Meeting of the Central Valley Flood Protection Board
March 25, 2011

Staff Report – Encroachment Permit

California Department of Transportation, District 10
San Joaquin River Overflow Bridge on State Route 165 in Merced County

---

1.0 – ITEM

Consider approval of Permit No. 18579-1

2.0 – APPLICANT

California Department of Transportation, District 10

3.0 – LOCATION

The limits of the bridge project extend from STA 606+47 to STA 607+02 along State Route 165 in Merced County (See Attachment A for Location Map).

4.0 – DESCRIPTION

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) propose to rehabilitate the roadway of State Route 165 in Merced County (Wolfsen Road Rehabilitation Project). The proposed project begins at Henry Miller Road and ends at State Route 140. The total length of the project is 15.2 miles. The proposed project consists of overlaying the roadway with new asphalt concrete, replacing the San Joaquin River Bridge, widening the San Joaquin River Overflow and Salt Slough Bridges, and realigning the Santa Fe Grade Road and Wolfsen Road where they intersect State Route 165. The work is limited to the right-of-way except where Santa Fe Grade Road and Wolfsen Road are proposed to be realigned. The San Joaquin River Bridge replacement and the San Joaquin River Overflow Bridge widening are located within the floodway of the San Joaquin River.

This report focuses on the San Joaquin River Overflow Bridge (39-0212) project. The San Joaquin River Overflow Bridge will be widened in kind with Cast-in-Place (CIP) slab superstructures on pile extensions. This structure will be widened symmetrically, adding

6.42 feet on both the right and left edge of the existing structure, to accommodate standard 8 foot shoulders. The widened portions will incorporate two additional 18" diameter driven Cast-In-Steel Shell (CISS) piles at each bent, one each for the left and right side of widened portions. The proposed end land use for the project site will be a two-lane highway bridge with standard 8-foot shoulder widths.

This project is located south of the existing project levee which is maintained by the Lower San Joaquin Levee District. The toe of the project levee, located north of the San Joaquin River Overflow Bridge is at STA 607+40 and the crown of the levee is at STA 607+60. The pile to be driven into the existing roadway embankment (to Abutment 3) is at STA 607+ 01.28, which is approximately 40 feet south of the toe of the project levee (STA 607+40).

Excavation of native soils (approximately 100 cubic yards) adjacent to the existing abutment will be required so that the abutment can be widened to accommodate the new width of the widened bridge. All native soils excavated from the bridge abutment area will be stockpiled on-site for 3 months maximum and then used as backfill within the same area. No processing of the backfill materials will be necessary. Standard excavation and hauling equipment will be used, primarily backhoe and dump trucks, to excavate and haul the materials. Measures will be taken to prevent debris materials to enter the stream.

5.0 – PROJECT ANALYSIS

Based on the review of the proposed bridge project, the following analyses were made.

5.1 – Hydraulic Analysis

The revised channel hydraulics was modeled using the Army Corps of Engineers HEC-RAS program, version 4.0. The survey data used in the model was provided by the Department of Water Resources with the assistance from the Central Valley Flood Protection Board. HEC-RAS program was used to determine the water surface elevations (WSE) and velocities throughout the project reach. Manning's coefficients ranged from 0.029 to 0.0345 in the main channel and 0.033 in the floodplain areas. For the San Joaquin River, the channel bottom is very flat with average slope of approximately 0.02% or less in the reach at the project site.

For discharges of the San Joaquin River, USGS Gage # 11261500 was used to estimate the 50 year and 100-year flows. Based on the USGS Stream Gage, the 50-year and 100-year flows for San Joaquin River at the project site were estimated to be

16,800 cfs and 21,700 cfs, respectively. The design flow for the San Joaquin River at the project site is 26,000 cfs.

The calculated WSE corresponding to the design flow of 26,000 cfs was 73.7 feet, NGVD 29 (76.2 feet, NAVD 88). The existing soffit elevation is approximately 82.45 feet, NGVD 29. Since this project consists only of widening existing bridge with kind and there is no change in existing soffit elevation, it complies with the Title 23 requirements.

Scour was evaluated utilizing the methods outlined in the FHWA HEC-18, "Evaluating Scour at Bridges." All scour elevations are based on the 100-year discharge. For the San Joaquin River Bridge, based on the HEC-RAS models using the 100-year discharge, there is no overbank flow returning to the main channel immediately upstream of the structure. Therefore, the contraction scour, abutment scour and long term degradation were considered negligible for the San Joaquin River Overflow Bridge. For the San Joaquin River Overflow Bridge with 18" diameter piles, a total local scour depth of 3.1 feet is anticipated, reaching an elevation of 66.7 feet, NGVD 29. Based on the consultation with Caltrans engineer, this scour was included in the bridge design. Migration of the main channel to the location of the overflow structure is not considered likely.

5.2 – Geotechnical Analysis

The project site is located approximately in the central portion of the Great Valley geomorphic province of California. The Geologic Map of the San Francisco-San Jose Quadrangle, scale 1:250,000, compiled by D.L. Wagner, EJ. Bortugno, and R.D. McJunkin, 1990, second printing 2005, California Geological Survey, indicates the site is underlain by alluvial deposits of the Pleistocene aged Modesto Formation.

The subsurface investigation indicated that the embank Fill soils that underlie the existing abutments consists of loose to medium dense silty sand and extend to a depth of about 13 to 14 feet (average elevation 68.5 ft). Below this, alluvium (native soil) was encountered to the maximum depth of the borings. These native soils, which appear relatively consistent across the site, can be divided into five zones by depth according to soil type and/or consistency. Zone 1 soils are at EL. 68.5 ft to 48 ft at Abutment 1 and EL. 53 ft at Abutment 3. These soils consist of predominately wet, poorly sorted, loose, fine-grained sand with minor silt and interbedded silty sand. Zone 2 soils are at EL. 48 ft to 53 ft to about EL. 5.5 ft. These soils consist of wet, poorly sorted, medium dense to dense fine sand and silty sand with traces of silt and some thin interbedded hard clay. Zone 3 soils are at EL. 5.5 ft to EL. -6 ft. These soils consist of wet, dense to very dense sandy silt and silty sand interbedded with minor amounts of poorly sorted very dense

sand. Zone 4 soils are at EL. -6.0 ft to EL. -16.0 ft. These soils consist of moist, very stiff clay with sand. Zone 5 soils are at EL. -16 ft to -19.0 ft. These soils consist of wet, dense sandy silt and silty sand.

Groundwater was measured at elevation 64.4 feet in boring B-1 and 65.3 feet at boring B-2 in 1957 field investigation in the nearby San Joaquin River Bridge. Surface water was observed in the channel during the fall of 2006 foundation investigation. However, these groundwater elevations are expected to fluctuate with seasonal precipitation.

Based on the California Seismic Hazard Map 1996, the controlling fault at the site is the Midway-San Joaquin/N fault. This fault is located approximately 11.2 miles west of the site. This fault is capable of producing a maximum credible earthquake of 6.75 Mw. The Peak Bedrock Acceleration, based on the above seismic hazard map was estimated to be 0.3g. Based on the analysis, the liquefaction potential at the site is considered high. Caltrans' protocol was used in determining the axial pile load capacity for potentially liquefiable soil layers. Soil layers below the pile cut off tip elevation that were deemed liquefiable contribute zero soil / pile resistance to the applied axial load on the pile, and therefore, were discounted in the pile load calculations. When the soil layers above the lowest liquefiable layer that did not liquefy, the soil resistances (skin friction) of these layers were discounted as above and a negative soil resistance component (down-drag load) was applied to the pile. The down-drag load affect is caused by the settlement of the non-liquefied soil layers above.

There is no known active fault crossing the bridge site, therefore, the potential for surface rupture at the site is considered low.

Based on the results of the laboratory corrosion tests, the site soils are not corrosive.

Based on the geotechnical information, the following foundation recommendations were provided. Driven Class 200 Alternative "W" pipe piles were recommended as suitable to support the proposed widening at the abutments. Driven Cast-In-Steel Shell (CISS) piles were recommended to support the proposed widening at the bent. The geotechnical capacity of the CISS piles had been calculated using the Nordlund method (1963, 1979) for cohesionless soils and the Tomlinson method (1980, 1985) for cohesive soils. The FHWA approved computer program DRIVEN 1.2 was used to calculate the driven pile capacity for this project.

The closest pile to be driven into the existing roadway embankment (to Abutment 3) is at STA 607+ 01.28, which is approximately 40 feet south of the toe of the project levee (STA 607+40). Based on the above setback distance and soft/saturated soil conditions,

it appears that the pile driving for the San Joaquin River Overflow Bridge widening will have insignificant impact on the existing project levee and on the riverbanks.

6.0 – AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with this project, from all pertinent agencies are shown below:

- The U. S. Army Corps of Engineers endorsement letter has not been received but is expected to be received prior to the March 25, 2011 Board meeting which then will become Permit Exhibit A.
- The Lower San Joaquin Levee District has endorsed this application without any conditions.

7.0 –CEQA ANALYSIS

Board staff has prepared the following CEQA findings:

The Board, as a responsible agency under CEQA, has reviewed Initial Study/Mitigated Negative Declaration (SCH Number: 2007011106, March 2007) and Mitigation Measures for the Wolfsen Road Rehabilitation Project prepared by the lead agency, Caltrans. These documents, including project design, may be viewed or downloaded from the Central Valley Flood Protection Board website at http://www.cvfpb.ca.gov/meetings/2011/03-25-2011.cfm under a link for this agenda item. These documents are also available for review in hard copy at the Board and Caltrans Office.

Caltrans has determined that the project would not have a significant effect on the environment and approved the project on March 5, 2007 and filed a Notice of Determination on June 23, 2010 with the State Clearinghouse. Board staff finds that although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures address impacts to biological resources.

8.0 – SECTION 8610.5 CONSIDERATIONS

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

   The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

   The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

   This project does not have significant impacts on the State Plan of Flood Control, as the project does not impair the structural or hydraulic functions of the system.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

   Climate change issues have not been taken into account; however, it is assumed to be inland past the point tidal influence raises WSE. There are no other foreseeable projected future events that would impact this project.

9.0 – STAFF RECOMMENDATION

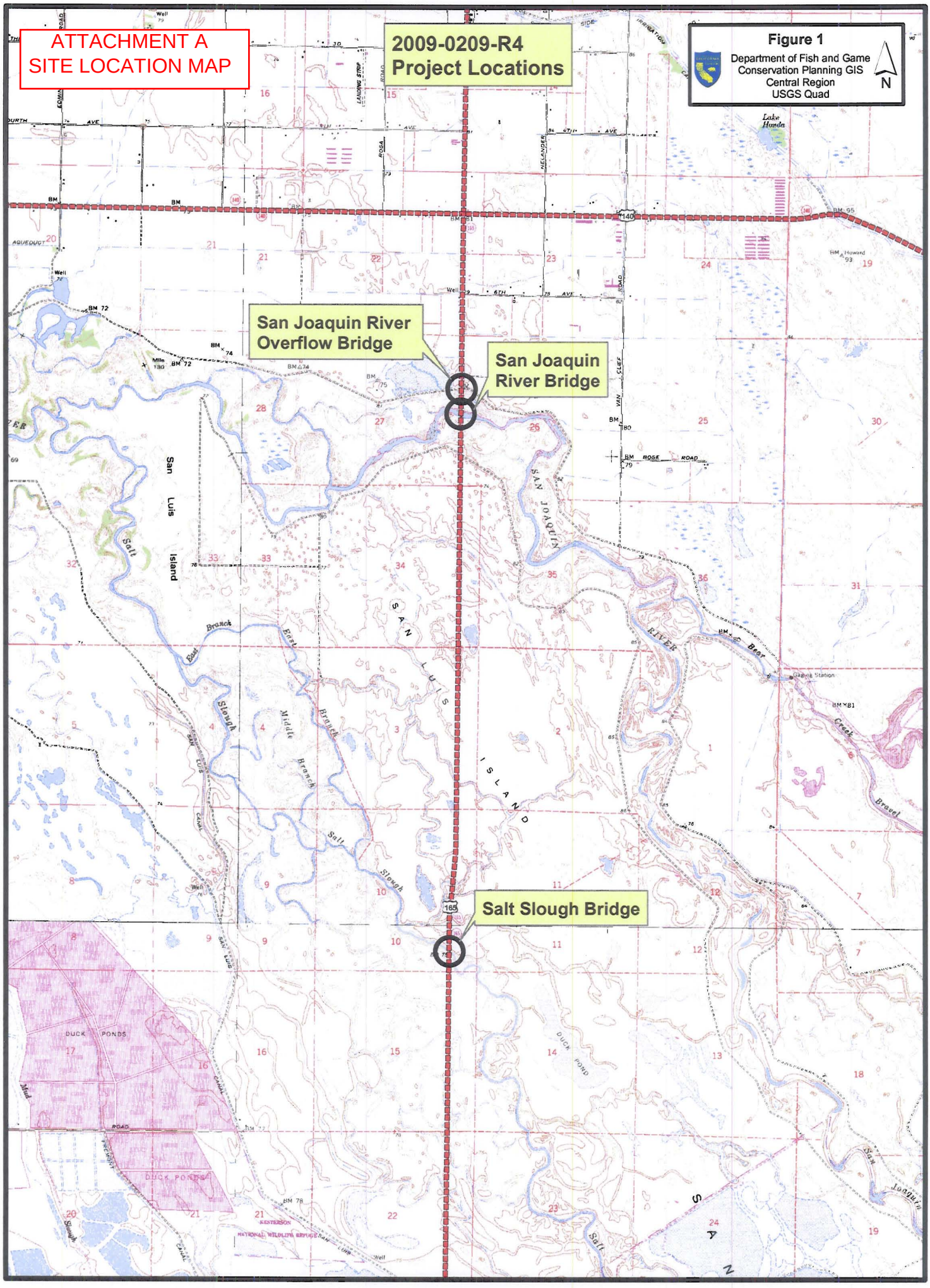
Staff recommends that the Board adopt the CEQA Findings, approve Permit No. 18579-1 conditioned upon receipt of a USACE 208.10 letter of determination confirming that the Corps has no objection to the project, and direct the Executive Officer to take necessary actions to execute the permit and to file a Notice of Determination with the State Clearinghouse.

10.0 – LIST OF ATTACHMENTS

A. Location Map
B. Draft Permit No. 18579-1
C. Bridge Plans

Reviewed by:	Deb Biswas, Ph.D., P.E.
Environmental Reviewed by:	James Herota, M.P.P.
Final Reviewed by:	Dan Fua, P.E.
	Len Marino, P.E.

ATTACHMENT A
SITE LOCATION MAP



DRAFT

STATE OF CALIFORNIA
THE RESOURCES AGENCY

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18579-1 BD

This Permit is issued to:

California Department of Transportation
1976 E. Dr. Martin Luther King Jr. Blvd.
Stockton, California 95205

To widen existing San Joaquin River Overflow Bridge by 6.42-feet on each side by adding two 18-inch-diameter Cast-In Steel Shell (CISS) piles at each bent, one on either side of the bridge. The project is located north of the City of Los Banos along State Route 165 in Merced County (Section 26&27, T7S, R10E, MDB&M, Lower San Joaquin Levee District, San Joaquin River, Merced 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: _____ _____
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. 18579-1 BD

THIRTEEN: This permit is not valid and no construction shall occur until the the Central Valley Flood Protection Board receives written confirmation from the Army Corps of Engineers pursuant to 33 CFR Section 208.10 that the Corps has no objection to the project. The letter shall be incorporated into this permit as Exhibit A and all conditions shall be incorporated into this permit as if fully set forth herein.

FOURTEEN: 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.

FIFTEEN: 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.

SIXTEEN: 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.

SEVENTEEN: The mitigation measures approved by the CEQA lead agency and the permittee are found in the Final Initial Study/Mitigated Negative Declaration adopted by the CEQA lead agency.

The permittee shall implement all such mitigation measures.

EIGHTEEN: The Central Valley Flood Protection Board and Department of Water Resources 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.

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

TWENTY: 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.

TWENTY-ONE: The permittee shall contact the Department of Water Resources by telephone, (916) 574-1206, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

TWENTY-TWO: Temporary staging, formwork, stockpiled material, equipment, and temporary buildings shall not remain in the floodway during the flood season from November 1 to July 15.

TWENTY-THREE: Prior to start of any demolition and/or construction activities within the floodway, the applicant shall provide the Central Valley Flood Protection Board with two sets of layout plans 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 July 15.

TWENTY-FOUR: Debris that may accumulate on the permitted encroachment(s) and related facilities shall be cleared off and disposed of outside the floodway after each period of high water.

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

TWENTY-SIX: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to July 15.

TWENTY-SEVEN: Fill material shall be placed only within the area indicated on the approved plans.

TWENTY-EIGHT: 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.

TWENTY-NINE: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the regulated channel.

THIRTY: Except with respect to activities expressly allowed under this permit, the work area shall be restored to the condition that existed prior to start of work.

THIRTY-ONE: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board.

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

THIRTY-THREE: In the event that levee or bank erosion injurious to the adopted plan of flood control occurs at or adjacent to the permitted encroachment(s), the permittee shall repair the eroded area and propose measures, to be approved by the Central Valley Flood Protection Board, to prevent further erosion.

THIRTY-FOUR: The permitted encroachment(s) shall not interfere with operation and maintenance of the present or future 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.

THIRTY-FIVE: 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.

THIRTY-SIX: The permittee shall be responsible for securing any necessary permits incidental to habitat manipulation and restoration work completed in the flood control project, and will provide any biological surveying, monitoring, and reporting needed to satisfy those permits.

THIRTY-SEVEN: 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.

THIRTY-EIGHT: The abandoned or dismantled bridge shall be completely removed and disposed of outside the limits of the levee section and floodway.

THIRTY-NINE: Piers, bents, and abutments being dismantled shall be removed to at least 1 foot below the natural ground line and at least 3 feet below the bottom of the low-water channel.

FORTY: The bridge piers and bents shall be constructed parallel to the direction of streamflow.

FORTY-ONE: Drainage from the bridge shall not be discharged into the streambank.

FORTY-TWO: Plans showing all construction facilities such as temporary staging, coffer dams, and falsework which shall remain in a floodway during November 1 to July 15, must be submitted to the board for approval prior to installation of these facilities.

FORTY-THREE: All construction facilities such as temporary staging, coffer dams, and falsework must be designed to prevent bank erosion during normal streamflows and maintain maximum channel capacity during November 1 to July 15.

FORTY-FOUR: The soffit of the bridge shall be no lower than that of the replaced bridge.

FORTY-FIVE: Bridge piers and bents placed within the floodway to support a widened portion of the existing bridge shall be constructed in line with the existing bents and piers.

ATTACHMENT C

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Mer	165	11.7/26.7		

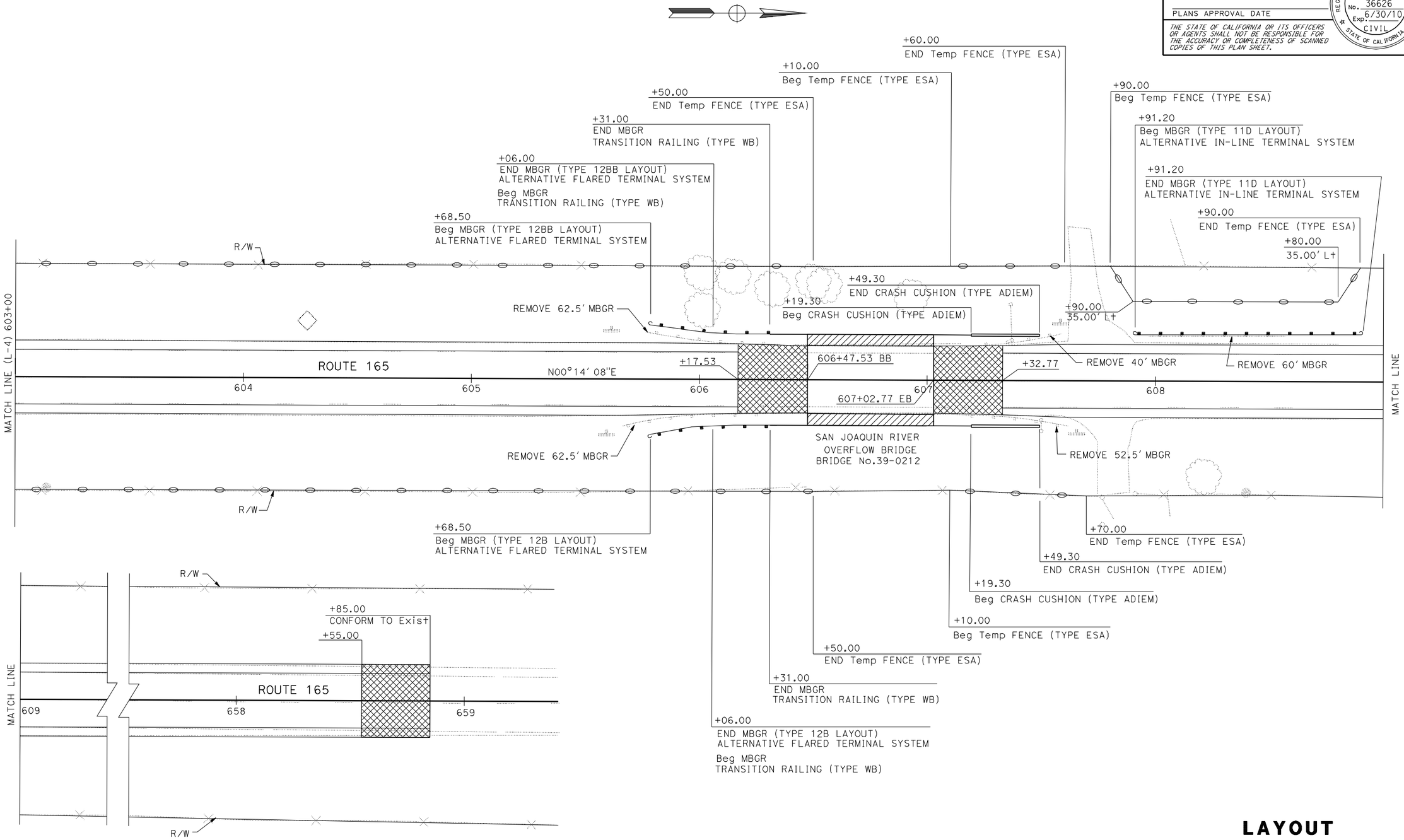
Michael D Hutchison 12/29/09
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Mike Hutchison — No. 36626 — Exp. 6/30/10 — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE: FOR ACCURATE RIGHT OF WAY, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LAYOUT

SCALE: 1" = 20' **L-5**

CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
MARLON LOPEZ	MIKE HUTHISON	ML	5/13/09

FUNCTIONAL SUPERVISOR: CAROLINE REYES

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN

LAST REVISION 00-00-00 | DATE PLOTTED => 22-FEB-2011 | TIME PLOTTED => 09:56

BORDER LAST REVISED 4/11/2008 | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s110641 | DGN FILE => a27980ea005.dgn | CU 06241 | EA 279801

ATTACHMENT C

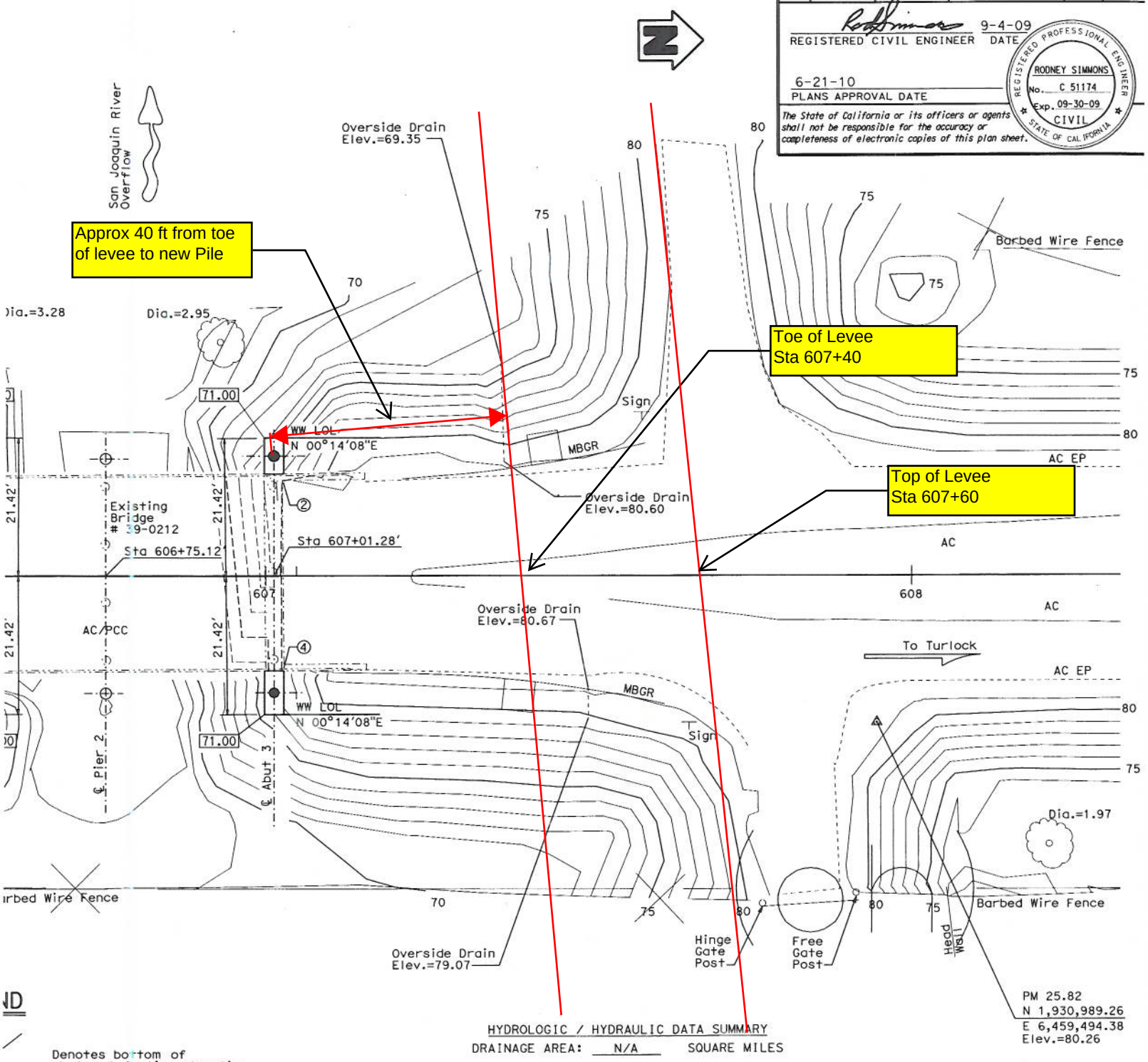
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
10	Mer	165	11.7/26.7	78	110

REGISTERED CIVIL ENGINEER — 9-4-09 DATE

RODNEY SIMMONS No. C 51174 Exp. 09-30-09 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

6-21-10
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



Denotes bottom of abutment footing elevation

Indicates 18" ø CISS piles

Indicates class 200 steel pipe piles

HYDROLOGIC / HYDRAULIC DATA SUMMARY

DRAINAGE AREA: N/A SQUARE MILES

	DESIGN FLOOD	BASE FLOOD
FREQUENCY (YEARS)	50	100
DISCHARGE (CUBIC FEET PER SECOND)	N/A	405
WATER SURFACE ELEV. (FEET)	N/A	74.4 ft

FLOOD PLAIN DATA ARE BASED UPON INFORMATION AVAILABLE WHEN THE PLANS WERE PREPARED AND ARE SHOWN TO MEET FEDERAL REQUIREMENTS. THE ACCURACY OF SAID INFORMATION IS NOT WARRANTED BY THE STATE AND INTERESTED OR AFFECTED PARTIES SHOULD MAKE THEIR OWN INVESTIGATIONS.

e Hensel
e Hensel
chellenger

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 17

BRIDGE NO. 39-0212
POST MILE 25.77

SAN JOAQUIN RIVER OVERFLOW BRIDGE (WIDEN)
FOUNDATION PLAN

CALE IN INCHES D PLANS 0 1 2 3

CU 06241
EA 279801

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 05/08/08 | 10/31/08 | 12/30/08 | 1/26/09 | 3-31-09 | 4-14-09 | 4-21-09 | 4-29-09

SHEET 3 OF 12

FILE => 39-0212-e-fp.dgn