INFORMATION HANDOUT

MATERIALS INFORMATION

MATERIALS RECOMMENDATION

FINAL FOUNDATION REPORT

FINAL HYDRAULIC REPORT

FOUNDATION REVIEW

ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT

LEAD CONCENTRATION DATA AND SAMPLE LOCATION MAPS

LANDSCAPE ARCHITECTURE

TREE MAP

WATER QUALITY

WATER QUALITY INFORMATION HANDOUT

STORM WATER DATA REPORT

PERMITS

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD, 401 PERMIT

CERTIFICATION OF US ARMY CORPS OF ENGINEERS' NATIONWIDE PERMIT #14

UNITED STATES ARMY CORPS OF ENGINEERS, NON-REPORTING NATIONWIDE 404 PERMIT

CALIFORNIA DEPARTMENT OF FISH AND GAME NOTIFICATION NO. 1600-2012-0192-R3

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: STEWART LEE
District Branch Chief
Design SHOPP – District 4

Attention: Bach-Yen Nguyen

Date: April 28, 2010

File: 04-NAP-121 PM 20.1 / 20.5
04-2A1100
Bridge Replacement

From: KAN WONG
Materials Design Engineer
Engineering Services I – Materials B

Concurred by: ASHOK DAS, P.E.
District Materials Engineer
Branch Chief, Materials B

Subject: Updated Materials Recommendation for New Roadway Pavement

This memo is in response to your requesting memorandum dated March 9, 2010 for updated roadway pavement recommendations. The project proposes to replace the existing Capell Creek Bridge (Br. No. 21-0009) in place, along the existing alignment. The approaching roadway would be widened to conform with the new bridge at both ends. The project is located on Route 121 from PM 20.1 to PM 20.5 in Napa County.

SITE HISTORY

Our investigation consisted of a search of the District As-built Plans to determine the roadway history. We could not find records of the original as-built plans of the above referenced project, but we found one roadwork contract within the proposed project limits. The contract is tabulated below.

EA (Filename)	PMs	Year Completed	Pavement Structural Section
04-1R9204	9.4/24.1	12/05/01	Asphalt-Rubber Seal coat

EXISTING CONDITIONS

To date, Route 121 currently within the project limits is a 2-lane undivided highway with narrow shoulder or no shoulder and turnouts at various locations. Our site visit on March 22, 2010 observed the existing surface pavement is "asphalt-rubber seal coat". According to 2007 Pavement Condition Survey, the general pavement condition is in "good" condition. Occasional

longitudinal cracks and isolated ruttings were observed within the project limits. There is a need of shoulder backing in some portion of the highway.

RECOMMENDATIONS

Based on our review of the 2007 Pavement Condition Survey, observation of the Caltran's Photolog, search of as-built plans files, and a site visit to the project location on March 24, 2010, we recommend the following:

I. Widening Pavement Design

Design Factors

Traffic Index

A 20-year traffic index of 7.5 provided by your office on April 26, 2010 has been used for the widened pavement design. (The traffic index was given by the Office of Advance Planning / Transportation Modeling and Forecasting Branch in a memorandum dated April 23, 2010 to your office).

R-value

An R-value of 25 has been selected for the pavement design. The R-value was retrieved from our office record.

Test Number: Lab No. 4016
Date Sampled: 9-21-60
Sample No.: A-7c at depth of 0.6'-3.0' ("B" line at Station 144+10)

Recommended Structural Section for Widening Pavement

We recommend that Office of Structure Design be contacted for the design of the bridge and approach slab.

Based on design factors: $TI_{20} = 7.5$ and $R_v = 25$, we recommend the following two alternative structural sections:

A. Alternative 1 – **Full Structural Sections (3 layers)**

Traveled-way and Shoulder Thickness

0.35' HMA (Type A)
0.65' AB (2)
0.40' AS (4)
Total thickness = 1.40'

B. Alternative 2 – **Full Depth HMA Section**

Traveled-way and Shoulder Thickness

0.80' HMA (Type A)
Total thickness = 0.80'

We have evaluated the two alternative structural sections above for this project. A full depth hot mix asphalt section (alternative 2) is preferred because the new pavement is limited and minimal handling of material type is desired.

II. Overlay with HMA (A) Exclude Bridge Structure

The HMA(A) overlay section excludes the bride structure portion.

In accordance to 2007 Pavement Condition Survey Report, the IRIs for this project ranged from 207 to 292, which are greater than 170.

A. PREPARATORY WORK (PM 20.1 to PM 20.5)

Prior to overlay, the following preparatory works are required:

1. Conduct a field review and locate specific areas of severe distress identified by rutting greater than 1/4 inch and/or loose and settling pavement. Digout and repair with HMA (A) at distressed localized area to the bottom of the existing AC layer or up to a maximum 6 inches in depth (whichever is less).
2. Tack coat shall be applied to all vertical surface of existing AC pavement before back filling with HMA (A). A ¾", Maximum, Medium Grading HMA Mix with PG 64-10 binder should be used.
3. Clean and seal all cracks with ¼" or wider. Low modulus asphalt crack sealant is recommended.

B. Overlay (PM 20.1 to PM 20.5)

1. Overlay the existing pavement with 0.25' HMA (A) from edge of pavement (EP) to edge of pavement.
2. Provide shoulder backing along edge of pavement as needed.

* * * * * *

If you have any questions, please contact Kan Wong at 622-8814.

Attachments:

c: Route File, Daily File, ADas

K.Wong/dg/NAP-121, Roadway Pavement

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: MR. SAMAD HAMOUD
Chief, Bridge Design Branch 16
Office of Structure Design-West

Date: May 9, 2012

Attention: Hardeep Singh

File: 04-NAP-121 PM 20.29
04-2A1100
Capell Creek Bridge Replacement

Sunny Yang S.A

From: SUNNY YANG / SAMUEL AWAD
Transportation Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

H. Nikoui

HOOSHMAND NIKOUI
Chief, Branch A
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject : Final Foundation Report

This Report is in response to your request dated September 1, 2011, for final foundation recommendations for the proposed Capell Creek Bridge Replacement (existing bridge number 21-0009, new bridge number 21-0112), located on Route 121 (PM 20.29) in Napa County. This Report supersedes the previous report dated April 26, 2012.

1. SCOPE OF WORK

The following tasks were performed for the preparation of this Report:

- Review of Bridge Inspection Reports and As-Built Foundation Data;
- Field exploration including drilling 5 geotechnical borings;
- Laboratory sample tests (soil corrosion testing);
- Foundation design analysis; and
- Preparation of this Report.

2. PROJECT DESCRIPTION

The existing Capell Creek Bridge is a two-span, two-lane bridge (one lane in each direction). The original bridge, built in 1907, was a 47-foot-long, 17.7-foot-wide, rubble masonry wall structure. In 1959, the right (upstream) side was widened by 13 feet. The widening portion is RC slab on RC walls. The bridge has been determined scour critical and is due for replacement. The proposed new structure will be built at the same location of the existing bridge. It will be a single span structure, 64 feet long and 40 feet wide, with strutted abutments.

The vertical datum used in this report is NAVD 88. The horizontal datum is NAD 83.

3. EXCEPTION TO POLICY

There is no known exception to Department policy relating to the investigation or design of the proposed structures.

4. FIELD INVESTIGATION AND TESTING PROGRAM

A total of five geotechnical exploratory borings were drilled to investigate subsurface soil conditions (Figure 1). All five borings were rotary wash borings. Table 1 lists depths of these borings and the dates they were drilled.

All samples were visually identified and recorded in the field log using standard method. For all borings, Standard Penetration Tests (SPT) were performed at 5-feet interval. Pocket Penetrometer (PP) tests were conducted on soil samples showing apparent cohesion. Further, for rock samples, Rock Quality Determination (RQD) and percent of sample recovery for each run were recorded.

Table 1. Summary of Field Borings

Boring ID	Surface Elev. (ft)	Total Depth (ft)	Date of completion	Groundwater Depth (ft)
RC-11-001	818.58	55	9-13-11	2
RC-11-002	819.48	45	9-14-11	3
RC-11-003	820.43	51.5	9-14-11	Not measured
RC-11-004	819.29	51.5	9-15-11	Not measured
RC-11-005	820.30	31	10-24-11	Not measured

5. SITE GEOLOGY AND SUBSURFACE CONDITIONS

Topography

The bridge site is located within the northeastern portion of the Coast Range. This region is made up of prominent northwest trending moderately steep-to-steep ridges and intervening narrow valleys. Capell Creek, in the vicinity of the site, flows through a narrow a canyon with the site situated near the south end of this feature. Elevations at the site range from approximately 805 feet at the creek bed to approximately 1100 feet to 1300 feet on the adjacent north and south sides of the canyon, respectively. The area is semi-arid and typically contains chaparral vegetation on the slopes and interspersed stands of oak, pine and grassy meadows in the valleys. An electric cattle fence is installed along the Caltrans Right Of Way at the site. The bridge site is approximately 1.5 miles south of the intersection of State Route 121 and State Route 128.

Site Geology

The bridge site is located on the eastern side of the north Coast Range Geomorphic Province. According to the C.D.M.G. Open File Report 82-16, the bedrock in this region is mainly composed of northwest striking tectonically dislocated sedimentary rock of the Lower Cretaceous–Upper Jurassic Age Great Valley Sequence and Jurassic Age mafic igneous rocks that have been partly to completely serpentinized. Surficial deposit include alluvium, slope wash and landside debris of Recent to Pleistocene Age. At the bridge site, bedrock consisting of weathered mudstone and conglomerate were observed on the creek banks near the abutments and wing walls. The creek bed generally contained alluvial coarse gravel, cobbles, some boulders and thin sand deposits; the latter was observed under the bridge. Additionally, there are a few large partially buried sandstone blocks located under the bridge. We are not sure if these blocks represent large boulders or intact bedrock.

Subsurface Conditions

At boring RC-11-001, the subsurface soil consists of 40 feet of interlayers of very stiff to hard sandy lean clay (pocket penetrometer values ranging from 3 to 4 tsf) and medium dense to very dense clayey sand or clayey gravel (energy corrected SPT blow count N_{60} ranging from 21 to greater than 50). Sandstone bedrock was encountered at 40.5 feet depth (Elev. 778 feet).

At boring RC-11-002, very hard to extremely hard sandstone rock was encountered right below the AC pavement (Elev. 819 feet), to a depth of 21 feet. From 21 to 50 feet depth is mudstone.

At boring RC-11-003, the subsurface soil consists of interlayers of mostly dense to very dense gravelly sand or sandy gravel (N_{60} = 44 to greater than 50). Bedrock was not encountered at this location.

At boring RC-11-004, the subsurface soil consists of interlayers of stiff to hard sandy silt or sandy lean clay (PP = 1.5 – 4.5 tsf), and dense gravel or silty sand (N_{60} = 35 – 47). Bedrock was not encountered at this location.

At boring RC-11-005, the subsurface soil consists of 11 feet of dense gravel (N_{60} = 40). Mudstone bedrock was encountered at 11.5 feet depth (Elev. 809 feet).

Groundwater

Groundwater level was measured at 2 feet depth in boring RC-11-001, and at 3 feet depth in boring RC-11-002. Groundwater level was not measured at the other boreholes.

6. SCOUR EVALUATION

The existing bridge was designated scour critical in 2003, due to the potential scour depth for a 100-year flood event at Pier 2. During our visit, we did observe the reported evidence of scour and related distress to the existing bridge. Per final hydraulics report dated December 9, 2011, the recommended bottom of footing elevation was 802.40 ft.

7. CORROSION EVALUATION

According to current Caltrans Corrosion Guidelines (2003), a soil is considered non-corrosive for structure foundation elements, if the minimum resistivity is greater than 1000 ohm-cm and the pH value is greater than 5.5. Based on our laboratory corrosion test performed on two soil samples (Table 2), the soils are non-corrosive.

Table 2. Soil Corrosion Test Summary

Location	SIC Number	Sample Depth (ft)	Min. Resistivity (ohm-cm)	pH
R-11-001	C633255	4-5	1944	6.6
R-11-003	C633256	4-5	4156	6.9

8. SEISMIC RECOMMENDATIONS

Hossain Salimi of Office of Geotechnical Design-West, provided the Final Seismic Design Recommendations in a report dated October 31, 2011. He can be contacted at (916) 227-7147 for additional information.

9. FOUNDATION RECOMMENDATIONS

Due to the stiff nature of subsurface soils and relatively small structure loads, we recommend spread footing for both abutments. According to current Caltrans Bridge Design Specifications, the abutments are designed using the Working Stress Design (WSD) method. The foundation design analysis was performed in general using the methods outlined in AASHTO LRFD Bridge Design Specifications (2007); however, reduction factors for geotechnical strength parameters were based on Caltrans/DES/Geotechnical Services criteria. Idealized subsurface soil profile and soil engineering parameters at each abutment location were defined based on the boring logs, relevant literature, and engineering judgment. Liquefaction potential at this site is minimum.

Tables 3 through 5 below are foundation geometry and loads, and scour data (provided by Structure Design). Table 6 shows the soil parameters used in the calculations. Using a factor of safety of 3.0, the maximum allowable bearing pressure at Abutment 1 and 2 were calculated to be approximately 7.8 ksf and 19.0 ksf, respectively (Tables 7 and 8). Permissible gross contact stress for a permissible (immediate) settlement of 2 inches was calculated to be approximately

16.5 ksf at Abutment 1. At Abutment 2, the foundation materials are mainly weathered rock and settlement is negligible, so the permissible stress was not calculated.

Table 3. Foundation Data

Support No.	Design Method	Finished Grade Elevation (ft)	BOF Elevation (ft)	Footing Size (ft)		Permissible Settlement under Service Load (in)
				B	L	
Abut 1	WSD	812.00	802.00	7.0	53.0	2.0
Abut 2	WSD	814.00	802.00	7.0	52.5	2.0

Table 4. Scour Data

Support No.	Long Term (Degradation and Contraction) Scour Elevation (ft)	Short Term (Local) Scour Depth (ft)
Abut 1	804.20	N/A
Abut 2	804.20	N/A

Table 5. Foundation Loads

LRFD Service Limit State I							
Support No.	Total Load				Permanent Load		
	Vertical Load (kip)	Effective Dimensions (ft)		Horizontal Load in Long. Direction (kip)	Vertical Load (kip)	Effective Dimensions (ft)	
		B'	L'			B'	L'
Abut 1	1500.00	7.0	53.0	N/A	1300	7.0	53.0
Abut 2	1500.00	7.0	52.5	N/A	1300	7.0	52.5

Table 6. Soil Parameters Used for Spread Footing Analysis

Support No.	Cohesion (ksf)	Friction angle (degree)	Moisture unit weight (psf)	Footing width (ft)	Embedment depth (ft)	Ultimate bearing capacity (ksf)
Abut 1	2.0	15	120	7	4.5	23.5
Abut 2	0.0	45	120	7	4.5	57.0

Table 7. Foundation Design Recommendations for Spread Footings

Support No.	Footing Size (ft)		Bottom of Footing Elevation (ft)	Minimum Footing Embedment Depth (ft)	(LRFD Service-I Limit State Load Combination)	
	B'	L'			Permissible Gross Contact Stress (ksf)	Allowable Gross Bearing Capacity (ksf)
Abut 1	7.0	53.0	802.00	5	16.5	7.8
Abut 2	7.0	52.5	802.00	5	N/A	19

Notes: 1) Recommendations are based on the foundation geometry and the load provided by Structure Design in the Foundation Design Data Sheet. The footing contact area is taken as equal to the effective footing area, where applicable.
2) See MTD 4-1 for definitions and applications of the recommended design parameters.

Table 8. Spread Footing Data Table

Support No.	Working Stress Design (WSD)	
	Permissible Gross Contact Stress (ksf)	Allowable Gross Bearing Capacity (ksf)
Abut 1	16.5	7.8
Abut 2	N/A	19

10. CONSTRUCTION CONSIDERATIONS

Due to the presence of very hard to extremely hard rock at boring R-11-002 and observed rock outcrop along the northbound shoulder at abutment 2, it is anticipated that the contractor may encounter difficulty during excavation for construction of the bridge abutments. Thus, the contractor should be prepared for such condition.

Due to the presence of groundwater, dewatering is likely to be required during foundation excavation and footing construction.

The recommendations contained in this report are based on specific project information regarding design loads and structure location provided by DES Structure Design. If any conceptual changes are made during final project design, or if you have any questions, please contact Sunny Yang at (510) 286-4808 or Hooshmand Nikoui, Branch Chief at (510) 286-4811.

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

SYang/mm

REGISTERED PROFESSIONAL ENGINEER
ZHAOHUI YANG
No. 71801
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

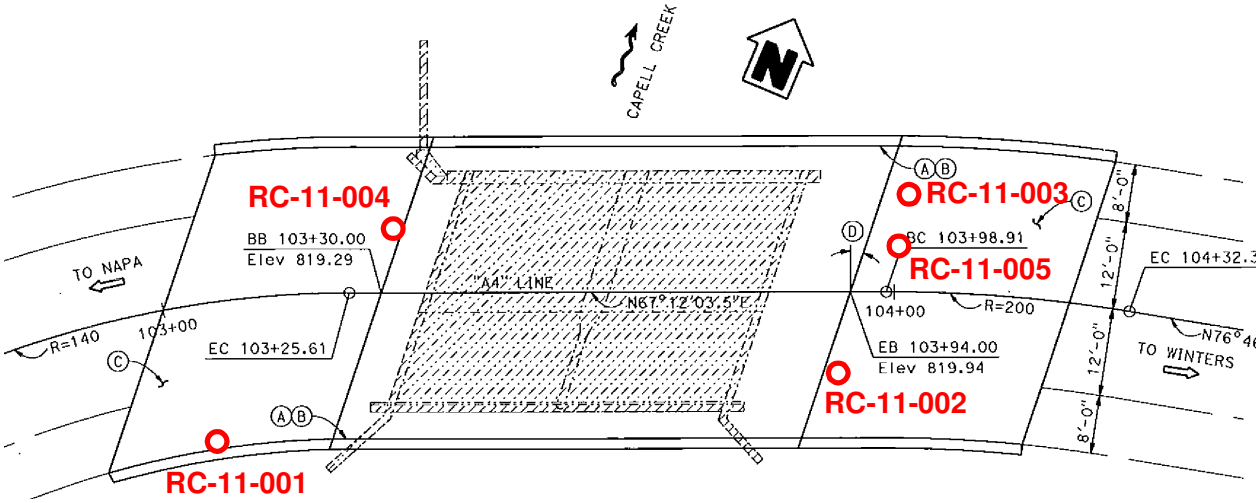


Figure 1: Boring locations

State of California – Department of Transportation
Division of Engineering Services
Structure Policy and Innovation
Office of Design and Technical Services
Structure Hydraulics and Hydrology

FINAL HYDRAULIC REPORT

Capell Creek

Bridge No. 21 0112
04 - NAP – 121 PM 20.10
EA 04-2A1100
Project ID 04 0000 0808

Prepared by:

Anthony Nedwick, PE
Structure Hydraulics and Hydrology
December 9, 2011

REGISTERED PROFESSIONAL ENGINEER
ANTHONY NEDWICK
No. C60368
Exp. 06/30/2012
CIVIL
STATE OF CALIFORNIA

General:

It is proposed to replace the existing Capell Creek Bridge (Bridge No. 21-0112). The existing structure is a two-span bridge consisting of a masonry rubble twin arch structure built in 1907, and a two-span reinforced concrete slab widening constructed in 1959. The overall width of the structure is approximately 30 feet, with an overall length of 55 feet. The existing bridge has numerous structural deficiencies along with the determination of the structure being considered scour critical. Historical Bridge Inspection Reports have noted scour issues including settlement of the spandrel wall at Abutment 1, footing exposure at both Abutment 1 and Pier 2, and significant amounts of debris being lodged against Pier 2. Potential Pier Scour at Bent 2 was estimated to extend below the as-built bottom of footing.

The new structure is proposed to be a single–span structure using precast prestressed concrete slabs. The current alternative calls for a 63'-0" overall bridge length, with an overall width of 43'-0", a hydraulic skew of about 14° and a clear span of approximately 58 feet. The deck will have a 2% cross-slope, a grade of 0.34% and a structural depth of 2'-3". The abutments will be vertical. Based on a Beginning of Bridge (BB) elevation of 820.22 feet along the Profile Grade, the estimated minimum soffit elevation for the proposed structure is approximately 817.5 feet. All elevations are based on the NAVD 88 datum. This evaluation is based on the "Incomplete Plan for Design Study" dated "21-Nov-2011" and provide by Hardeep Singh of Bridge Design Branch 16.

A review of historical channel cross-sections recorded along the upstream edge of the structure indicates a history of minor channel degradation since 1960. While these cross-sections show that the channel has been laterally stable with no indications of thalweg migration, they only record what is occurring at the upstream edge of the structure. However, based on historical Bridge Inspection reports, a site visit and subsequent survey data, it is apparent that the thalweg has migrated to the Abutment 1 wall at the downstream edge of the structure. Therefore thalweg migration is a factor in the recommendations provided by this report.

Further modeling of the site indicates that the bridge opening is smaller than the natural upstream channel at higher flows, constricting the flow of the channel. Based on the existing configuration, it was estimated that the historical degradation recorded at this structure may actually be partially attributed to contraction scour. It should be noted that the channel has a natural constriction downstream of the bridge, where Capell Creek enters a narrow canyon.

This report is based on information provided by Structure Design, including the Incomplete Plan for Design Study printed on 11-21-11. **All elevations indicated in this report are based on the Vertical Datum NAVD 1988.**

Basin:

At the project site, Capell Creek has a watershed area of approximately 6.7 mi^2, draining areas of eastern Napa County. There are no major reservoirs or stream diversions upstream of the project site. A large portion of the watershed is undeveloped, with a few low-density residential communities with acreage, some vineyards but mostly oak trees, dense brush and grasslands scattered among hilly terrain. Precipitation in the watershed varies with an average annual precipitation of about 33 inches.

Discharge:

To estimate channel discharge, several methods were studied including Regional Regression equations developed by the USGS, Chart "A" and Basin Transfer Methods. WMS (Watershed Modeling System by Aquaveo), version 8.4, was utilized to determine the watershed area of approximately 6.7 square miles. A USGS Basin Transfer method was used to correlate the two watershed areas. USGS stream gage #11453700 is located near the project site on a tributary to Capell Creek. The results were evaluated and compared to historical high water elevations at the site, based on past Bridge Inspection Reports. The 50-year and 100-year flow rates are 2,750 cfs and 3,200 cfs, respectively.

Hydraulic Analysis:

The channel at the site was modeled using HEC RAS version 4.1.0. Survey data was provided by Preliminary Investigations-North and structural data for the proposed bridge was provided by Hardeep Singh of Bridge Design Branch 16. Data for the existing structure, historical Bridge Inspection Reports, channel cross-sections and data from previous field inspections and scour evaluations performed by Structure Maintenance and Investigation (SM&I) Hydraulic Branch were also utilized in this analysis. Manning's roughness coefficients were estimated using USGS guides as well as Log of Test Boring information and data gathered during site investigations. Manning's coefficients were estimated at 0.034 for the main channel and 0.040 for the overbank areas. The channel has an average slope of approximately 1.5 % at the project site.

Two different scenarios were evaluated; the existing structure and the proposed single-span structure.

Average velocities for the 100-year discharge in this reach of Capell Creek ranged between 7.7 fps and 16 fps, and between 10 fps and 13.7 fps at the bridge site.

The water surface elevations in this evaluation were calculated using the HEC RAS model, and are based on the NAVD 1988 datum. The 50-year water surface elevation at the bridge is approximately 814.7 feet, while the 100-year water surface elevation is approximately 815.4 feet.

There is a history of significant debris at the site. Based on the plans provided, the minimum soffit elevation for the proposed structure is approximately 817.5 feet. Based on the analysis, the proposed structure should have sufficient freeboard.

Based on the survey data, the current channel invert at the structure is approximately 805.6 ft, using the NAVD88 vertical datum.

Streambed:

The channel bed consists of sand, gravel, cobbles and some boulders with some outcroppings of weathered mudstone and conglomerate on the banks. According to the Final Foundation Report dated November 1, 2011, there were five geotechnical soil borings recorded.

According to the report, no bedrock was encountered at borings RC-11-003 near Abutment 2 and RC-11-004 near Abutment 1. Both of these borings are located under the downstream side of the proposed structure. Additionally, at boring RC-11-001, bedrock was not encountered until a depth of 778 feet. Above that elevation, the bed material consists of 40 feet of alluvium comprised of sandy lean clay, clayey sand or clayey gravel. At boring RC-11-002, under the upstream side of the proposed Abutment 2, sandstone rock was encountered to an elevation of approximately 798 feet. Below that elevation was at least 30 feet of Mudstone. At boring RC-11-005, 11 feet of dense gravel overlies mudstone bedrock being encountered at elevation 809 feet. There was no indication as to the scour susceptibility of the mudstone bedrock or the sandstone encountered during the site investigation.

The placement of the footings recommended in this Final Hydraulic Report is based on the alluvial nature of the bed materials. If, during excavation, a representative of the Office of Geotechnical Design determines the foundation material consists of scour-resistant bedrock, the footing elevations may be adjusted accordingly.

Scour Analysis:

Scour was estimated utilizing the methods set forth in the FHWA HEC-18, "Evaluating Scour at Bridges." All scour elevations are based on the 100-year discharge and assume no mitigation measures will be in place.

Based on a review of historical channel cross-sections, the streambed at the site has shown signs of consistent degradation. However, based on the hydraulic model, the existing bridge is constricting the natural channel, and therefore the degradation observed may be attributed to contraction scour. There are no records for any nearby structures with which to correlate data. The proposed structure has been lengthened to reduce potential contraction scour.

Channel migration is also a consideration at this site, based on the bed material and indications that the channel has shifted laterally near the downstream edge of the bridge. Therefore, the abutments should each be designed for the same scour elevation, with the top of the spread footings placed at or below elevation 804.2 feet (NAVD 88). Local Pier Scour is not applicable to the proposed single-span structure.

It should be noted that the Final Foundation Plan borings indicate the presence of Mudstone bedrock. All footings shall be placed on competent, scour-resistant bedrock unless the top of footing is placed lower than 802.4 ft (NAVD 88). A representative from the Office of Geotechnical Design should inspect footing excavations to confirm the depth of competent, scour resistant bedrock.

Summary & Recommendations:

Below is a summary of key design parameters based on the hydrology and hydraulic analysis performed for these structures.

All elevations given are referenced to the data provided by Structures Design and Preliminary Investigations-North, using the NAVD 88 vertical datum.

Hydrologic Summary for Capell Creek, 21-0112 Single Span Precast Prestressed Concrete Slab Bridge		
Drainage Area: 6.7 mi^2		
Frequency	**Design Flood**	**Base Flood**
	50-year	100-year
Discharge	2,750 cfs	3,200 cfs
Water Surface Elevation at Bridge	814.7 ft	815.4 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 investigation.		
Minimum Required Soffit Elevation	817.0 ft	
Local Pier Scour Depth	N/A	
Local Pier Scour Elevation	N/A	

LongTerm Scour Depths, Capell Creek, Br. No. 21-0112		
Supports	Degradation Scour Depth*	Contraction Scour Depth
All Supports	0.0 ft	0.0 ft

Scour Data (Elevation and Depth), Capell Creek, Br. No. 21-0112			
		Short Term (Local) Scour Elevation	
Supports	Long Term Scour Elev	Depth	Elevation
All Supports	804.2 ft	N/A	N/A

FOUNDATION REVIEW

DIVISION OF ENGINEERING SERVICES
GEOTECHNICAL SERVICES

To: Structure Design
1. Design
2. R.E. Pending File
3. Specifications & Estimates
4. File

Geotechnical Services
1. GD - North ; South ; West
2. GS File Room

Date: 5/16/12

Cupell Creek Br.
Structure Name

04 - Nap - 121 - 20.2
District County Route ~~km~~ Post

District Project Development
District Project Engineer

04 - 2A1100 21 - 0112
E.A. Number Structure Number

Foundation Report By: S. Young Dated: 5/9/12

Reviewed By: H. Singh (SD) R. Price (GS)

General Plan Dated: Not dated Foundation Plan Dated: 9/22/11

☑ No changes. ☐ The following changes are necessary.

FOUNDATION CHECKLIST

Pile Types and Design Loads
___ Pile Lengths
___ Predrilling
___ Pile Load Test
___ Substitution of H Piles For Concrete Piles ☐ Yes ☑ No

___ Footing Elevations, Design Loads, and Locations
___ Seismic Data
___ Location of Adjacent Structures and Utilities
___ Stability of Cuts or Fills
___ Fill Time Delay

___ Effect of Fills on Abutments and Bents
___ Fill Surcharge
___ Approach Paving Slabs
___ Scour
___ Ground Water
___ Tremie Seals/Type D Excavation

Structure Design Bridge Design Branch No. 16 Geotechnical Services

Rev. 06/02

ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT

CAPELL CREEK BRIDGE (21-0009)
NAPA COUNTY, CALIFORNIA

PREPARED FOR:
CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING
111 GRAND AVENUE
OAKLAND, CALIFORNIA

PREPARED BY:
GEOCON CONSULTANTS, INC.
6671 BRISA STREET
LIVERMORE, CALIFORNIA

GEOCON PROJECT NO. E8560-06-37
CALTRANS EA 04-2A1101
CALTRANS PROJECT NO. 04-0000-0808-1

JUNE 2012

TABLE OF CONTENTS

ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT Page
REPORT LIMITATIONS i
PROJECT TEAM iii
EXECUTIVE SUMMARY iv
1.0 INTRODUCTION 1
1.1 Site Description and Proposed Improvements 1
1.2 Purpose 1
2.0 BACKGROUND 1
2.1 Asbestos 1
2.2 Lead Paint 2
3.0 SCOPE OF SERVICES 3
3.1 Pre-Field Activities 3
3.2 Field Activities 3
4.0 INVESTIGATIVE METHODS 4
4.1 Asbestos 4
4.2 Paint 4
5.0 INVESTIGATIVE RESULTS 4
5.1 Asbestos 4
5.2 Paint 4
6.0 CONCLUSIONS 5
6.1 Asbestos 5
6.2 Paint 5

TABLES
1. Summary of Analytical Laboratory Test Results - Asbestos
2. Summary of Analytical Laboratory Test Results - Paint

FIGURES
1. Vicinity Map
2. Site Plan

SITE PHOTOGRAPHS (1 through 3)

APPENDIX
A. Laboratory Analytical Reports and Chain-of-Custody Documentation

REPORT LIMITATIONS

This asbestos and lead-containing paint (LCP) survey was conducted in conformance with generally accepted standards of practice for identifying and evaluating asbestos and LCP in structures. Due to the nature of structure surveys, asbestos and LCP use, and laboratory analytical limitations, some asbestos or LCP in the structure may not have been identified. Structure spaces such as cavities, crawlspaces, and pipe chases may have been concealed to our investigator. Previous structure renovation work may have concealed or covered spaces or materials, or may have partially demolished materials and left debris in inaccessible areas. Additionally, renovation activities may have partially replaced asbestos with indistinguishable non-asbestos materials. Asbestos or LCP may exist in areas of the structure not accessible or sampled in conjunction with this Task Order.

During renovation or demolition operations, suspect materials may be uncovered which are different from those accessible for sampling during this assessment. Personnel in charge of renovation/demolition should be alerted to note materials uncovered during such activities that differ substantially from those included in this or previous assessment reports. If suspect materials are found, additional sampling and analysis should be performed to determine if the materials contain asbestos or lead.

This report has been prepared exclusively for the State of California Department of Transportation (Caltrans) District 4. The information contained herein is only valid as of the date of the report, and will require an update to reflect additional information obtained.

This report is not a comprehensive site characterization and should not be construed as such. The findings as presented in this report are predicated on the results of the limited sampling and laboratory testing performed. In addition, the information obtained is not intended to address potential impacts related to sources other than those specified herein. Therefore, the report should be deemed conclusive with respect to only the information obtained. We make no warranty, express or implied, with respect to the content of this report or any subsequent reports, correspondence or consultation. Geocon strived to perform the services summarized herein in accordance with the local standard of care in the geographic region at the time the services were rendered.

The contents of this report reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the State of California or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

GEOCON CONSULTANTS, INC.

David Watts, CAC Senior Project Scientist	Richard Day, CEG, CHG Regional Manager

CALIFORNIA DEPARTMENT OF TRANSPORTATION – DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING

Reviewed By:	Recommended By:	Approved By:
Peter Altherr, PE Task Order Manager	Christopher R. Wilson, PE District Branch Chief	Allen Baradar, PE, REA District Office Chief

PROJECT TEAM

Contact	Affiliation	Responsibility
Romy Fuentes, P.E. 510.622.8803 510.622.0198 fax romy_f_fuentes@dot.ca.gov	Caltrans – District 4 111 Grand Avenue, MS 7A Oakland, California 94612	Contract Manager
Peter Altherr 510.286.4668 510.286.5642 fax peter_altherr@dot.ca.gov	Caltrans – District 4 Environmental Engineering 111 Grand Avenue, MS8C Oakland, California 94612	Task Order Manager
Richard Day, CEG, CHG David Watts, CAC 925.371.5900 925.371.5915 fax livermore@geoconinc.com	Geocon Consultants, Inc. 6671 Brisa Street Livermore, CA 94550 (*Caltrans Contractor*)	Project Management Sample Collection Field QA/QC Investigation Report
Doug Krause, CIH 530.758.6397 530.758.6506 fax dskrause@pacbell.net	Krause & Associates 216 F. Street Suite 162 Davis, CA 95616 (*Geocon Subcontractor*)	Health and Safety
Diane Galvan 562.989.4045 562.989.4040 fax diane@atlglobal.com	Advanced Technology Laboratories 1510 E. 33rd Street Signal Hill, CA 90807 (*Geocon Subcontractor*)	Metals Analysis
Baojia Ke 510.895.3675 510.895.3680 fax sanleandrolab@emsl.com	EMSL Analytical, Inc. 2235 Polvorosa Ave., Suite 230 San Leandro, CA 94577 (Geocon Subcontractor)	Asbestos Analysis

EXECUTIVE SUMMARY

This asbestos and lead-containing paint (LCP) survey report was prepared for the Capell Creek Bridge (Bridge 21-0009) at Post Mile (PM) 20.3 on Highway 121 (Montecito Road) in Napa County, California. We performed an asbestos and LCP survey on the bridge. The project location is depicted on the Vicinity Map, Figure 1, and Site Plan, Figure 2. Caltrans has requested an investigation at the project location to provide data regarding the presence of asbestos and LCP prior to bridge improvements.

This report documents the investigation sampling methods and laboratory analytical data. The primary objective of our survey was to determine and quantify asbestos and LCP at the project location prior to bridge improvement activities. The information obtained from this investigation will be used by Caltrans to coordinate proposed activities, determine appropriate abatement/disposal costs, and identify health and safety concerns during improvements.

The field investigation was performed on May 7, 2012. The following field activities were performed during asbestos and LCP sampling efforts:

- Collected six bulk samples of suspect asbestos;
- Collected three (2-part composite) bulk samples of suspect LCP; and
- Transported samples to Caltrans-approved, California-certified environmental laboratories.

Samples were collected from locations as shown in the Site Plan (Figure 2). Suspect asbestos and LCP sample identification numbers are presented in Tables 1 and 2, respectively. Materials represented by the samples collected are presented in the Site Photographs.

Bulk suspect asbestos samples were collected after first wetting friable materials with a light mist of water. The samples were then cut from the substrate, transferred to labeled containers, and sealed. Three suspect materials (i.e., mortar, stone blocks, and expansion joint fill material) were identified during the survey (see Table 1). Sampling locations were distributed throughout the homogeneous areas (spaces where the material was observed).

We relinquished bulk samples for asbestos analysis using standard chain-of-custody documentation. Asbestos content was determined using U.S. Environmental Protection Agency (EPA) Test Method 600/R-93/116 for polarized light microscopy (PLM). We requested laboratory analyses to be within a 120-hour turnaround time.

Three bulk paint samples were collected using techniques presented in U.S. Department of Housing and Urban Development (HUD) guidelines. Three paint systems were identified during the survey (see Table 2).

> *It was not Geocon's intent during this inspection to conduct an evaluation of lead-based paint hazards in accordance with HUD guidelines.*

We relinquished bulk paint samples for lead analysis using standard chain-of-custody documentation. Total lead content was determined using EPA Test Method 6010B. At the direction of Caltrans, the paint samples were also analyzed for total chromium and zinc content using EPA Test Method 6010B, and total hexavalent chromium content using EPA Test Method 7196A/3060A. We requested laboratory analyses to be within a 120-hour turnaround time.

No asbestos was detected in samples of suspect materials collected during our survey. Laboratory results for the asbestos samples are summarized on Table 1. Reproductions of the laboratory report and chain-of-custody documentation are presented in Appendix A.

The laboratory analyses for paint indicated the following:

- A 2-part composite sample representing intact yellow traffic striping exhibited total chromium, lead, zinc, and hexavalent chromium concentrations of 3.5, 13, 50, and 14 milligrams per kilogram (mg/kg), respectively.
- A 2-part composite sample representing intact white traffic striping exhibited total chromium, lead, zinc, and hexavalent chromium concentrations of less than (<) 10, <10, 58, and <5.0 mg/kg, respectively.
- A 2-part composite sample representing deteriorated white paint applied to the bridge approach barriers exhibited total chromium, lead, zinc, and hexavalent chromium concentrations of 3.7, 98, 470, and <1.0 mg/kg, respectively. The Waste Extraction Test (WET) lead concentration was reported to be 1.1 milligrams per liter (mg/l).

Geocon paint sample laboratory results are summarized on Table 2. Reproductions of the lead laboratory report and chain-of-custody documentation are presented in Appendix A.

We provide the following conclusions and recommendations based on the results of our investigation.

Since no asbestos was detected, the Cal/OSHA asbestos standard does not apply for activities disturbing suspect materials represented by samples collected during our survey. In addition, suspect materials represented by samples collected during our survey would not be considered a California hazardous waste based on asbestos content.

In accordance with Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2, written notification is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

Paints identified during our survey would not be considered a potential California or Federal hazardous waste based on chromium, lead, zinc, or hexavalent chromium content.

We recommend that all paints at the project location (including graffiti, graffiti abatement, signage, etc.) be treated as lead-containing for purposes of determining the applicability of the Cal/OSHA lead standard during maintenance, renovation, and demolition activities. This recommendation is based on LCP sample results and the fact that lead was a common ingredient of paints manufactured before 1978 and is still an ingredient of some paints. In accordance with Title 8, CCR, Section 1532.1(p), written notification to the nearest Cal/OSHA district office is required at least 24 hours prior to certain lead-related work. Compliance and training requirements regarding construction activities where workers may be exposed to lead are presented in Title 8, CCR, Section 1532.1, subsections (e) and (l), respectively. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

ASBESTOS AND LEAD-CONTAINING PAINT SURVEY REPORT

1.0 INTRODUCTION

This asbestos and lead-containing paint (LCP) survey report was prepared for the Capell Creek Bridge (Bridge 21-0009) in Napa County, California. This report documents the investigation sampling methods and laboratory analytical data.

1.1 Site Description and Proposed Improvements

The project consists of the Capell Creek Bridge (Bridge 21-0009) at Post Mile (PM) 20.3 on Highway 121 (Montecito Road) in Napa County, California. The project location is depicted on the Vicinity Map, Figure 1, and Site Plan, Figure 2. Caltrans has requested an investigation at the project location to provide data regarding the presence of asbestos and LCP prior to bridge improvements.

1.2 Purpose

The primary objective of our survey was to determine and quantify asbestos and LCP at the project location prior to bridge improvement activities. The information obtained from this investigation will be used by Caltrans to coordinate proposed activities, determine appropriate abatement/disposal costs, and identify health and safety concerns during improvements.

2.0 BACKGROUND

2.1 Asbestos

The *Code of Federal Regulations (CFR)*, 40 CFR 61, Subpart M, National Emissions Standards for Hazardous Air Pollutants (NESHAP) and Federal Occupational Safety and Health Administration (FED OSHA) classify asbestos-containing material (ACM) as any material or product that contains *greater than* 1% asbestos. Nonfriable ACM is classified by NESHAP as either Category I or Category II material defined as follows:

- **Category I** – asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products.
- **Category II** – all remaining types of non-friable asbestos-containing material not included in Category I that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Regulated asbestos-containing material (RACM), a hazardous waste when friable, is classified as any manufactured material that contains *greater than* 1% asbestos by dry weight *and* is:

- Friable; or
- Category I material that has become friable; or

- Category I material that has been subjected to sanding, grinding, cutting, or abrading; or
- Category II non-friable material that has a high probability of becoming crumbled, pulverized, or reduced to a powder during demolition or renovation activities.

Activities that disturb materials containing *any* amount of asbestos are subject to certain requirements of the California Occupational Safety and Health Administration (Cal/OSHA) asbestos standard contained in Title 8, CCR Section 1529. Typically, removal or disturbance of more than 100 square feet of material containing more than 0.1% asbestos must be performed by a registered asbestos abatement contractor, but associated waste labeling is not required if the material contains 1% or less asbestos. When the asbestos content of a material exceeds 1%, virtually all requirements of the standard become effective.

Materials containing more than 1% asbestos are also subject to NESHAP regulations (40 CFR Part 61, Subpart M). RACM (friable ACM and nonfriable ACM that will become friable during demolition operations) must be removed from structures prior to demolition. Certain nonfriable ACM and materials containing 1% or less asbestos may remain in structures during demolition; however, there are waste handling/disposal issues and Cal/OSHA work requirements that must be followed. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

With respect to potential worker exposure, notification, and registration requirements, Cal/OSHA defines asbestos-containing construction material (ACCM) as construction material that contains more than 0.1% asbestos (Title 8, CCR 341.6).

2.2 Lead Paint

Construction activities (including demolition) that disturb materials or paints containing *any* amount of lead are subject to certain requirements of the Cal/OSHA lead standard contained in Title 8, CCR, Section 1532.1. Deteriorated paint is defined by Title 17, CCR, Division 1, Chapter 8, §35022 as a surface coating that is cracking, chalking, flaking, chipping, peeling, non-intact, failed, or otherwise separating from a component. Demolition of a deteriorated LCP component would require waste characterization and appropriate disposal. Most landfills and recycling facilities accept intact LCP on a component; however, contractors are responsible for segregating and characterizing waste streams prior to disposal.

For a solid waste containing lead, the waste is classified as California hazardous when: 1) the representative total lead content equals or exceeds the respective Total Threshold Limit Concentration (TTLC) of 1,000 milligrams per kilogram (mg/kg); or 2) the representative soluble lead content equals or exceeds the respective Soluble Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/l) based on the standard Waste Extraction Test (WET). A waste has the potential for exceeding the lead STLC when the waste's total lead content is greater than or equal to ten times the respective STLC value since the WET uses a 1:10 dilution ratio. Hence, when total lead is detected at a

concentration greater than or equal to 50 mg/kg, and assuming that 100 percent of the total lead is soluble, soluble lead analysis is required. Lead-containing waste is classified as "Resource, Conservation, and Recovery Act" (RCRA) hazardous, or Federal hazardous, when the representative soluble lead content equals or exceeds the Federal regulatory level of 5 mg/l based on the Toxicity Characteristic Leaching Procedure (TCLP).

The above regulatory criteria are based on chemical concentrations. Wastes may also be classified as hazardous based on other criteria such as ignitability; however, for the purposes of this investigation, toxicity (i.e., representative lead concentrations) is the primary factor considered for waste classification since waste generated during the construction activities would not likely warrant testing for ignitability or other criteria. Waste that is classified as either California hazardous or RCRA hazardous requires management as a hazardous waste.

Potential hazards exist to workers who remove or cut through LCP coatings during demolition. Dust containing hazardous concentrations of lead may be generated during scraping or cutting materials coated with LCP. Torching of these materials may produce lead oxide fumes. Therefore, air monitoring and/or respiratory protection may be required during the demolition of materials coated with LCP. Guidelines regarding regulatory provisions for construction work where workers may be exposed to lead are presented in the Title 8, CCR, Section 1532.1.

3.0 SCOPE OF SERVICES

The following scope of services was performed:

3.1 Pre-Field Activities

- Retained the services of EMSL, a Caltrans-approved laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), to perform the asbestos analyses.
- Retained the services of ATL, a Caltrans-approved laboratory, to perform the paint analyses.

3.2 Field Activities

Mr. David Watts, a California-Certified Asbestos Consultant (CAC), certification No. 98-2404 (expiration September 16, 2012), and Certified Lead Paint Inspector/Assessor and Project Monitor with the California Department of Public Health (DPH), certification numbers I-1734 and M-1734 (expiration December 4, 2012), performed the asbestos and LCP survey on May 7, 2012. Six bulk samples of suspect asbestos materials were collected. Three (2-part composite) bulk samples of suspect LCP were collected.

4.0 INVESTIGATIVE METHODS

4.1 Asbestos

Bulk suspect asbestos samples were collected after first wetting friable materials with a light mist of water. The samples were then cut from the substrate, transferred to labeled containers, and sealed. We observed three suspect materials during the survey (see Table 1). Sampling locations were distributed throughout the homogeneous areas (spaces where the material was observed).

We relinquished bulk samples for asbestos analysis using standard chain-of-custody documentation. Asbestos content was determined using EPA Test Method 600/R-93/116 for polarized light microscopy (PLM). We requested laboratory analyses to be within a 120-hour turnaround time.

4.2 Paint

Bulk paint samples were collected using techniques presented in U.S. Department of Housing and Urban Development (HUD) guidelines. Three paint systems were identified during the survey (see Table 2).

> *It was <u>not</u> Geocon's intent during this inspection to conduct an evaluation of lead-based paint hazards in accordance with HUD guidelines.*

We relinquished bulk paint samples for lead analysis using standard chain-of-custody documentation. Total lead content was determined using EPA Test Method 6010B. At the direction of Caltrans, the paint samples were also analyzed for total chromium and zinc content using EPA Test Method 6010B, and total hexavalent chromium content using EPA Test Method 7196A/3060A. We requested laboratory analyses to be within a 120-hour turnaround time.

5.0 INVESTIGATIVE RESULTS

5.1 Asbestos

No asbestos was detected in samples of suspect materials collected during our survey. Laboratory results for the asbestos samples are summarized on Table 1. Reproductions of the laboratory report and chain-of-custody documentation are presented in Appendix A.

5.2 Paint

The laboratory analyses for lead paint indicated the following:

- A 2-part composite sample representing intact yellow traffic striping exhibited total chromium, lead, zinc, and hexavalent chromium concentrations of 3.5, 13, 50, and 14 mg/kg, respectively.

- A 2-part composite sample representing intact white traffic striping exhibited total chromium, lead, zinc, and hexavalent chromium concentrations of less than (<) 10, <10, 58, and <5.0 mg/kg, respectively.
- A 2-part composite sample representing deteriorated white paint applied to the bridge approach barriers exhibited total chromium, lead, zinc, and hexavalent chromium concentrations of 3.7, 98, 470, and <1.0 mg/kg, respectively. The WET lead concentration was reported to be 1.1 mg/l.

Geocon paint sample laboratory results are summarized on Table 2. Reproductions of the lead laboratory report and chain-of-custody documentation are presented in Appendix A.

6.0 CONCLUSIONS

6.1 Asbestos

Since no asbestos was detected, the Cal/OSHA asbestos standard does not apply for activities disturbing suspect materials represented by samples collected during our survey. In addition, suspect materials represented by samples collected during our survey would not be considered a California hazardous waste based on asbestos content.

In accordance with Bay Area Air Quality Management District (BAAQMD) Regulation 11, Rule 2, written notification is required ten working days prior to commencement of *any* demolition activity (whether asbestos is present or not).

6.2 Paint

Paints identified during our survey would not be considered a potential California or Federal hazardous waste based on chromium, lead, zinc, or hexavalent chromium content.

We recommend that all paints at the project location (including graffiti, graffiti abatement, signage, etc.) be treated as lead-containing for purposes of determining the applicability of the Cal/OSHA lead standard during maintenance, renovation, and demolition activities. This recommendation is based on LCP sample results and the fact that lead was a common ingredient of paints manufactured before 1978 and is still an ingredient of some paints. In accordance with Title 8, CCR, Section 1532.1(p), written notification to the nearest Cal/OSHA district office is required at least 24 hours prior to certain lead-related work. Compliance and training requirements regarding construction activities where workers may be exposed to lead are presented in Title 8, CCR, Section 1532.1, subsections (e) and (l), respectively. Contractors are responsible for segregating and characterizing waste streams prior to disposal.

TABLE 1
SUMMARY OF ANALYTICAL LABORATORY TEST RESULTS - ASBESTOS
CAPELL CREEK BRIDGE (21-0009)
NAPA COUNTY, CALIFORNIA

Polarized Light Microscopy (PLM) - EPA Test Method 600/R-93/116

Sample ID	Description of Suspect Material	Approximate Quantity	Friable	Site Photo	Asbestos Content
1A 1B	Mortar	NA	NA	1, 2, abd 3	ND ND
2A 2B	Blocks (stone)	NA	NA	1, 2, abd 3	ND ND
3A 3B	Expansion joint fill material	NA	NA	3	ND ND

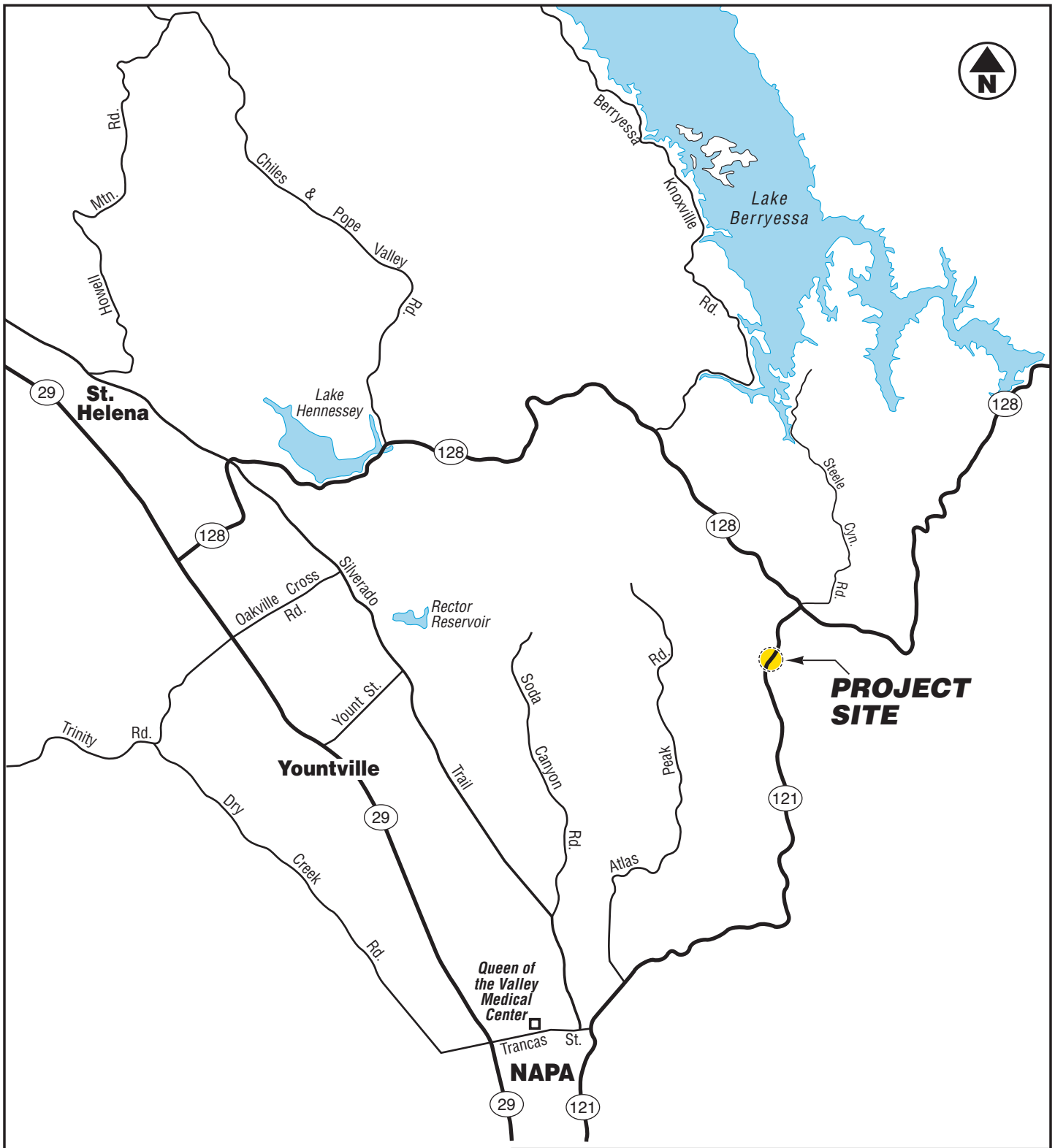
Notes:
NA = Not applicable
ND = No asbestos fibers detected

TABLE 2
SUMMARY OF ANALYTICAL LABORATORY TEST RESULTS - PAINT
CAPELL CREEK BRIDGE (21-0009)
NAPA COUNTY, CALIFORNIA

Total and Soluble Metals

Sample No.	Paint Description	Approximate Quantity Peeling/Flaking	Site Photos	Total Cr (mg/kg)	Total Pb (mg/kg)	Total Zn (mg/kg)	Total Cr6 (mg/kg)	WET Pb (mg/l)
P1A/P1B (Comp)	Yellow traffic striping	Intact	1	3.5	13	50	14	---
P2A/P2B (Comp)	White traffic striping	Intact	1	<10	<10	58	<5.0	---
P3A/P3B (Comp)	White paint (barriers)	10 square feet	1	3.7	98	470	<1.0	1.1

Notes:
Cr = chromium
mg/kg = milligrams per kilogram
Pb = lead
Zn = zinc
Cr6 = hexavalent chromium
WET = Waste Extraction Test
mg/l = milligrams per liter
Comp = two-part composite sample (field composite)
< = not detected at or above the indicated laboratory reporting limit



0 1 2 3
Scale in Miles

GEOCON CONSULTANTS, INC.
6671 BRISA STREET – LIVERMORE, CA 94550
PHONE 925.371.5900 – FAX 925.371.5915

Capell Creek Bridge (21-0009)		
Highway 121 (Post Mile 20.29) Napa County, California	**VICINITY MAP**	
GEOCON Proj. No. E8560-06-37		
Task Order No. 37, EA 04-2A1101	June 2012	Figure 1

LEGEND:

- Approximate Asbestos Sample Location
- Approximate Paint Sample Location

0 20 40

SCALE: feet

GEOCON CONSULTANTS, INC.
6671 BRISA STREET, LIVERMORE, CA 94550; PHONE 925 371-5900 - FAX 925 371-5915

Capell Creek Bridge (21-0009)

Highway 121 (Post Mile 20.29)
Napa County, California

SITE PLAN

GEOCON Proj. No. E8560-06-37

Task Order No. 37, EA 04-2A1101 | June 2012 | Figure 2

SITE0512

Photo 1 – Capell Creek Bridge (21-0009) in Napa County, California

Photo 2 – Arches

Photo 3 – Capell Creek

GEOCON
CONSULTANTS, INC.
6671 BRISA STREET – LIVERMORE, CA 94550
PHONE 925.371.5900 – FAX 925.371.5915

PHOTOGRAPHS 1, 2, & 3		
Capell Creek Bridge (21-0009) Napa County, California		
E8560-06-37	Task Order No. 37	June 2012

APPENDIX A

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.emsl.com sanleandrolab@emsl.com

EMSL Order:	091205722
CustomerID:	GECN21
CustomerPO:	E8560-06-37
ProjectID:	E8560-06-**

Attn: **Dave Watts**
Geocon Consultants, Inc.
6671 Brisa Street

Livermore, CA 94550

Project: **E8560-06-37 / NAP-121**

Phone:	(925) 371-5900
Fax:	(925) 371-5915
Received:	05/08/12 2:30 PM
Analysis Date:	5/9/2012
Collected:	5/7/2012

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 and/or EPA 600/M4-82-020 Method(s) using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1A-Mortar *091205722-0001*		Gray/Green Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
1B-Mortar *091205722-0002*		Gray Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
2A-Blocks (Stone) *091205722-0003*		Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
2B-Blocks (Stone) *091205722-0004*		Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
3A-Joint Fill Material *091205722-0005*		Brown Non-Fibrous Homogeneous		100% Non-fibrous (other)	**None Detected**
3B-Joint Fill Material *091205722-0006*		Brown Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (other)	**None Detected**

Analyst(s)

Matthew Batongbacal (6)

Baojia Ke, Laboratory Manager
or other approved signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. None Detected = <1%
Samples analyzed by EMSL Analytical, Inc San Leandro, CA NVLAP Lab Code 101048-3, MA AA000201, WA C2007

Initial report from 05/12/2012 11:44:11

THIS IS THE LAST PAGE OF THE REPORT.

091205722

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*): 091205722

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR., STE. 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

EMSL-Bill to: ☒ Same ☐ Different
If Bill to is Different note instructions in Comments**
Third Party Billing requires written authorization from third party

Company : GEOCON
Street: 6671 BRISA ST.
City: LIVERMORE **State/Province:** CA **Zip/Postal Code:** 94550 **Country:** USA
Report To (Name): D. WATTS **Fax #:** 925-371-5915
Telephone #: 925-371-5900 **Email Address:** WATTS@GEOCONINC.COM
Project Name/Number: E8560-06-37 NAP-121
Please Provide Results: ☐ Fax ☐ Email **Purchase Order:** **U.S. State Samples Taken:**

Turnaround Time (TAT) Options* – Please Check
☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☐ 2 Week

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air
☐ NIOSH 7400
☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
☒ PLM EPA 600/R-93/116 (<1%)
☐ PLM EPA NOB (<1%)
Point Count
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
Point Count w/Gravimetric
☐ 400 (<0.25%) ☐ 1000 (<0.1%)
☐ NYS 198.1 (friable in NY)
☐ NYS 198.6 NOB (non-friable-NY)
☐ NIOSH 9002 (<1%)

TEM – Air ☐ **4-4.5hr TAT (AHERA only)**
☐ AHERA 40 CFR, Part 763
☐ NIOSH 7402
☐ EPA Level II
☐ ISO 10312

TEM - Bulk
☐ TEM EPA NOB
☐ NYS NOB 198.4 (non-friable-NY)
☐ Chatfield SOP
☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
Fibers >10µm ☐ Waste ☐ Drinking
All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
☐ Microvac - ASTM D 5755
☐ Wipe - ASTM D6480
☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
☐ PLM CARB 435 - A (0.25% sensitivity)
☐ PLM CARB 435 - B (0.1% sensitivity)
☐ TEM CARB 435 - B (0.1% sensitivity)
☐ TEM CARB 435 - C (0.01% sensitivity)
☐ EPA Protocol (Semi-Quantitative)
☐ EPA Protocol (Quantitative)

Other:
☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group**

Samplers Name: WILL D. WATTS **Samplers Signature:** [signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1A/B	Mortar	NA	7 MAY 2012
2A/B	Blocks (STONE)	↓	↓
3A/B	JOINT FILL MATERIAL		

Total # of Samples: 6

Client Sample # (s):
Relinquished (Client): [signature] **Date:** 7 MAY 2012 **Time:** 1430
Received (Lab): **Date:** 5/8/12 **Time:** 1430
Comments/Special Instructions:

ADVANCED TECHNOLOGY LABORATORIES

May 16, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 371-5900
Fax:(925) 371-5915

Re: ATL Work Order Number : 1201718

Client Reference : NAP-121, E8560-06-37

Enclosed are the results for sample(s) received on May 09, 2012 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez

Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

3275 Walnut Avenue, Signal Hill, CA 90755 • Tel: 562-989-4045 • Fax: 562-989-4040
www.atlglobal.com

Geocon Consultants, Inc.		Project Number :	NAP-121, E8560-06-37
6671 Brisa Street		Report To :	Dave Watts
Livermore , CA 94550		Reported :	05/16/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P1A/B	1201718-01	Paint Chip	5/07/12 10:54	5/09/12 10:17
P2A/B	1201718-02	Paint Chip	5/07/12 11:11	5/09/12 10:17
P3A/B	1201718-03	Paint Chip	5/07/12 11:21	5/09/12 10:17

Geocon Consultants, Inc.		Project Number :	NAP-121, E8560-06-37
6671 Brisa Street		Report To :	Dave Watts
Livermore , CA 94550		Reported :	05/16/2012

Client Sample ID P1A/B
Lab ID: 1201718-01

Total Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	**3.5**	2.0	NA	1	B2E0404	05/14/2012	05/15/12 09:53	
Lead	**13**	2.0	NA	1	B2E0404	05/14/2012	05/15/12 09:53	
Zinc	**50**	2.0	NA	1	B2E0404	05/14/2012	05/15/12 09:53	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	**14**	1.0	NA	1	B2E0438	05/11/2012	05/15/12 10:55	

Geocon Consultants, Inc.		Project Number :	NAP-121, E8560-06-37
6671 Brisa Street		Report To :	Dave Watts
Livermore , CA 94550		Reported :	05/16/2012

Client Sample ID P2A/B

Lab ID: 1201718-02

Total Metals by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	ND	10	NA	5	B2E0404	05/14/2012	05/15/12 09:55	D2
Lead	ND	10	NA	5	B2E0404	05/14/2012	05/15/12 09:55	D2
Zinc	**58**	10	NA	5	B2E0404	05/14/2012	05/15/12 09:55	D2

Hexavalent Chromium by EPA 7196A/3060A **Analyst: AG**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	5.0	NA	5	B2E0438	05/11/2012	05/15/12 10:55	D1

Geocon Consultants, Inc.		Project Number :	NAP-121, E8560-06-37
6671 Brisa Street		Report To :	Dave Watts
Livermore , CA 94550		Reported :	05/16/2012

Client Sample ID P3A/B
Lab ID: 1201718-03

Total Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Chromium	**3.7**	2.0	NA	1	B2E0404	05/14/2012	05/15/12 09:57	
Lead	**98**	2.0	NA	1	B2E0404	05/14/2012	05/15/12 09:57	
Zinc	**470**	2.0	NA	1	B2E0404	05/14/2012	05/15/12 09:57	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0438	05/11/2012	05/15/12 10:55	

Geocon Consultants, Inc.	Project Number :	NAP-121, E8560-06-37
6671 Brisa Street	Report To :	Dave Watts
Livermore , CA 94550	Reported :	05/16/2012

QUALITY CONTROL SECTION

Total Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0404 - EPA 3050B									
Blank (B2E0404-BLK1)				Prepared: 5/14/2012 Analyzed: 5/15/2012					
Chromium	ND	1.0			NR				
Lead	ND	1.0			NR				
Zinc	ND	1.0			NR				
LCS (B2E0404-BS1)				Prepared: 5/14/2012 Analyzed: 5/15/2012					
Chromium	44	1.0	50.0		88.9	80 - 120			
Lead	44	1.0	50.0		88.3	80 - 120			
Zinc	43	1.0	50.0		85.1	80 - 120			
Duplicate (B2E0404-DUP1)		**Source: 1201774-01**		Prepared: 5/14/2012 Analyzed: 5/15/2012					
Chromium	18	1.0		16	NR		15.4	20	
Lead	6.1	1.0		6.2	NR		2.68	20	
Zinc	93	1.0		61	NR		41.3	20	R
Matrix Spike (B2E0404-MS1)		**Source: 1201774-01**		Prepared: 5/14/2012 Analyzed: 5/15/2012					
Chromium	120	1.0	125	16	84.0	55 - 105			
Lead	110	1.0	125	6.2	79.6	46 - 116			
Zinc	170	1.0	125	61	85.4	37 - 123			
Matrix Spike Dup (B2E0404-MSD1)		**Source: 1201774-01**		Prepared: 5/14/2012 Analyzed: 5/15/2012					
Chromium	120	1.0	125	16	82.7	55 - 105	1.36	20	
Lead	100	1.0	125	6.2	78.5	46 - 116	1.26	20	
Zinc	250	1.0	125	61	150	37 - 123	38.6	20	

Geocon Consultants, Inc.	Project Number :	NAP-121, E8560-06-37
6671 Brisa Street	Report To :	Dave Watts
Livermore , CA 94550	Reported :	05/16/2012

Hexavalent Chromium by EPA 7196A/3060A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0438 - EPA 3060A (WC)									
Blank (B2E0438-BLK1)				Prepared: 5/11/2012 Analyzed: 5/15/2012					
Hexavalent Chromium	ND	1.0			NR				
LCS (B2E0438-BS1)				Prepared: 5/11/2012 Analyzed: 5/15/2012					
Hexavalent Chromium	46	1.0	50.0		92	80 - 120			
Duplicate (B2E0438-DUP1)		**Source: 1201718-03**		Prepared: 5/11/2012 Analyzed: 5/15/2012					
Hexavalent Chromium	ND	1.0		0.70	NR			20	
Matrix Spike (B2E0438-MS1)		**Source: 1201718-03**		Prepared: 5/11/2012 Analyzed: 5/15/2012					
Hexavalent Chromium	38	1.0	50.0	0.70	74	75 - 125			M2
Matrix Spike (B2E0438-MS2)		**Source: 1201718-03**		Prepared: 5/11/2012 Analyzed: 5/15/2012					
Hexavalent Chromium	1400	50	1610	0.70	85	75 - 125			
Matrix Spike Dup (B2E0438-MSD1)		**Source: 1201718-03**		Prepared: 5/11/2012 Analyzed: 5/15/2012					
Hexavalent Chromium	43	1.0	50.0	0.70	84	75 - 125	12	20	

Geocon Consultants, Inc.		Project Number :	NAP-121, E8560-06-37
6671 Brisa Street		Report To :	Dave Watts
Livermore , CA 94550		Reported :	05/16/2012

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M2	Matrix spike recovery outside of acceptance limit due to possible matrix interference. The analytical batch was validated by the laboratory control sample.
D2	Sample required dilution due to high concentration of non-target analyte.
D1	Sample required dilution due to possible matrix interference.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

CHAIN OF CU TODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#:
Logged By: Date:

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: GSO

Sample Condition Upon Receipt:
1. CHILLED Y☐ N☑ 4. SEALED Y☐ N☐
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐
3. CONTAINER INTACT Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: GEOCON CONSULTANTS, INC.
Attn: D. WATTS
Address: 6671 Brisa Street
City: Livermore State: CA Zip Code: 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

Project Name: NAP-121 Project #: E8560-06-37 Sampler: (Printed Name) D. WATTS (Signature) [signature]

Relinquished by: (Signature and Printed Name) [signature] Date: 5/8/12 Time: 1700 Received by: (Signature and Printed Name) GSO [signature] Date: 5/8/12 Time: 1700
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Mango [signature] Date: 5/9/12 Time: 1017
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: D. WATTS 5/8/12 (Print Name, Date) [signature] (Signature)

Send Report To:
Attn:
Co: SAME AS ABOVE
Address
City State Zip

Bill To:
Attn:
Co: SAME AS ABOVE
Address
City State Zip

Special Instructions/Comments:
PAINT - TOTAL Pb
(PARTICULATE SOLUBLE REQUESTED)

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metal) - Pb, 8015B (GRO) / BTEX, 8015B (DRO), 8021 (BTEX), TITLE 22 / CAM 17 (6010 / 7000)

SPECIFY APPROPRIATE MATRIX: SOIL, WATER, GROUND WATER, WASTEWATER, PAINT

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A	8082	8260B	8270C	6010B (Pb)	8015B (GRO)	8015B (DRO)	8021	TITLE 22	SOIL	WATER	GROUND WATER	WASTEWATER	PAINT	TAT	Container(s) #	Type	PRESERVATION	REMARKS
	1207112-01	P1A/B	5/7/12	1054					X									X	120 Hr	1	1 g P		YTS
	2	P2A/B	↓	1111					↓									↓	↓	↓	↓		WTS
	3	P3A/B	↓	1124					↓									↓	↓	↓	↓		BAKR

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: White with report Yellow to folder Pink to submitter

Diane Galvan

From: David Watts [watts@geoconinc.com]
Sent: Wednesday, May 09, 2012 12:07 PM
To: 'Diane Galvan'
Subject: NAP-121 E8560-06-37

Diane,

For the 3 paint samples you are receiving today under this project, please analyze them for Cr3, Cr6, and Zn (in addition to Pb).

Thanks.

David Watts
Senior Project Scientist
Please visit our website at http://www.geoconinc.com

GEOCON Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
925-371-5900 (office)
925-371-5915 (fax)
925-785-5340 (mobile)
watts@geoconinc.com

GEOTECHNICAL - ENVIRONMENTAL - MATERIALS

San Diego Murrieta Burbank Bakersfield Fresno Sacramento Rocklin Fairfield Livermore Carson City Portland

CONFIDENTIALITY NOTICE: This e-mail may contain confidential and privileged material for the sole use of the intended recipient(s). Any review, use, distribution or disclosure by others is strictly prohibited. If you have received this communication in error, please notify the sender immediately by e-mail and delete the message and any file attachments from your computer. Thank you.

ADVANCED TECHNOLOGY LABORATORIES

May 23, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Dave Watts
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 371-5900
Fax:(925) 371-5915

Re: ATL Work Order Number : 1201718
Client Reference : NAP-121, E8560-06-37

Enclosed are the results for sample(s) received on May 09, 2012 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez
Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

3275 Walnut Avenue, Signal Hill, CA 90755 • Tel: 562-989-4045 • Fax: 562-989-4040
www.atlglobal.com

Geocon Consultants, Inc.		Project Number :	NAP-121, E8560-06-37
6671 Brisa Street		Report To :	Dave Watts
Livermore , CA 94550		Reported :	05/23/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
P3A/B	1201718-03	Paint Chip	5/07/12 11:21	5/09/12 10:17

Geocon Consultants, Inc.		Project Number :	NAP-121, E8560-06-37
6671 Brisa Street		Report To :	Dave Watts
Livermore , CA 94550		Reported :	05/23/2012

STLC Lead by AA (Direct Aspiration) by EPA 7420

Analyte: Lead **Analyst: VV**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1201718-03	P3A/B	**1.1**	mg/L	0.50	NA	1	B2E0626	05/21/2012	05/21/12 13:10	

Geocon Consultants, Inc.	Project Number : NAP-121, E8560-06-37
6671 Brisa Street	Report To : Dave Watts
Livermore , CA 94550	Reported : 05/23/2012

QUALITY CONTROL SECTION

STLC Lead by AA (Direct Aspiration) by EPA 7420 - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0626 - STLC Extraction									
Blank (B2E0626-BLK1)					Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	ND	0.50			NR				
Blank (B2E0626-BLK2)					Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	ND	0.50			NR				
LCS (B2E0626-BS1)					Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	5.2	0.05	5.00		105	80 - 120			
Duplicate (B2E0626-DUP1)		**Source: 1201774-15**			Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	3.2	0.50		3.3	NR		1.99	20	
Duplicate (B2E0626-DUP2)		**Source: 1201774-27**			Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	2.7	0.50		2.6	NR		4.52	20	
Matrix Spike (B2E0626-MS1)		**Source: 1201774-15**			Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	8.2	0.05	5.00	3.3	98.2	80 - 120			
Matrix Spike (B2E0626-MS2)		**Source: 1201774-27**			Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	7.5	0.05	5.00	2.6	96.8	80 - 120			
Matrix Spike Dup (B2E0626-MSD1)		**Source: 1201774-15**			Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	8.4	0.05	5.00	3.3	102	80 - 120	2.31	20	
Batch S2E0303 - B2E0626									
Instrument Blank (S2E0303-IBL1)					Prepared: 5/21/2012 Analyzed: 5/21/2012				
Lead	ND	0.50			NR				

Geocon Consultants, Inc.		Project Number :	NAP-121, E8560-06-37
6671 Brisa Street		Report To :	Dave Watts
Livermore , CA 94550		Reported :	05/23/2012

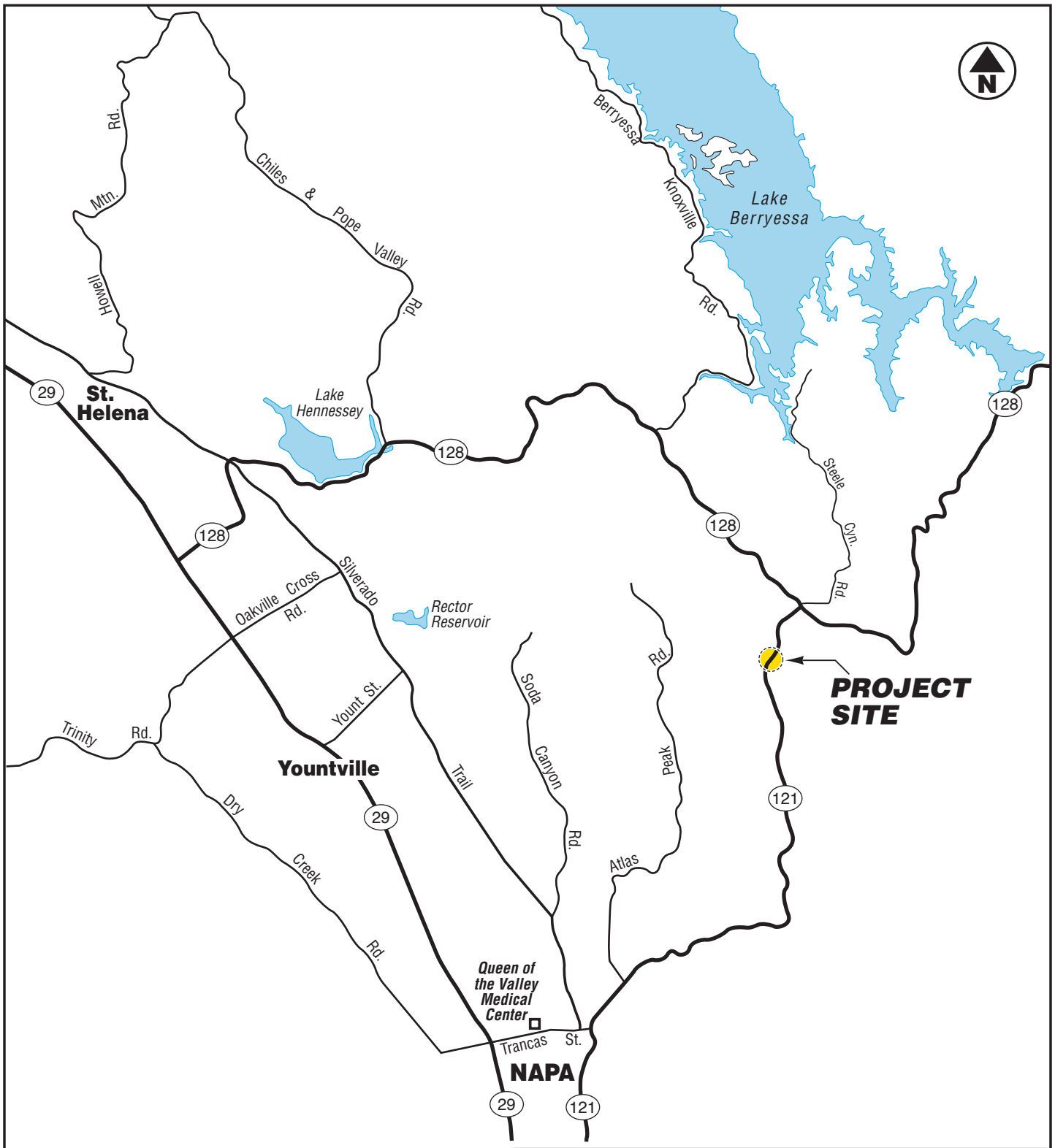
Notes and Definitions

ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference

Diane Galvan

From: watts@geoconinc.com
Sent: Wednesday, May 16, 2012 6:44 PM
To: Diane@ATLGlobal.com
Subject: Re: Results/EDD/Invoice - NAP-121 (1201718)

please run WETs for anything with potential to fail STLC...thx



0 1 2 3
Scale in Miles

GEOCON CONSULTANTS, INC.
6671 BRISA STREET – LIVERMORE, CA 94550
PHONE 925.371.5900 – FAX 925.371.5915

Capell Creek Bridge (21-0009)		
Highway 121 (Post Mile 20.29) Napa County, California	**VICINITY MAP**	
GEOCON Proj. No. E8560-06-37		
Task Order No. 37, EA 04-2A1101	June 2012	Figure 1

N

0 25 50

SCALE: feet

GEOCON CONSULTANTS, INC.

6671 BRISA STREET, LIVERMORE, CA 94550; PHONE 925 371-5900 - FAX 925 371-5915

Capell Creek Bridge (21-0009)		
Highway 121 (Post Mile 20.29) Napa County, California	**SITE PLAN**	
GEOCON Proj. No. E8560-06-37		
Task Order No. 37, EA 04-2A1101	June 2012	Figure 2

SITE0612

TABLE 1
Boring Coordinates
Route 121 at Capell Creek
Napa County, California

Boring	Northing	Easting
NB1	1,918,642.385	6,501,896.264
NB2A	1,918,685.002	6,501,986.254
NB2B	1,918,675.027	6,501,988.231
NB3A	1,918,700.863	6,502,037.766
NB3B	1,918,691.107	6,502,040.128
NB4A	1,918,717.122	6,502,097.505
NB4B	1,918,707.768	6,502,100.907
NB5	1,918,751.979	6,502,160.516
SB1	1,918,731.956	6,502,015.402
SB2	1,918,716.636	6,501,971.455
SB3	1,918,685.237	6,501,897.153
SB4	1,918,653.112	6,501,850.520
SB5A	1,918,586.804	6,501,811.247
SB5B	1,918,589.857	6,501,802.291
SB6	1,918,534.740	6,501,799.678
NOA1	1,918,567.873	6,501,797.312
NOA2	1,918,584.595	6,501,870.478
NOA3	1,918,714.956	6,501,898.091
NOA4	1,918,689.424	6,502,067.667
CC1	1,918,648.465	6,501,938.331

Northing and easting coordinates shown in feet, NAD 83, Zone 3

TABLE 2
Summary of Lead and pH Results
Route 121 at Capell Creek
Napa County, California

Sample ID	Sample Depth (feet)	Total Lead (mg/kg)	pH
NB1-0	0	26	7.6
NB2A-0	0	28	---
NB2B-0	0	9.5	6.6
NB3A-0	0	11	---
NB3B-0	0	15	6.0
NB4A-0	0	29	---
NB4B-0	0	14	5.5
NB5-0	0	16	---
SB1-0	0	31	7.6
SB2-0	0	63	---
SB3-0	0	12	6.7
SB4-0	0	23	---
SB5A-0	0	21	---
SB5B-0	0	5.8	6.6
SB6-0	0	13	---
NOA 1-0	0	16	---
NOA 2-0	0	10	---
NOA 3-0	0	17	---
NOA 4-0	0	28	---
CCI-0	0	5.5	---
RB 1		<0.005 (mg/l)	
Hazardous Waste Criteria			
TTLC (mg/kg)		1,000	---

Notes:
mg/kg = Milligrams per kilogram
mg/l = Milligrams per liter
--- = Not analyzed or no standard
<5.0 = Not detected above the laboratory reporting limit
TTLC = Total Threshold Limit Concentration
RB = Rinse Blank

TABLE 3
Summary of CAM 17 Metals Results
Napa County on Route 121 at Capell Creek
Napa County, California

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Hexavalent Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
NB1-0	0	<2.0	4.3	99	<1.0	<1.0	25	---	10	23	26	<0.10	<1.0	36	<1.0	<1.0	<1.0	36	53
NB2B-0	0	<2.0	5.8	140	<1.0	<1.0	28	<1.0	12	35	9.5	<0.10	<1.0	23	<1.0	<1.0	<1.0	51	63
NB3B-0	0	<2.0	5.3	160	<1.0	<1.0	25	<1.0	11	32	15	<0.10	<1.0	26	<1.0	<1.0	<1.0	46	72
NB4B-0	0	<2.0	6.2	130	<1.0	<1.0	25	<1.0	12	32	14	<0.10	<1.0	22	<1.0	<1.0	<1.0	47	72
SB5B-0	0	<2.0	4.0	200	<1.0	<1.0	47	<1.0	11	38	5.8	<0.10	<1.0	77	<1.0	<1.0	<1.0	47	63
NOA 1-0	0	<2.0	4.8	200	<1.0	<1.0	48	<1.0	15	38	16	<0.10	<1.0	76	<1.0	<1.0	<1.0	50	100
NOA 2-0	0	<2.0	3.7	120	<1.0	<1.0	31	<1.0	11	26	10	<0.10	<1.0	43	<1.0	<1.0	<1.0	40	49
NOA 3-0	0	<2.0	5.6	200	<1.0	<1.0	42	<1.0	13	35	17	<0.10	<1.0	69	<1.0	<1.0	<1.0	44	85
NOA 4-0	0	<2.0	6.8	150	<1.0	<1.0	25	<1.0	12	29	28	<0.10	<1.0	25	<1.0	<1.0	<1.0	49	83
CC1-0	0	<2.0	5.8	150	<1.0	<1.0	29	<1.0	10	39	5.5	<0.10	<1.0	32	<1.0	<1.0	<1.0	41	61
ESLs																			
Residential Land Use		6.3	0.39	750	4.0	1.7	750*	8.0	40	230	200	1.3	40	150	10	20	1.3	16	600
Comm/Ind Land Use		40	1.6	1,500	8.0	7.4	750*	8.0	80	230	750	10	40	150	10	40	16	200	600
Construction Exposure		310	15	2,600	98	39	1,200,000*	0.530	94	310,000	750	58	78	260	3,900	3,900	62	770	230,000

TABLE 3
Summary of CAM 17 Metals Results
Napa County on Route 121 at Capell Creek
Napa County, California

Sample ID	Sample Depth (ft)	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Hexavalent Chromiur	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
Hazardous Waste Criteria																			
	TTLC	500	500	10,000	75	100	2,500	500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000
	STLC	15	5.0	100	0.75	1.0	5.0	5.0	80	25	5.0	0.2	350	20	1.0	5.0	7.0	24	250
	TCLP	---	5.0	100	---	1.0	5.0	---	---	---	5.0	0.2	---	---	1.0	5.0	---	---	---

Notes:

Results are shown in milligrams per kilogram (mg/kg).

* ESL Values listed for chromium are for Chromium III, as there is no standard for total chromium

< = Analyte was not detected above the laboratory reporting limit.

ESLs = Environmental Screening Levels, Tables A and K-3, SFRWQCB, Revised May 2008.

TTLC = total threshold limit concentration

STLC = soluble threshold limit concentration

TCLP = toxicity characteristic leaching procedure

--- = not analyzed or no standard exists for this compound

TABLE 4
Summary of NOA Results
Napa County on Route 121 at Capell Creek
Napa County, California

Sample ID	Sample Depth (feet)	Asbestos Content (% dry weight)
NB2B-0	0	ND
NB3B-0	0	ND
NB4B-0	0	ND
SB5B-0	0	ND
NOA1-0	0	ND
NOA2-0	0	ND
NOA3-0	0	ND
NOA4-0	0	ND
CC1-0	0	ND

ND = None detected at 0.25% target analytical sensitivity.

APPENDIX A

ADVANCED TECHNOLOGY LABORATORIES

June 04, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003

Luann Beadle
Geocon Consultants, Inc.
6671 Brisa Street
Livermore, CA 94550
Tel: (925) 371-5900
Fax:(925) 371-5915

Re: ATL Work Order Number : 1201963

Client Reference : NAPA 121, E8560-06-37

Enclosed are the results for sample(s) received on May 24, 2012 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

Eddie Rodriguez

Laboratory Director

The cover letter and the case narrative are an integral part of this analytical report and its absence renders the report invalid. The report cannot be reproduced without written permission from the client and Advanced Technology Laboratories.

3275 Walnut Avenue, Signal Hill, CA 90755 • Tel: 562-989-4045 • Fax: 562-989-4040
www.atlglobal.com

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NB1-0	1201963-01	Soil	5/23/12 11:31	5/24/12 10:45
NB2A-0	1201963-02	Soil	5/23/12 12:44	5/24/12 10:45
NB2B-0	1201963-03	Soil	5/23/12 12:50	5/24/12 10:45
NB3A-0	1201963-04	Soil	5/23/12 13:00	5/24/12 10:45
NB3B-0	1201963-05	Soil	5/23/12 13:00	5/24/12 10:45
NB4A-0	1201963-06	Soil	5/23/12 12:51	5/24/12 10:45
NB4B-0	1201963-07	Soil	5/23/12 13:10	5/24/12 10:45
NB5-0	1201963-08	Soil	5/23/12 12:56	5/24/12 10:45
SB1-0	1201963-09	Soil	5/23/12 12:27	5/24/12 10:45
SB2-0	1201963-10	Soil	5/23/12 12:24	5/24/12 10:45
SB3-0	1201963-11	Soil	5/23/12 12:12	5/24/12 10:45
SB4-0	1201963-12	Soil	5/23/12 12:11	5/24/12 10:45
SB5A-0	1201963-13	Soil	5/23/12 12:01	5/24/12 10:45
SB5B-0	1201963-14	Soil	5/23/12 12:01	5/24/12 10:45
SB6-0	1201963-15	Soil	5/23/12 11:57	5/24/12 10:45
NOA 1-0	1201963-16	Soil	5/23/12 11:54	5/24/12 10:45
NOA 2-0	1201963-17	Soil	5/23/12 11:41	5/24/12 10:45
NOA 3-0	1201963-18	Soil	5/23/12 12:12	5/24/12 10:45
NOA 4-0	1201963-19	Soil	5/23/12 12:30	5/24/12 10:45
CCI-0	1201963-20	Soil	5/23/12 11:50	5/24/12 10:45
Rinse Blank (RB)	1201963-21	Aqueous	5/23/12 11:34	5/24/12 10:45

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NB1-0
Lab ID: 1201963-01

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Arsenic	**4.3**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Barium	**99**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Chromium	**25**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Cobalt	**10**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Copper	**23**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Lead	**26**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Nickel	**36**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Vanadium	**36**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	
Zinc	**53**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:01	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:32	

pH by EPA 9045C

Analyst: LA

Analyte	Result (pH Units)	PQL (pH Units)	MDL (pH Units)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
pH	**7.6**	0.10	NA	1	B2E0942	05/31/2012	05/31/12 13:49	H1

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NB2A-0

Lab ID: 1201963-02

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**28**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:04	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NB2B-0
Lab ID: 1201963-03

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Arsenic	**5.8**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Barium	**140**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Chromium	**28**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Cobalt	**12**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Copper	**35**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Lead	**9.5**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Nickel	**23**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Vanadium	**51**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	
Zinc	**63**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:03	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:36	

pH by EPA 9045C

Analyst: LA

Analyte	Result (pH Units)	PQL (pH Units)	MDL (pH Units)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
pH	**6.6**	0.10	NA	1	B2E0942	05/31/2012	05/31/12 13:49	H1

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NB3A-0

Lab ID: 1201963-04

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**11**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:06	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NB3B-0
Lab ID: 1201963-05

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Arsenic	**5.3**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Barium	**160**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Chromium	**25**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Cobalt	**11**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Copper	**32**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Lead	**15**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Nickel	**26**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Vanadium	**46**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	
Zinc	**72**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:04	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:38	

pH by EPA 9045C

Analyst: LA

Analyte	Result (pH Units)	PQL (pH Units)	MDL (pH Units)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
pH	**6.0**	0.10	NA	1	B2E0942	05/31/2012	05/31/12 13:49	H1

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NB4A-0

Lab ID: 1201963-06

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**29**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:07	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NB4B-0

Lab ID: 1201963-07

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Arsenic	**6.2**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Barium	**130**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Chromium	**25**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Cobalt	**12**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Copper	**32**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Lead	**14**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Nickel	**22**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Vanadium	**47**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	
Zinc	**72**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:05	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:40	

pH by EPA 9045C

Analyst: LA

Analyte	Result (pH Units)	PQL (pH Units)	MDL (pH Units)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
pH	**5.5**	0.10	NA	1	B2E0942	05/31/2012	05/31/12 13:49	H1

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NB5-0

Lab ID: 1201963-08

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**16**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:09	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID SB1-0

Lab ID: 1201963-09

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**31**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:11	

pH by EPA 9045C **Analyst: LA**

Analyte	Result (pH Units)	PQL (pH Units)	MDL (pH Units)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
pH	**7.6**	0.10	NA	1	B2E0942	05/31/2012	05/31/12 13:49	H1

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID SB2-0

Lab ID: 1201963-10

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**63**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:16	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID SB3-0

Lab ID: 1201963-11

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**12**	5.0	NA	5	B2E0800	05/25/2012	05/30/12 09:18	

pH by EPA 9045C **Analyst: LA**

Analyte	Result (pH Units)	PQL (pH Units)	MDL (pH Units)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
pH	**6.7**	0.10	NA	1	B2E0942	05/31/2012	05/31/12 13:49	H1

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID SB4-0

Lab ID: 1201963-12

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**23**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:46	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID SB5A-0

Lab ID: 1201963-13

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**21**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:48	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID SB5B-0
Lab ID: 1201963-14

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Arsenic	**4.0**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Barium	**200**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Chromium	**47**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Cobalt	**11**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Copper	**38**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Lead	**5.8**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Nickel	**77**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Vanadium	**47**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	
Zinc	**63**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:44	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:42	

pH by EPA 9045C

Analyst: LA

Analyte	Result (pH Units)	PQL (pH Units)	MDL (pH Units)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
pH	**6.6**	0.10	NA	1	B2E0942	05/31/2012	05/31/12 13:49	H1

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID SB6-0

Lab ID: 1201963-15

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	**13**	1.0	NA	1	B2E0800	05/25/2012	05/29/12 15:49	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NOA 1-0
Lab ID: 1201963-16

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Arsenic	**4.8**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Barium	**200**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Chromium	**48**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Cobalt	**15**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Copper	**38**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Lead	**16**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Nickel	**76**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Vanadium	**50**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	
Zinc	**100**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:45	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:48	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NOA 2-0
Lab ID: 1201963-17

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Arsenic	**3.7**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Barium	**120**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Chromium	**31**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Cobalt	**11**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Copper	**26**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Lead	**10**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Nickel	**43**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Vanadium	**40**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	
Zinc	**49**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:46	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:50	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NOA 3-0
Lab ID: 1201963-18

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Arsenic	**5.6**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Barium	**200**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Chromium	**42**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Cobalt	**13**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Copper	**35**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Lead	**17**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Nickel	**69**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Vanadium	**44**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	
Zinc	**85**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:48	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:52	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID NOA 4-0
Lab ID: 1201963-19

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Arsenic	**6.8**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Barium	**150**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Chromium	**25**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Cobalt	**12**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Copper	**29**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Lead	**28**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Nickel	**25**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Vanadium	**49**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	
Zinc	**83**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:50	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:54	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID CCI-0
Lab ID: 1201963-20

Title 22 Metals by ICP-AES EPA 6010B

Analyst: KK

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Antimony	ND	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Arsenic	**5.8**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Barium	**150**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Beryllium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Cadmium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Chromium	**29**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Cobalt	**10**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Copper	**39**	2.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Lead	**5.5**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Molybdenum	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Nickel	**32**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Selenium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Silver	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Thallium	ND	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Vanadium	**41**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	
Zinc	**61**	1.0	NA	1	B2E0798	05/25/2012	05/29/12 14:51	

Hexavalent Chromium by EPA 7196A/3060A

Analyst: AG

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Hexavalent Chromium	ND	1.0	NA	1	B2E0950	05/29/2012	05/30/12 14:05	

Mercury by AA (Cold Vapor) EPA 7471

Analyst: VV

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Mercury	ND	0.10	NA	1	B2E0930	05/31/2012	05/31/12 16:56	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Client Sample ID Rinse Blank (RB)

Lab ID: 1201963-21

Lead by ICP-AES EPA 6010B **Analyst: KK**

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Lead	ND	0.005	NA	1	B2E0872	05/30/2012	05/30/12 13:07	

Geocon Consultants, Inc.	Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street	Report To :	Luann Beadle
Livermore , CA 94550	Reported :	06/04/2012

QUALITY CONTROL SECTION

Title 22 Metals by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0798 - EPA 3050B									
Blank (B2E0798-BLK1)				Prepared: 5/25/2012 Analyzed: 5/29/2012					
Antimony	ND	2.0			NR				
Arsenic	ND	1.0			NR				
Barium	ND	1.0			NR				
Beryllium	ND	1.0			NR				
Cadmium	ND	1.0			NR				
Chromium	ND	1.0			NR				
Cobalt	ND	1.0			NR				
Copper	ND	2.0			NR				
Lead	ND	1.0			NR				
Molybdenum	ND	1.0			NR				
Nickel	ND	1.0			NR				
Selenium	ND	1.0			NR				
Silver	ND	1.0			NR				
Thallium	ND	1.0			NR				
Vanadium	ND	1.0			NR				
Zinc	ND	1.0			NR				
LCS (B2E0798-BS1)				Prepared: 5/25/2012 Analyzed: 5/29/2012					
Antimony	45	2.0	50.0		89.3	80 - 120			
Arsenic	43	1.0	50.0		85.8	80 - 120			
Barium	47	1.0	50.0		93.3	80 - 120			
Beryllium	46	1.0	50.0		92.3	80 - 120			
Cadmium	45	1.0	50.0		90.0	80 - 120			
Chromium	47	1.0	50.0		93.3	80 - 120			
Cobalt	46	1.0	50.0		91.3	80 - 120			
Copper	47	2.0	50.0		94.5	80 - 120			
Lead	45	1.0	50.0		89.9	80 - 120			
Molybdenum	47	1.0	50.0		93.4	80 - 120			
Nickel	46	1.0	50.0		91.6	80 - 120			
Selenium	42	1.0	50.0		83.3	80 - 120			
Silver	45	1.0	50.0		90.6	80 - 120			
Thallium	44	1.0	50.0		88.9	80 - 120			
Vanadium	48	1.0	50.0		95.9	80 - 120			
Zinc	44	1.0	50.0		88.4	80 - 120			
Duplicate (B2E0798-DUP1)		**Source: 1201963-20**		Prepared: 5/25/2012 Analyzed: 5/29/2012					
Antimony	ND	2.0		ND	NR			20	
Arsenic	6.3	1.0		5.8	NR		8.00	20	
Barium	130	1.0		150	NR		18.4	20	
Beryllium	0.27	1.0		0.29	NR		6.14	20	

Geocon Consultants, Inc.	Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street	Report To :	Luann Beadle
Livermore , CA 94550	Reported :	06/04/2012

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0798 - EPA 3050B (continued)									
Duplicate (B2E0798-DUP1) - Continued		**Source: 1201963-20**		Prepared: 5/25/2012 Analyzed: 5/29/2012					
Cadmium	ND	1.0		ND	NR			20	
Chromium	26	1.0		29	NR		10.0	20	
Cobalt	11	1.0		10	NR		10.6	20	
Copper	35	2.0		39	NR		9.55	20	
Lead	6.1	1.0		5.5	NR		10.3	20	
Molybdenum	ND	1.0		ND	NR			20	
Nickel	35	1.0		32	NR		8.41	20	
Selenium	ND	1.0		ND	NR			20	
Silver	0.10	1.0		0.13	NR		28.4	20	R
Thallium	ND	1.0		ND	NR			20	
Vanadium	40	1.0		41	NR		1.01	20	
Zinc	59	1.0		61	NR		2.48	20	
Matrix Spike (B2E0798-MS1)		**Source: 1201963-20**		Prepared: 5/25/2012 Analyzed: 5/29/2012					
Antimony	80	2.0	125	ND	63.7	44 - 105			
Arsenic	110	1.0	125	5.8	80.6	57 - 103			
Barium	240	1.0	125	150	71.8	36 - 134			
Beryllium	110	1.0	125	0.29	83.8	64 - 106			
Cadmium	96	1.0	125	ND	77.0	58 - 102			
Chromium	130	1.0	125	29	82.5	55 - 105			
Cobalt	110	1.0	125	10	78.7	59 - 105			
Copper	150	2.0	125	39	89.3	64 - 117			
Lead	100	1.0	125	5.5	77.8	46 - 116			
Molybdenum	99	1.0	125	ND	78.9	59 - 108			
Nickel	140	1.0	125	32	85.4	52 - 109			
Selenium	92	1.0	125	ND	73.7	56 - 100			
Silver	110	1.0	125	0.13	87.8	65 - 107			
Thallium	93	1.0	125	ND	74.6	47 - 100			
Vanadium	150	1.0	125	41	86.9	64 - 110			
Zinc	150	1.0	125	61	72.5	37 - 123			
Matrix Spike Dup (B2E0798-MSD1)		**Source: 1201963-20**		Prepared: 5/25/2012 Analyzed: 5/29/2012					
Antimony	69	2.0	125	ND	55.3	44 - 105	14.2	20	
Arsenic	96	1.0	125	5.8	72.4	57 - 103	10.1	20	
Barium	270	1.0	125	150	92.6	36 - 134	10.2	20	
Beryllium	94	1.0	125	0.29	75.0	64 - 106	11.1	20	
Cadmium	86	1.0	125	ND	69.0	58 - 102	10.9	20	
Chromium	120	1.0	125	29	73.3	55 - 105	9.11	20	
Cobalt	98	1.0	125	10	70.3	59 - 105	10.2	20	
Copper	140	2.0	125	39	84.0	64 - 117	4.55	20	
Lead	92	1.0	125	5.5	69.4	46 - 116	10.7	20	
Molybdenum	88	1.0	125	ND	70.1	59 - 108	11.8	20	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Title 22 Metals by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0798 - EPA 3050B (continued)									
Matrix Spike Dup (B2E0798-MSD1) - Continued		**Source: 1201963-20**		Prepared: 5/25/2012 Analyzed: 5/29/2012					
Nickel	120	1.0	125	32	72.3	52 - 109	12.6	20	
Selenium	82	1.0	125	ND	65.7	56 - 100	11.6	20	
Silver	99	1.0	125	0.13	79.2	65 - 107	10.2	20	
Thallium	83	1.0	125	ND	66.2	47 - 100	11.8	20	
Vanadium	140	1.0	125	41	79.7	64 - 110	6.22	20	
Zinc	140	1.0	125	61	66.6	37 - 123	4.98	20	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Lead by ICP-AES EPA 6010B - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0800 - EPA 3050 Modified									
Blank (B2E0800-BLK1)				Prepared: 5/25/2012 Analyzed: 5/29/2012					
Lead	ND	1.0			NR				
LCS (B2E0800-BS1)				Prepared: 5/25/2012 Analyzed: 5/29/2012					
Lead	43	1.0	50.0		86.5	80 - 120			
Duplicate (B2E0800-DUP1)		**Source: 1201963-15**		Prepared: 5/25/2012 Analyzed: 5/29/2012					
Lead	17	1.0		13	NR		25.6	20	R
Matrix Spike (B2E0800-MS1)		**Source: 1201963-15**		Prepared: 5/25/2012 Analyzed: 5/29/2012					
Lead	180	1.0	250	13	66.0	46 - 116			
Matrix Spike Dup (B2E0800-MSD1)		**Source: 1201963-15**		Prepared: 5/25/2012 Analyzed: 5/29/2012					
Lead	190	1.0	250	13	70.1	46 - 116	5.58	20	
Batch B2E0872 - EPA 3010A									
Blank (B2E0872-BLK1)				Prepared: 5/30/2012 Analyzed: 5/30/2012					
Lead	ND	0.005			NR				
LCS (B2E0872-BS1)				Prepared: 5/30/2012 Analyzed: 5/30/2012					
Lead	0.94	0.005	1.00		93.5	80 - 120			
Duplicate (B2E0872-DUP1)		**Source: 1201994-27**		Prepared: 5/30/2012 Analyzed: 5/30/2012					
Lead	ND	0.005		ND	NR			20	
Matrix Spike (B2E0872-MS1)		**Source: 1201994-27**		Prepared: 5/30/2012 Analyzed: 5/30/2012					
Lead	2.1	0.005	2.50	ND	83.9	78 - 117			
Matrix Spike Dup (B2E0872-MSD1)		**Source: 1201994-27**		Prepared: 5/30/2012 Analyzed: 5/30/2012					
Lead	2.1	0.005	2.50	ND	85.0	78 - 117	1.30	20	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Hexavalent Chromium by EPA 7196A/3060A - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0950 - EPA 3060A (WC)									
Blank (B2E0950-BLK1)				Prepared: 5/29/2012 Analyzed: 5/30/2012					
Hexavalent Chromium	ND	1.0			NR				
LCS (B2E0950-BS1)				Prepared: 5/29/2012 Analyzed: 5/30/2012					
Hexavalent Chromium	45	1.0	50.0		91	80 - 120			
Duplicate (B2E0950-DUP1)		**Source: 1201963-03**		Prepared: 5/29/2012 Analyzed: 5/30/2012					
Hexavalent Chromium	ND	1.0		ND	NR			20	
Matrix Spike (B2E0950-MS1)		**Source: 1201963-03**		Prepared: 5/29/2012 Analyzed: 5/30/2012					
Hexavalent Chromium	34	1.0	50.0	ND	67	75 - 125			M1
Matrix Spike (B2E0950-MS2)		**Source: 1201963-03**		Prepared: 5/29/2012 Analyzed: 5/30/2012					
Hexavalent Chromium	1400	50	1610	ND	86	75 - 125			
Matrix Spike Dup (B2E0950-MSD1)		**Source: 1201963-03**		Prepared: 5/29/2012 Analyzed: 5/30/2012					
Hexavalent Chromium	34	1.0	50.0	ND	69	75 - 125	3	20	M1

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Mercury by AA (Cold Vapor) EPA 7471 - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0930 - EPA 7471									
Blank (B2E0930-BLK1)				Prepared: 5/31/2012 Analyzed: 5/31/2012					
Mercury	ND	0.10			NR				
LCS (B2E0930-BS1)				Prepared: 5/31/2012 Analyzed: 5/31/2012					
Mercury	0.90	0.10	0.833		108	80 - 120			
Duplicate (B2E0930-DUP1)		**Source: 1201963-01**		Prepared: 5/31/2012 Analyzed: 5/31/2012					
Mercury	0.04	0.10		0.04	NR		0.306	20	
Matrix Spike (B2E0930-MS1)		**Source: 1201963-01**		Prepared: 5/31/2012 Analyzed: 5/31/2012					
Mercury	0.85	0.10	0.833	0.04	97.8	70 - 130			
Matrix Spike (B2E0930-MS2)		**Source: 1201963-20**		Prepared: 5/31/2012 Analyzed: 5/31/2012					
Mercury	0.005		0.00500	0.0008	90.8	70 - 130			
Matrix Spike Dup (B2E0930-MSD1)		**Source: 1201963-01**		Prepared: 5/31/2012 Analyzed: 5/31/2012					
Mercury	0.85	0.10	0.833	0.04	97.8	70 - 130	0.0400	20	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

pH by EPA 9045C - Quality Control

Analyte	Result (pH Units)	PQL (pH Units)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B2E0942 - Prep_WC_1_S									
Duplicate (B2E0942-DUP1)		**Source: 1201628-10**		Prepared: 5/31/2012 Analyzed: 5/31/2012					
pH	8.4	0.10		8.3	NR		2	20	

Geocon Consultants, Inc.		Project Number :	NAPA 121, E8560-06-37
6671 Brisa Street		Report To :	Luann Beadle
Livermore , CA 94550		Reported :	06/04/2012

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
M1	Matrix spike recovery outside of acceptance limit. The analytical batch was validated by the laboratory control sample.
H1	Sample was received past holding time.
ND	Analyte not detected at or above reporting limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA1	CA-NELAP (CDPH)
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)
TX1	TX-NELAP (TCEQ)

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____

Logged By: _____ Date: _____

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt
1. CHILLED 10.8 Y☑ N☐ 4. SEALED Y☐ N☐
2. HEADSPACE (VOA) Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐
3. CONTAINER INTACT Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: GEOCON CONSULTANTS, INC.
Attn: L. BEAPLE
Address: 6671 Brisa Street
City: Livemore State: CA Zip Code: 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

Project Name: NAPA 121
Project #: E8560-06-37
Sampler: (Printed Name) D. WATTS (Signature) [signature]

Relinquished by: (Signature and Printed Name) [signature] Date: 5/23/12 Time: 1800 Received by: (Signature and Printed Name) GSO Date: 5/23/12 Time: 1800
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) FPDUA Date: 5/24/12 Time: 1045
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr / Submitter:
D. WATTS 5/23/12
Print Name Date
[signature]
Signature

Send Report To:
Attn: _____
Co: SAME AS ABOVE
Address _____
City _____ State _____ Zip _____

Bill To:
Attn: _____
Co: SAME AS ABOVE
Address _____
City _____ State _____ Zip _____

Special Instructions/Comments:

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal) - Pb	8015B (GRO) / BTEX	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	pH (9045)	Cr6 (7196A)			SOIL	WATER	GROUND WATER	WASTEWATER			TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	1201963 - 1	NB1 - 0	5/23/12	1131									X	X				X						STD	1	T/M	C	
	- 2	NB2A - 0		1244				X																		Bg/P		
	- 3	NB2B - 0		1250									X	X	X											T/M		
	- 4	NB3A - 0		1300				X																		Bg/P		
	- 5	NB3B - 0		1300									X	X	X											T/M		
	- 6	NB4A - 0		1251				X																		Bg/P		
	- 7	NB4B - 0		1316									X	X	X											T/M		
	- 8	NB5 - 0		1256				X																		Bg/P		
	- 9	SB1 - 0		1227										X												C		
	- 10	SB2 - 0		1224																								

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=Hcl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: White with report Yellow to folder Pink to submitter

CHAIN OF CUSTODY RECORD

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
(562) 989-4045 • Fax (562) 989-4040

FOR LABORATORY USE ONLY:

P.O.#: _____
Logged By: _____ Date: _____

Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FEDEX ☐ Other: _____

Sample Condition Upon Receipt: 1. CHILLED Y☐ N☐ 2. HEADSPACE (VOA) Y☐ N☐ 3. CONTAINER INTACT Y☐ N☐ 4. SEALED Y☐ N☐ 5. # OF SPLS MATCH COC Y☐ N☐ 6. PRESERVED Y☐ N☐

Client: GEOCON CONSULTANTS, INC.
Attn: L. BEADLE
Address: 6671 Brisa Street
City: Livermore State: CA Zip Code: 94550
TEL: (925) 371-5900
FAX: (925) 371-5915

Project Name: NAPA 121 Project #: E8560-06-37 Sampler: (Printed Name) D. WATTS (Signature) [signature]

Relinquished by: (Signature and Printed Name) [signature] Date: 5/23/12 Time: 1800 Received by: (Signature and Printed Name) GSO Date: 5/23/12 Time: 1800
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) FPDIWA Date: 5/23/12 Time: 1045
Relinquished by: (Signature and Printed Name) Date: Time: Received by: (Signature and Printed Name) Date: Time:

I hereby authorize ATL to perform the work indicated below:
Project Mgr / Submitter: D. WATTS 5/23/12 (Print Name, Date) [signature] (Signature)

Send Report To: Attn: _____ Co: SAME AS ABOVE Address _____ City _____ State _____ Zip _____

Bill To: Attn: _____ Co: SAME AS ABOVE Address _____ City _____ State _____ Zip _____

Special Instructions/Comments: RUN RINSE BLANK (RB) FOR TOTAL Pb

Sample/Records - Archival & Disposal
Unless otherwise requested by client, all samples will be disposed 45 days after receipt and records will be disposed 1 year after submittal of final report.

Storage Fees (applies when storage is requested):
- Sample : $2.00 / sample / mo (after 45 days)
- Records : $1.00 / ATL workorder / mo (after 1 year)

Circle or Add Analysis(es) Requested

QA/QC: RTNE ☐ CT ☒ SWRCB ☐ Logcode ____ OTHER ____

ITEM	LAB USE ONLY: Batch #: / Lab No.	Sample Description: Sample I.D. / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal) - Pb	8015B (GRO) / BTEX	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010/7000)	pH (9045)	Cr6 (7196A)	SOIL	WATER	GROUND WATER	WASTEWATER	TAT	Container(s) #	Type	PRESERVATION	REMARKS
	N201953-11	SB3-0	5/23/12	1212					X				X			X				STD	1	Bg P	C	
	-12	SB4-0		1211																				
	-13	SB5A-0		1201																				
	-14	SB5B-0		1201								X	X		X							T m		
	-15	SB6-0		1157					X													Bg P		
	-16	NOA1-0		1154								X			X							T m		
	-17	NOA2-0		1141																				
	-18	NOA3-0		1212																				
	-19	NOA4-0		1230																				
	-20	CC1-0		1150								X			X							T m		

• TAT starts 8 a.m. following day if samples received after 3 p.m.

TAT: A= Overnight ≤ 24 hr B= Emergency Next workday C= Critical 2 Workdays D= Urgent 3 Workdays E= Routine 7 Workdays

Container Types: T=Tube V=VOA L=Liter P=Pint J=Jar B=Tedlar G=Glass P=Plastic M=Metal

Preservatives: H=HCl N=HNO_3 S=H_2SO_4 C=4°C Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

DISTRIBUTION: White with report Yellow to folder Pink to submitter

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.emsl.com sanleandrolab@emsl.com

EMSL Order:	091206483
CustomerID:	GECN21
CustomerPO:	E8560-06-37
ProjectID:	E8560-06-**

Attn: **Dave Watts**
Geocon Consultants, Inc.
6671 Brisa Street

Livermore, CA 94550

Project: **E8560-06-37 / NAPA-121**

Phone:	(925) 371-5900
Fax:	(925) 371-5915
Received:	05/24/12 9:00 AM
Analysis Date:	5/30/2012
Collected:	5/23/2012

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
NB2B-0 *091206483-0001*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
NB3B-0 *091206483-0002*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
NB4B-0 *091206483-0003*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
SB5B-0 *091206483-0004*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
NOA1-0 *091206483-0005*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
NOA2-0 *091206483-0006*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
NOA3-0 *091206483-0007*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**

Analyst(s)

Adam C. Fink (9)

Baojia Ke, Laboratory Manager
or other approved signatory

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for sample collection activities or method limitations. Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less than the limit of detection undergo additional analysis via TEM.Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from 05/30/2012 20:55:14

EMSL Analytical, Inc
2235 Polvorosa Ave , Suite 230, San Leandro, CA 94577
Phone/Fax: (510) 895-3675 / (510) 895-3680
http://www.emsl.com sanleandrolab@emsl.com

EMSL Order:	091206483
CustomerID:	GECN21
CustomerPO:	E8560-06-37
ProjectID:	E8560-06-**

Attn: **Dave Watts**
Geocon Consultants, Inc.
6671 Brisa Street

Livermore, CA 94550

Project: **E8560-06-37 / NAPA-121**

Phone:	(925) 371-5900
Fax:	(925) 371-5915
Received:	05/24/12 9:00 AM
Analysis Date:	5/30/2012
Collected:	5/23/2012

Test Report: PLM Analysis of Bulk Samples for Asbestos via EPA 600/R-93/116 Method with CARB 435 Prep (Milling) Level A for 0.25% Target Analytical Sensitivity

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
NOA4-0 *091206483-0008*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
CC1-0 *091206483-0009*	SOIL (NOA)	Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**

Analyst(s)

Adam C. Fink (9)

Baojia Ke, Laboratory Manager
or other approved signatory

This report relates only to the samples listed above and may not be reproduced except in full, without EMSL's written approval. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMSL is not responsible for sample collection activities or method limitations. Some samples may contain asbestos fibers below the resolution limit of PLM. EMSL recommends that samples reported as none detected or less than the limit of detection undergo additional analysis via TEM.Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from 05/30/2012 20:55:14

THIS IS THE LAST PAGE OF THE REPORT.

091206483

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Chain of Custody

EMSL Order Number (*Lab Use Only*): 091206483

EMSL ANALYTICAL, INC.
2235 POLVOROSA DR., STE. 230
SAN LEANDRO, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Company: GEOCON	EMSL-Bill to: ☒ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 6671 BRISA ST.	
City: LIVERMORE State/Province: CA	Zip/Postal Code: 94550 Country: USA
Report To (Name): D. WATTS	Fax #: 925-371-5915
Telephone #: 925-371-5900	Email Address: WATTS@GEOCONINC.COM
Project Name/Number: E8560-06-37 (NAPA-121)	
Please Provide Results: ☐ Fax ☐ Email Purchase Order:	U.S. State Samples Taken: CA

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☐ 96 Hour ☒ 1 Week ☐ 2 Week

*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

PCM - Air
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable in NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NIOSH 9002 (<1%)

TEM – Air ☐ **4-4.5hr TAT (AHERA only)**
- ☐ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ Chatfield SOP
- ☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
- ☒ PLM CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ EPA Protocol (Semi-Quantitative)
- ☐ EPA Protocol (Quantitative)

Other:
- ☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group**

Samplers Name: D. WATTS **Samplers Signature:** [signature]

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
NB2B-0	SOIL (NOA)	NA	23 MAY 2012
NB3B-0			
NB4B-0			
NB5B-0			
NOA1-0			
NOA2-0			
NOA3-0			
NOA4-0			
CC1-0			

Client Sample # (s): **Total # of Samples:** 9

Relinquished (Client): [signature] **Date:** FED-EX 5/23/12 **Time:** 1800

Received (Lab): [signature] **Date:** RECEIVED MAY 24 2012 **Time:** 0900 FX

Comments/Special Instructions:

APPENDIX B

As

Number of Valid Observations	10
Number of Distinct Observations	9
Minimum	3.7
Maximum	6.8
Mean	5.23
Median	5.45
SD	1.006
Variance	1.011
Coefficient of Variation	0.192
Skewness	-0.153
Mean of log data	1.637
SD of log data	0.2
95% Standard Bootstrap UCL	**5.73**

Pb Site (excluding CC1) - 0

Number of Valid Observations	19
Number of Distinct Observations	17
Minimum	5.8
Maximum	63
Mean	20.4
Median	16
SD	12.76
Variance	162.7
Coefficient of Variation	0.624
Skewness	2.15
Mean of log data	2.87
SD of log data	0.546
90% Standard Bootstrap UCL	**24.1**
95% Standard Bootstrap UCL	**25.0**

Pb Entire Site

Number of Valid Observations	20
Number of Distinct Observations	18
Minimum	5.5
Maximum	63
Mean	19.7
Median	16
SD	12.86
Variance	165.3
Coefficient of Variation	0.653
Skewness	2.08
Mean of log data	2.812
SD of log data	0.592
90% Standard Bootstrap UCL	**23.4**
95% Standard Bootstrap UCL	**24.3**

V

Number of Valid Observations	10
Number of Distinct Observations	9
Minimum	36
Maximum	51
Mean	45.1
Median	46.5
SD	4.818
Variance	23.21
Coefficient of Variation	0.107
Skewness	-0.695
Mean of log data	3.803
SD of log data	0.111
95% Standard Bootstrap UCL	**47.5**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	NAP	121	20.2/20.4		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. 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.

TREE REMOVAL

NO.	SPECIES	DIAMETER (Ft.)	N-COORDINATE	E-COORDINATE
1	DEAD TREE REMOVAL	0.5′	1918694.96	6502113.73
2	VALLEY OAK REMOVAL	1.2′	1918742.33	6501954.86
3	COTTONWOOD REMOVAL	2.7′	1918732.24	6501946.33
4	PACIFIC MADRONE REMOVAL	0.6′	1918691.52	6502103.41
5	GRAY PINE REMOVAL	0.5′	1918688.48	6502042.88
6	GRAY PINE REMOVAL	1.2′	1918662.04	6502078.55
7	BAY LAUREL REMOVAL	0.5′	1918668.90	6502023.56
8	BAY LAUREL REMOVAL	0.4′	1918687.79	6502044.72
9	BAY LAUREL REMOVAL	0.4′	1918685.00	6502099.51
10	BAY LAUREL REMOVAL	0.8′	1918713.59	6502128.58
11	ORACLE OAK REMOVAL	1.6′	1918713.54	6501865.45
12	ORACLE OAK REMOVAL	2.4′	1918713.81	6501867.54
13	ORACLE OAK REMOVAL	1.3′	1918686.32	6502103.89
14	ORACLE OAK REMOVAL	0.9′	1918685.70	6502106.16
15	ORACLE OAK REMOVAL	1.0′	1918691.10	6502108.79
16	BLACK OAK REMOVAL	1.0′	1918698.11	6502086.29
17	BLACK OAK REMOVAL	0.9′	1918707.82	6502094.55
18	BLACK OAK REMOVAL	1.6′	1918710.28	6502098.13
19	BLACK OAK REMOVAL	2.0′	1918703.81	6502109.86
20	BLACK OAK REMOVAL	1.3′	1918714.46	6502122.37
21	BLACK OAK REMOVAL	0.6′	1918707.58	6502132.42
22	BLACK OAK REMOVAL	1.5′	1918706.23	6502138.10
23	BLACK OAK REMOVAL	2.0′	1918737.17	6502025.16
24	BLACK OAK REMOVAL	2.7′	1918687.90	6502021.77
25	BLACK OAK REMOVAL	1.6′	1918671.98	6502025.61
26	BLACK OAK REMOVAL	0.8′	1918639.89	6502032.34
27	BLACK OAK REMOVAL	0.8′	1918641.75	6502039.82
28	BLACK OAK REMOVAL	1.4′	1918676.55	6502036.67
29	BLACK OAK REMOVAL	1.5′	1918682.82	6502039.98
30	BLACK OAK REMOVAL	0.9′	1918670.19	6502046.51
31	BLACK OAK REMOVAL	1.0′	1918667.24	6502063.92
32	BLACK OAK REMOVAL	1.0′	1918669.77	6502071.75
33	BLACK OAK REMOVAL	1.1′	1918683.06	6502070.94
34	BLACK OAK REMOVAL	2.0′	1918682.96	6502083.15
35	BLACK OAK REMOVAL	1.3′	1918682.24	6502090.92

TREE TRIMMING

36	COAST LIVE OAK TRIM	2.0′	1918626.64	6501919.78
37	COAST LIVE OAK TRIM	2.9′	1981721.59	6501908.38
38	COAST LIVE OAK TRIM	0.6′	1918743.42	6501900.65
39	COAST LIVE OAK TRIM	0.6′	1918660.05	6502028.76
40	COAST LIVE OAK TRIM	0.5′	1918645.29	6502033.98
41	COAST LIVE OAK TRIM	0.6′	1918644.49	6502048.50
42	COAST LIVE OAK TRIM	0.9′	1918676.25	6502054.18

TREE REMOVAL AND TRIMMING PLAN
INFORMATION HANDOUT

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans®

LAST REVISION 00-00-00 | DATE PLOTTED => $DATE | TIME PLOTTED => $TIME

WATER QUALITY INFORMATION HANDOUT
CONTRACT NO: 04-2A1104
04-NAP-121-PM 20.2/20.4
CAPELL CREEK BRIDGE REPLACEMENT

California Department of Transportation
District 04
Office of Water Quality
111 Grand Avenue, Oakland, CA 94612

March 14, 2013

Disclaimer

A "Disclaimer" is required specifying that the information provided in the Non Storm Water Information Handout is just a guideline and is to be used for information purposes only and should not be considered a sole source document to adhere to the requirements of the new National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP), Number CAS000002, adopted on September 2, 2009. The contractor is required to provide water quality monitoring, sampling and implement best management practices (BMPs) based on standard industry operations, field conditions and conditions encountered based on the contractor's means and methods. The information in this handout is not to be construed in any way as a waiver of the provisions in the CGP. Bidders and contractors are cautioned to make independent investigations and examinations as they deem necessary to satisfy the conditions encountered in performance of work, with respect to the following: sampling and monitoring locations, distribution of watershed areas for sizing of BMPs, and selection of BMPs in order to conform to the requirement of the contract documents and the CGP.

TABLE OF CONTENTS
CONTRACT NO: 04-2A1104

1 PROJECT INFORMATION
- 1A Project Description
- 1B Receiving Water Bodies
- 1C Climate and Rainfall Data

2 CONSTRUCTION GENERAL PERMIT
- 2A Risk Level

3 TEMPORARY CONSTRUCTION SITE BMPs
- 3A Water Quality Monitoring
- 3B Run-on Discharges
- 3C Temporary Creek Diversion System
- 3D Temporary Access Pad
- 3E Dewatering
- 3F Temporary ESA Fencing

4 PERMITS
- 4A General
- 4B 401 CERTIFICATION CONDITION # 18 - Project-specific Spill Containment, Cleanup Plan to be included as part of Section 500 (500.1.1) in the Storm Water Pollution Prevention Plan (SWPPP)

5 ATTACHMENTS
- A VICINITY MAP
- B RISK LEVEL DETERMINATION
- C RAINFALL DATA
- D PROJECT DISCHARGE LOCATION PLAN
- E GROUNDWATER SEEPAGE RATE
- F DEWATERING LOCATION PLAN
- G LIST OF PUBLICLY OWNED TREATMENT WORKS (POTW) FACILITY
- H POTW SERVICE AREA MAP
- I 401 CERTIFICATION
- J 1602 PERMIT
- K USACE & CDFG IMPACT MAP
- L NOTICE OF INTENT (DRAFT)

1 Project Information

1A Project Description

This project will replace the Capell Creek Bridge (No. 21-0009) on State Route 121 in Napa County at post mile 20.2/20.4. The work is proposed under the Department's Bridge Scour Mitigation Program. The project would involve building a bridge approximately 43 ft wide on the existing alignment. The bridge will be built to current Caltrans highway design standards to provide two standard 12-ft travel lanes and two 8-ft shoulders. The construction is anticipated to complete 2 year period. In-water work must occur between June 15 October 15.

Latitude and Longitude:	38.4282, -122.2098
Construction Start Date	06/01/2013
Construction End Date	08/01/2015
Project Area	2.0 ac
Disturbed Soil Area	1.2 ac

1B Receiving Water Bodies

Capell Creek, the receiving water body, is neither in the Clean Water Act 2006 303(d) List of Water Quality Limited Segments for Sedimentation/Siltation nor the project area is located within the high-risk receiving watershed area.

1C Climate and Rainfall Data

A National Oceanic and Atmospheric Administration (NOAA) weather station located in Petaluma, CA was used to obtain an estimated number of rainy days per year and qualifying rain events. The Compliance Storm Event was also downloaded from the NOAA website.

Rainy days per year (precipitation 0.10 inches or greater)	102.9	days
Qualifying rain events per year	60.3	days
Compliance Storm Event (rainfall total for the 5 year, 24 hr storm	5.85	inches

2 Construction General Permit

A Storm Water Pollution Prevention Plan is required since the disturbed soil area is 1.2 acres and R value is 127.01 .

2A Risk Level

R factor	127.01
K factor	0.37
LS factor	6.88
Sediment Risk	323.3
Receiving Water Body Risk	No/ Low
Risk Level	2

3 Temporary Construction Site BMPs

The estimated quantities of temporary construction site BMPs are in the PSE package. Various soil stabilization and sediment barriers are proposed due to the project's direct discharge into the Capell Creek.

3A Water Quality Monitoring

Water quality monitoring is required for in-water work. Minimum recommended control and sampling locations are shown on the attached map. These locations are recommended for the water quality monitoring specification for in-water work, including the installation and removal of the temporary creek diversion system. Other locations need to be reviewed for inspection and/or sampling, such as stockpiling locations, contractor's yard, and possible areas of high sediment and pH discharge.

3B Run-on Discharges

Run-on discharges are off-site storm water that can potentially run to the site. Run-on discharges should be calculated based on a rainfall intensity for a 2-year 24-hour event per the PPDG. The Rational Method is typically used to calculate run-on discharges.

Equation: $Q=CiA$
where Q = Run-on discharge (cubic feet per second)
C = Runoff coefficient (see HDM Figure 819.2A)
i = 2-year, 24-hour rainfall intensity (inches/hour)

Locations of Run-on Discharges are as follows:

Location	Area (ac)	Discharges (cfs)
No known		

The project cross-sections in the PSE package do not show areas of run-on adjacent to the roadway that would flow into the project work area; however, the Contractor needs to verify all run-on for the proposed project.

3C Temporary Creek Diversion System

A temporary creek diversion system is proposed during in-water work. The nssp and plans are in the PSE package. The plans show a system consisting of gravel bags and an impermeable plastic membrane. Two systems are shown, one for each construction year based on the staging on the project. As noted in section 3A, sampling and monitoring will be required.

3D Temporary Access Pad

A temporary access pad has been detailed to provide equipment access for bridge construction. Plans and its impacted area and the nssp are in the PSE package. The area of the pad is anticipated to change in position and size during stage 1 and 2.

The temporary access pad consists of gravel, rock, and subgrade enhancement geotextile (SEG). The gravel is specified by the regulatory agencies. It has limited structural capacity. Rock is proposed on top of the gravel and has some structural capacity. Rock is recommended to be 1 ft minimum and may need to be thicker. SEG separates the gravel from the native creek bed and the gravel from rock.

It is anticipated that the pad will be constructed in a dry environment. Any impermeable layer to separate the pad from water should be paid as temporary cover. The Contractor should be aware that water may come in contact with the access pad at the upstream location and the existing pool of water at the downstream location.

A temporary creek crossing/trestle is noted as optional in the temporary access pad nssp. There is no nssp or detail for the crossing. The Contractor should be aware that ramps for the trestle crossing may need to be constructed on top of the access pad.

The temporary creek diversion system and temporary access pad must be within the USACE and CDFG impact maps in the attachments. Adhere to the ESA fencing shown on the layout plans.

3E Dewatering

Displacement of groundwater is anticipated for bridge work. An Active Treatment System specification is included in the project. A dewatering and discharge work plan is required before dewatering activities.

The specification allows discharging into a POTW system. If groundwater, stormwater, or both are discharged to a POTW, the Contractor needs to obtain a municipal batch discharge permit and is responsible for all costs and requirements related to obtaining the municipal batch discharge permit and discharging the water.

Dewatering must also comply with the provisions of Order No. R1-2009-0045 adopted by Central Valley Regional Water Quality Control Board (General NPDES Permit No. CA 0024902 Waste Discharge Requirements for Low Threat Discharges to Surface Waters in the Central Valley Region).

A Seepage (Flow) Rate memorandum from Geotech is attached and a Site Investigation Report is included as a separate Information Handout.

3F Temporary ESA Fencing

Temporary ESA fencing is depicted on the layouts and on the USACE and CDFG impact maps. Adhere to the ESA fencing on the layout plans. The ESA fencing will depict areas where no construction activity can occur, except water quality monitoring and sampling. In many locations where temporary silt fence was also required, ESA fencing may be combined with temporary silt fence as temporary reinforced silt fence type 1. These locations will be depicted on the layout maps.

4 Permits

4A General

The permits required for the project note conditions that may call for special consideration from the Contractor. Conditions include work windows for in water work and various job site management, including equipment and stockpiles.

For the preparation of the Storm Water Pollution Prevention Plan, the Contractor should refer to conditions 1, 18, and 32 in the 401 Certification.

Condition 18 requires submittal of a project-specific Spill Containment, Cleanup Plan, which should be prepared and included as part of Section 500 (500.1.1) in the Storm Water Pollution Prevention Plan (SWPPP). Please see Materials Management Plan under Section 500 (500.1.1) of the SWPPP template. This Plan also needs to address Drilling Slurries and Fluids per Standard Specifications section 13-4.03D(5) Liquid Waste.

Required permits:

1. 401 Certification from the Regional Water Quality Board
2. 404 Permit from the U.S. Army Corps of Engineers
3. Biological Opinion from the U.S. Fish and Wildlife
4. 1600 Permit from the CA Department of Fish and Game

4B 401 CERTIFICATION CONDITION # 18 - Project-specific Spill Containment, Cleanup Plan to be included as part of Section 500 (500.1.1) in the Storm Water Pollution Prevention Plan (SWPPP)

Compliance with Condition 18 in the 401 Certification:

Project-Specific Spill Containment and Cleanup Plan (SCCP)

To comply with condition 18 in the 401 Certification issued by the Central Valley Regional Water Quality Control Board, a project-specific SCCP should be prepared and included in Section 500 (500.1.1) of the Storm Water Pollution Prevention Plan (SWPPP). Please see Materials Management Plan under Section 500 (500.1.1) of the SWPPP template. This Plan also needs to address Drilling Slurries and Fluids per Standard Specifications section 13-4.03D(5) Liquid Waste.

The SCCP shall describe in detail how the contractor will implement all the requirements of this specification:

1. Spill prevention
2. Materials management
3. Waste management
4. Non Storm Water Management
5. Dewatering

The SCCP is a plan specific to the project which addresses the site conditions during construction and the construction activities needed to complete the project.

All work activities that may produce waste during the construction process, either solid or liquid, must be described in detail in the SCCP with all the associated BMPs implemented to manage the waste. The description shall include

1. Details of materials and equipment used
2. Description of the waste produced
3. Details of BMPs implemented for waste discharge prevention, waste management and disposal, and waste cleanup for accidental discharges
4. Training provided to employees and subcontractors on implementation of these BMPs

The plan shall also include monitoring protocols to:

1. Observe and document waste producing activities
2. Document, manage and report any accidental discharges

3. Clean up and sample affected area
4. Disposal of waste

The SCCP shall be amended whenever new conditions are discovered or arise due to changes in operations, materials, and/or site management practices. The amendment may be proposed by the Contractor or requested by the Engineer.

Every 6 months the Contractor shall submit a SCCP Progress Report that includes the following information for the reporting period:

1. Summary of all discharges
2. Summary of all corrective measures implemented
3. Summary of training in construction site management provided to employees and sub contractors

Summary of all environmental sampling conducted to characterize materials,/waste for disposal, to identify any water quality impact, and/or to ascertain effectiveness of the cleanup methods

5 ATTACHMENTS

ATTACHMENT A

VICINITY MAP

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

INDEX OF PLANS

SHEET No.	DESCRIPTION
.	.

STATE OF CALIFORNIA

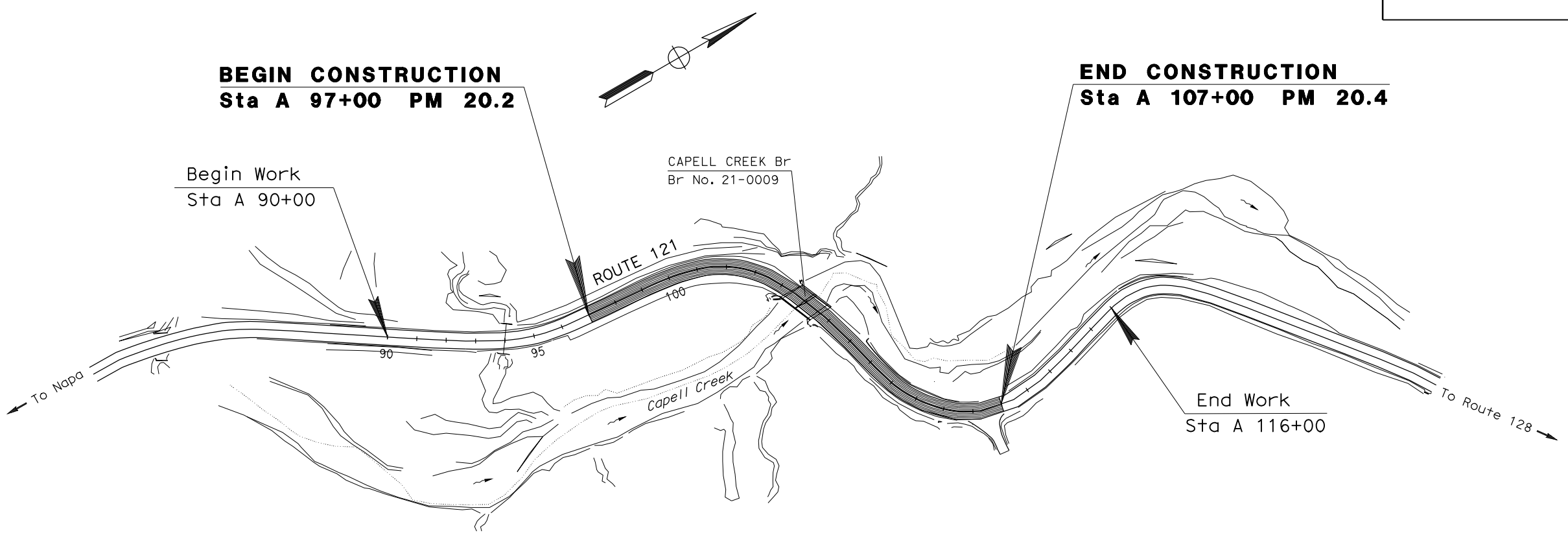
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN NAPA COUNTY
ABOUT 2 MILES SOUTH OF JUCTION ROUTE 128
AT CAPELL CREEK BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



NAPA COUNTY

NO SCALE

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

PROJECT MANAGER: KELLY HIRSCHBERG

DESIGN ENGINEER: STEWART LEE

PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

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.

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

CONTRACT No.	04-2A1104
PROJECT ID	0400000808

LAST REVISION 07-31-12

DATE PLOTTED => 15-AUG-2012
TIME PLOTTED => 11:11

ATTACHMENT B

RISK LEVEL DETERMINATION

	A	B	C
1	**Sediment Risk Factor Worksheet**		**Entry**
2	**A) R Factor**		
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.		
4	http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm		
5	**R Factor Value**		127.01
6	**B) K Factor (weighted average, by area, for all site soils)**		
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.		
8	Site-specific K factor guidance		
9	**K Factor Value**		0.37
10	**C) LS Factor (weighted average, by area, for all slopes)**		
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.		
12	LS Table		
13	**LS Factor Value**		6.88
14			
15	**Watershed Erosion Estimate (=RxKxLS) in tons/acre**	323.316656	
16	**Site Sediment Risk Factor**	**High**	
17	Low Sediment Risk: < 15 tons/acre		
18	Medium Sediment Risk: >=15 and <75 tons/acre		
19	High Sediment Risk: >= 75 tons/acre		
20			

Receiving Water (RW) Risk Factor Worksheet	Entry	Score
A. Watershed Characteristics	**yes/no**	
A.1. Does the disturbed area discharge (either directly or indirectly) to a **303(d)-listed waterbody impaired by sediment** (For help with impaired waterbodies please check the attached worksheet or visit the link below) or has a **USEPA approved TMDL implementation plan for sediment**?: 2006 Approved Sediment-impared WBs Worksheet http://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml	**NO**	**Low**
OR		
A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY? http://www.ice.ucdavis.edu/geowbs/asp/wbquse.asp		

Combined Risk Level Matrix

Receiving Water Risk	Sediment Risk: Low	Sediment Risk: Medium	Sediment Risk: High
Low	Level 1	Level 2	
High	Level 2		Level 3

Project Sediment Risk: High

Project RW Risk: Low

Project Combined Risk: Level 2

ATTACHMENT C

RAINFALL DATA

Rainfall Intensity can be obtained by the following link:

http://www.wrcc.dri.edu/pcpnfreq/nca5y24.gif

Refer to chapters 800, Highway Drainage Design of Highway Design Manual for information on runoff coefficient and shed map. The weighted runoff coefficient of 0.55 is recommended for the project area.

ATTACHMENT D

PROJECT DISCHARGE LOCATION PLAN

NOTE:

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

LEGEND:

D-X DISCHARGE LOCATION

NOTES:

1. LOCATION OF EXISTING DRAINAGE FACILITIES ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER.
2. TOP OF GRATE ELEVATION (TG) IS THE FINISHED PAVEMENT ELEVATION MINUS THE GUTTER DEPRESSION.
3. THERE WILL BE NO STANDARD GUTTER DEPRESSION (SGD) PROVIDED, UNLESS OTHERWISE NOTED.
4. ALL TIES TO INLET, MANHOLES AND JUNCTION BOXES ARE DEFINED ON SHEET DD-1, UNLESS OTHERWISE NOTED.

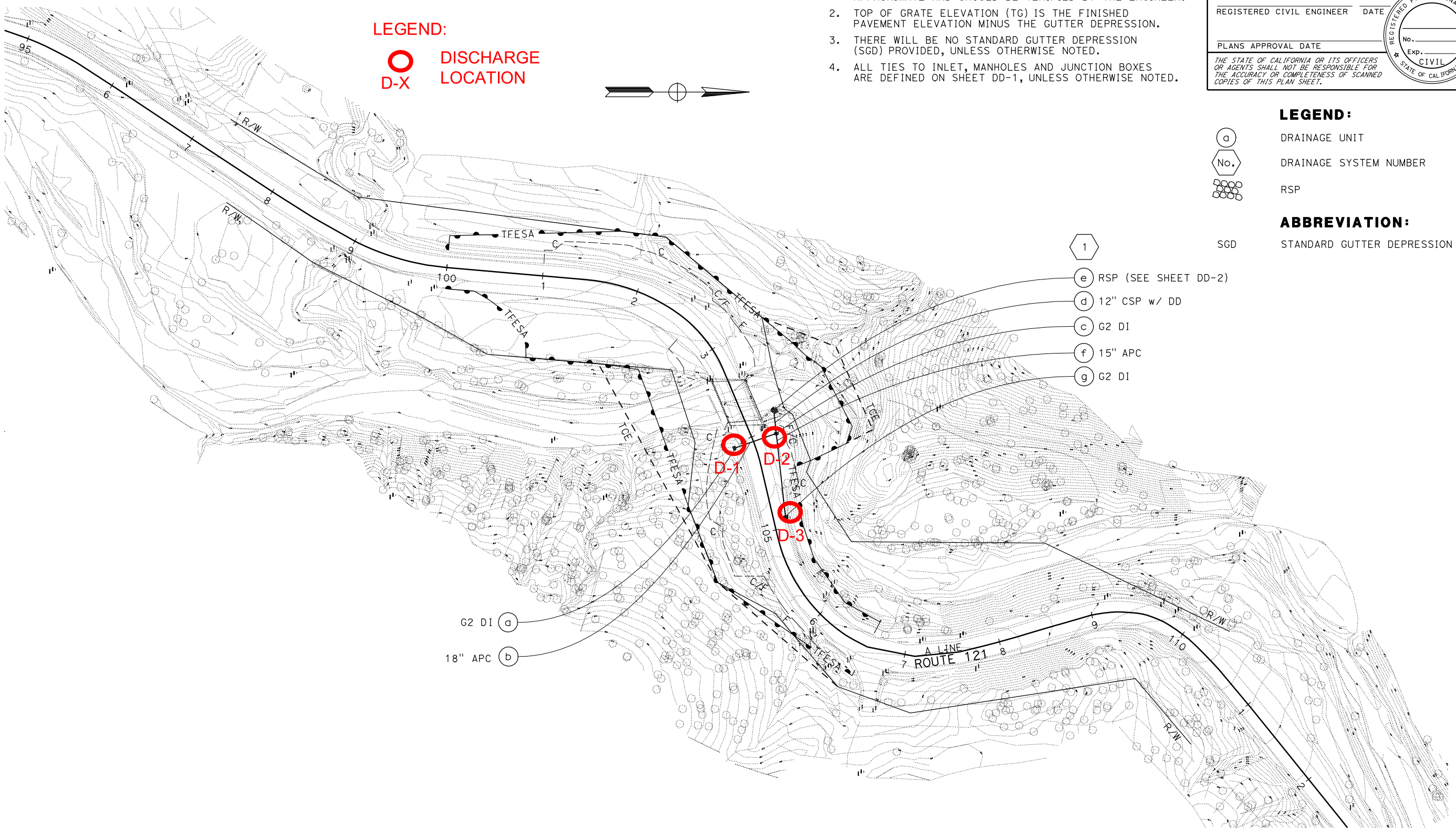
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. 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.



LEGEND:

a DRAINAGE UNIT

No. DRAINAGE SYSTEM NUMBER

RSP

ABBREVIATION:

SGD STANDARD GUTTER DEPRESSION

DRAINAGE PLAN

SCALE: 1" = 50'

D-1

APPROVED FOR DRAINAGE WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans HYDRAULICS

FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY EMARNAN PONGPAIROJ

CHECKED BY

REVISED BY

DATE REVISED

LAST REVISION 08-13-12

DATE PLOTTED => 15-AUG-2012

TIME PLOTTED => 11:11

ATTACHMENT E

GROUNDWATER SEEPAGE RATE

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: MR. HARDEEP TAKHAR
District Office Chief
Office of Water Quality

Date: February 13, 2012

Attention: J. Chen

File: 04- NAP- 121 PM 20.2/20.4
04 – 2A1101
Capell Creek Bridge

From: RIFAAT NASHED RN
Engineering Geologist
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

GRANT WILCOX GW
Chief, Branch B
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject : Seepage Rate (Flow Rate) Estimate at Four Locations

This memo is in response to your request to provide the groundwater depth and seepage rate for the construction of abutment 1, abutment 2, and retaining walls (type 1) located in the project site. It is our understanding that this information will be used in estimating dewatering quantities.

It should be noted that in our estimate in all the locations of construction elements, we considered the maximum depth of excavation under the groundwater elevation. At the western side of the bridge, we considered the groundwater elevation to be 816.58 ft as measured on September 14, 2011 (Borehole # RC-11-001). At the eastern side of the bridge, we considered the groundwater elevation to be 816.48 ft as measured on September 14, 2011. (Borehole # RC-11-002) Also, consider that in general, the water elevation could be influenced by surface water elevation in the creek.

Abutment 1

For this location, our estimates are limited to the excavation required for the abutment footing from the original ground surface to the bottom of the footing.

Based on the LOTB of borings RC-11-004 (at the northern side of the abutment), and RC-11-001 (at the southern side of the abutment), drilled in September 2011, the soil layers at and below the groundwater level and extending to the bottom of the footing are: sandy silt , gravel with clay & sand, and clayey sand.

By using the Coefficient of Permeability, K value 0.14 ft /day for sandy silt, and 1.4 ft /day for gravel with clay & sand, and 0.14 ft /day for clayey sand, <u>the seepage rate for this location is 1.2 gallon/day/ft^2</u>.

Abutment 2

For this location, our estimates are limited to the excavation required for the abutment footing from the original ground surface to the bottom of the footing.

Based on the LOTB of borings RC-11-005 (at the northern side of the abutment), and RC-11-003 (at the southern side of the abutment), drilled in September 2011, the soil layers at and below the groundwater level and extending to the bottom of the footing are: silty sand with gravel , well graded gravel, well graded sand, and sandstone

By using the Coefficient of Permeability, K value 0.14 ft /day for silty sand, 2.7 ft /day for well graded gravel 1.4 ft /day for well graded sand, and 0.00305 ft /day for sandstone[1] the seepage rate for this location is 2.1 gallon/day/ft^2.

Western Retaining Wall

For this location, our estimates are limited to the excavation required for the Retaining Wall footing from the original ground surface to the bottom of the footing.

Based on the LOTB of boring RC-11-004 for **the northern side** of the wall, drilled in September 2011, the soil layers at and below the groundwater level and extending to the bottom of the footing are: sandy silt and well graded gravel with clay and sand.

By using the Coefficient of Permeability, K value is 0.14 ft /day for sandy silt, and 1.4 ft /day for well graded gravel, the seepage rate for this location is 0.9 gallon/day/ft^2.

Based on the LOTB of boring RC-11-001 for the **southern side** of the wall, drilled in September 2011, the soil layers at and below the groundwater level and extending to the bottom of the footing are: sandy lean clay, well graded gravel with clay & sand, and clayey sand

By using the Coefficient of Permeability, K value 0.027 ft /day for sandy silt, and 1.4 ft /day for well graded gravel, and 0.14 ft /day for Clayey sand, the seepage rate for this location is 1.2 gallon/day/ft^2.

Eastern Retaining Wall

For this location, our estimates are limited to the excavation required for the retaining wall footing from the original ground surface to the bottom of the footing.

[1] Roy E. Hunt, 2005, Geotechnical Engineering Investigation Handbook, 2nd Edition- Page 167 table 3.12

Based on the LOTB of boring RC-11-003 for **the northern side** of the wall, drilled in September 2011, the soil layers at and below the groundwater level and extending to the bottom of the footing are: well graded sand, and well graded gravel with clay and sand.

By using the Coefficient of Permeability, K value 1.4 ft /day for well graded sand, and 2.7 ft /day for well graded gravel, the seepage rate for this location is 3.4 gallon/day/ft^2.

Based on the LOTB of boring RC-11-002 for the **southern side** of the wall, drilled in September 2011, the soil layer at and below the groundwater level and extending to the bottom of the footing is: fractured sandstone

By using the Coefficient of Permeability, K value 0.00305 ft /day for fractured sandstone, the seepage rate for this location is 0.01 gallon/day/ft^2.

According to "The Federal Highway Report NO. FHWA-TS-80-224, Page 48-49" the Coefficient of Permeability K (ft./day) for all soils encountered in the Capell Creek Bridge area are as follows:

Unified Soil Classification	Coefficient of Permeability K (ft./day)
Well graded gravel (GW)	2.7 to 274
Clayey gravel with sand (GC)	$2.7x10^{-5}$ to $2.7x10^{-2}$
Well graded sand (SW)	1.4 x137
Silty sand (SM)	$2.7x10^{-4}$ to 1.4
Clayey sand (SC)	$2.7x10^{-5}$ to 0.14
Sandy silt (ML)	$2.7x10^{-5}$ to 0.14
Sandy lean clay(CL)	$2.7x10^{-5}$ to $2.7x10^{-3}$

Our estimate of the seepage rate (flow rate) for the project area in general is approximately 1.5 gallons /day/ $ft^{2.}$ This seepage rate (flow rate) estimate is provided for cost estimate purposes only.

If you have any questions or need additional information, please call Rifaat Nashed at (510) 622-1773 or Grant Wilcox at (510) 286-4835.

c: TPokrywka, GWilcox, Route File, Daily File

RNashed/mm

Capell Creek Bridge - Seepage Rate

Construction Elemen	Soil Type	Bed Thickness under G.W.(ft)	Length (ft)	Width (ft)	A (ft^2)	K (ft/day)	H (ft)	H0 (ft)	dH (ft)	d S (ft)	i	q(ft3/day)	q total (Gallon/day)	Flow Rate (Gallon/day/ft2)	Average flow rate per sector(Gallon/day/ft2)
Abutment 1															
Northern side	Sandy silt (ML)	13.0	26.4	9.1	1403.5	0.14	816.58	802.25	14.33	54.454	0.2632	51.70789474	385.8798115	0.274941084	
	Well graded gravel w/ clay & sand (GW-GC)	1.3	26.4	9.1	572.8	1.4	816.58	802.25	14.33	54.454	0.2632	211.0315789	1574.862529	2.749410841	
Southern side	Sandy lean clay w/gravel (CL)	3.0	26.4	9.1	693.5	0.0027	816.58	802.25	14.33	54.454	0.2632	0.49275	3.677238806	0.005302435	
	Well graded gravel w/clay & sand (GW-GC)	8.35	26.4	9.1	1073.3	1.4	816.58	802.25	14.33	54.454	0.2632	395.4263158	2950.942655	2.749410841	
	Clayey sand (SC)	3.0	26.4	9.1	693.5	0.14	816.58	802.25	14.33	54.454	0.2632	25.55	190.6716418	0.274941084	1.21
Abutment 2															
Northern side	Silty sand w/gravel(SM)	6.48	26.25	9.1	935.9	0.14	816.5	802.25	14.23	54.074	0.2632	34.48052632	257.3173606	0.274941084	
	Sandstone	7.75	26.25	9.1	1025.7	0.00305	816.5	802.25	14.23	54.074	0.2632	0.823259211	6.143725452	0.005989788	
Southern side	Well graded sandw/gravel (SW)	10.98	26.25	9.1	1254	1.4	816.5	802.25	14.23	54.074	0.2632	462	3447.761194	2.749410841	
	Well graded gravel w/ sand (GW)	3.25	26.25	9.1	707.5	2.7	816.5	802.25	14.23	54.074	0.2632	502.6973684	3751.472899	5.302435192	2.08
Western Retaining Wall															
Northern side															
1st section	Sandy silt (ML)	13.0	8.0	15.5	775	0.14	816.58	802.25	14.33	54.454	0.2632	28.55263158	213.0793401	0.274941084	
	Well graded gravel w/clay & sand (GW-GC)	1.3	8.0	15.5	271.9	1.4	816.58	802.25	14.33	54.454	0.2632	100.1736842	747.5648075	2.749410841	
2nd section	Sandy silt (ML)	10.0	8.0	11.5	574	0.14	816.58	806.58	10.00	38	0.2632	21.14736842	157.8161822	0.274941084	
3rd section	Sandy silt (ML)	6.0	8.0	8.5	334	0.14	816.58	810.58	6.00	22.8	0.2632	12.30526316	91.83032207	0.274941084	0.89
Sourthern side															
1st section	Sandy lean clay w/gravel (CL)	3.0	8.0	15.5	389	0.027	816.58	802.25	14.33	54.454	0.2632	2.763947368	20.6264729	0.053024352	
	Well graded gravel w/clay & sand (GW-GC)	8.35	8.0	15.5	640.5	1.4	816.58	802.25	14.33	54.454	0.2632	235.9736842	1760.997643	2.749410841	
	Clayey sand (SC)	3.0	8.0	15.5	389	0.14	816.58	802.25	14.33	54.454	0.2632	14.33157895	106.9520817	0.274941084	
2nd section	Sandy lean clay w/gravel (CL)	3.0	8.0	11.5	301	0.027	816.58	806.58	10.00	38	0.2632	2.138684211	15.96032993	0.053024352	
	Well graded gravel w/clay & sand (GW-GC)	7.0	8.0	11.5	457	1.4	816.58	806.58	10.00	38	0.2632	168.3684211	1256.480754	2.749410841	
3rd section	Sandy lean clay w/gravel (CL)	3.0	8.0	8.5	235	0.027	816.58	810.58	6.00	22.8	0.2632	1.669736842	12.4607227	0.053024352	
	Well graded gravel w/clay & sand (GW-GC)	3.0	8.0	8.5	235	1.4	816.58	810.58	6.00	22.8	0.2632	86.57894737	646.1115475	2.749410841	1.24
Eastern Retaining Wall															
Northern side															
1st section	Well graded sandw/gravel (SW)	10.98	8.0	15.5	764.1	1.4	816.5	802.25	14.23	54.074	0.2632	281.5105263	2100.824823	2.749410841	
	Well graded gravel w/ sand (GW)	3.25	8.0	15.5	350.4	2.7	816.5	802.25	14.23	54.074	0.2632	248.9684211	1857.973291	5.302435192	
2nd section	Well graded sandw/gravel (SW)	9.9	8.0	11.5	370.1	1.4	816.5	806.58	9.90	37.62	0.2632	136.3526316	1017.556952	2.749410841	
3rd section	Well graded sandw/gravel (SW)	5.9	8.0	8.5	330.7	1.4	816.5	810.58	5.90	22.42	0.2632	121.8368421	909.230165	2.749410841	3.39
Sourthern side															
1st section	Sandstone	14.23	8.0	15.5	916.8	0.00305	816.5	802.25	14.23	54.074	0.2632	0.735852632	5.491437549	0.005989788	
2nd section	Sandstone	9.9	8.0	11.5	639.38	0.00305	816.5	806.58	9.90	37.62	0.2632	0.513186579	3.829750589	0.005989788	
3rd section	Sandstone	5.9	8.0	8.5	330.7	0.00305	816.5	810.58	5.90	22.42	0.2632	0.265430263	1.980822859	0.005989788	0.01
														General Average	1.49

$q = KiA$

Note

A = Surface area
k = Soil permeability (from Hwy Subdrainage Design Report No. FHWA - TS-80-224- Page 48-49) and
Roy E. Hunt, Geotechnical Engineering Investigation Handbook, 2nd Edition - Page 167 table 3.12
H = ground water elevation
H0 = elevation the bottomof excavation
dH = water head
ds = gradient distance Li = 3.8x(H - H0).....Ref. FHWA-Ts-80-224 Page 66
"i" = dH/ds
q total = (gallon/day/ft2) = q total (gallon/day)/ total surface area

ATTACHMENT F

DEWATERING LOCATION PLAN

NOTE:

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

LEGEND:

L-X DEWATERING LOCATION

NOTES:

1. LOCATION OF EXISTING DRAINAGE FACILITIES ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER.
2. TOP OF GRATE ELEVATION (TG) IS THE FINISHED PAVEMENT ELEVATION MINUS THE GUTTER DEPRESSION.
3. THERE WILL BE NO STANDARD GUTTER DEPRESSION (SGD) PROVIDED, UNLESS OTHERWISE NOTED.
4. ALL TIES TO INLET, MANHOLES AND JUNCTION BOXES ARE DEFINED ON SHEET DD-1, UNLESS OTHERWISE NOTED.

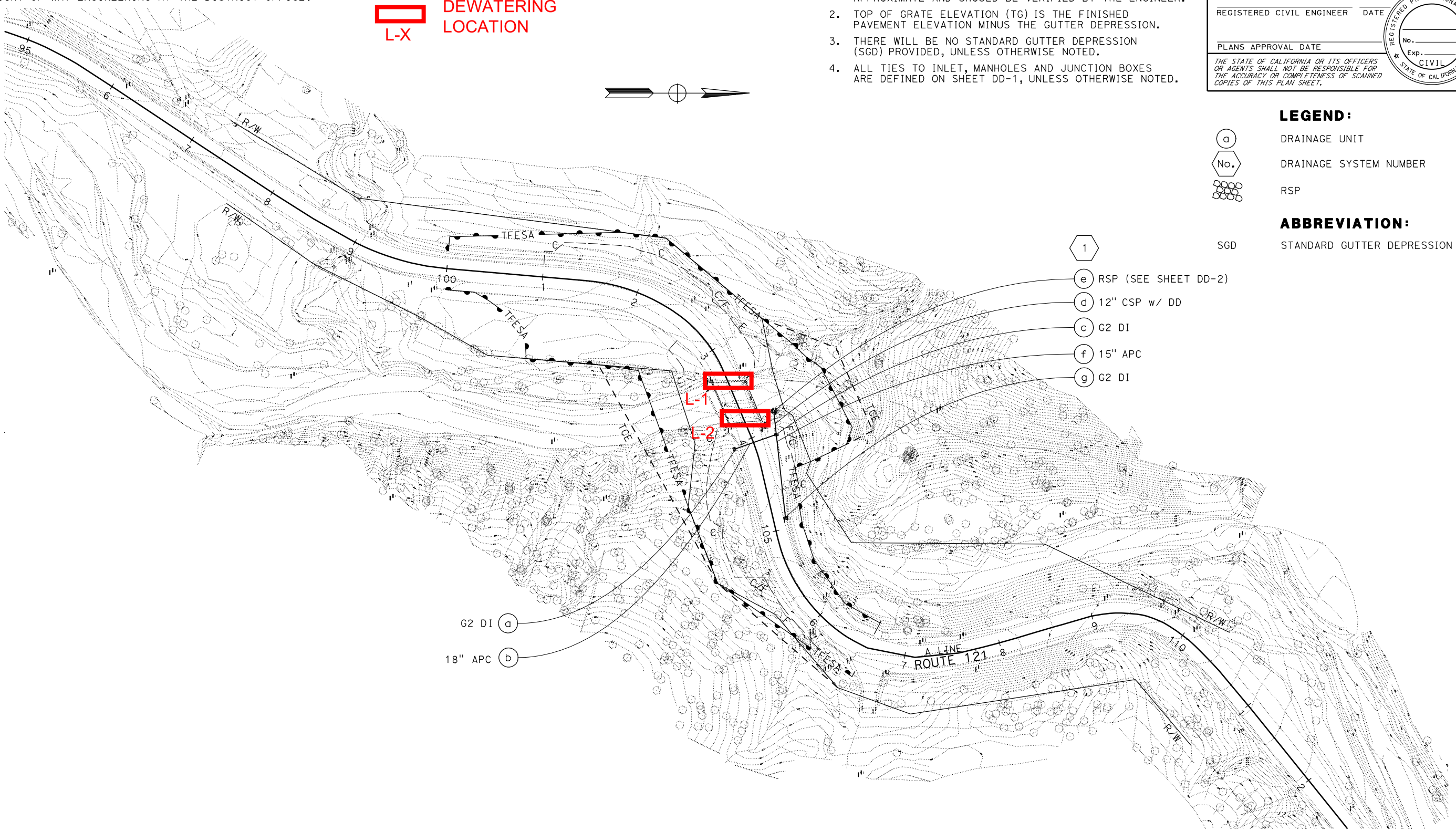
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. 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.



LEGEND:

a DRAINAGE UNIT

No. DRAINAGE SYSTEM NUMBER

RSP

ABBREVIATION:

SGD STANDARD GUTTER DEPRESSION

DRAINAGE PLAN

SCALE: 1" = 50'

D-1

APPROVED FOR DRAINAGE WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

HYDRAULICS

FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

EMARNAN PONGPAIROJ

LAST REVISION 08-13-12

DATE PLOTTED => 15-AUG-2012

TIME PLOTTED => 11:11

ATTACHMENT G

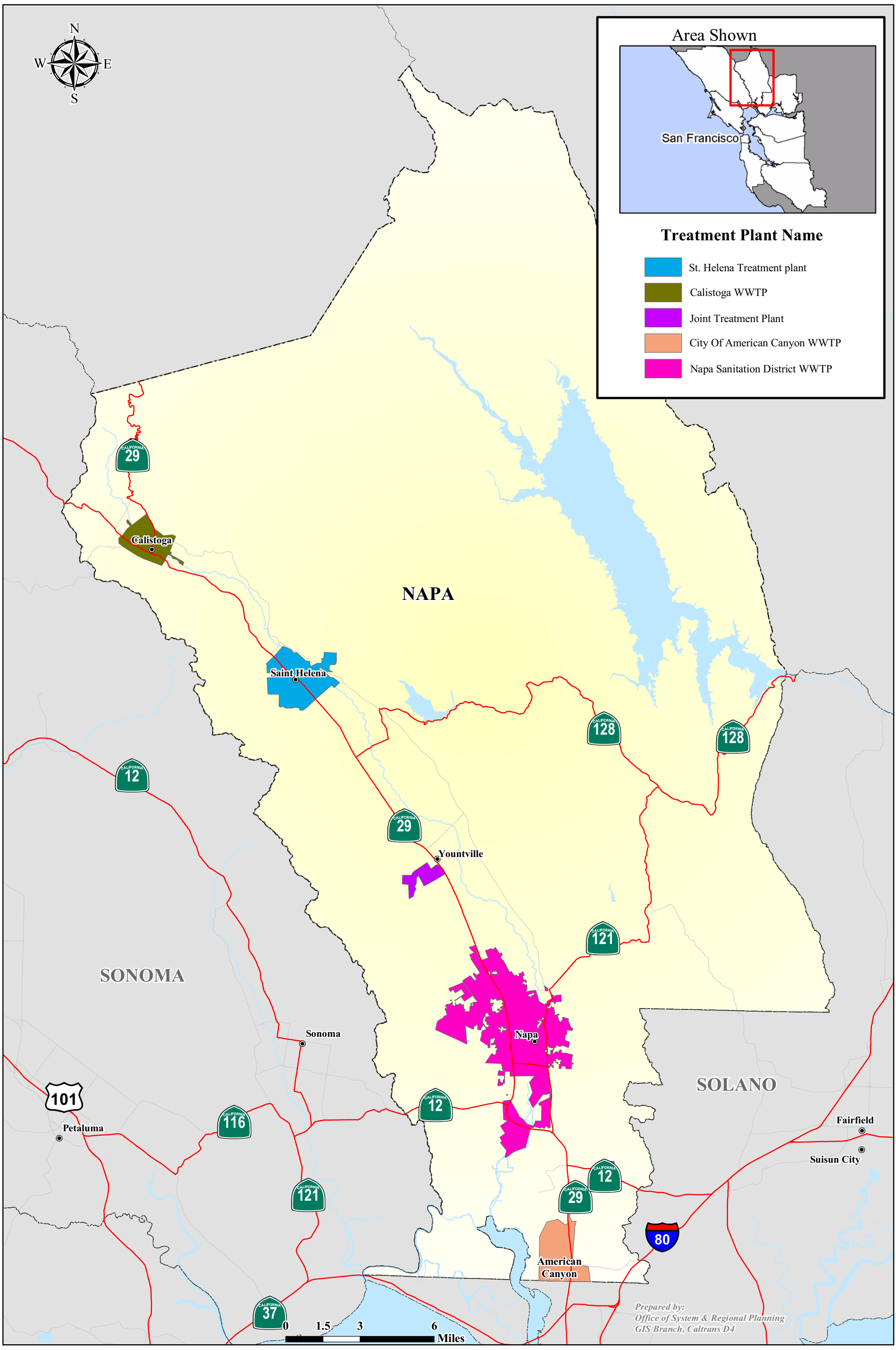
LIST OF PUBLICLY OWNED TREATMENT WORKS (POTW) FACILITY

	City Discharger	Treatment Plant Name	WDR Discharger Name	Discharger Contact Name	Contact Phone No.	Contact Email	Mail Address	Ct Contact for Groundwater & De-Watering Discharges	Service Area of the POTW
22	St. Helena	St. Helena Treatment Plant	City of St. Helena	Michael Sample	707-967-2878	michaels@ci.st_helena.ca.us		Per Michael Sample: "plant is over-maxed, 12 years past due for upgrade, city usually has said 'no' to past requests, final decision would have to be made by Jonathon Goodman @ City Hall @ 707-967-2792…"	The city limits of St. Helena - Caltrans has "Main St." which is Hwy 29/128.
23	Calistoga	Calistoga WWTP	Calistoga WWTP	Stanley Townsend	707-942-2828	stownsend@ci.calistoga.ca.us	Stanley Townsend, Director of Public Works, City of Calistoga, Dept. of Public Works, 1232 Washington St., Calistoga, CA 94515	Contact Stanley Townsend @ 707-942-2828 - they have just expanded their plant for additional flow and would consider accepting water - no permit procedure - would probably have to through City Council	The city of Calistoga and surrounding area of Hwy's 29 & 128
24	Yountville Town	Joint Treatment Plant Yountville Town	Joint Treatment Plant Yountville Town	Don Moore	707-944-2988	stevenr@yville.com	6550 Yount St., Yountville Town, CA 94599	Per Don Moore: "haven't encountered this before - would depend on quantities - can't during wintertime - would need more info"	Town of Yountville (Eastside of Hwy 29) and Vet Home (Westside of Hwy 29)
25	Yountville	The California Veterans Home	The California Veterans Home	Andy Ellicock	707-944-4803	andrew.ellicock@cdva.ca.gov	Andy Ellicock, Chief of Plant Operations, P.O. Box 1200, Yountville, CA 94599	Veteran's Home sends their WW to Yountville - see Line # A -24	Westside of Hwy 29 in Yountville
93	City of American Canyon WWTP	City of American Canyon WWTP	City of American Canyon WWTP	Tom Foley	707-333-9173	tfoley2@hotmail.com		Contact Tom Foley @ 707-333-9173 "no web site, case-by case scenario, would need City Council final approval" (small town)	Just the city of American Canyon
94	Napa Sanitation District WWTP	Napa Sanitation District WWTP	Napa Sanitation District WWTP	Shar Maglione	707-258-6020x601	Smaglion@co.napa.ca.us	804 First St. Napa, CA 94559	Best Contact : Pollution Prevention Coord. Bill Gaffney @ 707-258-6000 X 502. Website: www.napasanitationdistrict.com [Pol. Prevention, commercial.] Has done groundwater remediation in the past for Caltrans - [hwy 29/Trancas]	The City of Napa (Hwy's 29, 221 & 121) North to the town of Salvador, (and Silverado Country Club), and south to Fagan Creek (includes Napa Co. Airport.) [For GIS call Dan Schwartz @ 707-259-8645 at LAFCO (Local Agency Formation Commission.]

ATTACHMENT H

POTW SERVICE AREA MAP

Napa County - POTW Service Areas



ATTACHMENT I

401 CERTIFICATION

tc

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

10 December 2012

Kelly Hirschberg
California Departmentof Transportation
111 Grand Avenue, 10th Floor, Room 10-549
Oakland, CA 94612

CERTIFIED MAIL
7011 2970 0003 8939 7462

CLEAN WATER ACT §401 TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION; CALIFORNIA DEPARTMENT OF TRANSPORTATION, CAPELL CREEK BRIDGE REPLACEMENT PROJECT (WDID#5A28CR00016), NAPA COUNTY

This Order responds to your 16 July 2012 application submittal for the Water Quality Certification of a bridge replacement project permanently impacting less than 0.01 acre/4 linear feet and temporarily impacting 0.217 acre/483 linear feet of waters of the United States.

This Order serves as certification of the United States Army Corps of Engineers' Nationwide Permit #14 (SPK# 2010-112072) 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 § 3833 of the California Code of Regulations, unless otherwise stated in writing by the certifying agency.

4. This Certification is valid for the duration of the described project. This Certification is no longer valid if the project (as currently described) is modified, or coverage under § 404 of the Clean Water Act has expired.

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 California Department of Transportation shall satisfy the following:

1. The California Department of Transportation shall notify the Central Valley Water Board in writing 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 California Department of Transportation 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 California Department of Transportation shall perform surface water sampling: 1) when performing any in-water work; 2) in the event that project activities result in any materials reaching surface waters; or 3) 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	—
pH	Standard Units	Grab(1)	Every 4 hours during in-water work	(2)

(1) Grab sample 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, 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.

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 California Department of Transportation 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.

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, settleable matter, and pH 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 turbidty 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.

   C. Activities shall not cause pH to be depressed below 6.5 nor raised above 8.5 in surface water.

6. The California Department of Transportation shall notify the Central Valley Water Board immediately if the above criteria for turbidity, settleable matter, pH, or other water quality objectives are exceeded.

7. 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 California Department of Transportation shall notify the Central Valley Water Board immediately of any spill of petroleum products or other organic or earthen materials.

8. Activities shall not cause degradation of waters of the State.

9. The California Department of Transportation shall comply with all California Department of Fish and Game requirements, including but not limited to those requirements described in Lake or Streambed Alteration Agreement No. 1600-2012-0192-R3.

10. The California Department of Transportation shall comply with all United States Fish and Wildlife Service requirements, including but not limited to those requirements described in Biological Opinion 81420-2010-F-0845-2, provided to California Department of Transportation, dated 20 May 2012.

11. 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).

12. All temporarily affected areas will be restored to pre-construction contours and conditions upon completion of construction activities.

13. All areas disturbed by project activities shall be protected from washout or erosion.

14. In-stream work will occur during periods of low flow and no precipitation.

15. 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.

16. Hydroseeding shall be performed with California native seed mix.

17. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If 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 or 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 California Department of Transportation 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.

18. The California Department of Transportation 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.

19. If temporary surface water diversions and/or dewatering are anticipated, the California Department of Transportation shall develop and maintain on-site a Surface Water Diversion and/or Dewatering Plan(s). The Plan(s) shall include the proposed method and duration of diversion activities. The Surface Water Diversion and/or Dewatering Plan(s) must be consistent with this Certification.

20. When work in a flowing stream is unavoidable and any dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream, to maintain beneficial uses of waters of the State below the dam. Construction, dewatering, and removal of temporary cofferdams shall not violate Technical Certification Condition 5 of this Certification.

21. Any temporary dam or other artificial obstruction constructed shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation. Stream flow shall be temporarily diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.

22. Raw cement, concrete (or washing thereof), asphalt, drilling fluids, lubricants, paints, coating material, oil, petroleum products, or any other substances which could be hazardous to fish and wildlife resulting from or disturbed by project-related activities, shall be prevented from contaminating the soil and/or entering waters of the United States.

23. Concrete must be completely cured before coming into contact with waters of the United States. Surface water that contacts wet concrete must be pumped out and disposed of at an appropriate off-site commercial facility which is authorized to accept concrete wastes.

24. During replacement of the bridge, a method of containment must be used below the bridge to prevent debris from falling into the water body.

25. During construction, 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.

26. All materials resulting from the project shall be removed from the site and disposed of properly.

27. If unanticipated discharges to the waters of waters of the United States and/or soil occur, the California Department of Transportation shall notify the Central Valley Water Board Contact indicated in this Certification in writing within 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.

28. The California Department of Transportation shall obtain coverage under the 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.

29. 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.

30. The California Department of Transportation shall implement each of the mitigation measures specified in the approved Mitigated Negative Declaration for the project, as they pertain to biology, hydrology and water quality impacts as required by § 21081.6 of the Public Resource Code and CEQA Guidelines, § 15097 of the California Code of Regulations.

31. 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 California Department of Transportation 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 California Department of Transportation 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 California Department of Transportation 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.

32. The California Department of Transportation 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
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-8114
tcleak@waterboards.ca.gov
(916) 464-4684

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

The California Department of Transportation is the Lead Agency responsible for compliance with the California Environmental Quality Act for the Capell Creek Bridge Replacement Project pursuant to § 21000 et seq. of the Public Resources Code. The California Department of Transportation certified the Mitigated Negative Declaration on 14 December 2011 (State Clearinghouse Number 2010112072).

The Central Valley Water Board is a responsible agency for the project. The Central Valley Water Board has determined that the Mitigated Negative Declaration is in accordance with the requirements of the California Environmental Quality Act and is valid pursuant § 21167.3(b) of the Public Resources Code.

The Central Valley Water Board has reviewed and evaluated the potentially significant impacts to water quality identified in the Mitigated Negative Declaration. The mitigation measures discussed in the Mitigated Negative Declaration to minimize project impacts are required by this Certification.

With regard to the remaining impacts identified in the Mitigated Negative Declaration, the corresponding mitigation measures proposed are within the responsibility and jurisdiction of other public agencies.

WATER QUALITY CERTIFICATION:

I hereby issue an Order certifying that any discharge from the California Department of Transportation, Capell Creek Bridge Replacement Project (WDID#5A28CR00016) 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.

for Pamela C. Creedon
Executive Officer

Enclosure: Project Information

Attachment: Figure 1 – Project Location Map

cc: Distribution List, page 13

PROJECT INFORMATION SHEET

Application Date: 16 July 2012

Applicant: Kelly Hirschberg
California Department of Transportation
111 Grand Avenue, 10th Floor, Room 10-549
Oakland, CA 94612

Applicant Representatives: Cyrus Vafai
California Department of Transportation
111 Grand Avenue, 14th Floor, Mail Stop 8F
Oakland, CA 94612

Project Name: Capell Creek Bridge Replacement Project

Application Number: WDID#5A28CR00016

Type of Project: Bridge replacement

Timeframe of Project Implementation: 1 June 2013 through 15 October 2015

Project Location: Section 21, Township 7 North, Range 3 West, MDB&M.
Latitude: 38°25'49"N and Longitude: 122°12'30" W

County: Napa

Receiving Water(s) (hydrologic unit): Capell Creek, Sacramento Hydrologic Basin, Putah Creek Hydrologic Unit #512.22, Capell Creek HAS

Water Body Type: Riparian

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: Capell Creek is the receiving water for the Capell Creek Bridge Replacement Project. Capell Creek is a tributary to Lake Beryessa which is listed on the 303(d) list for mercury. This project does not impact an already impaired water body. The most recent list of approved water quality limited segments can be found at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml.

Project Description: The 2.32-acre Capell Creek Bridge Replacement Project consists of the demolition and replacement of an existing two span bridge approximately 33-feet wide by 47-feet long with a new 42-feet wide by 64-feet long single span bridge. The project is located on State Route 121, 1.4 miles south of Capell Valley Road in Napa County.

The project will replace the existing bridge on a similar alignment, widen the approaching roadways from approximately 11.5-feet to 20-feet, require cut and fill for slope stabilization, establish temporary access roads and a staging area, improve drainage, and conduct vegetation and biological mitigation.

This project will take place in two phases over two years. The first phase will demolish the existing bridge on the east side, and construct half of the new bridge. The second phase will demolish the existing bridge on the west side, and construct the remaining portion of the new bridge.

A wood platform will be placed under the bridge during demolition to catch construction debris. Approaching roadways will be aligned and widened at both ends to conform to the new bridge. The new abutments will be located approximately 8 feet behind the existing abutments. The abutments will be built with reinforced concrete. Wing walls approximately 12-feet long and 14-feet high. The new abutments will not be located below the ordinary high water mark. The drainage improvements will consist of four, new 4-feet tall, by 6-feet wide, by 6-feet long concrete drainage inlets or manhole boxes connected to four new culverts approximately 12 to 18-inches in diameter. The culverts will be made of steel, polyethylene plastic and concrete.

Temporary cofferdams and pipes will be used to dewater the project area. A cutoff trench and pipes will be used to divert water around the project area and to reduce seepage. Two temporary, approximately 20-feet wide by 189-feet long, access roads will be constructed. All temporarily impacted areas will be revegetated. Construction equipment will enter the waterway.

The project will permanently impact less than 0.01 acre/4 linear feet and temporarily impact 0.217 acre/483 linear feet of waters of the United States.

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

Proposed Mitigation to Address Concerns: The California Department of Transportation 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 California Department of Transportation will conduct turbidity, settleable matter, and pH testing during in-water work, stopping work if Basin Plan criteria are exceeded or are observed.

Excavation/Fill Area: Approximately 270 cubic yards of rock and gravel will be placed into less than 0.01 acre/4 linear feet of waters of the United States.

Dredge Volume: None

United States Army Corps of Engineers File Number: SPK# 2010-112072

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

California Department of Fish and Game Lake or Streambed Alteration Agreement: 1600-2012-0192-R3

Possible Listed Species: Valley elderberry longhorn beetle, California Red legged frog, Western pond turtle, Foothill yellow-legged frog.

Status of CEQA Compliance: The California Department of Transportation approved the Mitigated Negative Declaration on 14 December 2011. The California Department of Transportation filed a Notice of Determination with the State Clearinghouse on 29 December 2011 (State Clearinghouse Number 2010112072).

The Central Valley Water Board filed a Notice of Determination with the State Clearinghouse as a responsible agency within 5 days of the date of this Certification.

Compensatory Mitigation: The Central Valley Water Board is not requesting compensatory mitigation for the Capell Creek Bridge Replacement Project.

Application Fee Provided: Total fees of $1,817.00 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

Paula C. Gill
United States Army Corps of Engineers
Sacramento District Office
Regulatory Division
1325 J Street, Suite 1350
Sacramento, CA 95814-2922

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

Melessa Escaron
Department of Fish and Game
P.O. Box 47
Yountville, CA 94599

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

Cyrus Vafai
California Department of Transportation
111 Grand Avenue, 14th Floor, Mail Stop 8F
Oakland, CA 94612

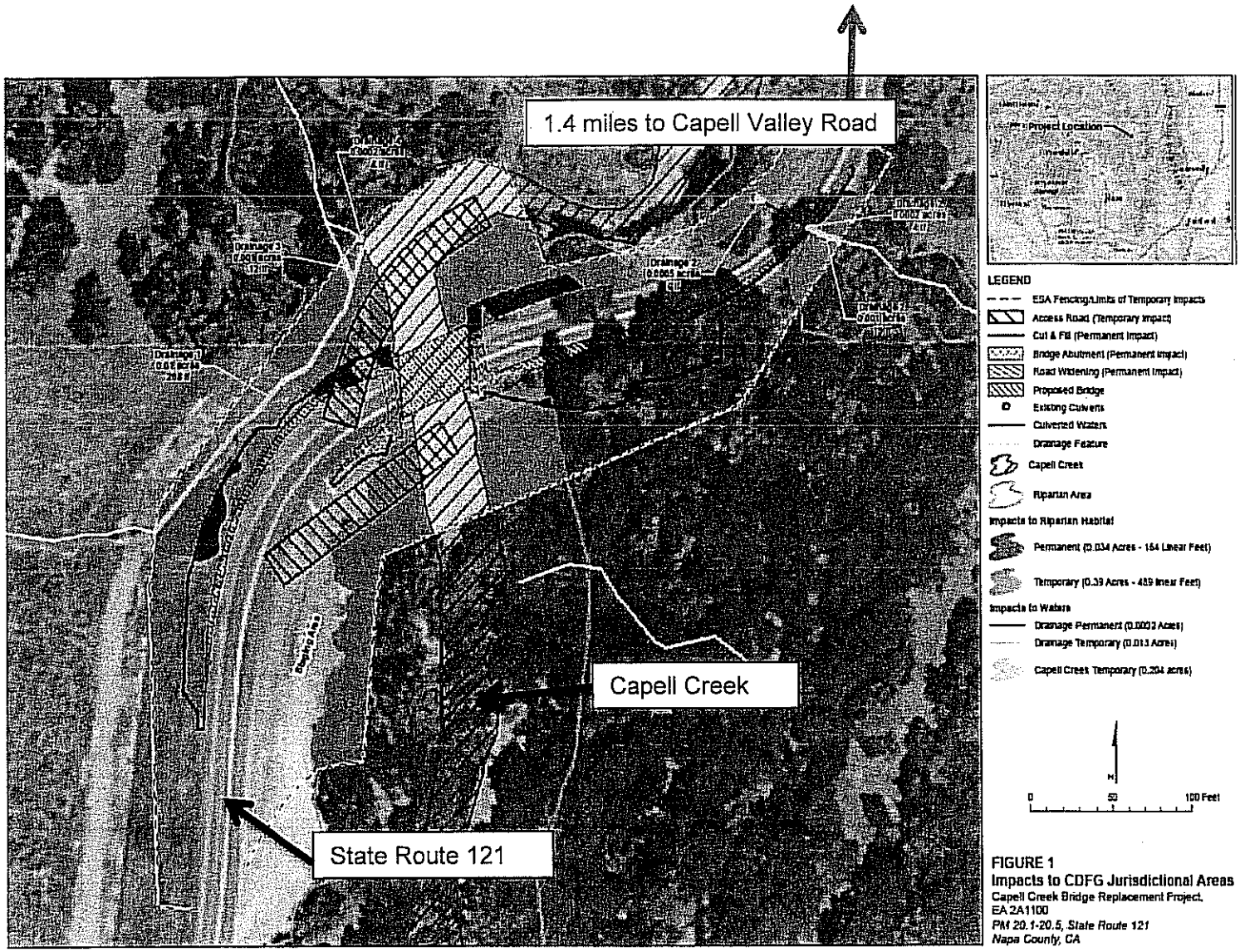


FIGURE 1
Impacts to CDFG Jurisdictional Areas
Capell Creek Bridge Replacement Project,
EA 2A1100
PM 20.1-20.5, State Route 121
Napa County, CA

Figure 1 – Project Location Map

ATTACHMENT J

1602 PERMIT

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

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

November 21, 2012

Mr. Jeffrey G. Jensen
California Department of Transportation
111 Grand Avenue
Oakland, CA

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2012-0192-R3
Capell Creek

Dear Mr. Jensen:

Enclosed is the final Streambed Alteration Agreement ("Agreement") for the Capell Creek Bridge Replacement Project ("Project"). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act ("CEQA"). In this case, the Department, acting as a responsible agency, filed a notice of determination ("NOD") on November 21, 2012 based on information contained in the Mitigated Negative Declaration the lead agency prepared for the Project.

Under CEQA, filing a NOD starts a 30-day period within which a party may challenge the filing agency's approval of the project. You may begin your project before the 30-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 Melissa Escaron, Staff Environmental Scientist at (707)339-0334 or mescaron@dfg.ca.gov.

Sincerely,

Craig Weightman
Acting Environmental Program Manager
Bay Delta Region

cc: Lieutenant Jones
Warden Morton
Melissa Escaron

CALIFORNIA DEPARTMENT OF FISH AND GAME
BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5520
WWW.DFG.CA.GOV

STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2012-0192-R3
Capell Creek

CALIFORNIA DEPARTMENT OF TRANSPORTATION
CAPELL CREEK BRIDGE REPLACEMENT PROJECT

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

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on May 12, 2012 that Permittee intends to complete the project described herein.

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

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

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

PROJECT LOCATION

The project is located where State Route 121 crosses Capell Creek, between post mile (PM) 20.2 and PM 20.4, in rural Napa County, State of California;

PROJECT DESCRIPTION

The proposed single span bridge will be built as a replacement of the existing bridge on a tangent alignment, spanning approximately 63 feet (ft) across Capell Creek with foundations on opposing banks. The bridge will provide two standard 12-ft travel lanes and 8-ft shoulders.

- Demolition of existing bridge in two phases;
- Building a single-span bridge as a replacement for the existing bridge
- Widening approaching roadways to conform to the new bridge;
- Cut and fill for slope stabilization in areas where the roadway is widened;
- Establishing temporary access roads and a staging area;
- Improving drainage;
- Conducting revegetation
- Establishing equipment and construction site best management practices (BMPs).

A temporary staging area is needed in order to allow for equipment storage, equipment maintenance, and construction material storage during construction. The temporary staging area will be located on the compacted dirt pullout area on the southeast side of the existing bridge. No site preparation of the area will be needed.

Two unpaved temporary construction access roads will be constructed to allow access to the existing bridge and proposed bridge locations. Both access roads will be approximately 20 ft in width and will begin at the pavement on the west side of the bridge and terminate in the streambed of Capell Creek. The access road to the north side of the existing bridge will be approximately 189 ft long and the access road to the south side will be approximately 120 ft long. The southbound access road will be constructed prior to demolition and construction of the southbound side of bridge and the northbound access roads will be constructed prior to demolition and construction of the northbound side of the bridge. The temporary access roads will be built no earlier than June 1 each year, and removed at the same time as the temporary water diversion system, by October 15. Filter fabric will line the access roads and will be removed after each construction phase. To construct the temporary 20-ft-wide access roads, the contractor will lay down protection fabric and then install on top of it either a 12-inch-tall timber mat system or a dirt pad and between 6 inches and 4 feet of rock (one to two inches in size). Once equipment is no longer needed, the contractor will remove the access roads and materials. The contractor will only access the dry creek channel through the aforementioned temporary construction access roads. The contractor will use one access road per construction phase. Following construction, the temporary access roads will be re-contoured to preconstruction conditions to the maximum extent practicable.

<u>Temporary Creek Diversion</u>

A temporary creek diversion system will be utilized during construction to ensure that there is no water within the creek bed during in-stream work, which is proposed from June 1 to October 15. The temporary creek diversion system will consist of a diversion

pipe with temporary cofferdams located at the upstream and downstream ends. The cofferdams will be constructed across the existing creek channel with gravel bags wrapped in impermeable plastic sheeting. A cut-off trench will be provided at both the upstream and downstream cofferdams to reduce seepage into the working area. The temporary dewatering system will be removed at the end of each construction season by October 15. Depending on the water flow at the time of construction, dewatering of foundations in the streambed may also be required.

The Project will be constructed according to the following:

• Phase I (Year 1): The contractor will demolish the east side of the existing bridge and construct half of the new bridge.

• Phase II (Year 2): The contractor will shift one-way traffic to the new bridge portion on the east. The west side of the existing bridge will be demolished and the remaining portion of the new bridge will be built. A final closure will connect the two new half bridges and two-way traffic will be re-opened.

Bridge Demolition
Access to the creek bed for demolition will be via the temporary construction access roads. A tall timber mat platform will be placed beneath the existing bridge to capture any construction debris from the demolition work. The platform will have the dimensions of the existing bridge (33 feet x 46 feet) and will be 12 inches tall. The remaining portions of the bridge abutments and the abutment footing will be removed to 3 feet below existing grade. Caltrans' contractors will dispose of demolition debris at a certified landfill.

Bridge Replacement
The proposed single span bridge (44 feet x 63 feet) will be built in-place of the existing bridge (33 feet x 46 feet) on a tangent alignment and will span approximately 63 feet across the Capell Creek. When completed the proposed bridge will provide two standard 12-foot travel lanes and 8-foot shoulders. Precast/prestressed (PC/PS) concrete slabs will be used to replace the old bridge. The PC/PS concrete slabs will be constructed off-site and transported to the site. The foundations for the two abutments will be built first. These will be located approximately 8 feet behind the existing abutments and will be supported by spread footing. Abutments will be built with reinforced concrete, with wingwalls on either side being approximately 12 feet long and 14 feet high. Cranes will be used to set 11 PC/PS concrete slabs onto the seats at both abutments.

There will be four new drainage inlets, which consist of reinforced concrete boxes (4 ft wide, 4 ft long, and the approximate depth of 5 ft), alternative pipe culverts and one downdrain that collects roadway runoff. The inlet locations and pipe sizes will be designed in accordance with Caltrans highway design standards. Proposed culverts sizes are 18 inches and 12 inches in diameter. Several measures will be put in place to

prevent erosion of the embankments (hot mixed asphalt/concrete dikes and rock slope protection (RSP). The new downdrain will have approximately 6 feet by 7 feet of RSP at the outlet on the northeast side of the bridge.

Site Cleanup and Restoration
All construction-related materials including the WEF and ESA fencing will be removed after construction activities are complete. The temporarily disturbed areas will be revegetated with appropriate native species, as necessary after each construction phase, to the maximum extent practicable. Permanent erosion control, including composting, netting, hydroseeding, and hydromulching will be applied to all affected Project areas to minimize erosion after construction.

Proposed Equipment
Cranes will be used for multiple parts of the construction from delivery of material to setting precast slabs. Excavators will be used for multiple parts of the construction including delivery of materials, setting precast slabs, and excavation at the abutments. Concrete mixer trucks and pump trucks will be used to pump concrete for all cast-in-place structures, including spread footings. Other equipment may include manlifts, pavers,hoe rams, jackhammers, and compaction equipment.

Project Schedule
Construction of the bridge will span over 2 years and is scheduled to start June 2013 and end December 2015.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

- California red-legged frogs and habitat
- Foothill yellow-legged frogs and habitat
- Western pond turtles and habitat
- Native trees
- Aquatic invertebrates
- Migratory bird nesting

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

- Tree removal
- Permanent and temporary loss of natural bed and bank
- Temporary loss of riparian habitat
- Disruption of nesting
- California red-legged frog, foothill yellow-legged frog, and Western pond turtle injury or mortality
- Temporary loss of California red-legged frog, foothill yellow-legged frog, and Western pond turtle habitat

- Water quality degradation
- Short-term release of contaminants

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to DFG personnel, or personnel from another state, federal, or local agency upon request.

1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors. .

1.3 Notification of Conflicting Provisions. Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, DFG shall contact Permittee to resolve any conflict.

1.4 Project Site Entry. Permittee agrees that DFG personnel may, with notification of the Resident Engineer, enter the project site at any time to verify compliance with the Agreement.

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 To minimize adverse impacts to fish and wildlife all work described in the project location and description shall be confined to the period of June 1 to October 15. Revegetation work is not confined to this time period.

2.2 At least 30-days prior to commencing project activities covered by this Agreement, the Permittee shall submit to DFG, for review and approval, the qualifications for a number of biologists (Qualified Biologist) that shall oversee the implementation of the conditions in this Agreement. At a minimum, the Qualified Biologists shall have a combination of academic training and professional experience in

biological sciences and related resource management activities. The Qualified Biologists shall communicate to the Resident Engineer when any activity is not in compliance with this Agreement and the Resident Engineer shall immediately stop the activity that is not in compliance with this Agreement.

2.3 To protect nesting birds, no project activities shall occur from February 15 through August 31 unless nesting bird surveys have been completed by a Qualified Biologist. To prevent nest abandonment, a Qualified Biologist shall survey within the limits of the proposed Project for nesting birds. If nests are found within the Project site then a Qualified Biologist shall establish a 50-foot buffer radius for nests of non-raptor bird species or a 300-foot buffer radius for raptor nests. A Qualified Biologist shall monitor the nesting birds and shall increase the buffer, through the Resident Engineer, if it is determined the birds are showing signs of unusual or distressed behavior that may be the result of Project activities. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. Surveys shall be conducted during periods of peak activity (early morning, dusk) and shall be of sufficient duration to observe movement patterns. Identified nests shall be reported to DFG. The buffer area shall be fenced off from work activities and avoided until the young have fledged, as determined by a Qualified Biologist. During work, should birds indicate unusual or distressed behavior that could be indicative of future nest abandonment, a Qualified Biologist shall stop work immediately, through the Resident Engineer, and consult DFG on how to proceed.

2.4 A Qualified Biologist shall conduct Pre-construction surveys immediately prior to the initiation of any ground disturbing activities within or adjacent to suitable California red-legged frog (CRLF) and foothill yellow-legged frog habitat. These surveys will comprise walking transects while conducting visual encounter surveys within areas that will be subject to staging, vegetation clearing, grubbing, grading, cut and fill, or other ground disturbing activities. All mammal burrows shall be inspected for signs of usage.

2.5 CRLF wildlife exclusion fencing (WEF) shall be placed at the edge of the active construction areas to restrict frog access into the work area. The fencing shall consist of taut silt fabric, 24 inches in height, with the bottom buried 3 inches below grade. WEF shall be maintained on a daily basis.

2.6 A Qualified Biologist shall be present onsite to monitor for CRLF during construction activities located within suitable CRLF habitat. Through communication with the Resident Engineer, a Qualified Biologist may stop work if deemed necessary for any reason to protect CRLF and will advise the Resident Engineer on how to proceed accordingly. A Qualified Biologist will conduct clearance surveys at the beginning of each day within or adjacent to suitable CRLF habitat and regularly throughout the workday when construction is occurring within or adjacent to suitable CRLF habitat. If CRLF are encountered in the action area, work within 50 feet of the animal will cease immediately and the Resident Engineer and a Qualified Biologist will be notified. Work will not resume until the animal leaves the work site voluntarily or is

removed by a USFWS- and DFG-approved Qualified Biologist. At no time shall work occur within 50 feet of a CRLF without a Qualified Biologist present.

2.7 To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1-foot deep will be covered with plywood or similar materials at the end of each workday or the holes or trenches will contain one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals.

2.8 A Qualified Biologist will survey the work site no more than 48 hours before the start of work activities for signs of western pond turtles, western pond turtle nesting activity (recently excavated nests, nest plugs) or nest depredation (partially to fully excavated nest chambers, nest plugs, scattered egg shell remains, egg shell fragments). Pre-construction surveys to detect western pond turtles will focus on potentially suitable aerial and aquatic basking habitat (logs, branches, rootwads, riprap), and the shoreline and adjacent warm, shallow waters, where pond turtles may be present below the water surface beneath algal mats or other surface vegetation. Preconstruction surveys to detect western pond turtles nesting activity will be concentrated within approximately 1,300 feet of suitable aquatic habitat and will focus on areas along south- or west- facing slopes with bare, hard-packed clay or silt soils or sparse vegetation of short grasses or forbs. If western pond turtles or their nesting sites are found, the biologist will contact DFG to determine whether relocation and/or exclusion buffers are appropriate. If DFG approves of moving the animal, the Qualified Biologist shall be allowed sufficient time to move the western pond turtle from the work site before work activities begin.

2.9 The Resident Engineer and a Qualified Biologist shall be onsite during dewatering and aquatic species relocation activities. Capture and relocation shall be conducted in a manner that minimizes stress and injury to captured animals. Capture methods may include dip nets. All nets shall be made of a soft braded nylon material that is non abrasive. Electrofishing shall be used as a last resort. A relocation site shall be identified and the most direct transportation route shall be determined prior to any capture. The number of animals captured and moved at any one time shall be limited to the number that can be relocated without stress or injury. Prior to handling animals, all hands and equipment shall be wetted down with stream water and shall be free of any materials including hand sanitizers, sunscreen or insect repellent. No animals shall be handled with dry hands or dry equipment. Exclusionary netting or other barriers shall be used to prevent relocated animals from re-entering the dewatered work area. An aeration system shall be used in any live well or other holding facility. Dissolved oxygen levels shall be maintained above 6 parts per million. Water from the local collection site shall be used in live wells or other holding facilities during loading and transport. At no time shall chlorinated tap water be used. Water temperatures within any live well or other holding facility shall be kept at or below water temperature at the collection site. No non-native animals captured shall be returned to the stream or released alive.

2.10 Plastic mono-filament netting, erosion control matting or similar material will not be used at the project site. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

2.11 To the maximum extent practicable, night-time construction will be minimized.

2.12 If any wildlife is encountered during the course of project activities, said wildlife shall be allowed to leave the area unharmed and on their own volition.

2.13 Permittee shall comply with all applicable state and federal laws, including the California and Federal Endangered Species Act. This Agreement does not authorize the take of any state or federally endangered listed species. Liability for any take or incidental take of such species remains the responsibility of the Permittee for the duration of the project. Any unauthorized take of listed species may result in prosecution and nullification of the Agreement.

2.14 The perimeter of the work site shall be adequately fenced using high visibility Environmentally Sensitive Area (ESA) fencing to prevent damage to adjacent riparian habitat. No construction activities, within the riparian zone, will be allowed within the habitat protected by the ESA fencing (this does not preclude activities from occurring on the bridge or deck work above the ESA area). ESA fencing shall be maintained daily.

2.15 Permittee shall conduct work defined in the above project description, and within the project area, during periods of dry weather. The project area is defined as the bed, bank, channel, and associated riparian habitat. The Permittee shall monitor forecasted precipitation. When ¼ inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No activity of the project may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-two hour weather forecasts from National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less than a 30% forecast for precipitation for the following 24-hour period.

2.16 Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waterways. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control installations shall be monitored for effectiveness and shall be repaired or replaced as recommended by a Qualified Biologist to the Resident Engineer. As needed to prevent sediment transport, Permittee shall deploy soil stabilizer such as hydroseeding, netting, erosion control mats, mulch, fiber rolls, silt fences, check dams, and flow velocity dissipation devices. Permittee shall stabilize and equip construction site entrances and exits with tire washing capability. Materials

containing monofilament or plastic shall not be used. Erosion and sediment control measures shall be installed prior to unseasonable rain storms.

2.17 To the extent practicable, Permittee shall leave the root masses of removed trees and shrubs in place. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations.

2.18 To the extent practicable Permittee shall not remove oak trees. Oak trees within the project site that can be avoided shall be fenced along their drip line with high visibility ESA fencing.

2.19 If the gradient of the streambed is altered during project operations, Permittee shall return its contours as close as possible to pre-project conditions. Pre-project condition shall be defined by engineered plans dated prior to the commencement of the project.

2.20 Concrete shall be excluded from surface water for a period of 30-days after it is poured/sprayed. During that time the concrete shall be kept moist and runoff from the concrete shall not be allowed to enter any water body. Commercial sealants may be applied to the concrete surface where difficulty in excluding flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is cured. If groundwater comes into contact with fresh concrete, it shall be prevented from flowing towards surface water.

2.21 Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the creek channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.

2.22 Refueling of mobile construction equipment and vehicles shall not occur within 50 feet of any water body, or anywhere that spilled fuel could drain to a water body. Refueling of stationary equipment requiring breakdown and setup to move will remain in place. All equipment shall be refueled with appropriate drip pans, absorbent pads, and water quality Best Management Practices. Equipment and vehicles operating in the project area shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

2.23 Permittee shall plan appropriately to ensure all work within DFG jurisdiction be completed by October 15 of each year. DFG will not grant work extensions beyond October 15 of each year.

3. Compensatory Measures

3.1 Permittee shall submit an Onsite Restoration Plan for temporary impacts at least 3 months prior to the start of construction. The Onsite Restoration plan shall include a plant palette of native species to be used, success criteria, a monitoring and reporting schedule, and corrective actions to be taken if mitigation measures do not meet the approved success criteria. All plantings shall be derived from locally available genotypes, if available at the time of plant installation. The Permittee shall monitor the survival and vigor of onsite plantings for a period of 5 years to ensure attainment of 80% survivorship. Permittee shall control invasive species as needed to ensure attainment of 80% survivorship after 5 years.

3.2 At the issuance of this Agreement DFG has not approved an offsite mitigation location. Prior to ground disturbance, Permittee shall submit, for review and written approval, a detailed Offsite Habitat Mitigation Plan for plant and tree mitigation that cannot be accommodated onsite. The Habitat Mitigation Plan shall mitigate .034 acres of permanent riparian habitat impacts at a minimum of a 3:1 acreage ratio. Mitigation shall be based on all trees regardless of diameter at breast height. The Habitat Mitigation Plan shall include proposed mitigation locations, a plant palette of native species to be used, success criteria, a monitoring and reporting schedule, and corrective actions to be taken if mitigation measures do not meet the approved success criteria. The Permittee shall monitor the survival and vigor of offsite plantings for a period of 5 years to ensure attainment of 80% survivorship. Offsite mitigation may include a combination of habitat restoration, creation, enhancement, and/or preservation of habitat that will support a similar riparian plant community found at the project site, including but not limited to the following species: California black oak, valley oak, coast live oak, cottonwood, native grasses and forbes. All plantings shall be derived from locally available genotypes if available at the time of plant installation.

CONTACT INFORMATION

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

To Permittee:

California Department of Transportation
Jeffrey G. Jensen
111 Grand Ave.
(510)622-8729
Jeffrey_jensen@dot.ca.gov

To DFG:

Department of Fish and Game

Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
Attn: Lake and Streambed Alteration Program – Melissa Escaron
Notification #1600-2012-0192-R3
mescaron@dfg.ca.gov

LIABILITY

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

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

SUSPENSION AND REVOCATION

DFG may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

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

ENFORCEMENT

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

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

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and

subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

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

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

AMENDMENT

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

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

TRANSFER AND ASSIGNMENT

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

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

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's

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

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

EFFECTIVE DATE

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

TERM

This Agreement shall expire on December 31, 2016, 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.

AUTHORITY

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

AUTHORIZATION

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

CONCURRENCE

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

FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION

Jeffrey G. Jensen
Office Chief Biological Sciences and Permits

Date 10/14/2012

FOR DEPARTMENT OF FISH AND GAME

Craig Weightman
Acting Environmental Program Manager

Date 11/21/12

Prepared by: Melissa Escaron
Staff Environmental Scientist

Draft Sent: September 5, 2012
Revision Sent: November 8, 2012
Revision Sent: November 13, 2012

FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Notification No.
6/12/12	$ 4482.75	$		1600-2012-0192-3

State of California
Check # 082-991814

M. Escaron
LT. Jones

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

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

Fish & Game
JUN 12 2012
Yountville

1. APPLICANT PROPOSING PROJECT

Name	Jeffrey G. Jensen		
Business/Agency	California Department of Transportation, District 4		
Street Address	111 Grand Avenue		
City, State, Zip	Oakland, CA 94623		
Telephone	(510) 622-8729	Fax	(510) 286-6374
Email	jeffrey_jensen@dot.ca.gov		

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

Name	James S. Coniglio		
Street Address	California Department of Transportation, District 4		
City, State, Zip	111 Grand Avenue, Oakland, CA 94623		
Telephone	(510) 286-6214	Fax	(510) 286-5600
Email	james_coniglio@dot.ca.gov		

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

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name	Capell Creek Bridge Replacement Project
B. Agreement Term Requested	☑ Regular (*5 years or less*) ☐ Long-term (*greater than 5 years*)

C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (*year*)	Ending (*year*)	Start Date (*month/day*)	End Date (*month/day*)	
2013	2015	06/01	10/15	176.00

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

5. AGREEMENT TYPE

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

A.	☑ Standard *(Most construction projects, excluding the categories listed below)*	
B.	☐ Gravel/Sand/Rock Extraction (*Attachment A*)	*Mine I.D. Number:* _____
C.	☐ Timber Harvesting (*Attachment B*)	THP *Number:* _____
D.	☐ Water Diversion/Extraction/Impoundment (*Attachment C*)	*SWRCB Number:* _____
E.	☐ Routine Maintenance (*Attachment D*)	
F.	☐ DFG Fisheries Restoration Grant Program (FRGP)	*FRGP Contract Number:* _____
G.	☐ Master	
H.	☐ Master Timber Harvesting	

6. FEES

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

	A. Project	B. Project Cost	C. Project Fee
1	Capell Creek Bridge Replacement	$5,000,000.00	$4,482.75
2			
3			
4			
5			
		D. Base Fee *(if applicable)*	
		E. TOTAL FEE ENCLOSED	$4,482.75

7. PRIOR NOTIFICATION OR ORDER

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

☐ Yes (*Provide the information below*) ☑ No

Applicant: _____ Notification Number: _____ Date: _____

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

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

☐ *Continued on additional page(s)*

8. PROJECT LOCATION

A. Address or description of project location.

(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)

The project site is in Napa County on State Route 121 (SR121) at Capell Creek Bridge (Bridge Number 21-009), between post mile (PM) 20.2 and PM 20.4. Please see Attachment 3 for Project Location Map.

Driving Directions:
1. Merge into SR29 South/St. Helena Highway towards Napa
2. Take exit 19 for Redwood Road/Trancas Street
3. Turn left onto Redwood Road/Trancas Street, continue to follow Trancas St.
4. Slight left onto Monticello Road (SR121)

Project starts at PM 20.2.

☐ *Continued on additional page(s)*

B. River, stream, or lake affected by the project.	Capell Creek
C. What water body is the river, stream, or lake tributary to?	Lake Berryessa
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?	☐ Yes ☑ No ☐ Unknown
E. County	Napa County

F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Capell Valley Quad	7N	3W	21	SW

☐ *Continued on additional page(s)*

K. Meridian (*check one*) ☐ Humboldt ☑ Mt. Diablo ☐ San Bernardino

L. Assessor's Parcel Number(s)

0321-7001-3000, 0324-8000-7000, and Caltrans Right of Way

☐ *Continued on additional page(s)*

M. Coordinates (*If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes*)

Latitude/Longitude	*Latitude:* 38° 25' 49" N	*Longitude:* 122° 12' 30" W	
	☑ Degrees/Minutes/Seconds	☐ Decimal Degrees	☐ Decimal Minutes
UTM	*Easting:*	*Northing:*	☐ Zone 10 ☐ Zone 11
Datum used for Latitude/Longitude or UTM	☐ NAD 27	☑ NAD 83 or WGS 84	

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

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

10. PROJECT DESCRIPTION

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

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

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

Please see Attachment 1, Section 10.A for detailed project description.

☑ *Continued on additional page(s)*

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

All clearing and grubbing will be completed by hand using small mechanical tools, or by using backhoes and excavators. Dozers will be used to grade temporary roads for access. A backhoe or excavator with a fitted ram will be utilized for bridge demolition and a front loader will collect the debris to load into trucks for offsite disposal. Please see Attachment 1, Section 10-B for more details.

☑ *Continued on additional page(s)*

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).	☑ Yes ☐ No (*Skip to box 11*)
D. Will the proposed project require work in the wetted portion of the channel?	☑ Yes (*Enclose a plan to divert water around work site*) ☐ No

11. PROJECT IMPACTS

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

Please see Attachment 1, Section 11.A for project impacts to bed, channel and bank.

☑ *Continued on additional page(s)*

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

Vegetation Type	Temporary Impact	Permanent Impact
Please see Attachment 1, Section 11.B for project impacts to vegetation.	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
Please see Attachment 1,Section 11.B		

☑ *Continued on additional page(s)*

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

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

Please see Attachment 1, Section 11.C for project impacts to special status species.

☑ *Continued on additional page(s)*

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

California Natural Diversity Database- California Department of Fish and Game and the Biological Opinion-U.S. Fish and Wildlife Service.

☐ *Continued on additional page(s)*

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

☑ Yes (*Enclose the biological study*) ☐ No

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

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

☐ Yes (*Enclose the hydrological study*) ☑ No

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

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

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

A Storm Water Pollution Prevention Plan (SWPPP) and erosion control best management practices will be developed and implemented to minimize any wind or water-related erosion. They will also be in compliance with the requirements of the Regional Water Quality Control Board. Caltrans BMP Guidance Handbook will provide guidance for design staff to include provisions in construction contracts for measures to protect sensitive areas and prevent and minimize storm water and non-storm water discharges.

Please see Attachment 1, Section 12.A.

☑ *Continued on additional page(s)*

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

Please see Attachment 1, Section 12.B.

☑ *Continued on additional page(s)*

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

Please see Attachment 1, Section 12.C.

☑ *Continued on additional page(s)*

13. PERMITS

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

A. USACE Clean Water Act 404 Nationwide Permit-Application pending ☐ Applied ☐ Issued

B. RWQCB 401 Water Quality Certification-Application pending ☐ Applied ☐ Issued

C. USFWS Biological Opinion (Please see Attachment 4) ☐ Applied ☑ Issued

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

☐ *Continued on additional page(s)*

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?

☑ Yes (*Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each*)

☐ No (*Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared*)

☐ Notice of Exemption	☑ Mitigated Negative Declaration	☑ NEPA document (*type*): CE
☑ Initial Study	☐ Environmental Impact Report	☑ CESA document (*type*): Mitigated Neg Dec
☐ Negative Declaration	☑ Notice of Determination *(Enclose)*	☑ ESA document (*type*): BA
☐ THP/ NTMP	☐ Mitigation, Monitoring, Reporting Plan	

B. State Clearinghouse Number (*if applicable*)	2010112072		
C. Has a CEQA lead agency been determined?	☑ Yes (*Complete boxes D, E, and F*)	☐ No (*Skip to box 14.G*)	
D. CEQA Lead Agency	Caltrans		
E. Contact Person	Yolanda Rivas	F. Telephone Number	(510) 286-6216

G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.

Not Applicable.

☐ *Continued on additional page(s)*

H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?

☑ Yes (*Enclose proof of payment*) ☐ No (*Briefly explain below the reason a filing fee has not been paid*)

Please see Attachment 5.

Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.

15. SITE INSPECTION

Check one box only.

☐ In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.

☑ I request the Department to first contact (*insert name*) James Coniglio at (*insert telephone number*) (510) 286-7036 to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

16. DIGITAL FORMAT

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

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

☐ No

17. SIGNATURE

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

Signed for Jeffrey G. Jensen

Signature of Applicant or Applicant's Authorized Representative

6.8.12

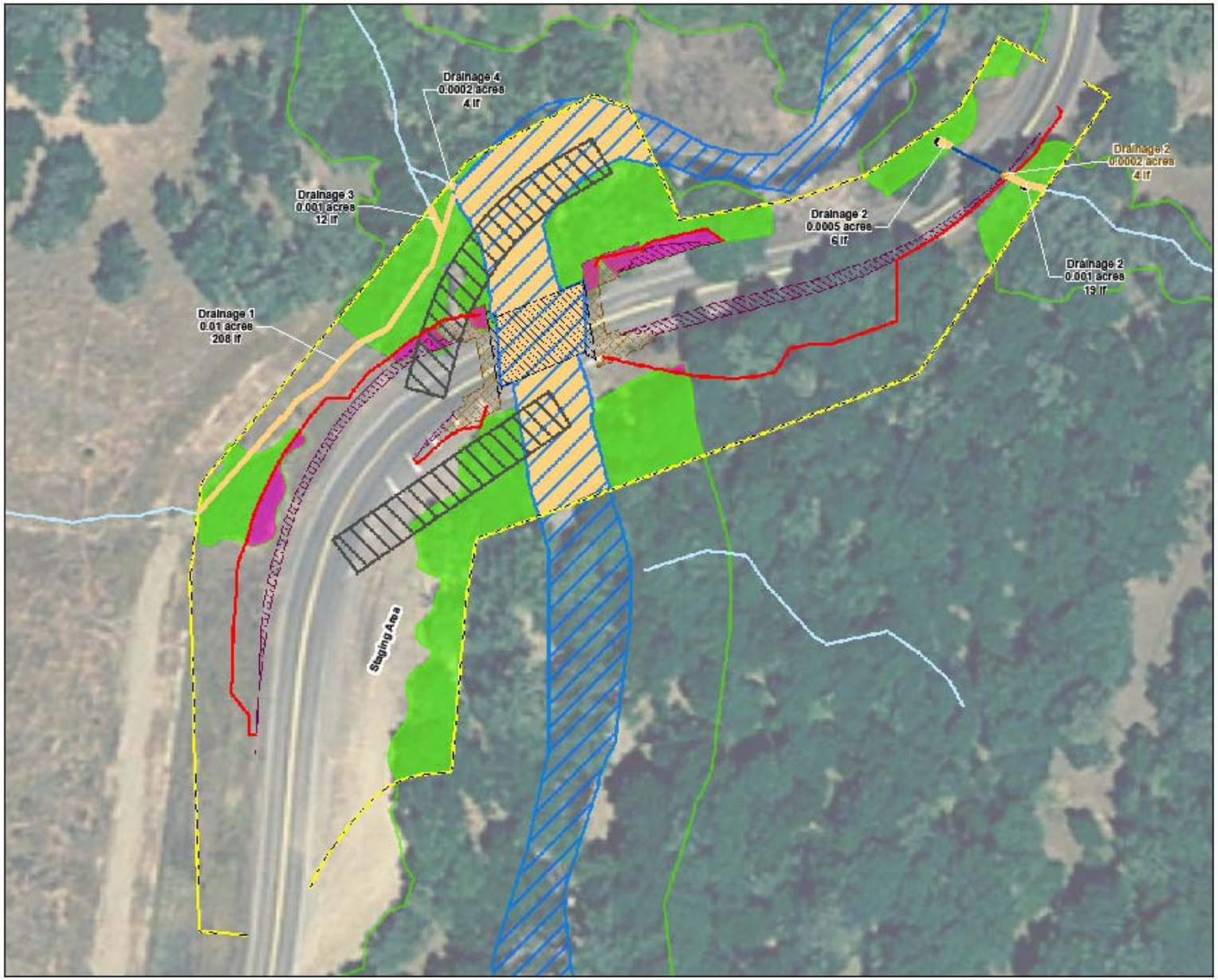
Date

Christopher T. Stokes

Print Name

ATTACHMENT K

USACE & CDFG IMPACT MAP



LEGEND

- ESA Fencing/Limits of Temporary Impacts
- Access Road (Temporary Impact)
- Cut & Fill (Permanent Impact)
- Bridge Abutment (Permanent Impact)
- Road Widening (Permanent Impact)
- Proposed Bridge
- Existing Culverts
- Culverted Waters
- Drainage Feature
- Capell Creek
- Riparian Area

Impacts to Riparian Habitat

- Permanent (0.034 Acres - 164 Linear Feet)
- Temporary (0.39 Acres - 489 linear Feet)

Impacts to Waters

- Drainage Permanent (0.0002 Acres)
- Drainage Temporary (0.013 Acres)
- Capell Creek Temporary (0.204 acres)

N

0 50 100 Feet

FIGURE 1
Impacts to CDFG Jurisdictional Areas
Capell Creek Bridge Replacement Project,
EA 2A1100
PM 20.1-20.5, State Route 121
Napa County, CA

BAO ZINFANDEL C:\PROJ\CALTRANS\406567\TO1_BIOLOGICAL_SUPPORT_NORTH_COUNTIES\2A1100_CAPELLCREEK\GIS\MAPFILES\2012\RIPARIAN_IMPACTS_032112.MXD CARCHER 3/21/2012 3:34:26 PM

ATTACHMENT L

NOTICE OF INTENT (DRAFT)

Attachment 2

State Water Resources Control Board

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF THE
GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER No. 99-08-DWQ)

I. NOI STATUS (SEE INSTRUCTIONS)

MARK ONLY ONE ITEM 1. ☐ New Construction 2. ☐ Change of Information for WDID#

II. PROPERTY OWNER

Name: California Department of Transportation		Contact Person: Kelly Hirschberg	
Mailing Address: 111 Grand Avenue		Title: Project Manager	
City: Oakland	State: CA	Zip: 94612	Phone: (510) 286-4925

Owner Type (*check one*) 1.[ ] Private Individual 2.[ ]Business 3.[ ]Municipal 4.[ ]State 5.[ ]Federal 6.[ ]Other

III. DEVELOPER/CONTRACTOR INFORMATION

Developer/Contractor		Contact Person	
Mailing Address		Title	
City	State	Zip	Phone

IV. CONSTRUCTION PROJECT INFORMATION

Site/Project Name: 2A1101/Replace Capell Creek Bridge. In Napa County		Site Contact Person	
Physical Address/Location: 04-NAP-121-PM 20.2/20.4	Latitude: 38.428 °	Longitude: -122.2(°	County: NAPA
City (or nearest City): Napa	Zip: 94558	Site Phone Number	Emergency Phone Number

A. Total size of construction site area: 2.0 Acres

B. Total area to be disturbed: 1.2 Acres (% of total 60)

C. Percent of site imperviousness (including rooftops):
Before Construction: 20 %
After Construction: 25 %

D. Tract Number(s): _____, _____

E. Mile Post Marker: 20.2/20.4

F. Is the construction site part of a larger common plan of development or sale?
☐ YES ☒ NO

G. Name of plan or development:

H. Construction commencement date: 08/20/2013

I. % of site to be mass graded: _____

J. Projected construction dates:
Complete grading: ____/____/____ Complete project: 08/01/2015

K. Type of Construction (Check all that apply):
1. ☐ Residential 2. ☐ Commercial 3. ☐ Industrial 4. ☒ Reconstruction 5. ☒ Transportation
6. ☐ Utility Description: _____ 7. ☐ Other (Please List): _____

V. BILLING INFORMATION

SEND BILL TO: ☒ OWNER (as in II. above)	Name	Contact Person	
☐ DEVELOPER (as in III. above)	Mailing Address	Phone/Fax	
☐ OTHER (enter information at right)	City	State	Zip

VI. REGULATORY STATUS

A. Has a local agency approved a required erosion/sediment control plan?..... ☐ YES ☐ NO

Does the erosion/sediment control plan address construction activities such as infrastructure and structures?..... ☐ YES ☐ NO

Name of local agency: _____ Phone: _____

B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification?..... ☐ YES ☐ No

If yes, provide details: _____

VII. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (Check all that apply):

1. ☒ **Indirectly to waters of the U.S.**
2. ☐ **Storm drain system - Enter owner's name:**_____
3. ☐ **Directly to waters of U.S. (e.g. , river, lake, creek, stream, bay, ocean, etc.)**

B. Name of receiving water: (river, lake, creek, stream, bay, ocean): Jameson Canyon Creek, Cattle Creek, Unnamed Creek(s)

VIII. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)

☐ A SWPPP has been prepared for this facility and is available for review: Date Prepared: ____/____/____ Date Amended: ____/____/____

☐ A SWPPP will be prepared and ready for review by (enter date): ____/____/____

☐ A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.

B. MONITORING PROGRAM

☐ A monitoring and maintenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.

If checked above: A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes..... ☐ YES ☐ NO

Name: _____ Phone: _____

C. PERMIT COMPLIANCE RESPONSIBILITY

A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Water Pollution Prevention Plan including:

1. Preparing an annual compliance evaluation..... ☐ YES ☐ NO

   Name: _____ Phone: _____

2. Eliminating all unauthorized discharges..... ☐ YES ☐ NO

IX. VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)

Have you included a vicinity map with this submittal? ..... ☐ YES ☐ NO

Have you included payment of the annual fee with this submittal?..... ☐ YES ☐ NO

X. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that I have read the entire General Permit, including all attachments, and agree to comply with and be bound by all of the provisions, requirements, and prohibitions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."

Printed Name: _____

Signature: _____ **Date:** _____

Title: _____

Dist-County-Route: **04-Napa-121**
Post Mile Limits: **PM 20.2/20.4**
Project Type: **Bridge Replacement**
Project ID (or EA): **0400000808(2A1100)**
Program Identification: **04-261**
Phase: ☐ PID
☐ PA/ED
☒ PS&E

Regional Water Quality Control Board(s): Central Valley RWQCB (R-5)

Is the Project required to consider Treatment BMPs? Yes ☐ No ☒
If yes, can Treatment BMPs be incorporated into the project? Yes ☐ No ☐
If No, a Technical Data Report must be submitted to the RWQCB at least 30 days prior to the projects RTL date. List RTL Date: 3/01/2013

Total Disturbed Soil Area: 1.2 ac Risk Level: 2
Estimated: Construction Start Date: 3/13/2013 Construction Completion Date: 8/1/2015
Notification of Construction (NOC) Date to be submitted:

Erosivity Waiver	Yes ☐	Date:	No ☒
Notification of ADL reuse (if Yes, provide date)	Yes ☐	Date:	No ☒
Separate Dewatering Permit (if yes, permit number)	Yes ☐	Permit #	No ☒

This Report has been prepared under the direction of the following Licensed Person. The Licensed Person attests to the technical information contained herein and the date upon which recommendations, conclusions, and decisions are based. Professional Engineer or Landscape Architect stamp required at PS&E.

Emarnan Pongpairoj, Registered Project Engineer/Landscape Architect — Date: 1/23/13

I have reviewed the stormwater quality design issues and find this report to be complete, current and accurate:

Kelly Hirschberg, *Project Manager* — Date: 1/23/13

Bob Braga, *Designated Maintenance Representative* — Date: 1/31/13

David Yam, *Designated Landscape Architect Representative* — Date: 1.30.13

[Stamp Required for PS&E only) Norman Gonsalves, *District/Regional Design SW Coordinator or Designee* — Date: 01/23/2013

STORM WATER DATA INFORMATION

1. Project Description

- This project is a Bridge Preservation Project.
- The project proposes to replace the Capell Creek Bridge (No. 21-0009) in Napa County on Route 121 with a new bridge (PM 20.2/20.4), due to scour and other deteriorating conditions. In addition, the approaching roadway will be widened to conform to the new structure. This project is programmed in the 2010 State Highway Operation and Protection Program (SHOPP) under the Bridge Scour Program HA-21 (20.10.201.111-Bridge Scour).
- State Route 121 within the project limits is a 2-Lane Conventional Highway. It is part of the National Highway System.

Existing Facilities

- The existing bridge, built in 1907, consists of two spans made up of rubble masonry earth filled barrel arches. In 1959, the bridge was widened from 18 ft to 30 ft with reinforced concrete slab on reinforced concrete pier and abutments, all on spread footing. The two-lane bridge currently serves two-way traffic with 12-ft lanes and 3-ft shoulders. It was concluded that the materials supporting bridge foundation are susceptible to scour and the bridge was determined to be scour critical. In addition to the scour mitigation issue, the structural integrity of the 1907 part of the existing structure is of concern as it is composed of unreinforced masonry (URM). The mortar between the cracks in the stone arch of the soffit is falling out due to the age of the structure resulting in the need for frequent maintenance. Consequently, the bridge could become unstable due to the continuing effects of scour and structural deficiency.

Proposed Project

- A new single span bridge would be built in-place of existing bridge on a tangent alignment, spanning about 64 ft across the creek. The bridge deck width will be 42 feet 10 inches with two 12 ft lanes and 8 ft outside shoulders conforming to current highway design standards. The proposed bridge railing would be Type 742.
- The proposed bridge foundations, abutments and wing walls will be anticipated to be cast in place reinforced concrete (CIP), while the bridge decks and girders will be proposed to be precast/pre-stressed (PC/PS).
- The existing roadways at both ends of the current bridge approaches will be widened and resurfaced to conform to the new bridge. Design speed for this project is 50 mph, and the current warning speed at the bridge is 20 mph.
- There will be four new drainage inlets which consist of reinforced concrete boxes (4 feet wide, 6 feet long, and approximate six feet depth) three new alternative pipe culverts and

one downdrain with tee dissipator that collect runoff to the creek. The inlet locations and pipe sizes will be designed in accordance with Caltrans highway design standards.

- The new downdrain on this project will have a tee dissipator and rock slope protection, approximately 6 feet by 7 feet at the outlet. Temporary construction access road on each side (one on the north and one on the south) of the bridge would be built onto the banks of Capell Creek to provide access to the creek bed for construction equipment.

Construction Activities

Temporary Access Roads

- A temporary construction access road on each side (one on the north and one on the south) of the bridge would be built onto the banks of Capell Creek to provide access to the creek bed for construction equipment.

Construction Sequence relevant to water Quality Objectives

- Construction in the creek will be limited to the dry season of June 15 to October 15, in or near aquatic habitat when drainages and wetlands would be either dry or at their lowest water level, to minimize impacts to water quality biological resources or soil hydrology.

Temporary Diversion System

- A temporary water diversion system would be in-place during this dry season. Temporary creek diversion system would consist of a diversion channel with temporary coffer dams located at the upstream and downstream ends. The coffer dams would be constructed across the existing creek channel with sand bags wrapped in impermeable plastic sheeting. A cut-off trench would be provided at both the upstream and downstream cofferdams to reduce seepage into the working area. The cofferdams would be assembled and removed in each of the two construction seasons. The diversion channel would consist of parallel Type K rails lined with impermeable plastic sheet. Environmentally Sensitive Area (ESA) fencing would be installed along the length of the Type K rails to prevent construction personnel and equipment from entering the active water diversion channel.
- The total working days within the creek are estimated to be 8 months. Vegetation clearing will be confined to the minimal area within the action area footprint, construction access and staging areas necessary to facilitate construction activities (see attached map). Plant habitat that can be avoided during construction will be flagged and designed as an ESA. All construction personnel and activities are to avoid the ESAs.
- Construction of the overall project would tentatively start in March 2013 and complete by August 2015.

Excavation

- Due to the presence of hard rock at the site (especially at the right bank side of the bridge), conventional excavation equipment may not be adequate. The contractor may have to employ special methods to perform excavations.

Disturbed Soil Area and Impervious Area

- The total disturbed soil area (DSA) is about1.2 ac. The Existing Impervious Area is about 0.4 ac. The net added impervious area is about 0.1 ac and the reworked area is about 0.1 ac.
- The project area is covered under the Napa County MS4 Area.

2. Site Data and Storm Water Quality Design Issues (refer to Checklists SW-1, SW-2, and SW-3)

Hydrologic Units and Receiving Water Bodies

- The site is within the Putah Creek hydrologic unit, Berryessa hydrologic area, and Capell Creek hydrologic sub-area (512.22). The watershed area is about 51263 ac.
- The direct receiving water body within the project limit is Capell Creek. Capell Creek is not in EPA's 2006 303(d) list. Capell Creek flows northeast into Berryessa Lake. Berryessa Lake is on 2006 CWA Section 303(d) for Pollutant concerns of Mercury from resource extraction.
- The beneficial uses of Lake Berryessa, are municipal and domestic supply; agricultural supply; power generation; water contact recreation; noncontact water recreation; warm freshwater habitat; cold freshwater habitat; spawning, reproduction and/or early development; and wildlife habitat.
- The beneficial uses of the underlying groundwater are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
- Currently No high-risk areas are found in the vicinity of the project limits.

CWA Section 401 Water Quality Certification

- Section 401 requires a water quality certification from the State Board or Regional Board when a 404 permit from the Army Corps of Engineers is needed. Since this project will need a 404 permit and involves work directly in Capell Greek, a 401 certification will be required from the Central Valley RWQCB, RB-5.

Climate

- The mean annual air temperature is 62° to 64° F. Summers are hot and dry, and winters are cool and moist. The frost-free season is 220 to 260 days. The rainy season for the project area is October 15 to April 15 and the mean annual precipitation is 25 to 35 inches (Soil Survey NRCS).

Land Use

- The project is located within predominantly public land use area. The plant cover is mostly annual grasses and scattered oaks (Soil Survey NRCS).

Right of Way

- Caltrans would need to acquire additional right-of-way and temporary construction easements due to maintenance, embankment construction, and construction activities.

Topography

- The existing terrain within the project area is a rolling terrain and elevation varies from 100 to 2000 ft (Soil Survey NRCS). The road elevation within the project limits is about 824 ft.

Geology and Soil Information

- The formation of the bedrock on river banks, consisting of weathered mudstone and conglomerate on the creek banks near the abutments and wing walls of bridge location. The creek bed generally contained alluvial coarse gravel, cobbles, some boulders and sand deposits. Additionally, there are a few large partially buried sandstone blocks located under the bridge.
- The soil within in vicinity of project area is characterized as Bressa-Dibble complex with 30 to 50 percent slopes. The soil within the project area consists of silty clay loam to clay loam with moderately slow infiltration rate when thoroughly wet (Soil Survey NRCS).

Groundwater

- Groundwater level was measured at 2 feet depth in boring RC-II-00 I (approach to left abutment), and at 3 feet depth in boring RC-II-002 (approach to right abutment).
- Ground water level will be fluctuated during seasonal or subsurface changes.

Dewatering

- Construction activities involving bridge removal and replacement is expected to encounter groundwater, seepage (i.e. dry weather flows) or which may involve non-storm water discharges requiring dewatering. Separate dewatering permit is not anticipated for this project. Other permit requires for the project include a Section 1602 from the California Department of Fish and Games.

Hazardous Waste Material

- According to the project Site assessment and tests, soil would be classified as non-hazardous based on lead content.
- Naturally occurring asbestos (NOA) was not detected in soil samples collected at the Site.

Erosion Potential

- Runoff in the area is rapid and the hazard of erosion is moderate to severe (Soil Survey NRCS).

Risk Assessment

- This project is subjected to the "NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities," (NPDES Number CAS000002), or CGP (Construction General Permit). The sediment risk factor is determined from the product of the rainfall runoff erosivity factor (R), the soil erodibility factor (K), and the length-slope factor (LS). The R factors were determined from the United States Environmental Protection Agency's "Rainfall Erosivity Factor Calculator for Small Construction Sites," and the K and LS factors were determined from a GIS map on the SWRCB website.
- Based on the combined sediment and receiving water risk, this project is classified as Risk Level 2 (See attachment).

Environmentally Sensitive Area

- Environmentally Sensitive Areas (ESAs) were identified through the project limit. The aim of the project is to avoid and minimize work within ESAs area. Appropriate erosion control and construction site BMPs were utilized to avoid and minimize the impacts. Any unpreventable impacts will be mitigated for this project. ESA fencing will be placed where needed to protect ESAs area during construction activities.

Archeological Sensitive Area

- There are areas of archeological sensitivity in vicinity of the project limits.
- Caltrans Office of Cultural Resources provided maps identifying sensitive archeological area. The archeological area will not be affected by this project.

Local Agency Requirements/Concerns

- There are currently no local agency requirement or concern.

Measures for Avoiding or Reducing Potential Stormwater Impacts

- Measures will be taken to prevent any construction material from entering the Capell Creek. Soil disturbance will be minimized during rainy season. Concentrated flows will be collected into stabilized drains and channels. All anticipated construction activities in the creek will be organized during dry seas. There is no existing treatment BMPs within the project limits.

3. Regional Water Quality Control Board Agreements

- The Central Coast Regional Water Quality Control Board (RWQCB-5) has water quality jurisdiction of the project.
- There are no negotiated understandings and/or agreements with the RWQCB-5 at this time.

CWA Section 401 Water Quality Certification

- Section 401 requires a water quality certification from the State Board or Regional Board when a 404 permit from the Army Corps of Engineers is needed. Since this project needs a 404 permit and involves work directly in Capell Greek, a 401 certification will be required from the Central Valley RWQCB, RB-5. Other permit requires for the project include a Section 1602 from the California Department of Fish and Games.

Hydromodification Management plan

- The project new added impervious area is about 0.1 ac (less than 1 ac). Therefore this project is exempt from hydromodification impact analysis and mitigation.

4. Proposed Design Pollution Prevention BMPs to be used on the Project.

Downstream Effects Related to Potentially Increased Flow, Checklist DPP-1, Parts 1 and 2

- There will be minimal changes in velocity and/or volume of downstream flow and project would have minimal impacts on downstream runoff. Rock slope protection (RSP) and flared end sections (FES) will be utilize to control erosion effects. On-site drainage facilities will be designed to discharge to unlined ditches. Hydro seeding and erosion control products will be used to minimize erosion potential of the site.
- Erosion control measures will be used to address soil stabilization and sedimentation. Erosion control measures will be provided on all disturbed areas to the extent feasible. These measures can utilize a combination of source and sediment control measures to prevent and minimize erosion from soil disturbed areas. Source controls can utilize erosion control netting in combination with hydroseeding.
- Sediment controls such as biodegradable fiber rolls will be used to retain sediments and to help control runoff from disturbed slope areas.
- Outlet protection and velocity dissipation devices will be placed at the downstream end of culverts and channels.

Slope/Surface Protection Systems, Checklist DPP-1, Parts 1 and 3

- All existing slopes along the alignments covered with light to heavy grasses, scattered oak trees and bushes. Proposed slopes will considered having the ratio of 2:1 (H:V) and flatter. New slopes will be revegetated and protected for erosion control.

Concentrated Flow Conveyance Systems, Checklist DPP-1, Parts 1 and 4

- The project proposes to create and modify existing ditches, dikes, slope drains, drainage swales and lined ditches. For slopes in cut, on top of the cut, ditches will be designed to convey flows to drainage system. Outlet protection will be provided

Preservation of Existing Vegetation, Checklist DPP-1, Parts 1 and 5

- Existing vegetation will be preserved when feasible. However because the project involves bridge replacement, part of the existing vegetation will be impacted. The area will be cleared consists mostly of trees and bushes. The trees and vegetated area that exempt from clearing and grubbing should be protected by means of proper fencing.

5. Proposed Permanent Treatment BMPs to be used on the Project

- The project does not have the significant potential to create permanent water quality impacts, since the new added impervious area for proposed project is 0.1 ac. No conventional treatment BMPs would be accommodated for this project. Stormwater will be partially treated throughout the conveyance into vegetated ditches and dispersion within the project area.

6. Proposed Temporary Construction Site BMPs to be used on Project

Construction Site BMP Approaches

- This project will involve construction over a period of 2 rainy seasons. Whenever is possible, earth disturbing construction activities will be scheduled outside the rainy season. Potential temporary water quality impacts will be reduced or eliminated by construction Site BMPs as needed. Construction Site BMPs will be incorporated into the Construction Contract by the SWPPP and include Soil Stabilization, Sediment Control, Tracking Control, Non-Storm Water Controls and Waste Management and Material Pollution Controls, General Construction Site Management and Stormwater Sampling and Analysis.

Monitoring and Reporting

- The Construction General Permit Risk Assessment Analysis indicated Risk Level 2 for this project. In addition to visual inspections and site runoff monitoring required on all sites, risk level 2 dischargers must sample effluent for qualified rain events for both pH and turbidity. The numeric action level (NAL) for pH is 6.5-8.5 and the NAL is 250 NTU for turbidity. Exceedance of NALs limits require corrective actions and submittal of exceedance report.
- Rain Event Action Plan is to determine anticipated average number of days that produce precipitation greater than 0.1 inches during project construction. The Water Quality Planning Tool or the published National climatic Data Center of the National Oceanic Atmospheric Association website can be used to anticipated number REAP the contractor will need to produce.
- The contractor will be required to monitor and report on water quality before, during and after construction. Monitoring will include visual and water sampling. The visual monitoring will be once per quarter unless pending rain event. The visual monitoring increases too two days prior to rain event, each day a qualifying rain event, and within two days after the last rain event.
- The contractor will be required to incorporate construction site BMP Strategy for temporary BMP and design Pollution prevention BMP.
- Stormwater Sampling and Analysis will require checking for turbidity and PH. The project will not be required to provide bioassessment monitoring since it has under 30 acres of DSA.

<u>The following Construction Site BMPs are separate Bid Line Items</u>

- <u>Soil Stabilization</u>

  -There are areas of existing vegetation within the project limits that will require protection during construction activities, these areas will be protected by Temporary Fence (Type ESA) as a separate bid line item.

  -The temporary slope stabilization by means of spraying hydraulic mulch Type (BMF) are considered as a separate bid line items.

  -Temporary Cover
- <u>Tracking Control</u>

  -Temporary construction entrances / exits for tracking control are included as a separate bid line items
- <u>Erosion control</u>

  -Move in/Move out includes moving onto the project when an area is ready to receive temporary erosion control, setting up required personnel and equipment for the application of erosion control materials, and moving out all personnel and equipment when temporary erosion control in that area is completed.

  -Temporary Fiber Rolls

  -Temporary Silt Fence

-Temporary Drainage Inlet Protection
-Temporary Check Dams

- Storm Water Event Monitoring

  Stormwater sampling and analysis, Storm Water annual report, and rain event action plans during construction are included in separate bid line items.

The following items are considered for this project as a Lump Sum items:

- Job Site Management

  The Project also includes a lump sum cost for job site management, which will involve controlling potential sources of water pollution before these pollutants come in contact with storm water systems or watercourses.

  It is also includes the training of employees and subcontractors, and proper selection, deployment, and repair of construction site BMPs used with the Project limits.

  The quantities and the cost of temporary construction BMPs with the lump Sum and separate bid line items are also attached to this report.

- Storm Water Pollution Prevention Plan

  This project requires implementation of a Storm Water Pollution Prevention Plan (SWPPP) as a lump sum item. Potential water quality impacts will be reduced to the MEP through proper implementation of the SWPPP and inclusion of Standard Special Provisions (SSPs) for Temporary Construction Site BMPs into the project. The SWPPP should emphasize: 1) standard temporary erosion control measures to reduce sedimentation and turbidity of surface run from disturbed areas; 2) personnel training; 3) Scheduling and implementation of BMPs throughout the various construction phases and during various seasons; 4) identification of BMPs for non-storm water discharge such as fuel spills; and , mitigation and monitoring throughout the construction period.

- Street Sweeping and Vacuuming

  This work includes a lump sum item for street sweeping using machine-operated sweepers. Street sweeping does not void specifications for main residue collection included in other work activities, such as grooving, grinding, or asphalt concrete planning.

- Temporary Concrete Washout (Portable)

  This includes a lump sum item for removal and disposal of concrete waste by furnishing, maintaining, and removing temporary concrete washout facilities. SWPPP must describe and include the use of temporary concrete washout facilities as a water pollution control practice for waste management and materials pollution control.

- Temporary Active Treatment System

  This work includes lump sum item for designing, placing, operating, monitoring, maintaining, and later removing a temporary active treatment system. The active treatment system must be used to remove sediment, turbidity, and other pollutants from uncontaminated groundwater, stormwater.

7. Maintenance BMPs (Drain Inlet Stenciling)

This Project would include drain inlet stenciling since construction would take place in areas (on a highway and on local streets) where there is the potential for pedestrian access. Drain inlet stenciling within Caltrans' right-of-way would be done in accordance with the *Department of Transportation State of California Standard Plans,* May 2006 Edition.

Required Attachments

- Vicinity Map
- Evaluation Documentation Form (EDF)
- Construction Site BMP Consideration Form (required at PS&E only)
- SWDR Attachment for SMARTS Input (required at PS&E only if CGP is applicable)
- Risk Level Determination Documentation
- Quantities for Construction Site BMPs (required at PS&E only)

Supplemental Attachments

Note: Supplement Attachments are to be supplied during the SWDR approval process; where noted, some of these items may only be required on a project-specific basis.

- 401 Certification
- Map of the Hydrological Sub-Area
- Project Typical Cross Sections and plans,
- Checklist SW-1, Site Data Sources
- Checklist SW-2, Storm Water Quality Issues Summary
- Checklist SW-3, Measures for Avoiding or Reducing Potential Storm Water BMPs
- Checklists DPP-1, Parts 1–5 (Design Pollution Prevention BMPs) [only those parts that are applicable]
- Checklists CS-1, Parts 1–6 (Construction Site BMPs) [only those Parts that are applicable, at PS&E only]
- Construction BMPs Cost Summary (See Quantities for Construction Site BMPs Attachment)
- Foundation Plan
- Log of Borings
- Water Quality Form

INDEX OF PLANS

SHEET No.	DESCRIPTION

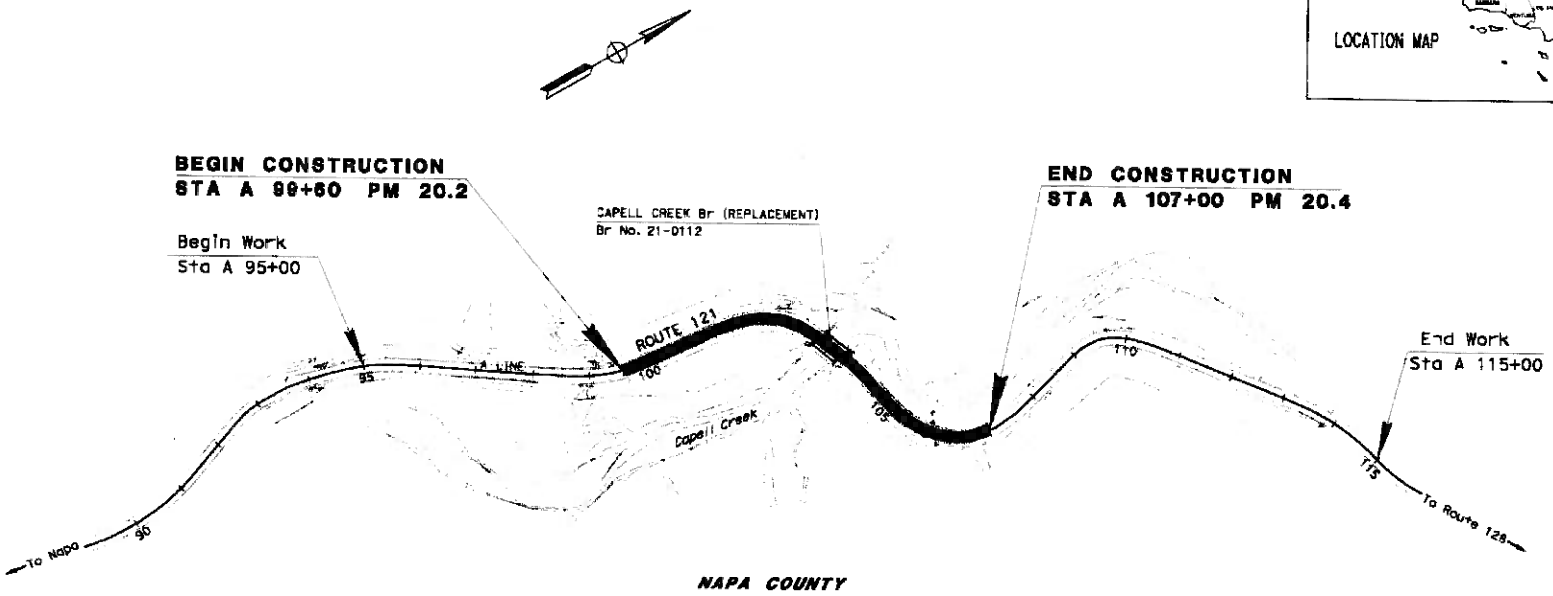
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

IN NAPA COUNTY
ABOUT 2 MILES SOUTH OF JUNCTION ROUTE 128
AT CAPELL CREEK BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		



NAPA COUNTY

NO SCALE

PROJECT ENGINEER
REGISTERED CIVIL ENGINEER
DATE 9/25/12

REGISTERED PROFESSIONAL ENGINEER
Emanuel Pangaliotis
No. 78551
Exp. 09/30/13
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

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.

PROJECT MANAGER KELLY HIRSCHBERG

DESIGN ENGINEER STEWART LEE

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

CONTRACT No.	04-2A1104
PROJECT ID	0400000808

BORDER LAST REVISED 1/2/2010 CALTRANS WEB SITE IS: HTTP://WWW.DOT.CA.GOV/

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s130888
DGN FILE => 0400000808b001.dgn

UNIT 0735 PROJECT NUMBER & PHASE 0400000808

LAST REVISION 09-25-12 DATE PLOTTED => 11-OCT-2012 TIME PLOTTED => 13:51

DATE: 01/22/ 2013

Project ID (or EA): 0400000808 (2A1100)

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION FOR EVALUATION
1.	Begin Project Evaluation regarding requirement for consideration of Treatment BMPs	✓		See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs. Go to 2
2.	Is this an emergency project?		✓	If **Yes**, go to 10. If **No**, continue to 3.
3.	Have TMDLs or other Pollution Control Requirements been established for surface waters within the project limits? Information provided in the water quality assessment or equivalent document.		✓	If **Yes**, contact the District/Regional NPDES Coordinator to discuss the Department's obligations under the TMDL (if Applicable) or Pollution Control Requirements, go to 9 or 4. NG *(Dist./Reg. SW Coordinator initials)* If **No**, continue to 4.
4.	Is the project located within an area of a local MS4 Permittee?	✓		If **Yes**. *(Napa County)*, go to 5. If **No**, document in SWDR go to 5.
5.	Is the project directly or indirectly discharging to surface waters?	✓		If **Yes**, continue to 6. If **No**, go to 10.
6.	Is it a new facility or major reconstruction?		✓	If **Yes**, continue to 8. If **No**, go to 7.
7.	Will there be a change in line/grade or hydraulic capacity?	✓		If **Yes**, continue to 8. If **No**, go to 10.
8.	Does the project result in a net increase of one acre or more of new impervious surface?		✓	If **Yes**, continue to 9. If **No**, go to 10. 0.1 ac *(Net Increase New Impervious Surface)*
9.	Project is required to consider approved Treatment BMPs.		See Sections 2.4 and either Section 5.5or 6.5 for BMP Evaluation and Selection Process. Complete Checklist T-1 in this Appendix E.	
10.	Project is not required to consider Treatment BMPs. NG *(Dist./Reg. Design SW Coord. Initials)* _____*(Project Engineer Initials)* _____*(Date)*	✓	Document for Project Files by completing this form, and attaching it to the SWDR.	

1 ***See Figure 4-1, Project Evaluation Process for Consideration of Permanent Treatment BMPs***

DATE: 01/20/2013

Project ID (or EA): 0400000808 (2A1101)

Project Evaluation Process for the Consideration of Construction Site BMPs

NO.	CRITERIA	YES ✓	NO ✓	SUPPLEMENTAL INFORMATION
1.	Will construction of the project result in areas of disturbed soil as defined by the Project Planning and Design Guide (PPDG)?	✓		If Yes, Construction Site BMPs for Soil Stabilization (SS) will be required. Complete CS-1, Part 1. Continue to 2. If No, Continue to 3.
2.	Is there a potential for disturbed soil areas within the project to discharge to storm drain inlets, drainage ditches, areas outside the right-of-way, etc?	✓		If Yes, Construction Site BMPs for Sediment Control (SC) will be required. Complete CS-1, Part 2. Continue to 3.
3.	Is there a potential for sediment or construction related materials and wastes to be tracked offsite and deposited on private or public paved roads by construction vehicles and equipment?	✓		If Yes, Construction Site BMPs for Tracking Control (TC) will be required. Complete CS-1, Part 3. Continue to 4.
4.	Is there a potential for wind to transport soil and dust offsite during the period of construction?	✓		If Yes, Construction Site BMPs for Wind Erosion Control (WE) will be required. Complete CS-1, Part 4. Continue to 5.
5.	Is dewatering anticipated or will construction activities occur within or adjacent to a live channel or stream?	✓		If Yes, Construction Site BMPs for Non-Storm Water Management (NS) will be required. Complete CS-1, Part 5. Continue to 6.
6.	Will construction include saw-cutting, grinding, drilling, concrete or mortar mixing, hydro-demolition, blasting, sandblasting, painting, paving, or other activities that produce residues?	✓		If Yes, Construction Site BMPs for Non-Storm Water Management (NS) will be required. Complete CS-1, Parts 5 & 6. Continue to 7.
7.	Are stockpiles of soil, construction related materials, and/or wastes anticipated?	✓		If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Complete CS-1, Part 6. Continue to 8.
8.	Is there a potential for construction related materials and wastes to have direct contact with precipitation; stormwater run-on, or stormwater runoff; be dispersed by wind; be dumped and/or spilled into storm drain systems?	✓		If Yes, Construction Site BMPs for Waste Management and Materials Pollution Control (WM) will be required. Complete CS-1, Part 6. Continue to 9.
9.	End of checklist.	✓	Document for Project Files by completing this form, and attaching it to the SWDR.	

PE to initialize after concurrence with Construction (PS&E only) *Date*

SWDR ATTACHMENT FOR SMARTS INPUT

Construction General Permit (CGP)

Permit Registration Document

Background of Information Transfer to RE

The National Pollutant Discharge Elimination System (NPDES) General Permit For Storm Water Discharges Associated with Construction and land Disturbance Activities Order No. 2009-0009-DWQ NPDES No CAS000002 (CGP), was issued September 2, 2009 and is effective July 1, 2010. This new permit has Permit Registration Documents (PRD) that will be required to be filed electronically in the SMARTS system.

Caltrans currently has its own NPDES permit (order No. 99-06-DWQ), which requires the submittal of a Notice of Construction (NOC) form 30 days prior to the start of construction and to ultimately file a Notice of Construction Completion (NOCC) form when the project is stabilized and completed. The project engineer is currently responsible for calculating and gathering the information for filing the NOC form and providing this information to the District NPDES coordinator. Completing and submitting the NOCC form is the responsibility of the Construction Resident Engineer (RE). The Caltrans permit and the CGP both require a Storm Water Pollution Prevention Plan (SWPPP) to be available at the job site for regulatory review. The SWPPP is prepared by the contractor and approved by the RE. The Caltrans NPDES permit is currently under review for renewal and until it is finalized, the NOC and NOCC forms are still required for compliance. Currently, Caltrans is not required to submit into SMARTs, however if the regional board provides written justification that a certain project needs to be registered in SMARTS, then Caltrans would have to register the project in SMARTS.

Caltrans has been told that the new NPDES permit is going to be approved in late 2011. As such, Caltrans needs to start to prepare design documents for compliance with the new CGP and be prepared to provide the necessary information for the RE to be able to enter into the SMARTS system.

The SWDR completed at PS&E will contain the necessary design information to input into SMARTS. However, the SMARTS system also requires information such as a SWPPP, storm water manager, RE name, Contractor name, QSD/QSP names, and certification of the Notice of Intent (NOI) PRD information. In addition, it also requires data entry and reporting throughout the construction period; REAPS, Quarterly reporting, BMP maintenance, annual reports, and sampling data. Lastly, many projects do not have their permits at PS&E and addendums are added to contract documents to address additional 401 requirements that will be part of the SWPPPs and then entered into SMARTS for compliance. For these reasons, it is expected that construction staff will enter all of the information into SMARTS. The PE will be responsible for preparing the design information necessary to enter into SMARTS and to support Construction for any contract change orders, including those related to stormwater.

SWDR ATTACHMENT FOR SMARTS INPUT

DESIGN INFORMATION FOR RE FILE

The following information is based on the PS&E design plans and specifications. If contract amendments or change orders are made after the design is complete, then the information should be updated by construction, as appropriate.

Enter the following data into the CGP SMARTS Notice of Intent-Site Information page.

1. **Total site size** (acres); for project area use Caltrans R/W x post mile limits (begin-end) on plan sheets.

Total site size __2.0____ acres

2. Enter **latitude and longitude** in decimal degrees to 5 significant figures. Use a location from the center of the project. This information can be obtained from Survey information, GPS units, Google earth, CT Earth, or other mapping software.

Latitude: __+38.43028_____

Longitude: _-122.20833_____

3. **Total Area to be Disturbed** (total Disturbed Soil Area (DSA)): This information is already calculated and can be taken from section one of the SWDR. It is should be described in acres.

DSA _____1.2_____ acres

4. **Imperviousness before Construction (percentage)** - This is calculated as the total impervious area of the project area divided by the total project area (see total site size), multiplied by 100. The impervious area is all paved areas or hard surfaces within the project limits.

Impervious area before construction % ___20_____

5. **Percent of total disturbed (percentage)**; This should be calculated by dividing the total disturbed soil area by the total project area and multiply by 100.

Percent of Total disturbed area % __60____

6. **Imperviousness after Construction (percentage)**, This should be calculated by adding all impervious area paved and hard surfaces based on the final design within project limits from above and dividing by the total project area from above multiply by 100.

Impervious area after construction % _25____

7. **Mile Post Marker**, enter the approximate post mile at the center of the project or take the average of the "begin" and "end" post mile markers from the title sheet.

Mile post Marker__20.3_____

SWDR ATTACHMENT FOR SMARTS INPUT

8. **Is the construction site part of a larger common plan of development?** Yes or No; in most cases mark no for Caltrans projects, as this is intended for developers (in accordance with the EPA definitions referenced by the CGP in 40 CFR title 22). This clarification is based on direction from the State Board. Get a confirmation with the Design Stormwater coordinator to determine if there is a special case project where the "common plan of development" may apply. No X

9. **Name of development**. Mark "Not Applicable (N/A)" in most cases.

Name of plan or development: N/A

10. **Construction Commencement Date**, mm/dd/yyyy. The PE provides the estimated construction start date from the cover of the SWDR. The actual construction start date should be used to input into SMARTS. After the contract is awarded, the RE will use an updated start date (if different) when entering in SMARTS. The RE needs to be aware of the original date provided by Design, as this date was used to calculate the design information including the Risk Level Determination. If the actual start date is different, construction should coordinate with the PE to determine if the Risk Level has changed.

Construction Commencement Date, 03/13/2013.

11. **Complete Grading Date/Complete Project Date**; The PE provides the estimated construction completion date from the cover of the SWDR to be used for both of these inputs. After the contract is awarded, the RE will use an updated completion date (if different) when entering in SMARTS. The RE needs to be aware of the original completion date provided by Design, as this date was used to calculate the design information including the Risk Level Determination. If the completion date is different, construction should coordinate with the PE to determine if the Risk Level has changed.

Complete Grading Date/Complete Project: 08/01/2015. Use the same date for both inputs, unless instructed otherwise.

12. **Does the Stormwater from the construction site discharge directly or indirectly into waters of the United States.**

Indirect discharge (Y) - If yes, list name(s) of receiving water(s) Lake Berryessa

Direct discharge (Y) - If yes, list name(s) of receiving water(s) Capell Creek

13. **Risk Level**; the combined project risk level is calculated using the sediment risk factor and the water body risk factor to give one overall project risk level. Use the Caltrans risk level determination guidance, (see the Storm water design web page). Attach all risk calculations.

R factor value 169.51

K factor value 0.37

LS factor value 6.88

SWDR ATTACHMENT FOR SMARTS INPUT

Receiving water risk comes from the state water resources control board mapping of water bodies for 303-d listing or TMDLs for sediment or water body with the beneficial use of cold and spawn and migratory. The input will either be high= yes and low=no;

Receiving water risk__Low____

The dates used for determining the project risk level and other design elements of the project required for CGP compliance are dependent on having the same sediment risk factor. This is a critical element for compliance, as modifying the estimated construction dates may cause the sediment risk factor to change and ultimately modify the overall project risk factor. This could impact the projects CGP compliance requirements and the assumptions used for the design documents and engineers estimate.

14. Provide electronic copy of plan sheets in .pdf format that can be loaded to SMARTS, burn a CD for the RE to use for the project. The Title sheet can be used as the site map.

Rainfall Erosivity Factor Calculator for Small Construction Sites

Facility Information

Facility Name: EA: 2A1101-NAP-121-PM 20.2/20.4
Start Date: 03/13/2013
End Date: 08/01/2015
Latitude: 38.4282
Longitude: -122.2098

Erosivity Index Calculator Results

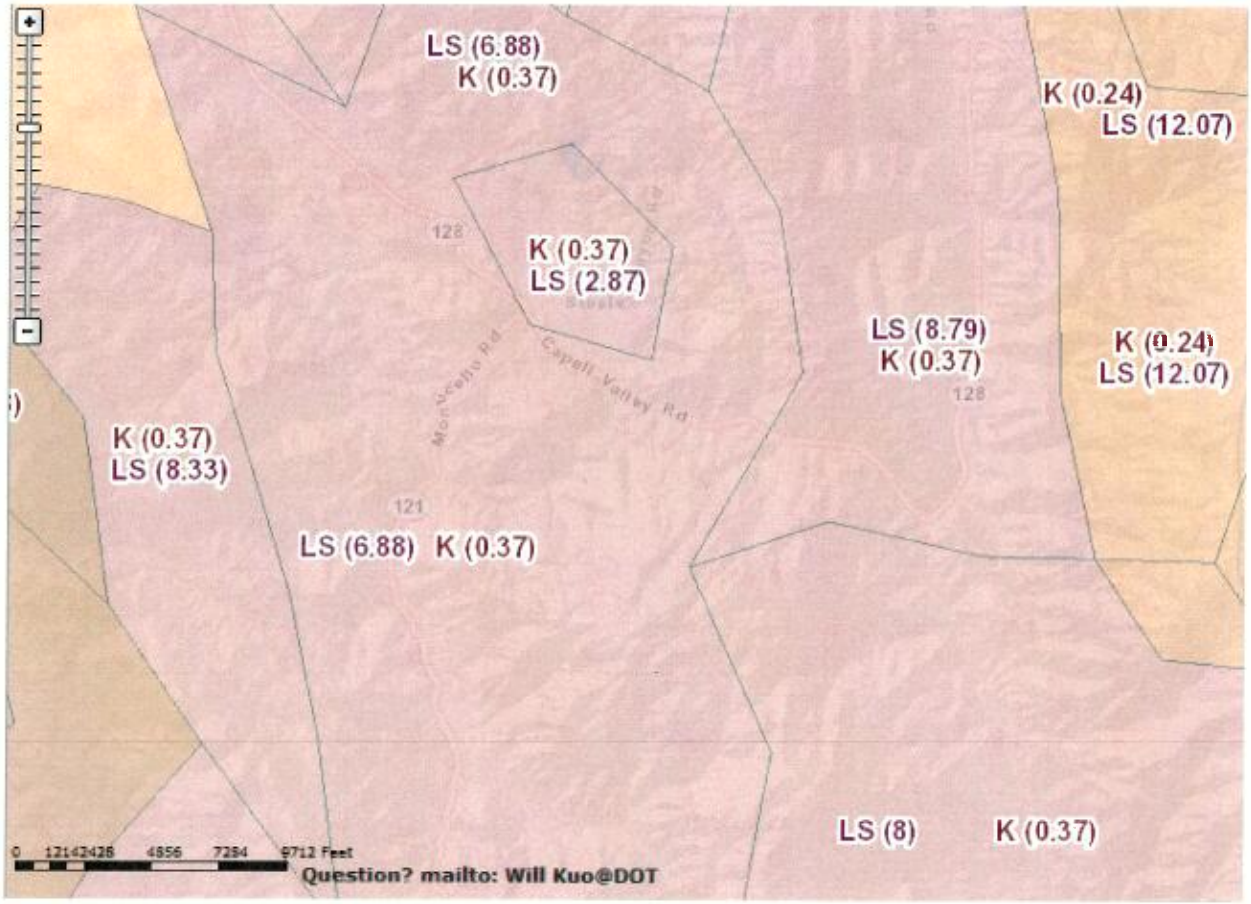
AN EROSIVITY INDEX VALUE OF **169.51** HAS BEEN DETERMINED FOR THE CONSTRUCTION PERIOD OF **03/13/2013 - 08/01/2015**.

A rainfall erosivity factor of 5.0 or greater has been calculated for your site and period of construction. **You do not qualify for a waiver from NPDES permitting requirements**.

Tables — K Factor, Rock Free — Summary By Map Unit

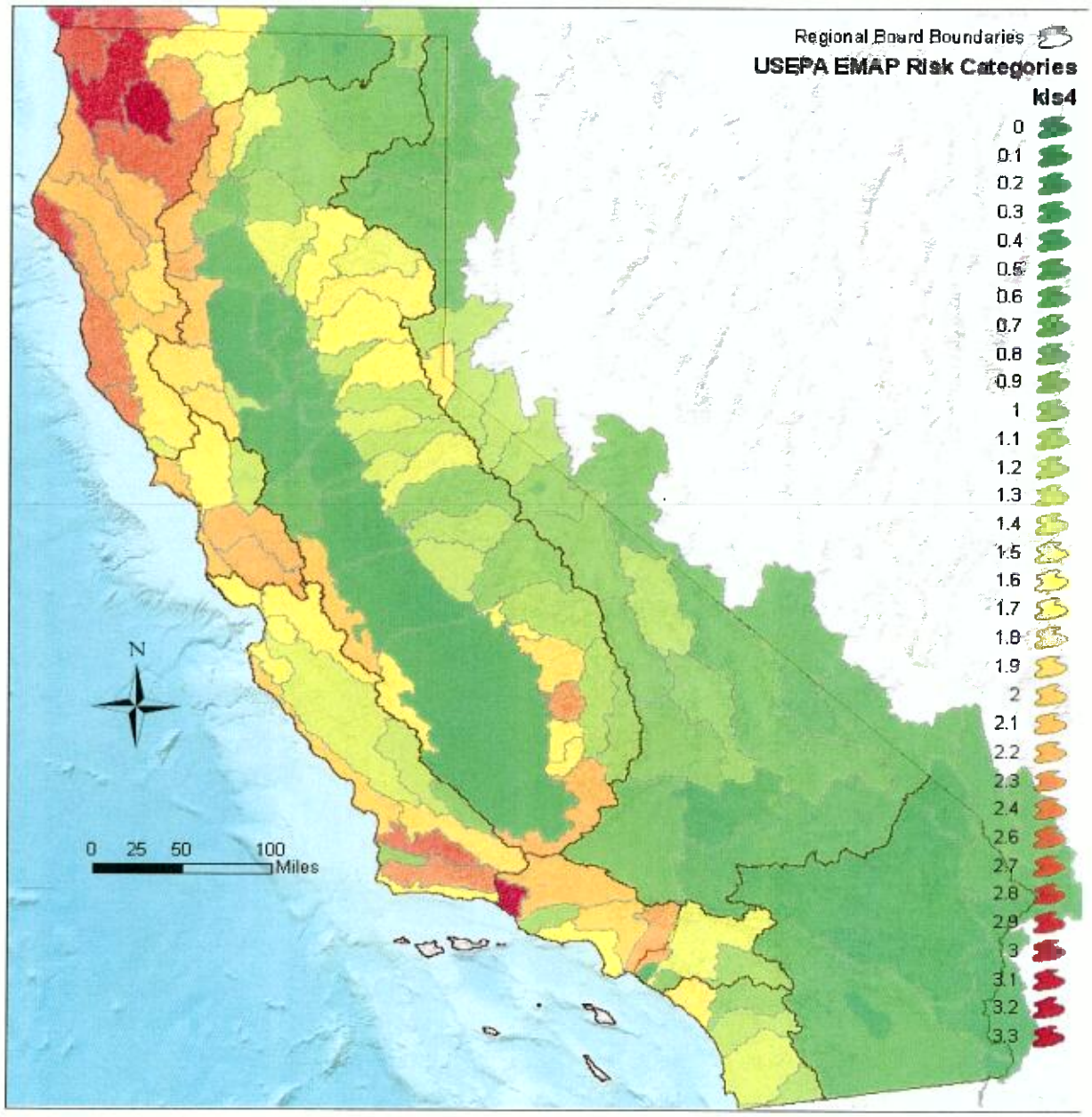
Summary by Map Unit — Napa County, California (CA055)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
113	Bressa-Dibble complex, 15 to 30 percent slopes	.37	0.7	47.8%
158	Los Gatos loam, 5 to 30 percent slopes	.37	0.7	52.2%
Totals for Area of Interest			**1.4**	**100.0%**


LS (6.88)
K (0.37)
K (0.24)
LS (12.07)
128
K (0.37)
LS (2.87)
LS (8.79)
K (0.37)
128
K (0.24)
LS (12.07)
Monticello Rd
Capell Valley Rd
K (0.37)
LS (8.33)
121
LS (6.88)
K (0.37)
LS (8)
K (0.37)
0 1214 2428 4856 7284 9712 Feet
Question? mailto: Will Kuo@DOT

For the GIS Map Method, the R factor for the project is calculated using the online calculator at (see cell to right). The product of K and LS are shown on the figure below. To determine soil loss in tons per acre, multiply the R factor times the value for K times LS from the map.

http://cfpub



Water Boards

State Water Resources Control Board, January 15, 2008

	A	B	C
1	**Sediment Risk Factor Worksheet**		**Entry**
2	**A) R Factor**		
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.		
4	http://cfpub.epa.gov/npdes/stormwater/LEW/lewCalculator.cfm		
5	**R Factor Value**		169.51
6	**B) K Factor (weighted average, by area, for all site soils)**		
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.		
8	Site-specific K factor guidance		
9	**K Factor Value**		0.37
10	**C) LS Factor (weighted average, by area, for all slopes)**		
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.		
12	LS Table		
13	**LS Factor Value**		6.88
14			
15	**Watershed Erosion Estimate (=RxKxLS) in tons/acre**		431.504656
16	**Site Sediment Risk Factor**		**High**
17	Low Sediment Risk: < 15 tons/acre		
18	Medium Sediment Risk: >=15 and <75 tons/acre		
19	High Sediment Risk: >= 75 tons/acre		
20			

Combined Risk Level Matrix

Receiving Water Risk	Sediment Risk: Low	Sediment Risk: Medium	Sediment Risk: High
Low	Level 1	Level 2	
High	Level 2		Level 3

Project Sediment Risk: High

Project RW Risk: Low

Project Combined Risk: Level 2

Construction Site BMPs Quantities
Replace Capell Creek Bridge
04-NAP-121-PM 20.2/20.4
PROJECT EA 2A1101

ITEM NO	STD. PLAN NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY
1	-	130100	JOB SITE MANAGEMENT	LS	1
2		074015	TEMPORARY ACTIVE TREATMENT SYSTEM	LS	1
3	-	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	1
4	T56	074028	TEMPORARY FIBER ROLL	LF	1,300
5	T51	074029	TEMPORARY SILT FENCE	LF	500
6	T58	074033	TEMPORARY CONSTRUCTION ENTRANCE	EA	2
7	T53	074034	TEMPORARY COVER	SQYD	200
8	T57	074035	TEMPORARY CHECK DAM	LF	300
9		074037	MOVE IN/MOVE OUT (TEMPORARY EROSION CONTROL)	EA	1
10	T61-T64	074038	TEMPORARY DRAINAGE INLET PROTECTION	EA	4
11		074040	TEMPORARY HUDRAULIC MULCH (BFM)	SQYD	1,300
12		074041	STREET SWEEPING	LS	1
13		074042	TEMPORARY CONCRETE WASHOUT (Portable)	LS	1
14		074056	RAIN EVENT ACTION PLAN	EA	103
15		074057	STORM WATER ANNUAL REPORT	EA	2
16		074058	STORM WATER SAMPLING AND ANALYSIS DAY	EA	60

tc

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

10 December 2012

Kelly Hirschberg
California Departmentof Transportation
111 Grand Avenue, 10th Floor, Room 10-549
Oakland, CA 94612

CERTIFIED MAIL
7011 2970 0003 8939 7462

CLEAN WATER ACT §401 TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION; CALIFORNIA DEPARTMENT OF TRANSPORTATION, CAPELL CREEK BRIDGE REPLACEMENT PROJECT (WDID#5A28CR00016), NAPA COUNTY

This Order responds to your 16 July 2012 application submittal for the Water Quality Certification of a bridge replacement project permanently impacting less than 0.01 acre/4 linear feet and temporarily impacting 0.217 acre/483 linear feet of waters of the United States.

This Order serves as certification of the United States Army Corps of Engineers' Nationwide Permit #14 (SPK# 2010-112072) 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 § 3833 of the California Code of Regulations, unless otherwise stated in writing by the certifying agency.

4. This Certification is valid for the duration of the described project. This Certification is no longer valid if the project (as currently described) is modified, or coverage under § 404 of the Clean Water Act has expired.

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 California Department of Transportation shall satisfy the following:

1. The California Department of Transportation shall notify the Central Valley Water Board in writing 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 California Department of Transportation 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 California Department of Transportation shall perform surface water sampling: 1) when performing any in-water work; 2) in the event that project activities result in any materials reaching surface waters; or 3) 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	—
pH	Standard Units	Grab[1]	Every 4 hours during in-water work	[2]

[1] Grab sample 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, 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.

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 California Department of Transportation 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.

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, settleable matter, and pH 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 turbidty 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.

   C. Activities shall not cause pH to be depressed below 6.5 nor raised above 8.5 in surface water.

6. The California Department of Transportation shall notify the Central Valley Water Board immediately if the above criteria for turbidity, settleable matter, pH, or other water quality objectives are exceeded.

7. 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 California Department of Transportation shall notify the Central Valley Water Board immediately of any spill of petroleum products or other organic or earthen materials.

8. Activities shall not cause degradation of waters of the State.

9. The California Department of Transportation shall comply with all California Department of Fish and Game requirements, including but not limited to those requirements described in Lake or Streambed Alteration Agreement No. 1600-2012-0192-R3.

10. The California Department of Transportation shall comply with all United States Fish and Wildlife Service requirements, including but not limited to those requirements described in Biological Opinion 81420-2010-F-0845-2, provided to California Department of Transportation, dated 20 May 2012.

11. 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).

12. All temporarily affected areas will be restored to pre-construction contours and conditions upon completion of construction activities.

13. All areas disturbed by project activities shall be protected from washout or erosion.

14. In-stream work will occur during periods of low flow and no precipitation.

15. 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.

16. Hydroseeding shall be performed with California native seed mix.

17. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If 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 or 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 California Department of Transportation 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.

18. The California Department of Transportation 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.

19. If temporary surface water diversions and/or dewatering are anticipated, the California Department of Transportation shall develop and maintain on-site a Surface Water Diversion and/or Dewatering Plan(s). The Plan(s) shall include the proposed method and duration of diversion activities. The Surface Water Diversion and/or Dewatering Plan(s) must be consistent with this Certification.

20. When work in a flowing stream is unavoidable and any dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream, to maintain beneficial uses of waters of the State below the dam. Construction, dewatering, and removal of temporary cofferdams shall not violate Technical Certification Condition 5 of this Certification.

21. Any temporary dam or other artificial obstruction constructed shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation. Stream flow shall be temporarily diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.

22. Raw cement, concrete (or washing thereof), asphalt, drilling fluids, lubricants, paints, coating material, oil, petroleum products, or any other substances which could be hazardous to fish and wildlife resulting from or disturbed by project-related activities, shall be prevented from contaminating the soil and/or entering waters of the United States.

23. Concrete must be completely cured before coming into contact with waters of the United States. Surface water that contacts wet concrete must be pumped out and disposed of at an appropriate off-site commercial facility which is authorized to accept concrete wastes.

24. During replacement of the bridge, a method of containment must be used below the bridge to prevent debris from falling into the water body.

25. During construction, 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.

26. All materials resulting from the project shall be removed from the site and disposed of properly.

27. If unanticipated discharges to the waters of waters of the United States and/or soil occur, the California Department of Transportation shall notify the Central Valley Water Board Contact indicated in this Certification in writing within 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.

28. The California Department of Transportation shall obtain coverage under the 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.

29. 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.

30. The California Department of Transportation shall implement each of the mitigation measures specified in the approved Mitigated Negative Declaration for the project, as they pertain to biology, hydrology and water quality impacts as required by § 21081.6 of the Public Resource Code and CEQA Guidelines, § 15097 of the California Code of Regulations.

31. 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 California Department of Transportation 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 California Department of Transportation 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 California Department of Transportation 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.

32. The California Department of Transportation 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
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-8114
tcleak@waterboards.ca.gov
(916) 464-4684

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

The California Department of Transportation is the Lead Agency responsible for compliance with the California Environmental Quality Act for the Capell Creek Bridge Replacement Project pursuant to § 21000 et seq. of the Public Resources Code. The California Department of Transportation certified the Mitigated Negative Declaration on 14 December 2011 (State Clearinghouse Number 2010112072).

The Central Valley Water Board is a responsible agency for the project. The Central Valley Water Board has determined that the Mitigated Negative Declaration is in accordance with the requirements of the California Environmental Quality Act and is valid pursuant § 21167.3(b) of the Public Resources Code.

The Central Valley Water Board has reviewed and evaluated the potentially significant impacts to water quality identified in the Mitigated Negative Declaration. The mitigation measures discussed in the Mitigated Negative Declaration to minimize project impacts are required by this Certification.

With regard to the remaining impacts identified in the Mitigated Negative Declaration, the corresponding mitigation measures proposed are within the responsibility and jurisdiction of other public agencies.

WATER QUALITY CERTIFICATION:

I hereby issue an Order certifying that any discharge from the California Department of Transportation, Capell Creek Bridge Replacement Project (WDID#5A28CR00016) 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.

for Pamela C. Creedon
Executive Officer

Enclosure: Project Information

Attachment: Figure 1 – Project Location Map

cc: Distribution List, page 13

PROJECT INFORMATION SHEET

Application Date: 16 July 2012

Applicant: Kelly Hirschberg
California Department of Transportation
111 Grand Avenue, 10th Floor, Room 10-549
Oakland, CA 94612

Applicant Representatives: Cyrus Vafai
California Department of Transportation
111 Grand Avenue, 14th Floor, Mail Stop 8F
Oakland, CA 94612

Project Name: Capell Creek Bridge Replacement Project

Application Number: WDID#5A28CR00016

Type of Project: Bridge replacement

Timeframe of Project Implementation: 1 June 2013 through 15 October 2015

Project Location: Section 21, Township 7 North, Range 3 West, MDB&M.
Latitude: 38°25'49"N and Longitude: 122°12'30" W

County: Napa

Receiving Water(s) (hydrologic unit): Capell Creek, Sacramento Hydrologic Basin, Putah Creek Hydrologic Unit #512.22, Capell Creek HAS

Water Body Type: Riparian

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: Capell Creek is the receiving water for the Capell Creek Bridge Replacement Project. Capell Creek is a tributary to Lake Beryessa which is listed on the 303(d) list for mercury. This project does not impact an already impaired water body. The most recent list of approved water quality limited segments can be found at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml.

Project Description: The 2.32-acre Capell Creek Bridge Replacement Project consists of the demolition and replacement of an existing two span bridge approximately 33-feet wide by 47-feet long with a new 42-feet wide by 64-feet long single span bridge. The project is located on State Route 121, 1.4 miles south of Capell Valley Road in Napa County.

The project will replace the existing bridge on a similar alignment, widen the approaching roadways from approximately 11.5-feet to 20-feet, require cut and fill for slope stabilization, establish temporary access roads and a staging area, improve drainage, and conduct vegetation and biological mitigation.

This project will take place in two phases over two years. The first phase will demolish the existing bridge on the east side, and construct half of the new bridge. The second phase will demolish the existing bridge on the west side, and construct the remaining portion of the new bridge.

A wood platform will be placed under the bridge during demolition to catch construction debris. Approaching roadways will be aligned and widened at both ends to conform to the new bridge. The new abutments will be located approximately 8 feet behind the existing abutments. The abutments will be built with reinforced concrete. Wing walls approximately 12-feet long and 14-feet high. The new abutments will not be located below the ordinary high water mark. The drainage improvements will consist of four, new 4-feet tall, by 6-feet wide, by 6-feet long concrete drainage inlets or manhole boxes connected to four new culverts approximately 12 to 18-inches in diameter. The culverts will be made of steel, polyethylene plastic and concrete.

Temporary cofferdams and pipes will be used to dewater the project area. A cutoff trench and pipes will be used to divert water around the project area and to reduce seepage. Two temporary, approximately 20-feet wide by 189-feet long, access roads will be constructed. All temporarily impacted areas will be revegetated. Construction equipment will enter the waterway.

The project will permanently impact less than 0.01 acre/4 linear feet and temporarily impact 0.217 acre/483 linear feet of waters of the United States.

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

Proposed Mitigation to Address Concerns: The California Department of Transportation 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 California Department of Transportation will conduct turbidity, settleable matter, and pH testing during in-water work, stopping work if Basin Plan criteria are exceeded or are observed.

Excavation/Fill Area: Approximately 270 cubic yards of rock and gravel will be placed into less than 0.01 acre/4 linear feet of waters of the United States.

Dredge Volume: None

United States Army Corps of Engineers File Number: SPK# 2010-112072

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

California Department of Fish and Game Lake or Streambed Alteration Agreement: 1600-2012-0192-R3

Possible Listed Species: Valley elderberry longhorn beetle, California Red legged frog, Western pond turtle, Foothill yellow-legged frog.

Status of CEQA Compliance: The California Department of Transportation approved the Mitigated Negative Declaration on 14 December 2011. The California Department of Transportation filed a Notice of Determination with the State Clearinghouse on 29 December 2011 (State Clearinghouse Number 2010112072).

The Central Valley Water Board filed a Notice of Determination with the State Clearinghouse as a responsible agency within 5 days of the date of this Certification.

Compensatory Mitigation: The Central Valley Water Board is not requesting compensatory mitigation for the Capell Creek Bridge Replacement Project.

Application Fee Provided: Total fees of $1,817.00 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

Paula C. Gill
United States Army Corps of Engineers
Sacramento District Office
Regulatory Division
1325 J Street, Suite 1350
Sacramento, CA 95814-2922

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

Melessa Escaron
Department of Fish and Game
P.O. Box 47
Yountville, CA 94599

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

Cyrus Vafai
California Department of Transportation
111 Grand Avenue, 14th Floor, Mail Stop 8F
Oakland, CA 94612

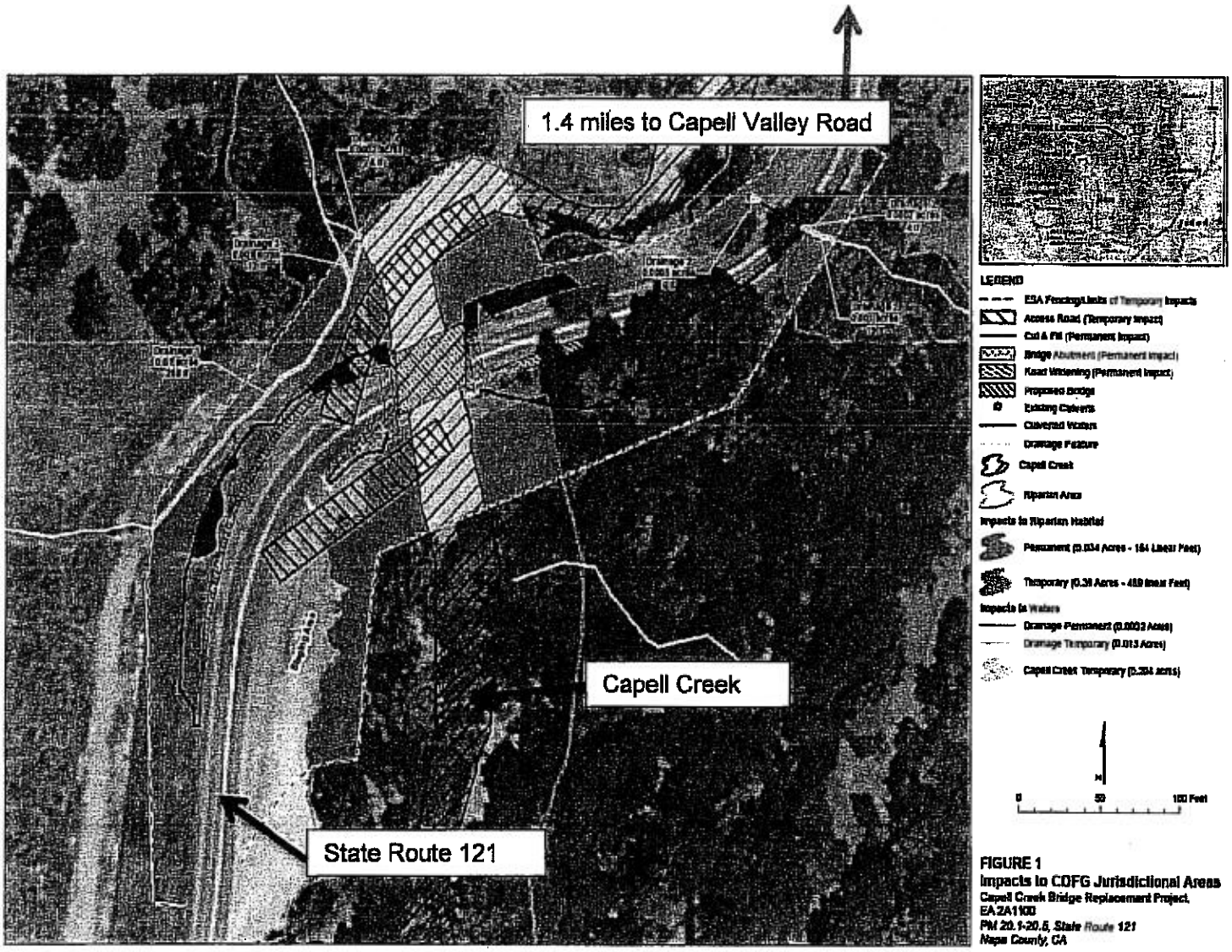
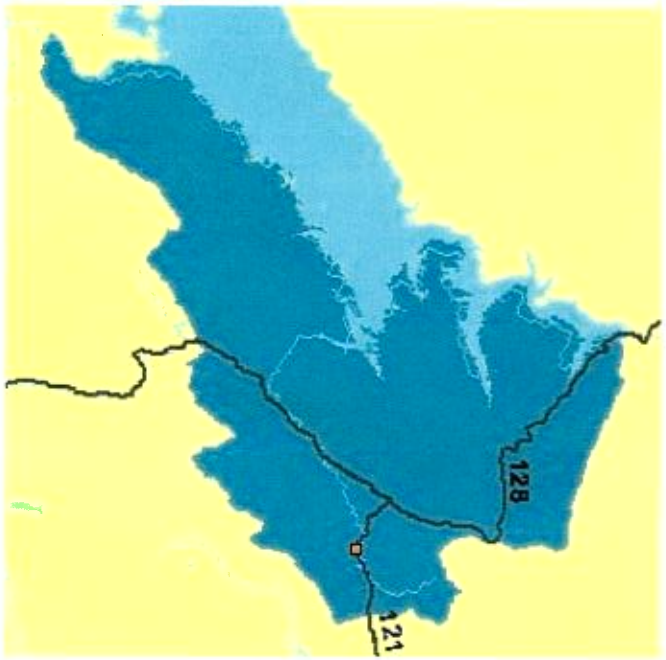


FIGURE 1
Impacts to CDFG Jurisdictional Areas
Capell Creek Bridge Replacement Project,
EA 2A1100
PM 20.1-20.5, State Route 121
Napa County, CA

Figure 1 – Project Location Map

Hydrologic Sub-Area 512.22

| HSA Information | TMDLs & 303(d) List | Water Quality Objectives | Caltrans Facilities | Caltrans Loads |



Topographic Map of the area around post mile NAP 121 20.120.
Aerial Photograph of the area around post mile NAP 121 20.120.
Help

HSA Information

Hydrologic Unit PUTAH CREEK

INDEX OF PLANS

SHEET No. DESCRIPTION

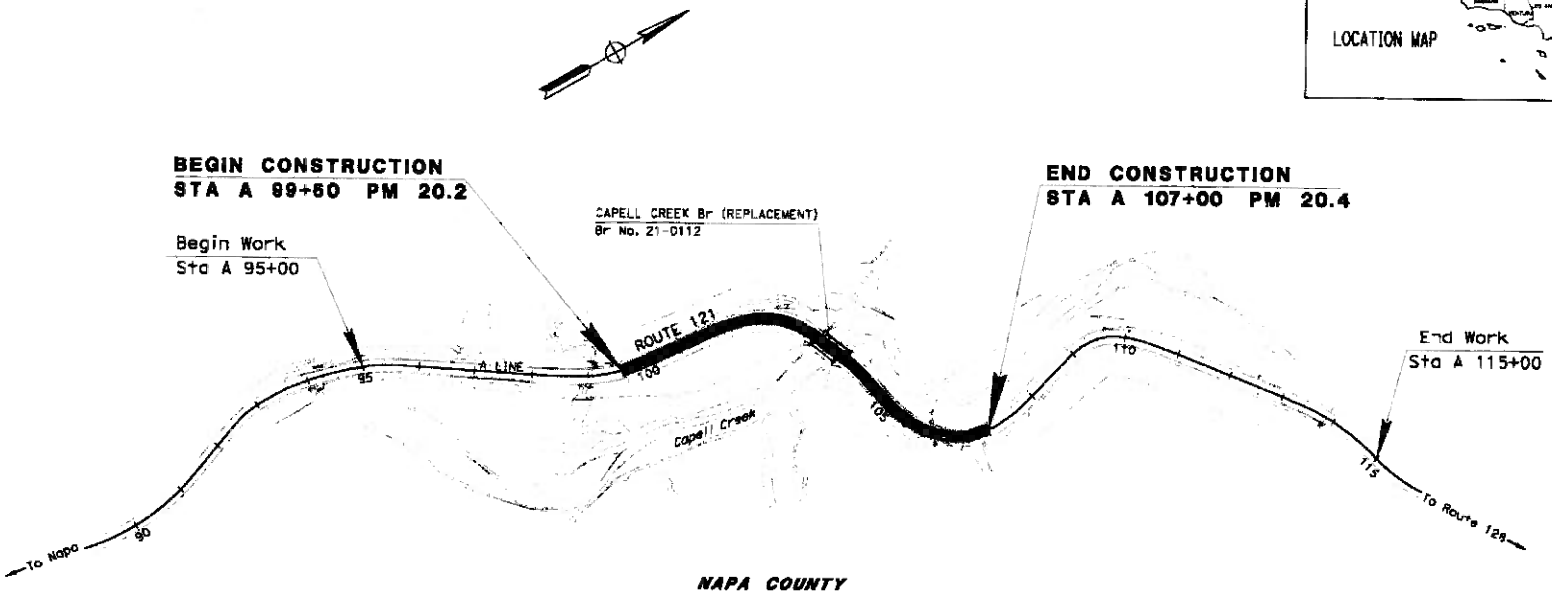
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY

IN NAPA COUNTY
ABOUT 2 MILES SOUTH OF JUNCTION ROUTE 128
AT CAPELL CREEK BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		



NAPA COUNTY

NO SCALE

PROJECT ENGINEER REGISTERED CIVIL ENGINEER — DATE 9/25/12

PLANS APPROVAL DATE

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.

REGISTERED PROFESSIONAL ENGINEER — Emerson Pangalinan — No. 78551 — 09/30/13 — CIVIL — STATE OF CALIFORNIA

PROJECT MANAGER: KELLY HIRSCHBERG

DESIGN ENGINEER: STEWART LEE

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

CONTRACT No.	04-2A1104
PROJECT ID	0400000808

DATE PLOTTED => 11-OCT-2012
TIME PLOTTED => (335)

LAST REVISION 09-25-12

BORDER LAST REVISED 7/2/2010 CALTRANS WEB SITE IS: HTTP://WWW.DOT.CA.GOV/

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s130888
DGN FILE => 0400000808000".dgn

UNIT 0738 PROJECT NUMBER & PHASE 0400000808T

NOTES:

1. DIMENSIONS OF PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATIONS ARE SHOWN ON THE SUPERELEVATION DIAGRAMS.
3. EXACT LOCATIONS AND TYPES OF HMA DIKE ARE SHOWN ON THE LAYOUTS AND SUMMARY OF QUANTITIES SHEETS.

ROUTE 121 DESIGN DESIGNATION

2014 ADT = 3000	D = 81.05%
2034 ADT = 4000	T = 2.9%
2034 DHV = 620	V = 25 MPH
ESAL 2034 = 171,000	TI20 = 7.5

TYPICAL PAVEMENT STRUCTURE SECTIONS

1. 0.80' HMA (TYPE A)
2. 0.25' COLD PLANE AC PAVEMENT
   0.25' HMA (TYPE A)
3. 0.25' TO 0.95' HMA (TYPE A)

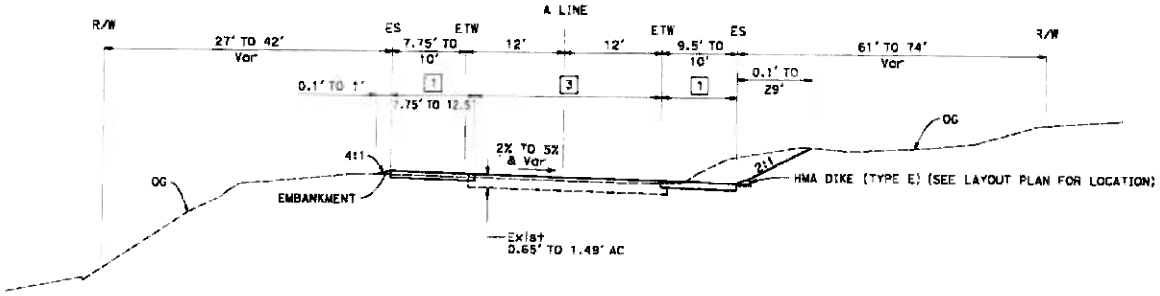
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER DATE 9/25/12

PLANS APPROVAL DATE

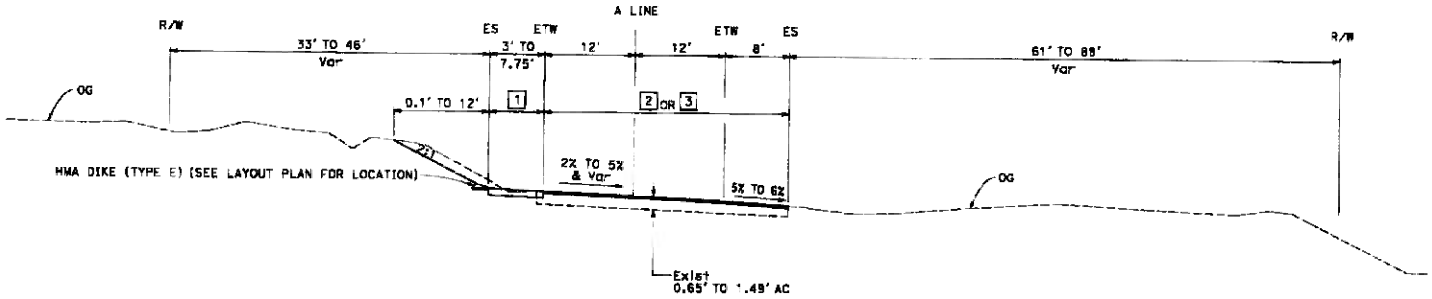
Emarnan Pongpairoj 78851 09/30/12 CIVIL

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.



SOUTHBOUND
A 102+66 TO 103+10
A 104+06 TO 104+60

NORTHBOUND
A 102+66 TO 102+98



SOUTHBOUND
A 101+00 TO 102+66

NORTHBOUND
A 101+00 TO 102+66

ROUTE 121

TYPICAL CROSS SECTIONS

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

FUNCTIONAL SUPERVISOR: STEWART LEE

CALCULATED-DESIGNED BY: EMARNAN PONGPAIROJ

CHECKED BY: STEWART LEE

REVISED BY: EP

DATE REVISED: 9/1/12

BORDER LAST REVISED 7/2/2010

USERNAME => s130888

DGN FILE => 0400000808cu00'.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 0400000808'

DATE PLOTTED => 11-OCT-2012

TIME PLOTTED => 13:51

09-25-12

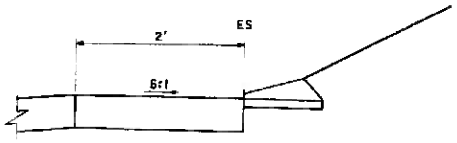
District	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER 9/25/12 DATE

PLANS APPROVAL DATE

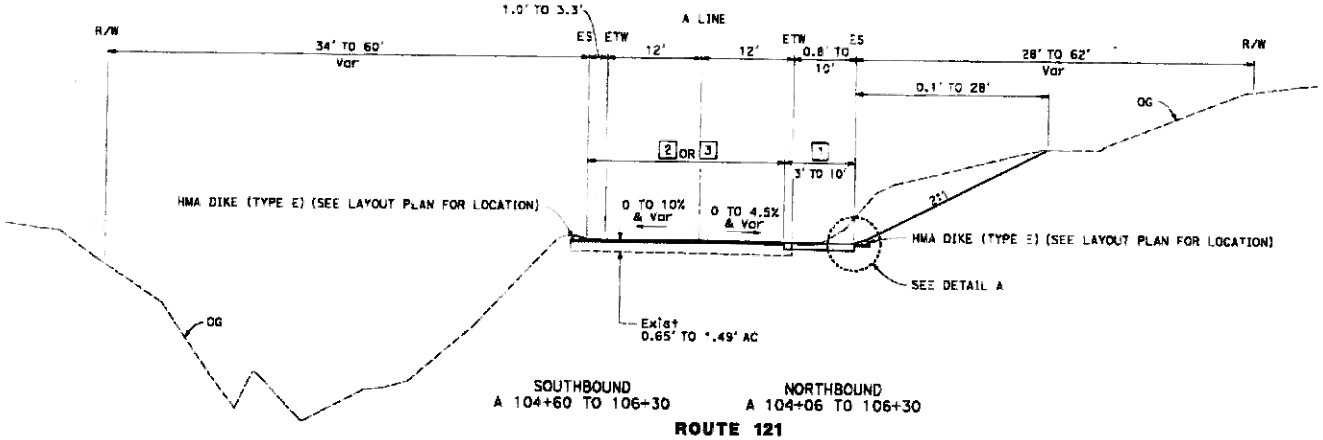
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET

Emarnan Pongpairoj No. 78561 09/30/13 CIVIL STATE OF CALIFORNIA



DETAIL A

NORTHBOUND
A 104+70.00 TO 106+00.00



SOUTHBOUND
A 104+60 TO 106+30

NORTHBOUND
A 104+06 TO 106+30

ROUTE 121

TYPICAL CROSS SECTIONS

NO SCALE

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET X-1

X-2

REVISED BY	EP		
DATE REVISED	9/1/12		
CALCULATED DESIGNED BY	EMARNAN PONGPAIROJ		
CHECKED BY	STEWART LEE		
FUNCTIONAL SUPERVISOR	STEWART LEE		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans DESIGN

BORDER LAST REVISED 7/2/2010

USERNAME => s130888
DGN FILE => 0400000808c0002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 0400000808

LAST REVISION DATE PLOTTED => 11-OCT-2012
09-25-12 TIME PLOTTED => 13:51

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. COORDINATE VALUES SHOWN ARE CCS NAD83 ZONE 2 SEE SHEET C-1, DETAIL B FOR Temp Const ROADWAY.

ABBREVIATION:

BRM BED ROCK MORTARS

LEGEND:

- PAVEMENT WIDENING
- HMA (TYPE A) SURFACING
- COLD PLANE 0.25' AC PAVEMENT 0.25' HMA (TYPE A)
- CUT/FILL LINE
- TEMPORARY FENCE (TYPE ESA)
- ARCHAEOLOGICAL MONITORING AREA BOUNDARY
- TEMPORARY CONSTRUCTION EASEMENT (TCE)
- STRUCTURAL SECTION No. (SEE SHEET X-1)

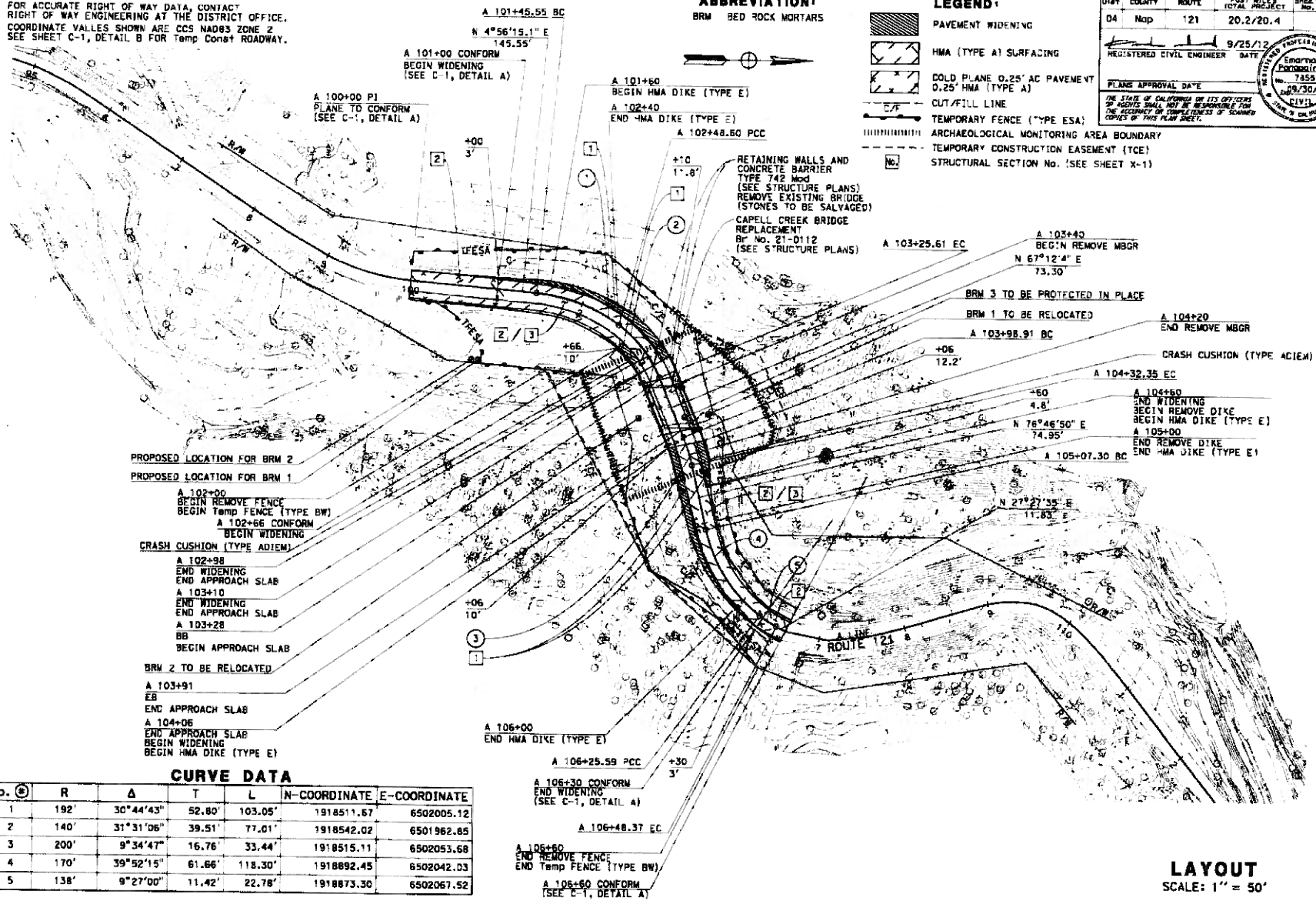
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER 9/25/12 DATE

PLANS APPROVAL DATE

Emerman Pongpairoj No. 78551 09/30/13 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.



CURVE DATA

No.	R	Δ	T	L	N-COORDINATE	E-COORDINATE
1	192'	30°44'43"	52.80'	103.05'	1918511.67	6502005.12
2	140'	31°31'06"	39.51'	77.01'	1918542.02	6501962.85
3	200'	9°34'47"	16.76'	33.44'	1918515.11	6502053.68
4	170'	39°52'15"	61.66'	118.30'	1918892.45	6502042.03
5	138'	9°27'00"	11.42'	22.78'	1918873.30	6502067.52

LAYOUT

SCALE: 1" = 50'

L-1

REVISED BY	DATE REVISED
EP	9/1/12

CALCULATED/DESIGNED BY: EMARMAN PONGPAIROJ
CHECKED BY: STEWART LEE
FUNCTIONAL SUPERVISOR: STEWART LEE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

DATE PLOTTED => 11-OCT-2012
TIME PLOTTED => 13:51
LAST REVISED 09-25-12

BORDER LAST REVISED 7/2/2010

USERNAME => s130866
DGN FILE => 0400000080800001.dgn

RELATIVE BORDER SCALE TO IN INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 0400000C8081

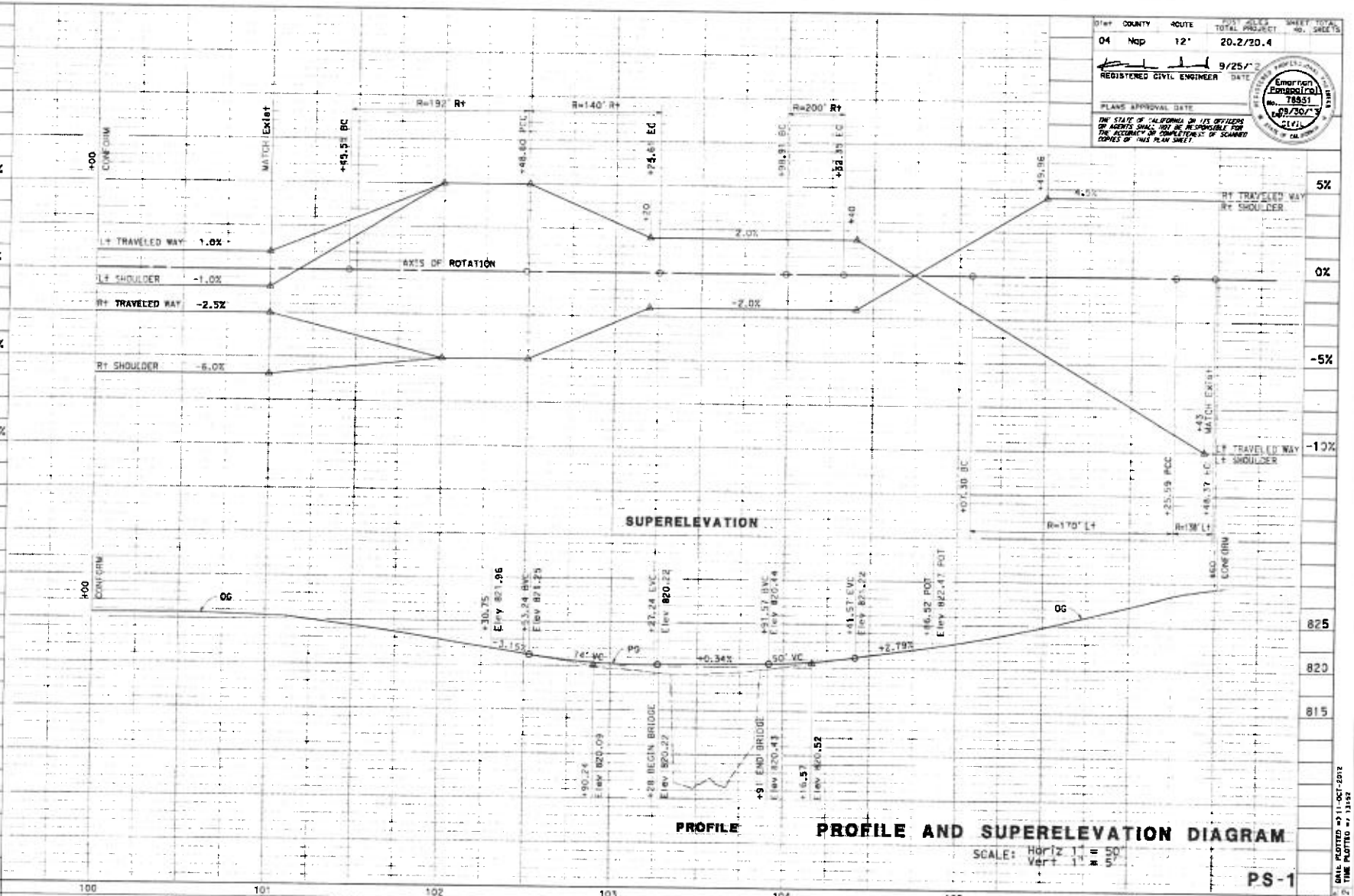
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Nap	12	20.2/20.4		

REGISTERED CIVIL ENGINEER 9/25/12 DATE

PLANS APPROVAL DATE

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

Emarnan Pongpairoj No. 78551 Exp. 09/30/13 Civil STATE OF CALIFORNIA



PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1" = 50'
Vert 1" = 5'

PS-1

STATION	100	101	102	103	104	105	106	TOTAL
CY Exc	0.00	76.28	81.22	6.08	400.38	107.25	11.13	691
CY Emb	0.00	0.02	5.13	7.89	0.53	0.13	0.65	13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR: STEWART LEE	CALCULATED/DESIGNED BY: EMARNAN PONGPAIROJ	REVISED BY: EP
Caltrans	DESIGN	CHECKED BY: STEWART LEE	DATE REVISED: 9/1/12

BORDER LAST REVISED 7/2/2010

USERNAME => s613088
DGN FILE => 04000008081ps01.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 04000008081

DATE PLOTTED => 11-OCT-2012
TIME PLOTTED => 13:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

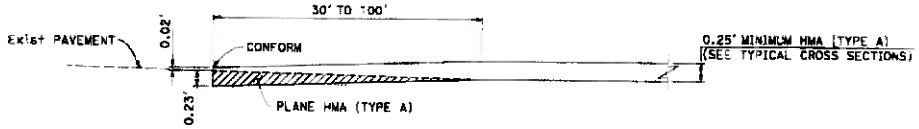
REGISTERED CIVIL ENGINEER 9/25/12 DATE

PLANS APPROVAL DATE

Emarnan Pongpaijroj No. 78551 Exp. 09/30/13 CIVIL STATE OF CALIFORNIA

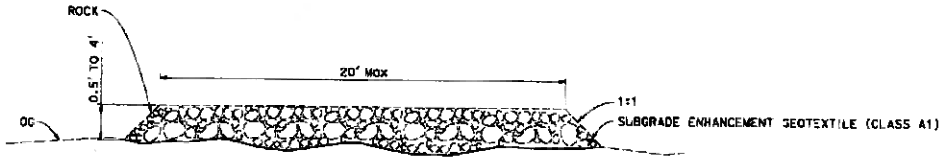
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:
SEE STANDARD PLAN T67 FOR DETAILS
NOT SHOWN FOR DETAIL B



DETAIL A

MAINLINE PAVING CONFORM
A 100+00 TO 101+00
A 106+30 TO 106+60



DETAIL B

TEMPORARY CONSTRUCTION ROADWAY
TYPICAL CROSS SECTION

CONSTRUCTION DETAILS
NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: STEWART LEE
CALCULATED-DESIGNED BY: EMARNAN PONGPAIJROJ
CHECKED BY: STEWART LEE
REVISED BY: EP
DATE REVISED: 9/1/12

BORDER LAST REVISED 7/2/2010
USERNAME => s-lee
DGN FILE => 0400000808gc001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0738
PROJECT NUMBER & PHASE 0400000808
DATE PLOTTED => 11-OCT-2012
TIME PLOTTED => 11:15:47
09-25-12

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

LEGEND:

No. PRUNE EXISTING PLANTS / SEQUENCE No.

PROTECT EXISTING PLANTS (TFESA)

ABBREVIATION:

TFESA Temp FENCE (TYPE ESA)

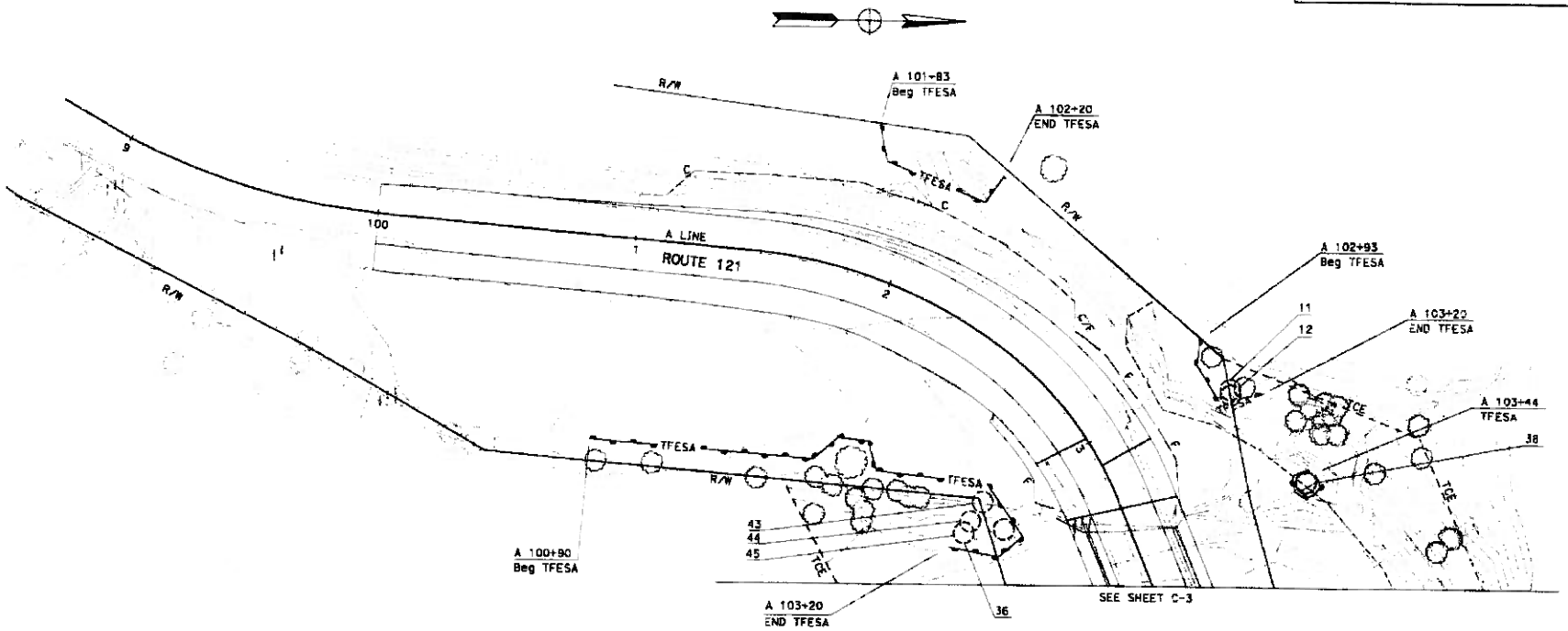
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER 9/25/12 DATE

PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER Emarnan Pongpairoj 78551 09/30/13 CIVIL STATE OF CALIFORNIA



CONSTRUCTION DETAIL
PRUNE EXISTING PLANTS PLAN

NO SCALE

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: STEWART LEE
CALCULATED-DESIGNED BY: EMARNAN PONGPAIROJ
CHECKED BY: STEWART LEE
REVISED BY: EP
DATE REVISED: 9/1/12

LAST REVISION DATE PLOTTED => 11-OCT-2012
TIME PLOTTED => 15:54
09-25-12

BORDER LAST REVISED 7/2/2010
USERNAME => s130888
DGN FILE => 04000008089g0002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0738
PROJECT NUMBER & PHASE 04000008081

NOTE:

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

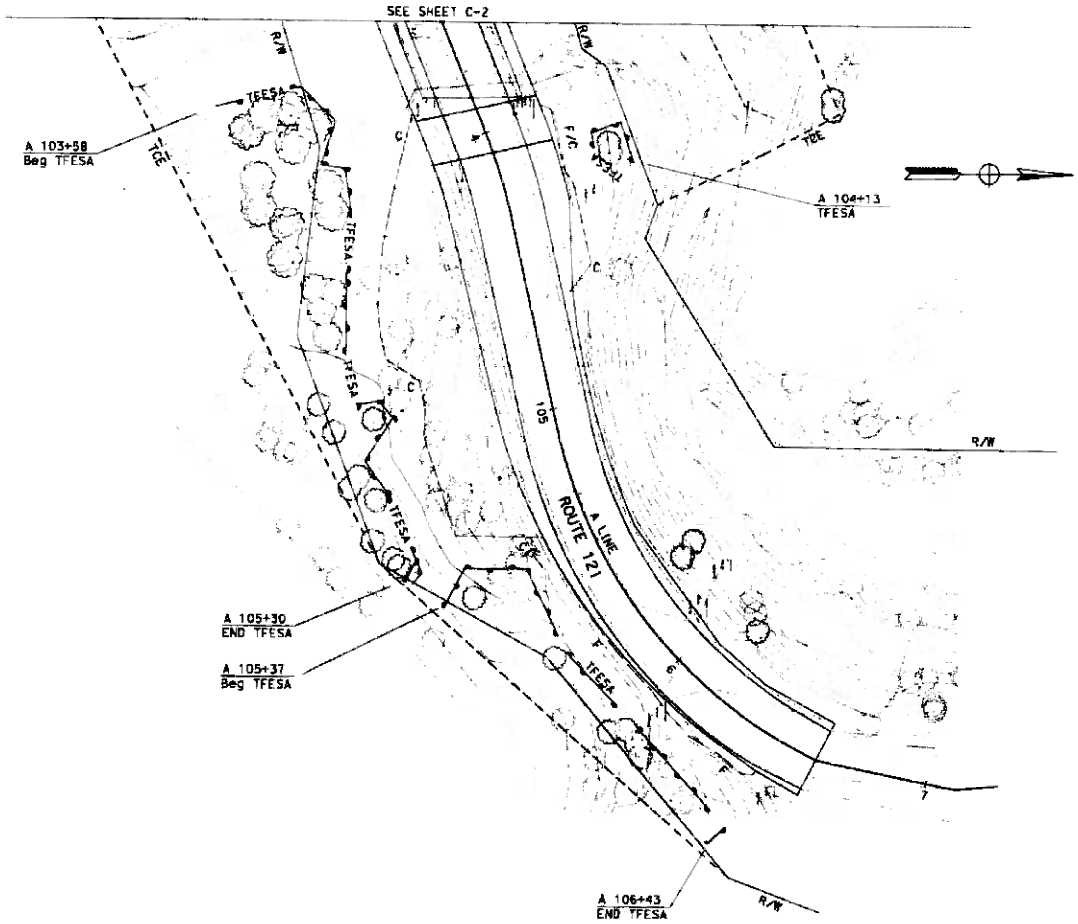
District	County	Route	Post Mi. Ex. Total Project	Sheet No.	Total Sheets
04	Nap	121	20.2/20.4		

9/25/12
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

Emarnan Pongpairoj No. 78551 09/30/13 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.



CONSTRUCTION DETAIL
PRUNE EXISTING PLANTS PLAN

NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN

FUNCTIONAL SUPERVISOR: STEWART LEE
CALCULATED/DESIGNED BY: EMARNAN PONGPAIROJ
CHECKED BY: STEWART LEE
REVISED BY: EP
DATE REVISED: 9/1/12

LAST REVISION 09-25-12 | DATE PLOTTED => 11-OCT-2012 | TIME PLOTTED => 13:52

BORDER LAST REVISED 7/2/2010 | USERNAME => s130884 | DGN FILE => 04000008Bga003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0738 | PROJECT NUMBER & PHASE 04000008081

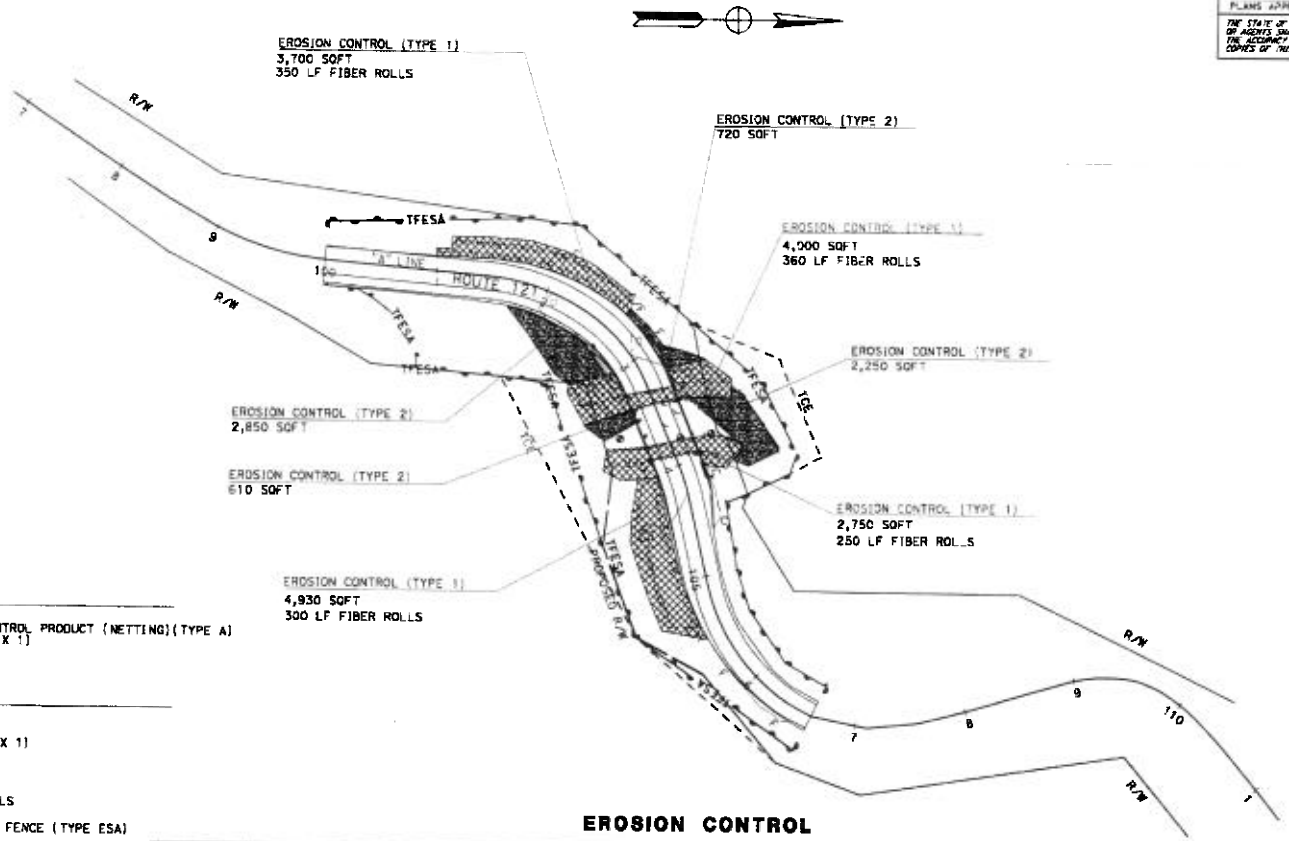
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	NAP	121	20.2/20.4		

CHRIS PADICK
LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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 DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



LEGEND:

EROSION CONTROL (TYPE 1)
COMPOST
ROLLED EROSION CONTROL PRODUCT (NETTING)(TYPE A)
HYDROSEED (SEED MIX 1)
HYDROMULCH

EROSION CONTROL (TYPE 2)
COMPOST
STRAW
HYDROSEED (SEED MIX 1)
HYDROMULCH

FR FIBER ROLLS

TFESA TEMPORARY FENCE (TYPE ESA)

EROSION CONTROL

SHEET	DESCRIPTION	COMPOST	STRAW	ROLLED EROSION CONTROL PRODUCT (NETTING)	HYDROSEED	HYDROMULCH	FIBER ROLLS	MOVE IN/ MOVE OUT
		SQFT	SQFT	SQFT	SQFT	SQFT	LF	EA
EC-1	EROSION CONTROL TYPE 1	15,380		15,380	15,380	15,380		3
	EROSION CONTROL TYPE 2	6,430	6,430		6,430	6,430		
	FIBER ROLLS						1,260	
	TOTAL	21,810	6,430	15,380	21,810	21,810	1,260	3

EROSION CONTROL PLAN AND QUANTITIES
SCALE 1" = 50'
EC-1

APPROVED FOR EROSION CONTROL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
WATER QUALITY
SENIOR LANDSCAPE ARCHITECT: DAVID YAM
CALCULATED/DESIGNED BY: CHRIS PADICK
CHECKED BY: EMARNAN PONGPAIROJ
REVISED BY / DATE REVISED

BORDER LAST REVISED 7/2/2010
USERNAME => s130888
DGN FILE => 04000008Dge001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0738
PROJECT NUMBER & PHASE 04000008081
DATE PLOTTED => 11 OCT 2012
TIME PLOTTED => 14:13
08-13-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	NAP	121	20 2/20.4		

CHRIS PADICK
LICENSED LANDSCAPE ARCHITECT

PLANS APPROVAL DATE

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.

FIBER ROLLS

SEQUENCE	ITEM	MATERIAL		REMARKS
		DESCRIPTION	TYPE	
In EC Type 1 areas Fiber Rolls must be Installed after RECP (Netting) and before Hydroseed.	FIBER ROLLS	FIBER ROLL	TYPE B 8" TO 10" Dia	Type 1 Fiber Roll Installation

EROSION CONTROL TYPE 1

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	COMPOST	COMPOST	MEDIUM	134 CY/ACRE
STEP 2	ROLLED EROSION CONTROL PRODUCT (NETTING)	NETTING	TYPE A	
STEP 3	HYDROSEED	SEED	MIX 1	60 LB/ACRE
		FIBER	WOOD	2000 LB/ACRE
STEP 4	HYDROMULCH	FIBER	WOOD	2000 LB/ACRE
		TACKIFIER	PSYLLIUM	200 LB/ACRE

EROSION CONTROL TYPE 2

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	COMPOST	COMPOST	MEDIUM	134 CY/ACRE
STEP 2	HYDROSEED	SEED	MIX 1	60 LB/ACRE
		FIBER	WOOD	500 LB/ACRE
STEP 3	STRAW	STRAW	RICE	2 TONS/ACRE
STEP 4	HYDROMULCH	FIBER	WOOD	500 LB/ACRE
		TACKIFIER	PSYLLIUM	200 LB/ACRE

SEED MIX

SEED	BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
MIX 1	ACHILLEA MILLEFOLIUM[1] (WESTERN YARROW)	85	7
	BROMUS CARINATUS[1] (CALIFORNIA BROME)	85	13
	ESCHSCHOLZIA CALIFORNICA[1] (CALIFORNIA POPPY)	80	10
	NASSELLA CERNUA[1] (NODDING NEEDLEGRASS)	90	15
	NASSELLA PULCHRA[1] (PURPLE NEEDLEGRASS)	85	10
	VULPIA MICROSTACHYS[1] (SMALL FESCUE)	90	5
	TOTALS		60

[1]SEED PRODUCED IN CALIFORNIA ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans WATER QUALITY

SENIOR LANDSCAPE ARCHITECT: DAVID YAM
CALCULATED-DESIGNED BY: EMARNAN PONGPAIROJ
CHECKED BY: CHRIS PADICK
REVISED BY
DATE REVISED

EROSION CONTROL LEGEND

APPROVED FOR EROSION CONTROL WORK ONLY

ECL-1

DATE PLOTTED => 11-OCT 2012
TIME PLOTTED => 14:11
08-13-12

BORDER LAST REVISED 7/2/2010
USERNAME => p130688
DGN FILE => 0400000808ge002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0738
PROJECT NUMBER & PHASE 04C000008081

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	NAP	121	20.2/20.4		

GANGA D. TRIPATHI 09/25/2012
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

Ganga D. Tripathi No. 78447 Exp. 9/30/13 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.

WATER POLLUTION CONTROL QUANTITY

LOCATION WPC No.	TEMPORARY FENCE (TYPE ESA)	TEMPORARY FIBER ROLL	TEMPORARY SILT FENCE	TEMPORARY COVER	TEMPORARY CHECK DAM	TEMPORARY DRAINAGE INLET PROTECTION	TEMPORARY HYDRAULIC MULCH (BFM)	TEMPORARY CONSTRUCTION ENTRANCE
	LF			SQYD	LF	EA	SQYD	EA
1	1500	1000	500	100	200	4	1000	2
Quantity Required for Additional Rainy Season	375	250	125	25	50	-	250	-
TOTAL	1875~1900	1250~1300	625~700	125~200	250~300	4	1250~1300	2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FUNCTIONAL SUPERVISOR

CALCULATED DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

WATER POLLUTION CONTROL QUANTITY

WPCQ-1

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => s130888
DGN FILE => 0400000808qq0001.cgn

CU 0738

EA 04000C08081

LAST REVISION DATE PLOTTED => 11-OCT-2012
04-19-11 TIME PLOTTED => 13:57

NOTE:

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

LEGEND:

- - - - - - - TEMPORARY CONSTRUCTION EASEMENT (TCE)

— — C/F — — CUT/FILL LINE

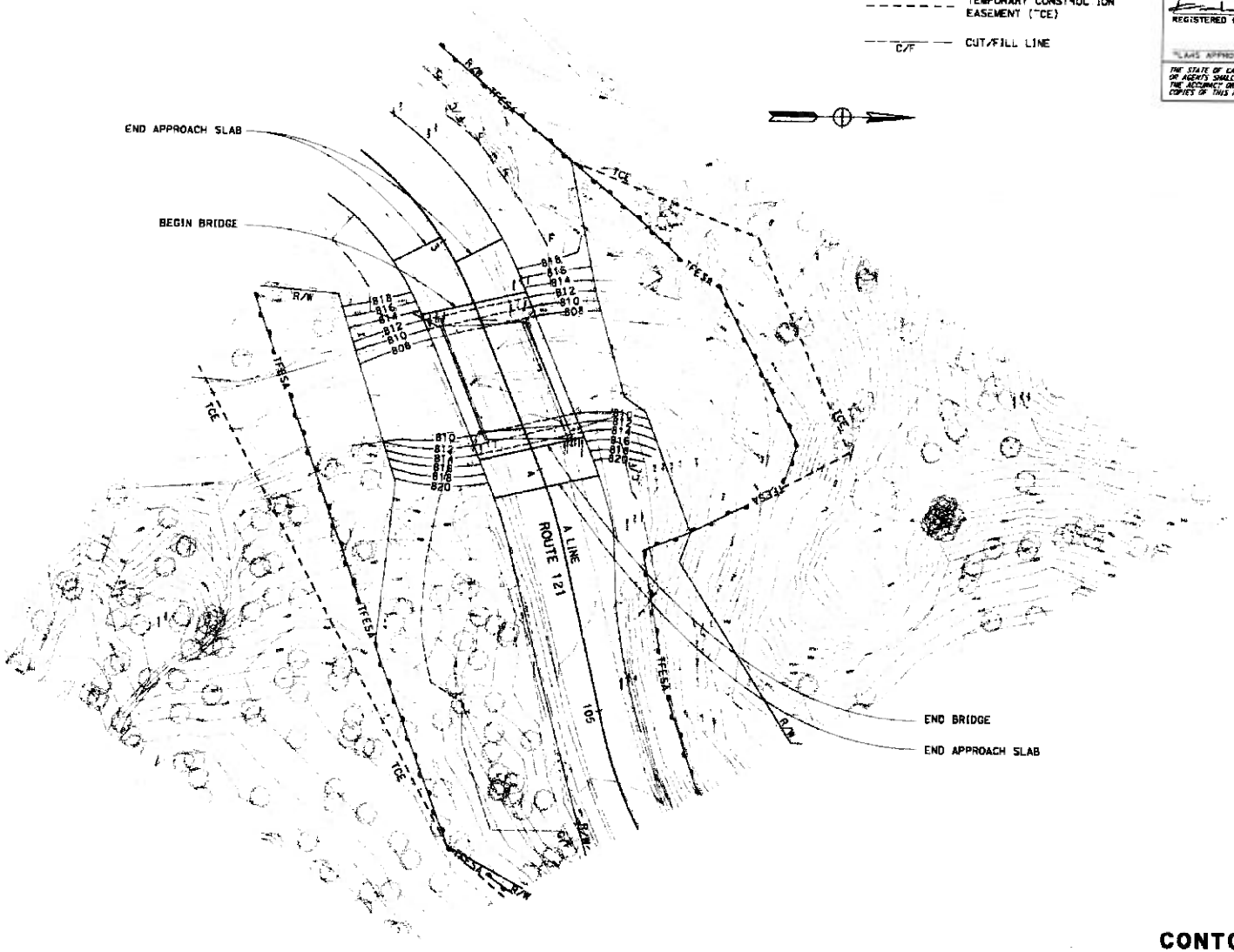
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL NO. SHEETS
04	Nap	121	20.2/20.4	

REGISTERED CIVIL ENGINEER 5/25/12 DATE

PLANS APPROVAL DATE

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.

REGISTERED PROFESSIONAL ENGINEER Emarnan Pongpairoj No. 78551 09/30/13 CIVIL STATE OF CALIFORNIA



APPROVED FOR CONTOUR GRADING WORK ONLY

CONTOUR GRADING

SCALE: 1" = 20'

G-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DESIGN

FUNCTIONAL SUPERVISOR

CALCULATED DESIGNED BY

CHECKED BY

REVISED BY EP

DATE REVISED 9/10/12

DATE PLOTTED => 11-04-2012

TIME PLOTTED => 13:52

09-25-12

BORDER LAST REVISED 7/2/2010

USERNAME => s130ssa

DGN FILE => 04000008081c001.dgn

RELATIVE BORDER SCALE IS 1" INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 04000008081

NOTE:

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

NOTES:

1. LOCATION OF EXISTING DRAINAGE FACILITIES ARE APPROXIMATE AND SHOULD BE VERIFIED BY THE ENGINEER.
2. TOP OF GRATE ELEVATION (TG) IS THE FINISHED PAVEMENT ELEVATION MINUS THE GUTTER DEPRESSION.
3. THERE WILL BE NO STANDARD GUTTER DEPRESSION (SGD) PROVIDED, UNLESS OTHERWISE NOTED.
4. ALL TIES TO INLET, MANHOLES AND JUNCTION BOXES ARE DEFINED ON SHEET DG-1, UNLESS OTHERWISE NOTED.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO	TOTAL SHEETS
04	Nap	121	20.2/20.4		

Kumblewaph 10/9/12
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

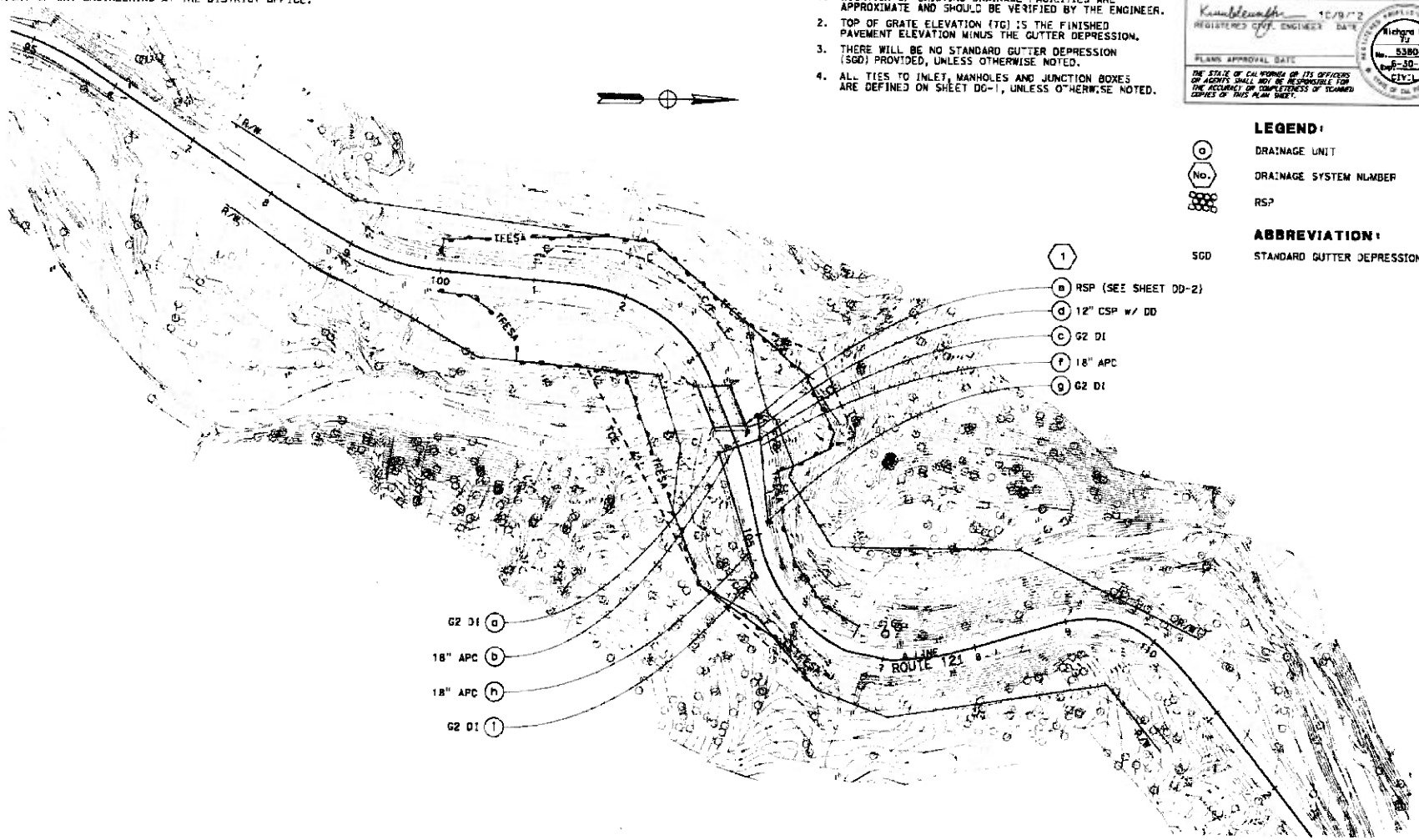
Richard K. Yu No. 53804 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA

LEGEND:

- (a) DRAINAGE UNIT
- (No.) DRAINAGE SYSTEM NUMBER
- RSP

ABBREVIATION:

SGD STANDARD GUTTER DEPRESSION



DRAINAGE PLAN

SCALE: 1" = 50'

D-1

APPROVED FOR DRAINAGE WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

HYDRAULICS

FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY: EMMANUAN PONDPATROJ

CHECKED BY: RICHARD YU

REVISED BY: EP

DATE REVISED: 9/10/12

DIST-RU-COUNTY DATE PLOTTED => 11-OCT-2012 TIME PLOTTED => 13:52

09-19-12

BORDER LAST REVISED 1/2/2010

USERNAME => s130888
DGN FILE => 04000008081 dd01.dgn

RELATIVE BORDER SCALE IN INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 04000008081

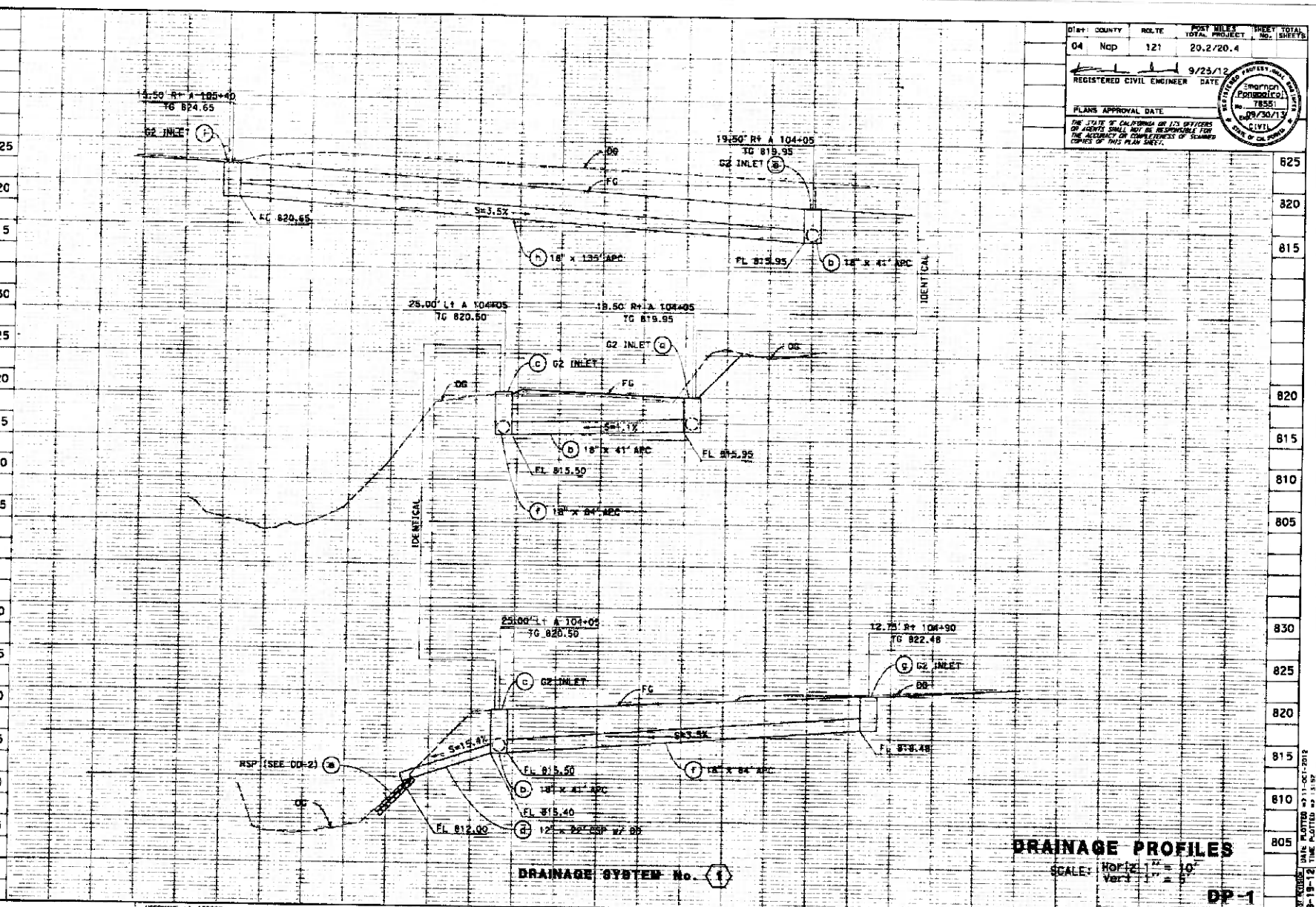
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER 9/25/12 DATE

PLANS APPROVAL DATE

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.

REGISTERED PROFESSIONAL ENGINEER Emarnan Pongpairoj No. 78551 09/30/13 CIVIL STATE OF CALIFORNIA



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

DESIGN

FUNCTIONAL SUPERVISOR: STEWART LEE

CALCULATED BY / DESIGNED BY: EMARNAN PONGPAIROJ

CHECKED BY: STEWART LEE

REVISED BY: EP

DATE REVISED: 9/10/12

BORDER LAST REVISED 7/2/2010

USERNAME => s130888
DGN FILE => 04000008081s001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0733

PROJECT NUMBER & PHASE 04000008081

LAST REVISED DATE PLOTTED => 11-OCT-2012
TIME PLOTTED => 15:57
09-19-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	12*	20.2/20.4		

REGISTERED CIVIL ENGINEER 10/9/12 DATE

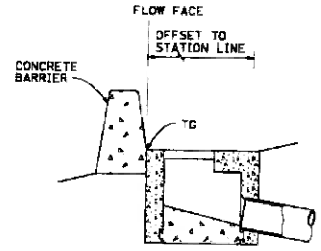
PLANS APPROVAL DATE

Richard K. Yu No. 53804 Exp. 6-30-13 CIVIL

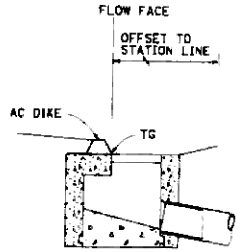
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

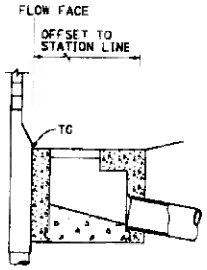
1. SEE STANDARD PLAN D87A FOR ANCHOR ASSEMBLY DETAILS.
2. FOR INFORMATION NOT SHOWN, SEE STANDARD PLAN D73 THROUGH D74B.



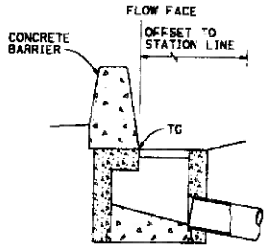
SECTION B-B



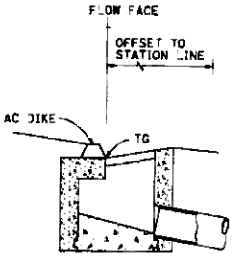
SECTION C-C



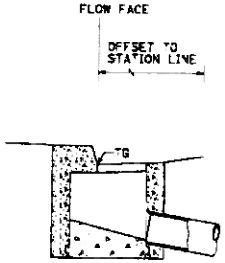
SECTION A-A



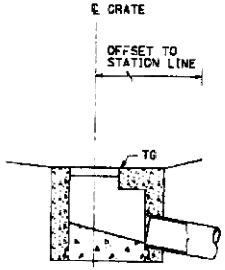
SECTION D-D



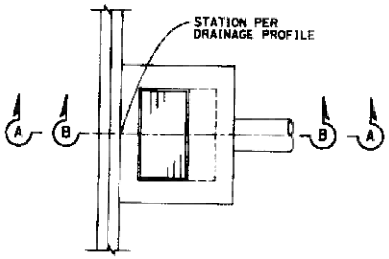
ELEVATION



ELEVATION



ELEVATION

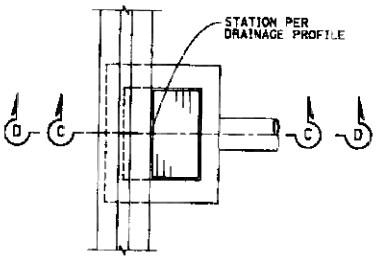


PLAN

ADJACENT TO SOUNDWALL (SECTION A-A)
ADJACENT TO CONCRETE BARRIER (SECTION B-B)

INLET

(TYPES 60E, 60GE, 60SC, 60SE, OR HIGH SIDE OF TYPES 60C, 60GC)

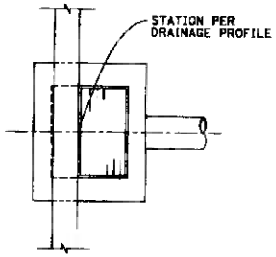


PLAN

ADJACENT TO AC DIKE (SECTION C-C)
ADJACENT TO CONCRETE BARRIER (SECTION D-D)

INLET

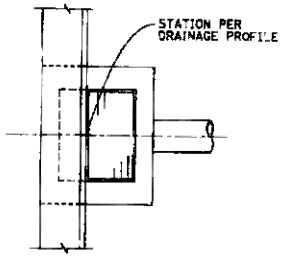
(TYPE 60C SHOWN, TYPES 60, 60G, 60GC SIMILAR)



PLAN

INLET

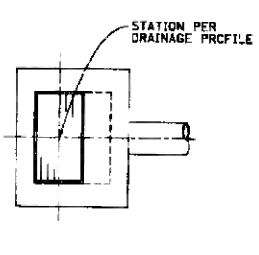
WITHIN AC SIDE GUTTER



PLAN

INLET

ADJACENT TO CURB



PLAN

FIELD INLET

DRAINAGE DETAILS

NO SCALE

DD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS

FUNCTIONAL SUPERVISOR

CALCULATED DESIGNED BY: EMARMAN PONGPAIROJ
CHECKED BY: RICHARD YU

REVISED BY: EP
DATE REVISED: 9/10/12

DATE PLOTTED => 11 OCT 2012
TIME PLOTTED => 13:12

02-28-12

BORDER LAST REVISED 7/2/2010

USERNAME => s130888
DGN FILE => 0400000808 (c001.dgn)

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 0400000808 1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER 10/9/12 DATE

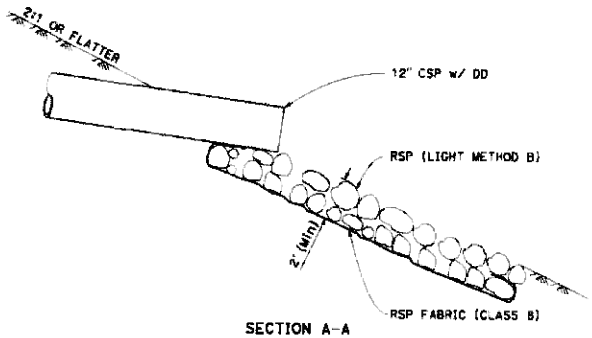
PLANS APPROVAL DATE

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.

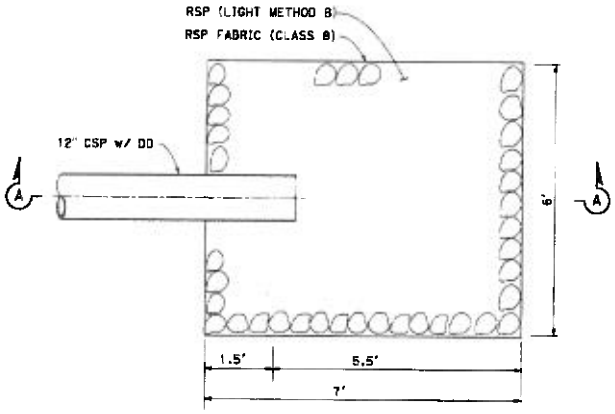
Richard E. Yu No. 53804 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA

NOTE:

FOR ANCHOR ASSEMBLY DETAILS, SEE STANDARD PLANS D87A.



SECTION A-A



PLAN

RSP (1) (B)

DRAINAGE DETAILS

NO SCALE

DD-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

HYDRAULICS

FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY: PIMARNAN PONGPAIROJ

CHECKED BY: RICHARD YU

REVISED BY: EP

DATE REVISED: 9/10/12

BORDER LAST REVISED 7/2/2010

USERNAME = s-a-30888

DGN FILE = i 0400000081 c002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 0400000081

DATE PLOTTED = 11-OCT-2012

TIME PLOTTED = 13:52

09-19-12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER 10/9/12 DATE

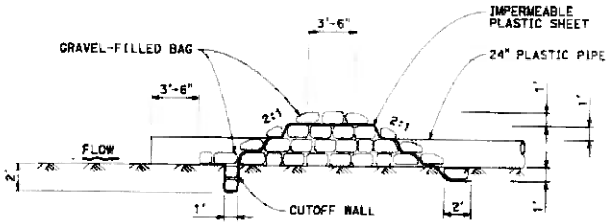
PLANS APPROVAL DATE

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.

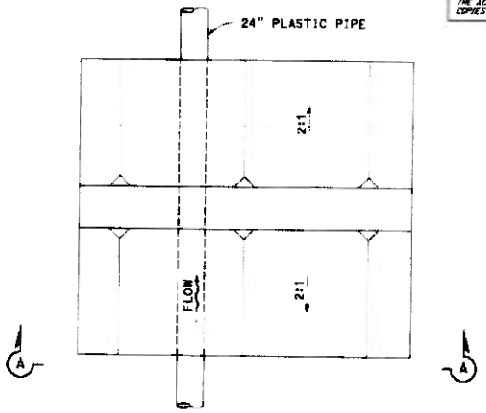
Richard K. Yu No. 53804 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA

NOTES:

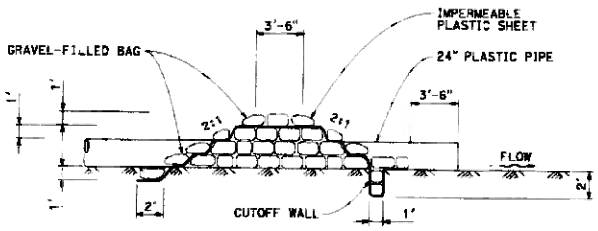
1. SEE STANDARD PLAN D87A FOR ANCHOR ASSEMBLY DETAILS.
2. EXACT LOCATION OF UPSTREAM COFFERDAM, DOWNSTREAM COFFERDAM, AND PLASTIC PIPE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. MULTIPLE DEPLOYMENT OF TEMPORARY CREEK DIVERSION SYSTEM MAY BE NECESSARY.



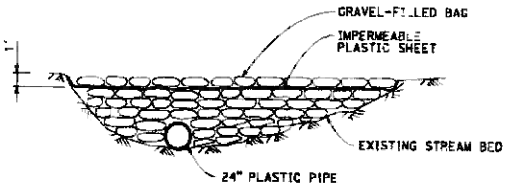
UPSTREAM



PLAN
COFFERDAM



DOWNSTREAM



SECTION A-A

TEMPORARY CREEK DIVERSION SYSTEM

DRAINAGE DETAILS

NO SCALE

DD-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

HYDRAULICS

FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY EMARIAN POMPAPROJ

CHECKED BY RICHARD YU

REVISED BY EP

DATE REVISED 9/10/12

BORDER LAST REVISED 7/2/2010

USERNAME

DGN FILE => 04000008081c003.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0738

PROJECT NUMBER & PHASE 04000008081

DATE PLOTTED => 11-OCT-2012

TIME PLOTTED => 13:52

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121	20.2/20.4		

REGISTERED CIVIL ENGINEER 10/9/12 DATE

PLANS APPROVAL DATE

Richard K. Yu No. 53804 Exp. 6-30-13 CIVIL

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:
PLASTIC PIPE ALTERNATIVE SHALL BE SMOOTH INTERIOR WALL TYPE ONLY.

ABBREVIATIONS:
SJ STANDARD JOINT
DD DOWN DRAIN JOINT

APC ALLOWABLE PIPE MATERIAL

DESIGNATION	RCP	PLASTIC PIPE (1)
	INCH	INCH
18" APC	18	18

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	ROCK SLOPE PROTECTION (LIGHT METHOD B) CY	RSP FABRIC (CLASS B) SQYD	MINOR CONCRETE (MINOR STRUCTURE) CY	FRAME & GRATE (TYPE 24 - 12X) (N) CY	MISCELLANEOUS IRON & STEEL LB	CSP DOWNDRAIN 12" LF	CSP DOWNDRAIN 18" LF	APC LF	HEIGHT OF INLET(N) LF	PIPE JOINT CLASSIFICATION (N)	DESCRIPTION	STATION	DRAINAGE SYSTEM No.	DRAINAGE UNIT
D-1	1	a			1.57	1	263				4		G2 INLET	19.50' Rt A 104+05	1	a
		b								41		SJ	18" APC	25.00' Lt A 104+05 TO 19.50' Rt A 104+05		b
		c			1.82	1	263				5		G2 INLET	25.00' Lt A 104+05		c
		d						22				DD	12" CSP w/ DD	31.00' Lt A 103+85 TO 25.00' Lt A 104+05		d
		e	4	5									RSP (LIGHT METHOD B)	31.00' Lt A 103+85		e
		f								84		SJ	18" APC	25.00' Lt A 104+05 TO 12.75' Rt A 104+90		f
		g			1.57	1	263				4		G2 INLET	12.75' Rt A 104+90		g
		h								135			18" APC	19.50' Rt A 104+05 TO 15.5' Rt A 105+40		h
		i			1.57	1	263				4		G2 INLET	15.50' Rt A 105+40		i
SHEET TOTAL			4	5	6.53	4	1052	22	260							

(N) = NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
HYDRAULICS
FUNCTIONAL SUPERVISOR
CALCULATED DESIGNED BY FAMIRAM PONGPAIROJ
CHECKED BY RICHARD YU
REVISED BY EP
DATE REVISED 9/10/12

DATE PLOTTED => 11-OCT 2012
TIME PLOTTED => 13:02

DRAINAGE QUANTITIES DQ-1

BORDER LAST REVISED 7/2/2010
USERNAME => s130684
DGN FILE => 0400000808idq01.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0738
PROJECT NUMBER & PHASE 0400000808

Checklist SW-1, Site Data Sources

Prepared by: Mostafa Faghihi Date: 01/22/2012 District-Co-Route: 04-NAPA-121

PM : 20.2- 20.4 Project ID (or EA): 0400000808 RWQCB: R-5

Information for the following data categories should be obtained, reviewed and referenced as necessary throughout the project planning phase. Collect any available documents pertaining to the category and list them and reference your data source. For specific examples of documents within these categories, refer to Section 5.5 of this document. Example categories have been listed below; add additional categories, as needed. Summarize pertinent information in Section 2 of the SWDR.

DATA CATEGORY/SOURCES	Date
Topographic	
• US Geological Survey – TerraServer USA	Accessed 2012
• Soil Survey NRCS	Accessed Nov. 2012
• Google Maps	Accessed Nov. 2012
Hydraulic	
• California State University, Sacramento, Water Quality Planning Tool	Accessed Jan. 2013
•	
•	
Soils	
• Soil Survey NRCS	Accessed Nov. 2012
• Caltrans Geotechnical Report	Accessed Dec. 2012
•	
Climatic	
• Soil Survey NRCS	Accessed Nov. 2012
•	
•	
Water Quality	
• Water Quality Planning Tool	Accessed Jan. 2013
• California 303d List of Water Quality Limited Segments	2006
•	
Other Data Categories	
• Caltrans, Storm Water Quality Handbooks-Construction Site Best Management Practices Manual	March, 2003
• Project Planning and Design Guide (PPDG)	May 2007
• Napa County Land Use Plan 2008 - 2030	June 2008

Checklist SW-2, Storm Water Quality Issues Summary

Prepared by: Mostafa Faghihi Date: 01/22/2012 District-Co-Route: 04-NAPA-121

PM : 20.2- 20.4 Project ID (or EA): 0400000808 RWQCB: R-5

The following questions provide a guide to collecting critical information relevant to project stormwater quality issues. Complete responses to applicable questions, consulting other Caltrans functional units (Environmental, Landscape Architecture, Maintenance, etc.) and the District/Regional Storm Water Coordinator as necessary. Summarize pertinent responses in Section 2 of the SWDR.

1.	Determine the receiving waters that may be affected by the project throughout the project life cycle (i.e., construction, maintenance and operation).	☒Complete	☐NA
2.	For the project limits, list the 303(d) impaired receiving water bodies and their constituents of concern.	☒Complete	☐NA
3.	Determine if there are any municipal or domestic water supply reservoirs or groundwater percolation facilities within the project limits. Consider appropriate spill contamination and spill prevention control measures for these new areas.	☒Complete	☐NA
4.	Determine the RWQCB special requirements, including TMDLs, effluent limits, etc.	☒Complete	☐NA
5.	Determine regulatory agencies seasonal construction and construction exclusion dates or restrictions required by federal, state, or local agencies.	☒Complete	☐NA
6.	Determine if a 401 certification will be required.	☒Complete	☐NA
7.	List rainy season dates.	☒Complete	☐NA
8.	Determine the general climate of the project area. Identify annual rainfall and rainfall intensity curves.	☒Complete	☐NA
9.	If considering Treatment BMPs, determine the soil classification, permeability, erodibility, and depth to groundwater.	☒Complete	☐NA
10.	Determine contaminated soils within the project area.	☒Complete	☐NA
11.	Determine the total disturbed soil area of the project.	☒Complete	☐NA
12.	Describe the topography of the project site.	☒Complete	☐NA
13.	List any areas outside of the Caltrans right-of-way that will be included in the project (e.g. contractor's staging yard, work from barges, easements for staging, etc.).	☒Complete	☐NA
14.	Determine if additional right-of-way acquisition or easements and right-of-entry will be required for design, construction and maintenance of BMPs. If so, how much?	☒Complete	☐NA
15.	Determine if a right-of-way certification is required.	☒Complete	☐NA
16.	Determine the estimated unit costs for right-of-way should it be needed for Treatment BMPs, stabilized conveyance systems, lay-back slopes, or interception ditches.	☒Complete	☐NA
17.	Determine if project area has any slope stabilization concerns.	☒Complete	☐NA
18.	Describe the local land use within the project area and adjacent areas.	☒Complete	☐NA
19.	Evaluate the presence of dry weather flow.	☒Complete	☐NA

Checklist SW-3, Measures for Avoiding or Reducing Potential Storm Water Impacts

Prepared by: Mostafa Faghihi Date: 01/22/2012 District-Co-Route: 04-NAPA-121

PM : 20.2- 20.4 Project ID (or EA): 0400000808 RWQCB: R-5

The PE must confer with other functional units, such as Landscape Architecture, Hydraulics, Environmental, Materials, Construction and Maintenance, as needed to assess these issues. Summarize pertinent responses in Section 2 of the SWDR.

Options for avoiding or reducing potential impacts during project planning include the following:

1. Can the project be relocated or realigned to avoid/reduce impacts to receiving waters or to increase the preservation of critical (or problematic) areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions?	☐Yes	☒No	☐NA
2. Can structures and bridges be designed or located to reduce work in live streams and minimize construction impacts?	☒Yes	☐No	☐NA
3. Can any of the following methods be utilized to minimize erosion from slopes:			
a. Disturbing existing slopes only when necessary?	☒Yes	☐No	☐NA
b. Minimizing cut and fill areas to reduce slope lengths?	☒Yes	☐No	☐NA
c. Incorporating retaining walls to reduce steepness of slopes or to shorten slopes?	☒Yes	☐No	☐NA
d. Acquiring right-of-way easements (such as grading easements) to reduce steepness of slopes?	☒Yes	☐No	☐NA
e. Avoiding soils or formations that will be particularly difficult to re-stabilize?	☐Yes	☒No	☐NA
f. Providing cut and fill slopes flat enough to allow re-vegetation and limit erosion to pre-construction rates?	☒Yes	☐No	☐NA
g. Providing benches or terraces on high cut and fill slopes to reduce concentration of flows?	☐Yes	☐No	☒NA
h. Rounding and shaping slopes to reduce concentrated flow?	☒Yes	☐No	☐NA
i. Collecting concentrated flows in stabilized drains and channels?	☒Yes	☐No	☐NA
4. Does the project design allow for the ease of maintaining all BMPs?	☒Yes	☐No	
5. Can the project be scheduled or phased to minimize soil-disturbing work during the rainy season?	☒Yes	☐No	
6. Can permanent storm water pollution controls such as paved slopes, vegetated slopes, basins, and conveyance systems be installed early in the construction process to provide additional protection and to possibly utilize them in addressing construction storm water impacts?	☐Yes	☒No	☐NA

Design Pollution Prevention BMPs
Checklist DPP-1, Part 1

Prepared by: Mostafa Faghihi Date: 1/22/2012 District-Co-Route: 04-Napa-121

PM : 20.2/20.4 Project ID (or EA): 0400000808(2A1100) RWQCB R-5

Consideration of Design Pollution Prevention BMPs

Consideration of Downstream Effects Related to Potentially Increased Flow [to streams or channels]

Will project increase velocity or volume of downstream flow?	☒Yes	☐No	☐NA
Will the project discharge to unlined channels?	☒Yes	☐No	☐NA
Will project increase potential sediment load of downstream flow?	☒Yes	☐No	☐NA
Will project encroach, cross, realign, or cause other hydraulic changes to a stream that may affect downstream channel stability?	☐Yes	☒No	☐NA

If Yes was answered to any of the above questions, consider ***Downstream Effects Related to Potentially Increased Flow***, complete the DPP-1, Part 2 checklist.

Slope/Surface Protection Systems

Will project create new slopes or modify existing slopes?	☒Yes	☐No	☐NA

If Yes was answered to the above question, consider ***Slope/Surface Protection Systems***, complete the DPP-1, Part 3 checklist.

Concentrated Flow Conveyance Systems

Will the project create or modify ditches, dikes, berms, or swales?	☒Yes	☐No	☐NA
Will project create new slopes or modify existing slopes?	☒Yes	☐No	☐NA
Will it be necessary to direct or intercept surface runoff?	☒Yes	☐No	☐NA
Will cross drains be modified?	☒Yes	☐No	☐NA

If Yes was answered to any of the above questions, consider ***Concentrated Flow Conveyance Systems***; complete the DPP-1, Part 4 checklist.

Preservation of Existing Vegetation

It is the goal of the Storm Water Program to maximize the protection of desirable existing vegetation to provide erosion and sediment control benefits on all projects. ☒Complete

Consider ***Preservation of Existing Vegetation***, complete the DPP-1, Part 5 checklist.

Design Pollution Prevention BMPs
Checklist DPP-1, Part 2

Prepared by: Mostafa Faghihi Date: 1/22/2012 District-Co-Route: 04-Napa-121

PM : 20.2/20.4 Project ID (or EA): 0400000808(2A1100) RWQCB: R-5

Downstream Effects Related to Potentially Increased Flow

1. Review total paved area and reduce to the maximum extent practicable. ☒Complete
2. Review channel lining materials and design for stream bank erosion control. ☒Complete
   (a) See Chapters 860 and 870 of the HDM. ☒Complete
   (b) Consider channel erosion control measures within the project limits as well as downstream. Consider scour velocity. ☒Complete
3. Include, where appropriate, energy dissipation devices at culvert outlets. ☒Complete
4. Ensure all transitions between culvert outlets/headwalls/wingwalls and channels are smooth to reduce turbulence and scour. ☒Complete
5. Include, if appropriate, peak flow attenuation basins or devices to reduce peak discharges.
6. Calculate the water quality volume infiltrated by DPP BMPs within the project limits. Include the percentage of the water quality volume for each BMP and subwatershed, as appropriate, for site conditions. These calculations will be used later in the T-1 checklist. ☐Complete

Design Pollution Prevention BMPs
Checklist DPP-1, Part 3

Prepared by: Mostafa Faghihi Date: 1/22/2012 District-Co-Route: 04-Napa-121

PM : 20.2/20.4 Project ID (or EA): 0400000808(2A1100) RWQCB: R-5

Slope / Surface Protection Systems

1. What are the proposed areas of cut and fill? (attach plan or map) ☒Complete
2. Were benches or terraces provided on high cut and fill slopes to reduce concentration of flows? ☐Yes ☒No
3. Were slopes rounded and/or shaped to reduce concentrated flow? ☒Yes ☐No
4. Were concentrated flows collected in stabilized drains or channels? ☒Yes ☐No
5. Are new or disturbed slopes > 4:1 horizontal:vertical (h:v)? ☒Yes ☐No

   If Yes, District Landscape Architect must prepare or approve an erosion control plan, at the District's discretion.
6. Are new or disturbed slopes > 2:1 (h:v)? ☐Yes ☒No

   If Yes, Geotechnical Services must prepare a Geotechnical Design Report, and the District Landscape Architect should prepare or approve an erosion control plan. Concurrence must be obtained from the District Maintenance Storm Water Coordinator for slopes steeper than 2:1 (h:v).
7. Estimate the net new impervious area that will result from this project. 0.1 acres ☒Complete

VEGETATED SURFACES

1. Identify existing vegetation. ☒Complete
2. Evaluate site to determine soil types, appropriate vegetation and planting strategies. ☒Complete
3. How long will it take for permanent vegetation to establish? ☒Complete
4. Minimize overland and concentrated flow depths and velocities. ☒Complete

HARD SURFACES

1. Are hard surfaces required? ☐Yes ☒No

   If Yes, document purpose (safety, maintenance, soil stabilization, etc.), types, and general locations of the installations. ☐Complete

Review appropriate SSPs for Vegetated Surface and Hard Surface Protection Systems. ☐Complete

Design Pollution Prevention BMPs
Checklist DPP-1, Part 4

Prepared by: Mostafa Faghihi Date: 1/22/2012 District-Co-Route: 04-Napa-121

PM : 20.2/20.4 Project ID (or EA): 0400000808(2A1100) RWQCB: R-5

Concentrated Flow Conveyance Systems

Ditches, Berms, Dikes and Swales

1. Consider Ditches, Berms, Dikes, and Swales as per Topics 813, 834.3, and 835, and Chapter 860 of the HDM. ☒Complete
2. Evaluate risks due to erosion, overtopping, flow backups or washout. ☒Complete
3. Consider outlet protection where localized scour is anticipated. ☒Complete
4. Examine the site for run-on from off-site sources. ☒Complete
5. Consider channel lining when velocities exceed scour velocity for soil. ☒Complete

Overside Drains

1. Consider downdrains, as per Index 834.4 of the HDM. ☒Complete
2. Consider paved spillways for side slopes flatter than 4:1 h:v. ☒Complete

Flared Culvert End Sections

1. Consider flared end sections on culvert inlets and outlets as per Chapter 827 of the HDM. ☒Complete

Outlet Protection/Velocity Dissipation Devices

1. Consider outlet protection/velocity dissipation devices at outlets, including cross drains, as per Chapters 827 and 870 of the HDM. ☒Complete

Review appropriate SSPs for Concentrated Flow Conveyance Systems. ☒Complete

Design Pollution Prevention BMPs
Checklist DPP-1, Part 5

Prepared by: Mostafa Faghihi Date: 1/22/2012 District-Co-Route: 04-Napa-121

PM : 20.2/20.4 Project ID (or EA): 0400000808(2A1100) RWQCB: R-5

Preservation of Existing Vegetation

1. Review Preservation of Property, (Clearing and Grubbing) to reduce clearing and grubbing and maximize preservation of existing vegetation. ☒Complete
2. Has all vegetation to be retained been coordinated with Environmental, and identified and defined in the contract plans? ☒Yes ☐No
3. Have steps been taken to minimize disturbed areas, such as locating temporary roadways to avoid stands of trees and shrubs and to follow existing contours to reduce cutting and filling? ☒Complete
4. Have impacts to preserved vegetation been considered while work is occurring in disturbed areas? ☒Yes ☐No
5. Are all areas to be preserved delineated on the plans? ☒Yes ☐No

Construction Site BMPs
Checklist CS-1, Part 1

Prepared by: Mostafa Faghihi Date: 12/20/2012 District-Co-Route: 04-NAP-121

PM : 20.2/20.4 Project ID (or EA): 0400000808 (2A1101) RWQCB: _____

Soil Stabilization

General Parameters

1. How many rainy seasons are anticipated between begin and end of construction? 2
2. What is the total disturbed soil area for the project? (ac) 1.2
   (a) How much of the project DSA consists of slopes 4:1 (h:v) or flatter? Sheet flow not to exceed 20 ft (ac). 0.35
   (b) How much of the project DSA consists of 4:1 (h:v) < slopes < 2:1 (h:v)? Sheet flow not exceed 15 ft (ac). .85
   (c) How much of the project DSA consists of slopes 2:1 (h:v) and steeper? Sheet flow not exceed 10 ft (ac). 0
3. What rainfall area does the project lie within? (Refer to 2003 Caltrans SWMP) 2
4. Review the required combination of temporary soil stabilization and temporary sediment controls and barriers for area, slope inclinations, rainy and non-rainy season, and active and non-active disturbed soil areas. (Refer to Tables 2-2, and 2-3 of the Construction Site Best Management Practices Manual for Rainfall Area requirements.) ☒ Complete

Scheduling (SS-1)

5. Does the project have a duration of more than one rainy season and have disturbed soil area in excess of 25 acres? ☐ Yes ☒ No
   (a) Include multiple mobilizations (Move-in/Move-out) as a separate contract bid line item to implement permanent erosion control or revegetation work on slopes that are substantially complete. (Estimate at least 6 mobilizations for each additional rainy season. Designated Construction Representative may suggest an alternate number of mobilizations.) ☐ Complete

(b) Edit Order of Work specifications for permanent erosion control or revegetation work to be implemented on slopes that are substantially complete. ☐Complete

(c) Edit permanent erosion control or revegetation specifications to require seeding and planting work to be performed when optimal. ☐Complete

Preservation of Existing Vegetation (SS-2)

6. Do Environmentally Sensitive Areas (ESAs) exist within or adjacent to the project limits? (Verify the completion of DPP-1, Part 5) ☒Yes ☐No

   (a) Verify the protection of ESAs through delineation on all project plans. ☒Complete

   (b) Protect from clearing and grubbing and other construction disturbance by enclosing the ESA perimeter with high visibility plastic fence or other BMP. ☒Complete

7. Are there areas of existing vegetation (mature trees, native vegetation, landscape planting, etc.) that need not be disturbed by project construction? Will areas designated for proposed treatment BMPs need protection (infiltration characteristics, vegetative cover, etc.)? (Coordinate with District Environmental and Construction to determine limits of work necessary to preserve existing vegetation to the maximum extent practicable.) ☒Yes ☐No

   (a) Designate as outside of limits of work (or designate as ESAs) and show on all project plans. ☒Complete

   (b) Protect with high visibility plastic fence or other BMP. ☒Complete

8. If yes for 6, 7, or both, then designate ESA fencing as a separate contract bid line item, *if not already incorporated as part of design pollution prevention work (See DPP-1, Part 5).* ☒Complete

Slope Protection

9. Provide a soil stabilization BMP(s) appropriate for the DSA, slope steepness, slope length, and soil erodibility. (Consult with District/Regional Landscape Architect.)

   (a) Select SS-3 (Hydraulic Mulch), SS-4 (Hydroseeding), SS-5 (Soil Binders), SS-6 (Straw Mulch), SS-7 (Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets), SS-8 (Wood Mulching), other BMPs or a combination to cover the DSA throughout the project's rainy season. ☒Complete

   (b) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest an alternate increase.) ☒Complete

(c) Designate as a separate contract bid line item. ☒Complete

Slope Interrupter Devices

10. Provide slope interrupter devices for all slopes with slope lengths equal to or greater than of 20 ft in length, in accordance with CGP requirements..

(a) Select SC-5 (Fiber Rolls) or other BMPs to protect slopes throughout the project's rainy season. ☒Complete

(b) For slope inclination of 4:1 (h:v) and flatter, SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 20 ft on center. ☒Complete

(c) For slope inclination between 4:1 (h:v) and 2:1 (h:v), SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 15 ft on center. ☒Complete

(d) For slope inclination of 2:1 (h:v) and greater, SC-5 (Fiber Rolls) or other BMPs shall be placed along the contour and spaced 10 ft on center. ☒Complete

(e) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest alternate increase.) ☒Complete

(f) Designate as a separate contract bid line item. ☒Complete

Channelized Flow

11. Identify locations within the project site where concentrated flow from stormwater runoff can erode areas of soil disturbance. Identify locations of concentrated flow that enters the site from outside of the right-of-way (off-site run-on). ☒Complete

(a) Utilize SS-7 (Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets), SS-9 (Earth Dikes/Swales, Ditches), SS-10 (Outlet Protection/Velocity Dissipation), SS-11 (Slope Drains), SC-4 (Check Dams), or other BMPs to convey concentrated flows in a non-erosive manner. ☒Complete

(b) Designate as a separate contract bid line item. ☒Complete

Construction Site BMPs
Checklist CS-1, Part 2

Prepared by: Mostafa Faghihi Date: 12/20/2012 District-Co-Route: 04-NAP-121

PM : 20.2/20.4 Project ID (or EA): 0400000808 (2A1101) RWQCB: Central Valley (Region 5)

Sediment Control

Perimeter Controls - Run-off Control

1. Is there a potential for sediment laden sheet and concentrated flows to discharge offsite from runoff cleared and grubbed areas, below cut slopes, embankment slopes, etc.? ☒Yes ☐No

   (a) Select linear sediment barrier such as SC-1 (Silt Fence), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or a combination to protect wetlands, water courses, roads (paved and unpaved), construction activities, and adjacent properties. (Coordinate with District Construction for selection and preference of linear sediment barrier BMPs.) ☒Complete

   (b) Increase the quantities by 25% for each additional rainy season. (Designated Construction Representative may suggest an alternate increase.) ☒Complete

   (c) Designate as a separate contract bid line item. ☒Complete

Perimeter Controls - Run-on Control

2. Do locations exist where sheet flow upslope of the project site and where concentrated flow upstream of the project site may contact DSA and construction activities? ☒Yes ☐No

   (a) Utilize linear sediment barriers such as SS-9 (Earth Dike/Drainage Swales and Lined Ditches), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or other BMPs to convey flows through and/or around the project site. (Coordinate with District Construction for selection and preference of perimeter control BMPs.) ☒Complete

   (b) Designate as a separate contract bid line item. ☒Complete

Storm Drain Inlets

3. Do existing or proposed drainage inlets exist within the project limits? ☒Yes ☐No

   (a) Select SC-10 (Storm Drain Inlet Protection) to protect municipal storm drain systems or receiving waters wetlands at each drainage inlet. (Coordinate with District Construction for selection and preference of inlet protection BMPs.) ☒Complete

   (b) Designate as a separate contract bid line item. ☒Complete

4. Can existing or proposed drainage inlets utilize an excavated sediment trap as described in SC-10 (Storm Drain Inlet Protection- Type 2)? ☒Yes ☐No

   (a) Include with other types of SC-10 (Storm Drain Inlet Protection). ☒Complete

Sediment/Desilting Basin (SC-2)

5. Does the project lie within a Rainfall Area where the required combination of temporary soil stabilization and sediment control BMPs includes desilting basins? (Refer to Tables 2-1, 2-2, and 2-3 of the Construction Site Best Management Practices Manual for Rainfall Area requirements.) ☐Yes ☒No

   (a) Consider feasibility for desilting basin allowing for available right-of-way within the project limits, topography, soil type, disturbed soil area within the watershed, and climate conditions. Document if the inclusion of sediment/desilting basins is infeasible. ☐Complete

   (b) If feasible, design desilting basin(s) per the guidance in the CASQA Construction BMP Guidance Handbookl to maximize capture of sediment-laden runoff. ☐Complete

   Designate as a separate contract bid item. ☐Complete

6. Is ATS to be used for controlling sediment? ☐Yes ☒No

   (a) If "yes", then will desilting basin or other means of natural storage be used? ☐Yes ☒No

   (b) If "no", then plan for storage tanks sufficient to hold treatment volume. ☐Comple

7. Will the project benefit from the early implementation of proposed permanent Treatment BMPs? (Coordinate with District Construction.) ☐Yes ☒No

   (a) Edit Order of Work specifications for permanent treatment BMP work to be implemented in a manner that will allow its use as a construction site BMP. ☐Complete

Sediment Trap (SC-3)

8. Can sediment traps be located to collect channelized runoff from disturbed soil areas prior to discharge? ☒Yes ☐No

   (a) Design sediment traps in accordance with the CASQA Construction BMP GuidanceHandbook. ☒Complete

   (b) Designate as a separate contract bid line item. ☒Complete

Construction Site BMPs
Checklist CS-1, Part 3

Prepared by: Mostafa Faghihi Date: 12/20/2012 District-Co-Route: 04-NAP-121

PM : 20.2/20.4 Project ID (or EA): 0400000808 (2A1101) RWQCB: Central Valley (Region 5)

Tracking Controls

Stabilized Construction Entrance/Exit (TC-1)

1. Are there points of entrance and exit from the project site to paved roads where mud and dirt could be transported offsite by construction equipment? (Coordinate with District Construction for selection and preference of tracking control BMPs.) ☒Yes ☐No

   (a) Identify and designate these entrance/exit points as stabilized construction entrances (TC-1). ☒Complete

   (b) Designate as a separate contract bid line item. ☒Complete

Tire/Wheel Wash (TC-3)

1. Are site conditions anticipated that would require additional or modified tracking controls such as entrance/outlet tire wash? (Coordinate with District Construction.) ☐Yes ☒No

   Designate as a separate contract bid line item. ☐Complete

Stabilized Construction Roadway (TC-2)

3. Are temporary access roads necessary to access remote construction activity locations or to transport materials and equipment? (In addition to controlling dust and sediment tracking, access roads limit impact to sensitive areas by limiting ingress, and provide enhanced bearing capacity.) (Coordinate with District Construction.) ☒Yes ☐No

   (a) Designate these temporary access roads as stabilized construction roadways (TC-2). ☒Complete

   (b) Designate as a separate contract bid line item. ☒Complete

Street Sweeping and Vacuuming (SC-7)

1. Is there a potential for tracked sediment or construction related residues to be transported offsite and deposited on public or private roads? (Coordinate with District Construction for preference of including street sweeping and vacuuming with tracking control BMPs.) ☒Yes ☐No

   Designate as a separate contract bid line item. ☒Complete

Construction Site BMPs
Checklist CS-1, Part 4

Prepared by: Mostafa Faghihi Date: 12/20/2012 District-Co-Route: 04-NAP-121

PM : 20.2/20.4 Project ID (or EA): 0400000808 (2A1101) RWQCB: Central Valley (Region 5)

Wind Erosion Controls

Wind Erosion Control (WE-1)

1. Is the project located in an area where standard dust control practices in accordance with Standard Specifications, Section 13: Dust Control, are anticipated to be inadequate during construction to prevent the transport of dust offsite by wind? *(Note: Dust control by water truck application is paid for through the various items of work. Dust palliative, if it is included, is paid for as a separate item.)* ☒Yes ☐No

   (a) Select SS-3 (Hydraulic Mulch), SS-4 (Hydroseeding), SS-5 (Soil Binders), SS-7 (Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets), SS-8 (Wood Mulching) or a combination to cover the DSA subject to wind erosion year-round, especially when significant wind and dry conditions are anticipated during project construction. (Coordinate with District Construction for selection and preference of wind erosion control BMPs.) ☒Complete

   (b) Designate as a separate contract bid line item. ☒Complete

Construction Site BMPs
Checklist CS-1, Part 5

Prepared by: Mostafa Faghihi Date: 12/20/2012 District-Co-Route: 04-NAP-121

PM : 20.2/20.4 Project ID (or EA): 0400000808 (2A1101) RWQCB: Central Valley (Region 5)

Non-Storm Water Management

Temporary Stream Crossing (NS-4) & *Clear Water Diversion* (NS-5)

1. Will construction activities occur within a waterbody or watercourse such as a lake, wetland, or stream? (Coordinate with District Construction for selection and preference for stream crossing and clear water diversion BMPs.) ☒Yes ☐No

   (a) Select from types offered in NS-4 (Temporary Stream Crossing) to provide access through watercourses consistent with permits and agreements.[1] ☒Complete

   (b) Select from types offered in NS-5 (Clear Water Diversion) to divert watercourse consistent with permits and agreements.[1] ☒Complete

   (c) Designate as a separate contract bid line item(s). ☒Complete

Other Non-Storm Water Management BMPs

2. Are construction activities anticipated that will generate wastes or residues with the potential to discharge pollutants? ☒Yes ☐No

   (a) Identify potential pollutants associated with the anticipated construction activity and select the corresponding BMP such as NS-1 (Water Conservation Practices), NS-2 (Dewatering Operations), NS-3 (Paving and Grinding Operations), NS-7 (Potable Water/Irrigation), NS-8 (Vehicle and Equipment Cleaning), NS-9 (Vehicle and Equipment Fueling), NS-10 (Vehicle and Equipment Maintenance), NS-11 (Pile Driving Operations), NS-12 (Concrete Curing), NS-13 (Material and Equipment Use Over Water), NS-14 (Concrete Finishing), and NS-15 (Structure Demolition/Removal Over or Adjacent to Water).[1] ☒Complete

   (b) Verify that costs for non-stormwater management BMPs are identified in the contract documents. Designate BMP as a separate contract bid line item if the requirements in Construction Site Management Standard Specifications Section 13 are anticipated to be inadequate or if requested by Construction. ☒Complete

[1] Coordinate with District Environmental for consistency with US Army Corps of Engineers 404 and 401 permits and Dept. of Fish and Game 1601 Streambed alteration Agreements.

Construction Site BMPs
Checklist CS-1, Part 6

Prepared by: Mostafa Faghihi Date: 12/20/2012 District-Co-Route: 04-NAP-121

PM : 20.2/20.4 Project ID (or EA): 0400000808 (2A1101) RWQCB: Central Valley (Region 5)

Waste Management & Materials Pollution Control

Concrete Waste Management (WM-8)

1. Does the project include concrete placement or mortar mixing? ☒Yes ☐No

   (a) Select from types offered in WM-8 (Concrete Waste Management) to provide concrete washout facilities. In addition, consider portable concrete washouts and vendor supplied concrete waste management services. (Coordinate with District Construction for selection and preference of waste management and materials pollution control BMPs.) ☒Complete

   (b) Designate as a separate contract bid line item if the quantity of concrete waste and washout are anticipated to exceed 5.2 yd^3 or if requested by Construction. ☒Complete

Other Waste Management and Materials Pollution Controls

2. Are construction activities anticipated that will generate wastes or residues with the potential to discharge pollutants? ☒Yes ☐No

   (a) Identify potential pollutants associated with the anticipated construction activity and select the corresponding BMP such as WM-1 (Material Delivery and Storage), WM-2 (Material Use), WM-4 (Spill Prevention and Control), WM-5 (Solid Waste Management), WM-6 (Hazardous Waste Management), WM-7 (Contaminated Soil Management), WM-9 (Sanitary/Septic Waste Management) and WM-10 (Liquid Waste Management) ☒Complete

   (b) Verify that costs for waste management and materials pollution control BMPs are identified in the contract documents. Designate BMP as a separate contract bid line item if the requirements in Construction Site Management Standard Specifications section 13 are anticipated to be inadequate or if requested by Construction. ☒Complete

Temporary Stockpiles (Soil, Materials, and Wastes)

3. Are stockpiles of soil, etc. anticipated during construction? ☒Yes ☐No

   (a) Select WM-3 (Stockpile Management), SS-3 (Hydraulic Mulch), SS-4 (Hydroseeding), SS-5 (Soil Binders), SS-7 (Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets), or a combination as appropriate to cover temporary stockpiles of soil, etc. ☒Complete

(b) Select linear sediment barrier such as SC-1 (Silt Fence), SC-5 (Fiber Rolls), SC-6 (Gravel Bag Berm), SC-8 (Sand Bag Barrier), SC-9 (Straw Bale Barrier), or a combination to encircle temporary stockpiles of soil, etc. (Coordinate with District Construction for selection and preference of BMPs related to stockpiles.) ☒Complete

(c) Designate as a separate contract bid line item if the requirements in Construction Site Management Standard Specifications section 13 are anticipated to be inadequate or if requested by Construction. ☒Complete

4. Is there a potential for dust and debris from construction material (fill material, etc.) and waste (concrete, contaminated soil, etc.) stockpiles to be transported offsite by wind? ☒Yes ☐No

(a) Select SS-7, temporary cover, plastic sheeting or other BMP to cover stockpiles subject to wind erosion year-round, especially when significant wind and dry conditions are anticipated during project construction. (Coordinate with District Construction for selection and preference of wind erosion control BMPs.) ☒Complete

(b) Designate as a separate contract bid line item. ☒Complete

COST ESTIMATE

Replace Capell Creek Bridge

04-NAP-121-PM 20.2/20.4

PROJECT EA 2A1101

5/11/2012

ITEM NO	STD. PLAN NO	ITEM CODE	ITEM DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	ITEM PRICE	TOTAL
1	-	130100	JOB SITE MANAGEMENT	LS	1	$ 10,000.00	$ 10,000.00
2		074015	TEMPORARY ACTIVE TREATMENT SYSTEM	LS	1	$ 20,000.00	$ 20,000.00
3	-	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	1	$ 9,200.00	$ 9,200.00
4	T56	074028	TEMPORARY FIBER ROLL	LF	1,300	$ 2.00	$ 2,600.00
5	T51	074029	TEMPORARY SILT FENCE	LF	500	$ 4.00	$ 2,000.00
6	T58	074033	TEMPORARY CONSTRUCTION ENTRANCE	EA	2	$ 2,500.00	$ 5,000.00
7	T53	074034	TEMPORARY COVER	SQYD	200	$ 1.00	$ 200.00
8	T57	074035	TEMPORARY CHECK DAM	LF	300	$ 5.00	$ 1,500.00
9		074037	MOVE IN/MOVE OUT (TEMPORARY EROSION CONTROL)	EA	1	$ 500.00	$ 500.00
	T61-T64	074038	TEMPORARY DRAINAGE INLET PROTECTION	EA	4	$ 300.00	$ 1,200.00
10		074040	TEMPORARY HUDRAULIC MULCH (BFM)	SQYD	1,300	$ 1.00	$ 1,300.00
11		074041	STREET SWEEPING	LS	1	$ 9,000.00	$ 9,000.00
12		074042	TEMPORARY CONCRETE WASHOUT (Portable)	LS	1	$ 1,000.00	$ 1,000.00
13		074056	RAIN EVENT ACTION PLAN	EA	103	$ 500.00	$ 51,500.00
14		074057	STORM WATER ANNUAL REPORT	EA	2	$ 2,000.00	$ 4,000.00
15		074058	STORM WATER SAMPLING AND ANALYSIS DAY	EA	60	$ 1,040.00	$ 62,400.00
			Subtotal				$ 181,400.00
SUPPLEMENTAL ITEMS							
16	-	066595	WATER POLLUTION CONTROL MAINTENANCE SHARING	LS	1	$ 9,200.00	$ 9,200.00
17	-	066596	ADDITIONAL WATER POLLUTION CONTROL	LS	1	$ 2,800.00	$ 2,800.00
18	-	066597	STORM WATER SAMPLING & ANALYSIS	LS	1	$ 2,800.00	$ 2,800.00
			Subtotal				$ 14,800.00
			TOTAL				**$ 196,200.00**

DIST	COUNTY	ROUTE	POST MILLS TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Nap	121			

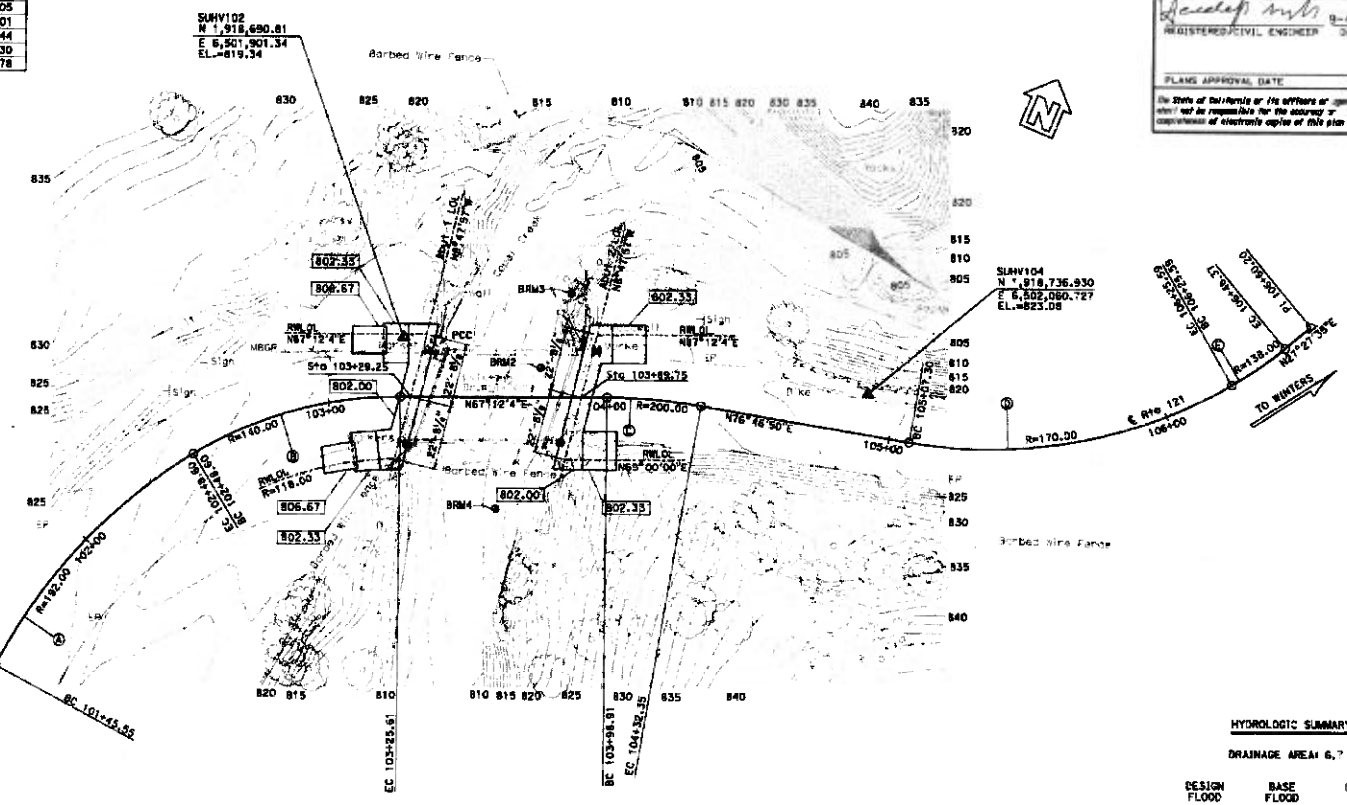
REGISTERED CIVIL ENGINEER 9-4-12 DATE

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.

CURVE DATA

No.	R	Δ	T	L
(A)	192.00	30°44'43"	52.80	103.05
(B)	140.00	31°31'06"	39.51	77.01
(C)	200.00	09°34'47"	16.76	33.44
(D)	170.00	39°52'15"	61.66	118.30
(E)	158.00	09°27'00"	11.42	22.78



SURVEY CONTROL

SUHV102
Frnd Set Rebr+Cap
21' Lt. "A" Line, ℄ Rte 121
Sta. 103+26.53
N 1,918,690.81
E 6,501,901.34
EL.=819.34

SUHV104
Frnd Set Rebr+Cap
14.33' Lt. "A" Line, ℄ Rte 121
Sta. 104+89.94
N 1,918,736.930
E 6,502,060.727
EL.=823.08

LEGEND:

Indicates Bottom of Footing Elevation

Indicates Bedrock Mortar

Notes:
All dia. of tree on level 214 construction class

Bridge Location #21-0009 (PN Points)
(1) 12.98' Lt. "A" Line, Sta 103+40.04, EL.=819.45±
(2) 15.20' Lt. "A" Line, Sta 103+88.49, EL.=819.81±
(3) 14.76' Rt. "A" Line, Sta 103+78.35, EL.=819.08±
(4) 14.58' Rt. "A" Line, Sta 103+30.71, EL.=818.73±

HYDROLOGIC SUMMARY

DRAINAGE AREA: 6.7 mi²

	DESIGN FLOOD	BASE FLOOD	OVERTOPPING FLOOD
FREQUENCY (YEARS)	50	100	-
DISCHARGE (CFS)	2,750	3,200	-
WATER SURFACE ELEVATIONS (FT)	814.70	815.40	-

PRELIMINARY INVESTIGATION SECTION

SCALE 1"=20'	HORZ.DATUM NAVD 88	PHOTOGRAMMETRY AS OF:	
	HORZ.DATUM NAD83 (92)	SURVEYED Blanflor	CHECKED Yie Surveys 09/2011
ALIGNMENT TIES Dist. Traverse Sheet		DRAFTED Sharon Zheng 09/2011	CHECKED Zim Portland 09/2011

DESIGN Hardeep Singh — CHECKED Sara Yip
DETAILS Liang Ma — CHECKED Sara Yip
QUANTITIES Hardeep Singh — CHECKED Angelo Perez

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 18

STRUCT. NO. 21-0112
POST MILE 20.20

CAPELL CREEK BRIDGE (REPLACEMENT)
FOUNDATION PLAN

STRUCTURES FOUNDATION PLAN SHEET (Bridge Dept) DIST. 08-01-10

INTERNAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 2657
PROJECT NUMBER & PHASE: 0400000808
CONTRACT NO.: 04-2A1101

REVISED PLANS REQUIRED
EARLIER REVISION DATES

REVISED DATE			SHEET	OF
			4	19

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO	TOTAL SHEETS
04	Nap	121			

REGISTERED CIVIL ENGINEER 01-13-12

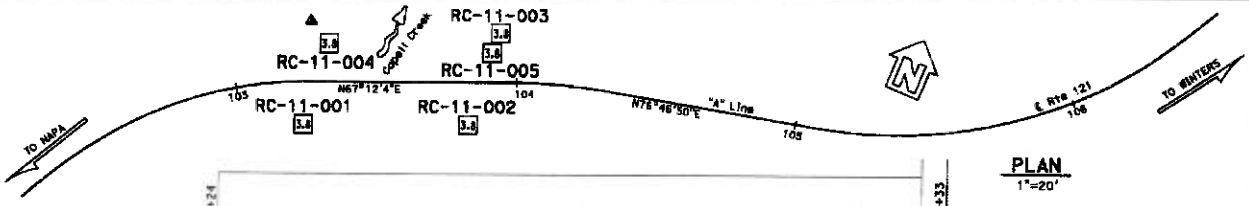
PLANS APPROVAL DATE

Samuel Awad 64589 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA REGISTERED PROFESSIONAL ENGINEER

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.

BENCH MARK ▲

SUH102
N 1,918,690.81
E 6,501,901.34
EL. 819.34'
Vertical Datum NAVD88
Horizontal Datum NAD83



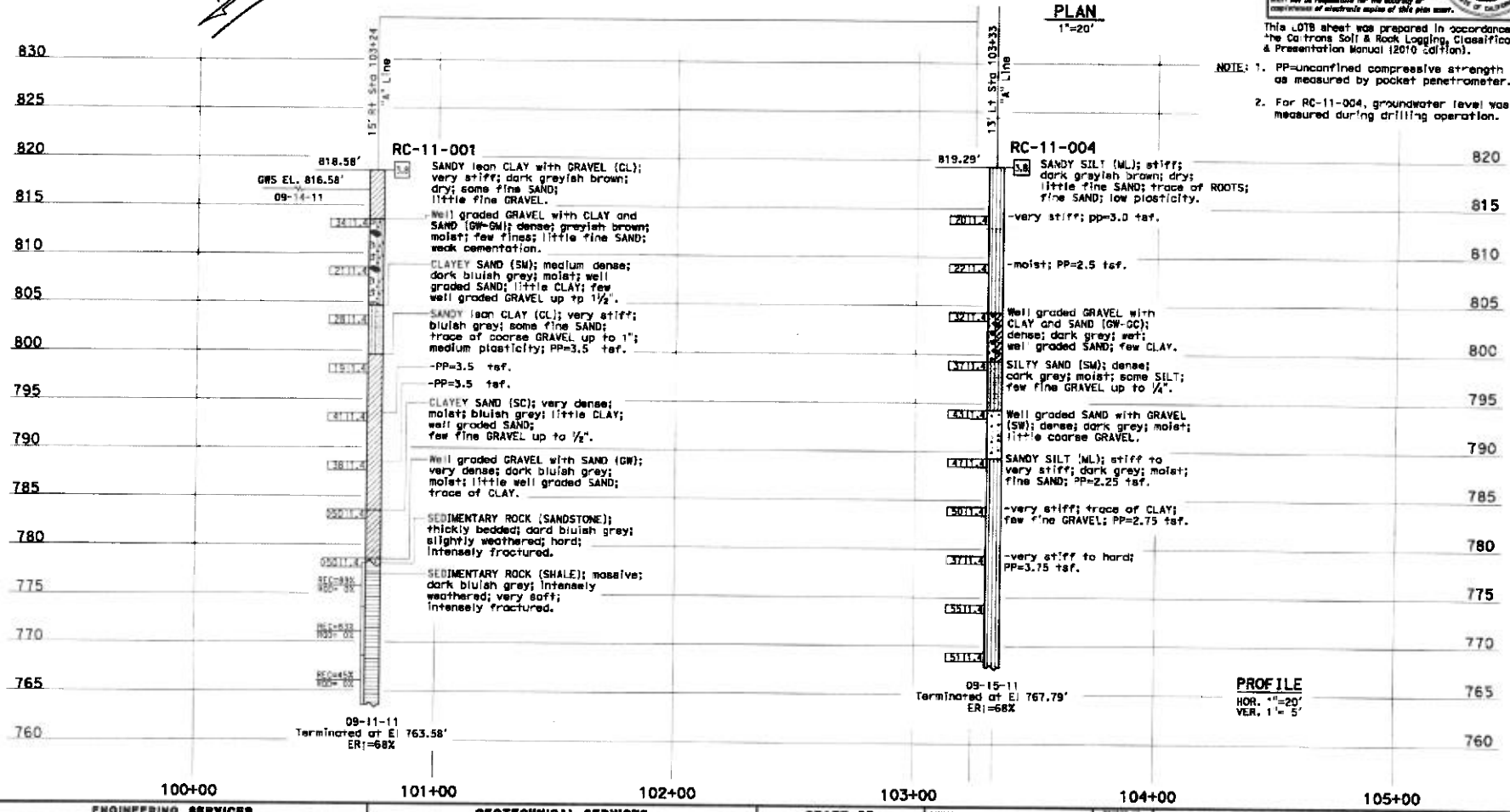
PLAN

1"=20'

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

NOTE: 1. PP=unconfined compressive strength (tsf) as measured by pocket penetrometer.

2. For RC-11-004, groundwater level was not measured during drilling operation.



PROFILE

HOR. 1"=20'
VER. 1"= 5'

ENGINEERING SERVICES		GEOTECHNICAL SERVICES	
FUNCTIONAL SUPERVISOR	DRAWN BY: M. Reynolds 12/11	FIELD INVESTIGATION BY: S. Awad	
NAME: H. Nikoui	CHECKED BY: M. Gaffney		

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 16

BRIDGE NO. 21-0112
POST MILES 20.20

CAPELL CREEK BRIDGE (REPLACEMENT)

LOG OF TEST BORINGS 1 OF 2

REGISTERED SCALE IS INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3660
PROJECT NUMBER & PHASE: 0400000881 CONTRACT NO.: 04-2A110

REVISED POSTS BEARING EARLIER REVISION DATES

REVISION DATE

SHEET 18 OF 19

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Nap	121			

REGISTERED CIVIL ENGINEER 01-13-12

PLANS APPROVAL DATE

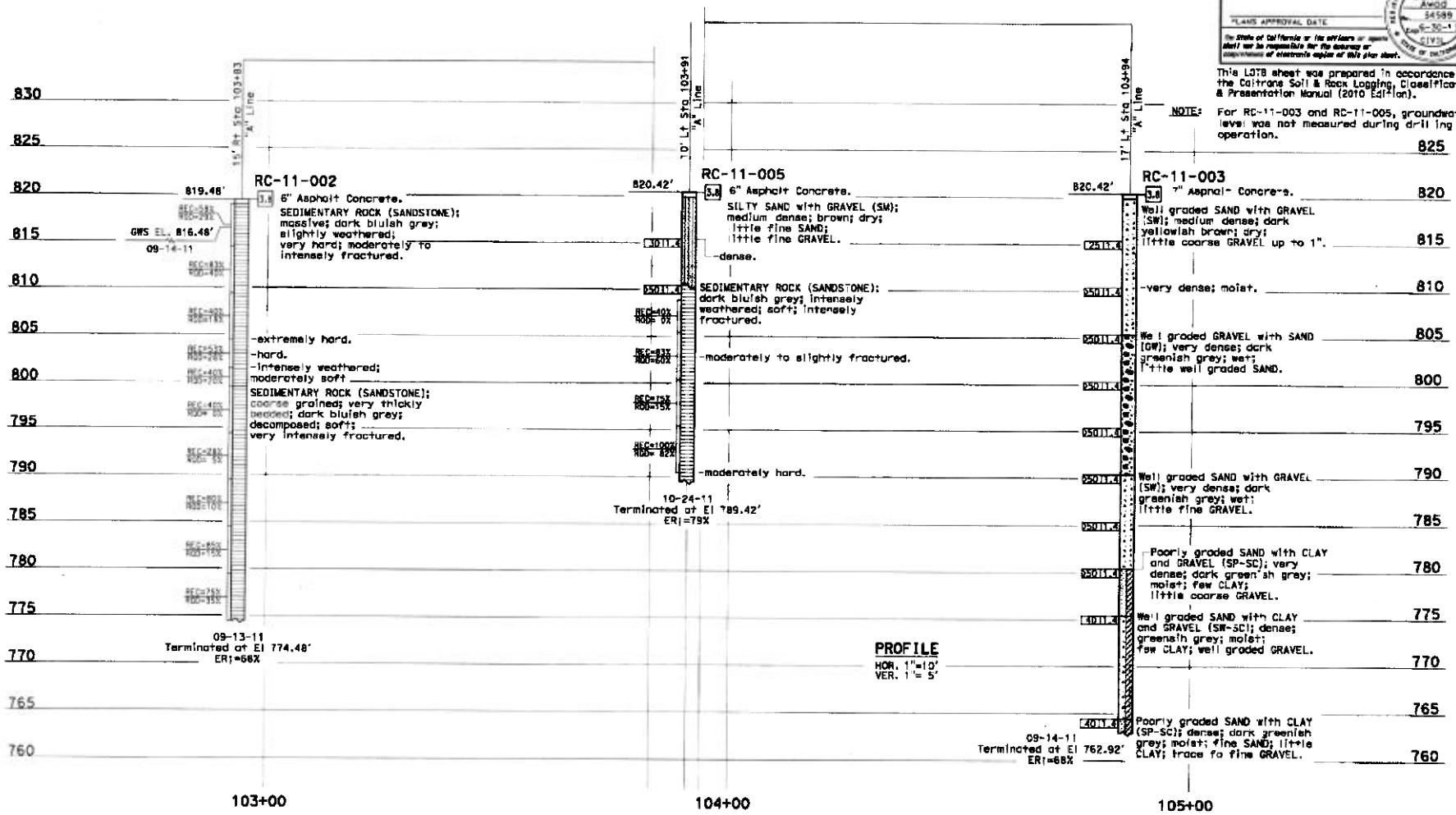
Samuel Awad 54599 Exp. 6-30-13 CIVIL STATE OF CALIFORNIA

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.

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).

NOTE: For RC-11-003 and RC-11-005, groundwater level was not measured during drilling operation.

(For Boring Location See Plan, LOTB Sheet 1 of 2)



ENGINEERING SERVICES		GEOTECHNICAL SERVICES	
FUNCTIONAL SUPERVISOR	DRAWN BY: M. Reynolds 12/11	FIELD INVESTIGATION BY: S. Awad, V. Khoron	
NAME: H. Nikoui	CHECKED BY: M. Gaffney		

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 16

BRIDGE NO. 21-0112 POST MILES 20.20

CAPELL CREEK BRIDGE (REPLACEMENT)

LOG OF TEST BORINGS 2 OF 2

ORIGINAL SCALE IN INCHES FOR REVISED PLANS

UNIT: 3660 PROJECT NUMBER & PHASE: 0400000881 CONTRACT NO.: 04-2A1101

DESIGNED PERMIT BEARING EARLIER REVISION DATES

SHEET 19 OF 19

FILE =? 21-0112-2-11-002.dgn

1.	**Date SWDR required**	August 2012
2.	**EA-County-Route**	2A1101 - Napa- 121
3.	**PM (Begin/End)**	20.2/20.4
4.	**Project Purpose**	Replace Capell Creek Br. In Napa County under the Department's bridge Scour mitigation program.
5.	**RU** *(CT Requesting Unit Number)*	04/261
6.	**Program ID**	20.XX.201.111
7.	**Phase** *(PID, PA/ED, PS&E)*	PS&E
8.	**Project Engineer or Oversight Engineer** *(Name / Phone #)*	Emarnan Pongpairoj / 622-5968
9.	**Project Manager** *(Name / Phone #)*	Kelly Hirschberg / 286-4925
10.	**Biologist** *(Name / Phone #)*	James Coniglio / 286-6214
11.	**Hydraulics Contact** *(Name / Phone #)*	Richard Yu / 286-4858
12.	**Geotechnical Contact** *(Name / Phone #)*	Rifaat Nashed / 622-1773
13.	**Hazardous Waste Contact** *(Name / Phone #)*	Peter Altherr / 286-4668
14.	**PID Due Date** *(MM/DD/YYYY)*	1/16/2007 A
15.	**PA/ED Due Date** *(MM/DD/YYYY)*	6/22/2011 A
16.	**PS&E Due Date** *(MM/DD/YYYY)*	10/01/12
17.	**RTL Due Date** *(MM/DD/YYYY)*	03/01/13
18.	**Construction Start Date** *(MM/DD/YYYY)*	03/13/13
19.	**Construction Completion Date** *(MM/DD/YYYY)*	08/01/15
20.	**Number Working Days**	180
21.	**Project Brokered?** *(Y/N)* **If Yes, which District?**	N
22.	**CT Oversight?** *(Y/N)* **If Yes, which Agency?**	N
23	**Oversight & locally administered Project?** *(Y/N)*	N
24.	**Total Roadway Item Cost ($)**	$1,500,000
25.	**Total Structure Item Cost ($)**	$995,000
26.	***New*** **Impervious Area (ac)**	0.1 ac
27.	***Reworked*** **Area (ac)** *Area with top impervious AC/PCC totally removed*	0.1 ac
28.	**Existing Impervious Area (ac)**	0.4 ac
29.	**404 Permit Required?** *(Y/N)* **Reporting or Non-Reporting?*(Check w/ Biologist)***	Y
30.	**1602 Permit Required?** *(Y/N) (Check w/ Biologist)*	Y
31.	**Notice of *ADL* Reuse** *(Date)*	
32.	**Shoulder Backing Proposed?** *(Y/N)*	Y
33.	**Concrete Work Involved?**(*Y/N) If yes, how much?*	Y
34.	**PCC Grinding Involved?** *If yes, how much?*	N
35.	**Total Disturbed Soil Area (DSA) (ac)** *(Post Constr./Need Permanent Soil Stabilization)*	1.2 ac
36.	**Total Construction Site Area (ac)**	2 ac
37.	**Is there any Landscape Work Involved?** *(Y/N)*	Y
38.	**Contractor's Staging Areas** *(Y/N), Area(sqft)*	Y 50,000 sq ft
39.	**Contractor's Stockpiling Areas** *(Y/N), Area(sqft)*	Y 20,000 sq ft
40	**Number Drainage Inlets within Project Limits**	4 Corrected after receiving drainage map

tc

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

10 December 2012

Kelly Hirschberg
California Departmentof Transportation
111 Grand Avenue, 10th Floor, Room 10-549
Oakland, CA 94612

CERTIFIED MAIL
7011 2970 0003 8939 7462

CLEAN WATER ACT §401 TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION; CALIFORNIA DEPARTMENT OF TRANSPORTATION, CAPELL CREEK BRIDGE REPLACEMENT PROJECT (WDID#5A28CR00016), NAPA COUNTY

This Order responds to your 16 July 2012 application submittal for the Water Quality Certification of a bridge replacement project permanently impacting less than 0.01 acre/4 linear feet and temporarily impacting 0.217 acre/483 linear feet of waters of the United States.

This Order serves as certification of the United States Army Corps of Engineers' Nationwide Permit #14 (SPK# 2010-112072) 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 § 3833 of the California Code of Regulations, unless otherwise stated in writing by the certifying agency.

4. This Certification is valid for the duration of the described project. This Certification is no longer valid if the project (as currently described) is modified, or coverage under § 404 of the Clean Water Act has expired.

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 California Department of Transportation shall satisfy the following:

1. The California Department of Transportation shall notify the Central Valley Water Board in writing 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 California Department of Transportation 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 California Department of Transportation shall perform surface water sampling: 1) when performing any in-water work; 2) in the event that project activities result in any materials reaching surface waters; or 3) 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	—
pH	Standard Units	Grab(1)	Every 4 hours during in-water work	(2)

(1) Grab sample 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, 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.

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 California Department of Transportation 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.

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, settleable matter, and pH 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 turbidty 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.

   C. Activities shall not cause pH to be depressed below 6.5 nor raised above 8.5 in surface water.

6. The California Department of Transportation shall notify the Central Valley Water Board immediately if the above criteria for turbidity, settleable matter, pH, or other water quality objectives are exceeded.

7. 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 California Department of Transportation shall notify the Central Valley Water Board immediately of any spill of petroleum products or other organic or earthen materials.

8. Activities shall not cause degradation of waters of the State.

9. The California Department of Transportation shall comply with all California Department of Fish and Game requirements, including but not limited to those requirements described in Lake or Streambed Alteration Agreement No. 1600-2012-0192-R3.

10. The California Department of Transportation shall comply with all United States Fish and Wildlife Service requirements, including but not limited to those requirements described in Biological Opinion 81420-2010-F-0845-2, provided to California Department of Transportation, dated 20 May 2012.

11. 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).

12. All temporarily affected areas will be restored to pre-construction contours and conditions upon completion of construction activities.

13. All areas disturbed by project activities shall be protected from washout or erosion.

14. In-stream work will occur during periods of low flow and no precipitation.

15. 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.

16. Hydroseeding shall be performed with California native seed mix.

17. Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If 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 or 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 California Department of Transportation 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.

18. The California Department of Transportation 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.

19. If temporary surface water diversions and/or dewatering are anticipated, the California Department of Transportation shall develop and maintain on-site a Surface Water Diversion and/or Dewatering Plan(s). The Plan(s) shall include the proposed method and duration of diversion activities. The Surface Water Diversion and/or Dewatering Plan(s) must be consistent with this Certification.

20. When work in a flowing stream is unavoidable and any dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water shall at all times be allowed to pass downstream, to maintain beneficial uses of waters of the State below the dam. Construction, dewatering, and removal of temporary cofferdams shall not violate Technical Certification Condition 5 of this Certification.

21. Any temporary dam or other artificial obstruction constructed shall only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel which will cause little or no siltation. Stream flow shall be temporarily diverted using gravity flow through temporary culverts/pipes or pumped around the work site with the use of hoses.

22. Raw cement, concrete (or washing thereof), asphalt, drilling fluids, lubricants, paints, coating material, oil, petroleum products, or any other substances which could be hazardous to fish and wildlife resulting from or disturbed by project-related activities, shall be prevented from contaminating the soil and/or entering waters of the United States.

23. Concrete must be completely cured before coming into contact with waters of the United States. Surface water that contacts wet concrete must be pumped out and disposed of at an appropriate off-site commercial facility which is authorized to accept concrete wastes.

24. During replacement of the bridge, a method of containment must be used below the bridge to prevent debris from falling into the water body.

25. During construction, 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.

26. All materials resulting from the project shall be removed from the site and disposed of properly.

27. If unanticipated discharges to the waters of waters of the United States and/or soil occur, the California Department of Transportation shall notify the Central Valley Water Board Contact indicated in this Certification in writing within 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.

28. The California Department of Transportation shall obtain coverage under the 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.

29. 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.

30. The California Department of Transportation shall implement each of the mitigation measures specified in the approved Mitigated Negative Declaration for the project, as they pertain to biology, hydrology and water quality impacts as required by § 21081.6 of the Public Resource Code and CEQA Guidelines, § 15097 of the California Code of Regulations.

31. 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 California Department of Transportation 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 California Department of Transportation 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 California Department of Transportation 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.

32. The California Department of Transportation 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
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-8114
tcleak@waterboards.ca.gov
(916) 464-4684

CALIFORNIA ENVIRONMENTAL QUALITY ACT:

The California Department of Transportation is the Lead Agency responsible for compliance with the California Environmental Quality Act for the Capell Creek Bridge Replacement Project pursuant to § 21000 et seq. of the Public Resources Code. The California Department of Transportation certified the Mitigated Negative Declaration on 14 December 2011 (State Clearinghouse Number 2010112072).

The Central Valley Water Board is a responsible agency for the project. The Central Valley Water Board has determined that the Mitigated Negative Declaration is in accordance with the requirements of the California Environmental Quality Act and is valid pursuant § 21167.3(b) of the Public Resources Code.

The Central Valley Water Board has reviewed and evaluated the potentially significant impacts to water quality identified in the Mitigated Negative Declaration. The mitigation measures discussed in the Mitigated Negative Declaration to minimize project impacts are required by this Certification.

With regard to the remaining impacts identified in the Mitigated Negative Declaration, the corresponding mitigation measures proposed are within the responsibility and jurisdiction of other public agencies.

WATER QUALITY CERTIFICATION:

I hereby issue an Order certifying that any discharge from the California Department of Transportation, Capell Creek Bridge Replacement Project (WDID#5A28CR00016) 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.

for Pamela C. Creedon
Executive Officer

Enclosure: Project Information

Attachment: Figure 1 – Project Location Map

cc: Distribution List, page 13

PROJECT INFORMATION SHEET

Application Date: 16 July 2012

Applicant: Kelly Hirschberg
California Department of Transportation
111 Grand Avenue, 10th Floor, Room 10-549
Oakland, CA 94612

Applicant Representatives: Cyrus Vafai
California Department of Transportation
111 Grand Avenue, 14th Floor, Mail Stop 8F
Oakland, CA 94612

Project Name: Capell Creek Bridge Replacement Project

Application Number: WDID#5A28CR00016

Type of Project: Bridge replacement

Timeframe of Project Implementation: 1 June 2013 through 15 October 2015

Project Location: Section 21, Township 7 North, Range 3 West, MDB&M.
Latitude: 38°25'49"N and Longitude: 122°12'30" W

County: Napa

Receiving Water(s) (hydrologic unit): Capell Creek, Sacramento Hydrologic Basin, Putah Creek Hydrologic Unit #512.22, Capell Creek HAS

Water Body Type: Riparian

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: Capell Creek is the receiving water for the Capell Creek Bridge Replacement Project. Capell Creek is a tributary to Lake Beryessa which is listed on the 303(d) list for mercury. This project does not impact an already impaired water body. The most recent list of approved water quality limited segments can be found at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml.

Project Description: The 2.32-acre Capell Creek Bridge Replacement Project consists of the demolition and replacement of an existing two span bridge approximately 33-feet wide by 47-feet long with a new 42-feet wide by 64-feet long single span bridge. The project is located on State Route 121, 1.4 miles south of Capell Valley Road in Napa County.

The project will replace the existing bridge on a similar alignment, widen the approaching roadways from approximately 11.5-feet to 20-feet, require cut and fill for slope stabilization, establish temporary access roads and a staging area, improve drainage, and conduct vegetation and biological mitigation.

This project will take place in two phases over two years. The first phase will demolish the existing bridge on the east side, and construct half of the new bridge. The second phase will demolish the existing bridge on the west side, and construct the remaining portion of the new bridge.

A wood platform will be placed under the bridge during demolition to catch construction debris. Approaching roadways will be aligned and widened at both ends to conform to the new bridge. The new abutments will be located approximately 8 feet behind the existing abutments. The abutments will be built with reinforced concrete. Wing walls approximately 12-feet long and 14-feet high. The new abutments will not be located below the ordinary high water mark. The drainage improvements will consist of four, new 4-feet tall, by 6-feet wide, by 6-feet long concrete drainage inlets or manhole boxes connected to four new culverts approximately 12 to 18-inches in diameter. The culverts will be made of steel, polyethylene plastic and concrete.

Temporary cofferdams and pipes will be used to dewater the project area. A cutoff trench and pipes will be used to divert water around the project area and to reduce seepage. Two temporary, approximately 20-feet wide by 189-feet long, access roads will be constructed. All temporarily impacted areas will be revegetated. Construction equipment will enter the waterway.

The project will permanently impact less than 0.01 acre/4 linear feet and temporarily impact 0.217 acre/483 linear feet of waters of the United States.

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

Proposed Mitigation to Address Concerns: The California Department of Transportation 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 California Department of Transportation will conduct turbidity, settleable matter, and pH testing during in-water work, stopping work if Basin Plan criteria are exceeded or are observed.

Excavation/Fill Area: Approximately 270 cubic yards of rock and gravel will be placed into less than 0.01 acre/4 linear feet of waters of the United States.

Dredge Volume: None

United States Army Corps of Engineers File Number: SPK# 2010-112072

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

California Department of Fish and Game Lake or Streambed Alteration Agreement: 1600-2012-0192-R3

Possible Listed Species: Valley elderberry longhorn beetle, California Red legged frog, Western pond turtle, Foothill yellow-legged frog.

Status of CEQA Compliance: The California Department of Transportation approved the Mitigated Negative Declaration on 14 December 2011. The California Department of Transportation filed a Notice of Determination with the State Clearinghouse on 29 December 2011 (State Clearinghouse Number 2010112072).

The Central Valley Water Board filed a Notice of Determination with the State Clearinghouse as a responsible agency within 5 days of the date of this Certification.

Compensatory Mitigation: The Central Valley Water Board is not requesting compensatory mitigation for the Capell Creek Bridge Replacement Project.

Application Fee Provided: Total fees of $1,817.00 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

Paula C. Gill
United States Army Corps of Engineers
Sacramento District Office
Regulatory Division
1325 J Street, Suite 1350
Sacramento, CA 95814-2922

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

Melessa Escaron
Department of Fish and Game
P.O. Box 47
Yountville, CA 94599

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

Cyrus Vafai
California Department of Transportation
111 Grand Avenue, 14th Floor, Mail Stop 8F
Oakland, CA 94612

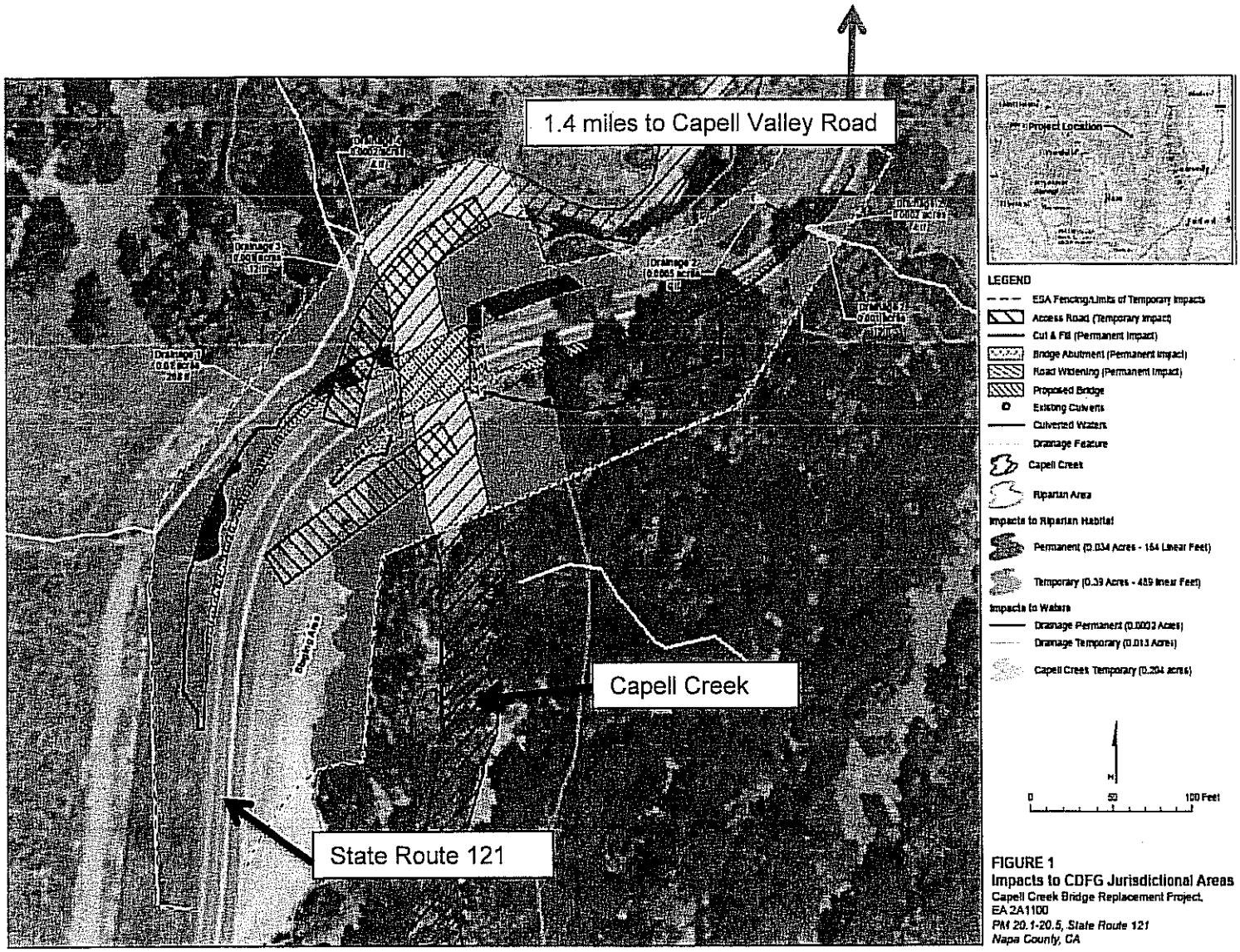


FIGURE 1
Impacts to CDFG Jurisdictional Areas
Capell Creek Bridge Replacement Project,
EA 2A1100
PM 20.1-20.5, State Route 121
Napa County, CA

Figure 1 – Project Location Map

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

REPLY TO\
ATTENTION OF

Regulatory Division

SUBJECT: File Number 2010-00318N

SEP 10 2012

California Department of Transportation (Caltrans), District 4
Mr. Jeffrey Jensen
111 Grand Avenue
Mail Station 8A
Oakland, California 94612

Dear Mr. Jensen:

This correspondence is in reference to your submittal of June 15, 2012, concerning Department of the Army (DA) authorization to implement the Capell Creek Bridge Replacement Project located on State Route 121 from Post Mile (PM) 20.2 to PM 20.4 in Napa County, California.

Work within U.S. Army Corps of Engineers' (Corps) jurisdiction would include replacement of the existing bridge on a tangent alignment, spanning approximately 64 feet across Capell Creek with foundations on opposing banks. Work will require demolition of existing bridge in two phases; building a single-span bridge as a replacement for the existing bridge; widening approaching roadways to conform to the new bridge; establishing temporary access roads and staging areas; improving drainage; conducting revegetation and biological mitigation; and establishing equipment and construction site best management practices. Work will require installation of a temporary coffer dam. In total, work will result in 0.217 ac (483 linear feet) of temporary impacts and 0.0002 ac (4 linear feet) of permanent impacts to Waters of the U.S. All work shall be completed in accordance with the plans and drawings titled "*USACE File #2010-00318N, Capell Creek Bridge Replacement Project, State Route 121, Post Mile 20.1 to 20.5, Napa County, September 10, 2012, Figures 1 to 4*" provided as enclosure 1.

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

use to transport interstate or foreign commerce. A Preliminary JD was completed for your site on November 10, 2010.

Based on a review of the information in your submittal, the project qualifies for authorization under Department of the Army Nationwide Permit (NWP) 14 for *Linear Transportation Projects,* 77 Fed. Reg. 10184, February 21, 2012, pursuant to Section 404 of the CWA of 1972, as amended (33 U.S.C. § 1344 *et seq.*). The project must be in compliance with the terms of the NWP, the general conditions of the Nationwide Permit Program, and the San Francisco District regional conditions cited in enclosure 2. You must also be in compliance with any special conditions specified in this letter for the NWP authorization to remain valid. Non-compliance with any term or condition could result in the revocation of the NWP authorization for your project, thereby requiring you to obtain an Individual Permit from the Corps. This NWP authorization does not obviate the need to obtain other State or local approvals required by law.

This verification will remain valid for two years from the date of this letter. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon a NWP will remain authorized provided the activity is completed within 12 months of the date of a NWP's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5 (c) or (d). The Chief of Engineers will periodically review NWPs and their conditions and will decide to either modify, reissue, or revoke the permits. If a NWP is not modified or reissued within five years of its effective date, it automatically expires and becomes null and void. It is incumbent upon you to remain informed of any changes to the NWPs. Changes to the NWPs would be announced by Public Notice posted on our website (http://www.spn.usace.army.mil/regulatory/index.html). Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, enclosure 3, verifying that you have complied with the terms and conditions of the permit.

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

General Condition 18 stipulates that project authorization under a NWP does not allow for the incidental take of any federally-listed species in the absences of a biological opinion (BO) with incidental take provisions. As the principal federal lead agency for this project, Caltrans initiated consultation with the United States Fish and Wildlife Service (USFWS) to address

project related impacts to list species, pursuant to Section 7(a) of the Endangered Species Act of 1973, as amended (16 U.S.C. Section 1531 *et seq.*). By letter of May 20, 2011, USFWS issued a BO (81420-2010-F-0845-2) cited in enclosure 4, with an incidental take statement for California red-legged frog.

General Condition 20 stipulates that any project affecting a historic property may not commence construction until the provisions of 33 C.F.R. pt. 325, Appendix C, have been satisfied. Caltrans initiated consultation with the SHPO to address project related impacts to CA-NAP-257 which is eligible for the National Register of Historic Places under criterion D. In a letter from the Office of Historic Preservation dated December 02, 2010, the State Historic Preservation Officer (SHPO) concurred with Caltrans finding that no adverse effects with Standard Conditions-ESA is appropriate for the proposed Capell Creek Bridge Replacement Project.

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

1. To remain exempt from the prohibitions of Section 9 of the Endangered Species Act, the non-discretionary Terms and Conditions for incidental take of federally-listed California red-legged frog shall be fully implemented as stipulated in the Biological Opinion entitled, "*Biological Opinion for the State Route 121, Capell Creek Bridge Replacement Project, Napa County, California (Caltrans EA 2A1100)*" (pages1-37). Project authorization under the NWP is conditional upon compliance with the mandatory terms and conditions associated with incidental take. Failure to comply with the terms and conditions for incidental take, where a 'take' of a federally-listed species occurs, would constitute an unauthorized take and non-compliance with the NWP authorization for your project. The USFWS is, however, the authoritative federal agency for determining compliance with the incidental take statement and for initiating appropriate enforcement actions or penalties under the Endangered Species Act.

2. Environmentally sensitive areas (ESA) shall be clearly delineated on the construction plans and demarcated in the field with high-visibility fencing prior to commencement of construction activities. ESA fencing shall be properly maintained throughout the duration of the project. The ESA shall be off limits to construction activity and personnel at all times.

3. During construction, erosion control materials, including silt fences, erosion control blankets/mats, and sandbags will be on hand and utilized to prevent unnecessary sedimentation in Capell Creek. Authorized discharge of fill material occurring below

ordinary high water shall consist solely of sand, gravel, cobble, boulder, rock or other inert riprap materials that are free of toxic pollutants.

4. If flowing water is present in the project reach, the creekbed shall be initially dewatered through the installation of a by-pass pipe and sandbag cofferdams upstream and downstream of the project reach. The by-pass pipe shall be sufficiently sized to avoid any decrease in flow velocity at its inlet or outlet. The dewatering process shall be performed in a manner to minimize any disruption or alteration of normal water flow downstream of the project.

5. After construction completion, any installed by-pass pipe, cofferdam, or other related construction materials installed below ordinary high water shall be removed in its entirety. Excavated substrate consisting of coarse sand, gravel, and cobble may be used as backfill material for construction purposes; all other material excavated below ordinary high water, including debris, mud, silt, and organic matter, shall be hauled off-site and disposed of at an upland location not subject to Corps' regulatory authority.

6. No debris, oil, petroleum products or other organic material resulting from construction activities shall be allowed to enter or be placed where it may be washed by rainfall or runoff into areas subject to the jurisdiction of the Corps.

7. Following project construction, disturbed areas including access points, staging and equipment storage areas, etc. shall be returned to pre-project conditions. This shall include, but is not necessarily limited to, grading to establish pre-project contours, removal of debris and seeding or planting disturbed areas with vegetation adapted to local conditions in accordance with the plan titled, "*USACE File #2010-00318S, Capell Creek Bridge Replacement Project, State Route 121, Post Mile 20.1 to 20.5, Napa County, September 10, 2012, Figure 3 of 4*" provided in enclosure 1.

8. A post construction report shall be submitted 45 days after the conclusion of revegetation activities. The report shall document construction activities and contain as-built drawings (if different from drawings submitted with application) and include before and after photographs. The report shall also include a summary of implemented revegetation efforts.

You may refer any questions on this matter to Paula Gill of my Regulatory staff by telephone at 415-503-6776 or by e-mail at Paula.C.Gill@usace.army.mil. All correspondence should be addressed to the Regulatory Division, North Branch, referencing the file number at the head of this letter.

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

Sincerely,

Jane M. Hicks
Chief, Regulatory Division

Enclosures

Copies furnished (w/o enclosures):

US EPA, San Francisco, CA
CA DFG, Yountville, CA
CA RWQCB, Oakland, CA
USFWS, Sacrament, CA

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

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

November 21, 2012

Mr. Jeffrey G. Jensen
California Department of Transportation
111 Grand Avenue
Oakland, CA

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2012-0192-R3
Capell Creek

Dear Mr. Jensen:

Enclosed is the final Streambed Alteration Agreement ("Agreement") for the Capell Creek Bridge Replacement Project ("Project"). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act ("CEQA"). In this case, the Department, acting as a responsible agency, filed a notice of determination ("NOD") on November 21, 2012 based on information contained in the Mitigated Negative Declaration the lead agency prepared for the Project.

Under CEQA, filing a NOD starts a 30-day period within which a party may challenge the filing agency's approval of the project. You may begin your project before the 30-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 Melissa Escaron, Staff Environmental Scientist at (707)339-0334 or mescaron@dfg.ca.gov.

Sincerely,

Craig Weightman
Acting Environmental Program Manager
Bay Delta Region

cc: Lieutenant Jones
Warden Morton
Melissa Escaron

CALIFORNIA DEPARTMENT OF FISH AND GAME
BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5520
WWW.DFG.CA.GOV

STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2012-0192-R3
Capell Creek

CALIFORNIA DEPARTMENT OF TRANSPORTATION
CAPELL CREEK BRIDGE REPLACEMENT PROJECT

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

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on May 12, 2012 that Permittee intends to complete the project described herein.

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

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

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

PROJECT LOCATION

The project is located where State Route 121 crosses Capell Creek, between post mile (PM) 20.2 and PM 20.4, in rural Napa County, State of California;

PROJECT DESCRIPTION

The proposed single span bridge will be built as a replacement of the existing bridge on a tangent alignment, spanning approximately 63 feet (ft) across Capell Creek with foundations on opposing banks. The bridge will provide two standard 12-ft travel lanes and 8-ft shoulders.

- Demolition of existing bridge in two phases;
- Building a single-span bridge as a replacement for the existing bridge
- Widening approaching roadways to conform to the new bridge;
- Cut and fill for slope stabilization in areas where the roadway is widened;
- Establishing temporary access roads and a staging area;
- Improving drainage;
- Conducting revegetation
- Establishing equipment and construction site best management practices (BMPs).

A temporary staging area is needed in order to allow for equipment storage, equipment maintenance, and construction material storage during construction. The temporary staging area will be located on the compacted dirt pullout area on the southeast side of the existing bridge. No site preparation of the area will be needed.

Two unpaved temporary construction access roads will be constructed to allow access to the existing bridge and proposed bridge locations. Both access roads will be approximately 20 ft in width and will begin at the pavement on the west side of the bridge and terminate in the streambed of Capell Creek. The access road to the north side of the existing bridge will be approximately 189 ft long and the access road to the south side will be approximately 120 ft long. The southbound access road will be constructed prior to demolition and construction of the southbound side of bridge and the northbound access roads will be constructed prior to demolition and construction of the northbound side of the bridge. The temporary access roads will be built no earlier than June 1 each year, and removed at the same time as the temporary water diversion system, by October 15. Filter fabric will line the access roads and will be removed after each construction phase. To construct the temporary 20-ft-wide access roads, the contractor will lay down protection fabric and then install on top of it either a 12-inch-tall timber mat system or a dirt pad and between 6 inches and 4 feet of rock (one to two inches in size). Once equipment is no longer needed, the contractor will remove the access roads and materials. The contractor will only access the dry creek channel through the aforementioned temporary construction access roads. The contractor will use one access road per construction phase. Following construction, the temporary access roads will be re-contoured to preconstruction conditions to the maximum extent practicable.

<u>Temporary Creek Diversion</u>

A temporary creek diversion system will be utilized during construction to ensure that there is no water within the creek bed during in-stream work, which is proposed from June 1 to October 15. The temporary creek diversion system will consist of a diversion

pipe with temporary cofferdams located at the upstream and downstream ends. The cofferdams will be constructed across the existing creek channel with gravel bags wrapped in impermeable plastic sheeting. A cut-off trench will be provided at both the upstream and downstream cofferdams to reduce seepage into the working area. The temporary dewatering system will be removed at the end of each construction season by October 15. Depending on the water flow at the time of construction, dewatering of foundations in the streambed may also be required.

The Project will be constructed according to the following:

• Phase I (Year 1): The contractor will demolish the east side of the existing bridge and construct half of the new bridge.

• Phase II (Year 2): The contractor will shift one-way traffic to the new bridge portion on the east. The west side of the existing bridge will be demolished and the remaining portion of the new bridge will be built. A final closure will connect the two new half bridges and two-way traffic will be re-opened.

Bridge Demolition
Access to the creek bed for demolition will be via the temporary construction access roads. A tall timber mat platform will be placed beneath the existing bridge to capture any construction debris from the demolition work. The platform will have the dimensions of the existing bridge (33 feet x 46 feet) and will be 12 inches tall. The remaining portions of the bridge abutments and the abutment footing will be removed to 3 feet below existing grade. Caltrans' contractors will dispose of demolition debris at a certified landfill.

Bridge Replacement
The proposed single span bridge (44 feet x 63 feet) will be built in-place of the existing bridge (33 feet x 46 feet) on a tangent alignment and will span approximately 63 feet across the Capell Creek. When completed the proposed bridge will provide two standard 12-foot travel lanes and 8-foot shoulders. Precast/prestressed (PC/PS) concrete slabs will be used to replace the old bridge. The PC/PS concrete slabs will be constructed off-site and transported to the site. The foundations for the two abutments will be built first. These will be located approximately 8 feet behind the existing abutments and will be supported by spread footing. Abutments will be built with reinforced concrete, with wingwalls on either side being approximately 12 feet long and 14 feet high. Cranes will be used to set 11 PC/PS concrete slabs onto the seats at both abutments.

There will be four new drainage inlets, which consist of reinforced concrete boxes (4 ft wide, 4 ft long, and the approximate depth of 5 ft), alternative pipe culverts and one downdrain that collects roadway runoff. The inlet locations and pipe sizes will be designed in accordance with Caltrans highway design standards. Proposed culverts sizes are 18 inches and 12 inches in diameter. Several measures will be put in place to

prevent erosion of the embankments (hot mixed asphalt/concrete dikes and rock slope protection (RSP). The new downdrain will have approximately 6 feet by 7 feet of RSP at the outlet on the northeast side of the bridge.

Site Cleanup and Restoration
All construction-related materials including the WEF and ESA fencing will be removed after construction activities are complete. The temporarily disturbed areas will be revegetated with appropriate native species, as necessary after each construction phase, to the maximum extent practicable. Permanent erosion control, including composting, netting, hydroseeding, and hydromulching will be applied to all affected Project areas to minimize erosion after construction.

Proposed Equipment
Cranes will be used for multiple parts of the construction from delivery of material to setting precast slabs. Excavators will be used for multiple parts of the construction including delivery of materials, setting precast slabs, and excavation at the abutments. Concrete mixer trucks and pump trucks will be used to pump concrete for all cast-in-place structures, including spread footings. Other equipment may include manlifts, pavers,hoe rams, jackhammers, and compaction equipment.

Project Schedule
Construction of the bridge will span over 2 years and is scheduled to start June 2013 and end December 2015.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

- California red-legged frogs and habitat
- Foothill yellow-legged frogs and habitat
- Western pond turtles and habitat
- Native trees
- Aquatic invertebrates
- Migratory bird nesting

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

- Tree removal
- Permanent and temporary loss of natural bed and bank
- Temporary loss of riparian habitat
- Disruption of nesting
- California red-legged frog, foothill yellow-legged frog, and Western pond turtle injury or mortality
- Temporary loss of California red-legged frog, foothill yellow-legged frog, and Western pond turtle habitat

- Water quality degradation
- Short-term release of contaminants

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to DFG personnel, or personnel from another state, federal, or local agency upon request.

1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors. .

1.3 Notification of Conflicting Provisions. Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, DFG shall contact Permittee to resolve any conflict.

1.4 Project Site Entry. Permittee agrees that DFG personnel may, with notification of the Resident Engineer, enter the project site at any time to verify compliance with the Agreement.

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 To minimize adverse impacts to fish and wildlife all work described in the project location and description shall be confined to the period of June 1 to October 15. Revegetation work is not confined to this time period.

2.2 At least 30-days prior to commencing project activities covered by this Agreement, the Permittee shall submit to DFG, for review and approval, the qualifications for a number of biologists (Qualified Biologist) that shall oversee the implementation of the conditions in this Agreement. At a minimum, the Qualified Biologists shall have a combination of academic training and professional experience in

biological sciences and related resource management activities. The Qualified Biologists shall communicate to the Resident Engineer when any activity is not in compliance with this Agreement and the Resident Engineer shall immediately stop the activity that is not in compliance with this Agreement.

2.3 To protect nesting birds, no project activities shall occur from February 15 through August 31 unless nesting bird surveys have been completed by a Qualified Biologist. To prevent nest abandonment, a Qualified Biologist shall survey within the limits of the proposed Project for nesting birds. If nests are found within the Project site then a Qualified Biologist shall establish a 50-foot buffer radius for nests of non-raptor bird species or a 300-foot buffer radius for raptor nests. A Qualified Biologist shall monitor the nesting birds and shall increase the buffer, through the Resident Engineer, if it is determined the birds are showing signs of unusual or distressed behavior that may be the result of Project activities. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. Surveys shall be conducted during periods of peak activity (early morning, dusk) and shall be of sufficient duration to observe movement patterns. Identified nests shall be reported to DFG. The buffer area shall be fenced off from work activities and avoided until the young have fledged, as determined by a Qualified Biologist. During work, should birds indicate unusual or distressed behavior that could be indicative of future nest abandonment, a Qualified Biologist shall stop work immediately, through the Resident Engineer, and consult DFG on how to proceed.

2.4 A Qualified Biologist shall conduct Pre-construction surveys immediately prior to the initiation of any ground disturbing activities within or adjacent to suitable California red-legged frog (CRLF) and foothill yellow-legged frog habitat. These surveys will comprise walking transects while conducting visual encounter surveys within areas that will be subject to staging, vegetation clearing, grubbing, grading, cut and fill, or other ground disturbing activities. All mammal burrows shall be inspected for signs of usage.

2.5 CRLF wildlife exclusion fencing (WEF) shall be placed at the edge of the active construction areas to restrict frog access into the work area. The fencing shall consist of taut silt fabric, 24 inches in height, with the bottom buried 3 inches below grade. WEF shall be maintained on a daily basis.

2.6 A Qualified Biologist shall be present onsite to monitor for CRLF during construction activities located within suitable CRLF habitat. Through communication with the Resident Engineer, a Qualified Biologist may stop work if deemed necessary for any reason to protect CRLF and will advise the Resident Engineer on how to proceed accordingly. A Qualified Biologist will conduct clearance surveys at the beginning of each day within or adjacent to suitable CRLF habitat and regularly throughout the workday when construction is occurring within or adjacent to suitable CRLF habitat. If CRLF are encountered in the action area, work within 50 feet of the animal will cease immediately and the Resident Engineer and a Qualified Biologist will be notified. Work will not resume until the animal leaves the work site voluntarily or is

removed by a USFWS- and DFG-approved Qualified Biologist. At no time shall work occur within 50 feet of a CRLF without a Qualified Biologist present.

2.7 To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1-foot deep will be covered with plywood or similar materials at the end of each workday or the holes or trenches will contain one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals.

2.8 A Qualified Biologist will survey the work site no more than 48 hours before the start of work activities for signs of western pond turtles, western pond turtle nesting activity (recently excavated nests, nest plugs) or nest depredation (partially to fully excavated nest chambers, nest plugs, scattered egg shell remains, egg shell fragments). Pre-construction surveys to detect western pond turtles will focus on potentially suitable aerial and aquatic basking habitat (logs, branches, rootwads, riprap), and the shoreline and adjacent warm, shallow waters, where pond turtles may be present below the water surface beneath algal mats or other surface vegetation. Preconstruction surveys to detect western pond turtles nesting activity will be concentrated within approximately 1,300 feet of suitable aquatic habitat and will focus on areas along south- or west- facing slopes with bare, hard-packed clay or silt soils or sparse vegetation of short grasses or forbs. If western pond turtles or their nesting sites are found, the biologist will contact DFG to determine whether relocation and/or exclusion buffers are appropriate. If DFG approves of moving the animal, the Qualified Biologist shall be allowed sufficient time to move the western pond turtle from the work site before work activities begin.

2.9 The Resident Engineer and a Qualified Biologist shall be onsite during dewatering and aquatic species relocation activities. Capture and relocation shall be conducted in a manner that minimizes stress and injury to captured animals. Capture methods may include dip nets. All nets shall be made of a soft braded nylon material that is non abrasive. Electrofishing shall be used as a last resort. A relocation site shall be identified and the most direct transportation route shall be determined prior to any capture. The number of animals captured and moved at any one time shall be limited to the number that can be relocated without stress or injury. Prior to handling animals, all hands and equipment shall be wetted down with stream water and shall be free of any materials including hand sanitizers, sunscreen or insect repellent. No animals shall be handled with dry hands or dry equipment. Exclusionary netting or other barriers shall be used to prevent relocated animals from re-entering the dewatered work area. An aeration system shall be used in any live well or other holding facility. Dissolved oxygen levels shall be maintained above 6 parts per million. Water from the local collection site shall be used in live wells or other holding facilities during loading and transport. At no time shall chlorinated tap water be used. Water temperatures within any live well or other holding facility shall be kept at or below water temperature at the collection site. No non-native animals captured shall be returned to the stream or released alive.

2.10 Plastic mono-filament netting, erosion control matting or similar material will not be used at the project site. Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

2.11 To the maximum extent practicable, night-time construction will be minimized.

2.12 If any wildlife is encountered during the course of project activities, said wildlife shall be allowed to leave the area unharmed and on their own volition.

2.13 Permittee shall comply with all applicable state and federal laws, including the California and Federal Endangered Species Act. This Agreement does not authorize the take of any state or federally endangered listed species. Liability for any take or incidental take of such species remains the responsibility of the Permittee for the duration of the project. Any unauthorized take of listed species may result in prosecution and nullification of the Agreement.

2.14 The perimeter of the work site shall be adequately fenced using high visibility Environmentally Sensitive Area (ESA) fencing to prevent damage to adjacent riparian habitat. No construction activities, within the riparian zone, will be allowed within the habitat protected by the ESA fencing (this does not preclude activities from occurring on the bridge or deck work above the ESA area). ESA fencing shall be maintained daily.

2.15 Permittee shall conduct work defined in the above project description, and within the project area, during periods of dry weather. The project area is defined as the bed, bank, channel, and associated riparian habitat. The Permittee shall monitor forecasted precipitation. When ¼ inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No activity of the project may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-two hour weather forecasts from National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less than a 30% forecast for precipitation for the following 24-hour period.

2.16 Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waterways. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control installations shall be monitored for effectiveness and shall be repaired or replaced as recommended by a Qualified Biologist to the Resident Engineer. As needed to prevent sediment transport, Permittee shall deploy soil stabilizer such as hydroseeding, netting, erosion control mats, mulch, fiber rolls, silt fences, check dams, and flow velocity dissipation devices. Permittee shall stabilize and equip construction site entrances and exits with tire washing capability. Materials

containing monofilament or plastic shall not be used. Erosion and sediment control measures shall be installed prior to unseasonable rain storms.

2.17 To the extent practicable, Permittee shall leave the root masses of removed trees and shrubs in place. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations.

2.18 To the extent practicable Permittee shall not remove oak trees. Oak trees within the project site that can be avoided shall be fenced along their drip line with high visibility ESA fencing.

2.19 If the gradient of the streambed is altered during project operations, Permittee shall return its contours as close as possible to pre-project conditions. Pre-project condition shall be defined by engineered plans dated prior to the commencement of the project.

2.20 Concrete shall be excluded from surface water for a period of 30-days after it is poured/sprayed. During that time the concrete shall be kept moist and runoff from the concrete shall not be allowed to enter any water body. Commercial sealants may be applied to the concrete surface where difficulty in excluding flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is cured. If groundwater comes into contact with fresh concrete, it shall be prevented from flowing towards surface water.

2.21 Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the creek channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.

2.22 Refueling of mobile construction equipment and vehicles shall not occur within 50 feet of any water body, or anywhere that spilled fuel could drain to a water body. Refueling of stationary equipment requiring breakdown and setup to move will remain in place. All equipment shall be refueled with appropriate drip pans, absorbent pads, and water quality Best Management Practices. Equipment and vehicles operating in the project area shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

2.23 Permittee shall plan appropriately to ensure all work within DFG jurisdiction be completed by October 15 of each year. DFG will not grant work extensions beyond October 15 of each year.

3. Compensatory Measures

3.1 Permittee shall submit an Onsite Restoration Plan for temporary impacts at least 3 months prior to the start of construction. The Onsite Restoration plan shall include a plant palette of native species to be used, success criteria, a monitoring and reporting schedule, and corrective actions to be taken if mitigation measures do not meet the approved success criteria. All plantings shall be derived from locally available genotypes, if available at the time of plant installation. The Permittee shall monitor the survival and vigor of onsite plantings for a period of 5 years to ensure attainment of 80% survivorship. Permittee shall control invasive species as needed to ensure attainment of 80% survivorship after 5 years.

3.2 At the issuance of this Agreement DFG has not approved an offsite mitigation location. Prior to ground disturbance, Permittee shall submit, for review and written approval, a detailed Offsite Habitat Mitigation Plan for plant and tree mitigation that cannot be accommodated onsite. The Habitat Mitigation Plan shall mitigate .034 acres of permanent riparian habitat impacts at a minimum of a 3:1 acreage ratio. Mitigation shall be based on all trees regardless of diameter at breast height. The Habitat Mitigation Plan shall include proposed mitigation locations, a plant palette of native species to be used, success criteria, a monitoring and reporting schedule, and corrective actions to be taken if mitigation measures do not meet the approved success criteria. The Permittee shall monitor the survival and vigor of offsite plantings for a period of 5 years to ensure attainment of 80% survivorship. Offsite mitigation may include a combination of habitat restoration, creation, enhancement, and/or preservation of habitat that will support a similar riparian plant community found at the project site, including but not limited to the following species: California black oak, valley oak, coast live oak, cottonwood, native grasses and forbes. All plantings shall be derived from locally available genotypes if available at the time of plant installation.

CONTACT INFORMATION

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

To Permittee:

California Department of Transportation
Jeffrey G. Jensen
111 Grand Ave.
(510)622-8729
Jeffrey_jensen@dot.ca.gov

To DFG:

Department of Fish and Game

Bay Delta Region
7329 Silverado Trail
Napa, CA 94558
Attn: Lake and Streambed Alteration Program – Melissa Escaron
Notification #1600-2012-0192-R3
mescaron@dfg.ca.gov

LIABILITY

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

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

SUSPENSION AND REVOCATION

DFG may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

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

ENFORCEMENT

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

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

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and

subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

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

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

AMENDMENT

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

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

TRANSFER AND ASSIGNMENT

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

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

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's

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

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

EFFECTIVE DATE

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

TERM

This Agreement shall expire on December 31, 2016, 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.

AUTHORITY

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

AUTHORIZATION

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

CONCURRENCE

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

FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION

Jeffrey G. Jensen
Office Chief Biological Sciences and Permits

Date 10/14/2012

FOR DEPARTMENT OF FISH AND GAME

Craig Weightman
Acting Environmental Program Manager

Date 11/21/12

Prepared by: Melissa Escaron
Staff Environmental Scientist

Draft Sent: September 5, 2012
Revision Sent: November 8, 2012
Revision Sent: November 13, 2012

FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Notification No.
6/12/12	$ 4482.75	$		1600-2012-0192-3

State of California
Check # 082-991814

M. Escaron
LT. Jones

STATE OF CALIFORNIA
DEPARTMENT OF FISH AND GAME

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

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

Fish & Game
JUN 12 2012
Yountville

1. APPLICANT PROPOSING PROJECT

Name	Jeffrey G. Jensen		
Business/Agency	California Department of Transportation, District 4		
Street Address	111 Grand Avenue		
City, State, Zip	Oakland, CA 94623		
Telephone	(510) 622-8729	Fax	(510) 286-6374
Email	jeffrey_jensen@dot.ca.gov		

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

Name	James S. Coniglio		
Street Address	California Department of Transportation, District 4		
City, State, Zip	111 Grand Avenue, Oakland, CA 94623		
Telephone	(510) 286-6214	Fax	(510) 286-5600
Email	james_coniglio@dot.ca.gov		

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

Name			
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name	Capell Creek Bridge Replacement Project
B. Agreement Term Requested	☑ Regular (*5 years or less*) ☐ Long-term (*greater than 5 years*)

C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (*year*)	Ending (*year*)	Start Date (*month/day*)	End Date (*month/day*)	
2013	2015	06/01	10/15	176.00

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

5. AGREEMENT TYPE

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

A.	☑ Standard *(Most construction projects, excluding the categories listed below)*	
B.	☐ Gravel/Sand/Rock Extraction (*Attachment A*)	*Mine I.D. Number:* _____
C.	☐ Timber Harvesting (*Attachment B*)	THP *Number:* _____
D.	☐ Water Diversion/Extraction/Impoundment (*Attachment C*)	*SWRCB Number:* _____
E.	☐ Routine Maintenance (*Attachment D*)	
F.	☐ DFG Fisheries Restoration Grant Program (FRGP)	*FRGP Contract Number:* _____
G.	☐ Master	
H.	☐ Master Timber Harvesting	

6. FEES

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

	A. Project	B. Project Cost	C. Project Fee
1	Capell Creek Bridge Replacement	$5,000,000.00	$4,482.75
2			
3			
4			
5			
		D. Base Fee *(if applicable)*	
		E. TOTAL FEE ENCLOSED	$4,482.75

7. PRIOR NOTIFICATION OR ORDER

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

☐ Yes (*Provide the information below*) ☑ No

Applicant: _____ Notification Number: _____ Date: _____

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

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

☐ *Continued on additional page(s)*

8. PROJECT LOCATION

A. Address or description of project location.

(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)

The project site is in Napa County on State Route 121 (SR121) at Capell Creek Bridge (Bridge Number 21-009), between post mile (PM) 20.2 and PM 20.4. Please see Attachment 3 for Project Location Map.

Driving Directions:
1. Merge into SR29 South/St. Helena Highway towards Napa
2. Take exit 19 for Redwood Road/Trancas Street
3. Turn left onto Redwood Road/Trancas Street, continue to follow Trancas St.
4. Slight left onto Monticello Road (SR121)

Project starts at PM 20.2.

☐ *Continued on additional page(s)*

B. River, stream, or lake affected by the project.	Capell Creek
C. What water body is the river, stream, or lake tributary to?	Lake Berryessa
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?	☐ Yes ☑ No ☐ Unknown
E. County	Napa County

F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Capell Valley Quad	7N	3W	21	SW

☐ *Continued on additional page(s)*

K. Meridian (*check one*) ☐ Humboldt ☑ Mt. Diablo ☐ San Bernardino

L. Assessor's Parcel Number(s)

0321-7001-3000, 0324-8000-7000, and Caltrans Right of Way

☐ *Continued on additional page(s)*

M. Coordinates (*If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes*)

Latitude/Longitude	*Latitude:* 38° 25' 49" N	*Longitude:* 122° 12' 30" W	
	☑ Degrees/Minutes/Seconds	☐ Decimal Degrees	☐ Decimal Minutes
UTM	*Easting:*	*Northing:*	☐ Zone 10 ☐ Zone 11
Datum used for Latitude/Longitude or UTM	☐ NAD 27	☑ NAD 83 or WGS 84	

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

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

10. PROJECT DESCRIPTION

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

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

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

Please see Attachment 1, Section 10.A for detailed project description.

☑ *Continued on additional page(s)*

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

All clearing and grubbing will be completed by hand using small mechanical tools, or by using backhoes and excavators. Dozers will be used to grade temporary roads for access. A backhoe or excavator with a fitted ram will be utilized for bridge demolition and a front loader will collect the debris to load into trucks for offsite disposal. Please see Attachment 1, Section 10-B for more details.

☑ *Continued on additional page(s)*

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).	☑ Yes ☐ No (*Skip to box 11*)
D. Will the proposed project require work in the wetted portion of the channel?	☑ Yes (*Enclose a plan to divert water around work site*) ☐ No

11. PROJECT IMPACTS

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

Please see Attachment 1, Section 11.A for project impacts to bed, channel and bank.

☑ *Continued on additional page(s)*

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

Vegetation Type	Temporary Impact	Permanent Impact
Please see Attachment 1, Section 11.B for project impacts to vegetation.	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____
	Linear feet: _____ Total area: _____	Linear feet: _____ Total area: _____

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
Please see Attachment 1,Section 11.B		

☑ *Continued on additional page(s)*

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

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

Please see Attachment 1, Section 11.C for project impacts to special status species.

☑ *Continued on additional page(s)*

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

California Natural Diversity Database- California Department of Fish and Game and the Biological Opinion-U.S. Fish and Wildlife Service.

☐ *Continued on additional page(s)*

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

☑ Yes (*Enclose the biological study*) ☐ No

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

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

☐ Yes (*Enclose the hydrological study*) ☑ No

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

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

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

A Storm Water Pollution Prevention Plan (SWPPP) and erosion control best management practices will be developed and implemented to minimize any wind or water-related erosion. They will also be in compliance with the requirements of the Regional Water Quality Control Board. Caltrans BMP Guidance Handbook will provide guidance for design staff to include provisions in construction contracts for measures to protect sensitive areas and prevent and minimize storm water and non-storm water discharges.

Please see Attachment 1, Section 12.A.

☑ *Continued on additional page(s)*

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

Please see Attachment 1, Section 12.B.

☑ *Continued on additional page(s)*

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

Please see Attachment 1, Section 12.C.

☑ *Continued on additional page(s)*

13. PERMITS

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

A. USACE Clean Water Act 404 Nationwide Permit-Application pending ☐ Applied ☐ Issued

B. RWQCB 401 Water Quality Certification-Application pending ☐ Applied ☐ Issued

C. USFWS Biological Opinion (Please see Attachment 4) ☐ Applied ☑ Issued

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

☐ *Continued on additional page(s)*

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?

☑ Yes (*Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each*)

☐ No (*Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared*)

☐ Notice of Exemption	☑ Mitigated Negative Declaration	☑ NEPA document (*type*): CE
☑ Initial Study	☐ Environmental Impact Report	☑ CESA document (*type*): Mitigated Neg Dec
☐ Negative Declaration	☑ Notice of Determination *(Enclose)*	☑ ESA document (*type*): BA
☐ THP/ NTMP	☐ Mitigation, Monitoring, Reporting Plan	

B. State Clearinghouse Number (*if applicable*)	2010112072		
C. Has a CEQA lead agency been determined?	☑ Yes (*Complete boxes D, E, and F*)	☐ No (*Skip to box 14.G*)	
D. CEQA Lead Agency	Caltrans		
E. Contact Person	Yolanda Rivas	F. Telephone Number	(510) 286-6216

G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.

Not Applicable.

☐ *Continued on additional page(s)*

H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?

☑ Yes (*Enclose proof of payment*) ☐ No (*Briefly explain below the reason a filing fee has not been paid*)

Please see Attachment 5.

Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.

15. SITE INSPECTION

Check one box only.

☐ In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.

☑ I request the Department to first contact (*insert name*) James Coniglio at (*insert telephone number*) (510) 286-7036 to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

16. DIGITAL FORMAT

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

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

☐ No

17. SIGNATURE

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

Signed for Jeffrey G. Jensen

Signature of Applicant or Applicant's Authorized Representative

6.8.12

Date

Christopher T. Stokes

Print Name