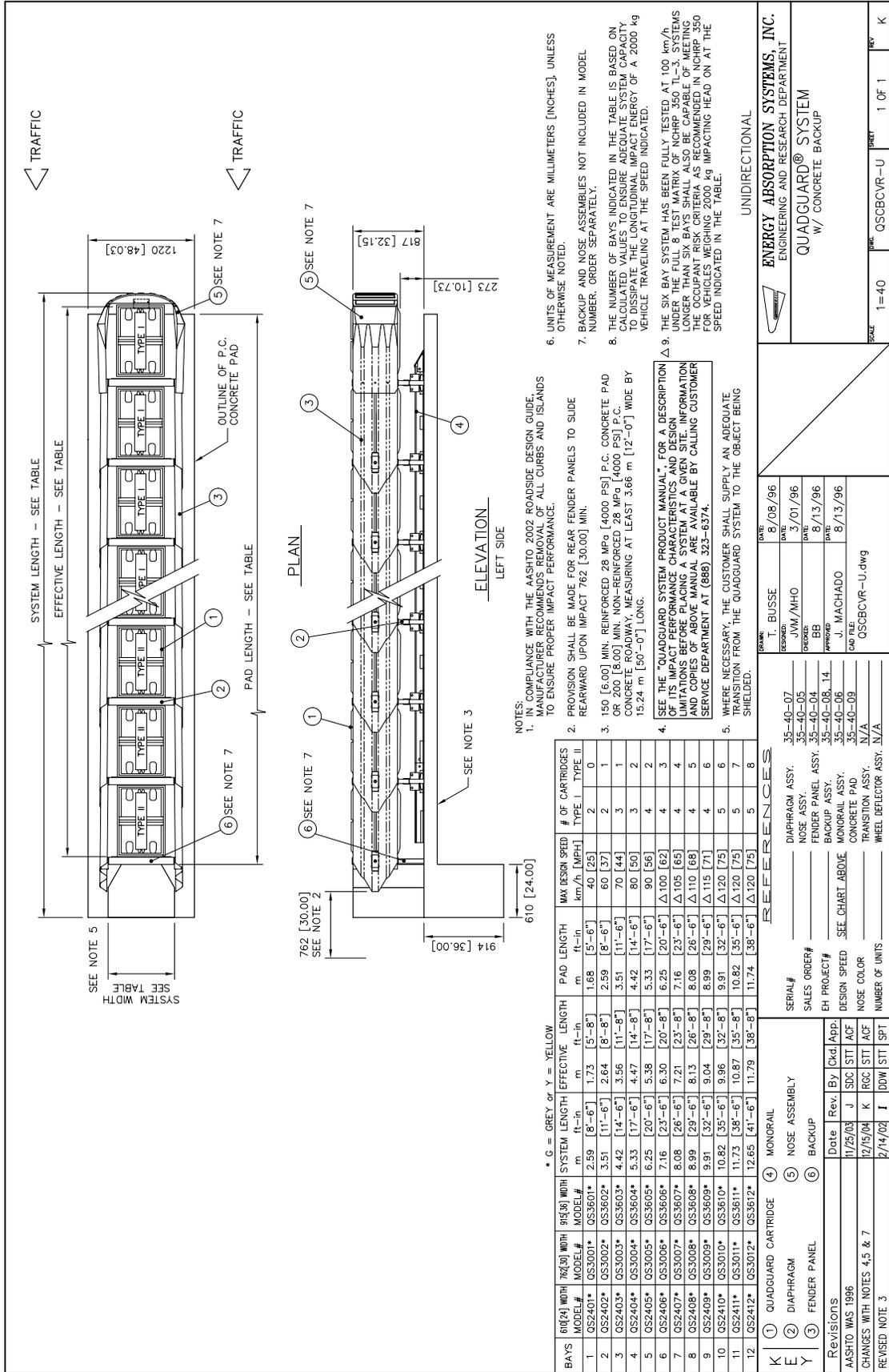


ITEM NO.	PART NUMBER	DESCRIPTION	QTY	UOM
1	BSI-1301252-KT	X-Tension Terminal Comp, 31 in	1	EACH
2	K070202	X-Tension Hardware Kit, GT.	1	EACH
3	K070206	X-Tension System Hardware Kit,	1	EACH
4	K070210	X-Tension GT Guardrail	1	EACH
5	B061100	BSL I-Beam Post, Middle, X350	1	EACH
6	MANXT1	X-TENSION Installation Manual	1	EACH

- NOTES: UNLESS OTHERWISE SPECIFIED.
- SYSTEM TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.
 - ONLY TIGHTEN THE CABLE ASSEMBLIES USING THE NUTS AT THE CABLE BRACKET (SEE DETAIL 'D'). DO NOT TIGHTEN THE CABLES AT THE FRONT OF THE GROUND ANCHOR.
 - WHEN DRIVING STEEL POST, ENSURE THAT A DRIVING CAP WITH TIMBER OR PLASTIC INSERT IS USED TO PREVENT DAMAGE TO THE GALVANIZING TO THE TOP OF THE POST.

<small>©2012 BARRIER SYSTEMS INC. THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BARRIER SYSTEMS INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF BARRIER SYSTEMS INC. IS PROHIBITED.</small>		<small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:</small> <small>FRACTIONS DECIMAL ANGLES</small> <small>± 1/16 .003 ± .03 ± 1/2°</small> <small>XXX ± .010</small>				<small>BARRIER SYSTEMS INC.</small> <small>3333 Voco Valley Parkway, Ste 800</small> <small>Vallejo, CA 95688</small> <small>Tel: 800-800-5691</small> <small>www.barriersystemsinc.com</small>	
APPROVALS DRAWN BY: NMV DRAWN DATE: 2/08/13 APPR'D BY: JMT APPR'D DATE: 2/08/13				<small>THIRD ANGLE PROJECTION</small> 		TITLE X-TENSION GUARDRAIL TERMINAL SYSTEM STEEL POST WITH COMPOSITE BLOCKOUT 31" RAIL HEIGHT	
REV: B ECN*: DATE: 2/08/13		SIZE: B DWG NO.: XTGTSS5 SCALE: 1:50		SHEET: 1 OF 1		REV: B	

QuadGuard® System



- NOTES:
- IN COMPLIANCE WITH THE AASHTO 2002 ROADSIDE DESIGN GUIDE, MANUFACTURER RECOMMENDS REMOVAL OF ALL CURBS AND ISLANDS TO ENSURE PROPER IMPACT PERFORMANCE.
 - PROVISION SHALL BE MADE FOR REAR FENDER PANELS TO SLIDE REARWARD UPON IMPACT 762 [30.00] MIN.
 - 150 [6.00] MIN. REINFORCED 28 MPa [4000 PSI] P.C. CONCRETE PAD OR 200 [8.00] MIN. NON-REINFORCED 28 MPa [4000 PSI] P.C. CONCRETE ROADWAY, MEASURING AT LEAST 3.66 m [12'-0"] WIDE BY 15.24 m [50'-0"] LONG.
 - SEE THE "QUADGUARD SYSTEM PRODUCT MANUAL" FOR A DESCRIPTION OF ITS IMPACT PERFORMANCE CHARACTERISTICS AND DESIGN LIMITATIONS BEFORE PLACING A SYSTEM AT A GIVEN SITE. INFORMATION AND COPIES OF ABOVE MANUAL ARE AVAILABLE BY CALLING CUSTOMER SERVICE DEPARTMENT AT (888) 323-6374.
 - WHERE NECESSARY, THE CUSTOMER SHALL SUPPLY AN ADEQUATE TRANSITION FROM THE QUADGUARD SYSTEM TO THE OBJECT BEING SHIELDED.

- UNIDIRECTIONAL
- ENERGY ABSORPTION SYSTEMS, INC.
ENGINEERING AND RESEARCH DEPARTMENT
- QUADGUARD® SYSTEM
W/ CONCRETE BACKUP
- DATE: 8/08/96
DESIGNED BY: T. BUSSE
DATE: 3/01/96
CHECKED BY: J.M/MHO
DATE: 8/13/96
DRAWN BY: J. MACHADO
DATE: 8/13/96
CAD FILE: QSCBCVR-U.dwg
- SCALE: 1"=40'
- 1 OF 1
- K

* G = GREY or Y = YELLOW

BAYS	610(24) WIDTH MODEL#	762(30) WIDTH MODEL#	915(36) WIDTH MODEL#	SYSTEM LENGTH	EFFECTIVE LENGTH	PAD LENGTH	MAX DESIGN SPEED	# OF CARTRIDGES
	ft.-in	ft.-in	ft.-in	ft.-in	ft.-in	ft.-in	km./h. [MPH]	TYPE I TYPE II
1	QS2401*	QS3001*	QS3601*	2.89 [8'-6"]	1.73 [5'-8"]	1.88 [5'-6"]	40 [25]	2 0
2	QS2402*	QS3002*	QS3602*	3.51 [11'-6"]	2.64 [8'-8"]	2.59 [8'-6"]	60 [37]	2 1
3	QS2403*	QS3003*	QS3603*	4.42 [14'-6"]	3.56 [11'-8"]	3.51 [11'-6"]	70 [44]	3 1
4	QS2404*	QS3004*	QS3604*	5.33 [17'-6"]	4.47 [14'-8"]	4.42 [14'-6"]	80 [50]	3 2
5	QS2405*	QS3005*	QS3605*	6.25 [20'-6"]	5.38 [17'-8"]	5.33 [17'-6"]	90 [56]	4 2
6	QS2406*	QS3006*	QS3606*	7.16 [23'-6"]	6.30 [20'-8"]	6.25 [20'-6"]	100 [62]	4 3
7	QS2407*	QS3007*	QS3607*	8.08 [26'-6"]	7.21 [23'-8"]	7.16 [23'-6"]	105 [65]	4 4
8	QS2408*	QS3008*	QS3608*	8.99 [29'-6"]	8.13 [26'-8"]	8.08 [26'-6"]	110 [68]	4 5
9	QS2409*	QS3009*	QS3609*	9.91 [32'-6"]	9.04 [29'-8"]	8.99 [29'-6"]	115 [71]	4 6
10	QS2410*	QS3010*	QS3610*	10.82 [35'-6"]	9.96 [32'-8"]	9.91 [32'-6"]	120 [75]	5 6
11	QS2411*	QS3011*	QS3611*	11.73 [38'-6"]	10.87 [35'-8"]	10.82 [35'-6"]	120 [75]	5 7
12	QS2412*	QS3012*	QS3612*	12.65 [41'-6"]	11.79 [38'-8"]	11.74 [38'-6"]	120 [75]	5 8

REFERENCES

DIAPHRAGM ASSY.	35-40-07
NOSE ASSY.	35-40-05
FENDER PANEL ASSY.	35-40-04
BACKUP ASSY.	35-40-08, 14
MONORAIL ASSY.	35-40-06
CONCRETE PAD.	35-40-09
TRANSITION ASSY.	N/A
WHEEL DEFLECTOR ASSY.	N/A

REVISIONS

Date	Rev.	By	Chk	App.
11/25/03	J	SDC	STT	ACF
12/15/04	K	RCC	STT	ACF
2/14/02	I	DDW	STT	SPT

Revisions

AASHTO WAS 1996

CHANGES WITH NOTES 4.5 & 7

REVISED NOTE 3