INFORMATION HANDOUT

For Contract No. 02-3E7904
At 02-Tri-299-12.3/12.9

Identified by
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

PLAC - California Regional Water Quality Control Board

North Coast Region
Water Quality Certification, WDID No. 1A13120WNTR

AGREEMENTS

PLAC - California Department of Fish and Wildlife

Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1

MATERIALS INFORMATION

Revised Foundation Report for Collins Bar Sidehill Viaduct No. 1

Dated: May 28, 2013

Foundation Report for Collins Bar Sidehill Viaduct No. 2

Dated: May 6, 2013

Optional Import Borrow Site

Site Investigation Report

Arieally Deposited Lead, Traffic Stripe Paint, and Naturally Occurring Asbestos
Dated: April 2013

02-3E7904
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PLAC CONDITION RESPONSIBILITY (PCR) SUMMARY

General:
This PCR Summary clarifies various PLAC requirements. Perform all work described in the PLACs on behalf of the Department unless otherwise stated below in Table 2. If a discrepancy exists between the PCR Summary and the PLAC, the PCR Summary governs.

Definitions:
Agency: A board, agency, or other entity that issues a PLAC
Activity: A task, event or other project element
PLAC Condition: a work activity and/or submittal required by a PLAC

Table 1 - Clarification of PLAC Requirements

PLAC Name	Section of the PLAC	PLAC Requirement
All PLACs	Applicable PLAC sections	**Submittals:** Submit to the Engineer when PLAC conditions require: 1. Communications. The Engineer will contact the agencies. 2. Records to be maintained, within 5 working days after the activity. 3. Submittals 5 days before the agencies require them. The Engineer will review and submit to the agencies.
California Department of Fish and Wildlife Streambed Alteration Agreement Notification No: 1600-2013-0265-R1	Measures to Protect Fish and Wildlife Resources	Measure 1.4. Both the Contractor and Caltrans will agree to allow DFG personnel to enter the project site at any time, after notifying the Resident Engineer, to verify compliance with the Agreement
	Erosion and Sediment Control	Measure 2.16 Apply erosion control mix to hydroseed areas shown on the plans.
California Department of Fish and Wildlife California Endangered Species Act Incidental Take PermitNo. 2081-2013-049-01	5.11. CDFWAccess	Both the Contractor and Caltrans will agree to allow DFG personnel to enter the project site at any time, after notifying the Resident Engineer, to verify compliance with the Agreement

PLAC CONDITION RESPONSIBILITY (PCR) SUMMARY

North Coast RWQCB 401 Water Quality Certification WDID No. 1A13120WNTR	Findings by the Executive Officer	All findings by the Executive Officer are general information from with the certification is based.

Table 2 - Work to be Performed by the Department		
PLAC Name	**Section of the PLAC**	**PLAC Requirement**
North Coast RWQCB 401 Water Quality Certification WDID No. 1A13120WNTR	Project-Specific Conditions and Standard Conditions	3, 7, 17, 21, 25
Non-Reporting NWP 14 Dated 8/20/13	All	All
California Department of Fish and Wildlife Streambed Alteration Agreement Notification No: 1600-2013-0265-R1	Measures to Protect Fish and Wildlife Resources	1.3
	Erosion and Sediment Control 3 Compensatory Measures	3.1
California Department of Fish and Wildlife California Endangered Species Act Incidental Take PermitNo. 2081-2013-049-01	5. General Provisions	5.1
		5.6
	8.Habitat ManagementHM Land Restoration	8.1, 8.2, 8.4, 8.5
	8.3 Implementation Plan	8.3.2
	9 Performance Security	All

02-3E7904
02-Tri- 299-12.3/12.9
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

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North Coast Region
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Dated: April 2013

California Department of Fish and Wildlife
Northern Region
601 LOCUST STREET
REDDING, CALIFORNIA 96001

California Endangered Species Act
Incidental Take Permit No. 2081-2013-049-01

COLLINS BAR CURVE IMPROVEMENT PROJECT

Authority: This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take[1] of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.[2] CDFW may authorize the take of any such species by permit if the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c) are met. (See Cal. Code Regs., tit. 14, § 783.4).

Permittee:	**California Department of Transportation**
Principal Officer:	**Steve Rogers, Project Manager**
Contact Person:	**Kelly Kawsuniak, 530-225-2789**
Mailing Address:	**Department of Transportation** **1031 Butte Street, Suite 205** **Redding, California 96001**

Effective Date and Expiration Date of this ITP:
This ITP shall be executed in duplicate original form and shall become effective once a duplicate original is acknowledged by signature of the Permittee on the last page of this ITP and returned to CDFW's Habitat Conservation Planning Branch at the address listed in the Notices section of this ITP. Unless renewed by CDFW, this ITP's authorization to take the Covered Species shall expire on **March 31, 2035**.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 6.6 of this ITP.

[1]Pursuant to Fish and Game Code section 86, "'Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 (for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "'take' ... means to catch, capture or kill").

[2]"The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

Project Location:

The Collins Bar Curve Improvement Project (Project) is located in Trinity County between the towns of Big Bar and Burnt Ranch, along State Route 299, from 1.0 to 1.4 miles west of Mill Creek Road, latitude 40.750 degrees, longitude -123.375 degrees, elevation approximately 1476 ft (see Figure 1, Location Map in Attachment 1).

Project Description:

The purpose of the Project is to improve traffic safety and operations along State Route (SR) 299 in Trinity County by realigning four curves, widening paved shoulders, increasing tangent lengths and improving the super-elevation transitions between the curves. Alternatives A and B were reviewed and discussed in the Project's California Environmental Quality Act (CEQA) documents. A summary of alternative A can be found in Attachment 1. Alternative B was selected as the preferred alternative.

Alternative B is preferred, would improve safety and traffic operations, and was programmed by the California Transportation Commission (CTC). The total Project footprint is smaller than Alternative A; thereby, reducing the potential of further impacts to Trinity bristle snail (Covered Species) habitat. This alternative proposes a realignment of the roadway, improving superelevation rates and increasing tangent lengths. This alternative would not excavate the cut at Post Mile (PM) 12.5; therefore, reducing the risk of slope failure. Alternative B also includes creating a large fill area at PM 12.4, west side of the Project, which reaches a maximum height of 150 ft and a width of 240 ft. This area will be used for mitigation of the Covered Species.

The mitigation area is approximately 1.98 acres, and will contain a fill slope area, rock-blanket bench, and a rock-lined channel. The fill slope area will be created by adding material which will be "built up" with compacted layers. A bench will be constructed mid slope and a rock- lined channel (0.28 acres) will be constructed at the base of fill slope area. Drainage systems 1, 2, 10, and 11 will provide necessary moisture needed for Covered Species habitat. Existing leaf litter, duff, and woody debris will be collected before clearing and grubbing activities and stored at staging areas. This collected material will later be placed on the mitigation area. Current Environmental Study Limit (ESL) lines show construction access and a new fill area (see Figure 2, ESL Map in Attachment 1).

Material need for the mitigation area will come from an excavation cut at PM 12.8 which will produce 14,000 cubic yards (cy) of material. Approximately 22,000 cy of imported material will also be required for the mitigation site. An optional borrow site at the Burnt Ranch Transfer Station is available, which is located below the Project site on Burnt Ranch Dump Road (PM 12.87).

Drainage 3 (PM 12.43 Lt): Place a new double 8" perforated plastic pipe (PPP) long underdrain in a fabric lined rock blanket, (2 ft deep, 20 ft wide by 60 ft) fed by an occasional underground spring. This outlets to the rock slope protection (RSP) lined channel at the base of the fill.

Drainage 4 (PM 12.48): Replace the existing 38 foot 18-inch CMP with 40 foot 24-inch CMP. Replace outlet headwall. Place the new drainage system consisting of a Grate Opening (GO) inlet and 84 ft. of 24" CMP. This culvert will outlet at the rock slope protection (RSP) lined channel at the beginning of the mitigation area.

Drainage 5 (PM 12.52): Replace the existing 60 foot 18-inch CMP and inlet with a new drainage system of two Double Grate Opening (GDO) inlets (PM 12.52 & 12.53) connected by a 50 ft 18" plastic pipe (PP) and a 48 ft 24" plastic pipe (PP) crossdrain with an outlet of no end treatment.

Drainage 6 (PM 12.70): Replace inlet with a Double Grate Opening (GDO) and the existing 60 ft 18" CMP with 58 ft 24" CMP. Culvert outlet is projecting with no end treatment.

Drainage 7 (PM 12.79): Replace the existing 40 foot 18-inch CMP and inlet with a new drainage system of two Single Grate Opening (GO) inlets (PM 12.77 & 12.79) connected by a 49 ft 24" CMP and a 47 ft 24" CMP crossdrain with an outlet of no end treatment.

Drainage 8 (PM 12.87): Remove existing inlet DI, outlet headwall (HW) and 40 ft 18" CMP. Replace with 46 ft 24" CMP. Culvert outlet is projecting with no end treatment.

Flows from Drainage 1, 2, 3, and 4 will be filtered through the rock-lined channel or the rock-blanket fill slope within the mitigation site. The water flow from these drainages will aid with the soil moisture requirements needed for the Covered Species suitable habitat.

Proposed Construction in Order of Work for Alternative B

The following list is the most likely approach the contractor would use to construct the Project. It does not dictate or limit the options the contractor has to build the Project.

- Place construction area signs and temporary signal system
- Place Environmental Sensitive Area (ESA) flagging or fencing
- Place K-rail at side-hill viaduct (SHV) bridges and barrier slab locations
- Close west bound lane and move all traffic to east bound lane with traffic control
- Stockpile leaf litter, duff, and wood debris at staging area
- Remove trees, clear and grub
- Earthwork

  - Cut slope at PM 12.8 (14,000 cy)
  - Import borrow (22,000 cy)
  - Fill area at PM 12.4 (36,000 cy)
- Excavate bridge and barrier rail slab locations
- Form abutments, place rebar and pour concrete abutments at bridges
- Construct equipment work platforms at bridge abutments
- Drill CIDH (Cast-In-Drilled-Hole) piles and place concrete for column foundations
- Form columns, bent caps, place rebar pour concrete at bridges
- Form bridge superstructure, place rebar and pour concrete deck at bridges with railing
- Form barrier rail slabs, place rebar and pour concrete with railing
- Excavate roadway structural section
- Remove/install eight (8) new drainage systems, inlet and outlets, using corrugated metal pipe (CMP)
- Place Class 2AB (aggregate base)
- Place pavement hot mix asphalt (HMA)
- Place metal beam guardrail
- Stripe roadway, bridges and barrier slabs

Covered Species Subject to Take Authorization Provided by this ITP:

This ITP covers the following species:

Name	CESA Status
1. Trinity bristle snail (*Monadenia infumata setosa*)	Threatened[3]

This species and only this species is the "Covered Species" for the purposes of this ITP.

Impacts of the Taking on Covered Species:

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include: pedestrian activities (foot traffic) by all personnel associated with all aspects of construction or monitoring, after the site has been surveyed by biologists; tree felling and brush and shrub removal; earth movement (grading, drilling, digging, excavation); vehicular travel in construction zone; rock displacement and movement; and filling or slope construction and buildup.

The Project will take approximately 0.18 acres of marginally suitable habitat within the environmental study limit boundaries. Approximately 0.10 acres of suitable habitat within the environmental study limit boundaries will be avoided.

[3]See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(1)(A).

Covered Activities

Incidental take of individuals of the Covered Species in the form of mortality ("kill") may occur as a result of Covered Activities such as: activities of heavy equipment (bulldozers, graders, excavators, backhoes), that will move rocks and the soil horizon where Covered Species may be present at the ground surface or underground; initial vehicular travel by equipment or personnel to cut trees, log removal, chipping of branches, and other activities associated with timber work; pedestrian traffic by construction personnel after biologists have cleared the site, some Covered Species will undoubtedly not be found; rock displacement occurring on the slopes to be cut or on the preexisting fill slope that will be increased for the curve construction, the Covered Species may be impacted by rock movement and crushing or by filling of cavities and burrows by rocks, soil, or other aggregate. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of efforts to locate the Covered Species prior to construction when snails will be sought for movement to safe zones; inadvertent crushing from foot traffic, errors in handling, or accidental dropping may occur in the efforts to collect the Covered Species from under rocks, duff, logs, and all other types organic or inorganic solids that form structural habitat; in addition, juveniles or adults may never be found or located due to their hidden locations in inaccessible cracks and crevices within and among all forms or organic and inorganic solids. The areas where authorized take of the Covered Species is expected to occur include the environmental study limits, the entire planned construction area and any adjacent areas that will be protected with exclusion fencing or, other agreed upon method, that may be habitat for the Covered Species (collectively, the Project Area).

The Project is expected to cause the permanent loss of 0.18 acres of marginally suitable habitat for the Covered Species. Impacts of the authorized take also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: loss of tree cover on the side-hill slope that was built in 1956; potential loss due to thermal shock effects and stress due to increased desiccation from removal of shade and from temporary diversions to water flow across the site due to construction activities.

Incidental Take Authorization of Covered Species:

This ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, CDFW authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the

Project Area, take of Covered Species resulting from violation of this ITP, or intentional take of Covered Species except for capture and relocation of Covered Species as authorized by this ITP.

Conditions of Approval:

Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging and parking, use of construction equipment and noise and vibration generating activities from such equipment that may take the Covered Species. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

1. **Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this ITP or adopted thereafter.

2. **CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Mitigated Negative Declaration (SCH No.: 2013032061) adopted by the State of California Department of Transportation on May 28, 2013 as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).

3. **LSA Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration Agreement (LSAA) (Notification No. 1600-2013-0265-R1) for the Project executed by CDFW pursuant to Fish and Game Code section 1600 et seq.

4. **ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP, Attachment 1).

5. **General Provisions:**

5.1. Designated Representative. The Designated Representative shall be a Caltrans Resident Engineer and/or Caltrans Biologist who is responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.

5.2. Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of a biological monitor (Designated Biologist) at least 30 days before starting Covered Activities. Permittee shall ensure that the Designated Biologist is knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species. The Designated Biologist shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist in writing before starting Covered Activities, and shall also obtain approval in advance in writing if the Designated Biologist must be changed.

5.3. Designated Biologist Authority. To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species.

5.4. Education Program. The Designated Biologist shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. The Designated Biologist shall provide interpretation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. The Designated Biologist shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.

5.5. Construction Monitoring Notebook. The Designated Biologist shall maintain a construction-monitoring notebook on-site throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. The Designated Biologist shall ensure a copy of the construction-monitoring notebook is available for review at the Project site upon request by CDFW.

5.6. Delineation of Property Boundaries. Before starting Covered Activities along each part of the route in active construction, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all

Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities in that area.

5.7. Delineation of Habitat. The Designated Biologist shall clearly delineate habitat of the Covered Species within the Project Area with posted signs, posting stakes, flags, rope, or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.

5.8. Project Access. Project-related personnel shall access the Project Area using existing routes, or routes identified in the Project Description and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.

5.9. Staging Areas. Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area.

5.10. Hazardous Waste. The Designated Biologist shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. The Designated Biologist shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site.

5.11. CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.

5.12. Refuse Removal. Upon completion of Covered Activities, the Designated Biologist shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

6. Monitoring, Notification and Reporting Provisions:

6.1. Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.

6.2. Notification of Non-compliance. The Designated Representative shall immediately notify CDFW in writing if it determines that the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall report any non-compliance with this ITP to CDFW within 72 hours either by telephone or e-mail to the CDFW Caltrans contact.

6.3. Compliance Construction Monitoring. The Designated Biologist shall be on-site daily during tree removal, clearing and grubbing, and any other initial ground disturbing activities which occur within habitat areas as delineated on the mitigation and monitoring plan maps. The Designated Biologist shall conduct compliance inspections to (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; (5) ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area; and (6) ensure that if any individuals of the Covered Species are found that they are safely transported to the off-site location of optimal habitat (e.g. Bidden Creek) as referenced in item 7.1. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing: oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP. The Designated Biologist shall conduct compliance inspections a minimum of monthly during periods of inactivity and after clearing, grubbing, and grading are completed.

6.4. Monthly Construction Compliance Report. The Designated Biologist shall compile the observation and inspection records into a Monthly Compliance Report and submit it to the Designated Representative, who will review them before submittal to CDFW. The report should include notes showing the current implementation status of each pertinent mitigation measure. Monthly Compliance Reports shall be submitted to CDFW's Regional Office at the office listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative. At the time of this ITP's approval, the CDFW Regional Representative is Dr. Richard Lis (Richard.Lis@wildlife.ca.gov). CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous

compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.

6.5. CNDDB Observations. The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDB) within 60 calendar days of the observation and the Designated Biologist shall include copies of the submitted forms with the next Monthly Compliance Report.

6.6. Final Mitigation Report. No later than 90 days after completion of the Project, the Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Compliance Report for the Permittee, which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports; (2) a summary table of mitigation measures with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.

6.7. Notification of Take, Injury, or Relocation. The Designated Biologist shall immediately notify the Designated Representative if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (530) 225-2300. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.

7. Take Minimization and Avoidance Measures:

The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species:

7.1. Pre-Construction Surveys. The Permittee and CDFW will decide 30 days in advance if focused Covered Species surveys are necessary prior to implementation of ground disturbing activities. Surveys shall be conducted by the Designated Biologist in the months of April or May (depending upon saturating rains and warm conditions) and prior to construction to maximize species detection. If individuals are found within areas proposed for disturbance, they will be captured and moved to suitable sites outside the Project boundaries to an area identified as consisting of optimal habitat within the local watershed (i.e. adjacent to Bidden Creek., near China Slide, SR 299 between PM 13.0 and 14.0).

7.2. Pre-Construction Education of Work-site Personnel. The Designated Biologist shall conduct pre-construction meetings with Caltrans resident engineer, Caltrans surveyors, and contractors before surveys, staking, or ground-disturbing activities are implemented, to educate survey crews and construction crews on the Covered Species ecology and mitigation measures (see Section 5.4).

7.3. Additional Pre-Construction Surveys. The results of previous pre-construction focused surveys will dictate the need for further surveys during construction. If snails are found, the Designated Biologist will identify the snail, and if identified as the Covered Species, then safely relocate it to suitable habitat (see Section 7.1).

7.4. Inclement Surveys. If the Project is temporarily closed due to rain or other inclement weather, then the Designated Biologist will survey the entire site for presence of any individuals of the Covered Species prior to the resumption of construction activities.

7.5. Environmental Sensitive Area (ESA). ESA fencing, or an agreed upon similar method, will be placed prior to the start of construction activities to avoid impacts to approximately 0.10 acres of suitable habitat within the Project Area.

8. Habitat Management (HM) Land Restoration:

CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.

To meet this requirement, the Permittee shall provide for both the permanent protection and management funds for 1.98 acres of HM land. Permanent protection and funding for perpetual management of compensatory habitat must be complete

before starting Covered Activities, or within 18 months of the effective date of this ITP.

8.1. Cost Estimates.
The Permittee has estimated the cost of mitigation and monitoring as $400,000.

ESA fencing -	$ 3,000
One ton rock minus -	$ 102,000
Bench Fill material to toe -	$ 240,000
Planting, Monitoring, and Maintenance -	$ 55,000

8.2. HM Lands Approval. Caltrans will obtain CDFW written approval of the HM lands documentation at least three months before Covered Activities commence.

8.2.1. HM Lands Documentation. The HM land is approximately 1.98 acres and held in Caltrans Easement.

8.2.1.1. ESA roadside paddles will be placed to start at PM 12.18 and end at PM 12.39 to inform Caltrans maintenance crews of the sensitive area. In addition to a visual reminder, this information is kept within the maintenance database.

8.2.1.2. Right-of-Way (ROW) Memorandum A Memorandum of Understanding between the Permittee and the United States Army Corps of Engineers and the United States Forest Service concerning responsibilities and management policy regarding compensatory mitigation for transportation projects on National Forest land is provided in Attachment 3.

8.2.1.3. ROW Record Map. The Permittee has provided a right-of-way record map dictating that the HM parcel is a mitigation site which includes this ITP number (Figure 1).

8.2.1.4. Letter of Consent from USFS. Before this Project goes to competitive bid, ROW will receive a letter from USFS that they agree with the proposed activities within the easement.

8.2.2. Land Manager. The Permittee is the interim and long-term land manager. The Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change.

8.3. Implementation Plan

The implementation plan includes site preparation and planting.

8.3.1. Site Preparation

Prior to ground disturbing activities, duff, leaf mold, and moderate size woody debris (logs 6-10 in dbh) found on site will be stockpiled in the Project staging area. During tree removal, some or all of the trees will be chipped to use post construction. After the fill slope area is constructed, including the rock-lined bench and rock-lined fill slope, the Permittee will re-apply stockpiled deciduous tree duff, soft vegetative material, leaf mold and wood chips to the rock. Moderate size woody debris (6 -10 dbh) may be placed parallel to the site contour to form stabilizing barriers for leaves and vegetative detritus, this will prevent leaves and other debris from washing down slope. An appropriate mix of native grass species (approved at least 30 days in advance by CDFW) will be applied, using hydroseeding, to all disturbed slope that is not covered by rock.

8.3.2. Planting

The mitigation area will be planted with a high density of deciduous trees. Planting will occur one year following the completion of construction activities to allow the slope to stabilize and herbaceous species to become established. Trees and shrubs shall be spaced 8 to 15 feet apart, depending on species, and shall not be planted deeper into the soil than the soil line of the plant in the container. Soil amendments may be used, but must be approved by CDFW 60 days prior to proposed use. Native tree species planned for planting include: *Acer macrophylum, Ceanothus integerrimus, Cercocarpus betuloides, Pseudostuga menziesii, Quercus chrysolepis, and Quercus kelloggi.* A detailed Restoration Plan, which will include a planting plan (with proposed numbers of each species to be planted), planting locations, irrigation plan, and detailed vegetation maintenance plan, shall be submitted to CDFW six months in advance of proposed planting for review and approval. In addition to trees, the rock-lined benches and toe of slope will be painted with moss inocula to encourage moss development, which is a food source for the Covered Species.

8.4. Maintenance

Maintenance of the site shall be performed by a qualified biologist familiar with the Covered Species. Maintenance of the mitigation site will consist of a minimum of monthly pedestrian surveys for the first year to inspect the site for erosion, trash, malfunction of drainage systems, excessive animal browse or herbivory, vandalism, or other potential activities that may lead to damage of the site. After the first year of maintenance, the site will only be inspected during each season to avoid excessive disturbance to the Covered Species. During the first year and as part of the detailed planting plan (see above), an irrigation

plan will be developed that will supply water to the trees for a minimum of three years, with the typical irrigation season being approximately May through November, depending upon weather conditions. At the end of the three year irrigation period, the Permittee shall consult with CDFW to determine if irrigation may be terminated or shall be continued. Irrigation must be extended for additional years if the trees are not found to be meeting the success criteria defined under 'Vigor'.

8.5. Monitoring Plan

Success of the mitigation effort, to provide good quality habitat for the Covered Species, will rely on the successful establishment of healthy large deciduous tree species which will provide shade, moisture, and soil conditions that allow the Covered Species to survive and multiply. Important habitat factors for the Covered Species include, but are not limited to: leaf/duff accumulation to suitable depth, appropriate soil temperatures and moisture, appropriate air temperature and humidity, overstory canopy closure, and ground cover by perennial herbaceous species such as ferns, grasses, or forbs.

Evaluation and review of the constructed Covered Species habitat will require comparison to two reference sites, (1) Bidden Creek will provide data on optimal habitat conditions; and (2) a nearby undisturbed site of marginal habitat (to be reviewed and approved by CDFW) will provide data on marginal habitat conditions. These two reference sites will provide the necessary comparative data to determine if the mitigation site is progressing to suitable habitat conditions, which will be within the range of the marginal habitat reference site and the optimal habitat reference site. Suitable habitat for the Covered Species requires that several biological and ecological factors be within tolerance ranges of the snail that will allow it to thrive on site. Detailed monitoring will indicate if the site is progressing to becoming suitable habitat for the Covered Species, and if it is not, then efforts will be made to identify the factors which may be changed to correct problems. Secondary purposes of monitoring include identifying necessary changes in maintenance methods, and evaluating effectiveness and suitability of the mitigation procedures used at the site. Monitoring is proposed annually for years 2 through 8, given that the site achieves success criteria in each year; if the site fails to achieve success criteria in any year of annual monitoring (years 2 – 8) then an additional year of annual monitoring will be appended to year 8 and beyond. Once success criteria have been achieved for a total of six years, then monitoring can be reduced to every other year for six years, as long as success criteria are met; if success criteria fail to be met within these biennial monitoring periods then additional biennial monitoring periods will be added, until the vegetative

success criteria are met. If all success criteria are met sequentially then monitoring shall be completed in 14 years.

8.5.1.1. Reference Sites

The area adjacent to Bidden Creek contains optimal habitat for the Covered Species and will be utilized as a reference site. The specific size and area of the site to collect data will be determined in the field and subject to review and approval by CDFW. The second reference site will be one to represent marginal habitat conditions. The site selected will be subject to review and approval by CDFW. General features of the reference sites will be that they will be of suitable size for comparison to the mitigation site; other comparative features for consideration will include slope, aspect, soils, geology, etc.

8.5.1.2. Baseline Data

If feasible, prior to initiation of any construction activities, some baseline data will be collected within the marginal suitable habitat that will be destroyed or damaged during construction.

Primary comparative baseline data for evaluating the success and progress of the mitigation site will be collected from the reference sites as listed above. All monitoring data to be collected (see discussion below) at the mitigation site will be simultaneously collected at the two reference sites throughout the monitoring period until all monitoring has concluded and been deemed successful.

8.5.1.3. Annual Monitoring

Monitoring will focus on measuring plant vigor and quantitative habitat conditions on-site and off-site at the two reference areas. All quantitative monitoring data shall be collected as listed below. Tree vigor monitoring will be conducted in mid-summer of each monitoring year to observe the trees prior to the period of greatest water stress.

- Vigor

Individual tree growth will be monitored annually and be reported for vigor, height and crown diameter during the entire monitoring period. Tree vigor will be rated "good", "fair", "poor", "very poor" or "dying or dead" based on qualitative observations of symptoms of disease, browsing/herbivory, density of foliage, leaf color, and insect infestation. A vigor rating of "good" will be applied to a tree that has 25% or less of foliage affected by one or more of

the aforementioned symptoms. A vigor rating of "fair" will be applied to a tree that has between 26% and 50% of the foliage affected by one or more of the aforementioned symptoms. A vigor rating of "poor" will be applied to a tree that has between 51% and 75% foliage affected by aforementioned symptoms. A vigor rating of "very poor" will be applied to trees with 76% to 90% of the foliage affected by one or more of the aforementioned symptoms. A vigor rating of "dying or dead" will be applied to trees with 91% to 100% of the foliage affected by one or more of the aforementioned symptoms, or if the tree is dead. Individual tree height and maximum crown diameter will be recorded for each tree to determine the annual rate of growth of the trees, and progress towards a mature canopy.

- Leaf/Duff Depth

A calibrated probe or some other measurement tool will be used to determine the depth of leaf litter/duff that covers bare ground or rock, average depth of leaf/deaf will be measured at 40 to 100 locations at each of the three sites (mitigation, optimal habitat, and marginal habitat). The exact number and spacing of these measurements at each site will be determined in collaboration with CDFW and subject to review and approval by CDFW. The locations will not need to be permanently identified for repeated sampling each year, but will be randomly, systematically randomly, or stratified systematically randomly located depending upon the site and local topography. The success criterion for this measure will be developed in conjunction with CDFW and is subject to approval by CDFW.

- Soil Temperature and Moisture

Soil temperature or moisture may be limiting factors for the Covered Species suitable habitat. Soil moisture and temperature will be monitored with remote continuous data loggers that will collect data a minimum of six times in every 24 hour period continuously throughout the year. At each site (mitigation, optimal reference, and marginal reference) one Hobo microstation (or equivalent) with a minimum of four sensor probes will collect readings for each variable (data collected will include two soil moisture and two soil temperature readings). Installation of the microstation and probe locations at each site (mitigation, optimal habitat, and marginal habitat) will be in conjunction with CDFW.

- Air Temperature and Humidity

Air temperature and humidity will affect plant establishment and growth and the Covered Species habitat conditions. Air temperature and humidity will be monitored with remote continuous reading loggers that will collect air temperature and humidity a minimum of six times in every 24 hour period,

continuously throughout the year. One Hobo Pro v2 (or equivalent) logger will be deployed for each site (mitigation, optimal habitat, and marginal habitat) with the determination of logger placement at each site subject to the approval of CDFW.

- Overstory Canopy Closure

Canopy closure will be measured annually and at the period of maximum leaf expansion and prior to any leaf senescence at approximately 30 locations throughout each site (mitigation, optimal habitat, and marginal habitat); the exact number of locations at each site for collection of overstory canopy cover data will be determined in conjunction with CDFW and be subject to CDFW approval. Methods for measuring and calculating canopy closure will be subject to CDFW review and approval. It is anticipated that the mitigation site will have values of zero for the first few years of tree growth, until trees begin to reach heights of greater than 10 feet or more.

- Photographic Documentation

Monitoring will also consist of annual photographic documentation from permanent photographic points; these shall be established around the perimeter of the mitigation site and the two reference sites. Photographic points may also be established within the sites to better document the site if there are poor views from the perimeter. A map of the photographic locations shall be submitted to CDFW for review with the first submitted photographic documentation.

- Species List

A species list of herbaceous species that have colonized and established upon the mitigation site will be collected during each year of monitoring. Any non-native invasive species will be identified, bagged, and disposed of in a manner that precludes those collected specimens from reproducing at this site or any other.

- Presence of Snails

Surveys for snails and the Covered Species may begin at the mitigation site during the 5th year of monitoring and every year thereafter. If snails or the Covered Species are noticed prior to the fifth year, the Permittee may request approval to begin surveys earlier from CDFW. Surveys will follow the "Survey Protocol for Survey and Manage Terrestrial Mollusk Species," and use the datasheet created by CDFW.

8.5.2. Success Criteria

- Vigor

Success in vigor will be assessed after each monitoring period. At least 75% of the trees must be in "good" condition (as defined under vigor) in any season or further evaluation will be necessary to determine what remedial measures are necessary to improve tree health. Any trees found dead will be replaced in the following fall or winter. Trees in the fair, poor, or very poor rating will be evaluated for the causes of unsuccessful growth and assessed for remedial measures. Once 75% of the trees (in a good vigor rating) reach 50% of the mean height and 50% of the mean maximum crown diameter of trees on the two reference sites, and overstory canopy closure is 60% of the mean of reference sites, then no further vegetation monitoring will be necessary. Data from the mitigation site shall be compared to the two reference sites separately and to the references sites as pooled data. The success criteria data percentages, for determinations of success, shall be compared to the pooled data set.

- Quantitative Habitat Conditions (soil moisture and temperature, air temperature and humidity)

Baseline and reference quantitative measurements will be compared to the mitigation site to determine the progression of habitat development that will support the Covered Species. The mitigation site is expected to achieve the quality of suitable habitat which is expected to produce values that are between marginal habitat and optimal habitat (the two reference sites being monitored). In addition to means, extreme values will be identified during months of the Covered Species activity to determine if the sites are comparable in extremes, such as high and lows of soil moisture and temperature, air temperature and humidity. Data from the reference sites will provide the range of variation to be expected within that habitat type and as the mitigation site develops its range of variation is expected to fall within the range of variation displayed at the reference sites. Success criteria of these quantitative measures will be met if the data collected on the mitigation site begins to trend toward the ranges displayed by the reference sites. The Permittee will provide an analysis of the data acquired each year in the annual report and assess the potential for the mitigation site to be trending towards values displayed by the reference sites. These data are being collected to provide important information on the development of the mitigation site as suitable habitat for the Covered Species, and will provide important measures to assess the potential for the success of the site or possible restoration solutions, if vegetation success criteria are failing to be met. The Permittee and CDFW will collaborate to determine if success

criteria are needed for these data after the fifth year of monitoring. With no baseline data from the reference sites available at this time, realistic success criteria cannot be developed. Quantitative soil moisture and temperature monitoring may cease when vegetative vigor success criteria are fully met and approved by CDFW.

- Presence of Snails

If the Covered Species is detected during any two successive monitoring periods, and other success criteria are on a trajectory for success, then the Permittee may submit a request in writing documenting achievement of all success measures and request a suspension of all further monitoring.

8.5.3. Remedial Actions

Failure to achieve the success criteria will require the Permittee to implement remedial measures. The Permittee will identify the magnitude and causes of mitigation failure, document these in writing and propose remedial actions. CDFW will review and approve proposals for remedial actions. All actions will be documented in monitoring reports. Permittee may also propose remedial measures if the success criteria are being met, but if monitoring trends indicate that success criteria may not be met in future years. These proposals shall be submitted to CDFW for review and approval. Remedial measures may include replanting the site with the same or similar species, addition of more leaf litter, duff, or woody debris, increased supplemental irrigation, adjustment of drainage systems, etc.

In the event of catastrophic events that may occur on site, such as wildfire, land-slides, earthquakes, hazardous materials spills, or other events that may destroy the Covered Species, trees, or habitat for the Covered Species that has been established on this site as mitigation for the Covered Species, CDFW shall be notified as soon as possible and a summary of the catastrophic accident shall be submitted along with an estimate of the damage to the mitigation site. The Permittee and CDFW will then meet and review the status of the site, damage to habitat, probable and potential injury and death to the Covered Species, and potential remedial actions. In addition, the time-lines for progress under this ITP will need to be reviewed and determinations made as to whether the current ITP will need to be amended.

8.5.4. Reporting

8.5.4.1. Annual Monitoring Report

Monitoring results will be submitted to CDFW by February 28th following each annual monitoring period. The monitoring report should be sent to CDFW, 601 Locust Street, Redding, CA, 96001. Quantitative vegetative vigor monitoring will be initiated one year after the mitigation area has been planted. Quantitative monitoring of reference sites will begin the year the site has been cleared for construction in order to establish baseline data. Monitoring reports will include: (1) an introduction and background of the Project history and monitoring performed to date; (2) a summary of plant survival and a qualitative description of growth and vigor of all species of plants in the mitigation area; (3) a description of environmental factors that may be affecting plant vigor (i.e. rainfall, fire, toxins, etc.); (4) a results and discussion section on the analysis of habitat conditions; (5) photography of the site from permanent photographic documentation points; (6) a qualitative description of wildlife (including mollusks) use of the site; (7) a description of necessary remedial measures; and (8) a description and justification for any proposed amendments to the mitigation program that result from observations made during monitoring.

8.5.5. Project Closure Report

When the Permittee and CDFW agree that all performance criteria have been satisfactorily met, then the Permittee will prepare and submit a project closure report to CDFW to signify successful completion of the mitigation Project. The project closure report will include: (1) an introduction and chronological summary of activities performed at the mitigation area over the preceding years of monitoring; (2) a thorough qualitative and quantitative description of the habitat conditions; (3) observations of mollusk species in the mitigation area; (4) natural recruitment of tree and shrub species; (5) an appendix with a chronological photographic documentation of the mitigation area progress; and (6) recommendations for future Covered Species habitat mitigation projects or restoration area management activities, if noticeable problems arose during the monitoring period.

9. Performance Security

The Permittee may proceed with Covered Activities only after the Permittee has ensured secured funding (Security) to complete any activity required by this ITP that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:

9.1. Security Amount. The secured fund shall be in the amount of **$400,000**.

9.2. Security Form. A promissory letter was sent to Mr. Neil Manji, Regional Manager, North District, California Department of Fish and Wildlife (CDFW), on November 4, 2013 (Attachment 4.).

Amendment:
This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

Stop-Work Order:
CDFW may issue Permittee a written stop-work order requiring Permittee to suspend any Covered Activity for an initial period of up to 25 days to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 25 additional days. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

Compliance with Other Laws:
This ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

Notices:
The Permittee shall deliver a fully executed duplicate original ITP by registered first class mail or overnight delivery to the following address:

Habitat Conservation Planning Branch
California Department of Fish and Wildlife
Attention: CESA Permitting Program
1416 Ninth Street, Suite 1260
Sacramento, CA 95814

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number 2081-2013-049-01 in a cover letter and on any other associated documents.

Mr. Neil Manji, Regional Manager
California Department of Fish and Wildlife
601 Locust Street
Redding, California 96001
(530) 225-2363

Unless Permittee is notified otherwise, CDFW's Regional Representative for purposes of addressing issues that arise during implementation of this ITP is:

Dr. Richard Lis
California Department of Fish and Wildlife
601 Locust Street
Redding, California 96001
(530) 225-2142
Fax (530) 225-2267

Compliance with CEQA:
CDFW's issuance of this ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, Caltrans. (See generally Pub. Resources Code, §§ 21067, 21069.)

The lead agency's prior environmental review of the Project is set forth in the Mitigated Negative Declaration (State Clearinghouse No. 2013032061) dated May 28, 2013. At that time the lead agency adopted the Mitigated Negative Declaration and approved the Project it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

This ITP, along with CDFW's related CEQA findings, which are available as a separate document, provide evidence of CDFW's consideration of the lead agency's Mitigated Negative Declaration/EIR for the Project and the environmental effects related to issuance of this ITP (CEQA Guidelines, § 15096, subd. (f)). CDFW finds that issuance of this ITP will not result in any previously undisclosed potentially significant effects on the environment or a substantial increase in the severity of any potentially significant environmental effects previously disclosed by the lead agency. Furthermore, to the extent the potential for such effects exists, CDFW finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, and that adherence to and implementation of the Conditions of Approval imposed by CDFW through the issuance of this ITP, will avoid or reduce to below a level of significance any such potential effects. CDFW consequently finds that issuance of this ITP will not result in any significant, adverse impacts on the environment.

Findings Pursuant to CESA:
These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. (Fish & G. Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2).)

CDFW finds based on substantial evidence in the ITP application, Mitigated Negative Declaration/EIR, Lake Stream Alteration Agreement, the results of site visits and consultations, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

(1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;

(2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly Compliance Reports. CDFW evaluated factors including an assessment of the importance of the habitat in the Project Area, the extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation. Based on this evaluation, CDFW determined that the protection and management in perpetuity of 1.98 acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;

(3) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;

(4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;

(5) All required measures are capable of successful implementation;

(6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;

(7) Permittee has ensured adequate funding to implement the measures required by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and

(8) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

Attachments:

1. Mitigation Monitoring and Reporting Plan
2. Memorandum from Ms. Tauni Melvin to Mr. Neil Manji, dated Nov. 25, 2013
3. Memorandum of Understanding between Permittee and U.S. A.C.O.E. and U.S.F.S.
4. Letter from Permittee to Neil Manji concerning mitigation funding assurance dated Nov. 4, 2013

Figure
1. Right of Way Appraisal Map No. 3E790.101

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

on 2/10/14

Neil Manji, Regional Manager
NORTHERN REGION

ACKNOWLEDGMENT

The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of this ITP, and (3) agrees on behalf of the Permittee to comply with all terms and conditions

By: _____ Date: 2/10/14

Printed Name: STEVE ROGERS Title: PROJECT MANAGER

Figure 3. Environmental Study Limits
Page 1 of 2 Date: 5/3/13

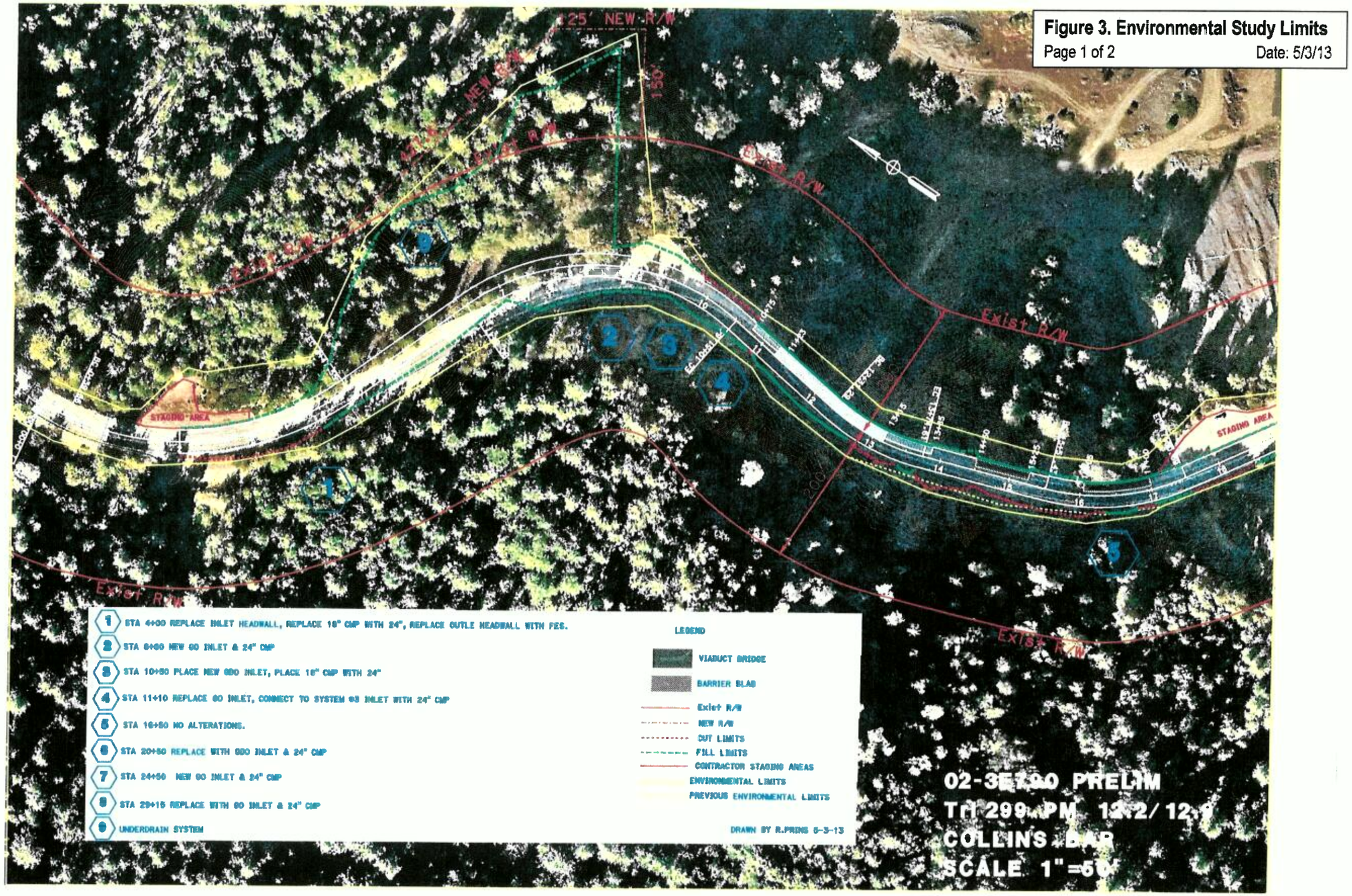


Figure 3. Environmental Study Limits
Page 2 of 2 Date: 5/3/13

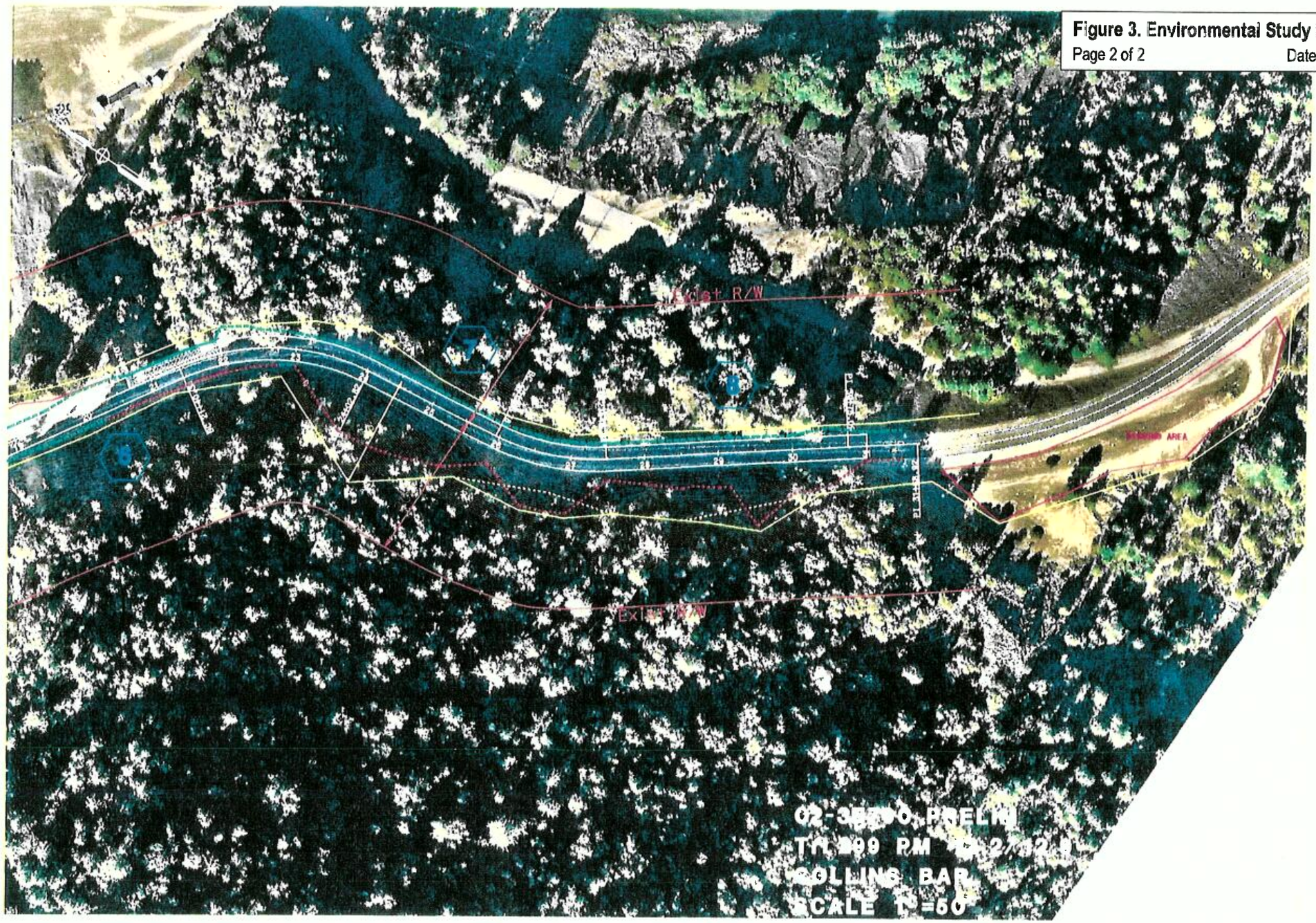


Figure 3. Layout Plan Sheet
Page 1 of 2 Date: 5-14-13

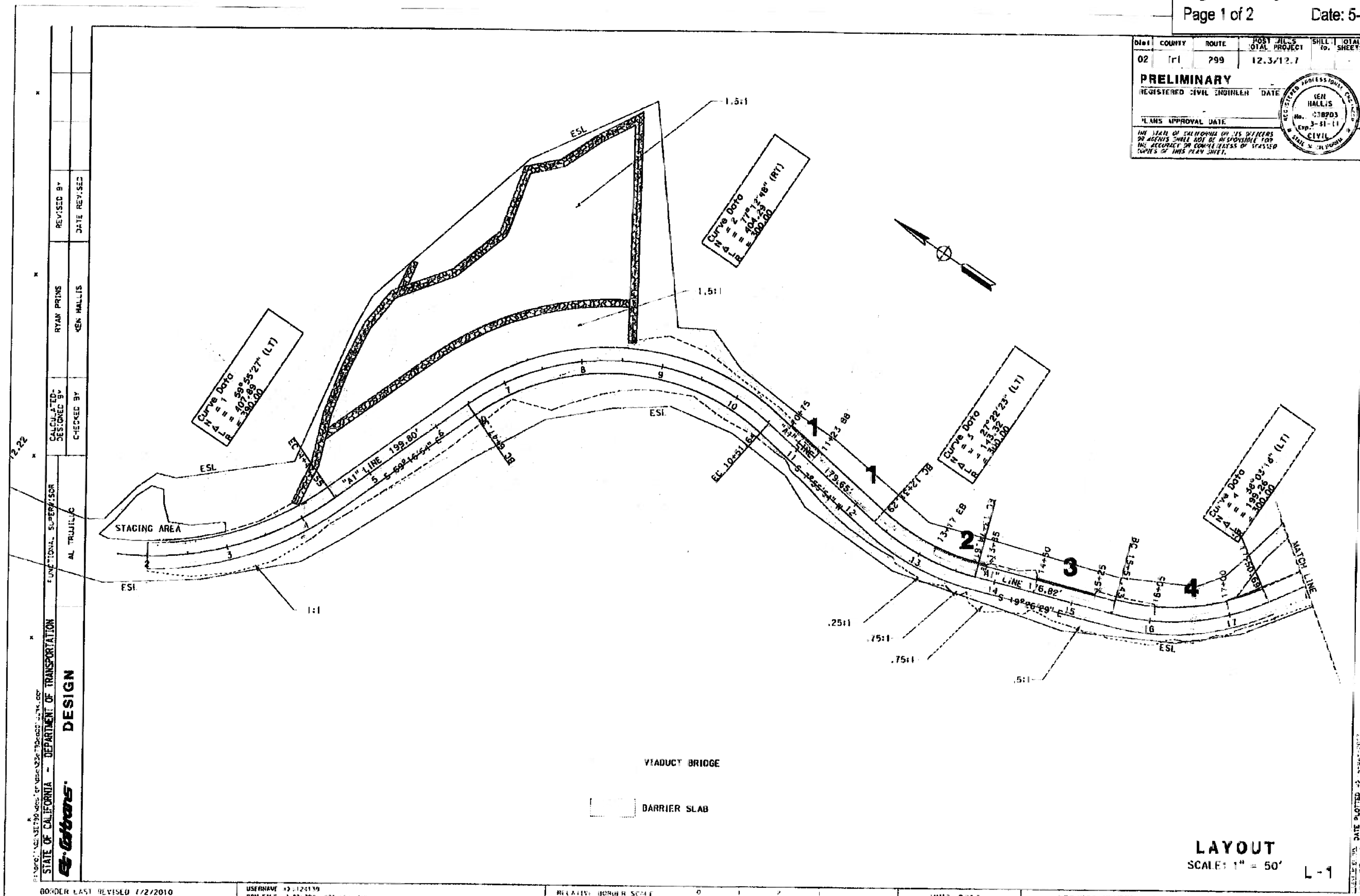
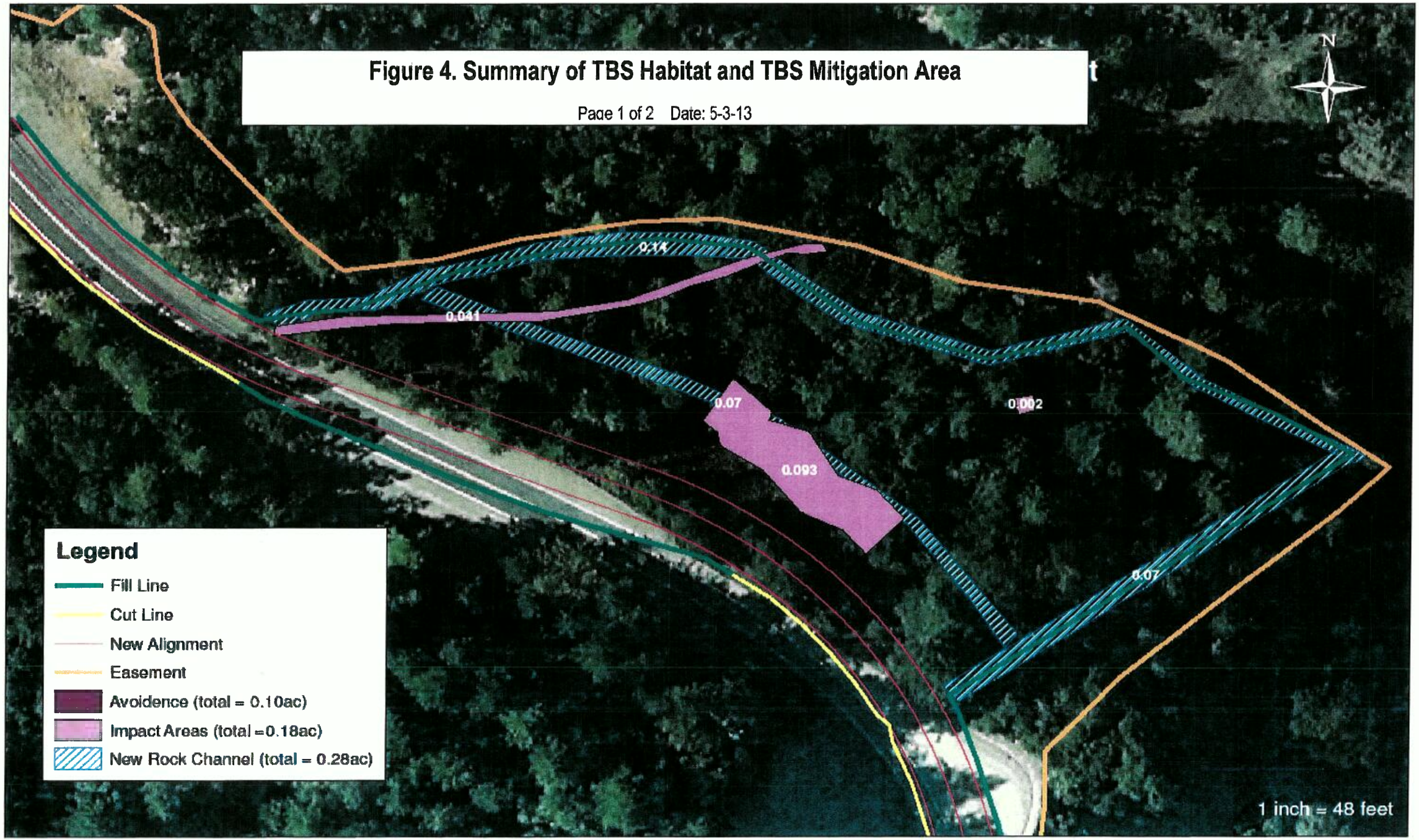


Figure 4. Summary of TBS Habitat and TBS Mitigation Area

 Date: 5-3-13



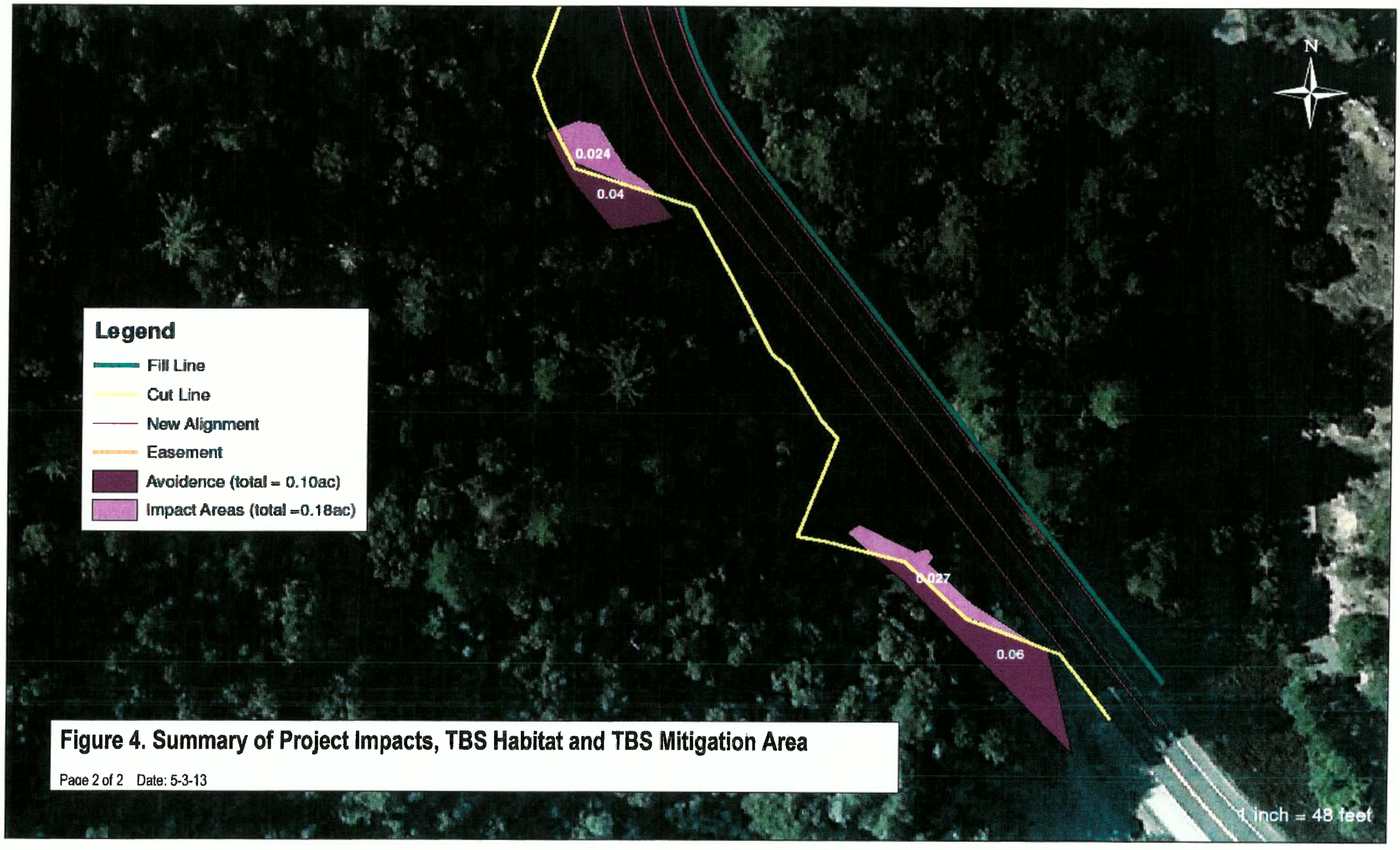
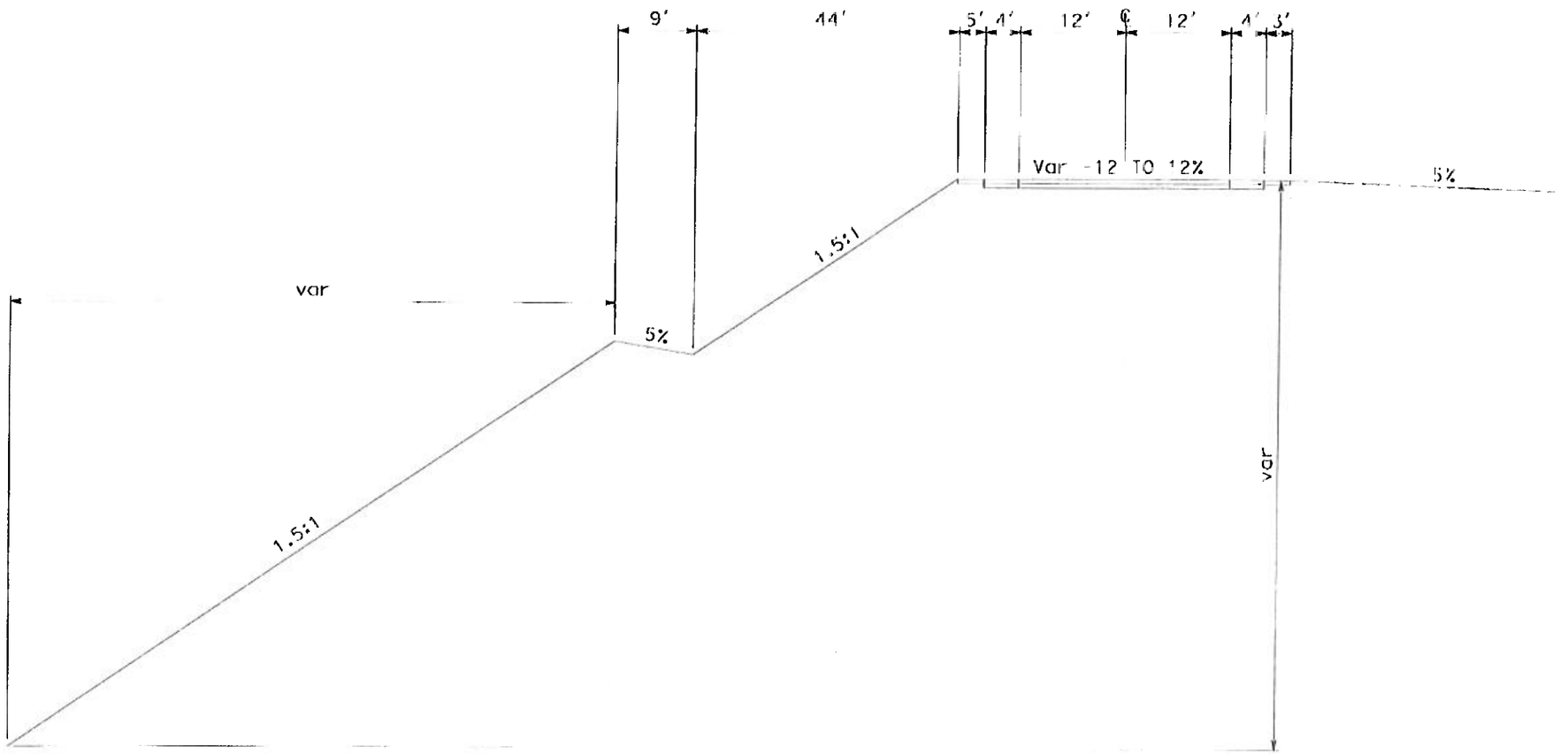


Figure 4. Summary of Project Impacts, TBS Habitat and TBS Mitigation Area

Figure 5. Fill Area Profile (TBS Mitigation Site)



STA 4+25 TO 8+60

Figure 6. Planting Plan
Date: 5-14-13

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
XX	XXX	XX	-		

PRELIMINARY
LICENSED LANDSCAPE ARCHITECT
XX-XX-XX
PLANS APPROVAL DATE

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

ESL
Rock Lined Ditch (Typical)
ESL
STAGING AREA
"A1" LINE 199.80'
1
2
3
4
5
6
7
8
9

LEGEND:

99	Acer macrophylum	Big-leaf Maple
109	Quercus kelloggi	Black Oak
11	Pseudotsuga menziesii	Douglas Fir
37	Quercus chrysolepis	Canyon Live Oak
56	Ceanothus integerrimus	Deer Brush
69	Cercocarpus betuloides	Mountain Mahogany

PLANTING PLAN
NO SCALE

APPROVED FOR LANDSCAPE WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE
SUPERVISOR
DESIGNER
CHECKED
REVISED BY
DATE REVISED
CALCULATED/DESIGNED BY
CHECKED BY
SIGN LANDSCAPE ARCHITECT

DGN FILE LAST REVISED 7/27/2010
USERNAME
DGN FILE
RELATIVE BORDER SCALE
UNIT 0000
PROJECT NUMBER & PHASE 0000000000

Attachment 2. Memorandum from Ms. Tauni Melvin to Mr. Neil Manji, dated Nov. 25, 2013

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Flex your power!
Be energy efficient!

To: Neal Manji, Regional Manager
CA Dept of Fish & Wildlife
North District

Date: November 25, 2013

File: 02-Tri-299, PM 12.3/12.6
EA 3E790
Collins Bar Curve

From: Tauni Melvin, Federal Lands Transfer Coordinator
District 2 Right of Way

Subject: **DEPARTMENT OF TRANSPORTATION EASEMENT**

The California Department of Transportation (Caltrans) will be acquiring approximately 0.92 acres of land adjacent to State Route (SR) 299 in Trinity County for the Collins Bar Curve realignment and safety project. This property is currently under the management of the Shasta-Trinity National Forest. Caltrans will obtain a Department of Transportation Easement Deed for the transfer of this land. This easement is a recorded document that will allow Caltrans to hold this land as long as necessary, with no term for expiration. Once this land is under easement to Caltrans any use by any other entity, including the Forest Service (FS), will require the permission of Caltrans by application of an Encroachment Permit. At that point the determination is Caltrans' to decide if the use will be allowed.

Attached is a copy of the pending Department of Transportation Easement (DOTE) Deed for the 0.92 acre of land on which an easement is being acquired from the FS. Stipulation No. 2, on page 3 of this document, requires STNF to consult with Caltrans prior to issuing use of this area within the easement. It has been established that this "consultation" requires Caltrans issuing an encroachment permit prior to any use being authorized by the Forest Service. If Caltrans does not issue an encroachment permit the FS cannot allow other uses.

PRESENTED FOR RECORDING by;
The State of California, Department of Transportation,
under Government Code Section 27383.

NO FEES CHARGED FOR RECORDING OR
DOCUMENT TRANSFER TAX.
AFTER RECORDING, RETURN TO:

Department of Transportation
Right of Way Field office
1031 Butte Street, Suite 205
Redding, Ca. 96001

Space above this line for Recorder's Use

HIGHWAY EASEMENT DEED

THIS DEED, made this _____ day of _____, 20___, by and between the UNITED STATES OF AMERICA, acting by and through the DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, hereinafter referred to as the Grantor, and the STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, hereinafter referred to as the Grantee:

WITNESSETH:

WHEREAS, the Grantee has filed application under the provisions of the Act of Congress of August 27, 1958, as amended (23 U.S.C. Section 317 and/or Section 107 (d)), for the right-of-way of a highway over certain federal land in the State of California under the jurisdiction of the United States Department of Agriculture, Forest Service (FS) which land has been appropriated by the Grantor, and

WHEREAS, the Federal Highway Division Administrator, pursuant to delegation of authority from the Secretary of Transportation and FHWA Administrator, has determined that an easement over the land covered by the application is reasonably necessary for a right-of-way for the construction, operation and maintenance of State Route 02-Tri-299-PM-12.5, and

WHEREAS, the United States Department of Agriculture, acting by and through the FS, in its consent to the appropriation of the federal land, has agreed to the transfer by the Grantor of an easement over the land to the Grantee, and

WHEREAS, the Grantee with respect to activities related to the Property, agrees that (a) no person shall, on the grounds of race, color, national origin, sex, age, disability, or religion be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to the Grantee's operations, programs, or activities conducted on the Property, (b) that the Grantee shall use said land so conveyed in compliance with all requirements imposed by or pursuant to Title VI of the Civil Rights Act of 1964 (42 U.S.C. section 2000d to 2000d-4) and all applicable civil rights provisions of other Federal statutes.

02-Tri-299-P.M. 12.5
Parcel 14099
E.A.3E7902/EFIS. 0200020151

NOW THEREFORE, the **Grantor** does hereby grant to the Grantee an easement for a right-of-way for the construction, operation, and maintenance of a highway, and use of the space above and below the established grade line of the highway pavement for highway purposes on, over, across, in, and upon the following described federal land(s) in the County of Trinity, State of California:

As the land is more particularly described below and shown on the attached Exhibit "A" Sheet 1 of 1, shown as Parcel Number 14099 attached and made a part hereof;

Lying within un-surveyed lands easterly of Section 23, Township 5 North, Range 6 East, H.M. according to the official plat thereof, approved August 1, 1996.

TOGETHER WITH THE HEREIN ABOVE DESCRIBED PARCEL(S):

Any and all man-made features and drainages adjacent to and appurtenant to said existing Highway.

EXCEPTING THEREFROM THE HEREINABOVE DESCRIBED PARCEL(S):

All frontage roads, trails, and waterways adjacent to and parallel with the roadbed of said existing Highway.

This easement is made subject to all matters of record and is limited by and shall not exceed the right, title and interest of the Grantor in and to the federal lands herein described.

If any subsequent survey of said existing Highway shows that any portion of said existing highway crossed lands of the Grantor not described herein, this easement shall be amended to include the additional lands traversed.

These real property descriptions have been prepared by me, or under my direction, in conformance with the Professional Land Surveyors Act.

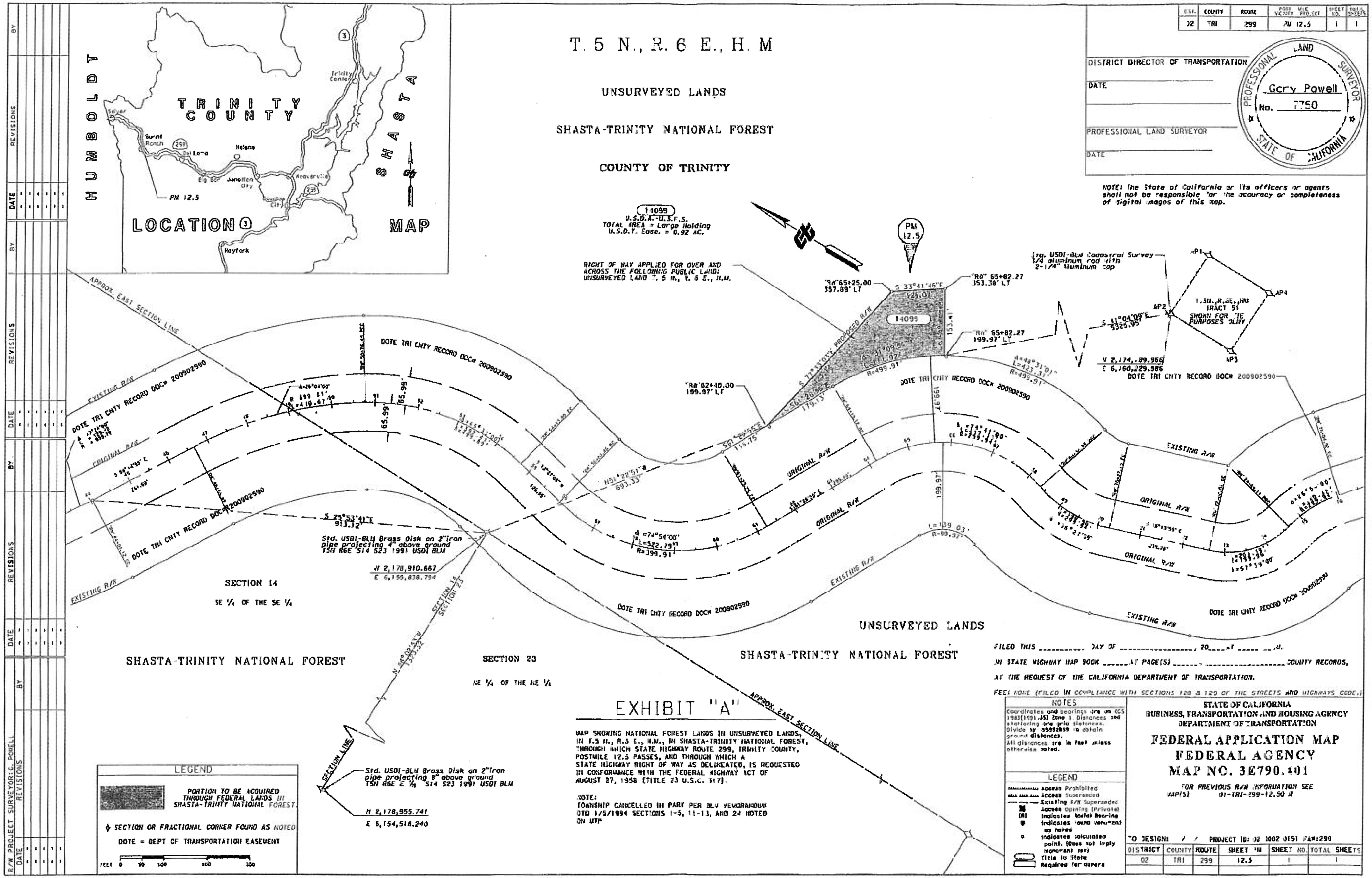
Signature Gary R. Powell
Licensed Land Surveyor
Date May 7, 2013

LICENSED LAND SURVEYOR
GARY R. POWELL
No. 7750
STATE OF CALIFORNIA

OPERATION, MAINTENANCE, AND CONSTRUCTION STIPULATIONS

This transfer is subject to the following terms and conditions:

1. If outstanding valid claims exist on the date of this grant, the Grantee shall obtain such permission as may be necessary on account of any such claims.
2. The right-of-way should be nonexclusive with the Forest Service retaining all rights to issue authorizations for uses not inconsistent or incompatible with highway use. The Forest Service shall consult with the Highway Agent on appropriate stipulations to protect the roadway facility prior to the issuance of such authorization.
3. The Forest Service will retain the right to any merchantable timber and all other resource materials not specifically appropriated, within the boundaries of the appropriation. The Highway Agent will notify the Forest Service which timber or other resource materials within the appropriation are scheduled to be removed and the Forest Service will determine whether a timber sale or other authorization for removal is appropriate.
4. All signing within the right-of-way will be installed and maintained by the Highway Agent. The Highway Agent will provide signs to mark National Forest boundaries (both for entering and leaving), intersecting Forest Service roads, directional signs to nearby National Forest information facilities which are staffed throughout the year, and signs to geographic or recreation areas. All signing will be in accordance with the Manual on Uniform Traffic Control Devices. Where feasible, the Highway Agent will install displays (panels or posters), furnished by the Forest Service, at Interstate rest stops near National Forest.
5. The Forest Service may provide conditions protecting the adjacent National Forest System lands from construction and maintenance activities which may cause off-right-of-way adverse effects, such as wildfire, chemical control of vegetation and animals, runoff drainage, and revegetation with nonnative species.
6. The Grantee and the Regional Forester shall make determination as to the necessity for archaeological and paleontological reconnaissance and salvage within the right-of-way, and such reconnaissance and salvage to the extent determined necessary because of construction of the highway facility, is to be undertaken by the Grantee in compliance with the acts entitled An Act for the Preservation of American Antiquities, approved June 8, 1906 (34 Stat. 225, 16 U.S.C. 432-433), the Archaeological Resources Protection Act of 1979 (93 Stat. 721, 16 U.S.C. 470aa-47011), and State laws where applicable.



3E790.401rev2.dgn 5/7/2013 3:02:41 PM

I, _____, Attorney, State of California, Department of Transportation, and duly licensed to practice law in the State of California, hereby certify that this deed is legally sufficient for its stated purpose.

_____ _____

Signature Date

IN WITNESS WHEREOF, I, Vincent P. Mammano, California Division Administrator, pursuant to delegations of authority from the Secretary of Transportation and the Federal Highway Administrator by virtue of authority in me vested by law, have hereunto subscribed my name as of the day and year first above written.

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

By _____
Vincent P. Mammano
California Division Administrator

ACKNOWLEDGMENT

STATE OF CALIFORNIA

COUNTY OF _____)

On _____before me, _____

personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

In compliance with the conditions set forth in the foregoing deed, the State California, Department of Transportation, certifies, and by the acceptance of this deed, accepts the right-of-way over certain land herein described and agrees for itself, its successors and assigns forever to abide by the conditions set forth in said deed.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

By _____
Karen E. Hawkins
Chief, North Region Right of Way

ACKNOWLEDGMENT

STATE OF CALIFORNIA

COUNTY OF _____)

On _____before me,_____

personally appeared_____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

02-Tri-299-P.M. 12.5
Parcel 14099
E.A.3E7902/EFIS. 0200020151

Attachment 3. Memorandum of Understanding between Permittee and U.S. A.C.O.E. and U.S.F.S.

MEMORANDUM OF UNDERSTANDING
BETWEEN
CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND
UNITED STATES ARMY CORPS OF ENGINEERS
AND
UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

CONCERNING COMPENSATORY MITIGATION
FOR TRANSPORTATION PROJECTS
ON
NATIONAL FORESTS IN CALIFORNIA

This Memorandum of Understanding ("MOU") is entered into by the California Department of Transportation ("Caltrans"), the U.S. Army Corps of Engineers, South Pacific Division ("Corps"), and the USDA Forest Service ("Forest Service"), collectively referred to herein as the "Participating Agencies."

RECITALS

WHEREAS, it is the mission of Caltrans to provide mobility across California; and

WHEREAS, it is the mission of the Corps Regulatory Program (33 C.F.R. Parts 320-332) to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions; and

WHEREAS, it is the mission of the Forest Service to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations; and

WHEREAS, Caltrans, on behalf of the State of California and the Federal Highway Administration ("FHWA"), operates, maintains and improves thousands of miles of highways and provides assistance to local governments with similar transportation infrastructure; and

WHEREAS, Caltrans selects projects to construct using State only funds or with Federal assistance under the Federal-aid Highway Program (23 U.S.C. § 145), and unavoidable impacts to waters of the U.S., including wetlands, resulting from those projects are offset through establishment, restoration, and/or enhancement of similar waters of the U.S., including wetlands; and

WHEREAS, sections 6001 and 6002 of the Safe, Accountable, Flexible, Efficient, Transportation Equity Act - A Legacy for Users (P.L. 109-59) require Caltrans, pursuant

to its delegated authority, to undertake specific project development and coordination procedures that provide for advance transportation planning and early agency input; and

WHEREAS, the Corps is responsible for the administration of laws for the protection and preservation of aquatic resources pursuant to Section 10 of the Rivers and Harbors Act of 1899 ("RHA") and Section 404 of the Clean Water Act ("CWA"). Pursuant to the RHA, all work or structures in or affecting the course, condition, or capacity of "navigable waters of the U.S." require Corps authorization. The Corps authorizes, under the CWA, the discharge of dredged or fill material into "waters of the U.S.," including wetlands. Navigable waters of the U.S. and waters of the U.S. are hereinafter collectively referred to as "Aquatic Resources." Caltrans' highway projects may require one or more Department of the Army permits from the Corps under the above cited statutes; and

WHEREAS, the U.S. Environmental Protection Agency (EPA) regulations at 40 C.F.R. Part 230 implementing section 404(b)(1) of the CWA [33 U.S.C. § 1344(b)] and Corps regulations at 33 C.F.R. § 332.1 require an applicant for a Department of the Army permit to take all appropriate and practicable steps to first avoid and then minimize adverse impacts to Aquatic Resources, and then compensate for unavoidable adverse impacts remaining after all appropriate and practicable minimization has been undertaken; and

WHEREAS, Executive Order 11990 (Protection of Wetlands) directs Federal agencies to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out their responsibilities for (1) acquiring, managing, and disposing of federal lands and facilities; and (2) providing federally undertaken, financed, or assisted construction and improvements; and (3) conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities; and

WHEREAS, Caltrans and the Corps, along with four other Federal signatory agencies, agreed through a Memorandum of Understanding (2006) to integrate the National Environmental Policy Act ("NEPA") and CWA section 404 processes concerning Federal-aid surface transportation projects that have five or more acres of permanent impacts to Aquatic Resources in order to provide more timely agency decisions while improving the overall quality of those decisions; and

WHEREAS, it is the State of California's wetland conservation policy ('No Net Loss' policy; Executive Order W-59-93) to ensure no overall net loss and achieve a long-term net gain in the quantity, quality, and permanence of wetland acreage and values in California in a manner that fosters creativity, stewardship, and respect for private property, reduces procedural complexity in the administration of State and federal wetlands conservation programs, and encourages partnerships to make landowner incentive programs and cooperative planning efforts the primary focus of wetlands conservation and restoration; and

WHEREAS, it is the goal of the Federal Wetlands Policy (1993) to achieve no overall net loss of the Nation's remaining wetlands resource base, and a long-term goal to increase the quality and quantity of the Nation's wetlands; and

WHEREAS, the Forest Plans developed by the Forest Service for National Forests in California focus on long-term sustainability, and opportunities exist for Aquatic Resource establishment,, restoration and/or enhancement that can be realized by collaboration with Caltrans as compensatory mitigation for unavoidable impacts to Aquatic Resources associated with the construction, maintenance, or improvement of highway projects; and

WHEREAS, the Forest Service has substantial expertise and capacity for watershed management and establishment, restoration and/or enhancement of Aquatic Resources and is organized to accomplish land management and restoration and enhancement in local watersheds affected by construction, maintenance, or improvement of highway projects; and

WHEREAS, the rate of progress of Aquatic Resource establishment, restoration, and/or enhancement on National Forests is substantially below its potential due to limited Forest Service funding; and

WHEREAS, in accordance with the National Forest Management Act of 1976 (16 U.S.C. § 1600 *et seq.*) ("NFMA"), the Forest Service is responsible for the management of the National Forests to maintain the productivity of the land in perpetuity; and

WHEREAS, the Participating Agencies favor a watershed-based approach for compensatory mitigation of Aquatic Resources, and National Forests may, in some areas and in particular situations, offer the most practicable opportunity for compensation.

THEREFORE, the Participating Agencies agree as follows:

I. PURPOSE

This MOU is entered into by the Participating Agencies for the purpose of:

1. establishing a framework for integrating Caltrans' required compensatory mitigation for unavoidable impacts to Aquatic Resources, specified in a Department of the Army permit, with the Aquatic Resource and associated habitat establishment, restoration and/or enhancement needs of the Forest Service under the NFMA;

2. fostering multi-agency coordination that brings agency expertise together in the planning, approval, implementation and oversight of compensatory mitigation;

3. facilitating implementation of Caltrans' required compensatory mitigation on National Forests where Corps-approved mitigation banks or in-lieu fee

programs are not available or are determined less environmentally preferable, inappropriate, or otherwise unacceptable for highway project impacts;

4. reducing administrative and endowment costs, improving predictability, and reducing risks associated with implementing compensatory mitigation;

5. documenting that incorporation of the compensatory mitigation area into the Forest Plan will meet the long-term protection in perpetuity requirements set forth in 33 C.F.R. § 332.7.

II. RESPONSIBILITIES

A. CALTRANS INTENDS TO:

1. Serve as lead agency, as appropriate, under NEPA for Federal-aid highway projects under delegated authority of the FHWA (23 U.S.C. § 327) that are not constructed on Federal lands unless written consent is obtained from the Federal agency responsible for managing the lands.
2. Coordinate with the Forest Service to identify potential compensatory mitigation locations and opportunities as appropriate for Caltrans projects.
3. Confer with the Corps early and often in the project development process to identify potential avoidance, minimization, and compensation measures for identified impacts to Aquatic Resources.
4. Prepare preliminary wetland delineations, wetland functional assessments, habitat evaluations, and any additional studies, as necessary or as required, for the purpose of identifying and evaluating any impacts to Aquatic Resources within a proposed project area.
5. Evaluate, in collaboration with the Forest Service, the suitability of the proposed compensatory mitigation site within a National Forest in California.
6. Develop in collaboration with the Forest Service or review and approve Forest Service prepared Habitat Mitigation and Monitoring Plans ("HMMP"), which include short-term success of the mitigation, long-term and adaptive management plans, maintenance activities and financial assurances, in accordance with the Corps' regulations, policies, guidelines, and permit requirements.
7. Ensure implementation of the HMMP as approved by the Corps.
8. Transfer, unless otherwise agreed upon, after mitigation success criteria have been met, any long-term maintenance, monitoring, and adaptive management responsibilities, specified in a Department of the Army permit and as described in the HMMP, to the Forest Service, after review and approval by the Corps pursuant to 33 C.F.R. § 332.7(d).

B. CORPS INTENDS TO:

1. Utilize, to the maximum extent practicable, pre-application consultation described at 33 C.F.R. §§ 325.1(b) and 332.4(a) to provide advice concerning studies or other foreseeable information required, including potential compensatory mitigation measures and locations, to process a Department of the Army permit application submitted by Caltrans.
2. Consider opportunities, as appropriate, for developing innovative regulatory permitting approaches, including general permits, to streamline review of Caltrans' permit applications based upon lessons learned through application of this MOU.
3. Subject to availability of resources and in accordance with applicable laws, regulations and policies, upon submittal of draft HMMPs, provide advice on emerging science or other information concerning Aquatic Resources for the purpose of assisting Caltrans in developing appropriate compensatory mitigation.
4. Pursuant to 33 C.F.R. § 332.4, review draft HMMPs submitted to the Corps concerning proposed compensatory mitigation projects and provide comments within a reasonable period of time from the date the draft HMMP is received.

C. FOREST SERVICE INTENDS TO:

1. Coordinate with Caltrans and provide site lists that identify opportunities on National Forests in California that may be suitable for collaborative establishment, restoration, and/or enhancement of Aquatic Resources.
2. When requested and to the extent funded by Caltrans, provide technical expertise for designing compensatory mitigation proposals and/or assist or prepare draft HMMPs, including the long-term financial plan pursuant to 33 C.F.R. § 332.4, 332.7(d)(3) and any applicable Corps polices and guidelines.
3. Pursuant to 33 C.F.R § 332.7 (a), be responsible for providing long-term site protection to compensatory mitigation areas on National Forests by identifying such areas as "Special Designated Areas" in the Automated Lands Project (ALP) maintained by the Forest Service; amending in a timely manner the Forest Plan for each affected National Forest, each amendment will include, designating such areas as "Aquatic Resources Compensatory Mitigation Area," description of long-term management goals, and incorporating by reference the HMMP; providing advance notification to the Corps before any action is taken to further modify the Forest Plan concerning such designated areas.
4. In accordance with 33 C.F.R.§ 332.7(a)(4), be responsible for planning, implementing and fully funding alternative compensatory mitigation that is acceptable to the Corps for any loss in functions in the event of changes in statute, regulation, or agency needs or mission that results in an incompatible

use on National Forests that will impact Caltrans' compensatory mitigation sites.

5. Accept long-term maintenance, monitoring, and adaptive management responsibilities of a Caltrans compensatory mitigation site after success criteria have been met, pursuant to 33 C.F.R. § 332.7 and as provided for in the long term financial plan (II. C. 2.); share management and monitoring reports/updates with Caltrans and the Corps via web technology.

6. Upon completion of an approved HMMP enter into a signed agreement with Caltrans under the authority of the Cooperative Funds and Deposits Act of 1914.

III. GENERAL PROVISIONS

A. Nothing in this MOU is intended to require an agency to obligate or expend funds in advance of or in excess of available appropriations. In addition, this MOU cannot be used to obligate or commit funds or as the basis for the transfer of funds. Any endeavor involving reimbursement, or contribution of funds between the Participating Agencies will be handled in accordance with applicable laws, regulations, and procedures. Such endeavors, if any, will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This MOU does not provide such authority. This MOU is not intended nor shall it be construed as a legally binding agreement.

B. Corps participation in this MOU does not imply endorsement of Caltrans Federal-aid highway projects nor does it diminish, modify, or otherwise affect Corps statutory or regulatory authorities.

C. This MOU neither expands nor is in derogation of those powers and authorities vested in the Participating Agencies by applicable laws, statutes, regulations, or Executive Orders, nor does it modify or supersede any other applicable interagency agreements existing as of the date of this MOU.

D. This MOU is not a substitute for consultation with the United States Fish and Wildlife Service or National Oceanic and Atmospheric Administration under section 7 of the Federal Endangered Species Act or any other applicable law.

E. This MOU may be modified or amended upon written request of any Participating Agency hereto and the subsequent written concurrence of all of the Participating Agencies. Participation in this MOU may be terminated sixty days after a Participating Agency provides written notice of such termination to the other Participating Agencies.

F. This MOU in no way restricts the Participating Agencies from participating with other public or private agencies, organizations, or individuals. The Participating Agencies recognize the importance of continuing cooperation and participation

with non-governmental organizations and institutions in programs of mutual interest.

G. This MOU is not intended to, and does not create, any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or in equity, by a party against the United States, the State of California, their agencies, officers, or any person.

H. This MOU is for the purpose of establishing a framework for the Participating Agencies to integrate Caltrans' required compensatory mitigation for unavoidable impacts to Aquatic Resources, specified in a Department of the Army permit, with the Aquatic Resources establishment, restoration and/or enhancement needs of the Forest Service under the NFMA, and nothing in this MOU shall be construed to create a cause of action.

.I. Any information furnished to the Forest Service or Corps under this MOU is subject to the Freedom of Information Act (5 U.S.C. 552).

J. Any information furnished to Caltrans under this MOU is subject to the California Public Records Act (California Government Code 6250).

IV. PRINCIPAL CONTACTS

Each Participating Agency hereby designates a principal point of contact for that agency. These contacts may be changed at the Participating Agency's discretion upon notice to the other Participating Agencies.

Caltrans
Gregg Erickson
Chief, Biological Studies and Technical Assistance Office
California Department of Transportation
1120 N Street
Sacramento, CA 95814
Phone: (916) 654-6296
FAX: (916) 653-7757
E-Mail:
Gregg_Erickson@dot.ca.gov

Corps
Michael S Jewell
Chief, Regulatory Division
US Army Corps of Engineers,
Sacramento District
1325 J Street
Sacramento, CA 95814
Phone: (916) 557-6605
FAX: (916) 557-6877
E-Mail:
michael.s.jewell@usace.army.mil

Forest Service
Christine Nota
Regional Forester's Representative
U.S. Department of Agriculture, Forest Service
650 Capitol Mall, Rm. 8-200
Sacramento, CA 95814
Phone: (916) 498-5901
FAX: (916) 498-6675
E-Mail: cnota@fs.fed.us

V. EFFECTIVE DATE

The MOU is effective as of the date of the last signature and is effective for 10 years at which time it will expire unless extended.

CALIFORNIA DEPARTMENT OF TRANSPORTATION

Randell H. Iwasaki

Name RANDELL H. IWASAKI
Director

Date: August 10, 2009

U.S. ARMY CORPS OF ENGINEERS

for SCOTT F. "ROCK" DONAHUE
Colonel, U.S. Army
Commander, South Pacific Division

Date: 1 Sep 09

USDA FOREST SERVICE

RANDY MOORE
Regional Forester
Pacific Southwest Region

Date: August 12, 2009

Attachment 4. Letter from Permittee to Neil Manji concerning mitigation funding assurance dated Nov. 4, 2013

BABCOCK →

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DISTRICT DIRECTOR
1657 RIVERSIDE DRIVE
REDDING, CA 96001
PHONE (530) 225-3270
FAX (530) 225-2459
TTY 711
www.dot.ca.gov/dist2/

Flex your power!
Be energy efficient!

November 4, 2013

Mr. Neil Manji
Regional Manager, North Region
California Department of Fish and Wildlife
601 Locust Street
Redding, CA 96001

Subject: Mitigation Funding Assurance for the Collins Bar Safety Project on State Route (SR) 299 in Trinity County, California

Dear Mr. Manji,

The California Department of Transportation (Caltrans) is providing this letter to the California Department of Fish and Wildlife (CDFW) to provide assurance that sufficient funds have been budgeted, as well as allocated, to cover all costs necessary to fully mitigate for the potential take of the state-listed trinity bristle snail (TBS) that may be associated with construction of the Collins Bar Safety Project.

Caltrans acknowledges its legal obligation to mitigate for the potential take of the TBS from construction of this project. The Collins Bar Safety Project is programmed for $4.4 million of Construction Capital in the 2012 State Highway Operations Protection Program (SHOPP) in fiscal year 13/14. The SHOPP was prepared in accordance with Government Code Section 14526.5, Streets and Highways Code Section 164.6 and the strategies outlined in the Caltrans Policy for management of the SHOPP. The 2012 SHOPP is a four-year program of projects for Fiscal Years 2012/13 through 2016/17. The Expenditure Authorization code is 02-3E790.

The project's programmed Construction Capital account has a balance of approximately $400,000 dedicated to TBS mitigation. On site restoration of disturbed TBS habitat within the project area will be implemented as part of overall construction contract and paid from these funds. If expertise outside of Caltrans is needed, this account will also cover costs of contracting for a qualified biologist to conduct TBS-related activities during construction, as outlined in the Maintenance and Monitoring Plan. The TBS mitigation will be maintained in accordance with Streets and Highways Code Division 1, Chapter 1, Article 3.91.

This letter acknowledges our legal obligation to comply with the proposed mitigation described above. Please provide written acknowledgement that this letter meets the required funding assurance obligations. We request this written acknowledgement and the incidental Take Permit by February 3, 2014 so that we can insure this important highway safety project is constructed during the 2013 construction season.

Questions may be directed to Steve Rogers, Caltrans Project Manager, at 530-225-2455 or by email at steve.rogers@dot.ca.gov.

Sincerely,

JOHN BULINSKI
District Director
District 2, Redding

c:
Amber Kelly, Caltrans Environmental Division Chief
Kelly Kawsuniak, Caltrans Biologist
Ryan Mathis, CDFW Senior Environmental Scientist

02-3E7904
02-Tri- 299-12.3/12.9
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

PLAC - California Regional Water Quality Control Board

North Coast Region
Water Quality Certification, WDID No. 1A13120WNTR

AGREEMENTS

PLAC - California Department of Fish and Wildlife

Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1

MATERIALS INFORMATION

Revised Foundation Report for Collins Bar Sidehill Viaduct No. 1

Dated: May 28, 2013

Foundation Report for Collins Bar Sidehill Viaduct No. 2

Dated: May 6, 2013

Optional Import Borrow Site

Site Investigation Report

Arieally Deposited Lead, Traffic Stripe Paint, and Naturally Occurring Asbestos
Dated: April 2013

NON-REPORTING NWP 14

U.S. Army Corps of Engineers

South Pacific Division

Nationwide Permit Pre-Construction Notification (PCN) Form

This form integrates requirements of the U.S. Army Corps of Engineers Nationwide Permit Program within the South Pacific Division (SPD), including General and Regional Conditions. You MUST fill out all boxes related to the work being done. Fillable boxes in this form expand if additional space is needed.

Box 1 Project Name Collins Bar Curve Improvement Project			
Applicant Name Steve Rogers		**Applicant Title** Project Manager	
Applicant Company, Agency, etc. DOT, Caltrans		Applicant's internal tracking number (if any) EA=02-3E790	
Mailing Address 1031 Butte St., MS 30			
Work Phone with area code (530) 225-2455	Mobile Phone with area code	Home Phone with area code	Fax # with area code
E-mail Address steve_rogers@dot.ca.gov	Relationship of applicant to property: ☐ Owner ☐ Purchaser ☐ Lessee ☑ Other:		
Application is hereby made for verification that subject regulated activities associated with subject project qualify for authorization under a U.S. Army Corps of Engineers Nationwide Permit or Permits as described herein. I certify that I am familiar with the information contained in this application and, that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agency to which this application is made the right to enter the above-described location to inspect the proposed, in-progress or completed work. I agree to start work only after all necessary permits have been received and to comply with all terms and conditions of the authorization.			
Signature of applicant			Date (mm/dd/yyyy) 8/20/13

If anyone other than the person named as the Applicant will be in contact with the U.S. Army Corps of Engineers representing the Applicant regarding this project during the permit process, Box 2 MUST be filled out.

Box 2 Authorized Agent/Operator Name Coady Reynolds		**Agent/Operator Title** Associate Environmental Planner (Biologist)	
Agent/Operator Company, Agency, etc. DOT, Caltrans		E-mail Address coady_reynolds@dot.ca.gov	
Mailing Address 1656 Union St.			
Work Phone with area code 707.445.6633	Mobile Phone with area code	Home Phone with area code	Fax # with area code
I hereby authorize the above named authorized agent to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application. I understand that I am bound by the actions of my agent and I understand that if a federal or state permit is issued, I, or my agent, must sign the permit.			
Signature of applicant			Date (mm/dd/yyyy) 8/20/13
I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete, and accurate.			
Signature of authorized agent Coady Reynolds			Date (mm/dd/yyyy) 8/20/13

Revised April 12, 2012. For the most recent version of this form, visit your Corps District's Regulatory website.

Box 3 Name of Property Owner(s), if other than Applicant:		
Owner Title	**Owner Company, Agency, etc.**	
Mailing Address		
Work Phone with area code	Mobile Phone with area code	Home Phone with area code

Box 4 Name of Contractor(s) (if known):		
Contractor Title	**Contractor Company, Agency, etc.**	
Mailing Address		
Work Phone with area code	Mobile Phone with area code	Home Phone with area code

Box 5 Site Number 1 **of** 1**. Project location(s), including street address, city, county, state, zip code where proposed activity will occur:**	
State Route-299, PM 12.3, Burnt Ranch, CA.	
Name of Waterbody(ies) (if known, otherwise enter "an unnamed tributary to"): unnamed tributary to Trinity River Tributary to what named, downstream waterbody: Trinity River	
Latitude & Longitude (D/M/S, DD, or UTM with Zone): 40.8032 N and 123.4656194444 W	Section, Township, Range: 24, T5N, R6E
County Assessor Parcel Number (Include County name): N/A	USGS Quadrangle map name: Ironside Mountain
Watershed (HUC and watershed name[1]): [1]http://water.usgs.gov/GIS/regions.html 180102 -- Klamath	Size of permit area or project boundary: acres 0.006 linear feet 60
Directions to the project location and other location descriptions, if known: From Arcata (Humboldt Co.) take SR-299 E until the town of Burnt Ranch, the site is approximately 1-mile further east on SR-299.	
Access limitations or restrictions (if any): N/A	

Box 6 Nature of Activity (Description of the project, include all features): See Continuation Sheet
Project Purpose (Description of the reason or purpose of the project): Curve correction for traffic safety.
Reason(s) for Discharge into Waters of the United States (Description of why dredged and/or fill material needs to be placed in Waters of the United States): Toe of existing slope will be extended further into "waters of the US"

Proposed discharge of dredge and/or fill material. Indicate total surface area in **acres** and **linear feet** (where appropriate) of the proposed impacts to Waters of the United States, indicate water body type (tidal wetland, non-tidal wetland, vernal pool, riparian wetland, ephemeral stream/river, intermittent stream/river, perennial stream/river, pond/lake, vegetated shallows, bay/harbor, lagoon, ocean, etc.), and identify the impact(s) as permanent and/or temporary for each requested Nationwide Permit[1]:

[1] Enter the intended permit number(s). See Nationwide Permit regulations for permit numbers and qualification information: http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/NationwidePermits.aspx

Water Body Type	Requested NWP Number: 14				Requested NWP Number:				Requested NWP Number:			
	Permanent		Temporary		Permanent		Temporary		Permanent		Temporary	
	Area	Length	Area	Length	Area	Length	Area	Length	Area	Length	Area	Length
Intermittent stream	0.002	60										
Total:	0.002	60										

Total volume (in cubic yards) and type(s) of material proposed to be dredged from or discharged into Waters of the United States:

Material Type	Total Volume Dredged	Total Volume Discharged
Rock Slope Protection (RSP)		2.25
Clean spawning gravel		
River rock		
Soil/Dirt/Silt/Sand/Mud		
Concrete		
Structure		
Stumps/Root wads		
Other:		
Total:		

Activity requires a written waiver to exceed specified limits of the Nationwide Permit? ☐ Yes ☑ No
If yes, provide Nationwide Permit number and name, limit to be exceeded, and rationale for each requested waiver:

Activity will result in the loss of greater than ½-acre of Waters of the United States? ☐ Yes ☑ No
If yes, provide an electronic copy (compact disc) or multiple hard copies (7) of the complete PCN for appropriate Federal and State Pre-discharge Notification (See General Condition #31, Pre-construction Notification, Agency Coordination, Section 2 and 4):

Describe direct and indirect effects caused by the activity (General Condition #31, District Engineer's Decision:
Direct and indirect effects will include temporary disturbance to ground cover, and increase in culvert facilities lifespan.

Potential cumulative impacts of proposed activity(if any): N/A

Drawings and figures (see each U.S. Army Corps of Engineers District's Minimum Standards Guidance):
Vicinity map: ☑ Attached (or mail copy separately if applying electronically)
To-scale Plan view drawing(s): ☑ Attached (or mail copy separately if applying electronically)
To-scale elevation and/or Cross Section drawing(s): ☑ Attached (or mail copy separately if applying electronically)
Numbered and dated pre-project color photographs: ☑ Attached (or mail copy separately if applying electronically)
Sketch drawing(s) or map(s): ☐ Attached (or mail copy separately if applying electronically)

Has a wetlands/waters of the U.S. delineation been completed?
☐ Yes, Attached[2] (or mail copy separately if applying electronically) ☑ No
If a delineation has been completed, has it been verified in writing by the Corps?
☐ Yes, Date of preliminary or approved jurisdictional determination (mm/dd/yyyy): Corps file number: ☐ No
[2]If available, provide ESRI shapefiles (NAD83) for delineated waters

For proposed discharges of dredged material resulting from navigation dredging into inland or near-shore waters of the U.S. (including beach nourishment), please attach[3] a proposed Sampling and Analysis Plan (SAP) prepared according to Inland Testing Manual (ITM) guidelines (including Tier I information, if available), or if disposed offshore, a proposed SAP prepared according to the Ocean Disposal Manual.
[3]Or mail copy separately if applying electronically

Is any portion of the work already complete? ☐ YES ☑ NO
If yes, describe the work:

Box 7 Authority:
Is Section 10 of the Rivers and Harbors Act applicable?: ☐ YES ☑ NO
Is Section 404 of the Clean Water Act applicable?: ☑ YES ☐ NO

Is the project located on U.S. Army Corps of Engineers property or easement?: ☐ YES ☑ NO
If yes, has Section 408 process been initiated?: ☐ YES ☑ NO
Would the project affect a U.S. Army Corps of Engineers structure?: ☐ YES ☑ NO
If yes, has Section 408 process been initiated?: ☐ YES ☑ NO

Is the project located on other Federal Lands (USFS, BLM, etc.)?: ☑ YES ☐ NO
Is the project located on Tribal Lands?: ☐ YES ☑ NO

Box 8 Is the discharge of fill or dredged material for which Section 10/404 authorization is sought part of a larger plan of development?: ☑ YES ☐ NO

If discharge of fill or dredged material is part of development, name and proposed schedule for that larger development (start-up, duration, and completion dates):
N/A

Location of larger development (if discharge of fill or dredged material is part of a plan of development, a map of suitable quality and detail of the entire project site should be included):
N/A

Box 9 Measures taken to avoid and minimize impacts to waters of the United States:
All work will occur in the dry season. Work areas will be as minimal as possible.

Box 10 Proposed Compensatory Mitigation related to fill/excavation and dredge activities. Indicate in **acres** and **linear feet** (where appropriate) the total quantity of Waters of the United States proposed to be created, restored, enhanced and/or preserved for purposes of providing compensatory mitigation. Indicate water body type (tidal wetland, non-tidal wetland, vernal pool, riparian wetland, ephemeral stream/river, intermittent stream/river, perennial stream/river, pond/lake, vegetated shallows, bay/harbor, lagoon, ocean, etc.) or non-jurisdictional (uplands[1]). Indicate mitigation type (permittee-responsible on-site/off-site, mitigation bank, or in-lieu fee program). If the mitigation is purchase of credits from a mitigation bank, indicate the bank to be used, if known:

[1] For uplands, please indicate if designed as an upland buffer.

Site Number	Water Body Type	Created		Restored		Enhanced		Preserved		Mitigation Type
		Area	Length	Area	Length	Area	Length	Area	Length	
Total:										

If no mitigation is proposed, provide detailed explanation of why no mitigation would be necessary:
Impacts are under 0.1-acre and do not justify mitigation.

If permittee-responsible mitigation is proposed, provide justification for not utilizing a Corps-approved mitigation bank or in-lieu fee program:

Has a draft/conceptual mitigation plan been prepared in accordance with the April 10, 2008, Final Mitigation Rule[2] and District Guidelines[3,4,5]?

[2] http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/mitig_info.aspx
[3] **Sacramento and San Francisco Districts**-http://www.spk.usace.army.mil/organizations/cespk-co/regulatory/pdf/Mitigation_Monitoring_Guidelines.pdf
[4] **Los Angeles District**-http://www.spl.usace.army.mil/regulatory/mmg_2004.pdf
[5] **Albuquerque District**-http://www.spa.usace.army.mil/reg/mitigation/SPA%20Final%20Mitigation%20Guidelines_OLD.pdf

☐ Yes, Attached (or mail copy separately if applying electronically) ☑ No

If no, a mitigation plan must be prepared and submitted, if applicable.

Mitigation site(s) Latitude & Longitude (D/M/S, DD, or UTM with Zone):	USGS Quadrangle map name(s):
Assessor Parcel Number(s):	Section(s), Township(s), Range(s):

Other location descriptions, if known:

Directions to the mitigation location(s):

Box 11 Threatened or Endangered Species and Essential Fish Habitat

Please list any federally-listed (or proposed) threatened or endangered species or critical habitat (or proposed critical habitat) within the project area (include scientific names (e.g., Genus species), if known):

a. northern spotted owl designated critical habitat(Strix occidentalis) b.

c. d.

e. f.

Have surveys, using U.S. Fish and Wildlife Service/NOAA Fisheries protocols, been conducted?

☐ Yes, Report attached (or mail copy separately if applying electronically) ☑ No

Has a biological assessment or evaluation been completed for the proposed project?

☐ Yes, Report attached (or mail copy separately if applying electronically) ☑ Not attached

Has Section 7 consultation been initiated by another federal agency?

☐ Yes, Initiation letter attached (or mail copy separately if applying electronically) ☑ No

Has Section 10 consultation been initiated for the proposed project?

☐ Yes, Initiation letter attached (or mail copy separately if applying electronically) ☑ No

Has the USFWS/NOAA Fisheries issued a Biological Opinion?

☐ Yes, Attached (or mail copy separately if applying electronically) ☑ No

If yes, list date Opinion was issued (m/d/yyyy):

Is the project located within Essential Fish Habitat[1] (EFH)? ☐ Yes ☑ No

[1] http://swr.nmfs.noaa.gov/hcd/HCD_webContent/EFH/index_EFH.htm

Box 12 Historic Properties and Cultural Resources:

Are any cultural resources of any type known to exist on-site? ☐ Yes ■ No

Please list any known historic properties listed, or eligible for listing, on the National Register of Historic Places:

a. b.

c. d.

e. f.

Has a cultural resource records search been conducted?

☑ Yes, Report attached (or mail copy separately if applying electronically) ☐ No

Has a cultural resource pedestrian survey been conducted for the site?

☑ Yes, Report attached (or mail copy separately if applying electronically) ☐ No

Has another federal agency been designated the lead federal agency for Section 106 consultation?

☑ Yes, Designation letter/email attached (or mail copy separately if applying electronically) ☐ No

Has Section 106 consultation been initiated by another federal agency?

☐ Yes, Initiation letter attached (or mail copy separately if applying electronically) ☑ No

Has a Section 106 MOA or PA been signed by another federal agency and the SHPO?

☐ Yes, Attached (or mail copy separately if applying electronically) ☑ No

If yes, list date MOA or PA was signed (m/d/yyyy):

Box 13 Section 401 Water Quality Certification:
Applying for certification? ☑ Yes, Attached (or mail copy separately if applying electronically) ☐ No
☐ Not applicable (projects proposed for authorization under RHA Section 10 only)

Certification issued (including Programmatically)?
☐ Yes, Attached (or mail copy separately if applying electronically) ☑ No
Certification waived? ☐ Yes, Attached (or mail copy separately if applying electronically) ☐ No
Certification denied? ☐ Yes, Attached (or mail copy separately if applying electronically) ☐ No

Exempted activity? ☐ Yes ☑ No
Agency concurrence? ☐ Yes, Attached ☐ No
If exempt, state why:

Box 14 Coastal Zone Management Act:
Is the project located within the Coastal Zone? ☐ Yes ☑ No (If no, proceed to Box 15)

If yes, applying for a coastal commission-approved Coastal Development Permit?
☐ Yes, Attached (or mail copy separately if applying electronically) ☐ No
If no, applying for separate CZMA-consistency certification?
☐ Yes, Attached (or mail copy separately if applying electronically) ☐ No

Permit/Consistency issued? ☐ Yes, Attached (or mail copy separately if applying electronically) ☐ No

Exempt? ☑ Yes ☐ No
Agency concurrence? ☐ Yes, Attached ☐ No
If exempt, state why:

Box 15 List of other certifications or approvals/denials received from other federal, state, or local agencies for work described in this application:

Agency	Type of Approval[4]	Identification Number	Date Applied	Date Approved	Date Denied
CA, Fish and Wildlife	1602 LSAA		pending		
NCRWQCB	Section 401 Water Quality Certification		pending		

[4] Would include but is not restricted to zoning, building, and flood plain permits

Nationwide Permit General Conditions (GC) checklist:

(http://www.gpo.gov/fdsys/pkg/FR-2012-02-21/pdf/2012-3687.pdf)

Check	General Condition	Rationale for compliance with General Condition
☑	1. Navigation	Project activities will not adversely affect navigable waters.
☑	2. Aquatic Life Movements	Activities will not disrupt the movements or life cycle of any aquatic species.
☑	3. Spawning Areas	Spawning areas will not be affected.
☑	4. Migratory Bird Breeding Areas	Breeding areas for migratory birds will be avoided to the maximum extent practicable
☑	5. Shellfish Beds	Project activities will not affect shellfish beds.
☑	6. Suitable Material	Material used for construction will be free from toxic pollutants in toxic amounts.
☑	7. Water Supply Intakes	No activity will occur in proximity of a public water supply intake.
☑	8. Adverse Effects from Impoundments	Water will not be impounded.
☑	9. Management of Water Flows	Pre- construction course, condition, capacity, and location of open waters will remain.
☑	10. Fills Within 100-Year Floodplains	No fill within 100-year floodplain.
☑	11. Equipment	Heavy equipment will not be working in wetlands or mudflats.
☑	12. Soil Erosion and Sediment Controls	Appropriate soil erosion and sediment controls will be used and maintained.
☑	13. Removal of Temporary Fills	Temporary fills will be removed in their entirety and the affected areas returned to pre-construction elevations.
☑	14. Proper Maintenance	Caltrans will routinely inspects and maintains all culverts in the state highway system.
☑	15. Single and Complete Project	This activity is part of a single and complete project.
☑	16. Wild and Scenic Rivers	Wild and Scenic Rivers will not be affected.
☑	17. Tribal Rights	The project will not impede or interfere with any tribal rights.
☑	18. Endangered Species	See Box 11 above.
☑	19. Migratory Bird and Bald and Golden Eagle Permits	There will be no "take" of any avian species as a result of this project.
☑	20. Historic Properties	See Box 12 above.
☑	21. Discovery of Previously Unknown Remains and Artifacts	The district engineer will be immediately notified of any discovery of any previously unknown historic,cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit.
☑	22. Designated Critical Resource Waters	The project will not affect any designated critical resource waters.
☑	23. Mitigation	See Box 10 above.
☑	24. Safety of Impoundment Structures	This project will not have impoundment structures.
☑	25. Water Quality	See Box 13 above.
☑	26. Coastal Zone Management	See Box 14 above.
☑	27. Regional and Case-by-Case Conditions	The activity is in compliance regional conditions have been added by the Division Engineer
☑	28. Use of Multiple Nationwide Permits	This project will utilize NWP #14.
☑	29. Transfer of Nationwide Permit Verifications	Nationwide permit verifications will not be transferred.
☑	30. Compliance Certification	Signed certification documenting completion of the authorized activity will be submitted.
☑	31. Pre-Construction Notification	This PCN will not be submitted (Non-reporting NWP #14).

San Francisco District (SPN) in California:

Strike out text is not applicable to project.

A. General Regional Conditions that apply to all NWPs in the Sacramento, San Francisco, and Los Angeles Districts:

1. Is pre-construction notification (PCN) required? ☐ Yes ☑ No

~~If yes, then in accordance with General Condition 31, the appropriate U.S. Army Corps of Engineers (Corps) District shall be notified using either the South Pacific Division PCN Checklist or a signed application form (ENG Form 4345) with an attachment providing information on compliance with all of the General and Regional Conditions. The PCN Checklist and application form are available at: http://www.spn.usace.army.mil/regulatory/index.html. In addition, the PCN shall include:~~

~~a. A written statement describing how the activity has been designed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States; and~~

~~b. Drawings, including plan and cross-section views, clearly depicting the location, size and dimensions of the proposed activity as well as the location of delineated waters of the U.S. on the site. The drawings shall contain a title block, legend and scale, amount (in cubic yards) and area (in acres) of fill in Corps jurisdiction, including both permanent and temporary fills/structures. The ordinary high water mark or, if tidal waters, the mean high water mark and high tide line, should be shown (in feet), based on National Geodetic Vertical Datum (NGVD) or other appropriate referenced elevation. All drawings for projects located within the boundaries of the Los Angeles District shall comply with the most current version of the *Map and Drawing Standards for the Los Angeles District Regulatory Division* (available on the Los Angeles District Regulatory Division website at: www.spl.usace.army.mil/regulatory/); and~~

c. ~~Numbered and dated pre-project color photographs showing a representative sample of waters proposed to be impacted on the project site, and all waters proposed to be avoided on and immediately adjacent to the project site. The compass angle and position of each photograph shall be documented on the plan-view drawing required in subpart b of this regional condition.~~

If yes, is the PCN attached? ☐ Yes ☐ No ☑ Not Applicable

2. Is the activity located in an area designated as Essential Fish Habitat (EFH) by the Pacific Fishery Management Council (i.e., all tidally influenced areas - Federal Register dated March 12, 2007 (72 FR 11092)).
☐ Yes ☑ No

~~If yes, notification pursuant to General Condition 31 is required. The PCN shall include an EFH assessment and extent of proposed impacts to EFH. Examples of EFH habitat assessments can be found at: http://www.swr.noaa.gov/efh.htm.~~

3. Are any other Federal agencies involved? ☐ Yes ☑ No

~~If yes, for activities in which the Corps designates another Federal agency as the lead for compliance with Section 7 of the Endangered Species Act (ESA) of 1973 as amended (50 CFR Part 402.07), Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act (EFH) (50 CFR 600.920(b)) and/or Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR 800.2(a)(2)), the lead Federal agency shall provide all relevant documentation to the appropriate Corps demonstrating any previous consultation efforts, as it pertains to the Corps Regulatory permit area (for Section 7 and EFH compliance) and the Corps Regulatory area of potential effect (APE) (for Section 106 compliance). For activities requiring a PCN, this information shall be submitted with the PCN. If the Corps does not designate another Federal agency as the lead for ESA, EFH and/or NHPA, the Corps will initiate consultation for compliance, as appropriate.~~

4. Is the project located within a waterbody supporting any federally-listed threatened or endangered fish species?
☐ Yes ☑ No
~~If yes, unless determined to be impracticable by the Corps, the permittee shall design all road crossings to ensure that the passage and/or spawning of fish is not hindered. In these areas, the permittee shall employ bridge designs that span the stream or river, including pier- or pile-supported spans, or designs that use a bottomless arch culvert with a natural streambed.~~

5. Will the permittee complete the construction of any compensatory mitigation required by special condition(s) of the NWP verification before or concurrent with commencement of construction of the authorized activity?
☐ Yes ☑ No

~~If no, then the proposed activity may not be in compliance with Regional Condition 10, unless construction of compensatory mitigation prior to or concurrent with commencement of construction of the authorized activity is specifically determined impracticable by the Corps.~~

Will the mitigation involve use of a mitigation bank or in-lieu fee program? ☐ Yes ☑ No

~~If yes, then the permittee shall submit proof to the Corps of payment prior to commencement of construction of the authorized activity.~~

6. Will the activity result in the loss of greater than 300 linear feet of intermittent and/or ephemeral streams for NWPs 29, 39, 40, 42, 43, 44, 51, and 52 or result in the loss of greater than 500 linear feet along the bank for NWP 13? ☐ Yes ☑ No

If yes, is the applicant requesting a waiver of the linear foot limit? ☐ Yes ☑ No ☐ Not Applicable

~~If yes, then the request shall include the following:~~

~~a. A narrative description of the stream. This should include known information on: volume and duration of flow; the approximate length, width, and depth of the water body and characters observed associated with an Ordinary High Water Mark (e.g. bed and bank, wrack line, or scour marks); a description of the adjacent vegetation community and a statement regarding the wetland status of the associated vegetation community (i.e. wetland, non-wetland); surrounding land use; water quality; issues related to cumulative impacts in the watershed, and; any other relevant information; and~~

~~b. An analysis of the proposed impacts to the waterbody in accordance with General Condition 31 and Regional Condition 3; and~~

~~c. Measures taken to avoid and minimize losses, including other methods of constructing the proposed project; and~~

~~d. A compensatory mitigation plan describing how the unavoidable losses are proposed to be compensated, in accordance with 33 CFR Part 332.~~

B. SPN Regional Conditions to be applied across **the entire San Francisco District:**

1. Is the project located within the **San Francisco Bay diked baylands** (undeveloped areas currently behind levees that are within the historic margin of the Bay)? Diked historic baylands are those areas on the Nichols and Wright map below the 5-foot contour line, National Geodetic Vertical Datum (NGVD) (see Nichols, D.R., and N. A. Wright. 1971. Preliminary map of historic margins of marshland, San Francisco Bay, California. U.S. Geological Survey Open File Map, Figure 1 on the Public Notice for Federal Register Notice Announcing the Reissuance of the Nationwide Permits and the San Francisco District Regional Conditions: http://www.spn.usace.army.mil/regulatory/nwp/2012/final%20NWPs.pdf)? ☐ Yes ☑ No

If yes, notification pursuant to General Condition 31 is required. The PCN must include an explanation of how avoidance and minimization of losses of waters or wetlands are taken into consideration to the maximum extent practicable (see General Condition 23(a)).

2. Is the project located within the **Santa Rosa Plain** (http://www.spn.usace.army.mil/regulatory/srp/srpmap.pdf)?
☐ Yes ☑ No

If yes, notification pursuant to General Condition 31 is required. The PCN must include an explanation of how avoidance and minimization of losses of waters or wetlands are taken into consideration to the maximum extent practicable (see General Condition 23(a)).

3. Will the proposed project impact **Eelgrass Beds**? ☐ Yes ☑ No

If yes, notification pursuant to General Condition 31 is required. The PCN must include a compensatory mitigation plan, habitat assessment, and extent of proposed project impacts to Eelgrass Beds.

C. SPN Regional Conditions to be applied to specific Nationwide Permits (NWP):

NWP 3:

Will excavation equipment operate from an upland site? ☐ Yes ☑ No
If no, an explanation as to need to place equipment in waters of the U.S. must be included in the PCN.

Will work occur within a special aquatic site? ☐ Yes ☑ No
If yes, an explanation why the special aquatic site cannot be avoided, as well as impact minimization measures, must be included in the PCN.

NWP 11:

Are temporary structures proposed in wetlands or vegetated shallow water areas? ☐ Yes ☐ No
If yes, notification pursuant to General Condition 31 is required. The PCN shall include the type of habitat and aerial extent affected by the structure(s).

NWP 12:

Will excess material removed from any trenching that is not used for backfilling of the trench be disposed of at an upland site? ☐ Yes ☐ No

Does the proposed project include construction of substation facilities? ☐ Yes ☐ No
If yes, NWP 12 cannot be used to authorize this project.

NWP 13:

Will more than 300 linear feet of bank be stabilized? ☐ Yes ☐ No
If yes, notification pursuant to General Condition 31 is required. The PCN shall address the effect of the bank stabilization on the stability of the opposite side of the waterway's bank, and on the adjacent property upstream and downstream of the activity.

Will wetland vegetation or submerged, rooted, aquatic plants be removed from an area greater than 0.1 acre or 300 linear feet? ☐ Yes ☐ No
If yes, notification pursuant to General Condition 31 is required and shall include vegetation type and extent of removal.

Will excess material excavated from a toe trench be disposed of in an upland location? ☐ Yes ☐ No
If yes, the PCN shall include the location of the disposal site.

Will additional fill extend beyond the original shoreline in excess of one cubic yard per running foot?
☐ Yes ☐ No

Will bank stabilization incorporate structures or modifications beneficial to fish and wildlife? ☐ Yes ☐ No
If no, the applicant shall demonstrate why the structures or modifications were not considered practicable.

NWP 14:

Will the proposed project fill greater than 300 linear feet of a jurisdictional waterway? ☐ Yes ☑ No
If yes, notification pursuant to General Condition 31 is required. The PCN shall address the effect of the activity on the stability of the opposite side of the waterway's bank, and on the adjacent property upstream and downstream of the activity.

Is the proposed project to construct taxiways or runways? ☐ Yes ☑ No
If yes, NWP 14 cannot be used to authorize this project.

Has this NWP been used to authorize previous project segments within the same linear transportation project?
☐ Yes ☑ No
If yes, justification must be provided demonstrating that the cumulative impacts of the proposed and previously authorized project segments do not result in more than minimal impacts to the aquatic system.

Has any new or additional bank stabilization required for the crossing incorporated structures or modifications beneficial to fish and wildlife? ☐ Yes ☑ No
If no, the applicant shall demonstrate why they were not considered practicable. Bottomless and embedded culverts are encouraged over traditional culvert stream crossings.

NWP 23:

Use of this NWP requires notification pursuant to General Condition 31. Please refer to Regional Conditions for additional information on PCN requirements.

NWP 27:

The PCN shall include documentation of a review of the project's impacts to demonstrate that at the conclusion of work the project would result in a net increase of aquatic function. The documentation must also include a review of the project's impacts on adjacent properties or structures and must also discuss cumulative impacts associated with the project.

NWP 29:

Will the activity result in the replacement of wetlands or waters of the U.S. with impervious surfaces?
☐ Yes ☐ No
If yes, the residential development shall incorporate low impact development concepts to the extent practicable, and a description of those concepts proposed shall be included with the PCN. Additional information on concepts and definitions are available at the following website: http://www.epa.gov/owow/NPS/lid

Is the proposed project located within the San Francisco Bay diked baylands (Figure 1 on the Public Notice for Federal Register Notice Announcing the Reissuance of the Nationwide Permits and the San Francisco District Regional Conditions: http://www.spn.usace.army.mil/regulatory/nwp/2012/final%20NWPs.pdf)?
☐ Yes ☐ No
If yes, NWP 29 cannot be used to authorize this project.

NWP 33:

Are access roads designed to be the minimum width necessary? ☐ Yes ☐ No ☐ Not Applicable (N/A)

Are access roads designed to minimize changes to the hydraulic flow characteristics of waterways and degradation of water quality for project implementation? ☐ Yes ☐ No ☐ N/A

Will the road(s) be properly stabilized and maintained during and after construction? ☐ Yes ☐ No ☐ N/A

Will fill be placed to minimize encroachment of equipment within waters of the U.S? ☐ Yes ☐ No ☐ N/A

Will vegetative disturbance be minimized? ☐ Yes ☐ No ☐ N/A

Will borrow material be taken from an upland source, where feasible? ☐ Yes ☐ No ☐ N/A

If no to any of the above, NWP 33 cannot be used to authorize the project.

Will the proposed project result in stream channelization? ☐ Yes ☐ No ☐ N/A
If yes, NWP 33 cannot be used to authorize the project.

NWP 35:

Use of this NWP requires notification pursuant to General Condition 31. Please refer to Regional Conditions for additional information on PCN requirements.

NWP 39

Will the activity result in the replacement of wetlands or waters of the U.S. with impervious surfaces?
☐ Yes ☐ No
If yes, the commercial or institutional development shall incorporate low impact development concepts to the extent practicable, and a description of those concepts proposed shall be included with the PCN. Additional information on concepts and definitions are available at the following website: http://www.epa.gov/owow/NPS/lid

Is the proposed project located within the San Francisco Bay diked baylands (Figure 1 on the Public Notice for Federal Register Notice Announcing the Reissuance of the Nationwide Permits and the San Francisco District Regional Conditions: http://www.spn.usace.army.mil/regulatory/nwp/2012/final%20NWPs.pdf)?
☐ Yes ☐ No
If yes, NWP 39 cannot be used to authorize the project.

NWP 40:

Will work impede flows during high volume events of a perennial or intermittent watercourse? ☐ Yes ☐ No
If yes, NWP 40 can not be used to authorize the project.

NWP 41:

If the Corps determines that there will be a detrimental impact to aquatic habitat, compensatory mitigation may be required.

Will fill material be re-deposited, re-graded, and/or discharged, or will channel lining be installed?
☐ Yes ☐ No
If yes, notification pursuant to General Condition 31 is required. The PCN shall include a statement demonstrating the need for the project and an explanation of the project's benefit to water quality.

NWP 42:

Are buildings proposed in waters of the U.S.? ☐ Yes ☐ No
If yes, the applicant must demonstrate that there is no on-site practicable alternative less environmentally damaging as defined by the Section 404(b)(1) guidelines.

02-3E7904
02-Tri- 299-12.3/12.9
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

PLAC - California Regional Water Quality Control Board

North Coast Region
Water Quality Certification, WDID No. 1A13120WNTR

AGREEMENTS

PLAC - California Department of Fish and Wildlife

Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1

MATERIALS INFORMATION

Revised Foundation Report for Collins Bar Sidehill Viaduct No. 1

Dated: May 28, 2013

Foundation Report for Collins Bar Sidehill Viaduct No. 2

Dated: May 6, 2013

Optional Import Borrow Site

Site Investigation Report

Arieally Deposited Lead, Traffic Stripe Paint, and Naturally Occurring Asbestos
Dated: April 2013

February 21, 2014

In the Matter of

Water Quality Certification

for the

California Department of Transportation
State Route 299, Collins Bar Curve Improvement Project
(Caltrans EA No. 02-3E790)
WDID No. 1A13120WNTR

APPLICANT:	California Department of Transportation
RECEIVING WATER:	Trinity River
HYDROLOGIC AREA:	Trinity River Hydrologic Unit No. 106.00
COUNTY:	Trinity
FILE NAME:	CDOT TRI-299 Collins Bar Curve Improvement Project PM 12.2-12.9

FINDINGS BY THE EXECUTIVE OFFICER:

1. On August 22, 2013, the North Coast Regional Water Quality Control Board (Regional Water Board) received an application from the California Department of Transportation (Caltrans) requesting Federal Clean Water Act (CWA) section 401, Water Quality Certification (certification) for activities related to the State Route 299 Collins Bar Curve Improvement Project (Project).

2. **Hydrologic Unit**: The proposed Project would cause disturbances to jurisdictional wetlands that are tributary to the Trinity River within the Burnt Ranch Hydrologic Subarea of the Trinity River Hydrologic Unit (CalWater Number 106.00).

3. **Public Notice:** The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on December 4, 2013, and posted information describing the project on the Regional Water Board's website. No comments were received.

4. **Project Description:** The proposed Project is located in Trinity County on State Route (SR) between post-miles 12.2 and 12.9, in Trinity County. The purpose of the Project is to improve roadway safety by increasing roadway width and improving roadway geometrics to accommodate larger vehicles. The primary Project elements include: Adding four-foot shoulders to each lane; constructing two sidehill viaduct bridges to allow for road widening; constructing four barrier slab structures; excavation of the hillside above the road at post mile 12.8 to create a rock catchment area; tree removal and placement of approximately 22,000 cubic yards of rock and dirt fill below the westbound lane—the fill would be obtained from the Burnt Rock Transfer Station and from on-site cut—the fill will accommodate roadway widening; and, addition of four new and seven upgraded drainage systems.

5. **Construction Duration:** Project implementation is expected to start August 15, 2014 and be completed December 20, 2015.

6. **Permanent Impacts:** Caltrans has determined that the proposed Project would result in approximately 0.006 acres (60 linear feet) of permanent impacts to jurisdictional waters created by drainage from an underdrain outlet at the lower portion of the proposed fill area.

7. **Temporary Impacts:** Caltrans has determined that the proposed Project would not result in any temporary impacts to jurisdictional waters.

8. **Mitigation for Permanent Impacts**: Mitigation is not required because the impacts are de minimis impacts to an ephemeral stream channel formed from an underdrain outlet and without wetland characteristics.

9. **Post-Construction Stormwater Treatment:** Project implementation would result in approximately 0.47 acres of new and approximately 1.7 acres of replaced impervious surface area. Caltrans shall install two biofiltration swales to treat stormwater runoff from 0.56 acres of impervious area. Caltrans shall also install five v-ditch biofiltration swales that will provide additional treatment. See Table 1, below, for a biofiltration swale summary.

Table 1: Biofiltration Swale Summary

Treatment Type	Post-Mile(s), approximate	Station	Eastbound, Westbound	Length (linear feet)	Impervious Area Treated (acres)
Biofiltration Swale	12.48	8+60	EB	440	0.49
Biofiltration Swale	12.51	10+88	EB	228	*
Biofiltration Swale	12.63	20+40	EB	390	*
Biofiltration Swale	12.68	24+50	EB	410	*
Biofiltration Swale	12.70	25+02	EB	52	*
Biofiltration Swale	12.87	29+15 L	WB	185	*
Biofiltration Swale	12.87	29+15 R	EB	185	0.07
*This value cannot be reliably determined because the swale is either undersized or the BMP catchment area includes a significant pervious contributing area.				*total*:	0.56

10. **Disturbed Soil Area**: Project implementation would result in greater than one acre of disturbed soil area. Caltrans shall apply for coverage under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities ("construction general permit," Order No. 2009-0009-DWQ) and prepare a Stormwater Pollution Prevention Plan detailing Best Management Practices to control pollution from the Project area during construction. All disturbed areas within the Project area shall be appropriately stabilized and/or replanted with appropriate native vegetation.

11. **Utility Relocations:** Utility relocations are not needed for this project.

12. **Other Agency Actions:** Caltrans has claimed coverage under a United States Army Corps of Engineers non-reporting Nationwide Permit 14 pursuant to Clean Water Act, section 404. Caltrans has also applied to California Department of Fish and Wildlife for a Streambed Alteration Agreement and Incidental Take Permit for the Trinity bristle snail. The Project design has incorporated measures to mitigate for impacts to the bristle snail habitat.

13. **CEQA Compliance:** On May 23, 2013, Caltrans, acting as lead agency, signed a Notice of Determination pursuant to the California Environmental Quality Act (CEQA), declaring

that a mitigated negative declaration had been approved for the Project. The Notice of Determination was received by the State Clearinghouse on May 31, 2013.

14. **TMDL**: The Trinity River Total Maximum Daily Load (TMDL) for sediment was established in 2001 by the United States Environmental Protection Agency in accordance with section 303(d) of the Clean Water Act, because the State of California determined that the water quality standards for the Trinity River are exceeded due to excessive sediment.

    Pursuant to Regional Water Board Resolution R1-2004-0087, Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters Within the North Coast Region, the Regional Water Board Executive Officer is directed to "rely on the use of all available authorities, including existing regulatory standards, and permitting and enforcement tools to more effectively and efficaciously pursue compliance with sediment-related standards by all dischargers of sediment waste."

    Roads and bank erosion are identified as sources contributing to the sediment impairment. The primary adverse impacts associated with excessive sediment in the Trinity River pertain to cold freshwater habitat, primarily anadromous salmonid habitat. The proposed Project activities include implementation of erosion and sediment control Best Management Practices and re-vegetation of disturbed areas, including vegetating previously un-vegetated areas. Accordingly, the Project is consistent with and implements the Trinity River TMDL.

15. **Antidegradation Policy:** The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. This certification is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater, and does not otherwise authorize degradation of the waters affected by this Project.

16. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this certification.

Receiving Water:	Trinity River in Trinity River Hydrologic Unit No. 106.00	
Filled and/or Excavated Areas:	Permanent – stream channel	342 ft^2 (0.008 acres, 60 linear feet)
	Temporary – jurisdictional waters	No temporary fill
Dredge Volume:	none	
Fill Volume:	Permanent – 11.15 cubic yards	
Mitigation proposed:	none	
Latitude/Longitude:	40.8032 / -123.4656194444	

Accordingly, based on its independent review of the record, the Regional Water Board certifies that the State Route 299 Collins Bar Curve Improvement Project (WDID No. 1A13120WNTR), as described in the application will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Caltrans complies with the following terms and conditions:

All conditions of this certification apply to Caltrans (and all its employees) and all contractors (and their employees), sub-contractors (and their employees), and any other entity or agency that performs activities or work on the project (including the off-site mitigation lands) as related to this Water Quality Certification.

Project-Specific Condition Requiring Reports

1. The Regional Water Board shall be notified in writing (e-mail is acceptable) at least five working days prior to commencement of Project activities, including vegetation clearing. If vegetation clearing is proposed prior to filing of a Notice of Intent for coverage under the construction general permit, then Caltrans shall be required to first submit an erosion and sediment control plan for Regional Water Board staff review and consideration of acceptance.

Project-Specific Conditions

2. Caltrans shall install seven compost-amended biofiltration swales within the Project limits. The swales shall be installed consistent with the information in Table 1 of this certification. The swales shall be entered into the District's permanent stormwater treatment BMP database and monitored and maintained to ensure BMP infiltration efficacy.

3. Caltrans shall implement an onsite Planting Plan consisting of 99 big-leaf maple trees, 109 black oak trees, 71 douglas fir trees, 37 canyon live oak trees, 56 deer brush plants, and 69 mountain mahogany plants. Any change to the planting plan shall first be accepted by Regional Water Board staff. All trees shall be planted within one year of Project completion.

Project-Specific Conditions (continued)

4. The new fill slope shall be fully stabilized with appropriate erosion control measures by October 15.

Standard Conditions

5. Herbicides and pesticides shall not be used within the Project. If Caltrans has a compelling case as to why herbicides and pesticides should be used, they may submit a request along with a BMP plan to Regional Water Board staff for review and consideration of acceptance.

6. All activities and BMPs shall be implemented according to the submitted application materials and the findings and conditions of this certification. Subsequent changes to the Project that could significantly impact water quality shall first be subject to review and consideration of acceptance by Regional Water Board staff. The Regional Water Board recommends Caltrans either consult Regional Water Board staff or use the best professional judgment of Caltrans environmental staff to determine if Project changes may significantly affect water quality and warrant notification to the Regional Water Board.

7. All conditions required by this Order shall be included in the Contract Documents prepared by Caltrans for the contractor. In addition, Caltrans shall require compliance with all conditions included in this Order in the bid contract for this Project.

8. Caltrans is prohibited from discharging waste to waters of the State, unless explicitly authorized by this certification. For example, no debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or concrete washings, welding slag, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, shall be allowed to enter into State waters.

   Except for temporary stockpiling of waste generated during demolition operations ("temporary" in this instance means generated and removed during the same working day), waste materials shall not be placed in a manner where the materials may be transported into waters of the State. Waste materials shall not be placed within 100 linear feet of State waters. Exceptions to the 100-foot limit may be granted on a case-by-case basis provided Caltrans first submits a proposal in writing that is found acceptable by Regional Water Board staff.

9. Caltrans is liable and responsible for the proper disposal of Project-generated waste. Additionally, when handling, transporting, and disposing of Project-generated waste, Caltrans and their contractors shall:
   i) Comply with all applicable State and Federal laws and regulations;
   ii) Make appropriate arrangements to dispose of the material, including, but not limited to, property owner agreements, permits, licenses, and

Standard Conditions (continued)

environmental clearances;

iii) Obtain satisfactory evidence that the work in 9.i has been completed; and

iv) Obtain a dated, signed manifest from the disposal site owner, or authorized representative, that identifies the type and quantity of disposed waste.

10. Asphalt-concrete grindings shall not be placed in any location where it may, at any time, be directly exposed to surface waters or seasonally-high ground water, except asphalt-concrete grindings may be re-used and incorporated into hot mix asphalt products or encapsulated within the roadway structural section.

11. Fueling, lubrication, maintenance, storage and staging of vehicles and equipment shall be prohibited within waters of the State (e.g., gravel bars, seeps, ephemeral streams) and riparian areas. Caltrans shall not use leaking vehicles or equipment within State waters or riparian areas.

12. Caltrans shall prioritize the use of wildlife-friendly biodegradable (not photo-degradable) erosion control products wherever feasible. Caltrans shall not use or allow the use of erosion control products that contain synthetic netting for permanent erosion control (i.e., erosion control materials to be left in place for two years or after the completion date of the project). If Caltrans finds that erosion control netting or products have entrapped or harmed wildlife, personnel shall remove the netting or product and replace it with wildlife-friendly biodegradable products.

13. Work in flowing or standing surface waters, unless otherwise proposed in the project description and approved by the Regional Water Board, is prohibited

14. Non-stormwater discharges are prohibited unless the discharge is first approved by the Regional Water Board and in compliance with the Basin Plan. If construction dewatering of groundwater is necessary, then Caltrans shall use a method of water disposal other than disposal to surface waters, such as land disposal. Groundwater disposed of to land shall not enter State waters. Alternatively, Caltrans may apply for coverage under the Low Threat Discharge Permit or an individual National Pollutant Discharge Elimination System (NPDES) Permit. If Caltrans applies for coverage under either of these permits, then discharge is prohibited until Caltrans has received notification of coverage under the respective permit.

15. This Order does not authorize drafting of surface waters.

16. Caltrans shall provide a copy of this certification and State Water Resources Control Board (SWRCB) Order No. 2003-0017-DWQ (web link referenced below) to the contractor and all subcontractors conducting the work, and require that copies

Standard Conditions (continued)

remain in their possession at the work site. Caltrans shall be responsible for work conducted by its contractor and subcontractors.

17. The Resident Engineer (or appropriately authorized agent) shall hold water quality permit compliance meetings (similar to tailgate safety meetings) to discuss permit compliance, including instructions on violation avoidance and violation reporting procedures. The meetings shall be held at least every other week, before forecasted storm events, and when a new contractor or subcontractor arrives to begin work at the site. The contractors, subcontractors and their employees, and inspectors or monitors assigned to work on the Project within the next week, shall be present at the meetings. Caltrans shall maintain dated sign-in sheets for attendees at these meetings, and shall make them available to Regional Water Board staff on request.

18. Caltrans shall implement appropriate BMPs to prevent the discharge of equipment fluids to the stream channel. The minimum requirements shall include: storing hazardous materials at least 150 linear feet outside of the stream banks; checking equipment for leaks and not using equipment with leaks; and pressure washing or steam cleaning equipment to remove fluid residue on any of its surfaces prior to its entering any stream channel. Fluids and waste by-products generated by equipment washing and cleaning shall not enter State waters.

19. If an unauthorized discharge to surface waters (including wetlands, rivers or streams) occurs, or any other threat to water quality arises as a result of Project implementation, the associated Project activities shall cease immediately until the threat to water quality is otherwise abated. If there is a discharge to State waters, the Regional Water Board shall be notified, with photographs, no more than 24 hours after the discharge occurs.

20. Any imported fill material shall be clean and free of pollutants. All fill material shall be imported from a source that has the appropriate environmental clearances and permits. The reuse of low-level contaminated solids as fill on-site shall be performed in accordance with all State and Federal policies and established guidelines and must be submitted to the Regional Water Board for review and consideration of acceptance.

21. The validity this certification is conditioned upon total payment of any fee required under title 23, California Code of Regulations, section 3833, and owed by Caltrans. The Regional Water Board received $944 from Caltrans on August 22, 2013.

22. 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 title 23, California

Standard Conditions (continued)

Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

23. 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 applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this certification, the Regional Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

24. This certification action is subject to modification or revocation upon administrative or judicial review; including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.

25. This certification is not transferable. In the event of any change in control of ownership of land presently owned or controlled by Caltrans, Caltrans shall notify the successor-in-interest of the existence of this certification by letter and shall forward a copy of the letter to the Regional Water Board. The successor-in-interest must send to the Regional Water Board Executive Officer a written request for transfer of this certification to discharge dredged or fill material under this Order. The request must contain the following:
    i) requesting entity's full legal name;
    ii) the state of incorporation, if a corporation;
    iii) address and phone number of contact person; and
    iv) a description of any changes to the project or confirmation that the successor-in-interest intends to implement the project as described in this Order.

26. Except as may be modified by any preceding conditions, all certification actions are contingent on: a) the discharge being limited, and all proposed revegetation, avoidance, minimization, and mitigation measures being completed, in strict compliance with Caltrans's project description and CEQA documentation, as

Standard Conditions (continued)

approved herein; b) Caltrans shall construct the project in accordance with the project described in the application and the findings above; and c) compliance with all applicable water quality requirements and water quality control plans including the requirements of the Water Quality Control Plan for the North Coast Region (Basin Plan), and amendments thereto. Any change in the design or implementation of the project that would have a significant or material effect on the findings, conclusions, or conditions of this Order must be submitted to the Executive Officer of the Regional Water Board for prior review, consideration, and written concurrence. If the Regional Water Board is not notified of a significant alteration to the project, it will be considered a violation of this Order, and Caltrans may be subject to Regional Water Board enforcement actions.

27. The authorization of this certification for any dredge and fill activities expires on March 1, 2019. Conditions and monitoring requirements outlined in this Order are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

Condition 1 is a requirement for a report. Any requirement for a report made as a condition to this certification is a formal requirement pursuant to California Water Code section 13267, and failure or refusal to provide, or falsification of such required report is subject to civil liability as described in California Water Code, Section 13268.

The Regional Water Board may add to or modify the conditions of this Order, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

Please contact our staff Environmental Specialist/Caltrans liaison, Brendan Thompson at (707) 576-2699, or via e-mail, at Brendan.Thompson@waterboards.ca.gov, if you have any questions.

Matthias St. John
Executive Officer

140221_BJT_dp_CDOT_Hwy299_CollinsBar_401

Web link: State Water Resources Control Board Order No. 2003-0017 -DWQ, General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification can be found at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf

Original to: Mr. Steve Rogers, Caltrans, District 2, 1031 Butte Street, Redding, CA 96601
Steve.Rogers@dot.ca.gov

cc: U.S. Army Corps of Engineers, Regulatory Functions - San Francisco District
Laurie.A.Monarres@usace.army.mil
Paula.C.Gill@usace.army.mil
Jane.M.Hicks@usace.army.mil
California Department of Fish and Wildlife, Bay Delta Region
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Stephen.Bargsten@waterboards.ca.gov

02-3E7904
02-Tri- 299-12.3/12.9
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

PLAC - California Regional Water Quality Control Board

North Coast Region
Water Quality Certification, WDID No. 1A13120WNTR

AGREEMENTS

PLAC - California Department of Fish and Wildlife

Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1

MATERIALS INFORMATION

Revised Foundation Report for Collins Bar Sidehill Viaduct No. 1

Dated: May 28, 2013

Foundation Report for Collins Bar Sidehill Viaduct No. 2

Dated: May 6, 2013

Optional Import Borrow Site

Site Investigation Report

Arieally Deposited Lead, Traffic Stripe Paint, and Naturally Occurring Asbestos
Dated: April 2013

Notice of Determination

TO: ☒ Office of Planning and Research

For U.S. Mail:
P.O. Box 3044
Sacramento, CA 95812-3044

Street Address:
1400 Tenth Street
Sacramento, CA 95814

FROM: Department of Fish and Wildlife
Region 1 - Northern
601 Locust Street
Redding, CA 96001
Contact: Richard Lis
Phone: (530) 225-2142

LEAD AGENCY (if different from above):
California Department of Transportation
1031 Butte Street
Redding, CA 96001
Contact: Steve Rogers
Phone: (530) 225-2455

SUBJECT: Filing of Notice of Determination pursuant to § 21108 of the Public Resources Code

State Clearinghouse Number: 2013032061

Project Title: **Lake or Streambed Alteration Agreement No. 1600-2013-0265-R1 Collins Bar Curve Improvement Project**

Project Location: Along hwy 299, between the towns of Big Bar and Burnt Ranch, from 1.0 to 1.4 miles west of Mill Creek Road, Unnamed tributary to the Trinity River, Trinity County, T5N, R6E, Section 24 NW1/4, Humboldt Meridian.

Project Description: The Project proposes to improve traffic safety and operations along State Route 299 in Trinity County by realigning four curves, widening paved shoulders, and increasing tangent lengths.

This is to advise that the Department of Fish and Wildlife (CDFW), acting as ☐ **the lead agency** / ☒ **a responsible agency** approved the above-described project on the date signed below and has made the following determinations regarding the above described project:

1. The project ☐ **will** / ☒ **will not** have a significant effect on the environment. (This determination is limited to effects within CDFW's jurisdiction when CDFW acts as a responsible agency.)
2. ☐ **An environmental impact report** / ☒ **A negative declaration** / ☐ **A timber harvesting plan** was prepared for this project pursuant to CEQA.
3. Mitigation measures ☒ **were** / ☐ **were not** made a condition of CDFW's approval of the project.
4. A Statement of Overriding Considerations ☐ **was** / ☒ **was not** adopted by CDFW for this project.
5. Findings ☐ **were** / ☒ **were not** made by CDFW pursuant to Public Resources Code § 21081(a). CDFW did, however, adopt findings to document its compliance with CEQA.
6. Compliance with the environmental filing fee requirement at Fish and Game Code § 711.4 (check one):
   - ☐ Payment is submitted with this notice.
   - ☒ A copy of a receipt showing prior payment is on file with CDFW.
   - ☐ A copy of the CEQA Filing Fee No Effect Determination Form signed by CDFW is attached to this notice.

☐ Lead Agency certification: CDFW, as Lead Agency, has made the final EIR with comments and responses and record of project approval, or the Negative Declaration, available to the General Public at the CDFW office identified above.

☒ Responsible Agency statement: The Negative Declaration that was prepared by the Lead Agency for this project is available to the General Public at the office location listed above for the Lead Agency. CDFW's record of decision is available at the CDFW office identified above.

Signed: _____ Date: 1-29-14

Michael R. Harris
Interior Conservation Planning Supervisor
California Department of Fish and Wildlife, Northern Region

Date Received for filing at OPR:

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS FOR
LAKE OR STREAMBED ALTERATION AGREEMENT No. 1600-2013-0265-R1

Introduction

The California Environmental Quality Act (CEQA) (Public Resources Code Section 21000, *et seq.*) and the State CEQA Guidelines (Guidelines) (Section 15000, *et seq.*, Title 14, California Code of Regulations) require that no public agency shall approve or carry out a project for which a Mitigated Negative Declaration (MND) has been completed that identifies one or more significant effects, unless the agency makes the following finding as to each significant effect:

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.

As the lead agency for the project, the California Department of Transportation (Caltrans) adopted the MND for the Project on **May 31, 2013**. Caltrans found that the Project will not result in significant environmental effects with the mitigation measures required in, or incorporated into the Project.

The California Department of Fish and Wildlife (CDFW) is entering into Lake or Streambed Alteration Agreement (Agreement) **No. 1600-2013-0265-R1** with **Mr. Steve Rogers representing the Caltrans**. The project is located along hwy 299, between the towns of Big Bar and Burnt Ranch, from 1.0 to 1.4 miles west of Mill Creek Road, Unnamed tributary to the Trinity River, Trinity County, T5N, R6E, Section 24 NW1/4, Humboldt Meridian.

Because CDFW is issuing the Agreement, it is a Responsible Agency under CEQA for the Project. As a CEQA Responsible Agency, CDFW is required by Guidelines Section 15096 to review the environmental document certified by the Lead Agency approving the projects or activities addressed in the Agreement and to make certain findings concerning a project's potential to cause significant, adverse environmental effects. However, when considering alternatives and mitigation measures approved by the Lead Agency, a Responsible Agency is more limited than the Lead Agency. When issuing the Agreement, CDFW is responsible only for ensuring that the direct or indirect environmental effects of activities addressed in the Agreement are adequately mitigated or avoided. Consequently, the findings adopted or independently made by CDFW with respect to an Agreement's activities are more limited than the findings of the Lead Agency funding, approving, or carrying out the project activities addressed in such Agreements.

Findings

CDFW has considered the MND adopted by Caltrans. CDFW has independently concluded that the Agreement should be issued under the terms and conditions specified therein. In this regard, CDFW hereby adopts any findings of Caltrans as set forth in the MND and record of project approval, insofar as those findings pertain to the project's impacts on biological resources.

Signed: _____ Date: 1-29-13

Michael R. Harris
Interior Conservation Planning Supervisor
California Department of Fish and Wildlife, Northern Region

California Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Region 1 – Northern
601 Locust Street
Redding, CA 96001
(530) 225-2300
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director

January 31, 2014

Mr. Steve Rogers
California Department of Transportation
1031 Butte Street MS 30
Redding, California 96001

Subject: Final Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1
Collins Bar Curve Improvement

Dear Mr. Rogers:

Enclosed is the final Streambed Alteration Agreement (Agreement) for the Collins Bar Curve Improvement Project (Project). Before the California Department of Fish and Wildlife (Department) may issue an Agreement, it must comply with the California Environmental Quality Act (CEQA). In this case, the Department, acting as a responsible agency, filed a notice of determination (NOD) on the same date it signed the Agreement. The NOD was 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 Richard Lis at 530-225-2142 or Richard. Lis@wildlife.ca.gov.

Sincerely,

for: Rachelle Pike

Richard Lis
Senior Environmental Scientist Specialist

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
NORTHERN REGION
601 LOCUST STREET
REDDING, CALIFORNIA 96001

STREAMBED ALTERATION AGREEMENT
NOTIFICATION NO. 1600-2013-0265-R1
Unnamed tributary to the Trinity River

CALIFORNIA DEPARTMENT OF TRANSPORTATION
COLLINS BAR CURVE IMPROVEMENT

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

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on August 26, 2013 that Permittee intends to complete the project described herein;

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

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

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

PROJECT LOCATION

The project is located at an unnamed tributary to the Trinity River, in the County of Trinity, State of California; Latitude 40.8032 N, Longitude 123.4656194444 W, or Section 24 NW1/4, Township 5N, Range 6E, U.S. Geological Survey (USGS) map Ironside Mountain, Humboldt meridian.

PROJECT DESCRIPTION

The project is limited to an area that is part of an overall highway improvement along State Route 299 between postmiles 12.2 and 12.9 in Trinity County. A fill slope will be constructed to accommodate a curve correction. At the toe of this fill slope a culvert eight inches in diameter will be replaced by a culvert eighteen inches in diameter.

The culvert will convey water that arrives at the toe of the existing slope from a pre-existing underground drain system. Bed, bank and channel have developed at the outlet and downstream of the existing culvert. The installation of the new culvert and the addition of rock slope protection (rsp) will alter the existing bed, bank, and channel of this unnamed tributary. Approximately 60 linear feet of rsp (11.1 yard$^{3)}$ will be placed around the new culvert.

PROJECT IMPACTS

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

1. Permanent impacts to the bed, bank, and channel will include the addition to the fill slope that will extend 60 feet beyond the outlet point of the existing underdrain system. Total area to be affected is approximately 240 ft^2. Fill will include approximately 8.85 yd^3 of rsp and include a new culvert 18 inches in diameter.

The adverse effects the project could have on the fish or wildlife resources identified above include: the loss of three individuals of Acer macrophyllum (big leaf maple) 4--6 in. dbh which will be removed.
Trinity bristle snails (Monadenia infumata ssp. setosa) were found on other areas of the full project site. The impacts to this species and mitigation for incidental take are being addressed in Incidental Take Permit No. 2081-2013-049-01.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

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

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

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

1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with the Agreement.

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.

PROJECT TIMING

2.1 All work on the stream banks or within the stream channel, shall be confined to the period commencing May 15, and ending October 15, of any year in which this Agreement is valid when there is little or no stream flow. If there is flow in the stream the Permittee or its contractors may construct a clear water diversion to cleanly route water around the construction area. Weather conditions should be monitored daily, if the stream has clear water diversion, and the diversion constructed should be sized to accommodate 25 year potential thunder-storm events. If weather conditions permit, and the stream remains in low flow conditions or dry, the Permittee may perform work within the stream channel or on the banks after October 15, provided a written request is made to the Department at least 5 days before the proposed work period variance. Written approval from the Department for the proposed work period variance must be received by the Permittee prior to the start or continuation of work after October 15.

2.2 If work is performed within the stream channel or on the banks after October 15, the Permittee shall do all of the following:

a. Stage erosion and sediment control materials at the work site.

b. Monitor the seventy-two (72) hour forecast from the National Weather Service.

c. When the 72-hour forecast indicates a probability of precipitation of 60% or greater, or at the onset of any precipitation, ground disturbing activities shall cease and erosion control measures shall be implemented to stabilize exposed soils and prevent the mobilization of sediment into the stream channel or adjacent wetland or riparian areas.

HABITAT AND SPECIES PROTECTION

2.3 This Agreement does not authorize the take of any State threatened or endangered species. The project will have incidental take of Trinity bristle snail and this is being addressed in ITP No. 2081-2013-049-01.

2.4 Removal of existing vegetation shall not exceed the minimum necessary to complete operations. Woody riparian vegetation removal from the channel or banks at of the unnamed tributary is limited to the three trees of Acer macrophyllum that range in dbh from 4 to 6 inches. All unpaved disturbed areas will have erosion control materials (e.g. hydroseed, mulch, certified weed-free straw) applied at rates that are effective for preventing mobilization and movement of soils.

2.5 Construction equipment and personnel shall be restricted to the limits of the work area as shown on the project plans. No construction activities or habitat disturbance is authorized beyond this area. The Permittee, or its contractors, will prepare a Storm Water Pollution Prevention Plan.

2.6 Take of migratory birds will be avoided during construction activities. In no case shall active nests with eggs or young be removed during construction. Vegetation removal will be limited to the period of September 16 to February 14th, which will occur outside the breeding season of migratory birds.

PETROLEUM, CHEMICAL AND OTHER POLLUTANTS

2.7 All construction-related materials and equipment shall be stored in designated staging areas located outside of the floodplain unless approved in writing by DFW.

2.8 Refueling and vehicle maintenance shall be performed at least 100 feet from streams or other water bodies unless approved in writing by DFW.

2.9 No equipment or machinery shall be operated within any flowing stream.

2.10 Any equipment or vehicles driven and/or operated within or adjacent to the stream channel shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life, wildlife, or riparian habitat.

2.11 Stationary equipment such as motors, pumps, generators, and welders that contain deleterious materials, located adjacent to the stream channel shall be positioned over drip pans.

2.12 No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, asphalt, paint or other coating material, oil or petroleum products or other organic or earthen material from any construction, or associated activity of whatever nature shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into, waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any stream or lake.

EROSION AND SEDIMENT CONTROL

2.13 The project shall at all time feature adequate erosion and sediment control devices to prevent the degradation of water quality.

2.14 Soils exposed by project operations shall be treated to prevent sediment runoff and transport. Erosion control measures shall include the proper installation and maintenance of approved Best Management Practices (BMPs) and may include applications of seed, certified weed-free straw, compost, fiber, commercial fertilizer, stabilizing emulsion and mulch, or combinations thereof.

2.15 Soils adjacent to the stream channel that are exposed by project operations shall be adequately stabilized when rainfall is reasonably expected during construction, and immediately upon completion of construction, to prevent the mobilization of such sediment into the stream channel or adjacent riparian areas. National Weather Service forecasts shall be monitored by the Permittee to determine the chance of precipitation.

2.16 Following construction, all disturbed upland areas shall be stabilized and reseeded with an erosion control mix consisting of regionally appropriate, native grass and forb species.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

3.1 To compensate for the loss of the three trees of *Acer macrophyllum*, there will be approximately 50-100 individuals *of Acer macrophyllum* replanted on the hillslope as part of the mitigation plan to restore habitat for the Trinity bristle snail and associated habitat; this mitigation is being developed in detail as part of ITP No. 2081-2013-049-01.

CONTACT INFORMATION

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

To Permittee:

Mr. Steve Rogers
1031 Butte St., MS 30
Redding, California 96001
Telephone 530-225-2455
E-mail: steve_rogers@dot.ca.gov

To CDFW:

Department of Fish and Wildlife
Northern Region
601 Locust St.
Attn: Lake and Streambed Alteration Program – Richard Lis
Notification #1600-2013-0265-R1
Fax 530-225-2267
E-mail: richard.lis@wildlife.ca.gov.

LIABILITY

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

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

SUSPENSION AND REVOCATION

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

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

ENFORCEMENT

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

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

OTHER LEGAL OBLIGATIONS

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

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

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

AMENDMENT

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

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

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective,

unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

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

EXTENSIONS

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

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (FGC section 1605(f)).

EFFECTIVE DATE

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

TERM

This Agreement shall expire on December 15, 2017, 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 CDFW in accordance with FGC section 1602.

CONCURRENCE

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

FOR DEPARTMENT OF TRANSPORTATION

Steve Rogers — Date: 1/3/14

FOR DEPARTMENT OF FISH AND WILDLIFE

Michael R. Harris — Date: 1-24-14
Habitat Conservation Planning Supervisor

Prepared by: Richard Lis, Ph.D.
Senior Environmental Scientist

02-3E7904
02-Tri- 299-12.3/12.9
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

PLAC - California Regional Water Quality Control Board

North Coast Region
Water Quality Certification, WDID No. 1A13120WNTR

AGREEMENTS

PLAC - California Department of Fish and Wildlife

Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1

MATERIALS INFORMATION

Revised Foundation Report for Collins Bar Sidehill Viaduct No. 1

Dated: May 28, 2013

Foundation Report for Collins Bar Sidehill Viaduct No. 2

Dated: May 6, 2013

Optional Import Borrow Site

Site Investigation Report

Arieally Deposited Lead, Traffic Stripe Paint, and Naturally Occurring Asbestos
Dated: April 2013

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

M e m o r a n d u m

Flex your power!
Be energy efficient!

To: GUDMUND SETBERG
Branch Chief
Division of Engineering Services
Office of Bridge Design-North
Bridge Design Branch 2

Attn: Kuruswamy Selventhiran

Date: May 28, 2013

File: 02-TRI-299-PM 12.3-12.7
Collins Bar Sidehill
Viaduct No. 1
Br. No. 05-0091
EA 02- 3E7900
EFIS 0200020151

From: **DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Geotechnical Services – MS 5
Office of Geotechnical Design – North

Subject: **Revised** Foundation Report (FR) for Collins Bar Sidehill Viaduct No. 1

The Office of Geotechnical Design North (OGD-N) is providing a Revised Foundation Report (FR) for the Collins Bar Sidehill Viaduct No. 1. These revisions are being applied to the Pile Data Table, Table 3 on page 8 and are to supercede the Pile Data Table included in the FR dated May 6, 2013.

Per your request, the Office of Geotechnical Design-North (OGD-N) has prepared this FR for the Collins Bar Sidehill Viaduct No. 1.

SCOPE OF WORK

This report provides the general site geology, geotechnical information, seismicity, and foundation recommendations. This report is based on a review of published data such as California Geologic Survey (CGS) publications, review of previous reports, review of the geological information gathered from the recent subsurface field investigation and field reconnaissance. Please note that a slope stability study is not included in the scope of work for this report.

The elevations used in this report are based on the General Plan dated April 9, 2013 and the Foundation Plan dated January 22, 2013 for the proposed Collins Bar Sidehill Viaduct No. 1. The vertical datum used in this report is based on NAVD 88.

PROJECT DESCRIPTION

The proposed Collins Bar Sidehill Viaduct No. 1 is one of two structures for the proposed Collins Bar Safety Improvement Project. The proposed Collins Bar Safety Improvement Project consists of the realignment and widening of State Route 299 between post miles 12.3 and 12.7 in western Trinity County, California. The project site is located approximately one mile east of the town of Burnt Ranch, California.

The proposed Collins Bar Sidehill Viaduct No. 1 is located in a cut-fill section of State Route 299 and is near the west end of the project site. A "Rubble Wall" was built to retain the fill material for the existing roadway. The proposed Sidehill Viaduct No. 1 is approximately 194 feet long, with seven supports and each support consists of two, 24-inch diameter Cast-in-Drilled-Hole (CIDH) piles.

FIELD INVESTIGATION AND TESTING PROGRAM

The field investigation consisted of a subsurface (drilling) investigation and site reconnaissance. A total of 22 mud rotary borings were drilled for the Collins Bar Safety Improvement Project in the summer of 2012. Nine of the 22 borings were located in the vicinity of Sidehill Viaduct No. 1. The mud rotary borings were advanced using a self-casing wireline drilling method. The maximum depth reached by the 2012 subsurface field investigation was approximately 120 feet from the existing pavement, an elevation of approximately 1,162.4 feet. Sampling was achieved in the upper soil and rock layers encountered, by utilizing the Standard Penetration Test (SPT) sampler. Below these layers, hard rock sampling was achieved utilizing a diamond drill bit and core barrel. Selected soil and rock samples were tested at the Caltrans soils laboratory.

LABORATORY TESTING PROGRAM

Laboratory testing was performed on selected soil and rock samples obtained from the 2012 subsurface field investigation. Soil samples were selected for corrosion evaluation and rock core samples were selected for rock strength testing.

A total of four rock core samples from Boring RC-12-001 were tested for the proposed foundation design. Since the bedrock at the project site has undergone severe tectonic stress in the past and is intensely folded, foliated, fractured, sheared, and weathered, it was difficult to select intact rock core samples for laboratory testing. Therefore, only those samples that survived the selection process were tested.

One sample was tested for the unconfined compressive strength. The test sample's length/diameter ratio was not in compliance with the test method. The unconfined compressive strength test results from this sample are 10,123 psi. The three other samples

were tested using the point load test method. These results indicated the Rock Strength Index I_{s50} ranged from 127 to 190 psi. All test samples failed along preexisting, healed discontinuities and may not indicate the true intact strength of the rock matrix.

These test results are presented in Appendix B. Additionally, the Rock Strength Index $I_{s\ 50}$ for samples taken from Borings RC-12-004 and RC-12-022 within the Sidehill Viaduct No. 2 area of the same project are also presented in Appendix B for reference. Please note that these test results presented in Appendix B, only represent the samples tested. These test results cannot be used without incorporating knowledge of the local geology, observation of the site geology, and review of the subsurface drilling results including core samples. Directly using these test results without appropriate interpretation and study may result in the misleading conclusions.

SITE GEOLOGY AND SUBSURFACE CONDITIONS

The project site is located in the Klamath Mountains geomorphic province. The Geologic Map of the Redding Sheet, California, 1:250,000, compilation by Rudolph G, Strand, 1962, indicate the project site is underlain by Pre-Cretaceous metamorphic rocks (m). Mapping by Higgins and Downey indicate the site may be within the unit mapped as "melos." This unit is described as "Melange with serpentinite (ophiolitic rocks with locally abundant serpentinite; Rattlesnake Creek terrane, Western Klamath terrane)," California Geological Survey map, Geologic Setting of State Highway 299 Between Arcata and Buckhorn Summit, Humbolt and Trinity Counties, California, Plate 1, 2009, compiled by Chris T. Higgins and Cameron I. Downey.

Subsurface Conditions

Soil and rock were encountered in all nine of the mud rotary test borings drilled for this structure in the 2012 subsurface field investigation. The following is a summary of the geological findings from the 2012 foundation investigation.

The soils encountered were up to 15 feet in thickness and consisted of gravel, sand, and silt. The apparent density of these soils was estimated from loose to dense based on Standard Penetration Tests (SPTs) and field observations.

The project site is located in a geologically complex area based on the geological maps, literature and the LOTBs from the 2012 foundation investigation. The bedrock at the project site has undergone severe tectonic stress in the past and is intensely folded, foliated, fractured, and sheared. The bedrock properties are highly heterogeneous and anisotropic.

Bedrock was encountered in all borings at various depths, and the top of bedrock depth ranged from one foot to 15 feet below the surface. The rock was visually identified as metamorphic rock such as phyllite, argillite, and meta-graywacke by field personnel. In general, the fracture density of the bedrock ranged from moderately to very intensely fractured. The variability of the bedrock weathering is from fresh to decomposed. The hardness of the bedrock ranged from hard to soft. For subsurface data and boring locations, please refer to the Log of Test Borings (LOTBs).

Groundwater

Groundwater was measured in piezometers installed in Boring RC-12-001 and Boring RC-12-002. Groundwater was measured at an approximate elevation of 1,198.2 feet (or at a depth of 84.0 feet below the existing pavement) on April 5, 2013 in piezometer/Boring RC-12-001 and at an approximate elevation of 1,220.9 feet (or at a depth of 53.3 feet below the existing pavement) on August 8, 2012 in piezometer/Boring RC-12-002.

Wet spots were observed near the bottom of the existing Rubble Wall, 20 feet below the roadway surface, approximately between the proposed Bent 3 and Bent 4 locations on the January 3, 2013 field visit. These wet spots may be caused by seepage through the fill material and the fractured rock behind the existing Rubble Wall.

SCOUR EVALUATION

Scour is not an issue for this project because the proposed viaduct foundations do not span a watercourse.

CORROSION EVALUATION

Corrosion samples were collected during the August 2012 field investigation and analyzed for corrosivity. All test results indicate this site is **not** corrosive to foundation elements. Due to the location of this project, it is expected that deicing salts would be used on the roadway and bridge deck. Appropriate corrosion protection measures should be considered. Table 1 below presents the summary of these test results.

Table 1. Corrosion Test Summary Report-Soil

Sample Location	Sample Depth (ft)	pH	Minimum Resistivity (ohm-cm)	Sulfate Content (ppm)	Chloride Content (ppm)
Bent 2	0-5	8.07	7889	N/A	N/A
Bent 5	0-1	7.19	8344	N/A	N/A

Note:
The Corrosion Technology Branch considers a site to be corrosive if one or more of the following conditions exist for the representative soil and/or water samples taken at the site: chloride concentration is 550 ppm or greater, sulfate concentration is 2000 ppm or greater, or the pH is 5.5 or less. The minimum resistivity serves only as an indicator parameter for the possible presence of soluble salts and is not included to define a corrosive site. It is the practice of the Corrosion Technology Branch that if the minimum resistivity of the sample is greater than 1000 ohm-cm, the sample is considered to be non-corrosive and testing to determine the sulfate and chloride content are not performed.

SEISMIC RECOMMENDATIONS

Based on the Log of Test Borings and bedrock outcrop observations from our 2012 field reconnaissance, a V_{S30} (the weighted shear wave velocity for the top 100 feet of foundation materials) of 1850 feet per second (760 m/s) is considered to be applicable to the foundation materials.

Based on the Caltrans ARS Online Tool (Version 2.2.06) the Big Lagoon-Bald Mountain (Fault ID No. 9) with MMax of 7.5 is the controlling active fault for the deterministic spectrum. The Big Lagoon-Bald Mountain is a thrust fault with a 35 degree dip angle and is located west of the structure site. The closest distance to the structure site from the fault rupture plane is approximately 10.9 miles (17.5 km).

Based on the "Methodology for Developing Design Response Spectrum for Use in Seismic Design Recommendations, November 2012," the design ground motion is the highest spectral acceleration as obtained by any or a combination of the following three methods for the Collins Bar Sidehill Viaduct No. 1:

1) Statewide minimum deterministic spectrum requirements with MMax of 6.5, vertical strike-slip event with a rupture distance of 7.5 miles.
2) The nearest controlling active fault as shown on the ARS Online Tool (Version 2.0.4) based on the deterministic spectrum.
3) The USGS 5% Probability of Exceedance in 50 years (975 years return period).

Based on the V_{S30}, the Acceleration Response Spectrum (ARS) curve is controlled by USGS 5% Probability of Exceedance in 50 years (975 year return period) as stated above. The peak ground acceleration is estimated to be 0.34g as shown on the ARS curve, see Figure 1, attached.

The potential for soil liquefaction based on the foundation material is considered to be insignificant.

The potential for surface rupture at the site due to fault movement is considered insignificant since there are no known faults projecting towards or passing directly through the project site.

AS-BUILT FOUNDATION DATA

The proposed Sidehill Viaduct No. 1 is a new structure and there is no As-Built structure information available.

FOUNDATION RECOMMENDATIONS

For the proposed Sidehill Viaduct No. 1, 24-inch diameter Cast-in-Drilled-Hole (CIDH) piles or rock sockets are recommended for all support locations. Each foundation support location consists of two (2) piles. One pile will be installed through the existing roadway (inboard) and the second pile will be installed on the rock slope (outboard). Note, in this report (when looking up-station) the inboard piles are referred to as R, or right and the outboard piles are referred to as L, or left.

According to the "Foundation Design Data Sheet (FDDS) for Deep Foundations" dated March 15, 2013, this project is using Load and Resistance Factor Design (LRFD) methodology. The CIDH pile lengths or pile tip elevations recommended in Table 2 are estimated based on the FDDS and the current Federal Highway Administration (FHWA) design manual. The soil and rock parameters used for estimating the pile lengths are based on the LOTBs for this project.

Based on our discussion on February 7, 2013, we understand that the abutments for this structure were treated as bents for LRFD analyses by Office of Bridge Design-North.

Table 2. Foundation Design Recommendations

Support Location	Pile Type	Cut-off Elevation (ft)	Service-I Limit State Load per Support (kips)	Total Permissible Support Settlement (inches)	Required Factored Nominal Resistance per Pile (kips)				Estimated Top of Bedrock Elevation (ft)	Design Tip Elevations (ft)	Specified Tip Elevation (ft)
					Strength Limit		Extreme Event				
					Compression (φ=0.7)	Tension (φ=0.7)	Compression (φ=1)	Tension (φ=1)			
Abut 1 Left	24" CIDH	1281.6	105	1	170	0	45	0	1282.0	1265.0 (a) 1264.0 (b)	1264.0 (b)
Abut 1 Right	24" CIDH	1281.4	110	1	175	0	40	0	1281.0	1270.0 (a) 1266.6 (b)	1266.6 (b)
Bent 2 Left	24" CIDH	1267.3	235	1	370	0	120	0	1265.0	1241.0 (a) 1246.7 (b)	1241.0 (a)
Bent 2 Right	24" CIDH	1280.0	180	1	265	0	95	0	1270.0	1250.0 (a) 1259.4 (b)	1250.0 (a)
Bent 3 Left	24" CIDH	1253.8	255	1	400	0	135	0	1251.0	1223.0 (a) 1236.5 (b)	1223.0 (a)
Bent 3 Right	24" CIDH	1278.4	170	1	250	0	100	0	1256.0	1244.0 (a) 1257.2 (b)	1244.0 (a)
Bent 4 Left	24" CIDH	1258.3	240	1	380	0	130	0	1256.0	1226.0 (a) 1241.0 (b)	1226.0 (a)
Bent 4 Right	24" CIDH	1275.5	180	1	270	0	100	0	1269.0	1254.0 (a) 1255.0 (b)	1254.0 (a)
Bent 5 Left	24" CIDH	1272.4	225	1	365	0	125	0	1272.0	1235.0 (a) 1255.0 (b)	1235.0 (a)
Bent 5 Right	24" CIDH	1274.4	200	1	300	0	100	0	1273.0	1254.0 (a) 1252.9 (b)	1252.9 (b)
Bent 6 Left	24" CIDH	1246.7	200	1	305	0	130	0	1246.0	1224.0 (a) 1230.1 (b)	1224.0 (a)
Bent 6 Right	24" CIDH	1272.7	200	1	300	0	105	0	1260.0	1240.0 (a) 1250.7 (b)	1240.0 (a)
Abut 7 Left	24" CIDH	1250.8	100	1	165	0	60	0	1250.0	1230.0 (a) 1233.4 (b)	1230.0 (a)
Abut 7 Right	24" CIDH	1271.2	120	1	190	0	45	0	1259.0	1244.0 (a) 1249.4 (b)	1244.0 (a)

Notes:

1. *Design Tip Elevations are controlled by: (a) Compression (Strength Limit), (b) Lateral Load, respectively.*
2. *The Specified Tip Elevation shall not be raised above the Design Tip Elevations for Lateral Load.*
3. *Design Tip Elevation for Lateral Load is provided by Structure Design.*

Table 3. Pile Data Table

Support Location	Pile Type	Cut-Off Elevation (ft)	Nominal Resistance (kips)		Estimated Top of Bedrock Elevation (ft)	Design Tip Elevations (ft)	Specified Tip Elevation (ft)
			Compression	Tension			
Abut 1 Left	24" CIDH	1281.6	250	0	1282.0	1265.0 (a) 1264.0 (b)	1264.0
Abut 1 Right	24" CIDH	1281.4	250	0	1281.0	1270.0 (a) 1266.6 (b)	1266.6
Bent 2 Left	24" CIDH	1267.3	530	0	1265.0	1241.0 (a) 1246.7 (b)	1241.0
Bent 2 Right	24" CIDH	1280.0	380	0	1270.0	1250.0 (a) 1259.4 (b)	1250.0
Bent 3 Left	24" CIDH	1253.8	580	0	1251.0	1223.0 (a) 1236.5 (b)	1223.0
Bent 3 Right	24" CIDH	1278.4	360	0	1256.0	1244.0 (a) 1257.2 (b)	1244.0
Bent 4 Left	24" CIDH	1258.3	550	0	1256.0	1226.0 (a) 1241.0 (b)	1226.0
Bent 4 Right	24" CIDH	1275.5	390	0	1269.0	1254.0 (a) 1255.0 (b)	1254.0
Bent 5 Left	24" CIDH	1272.4	530	0	1272.0	1235.0 (a) 1255.0 (b)	1235.0
Bent 5 Right	24" CIDH	1274.4	430	0	1273.0	1254.0 (a) 1252.9 (b)	1252.9
Bent 6 Left	24" CIDH	1246.7	440	0	1246.0	1224.0 (a) 1230.1 (b)	1224.0
Bent 6 Right	24" CIDH	1272.7	430	0	1260.0	1240.0 (a) 1250.7 (b)	1240.0
Abut 7 Left	24" CIDH	1250.8	236	0	1250.0	1230.0 (a) 1233.4 (b)	1230.0
Abut 7 Right	24" CIDH	1271.2	280	0	1259.0	1244.0 (a) 1249.4 (b)	1244.0

Notes:

1. *Design Tip Elevations are controlled by: (a) Compression, (b) Lateral Load.*
2. *The Specified Tip Elevation shall not be raised above the Design Tip Elevations for Lateral Load.*
3. *Design Tip Elevation for Lateral Load is provided by Structure Design.*

CONSTRUCTION CONSIDERATIONS

1. Groundwater was measured in piezometers at the approximate elevation of 1,198.2 feet in Boring RC-12-001 in April 2013 and at the approximate elevation of 1,220.9 feet in Boring RC-12-002 in August 2012. It is possible there may be seepage flow into the drilled shafts through fractures and shear zones from seasonal rainfall or other sources at various depths and locations. The flow rate and the amount of water will be dependent on seasonal precipitation and other factors. The Contractor should be prepared to dewater or install the piles using the "wet" method.

2. The project site is considered to be geologically complex. Due to the chaotic and variable nature of the bedrock, the Contractor should take necessary precautions when drilling into bedrock, to prevent the possibility of fractured bedrock fragments caving into the drilled shaft or causing deflection from vertical during construction.

3. The bedrock is intensely fractured and breaks easily along the existing discontinuities such as foliation and healed fractures. Some of the foliation planes, fractures, and joint planes dip steeply to near vertical. Some of the fracture and foliation planes may daylight on the wall of the drilled shaft and may cause unexpected cave-in or collapse. The drilling equipment, drilling method and techniques used for the installation of CIDH piles should minimize the possibility of drilled hole cave-in or collapse.

4. The LOTBs indicate that the percent rock core recovery (REC) ranged from 0% to 100% and the Rock Quality Designation (RQD) ranged from 0% to 30%. Low REC and RQD ratios in the foundation zone indicate that drilled holes are prone to cave-in or collapse. The Contractor should take appropriate measures to prevent the drilled holes from cave-in or collapse. Caving conditions may also be encountered in the fill material since the fill material has little or no cohesive binding.

5. Temporary casings may be necessary during CIDH pile construction to prevent caving of the drilled shafts. The temporary casings must be pulled (removed) during the concrete pours.

6. The drilling of the rock socket, the placement of the rebar cage, and concrete pour shall be completed in one continuous operation.

7. The top of bedrock surface elevation is expected to vary and the rock strength is expected to vary also. The rock strength test results indicate that the rock samples are in the range of extremely weak to very strong rock based on the classification of rock strength, ISRM 1981. The hardness of the rock was described in the range of very soft to very hard. Therefore, drilling of the CIDH piles is expected to be difficult.

8. The rock core samples used for rock strength testing may have broken/failed along planes of preexisting weakness, thus the reported rock strength may be less than the true intact strength of the rock matrix.

9. The drilling for CIDH pile rock sockets, is expected to be difficult when drilling through hard and intensely to very intensely fractured bedrock. Zones with intensely fractured bedrock with open fractures, may cause the drilled shafts to cave-in or collapse during drilling.

10. It is highly recommended that the Contractor inspect/observe the core samples at the Translab facility before bidding. This inspection/observation would give the prospective bidder a better understanding of the potentially unstable subsurface material, and the hard and intensely to very intensely fractured bedrock.

If you have any questions regarding this report, please contact Xing Zheng at 916-227-1036, John L. Thorne at 916-227-1034 or Reza Mahallati at 916-227-1033.

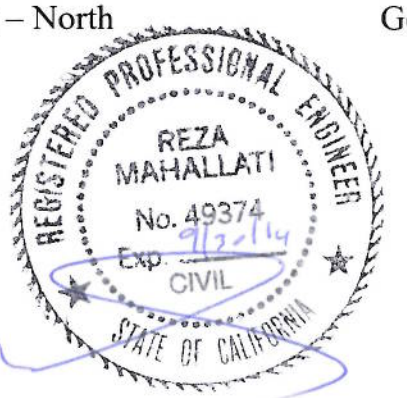
Report by:

exp. 3/31/2015

XING ZHENG, CEG 2130
Engineering Geologist
Geotechnical Design – North

for John Thorne

JOHN L. THORNE
Engineering Geologist
Geotechnical Design – North



REZA MAHALLATI, P.E. 49374
Senior Materials and Research Engineer
Geotechnical Design – North

Attachment: Appendix A, Figure 1 – Acceleration Response Spectrum recommended for design.

Appendix B, - Rock Strength Index $I_{s\ 50}$.

c: GudmundSetberg-OBD-N (E-copy)
KuruswamySelventhiran-OBD-N (E-copy)
GregSlocum- OBD-N (E-copy)
KenHallis-D02 (E-copy)
CassieMitchell-PCE (E-copy)
DerekWillis-DPM (E-copy)
BrianHumphrey-DEP (E-copy)
ByronBerger-DME (E-copy)
ReidBuell-GDN (E-copy)
XingZheng-GDN (E-copy)
JohnThorne-GDN (E-copy)
RezaMahallati-GDN (E-copy)
ShiraRajendra-GS Corporate (E-copy)
Geodog (E-copy)
GDNFile

Appendix A

ARS Curve

Collins Bar Sidehill Viaduct No. 1

Br. No. 05-0091

EA 02-3E7900

EFIS 0200020151

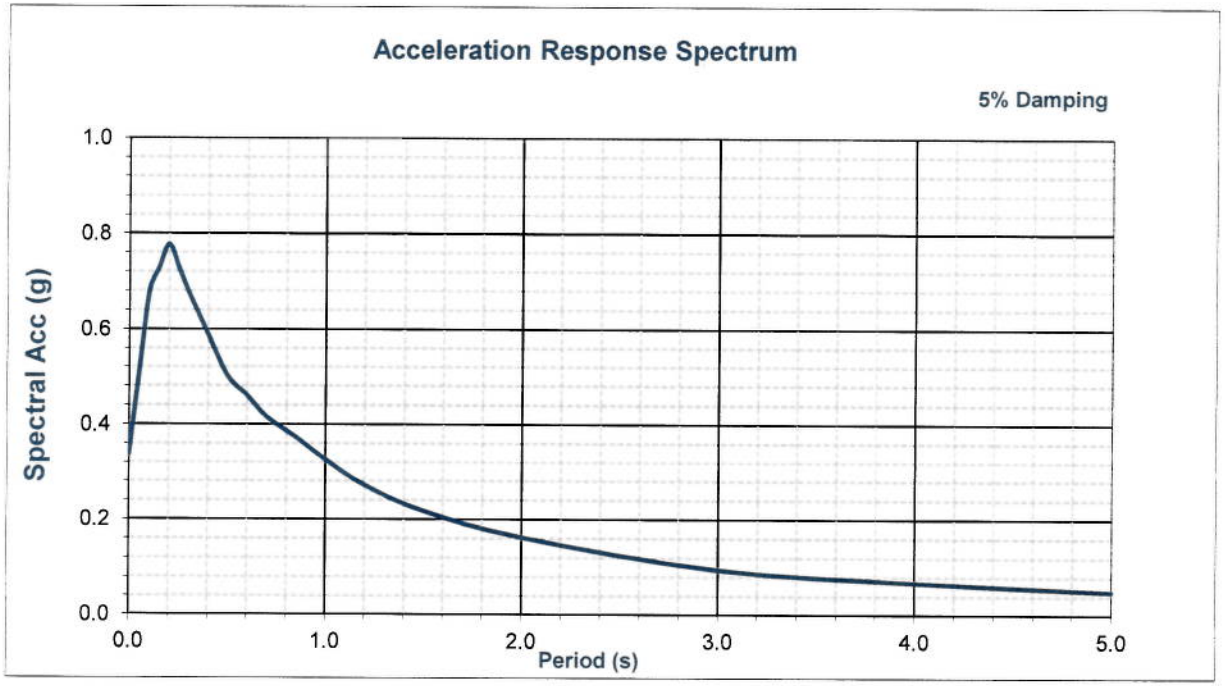
Collins Bar Sidehill Viaduct No. 1

Bridge No. 05-0091
EFIS 0200020151

Latitude 40.79997
Longitude -123.46343

Control **Probabilistic**

Period (s)	Sa(g)
0.000	0.336
0.050	0.507
0.100	0.678
0.150	0.727
0.200	0.777
0.250	0.727
0.300	0.677
0.400	0.588
0.500	0.500
0.600	0.459
0.700	0.415
0.850	0.373
1.000	0.326
1.200	0.271
1.500	0.217
2.000	0.163
3.000	0.096
4.000	0.068
5.000	0.050



Controlling Fault Data for Deterministic Procedure

Fault	Big Lagoon - Bald Mtn	
Fault ID	9	
Style	Rev	
Mmax	7.5	
Dip	35	deg
Z_{TOR}	0	km
Z_{BOT}	13.2	km

R_{rup}	17.5	km
R_{jb}	11.5	km
R_x	30.3	km
V_{S30}	760	m/s
$Z_{1.0}$	N/A	m
$Z_{2.5}$	N/A	km

Note

This ARS curve is based on the USGS 5% probability of exceedance in 50 years (975 years return period).

Final

Design Response Spectrum

Appendix B

Rock Core Sample Test Results

Collins Bar Sidehill Viaduct No. 1

Br. No. 05-0091

EA 02-3E7900

EFIS 0200020151

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL SUPPORT
GEOTECHNICAL LABORATORY

UNCONFINED COMPRESSION TEST RESULTS (ASTM D7012 Method C)

JOB LOCATION **02-Tri-299 PM 12.3-12.9** GL No. **13-005** DATE **4/17/2013**

TEST BY **AZM**

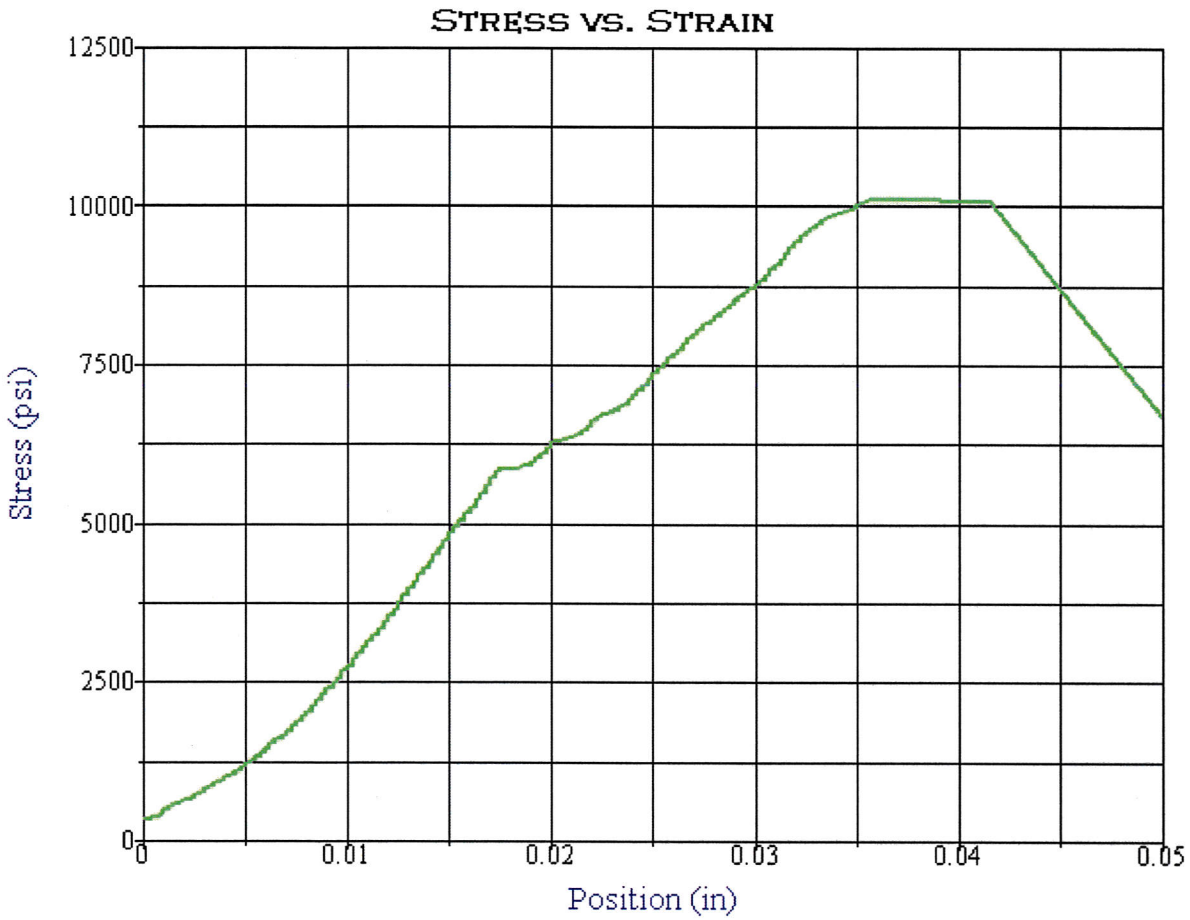
JOB NUMBER **02-3E7900 Collins Bar Viaducts** Bridge No. _____ CHECKED BY **LP 4/18/13**

SAMPLE NO.	DEPTH FT.	DIA. IN.	LENGTH IN.	L/D RATIO	WEIGHT LBS.	LOAD LBS.	DENSITY PCF	STRENGTH PSI	REMARKS
RC-12-001-02	63.0	1.86	2.50	1.34	0.7	27505	166	10123	**
RC-12-022-02	11.0								*
RC-12-002-03	16.5								*
RC-12-022-05	28.5-29								*

Note: No moistures recorded

* Sample fell apart while preparing for testing -- Not suitable for testing

** The test specimen length/diameter ratio was not in compliance with the test method



Test Summary

Counter:	2431
Elapsed Time:	00:04:35
Operator:	AZM
Sample:	RC-12-001-02
Resident Engineer:	
Ticket:	GL# 13-005
E.A. NUMBER:	02-3E7900
Procedure Name:	Cores test
Start Date:	4/17/2013
Start Time:	12:02:00 PM
End Date:	4/17/2013
End Time:	12:06:35 PM
Workstation:	D1K00YB1
Tested By:	AZM
Lab:	Q13-016

Test Results

Specimen Gage Length:	2.5000 in
Diameter:	1.8600 in
Area:	2.7172 in²
Maximum Load:	27505 lbf
Compressive Strength:	10123 psi

Division of Engineering Services
Geotechnical Laboratory

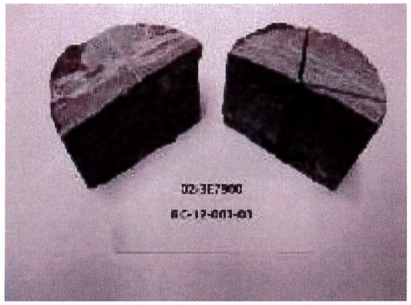
Point Load Strength Index

Dist-EA: 02-3E7900
Dist-Co-Rte-PM: TRI-299-12.3/12.9

GI Tracking No.: 13-005
Report Date: April 4, 2013

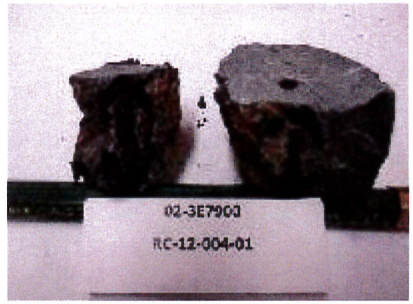
Sample ID	Test Type	Length , L (mm)	Width, W (mm)	Initial Distance Between Contact Points, D(mm)	Final Distance Between Contact Points, D'(mm)	Equivalent Diameter, De (mm)	Failure Load, P (lbs)	Uncorrected Point Load Strength Index Is (psi)	Point Load Strength Index Is (50) (psi)	Remarks
RC-12-001_01	I-L	35	43.5	28.5	25	37.21	466.4	217.31	190	
RC-12-001_03	A-L		47.1	38	35	45.81	524.48	161.21	155	
RC-12-001_04	A-L		47.2	31	29.5	42.11	376.64	137.06	127	
RC-12-004_01	A-L		60	28.5	28	46.25	297.44	89.71	87	

RC-12-001_01



RC-12-001_03

RC-12-001_04



RC-12-004_01

Test Type Abbreviations: D- Diametral, A - Axial, B - Block, I - Irregular Lump

Orientation of Load Direction (if anisotropic): P - Perpendicular to plane of weakness, L - Parallel to plane of weakness

Division of Engineering Services
Geotechnical Laboratory

Point Load Strength Index

Dist-EA: 02-3E7900
Dist-Co-Rte-PM: TRI-299-12.3/12.9

GI Tracking No.: 13-005
Report Date: April 4, 2013

Sample ID	Test Type	Length , L (mm)	Width, W (mm)	Initial Distance Between Contact Points, D(mm)	Final Distance Between Contact Points, D'(mm)	Equivalent Diameter, De (mm)	Failure Load, P (lbs)	Uncorrected Point Load Strength Index Is (psi)	Point Load Strength Index Is (50) (psi)	Remarks
RC-12-004_02	I-L	25	40.7	18.5	16	28.79	1392.16	1083.26	845	
RC-12-004_03	I-L	23	43	27	24	36.25	1499.52	736.26	637	
RC-12-004_04	A-L		60.9	19	17.5	36.84	376.64	179.07	156	• Specimen Dimensions do not comply with ASTM D 5731
RC-12-004_06	A-L		60.9	21	18.5	37.87	1064.8	478.89	423	

RC-12-004_02

RC-12-004_03


RC-12-004_04

RC-12-004_06

Test Type Abbreviations: D- Diametral, A - Axial, B - Block, I - Irregular Lump

Orientation of Load Direction (if anisotropic): P - Perpendicular to plane of weakness, L - Parallel to plane of weakness

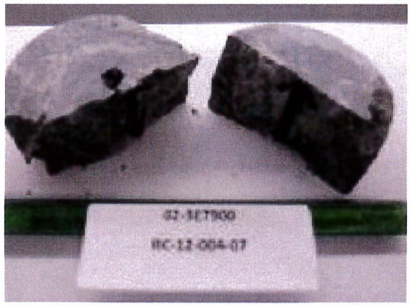
Division of Engineering Services
Geotechnical Laboratory

Point Load Strength Index

Dist-EA: 02-3E7900
Dist-Co-Rte-PM: TRI-299-12.3/12.9

GI Tracking No.: 13-005
Report Date: April 4, 2013

Sample ID	Test Type	Length , L (mm)	Width, W (mm)	Initial Distance Between Contact Points, D(mm)	Final Distance Between Contact Points, D'(mm)	Equivalent Diameter, De (mm)	Failure Load, P (lbs)	Uncorrected Point Load Strength Index Is (psi)	Point Load Strength Index Is (50) (psi)	Remarks
RC-12-004_07	A-L		60.4	30	28	46.4	533.28	159.78	155	
RC-12-004_09	A-L		60.8	22	20	39.35	733.92	305.82	275	
RC-12-022_01	A-L		60.9	23	21	40.35	739.2	292.88	266	
RC-12-022_04	A-L		61	20	19	38.41	137.28	60.02	53	• Specimen Dimensions do not comply with ASTM D 5731



RC-12-004_07

RC-12-004_09

RC-12-022_01

RC-12-022_04

Test Type Abbreviations: D- Diametral, A - Axial, B - Block, I - Irregular Lump

Orientation of Load Direction (if anisotropic): P - Perpendicular to plane of weakness, L - Parallel to plane of weakness

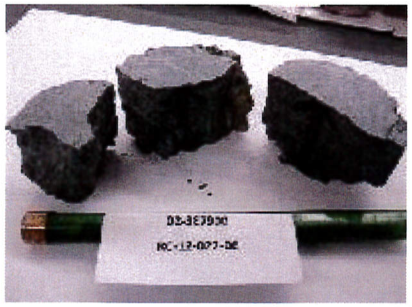
Division of Engineering Services
Geotechnical Laboratory

Point Load Strength Index

Dist-EA: 02-3E7900
Dist-Co-Rte-PM: TRI-299-12.3/12.9

GI Tracking No.: 13-005
Report Date: April 4, 2013

Sample ID	Test Type	Length , L (mm)	Width, W (mm)	Initial Distance Between Contact Points, D(mm)	Final Distance Between Contact Points, D'(mm)	Equivalent Diameter, De (mm)	Failure Load, P (lbs)	Uncorrected Point Load Strength Index Is (psi)	Point Load Strength Index Is (50) (psi)	Remarks
RC-12-022_06	A-L		60.7	35.5	32.5	50.12	635.36	163.19	163	
RC-12-022_07	A-L		60.8	17.5	14.5	33.5	241.12	138.59	116	• Specimen Dimensions do not comply with ASTM D 5731



RC-12-022_06

RC-12-022_07

No Image Available

No Image Available

Test Type Abbreviations: D- Diametral, A - Axial, B - Block, I - Irregular Lump

Orientation of Load Direction (if anisotropic): P - Perpendicular to plane of weakness, L - Parallel to plane of weakness

02-3E7904
02-Tri- 299-12.3/12.9
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

PLAC - California Regional Water Quality Control Board

North Coast Region
Water Quality Certification, WDID No. 1A13120WNTR

AGREEMENTS

PLAC - California Department of Fish and Wildlife

Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1

MATERIALS INFORMATION

Revised Foundation Report for Collins Bar Sidehill Viaduct No. 1

Dated: May 28, 2013

Foundation Report for Collins Bar Sidehill Viaduct No. 2

Dated: May 6, 2013

Optional Import Borrow Site

Site Investigation Report

Arieally Deposited Lead, Traffic Stripe Paint, and Naturally Occurring Asbestos
Dated: April 2013

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: GUDMUND SETBERG
Branch Chief
Division of Engineering Services
Office of Bridge Design-North
Bridge Design Branch 2

Attn: Kuruswamy Selventhiran

Date: May 6, 2013

File: 02-TRI-299-PM 12.3-12.7
Collins Bar Sidehill
Viaduct No. 2
Br. No. 05-0092
EA 02-3E7900
EFIS 0200020151

From: **DEPARTMENT OF TRANSPORTATION**
DIVISION OF ENGINEERING SERVICES
Geotechnical Services – MS 5
Office of Geotechnical Design – North

Subject: Foundation Report (FR) for Collins Bar Sidehill Viaduct No. 2

Per your request, the Office of Geotechnical Design-North (OGD-N) has prepared this FR for the Collins Bar Sidehill Viaduct No. 2.

SCOPE OF WORK

This report provides the general site geology, geotechnical information, seismicity, and foundation recommendations. This report is based on a review of published data such as California Geologic Survey (CGS) publications, review of previous reports, review of the geological information gathered from the recent subsurface field investigation and field reconnaissance. Please note that a slope stability study is not included in the scope of work for this report.

The elevations used in this report are based on the General Plan dated April 10, 2013 and the Foundation Plan dated January 16, 2013 for the proposed Collins Bar Sidehill Viaduct No. 2. The vertical datum used in this report is based on NAVD 88.

PROJECT DESCRIPTION

The proposed Collins Bar Sidehill Viaduct No. 2 is one of two structures for the proposed Collins Bar Safety Improvement Project. The proposed Collins Bar Safety Improvement Project consists of realignment and widening of State Route 299 between post miles 12.3 and 12.7 in western Trinity County, California. The project site is located approximately one mile east of the town of Burnt Ranch, California.

The proposed Collins Bar Sidehill Viaduct No. 2 is located in a cut-fill section of State Route 299 and is near the east end of the project site. A "Rubble Wall" was built to retain the fill material for the existing roadway. The proposed Sidehill Viaduct No. 2 is approximately 125 feet long, with five supports and each support consists of two, 24-inch diameter Cast-in-Drilled-Hole (CIDH) piles.

FIELD INVESTIGATION AND TESTING PROGRAM

The field investigation consisted of a subsurface (drilling) investigation and site reconnaissance. A total of 22 mud rotary borings were drilled for the Collins Bar Safety Improvement Project in the summer of 2012. Five of the 22 borings were located in the vicinity of Sidehill Viaduct No. 2. The mud rotary borings were advanced using a self-casing wireline drilling method. The maximum depth reached by the 2012 subsurface field investigation was approximately 100 feet from the existing pavement, an elevation of approximately 1,230.5 feet. Sampling was achieved in the upper soil and rock layers encountered, by utilizing the Standard Penetration Test (SPT) sampler. Below these layers, hard rock sampling was achieved utilizing a diamond drill bit and core barrel. Selected soil and rock samples were tested in the Caltrans soils laboratory.

LABORATORY TESTING PROGRAM

Laboratory testing was performed on selected soil and rock samples obtained from the 2012 subsurface field investigation. Soil samples were selected for corrosion evaluation and rock core samples were selected for rock strength testing.

Selected rock core samples from Borings RC-12-004 and RC-12-022 were tested for the proposed foundation design. Since the bedrock at the project site has undergone severe tectonic stress in the past and is intensely folded, foliated, fractured, sheared, and weathered, it was difficult to select intact rock core samples for laboratory testing. Therefore, only those samples that survived the selection process were tested. Furthermore, please note that none of these samples were suitable for Unconfined Compressive Rock Strength testing. These samples were tested using the Point Load Test Method.

The test results indicated the Rock Strength Index I_{s50} ranged from 53 to 845 psi. All test samples failed along preexisting, healed discontinuities and may not indicate the true intact strength of the rock matrix.

These test results are presented in Appendix B. Additionally, the test results for samples taken from Borings RC-12-001 within the Sidehill Viaduct No. 1 area of the same project are also presented in Appendix B for reference. Please note that these test results only represent the samples tested. These test results cannot be used without incorporating knowledge of the local geology, observation of the site geology, and review of the

subsurface drilling results including core samples. Directly using these test results without appropriate interpretation and study may result in misleading conclusions.

SITE GEOLOGY AND SUBSURFACE CONDITIONS

The project site is located in the Klamath Mountains geomorphic province. The Geologic Map of the Redding Sheet, California, 1:250,000, compilation by Rudolph G, Strand, 1962, indicate the project site is underlain by Pre-Cretaceous metamorphic rocks (m). Mapping by Higgins and Downey indicate the site may be within the unit mapped as "melos." This unit is described as "Melange with serpentinite (ophiolitic rocks with locally abundant serpentinite; Rattlesnake Creek terrane, Western Klamath terrane)," California Geological Survey map, Geologic Setting of State Highway 299 Between Arcata and Buckhorn Summit, Humbolt and Trinity Counties, California, Plate 1, 2009, compiled by Chris T. Higgins and Cameron I. Downey.

Subsurface Conditions

Soil and rock were encountered in all five of the mud rotary test borings drilled for this structure in the 2012 subsurface field investigation. The following is a summary of the geological findings from the 2012 foundation investigation.

The soils encountered were up to 12 feet in thickness and consisted of gravel, sand, and silt. The apparent density of these soils was estimated from loose to dense based on Standard Penetration Tests (SPTs) and field observations.

The project site is located in a geologically complex area based on the geological maps, literature and the LOTBs from the 2012 foundation investigation. The bedrock at the project site has undergone severe tectonic stress in the past and is intensely folded, foliated, fractured, and sheared. The bedrock properties are highly heterogeneous and anisotropic.

Bedrock was encountered in all borings at various depths, and the top of bedrock depth ranged from one foot to 12 feet below the surface. The rock was visually identified as metamorphic rock such as phyllite, argillite, and meta-graywacke by field personal. In general, the fracture density of the bedrock ranged from moderately to very intensely fractured. The variability of the bedrock weathering is from fresh to decomposed. The hardness of bedrock ranged from hard to soft. For subsurface data and boring locations, please refer to the Log of Test Borings (LOTBs).

Groundwater

Groundwater was measured in a piezometer in Boring RC-12-005 at an approximate elevation of 1,211.7 feet (or at a depth of 18.8 feet below the existing pavement) on April 5, 2013.

SCOUR EVALUATION

Scour is not an issue for this project because the proposed bridge foundations are not in a watercourse.

CORROSION EVALUATION

Corrosion samples were collected during the August 2012 field investigation and analyzed for corrosivity. All test results indicate this site is **not** corrosive to foundation elements. Due to the location of this project, it is expected that deicing salts would be used on the roadway and bridge deck. Appropriate corrosion protection measures should be considered. Table 1 below presents the summary of these test results.

Table 1. Corrosion Test Summary Report-Soil

Sample Location	Sample Depth (ft)	pH	Minimum Resistivity (ohm-cm)	Sulfate Content (ppm)	Chloride Content (ppm)
Bent 2	0-1	8.09	9492	N/A	N/A
Bent 3	0-1	7.03	9983	N/A	N/A

Note:
The Corrosion Technology Branch considers a site to be corrosive if one or more of the following conditions exist for the representative soil and/or water samples taken at the site: chloride concentration is 550 ppm or greater, sulfate concentration is 2000 ppm or greater, or the pH is 5.5 or less. The minimum resistivity serves only as an indicator parameter for the possible presence of soluble salts and is not included to define a corrosive site. It is the practice of the Corrosion Technology Branch that if the minimum resistivity of the sample is greater than 1000 ohm-cm, the sample is considered to be non-corrosive and testing to determine the sulfate and chloride content is not performed.

SEISMIC RECOMMENDATIONS

Based on the Log of Test Borings and bedrock outcrop observations from 2012 field reconnaissance, a V_{S30} (the weighted shear wave velocity for the top 100 feet of foundation materials) of 1850 feet per second (760 m/s) is considered to be applicable to the foundation materials.

Based on the Caltrans ARS Online Tool (Version 2.2.06) the Big Lagoon-Bald Mountain (Fault ID No. 9) with MMax of 7.5 is the controlling active fault for the deterministic spectrum. The Big Lagoon-Bald Mountain is a thrust fault with a 35 degree dip angle and is located west of the structure site. The closest distance to the structure site from the fault rupture plane is approximately 10.9 miles (17.5 km).

Based on the "Methodology for Developing Design Response Spectrum for Use in Seismic Design Recommendations, November 2012," the design ground motion is the highest spectral acceleration as obtained by any or a combination of the following three methods for the Collins Bar Sidehill Viaduct No. 2:

1) Statewide minimum deterministic spectrum requirements with MMax of 6.5, vertical strike-slip event with a rupture distance of 7.5 miles.
2) The nearest controlling active fault as shown on the ARS Online Tool (Version 2.0.4) based on the deterministic spectrum.
3) The USGS 5% Probability of Exceedance in 50 years (975 years return period).

Based on the V_{S30}, the Acceleration Response Spectrum (ARS) curve is controlled by USGS 5% Probability of Exceedance in 50 years (975 year return period) as stated above. The peak ground acceleration is estimated to be 0.34g as shown on the ARS curve, see Figure 1, attached.

The potential for soil liquefaction based on the foundation material is considered to be insignificant.

The potential for surface rupture at the site due to fault movement is considered insignificant since there are no known faults projecting towards or passing directly through the project site.

AS-BUILT FOUNDATION DATA

The proposed Sidehill Viaduct No. 2 is a new structure and there is no As-Built structure information available.

FOUNDATION RECOMMENDATIONS

For the proposed Sidehill Viaduct No. 2, 24-inch diameter Cast-in-Drilled-Hole piles or rock sockets are recommended for all Bent locations and Standard 16-inch CIDH piles are recommended for support at Abutment 1 and Abutment 5. Each foundation support location consists of two (2) piles. One pile will be installed through the existing roadway (inboard) and the second pile will be installed on the rock slope (outboard). Note, in this report (when looking up-station) the inboard piles are referred to as R, or right and the

outboard piles are referred to as L, or left.

According to the "Foundation Design Data Sheet (FDDS) for Deep Foundations" dated March 15, 2013, this project is using Load and Resistance Factor Design (LRFD) methodology. The CIDH pile lengths or pile tip elevations recommended in Tables 2 and 3 are estimated based on the FDDS and the current Federal Highway Administration (FHWA) design manual. The soil and rock parameters used for estimating the pile lengths are based on the LOTBs for the project.

Table 2. Foundation Design Recommendations

Support Location	Pile Type	Cut-off Elevation (ft)	LRFD Service-I Limit State Total Load (kips) per Pile (Compression)		Nominal Resistance (kips)		Estimated Top of Bedrock Elevation (ft)	Design Tip Elevations (ft)	Specified Tip Elevation (ft)
			Comp-ression	Tension	Comp-ression	Tension			
Abut 1 Left	Class 140 (16" CIDH)	1228.3	140	0	280	0	1232.0	1213.0 (a) 1220.0 (b)	1213.0 (a)
Abut 1 Right	Class 140 (16" CIDH)	1228.3	140	0	280	0	1232.0	1217.0 (a) 1220.0 (b)	1217.0 (a)
Abut 5 Left	Class 140 (16" CIDH)	1222.7	140	0	280	0	1227.0	1206.0 (a) 1213.0 (b)	1206.0 (a)
Abut 5 Right	Class 140 (16" CIDH)	1221.9	140	0	280	0	1227.0	1211.0 (a) 1213.0 (b)	1211.0 (a)

Notes:

1. *Design Tip Elevations are controlled by: (a) Compression, (b) Lateral Load, respectively.*
2. *The Specified Tip Elevation shall not be raised above the Design Tip Elevations for Lateral Load.*
3. *Design Tip Elevation for Lateral Load is provided by Structure Design.*

Table 3. Foundation Design Recommendations

Bent Foundation Design Recommendations											
Support Location	Pile Type	Cut-off Elevation (ft)	Service-I Limit State Load per Support (kips)	Total Permissible Support Settlement (inches)	Required Factored Nominal Resistance per Pile (kips)				Estimated Top of Bedrock Elevation (ft)	Design Tip Elevations (ft)	Specified Tip Elevation (ft)
					Strength Limit		Extreme Event				
					Compression (φ=0.7)	Tension (φ=0.7)	Compression (φ=1)	Tension (φ=1)			
Bent 2 Left	24" CIDH	1227.5	235	1	380	0	150	0	1227.5	1204.0 (a) 1202.0 (b)	1202.0 (a)
Bent 2 Right	24" CIDH	1230.0	190	1	285	0	120	0	1230.0	1213.0 (a) 1215.0 (b)	1213.0 (a)
Bent 3 Left	24" CIDH	1220.0	255	1	410	0	160	0	1220.0	1190.0 (a) 1194.0 (b)	1190.0 (a)
Bent 3 Right	24" CIDH	1228.2	190	1	290	0	110	0	1216.0	1206.0 (a) 1207.0 (b)	1206.0 (a)
Bent 4 Left	24" CIDH	1218.0	245	1	395	0	160	0	1218.0	1190.0 (a) 1193.0 (b)	1190.0 (a)
Bent 4 Right	24" CIDH	1226.3	180	1	280	0	110	0	1222.0	1212.0 (a) 1214.0 (b)	1212.0 (a)

Notes:

1. *Design Tip Elevations are controlled by: (a) Compression (Strength Limit), (b) Lateral Load.*
2. *The Specified Tip Elevation shall not be raised above the Design Tip Elevations for Lateral Load.*
3. *Design Tip Elevation for Lateral Load is provided by Structure Design.*

Table 4. Pile Data Table

Pile Data Table							
Support Location	Pile Type	Cut-Off Elevation (ft)	Nominal Resistance (kips)		Estimated Top of Bedrock Elevation (ft)	Design Tip Elevation (ft)	Specified Tip Elevation (ft)
			Compression	Tension			
Abut 1 Left	16" CIDH	1228.3	280	0	1232.0	1213.0 (a) 1220.0 (b)	1213.0 (a)
Abut 1 Right	16" CIDH	1228.3	280	0	1232.0	1217.0 (a) 1220.0 (b)	1217.0 (a)
Bent 2 Left	24" CIDH	1227.5	550	0	1227.5	1204.0 (a) 1202.0 (b)	1202.0 (d)
Bent 2 Right	24" CIDH	1230.0	410	0	1230.0	1213.0 (a) 1215.0 (b)	1213.0 (a)
Bent 3 Left	24" CIDH	1220.0	590	0	1220.0	1190.0 (a) 1194.0 (b)	1190.0 (a)
Bent 3 Right	24" CIDH	1228.2	420	0	1216.0	1206.0 (a) 1207.0 (b)	1206.0 (a)
Bent 4 Left	24" CIDH	1218.0	570	0	1218.0	1190.0 (a) 1193.0 (b)	1190.0 (a)
Bent 4 Right	24" CIDH	1226.3	400	0	1222.0	1212.0 (a) 1214.0 (b)	1212.0 (a)
Abut 5 Left	16" CIDH	1222.7	280	0	1227.0	1206.0 (a) 1213.0 (b)	1206.0 (a)
Abut 5 Right	16" CIDH	1221.9	280	0	1227.0	1211.0 (a) 1213.0 (b)	1211.0 (a)

Notes:

1. *Design Tip Elevations for all support locations are controlled by (a) Compression, (b) Lateral Load.*
2. *The Specified Tip Elevation shall not be raised above the Design Tip Elevations for Lateral Load.*
3. *The Design Tip Elevation for Lateral Load is provided by Structure Design.*

CONSTRUCTION CONSIDERATIONS

1. Groundwater was measured in a piezometer at the approximate elevation of 1,211.7 feet in Boring RC-12-005 in April 2013. It is possible there may be seepage flow into the drilled shaft through fractures and shear zones from seasonal rainfall or other sources at various depths and locations. The flow rate and the amount of water will be dependent on seasonal precipitation and other factors. The Contractor should be prepared to dewater or install the piles using the "wet" method.

2. The project site is considered to be geologically complex. Due to the chaotic and variable nature of the bedrock, the Contractor should take necessary precautions when drilling into bedrock, to prevent the possibility of fractured bedrock fragments caving into the drilled shaft or causing deflection from vertical during construction.

3. The bedrock is intensely fractured and breaks easily along the preexisting discontinunities such as foliation and healed fractures. Some of the foliation planes, fractures, and joint planes dip steeply to nearly vertical. Some of the fracture and foliation planes may daylight on the wall of the drilled shaft and may cause unexpected cave-in or collapse. The drilling equipment and drilling methods and techniques used for the installation of CIDH piles should minimize the possibility of drilled hole cave-in or collapse.

4. The LOTBs indicates that the percent rock core recovery (REC) ranged from 0% to 100% and the Rock Quality Designation (RQD) ranged from 0% to 30%. Low REC and RQD ratios in the foundation zone also indicate that drilled holes are prone to cave-in or collapse. The Contractor should take appropriate measures to prevent the drilled holes from cave-in or collapse. Caving conditions may also be encountered in the fill material since the fill material has little or no cohesive binding.

5. Temporary casing may be necessary during CIDH pile construction to prevent the caving of the drilled shafts. The temporary casing must be pulled (removed) during the concrete pours.

6. The drilling of the rock socket, the placement of the rebar cage, and concrete pour shall be completed in one continuous operation.

7. The top of bedrock surface elevation is expected to vary and the rock strength is expected to vary also. The rock strength test results indicate that the rock samples are in the range of extremely weak to very strong rock based on the classification of rock strength, ISRM 1981. The hardness of the rock was described in the range of very soft to very hard. Therefore, drilling of the CIDH piles is expected to be difficult.

8. The rock core samples used for rock strength testing may have broken/failed along planes of preexisting weakness, thus the reported rock strengths may be less than the true intact strength of the rock matrix.

9. The drilling for CIDH pile rock sockets, is expected to be difficult when drilling through hard and intensely to very intensely fractured bedrock. Zones with intensely fractured bedrock with open fractures, may cause the drilled shafts to cave-in or collapse during drilling.

10. It is highly recommended that the Contractor inspect/observe the core samples at the Translab facility before bidding. This inspection/observation would give the prospective bidder an understanding of the potentially unstable subsurface material, and the hard and intensely to very intensely fractured bedrock.

11. The rock core samples used for rock strength testing may have broken/failed along planes of preexisting weakness, thus the reported rock strengths may be less than the true intact strength of the rock matrix.

If you have any questions regarding this report, please contact Xing Zheng at 916-227-1036, John L. Thorne at 916-227-1034 or Reza Mahallati at 916-227-1033.

Report by:

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Engineering Geologist
Geotechnical Design – North

JOHN L. THORNE
Engineering Geologist
Geotechnical Design – North

REZA MAHALLATI, P.E. 49374
Senior Materials and Research Engineer
Geotechnical Design – North

Attachments: Appendix A, Figure 1 – Acceleration Response Spectrum recommended for design.

Appendix B, - Rock Strength Index $I_{s\,50}$.

c: GudmundSetberg-OBD-N (E-copy)
KuruswamySelventhiran-OBD-N (E-copy)
GregSlocum-OBD-N (E-copy)
KenHallis-D02 (E-copy)
CassieMitchell-PCE (E-copy)
DerekWillis-DPM (E-copy)
BrianHumphrey-DEP (E-copy)
ByronBerger-DME (E-copy)
ReidBuell-GDN (E-copy)
XingZheng-GDN (E-copy)
JohnThorne-GDN (E-copy)
RezaMahallati-GDN (E-copy)
ShiraRajendra-GS Corporate (E-copy)
Geodog (E-copy)
GDNFile

Appendix A

ARS Curve

Collins Bar Sidehill Viaduct No. 2

Br. No. 05-0092

EA 02-3E7900

EFIS 0200020151

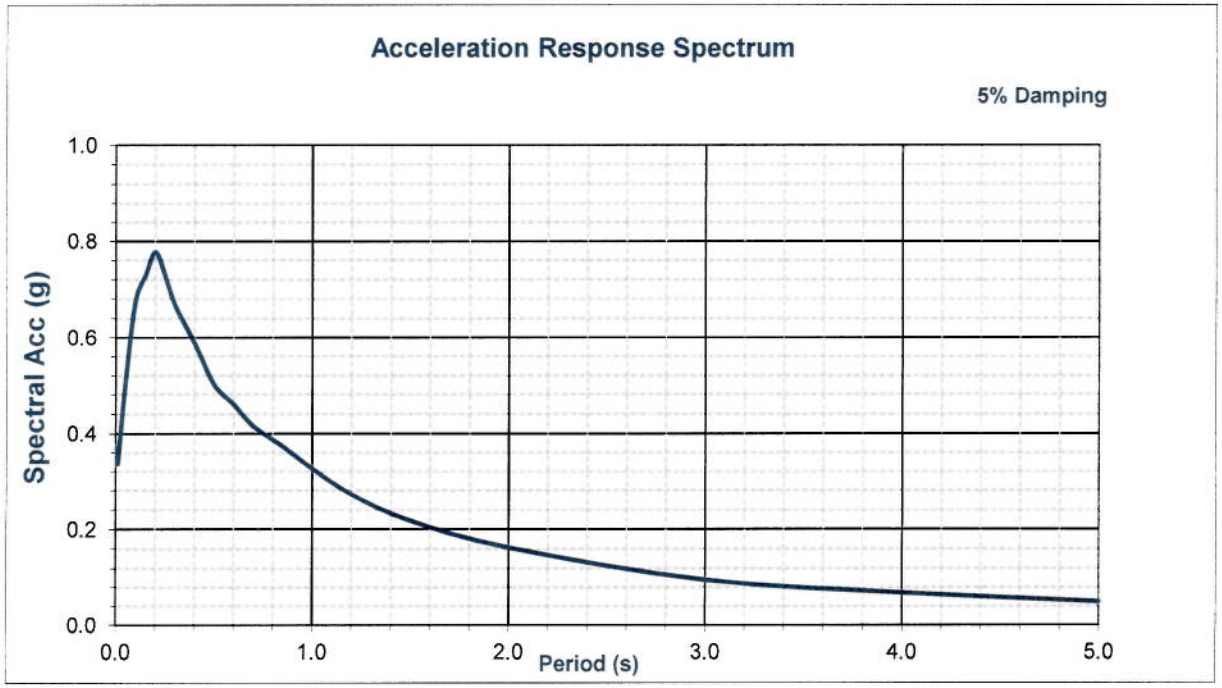
Collins Bar Sidehill Viaduct No. 2

Bridge No. 05-0092
EFIS 0200020151

Latitude 40.79780
Longitude -123.46251

Control **Probabilistic**

Period (s)	Sa(g)
0.010	0.336
0.050	0.508
0.100	0.678
0.150	0.728
0.200	0.777
0.250	0.727
0.300	0.668
0.400	0.589
0.500	0.500
0.600	0.460
0.700	0.416
0.850	0.373
1.000	0.326
1.200	0.272
1.500	0.217
2.000	0.163
3.000	0.096
4.000	0.068
5.000	0.050



Controlling Fault Data for Deterministic Procedure

Fault	Big Lagoon - Bald Mtn	
Fault ID	9	
Style	Rev	
Mmax	7.5	
Dip	35	deg
Z_{TOR}	0	km
Z_{BOT}	13.2	km

R_{rup}	17.5	km
R_{jb}	11.5	km
R_x	30.4	km
V_{S30}	760	m/s
$Z_{1.0}$	N/A	m
$Z_{2.5}$	N/A	km

Notes

This ARS curve is based on the USGS 5% probability of exceedance in 50 years (975 years return period).

Final

Design Response Spectrum

Appendix B

Rock Core Sample Test Results

Collins Bar Sidehill Viaduct No. 2

Br. No. 05-0092

EA 02-3E7900

EFIS 0200020151

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF GEOTECHNICAL SUPPORT
GEOTECHNICAL LABORATORY

UNCONFINED COMPRESSION TEST RESULTS (ASTM D7012 Method C)

JOB LOCATION **02-Tri-299 PM 12.3-12.9** GL No. **13-005** DATE **4/17/2013**

TEST BY **AZM**

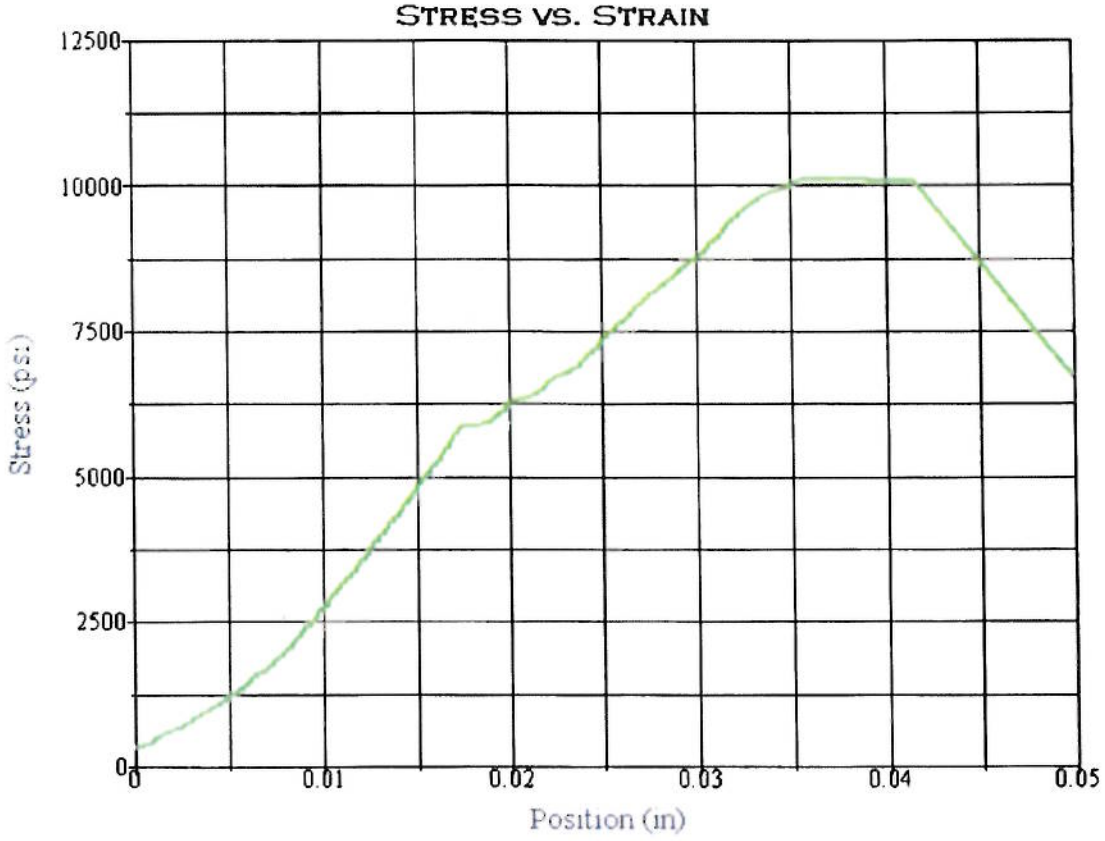
JOB NUMBER **02-3E7900 Collins Bar Viaducts** Bridge No. _____ CHECKED BY **LP 4/18/13**

SAMPLE NO.	DEPTH FT.	DIA. IN.	LENGTH IN.	L/D RATIO	WEIGHT LBS.	LOAD LBS.	DENSITY PCF	STRENGTH PSI	REMARKS
RC-12-001-02	63.0	1.86	2.50	1.34	0.7	27505	166	10123	**
RC-12-022-02	11.0								*
RC-12-002-03	16.5								*
RC-12-022-05	28.5-29								*

Note: No moistures recorded

* Sample fell apart while preparing for testing -- Not suitable for testing

** The test specimen length/diameter ratio was not in compliance with the test method



Test Summary

Counter:	2431
Elapsed Time:	00:04:35
Operator:	AZM
Sample:	RC-12-001-02
Resident Engineer:	
Ticket:	GL# 13-005
E.A. NUMBER:	02-3E7900
Procedure Name:	Cores test
Start Date:	4/17/2013
Start Time:	12:02:00 PM
End Date:	4/17/2013
End Time:	12:06:35 PM
Workstation:	D1K00YB1
Tested By:	AZM
Lab:	Q13-016

Test Results

Specimen Gage Length:	2.5000 in
Diameter:	1.8600 in
Area:	2.7172 in^2
Maximum Load:	27505 lbf
Compressive Strength:	10123 psi

Division of Engineering Services
Geotechnical Laboratory

Point Load Strength Index

Dist-EA. 02-3E7900
Dist-Co-Rte-PM: TRI-299-12.3/12.9

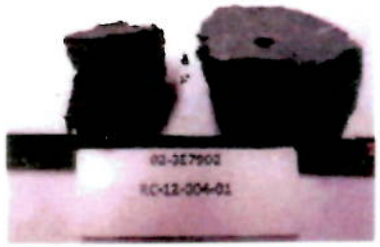
GI Tracking No.: 13-005
Report Date: April 4, 2013

Sample ID	Test Type	Length , L (mm)	Width, W (mm)	Initial Distance Between Contact Points, D(mm)	Final Distance Between Contact Points, D'(mm)	Equivalent Diameter, De (mm)	Failure Load, P (lbs)	Uncorrected Point Load Strength Index Is (psi)	Point Load Strength Index Is (50) (psi)	Remarks
RC-12-001_01	I-L	35	43.5	28.5	25	37.21	466.4	217.31	190	
RC-12-001_03	A-L		47.1	38	35	45.81	524.48	161.21	155	
RC-12-001_04	A-L		47.2	31	29.5	42.11	376.64	137.06	127	
RC-12-004_01	A-L		60	28.5	28	46.25	297.44	89.71	87	

RC-12-001_01

RC-12-001_03

RC-12-001_04



RC-12-004_01

Test Type Abbreviations: D- Diametral, A - Axial, B - Block, I - Irregular Lump

Orientation of Load Direction (if anisotropic): P - Perpendicular to plane of weakness, L - Parallel to plane of weakness

Division of Engineering Services
Geotechnical Laboratory

Point Load Strength Index

Dist-EA: 02-3E7900
Dist-Co-Rte-PM: TRI-299-12 3/12.9

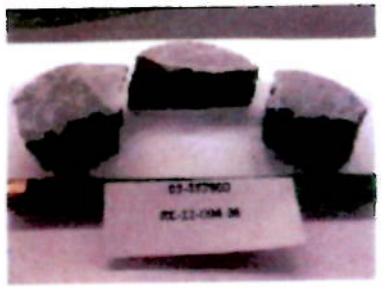
GI Tracking No.: 13-005
Report Date: April 4, 2013

Sample ID	Test Type	Length, L (mm)	Width, W (mm)	Initial Distance Between Contact Points, D(mm)	Final Distance Between Contact Points, D'(mm)	Equivalent Diameter, De (mm)	Failure Load, P (lbs)	Uncorrected Point Load Strength Index Is (psi)	Point Load Strength Index Is (50) (psi)	Remarks
RC-12-004_02	I-L	25	40.7	18.5	16	28.79	1392.16	1083.26	845	
RC-12-004_03	I-L	23	43	27	24	36.25	1499.52	736.26	637	
RC-12-004_04	A-L		60.9	19	17.5	36.84	376.64	179.07	156	• Specimen Dimensions do not comply with ASTM D 5731
RC-12-004_06	A-L		60.9	21	18.5	37.87	1064.8	478.89	423	

RC-12-004_02

RC-12-004_03

RC-12-004_04



RC-12-004_06

Test Type Abbreviations: D- Diametral, A - Axial, B - Block, I - Irregular Lump

Orientation of Load Direction (if anisotropic): P - Perpendicular to plane of weakness, L - Parallel to plane of weakness

Division of Engineering Services
Geotechnical Laboratory

Point Load Strength Index

Dist-EA: 02-3E7900
Dist-Co-Rte-PM: TRI-299-12.3/12.9

GI Tracking No.: 13-005
Report Date: April 4, 2013

Sample ID	Test Type	Length , L (mm)	Width, W (mm)	Initial Distance Between Contact Points, D(mm)	Final Distance Between Contact Points, D'(mm)	Equivalent Diameter, De (mm)	Failure Load, P (lbs)	Uncorrected Point Load Strength Index Is (psi)	Point Load Strength Index Is (50) (psi)	Remarks
RC-12-004_07	A-L		60.4	30	28	46.4	533.28	159.78	155	
RC-12-004_09	A-L		60.8	22	20	39.35	733.92	305.82	275	
RC-12-022_01	A-L		60.9	23	21	40.35	739.2	292.88	266	
RC-12-022_04	A-L		61	20	19	38.41	137.28	60.02	53	• Specimen Dimensions do not comply with ASTM D 5731

RC-12-004_07

RC-12-004_09

RC-12-022_01

RC-12-022_04

Test Type Abbreviations: D- Diametral, A - Axial, B - Block, I - Irregular Lump

Orientation of Load Direction (if anisotropic): P - Perpendicular to plane of weakness, L - Parallel to plane of weakness

Division of Engineering Services
Geotechnical Laboratory

Point Load Strength Index

Dist-EA: 02-3E7900
Dist-Co-Rte-PM: TRI-299-12.3/12.9

GI Tracking No.: 13-005
Report Date: April 4, 2013

Sample ID	Test Type	Length , L (mm)	Width, W (mm)	Initial Distance Between Contact Points, D(mm)	Final Distance Between Contact Points, D'(mm)	Equivalent Diameter, De (mm)	Failure Load, P (lbs)	Uncorrected Point Load Strength Index Is (psi)	Point Load Strength Index Is (50) (psi)	Remarks
RC-12-022_06	A-L		60.7	35.5	32.5	50.12	635.36	163.19	163	
RC-12-022_07	A-L		60.8	17.5	14.5	33.5	241.12	138.59	116	• Specimen Dimensions do not comply with ASTM D 5731

RC-12-022_06

RC-12-022_07

No Image Available

No Image Available

Test Type Abbreviations: D- Diametral, A - Axial, B - Block, I - Irregular Lump

Orientation of Load Direction (if anisotropic): P - Perpendicular to plane of weakness, L - Parallel to plane of weakness

02-3E7904
02-Tri- 299-12.3/12.9
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

PLAC - California Regional Water Quality Control Board

North Coast Region
Water Quality Certification, WDID No. 1A13120WNTR

AGREEMENTS

PLAC - California Department of Fish and Wildlife

Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1

MATERIALS INFORMATION

Revised Foundation Report for Collins Bar Sidehill Viaduct No. 1

Dated: May 28, 2013

Foundation Report for Collins Bar Sidehill Viaduct No. 2

Dated: May 6, 2013

Optional Import Borrow Site

Site Investigation Report

Arieally Deposited Lead, Traffic Stripe Paint, and Naturally Occurring Asbestos
Dated: April 2013

INFORMATION HANDOUT

COLLINS BAR CURVE IMPROVEMENT PROJECT

TRI 299 PM 12.3/12.9

02-3E7904

FOR CONSTRUCTION CONTRACT
IN TRINITY COUNTY NEAR BURNT RANCH
FROM 1.4 MILES TO 0.9 MILE WEST
OF MILL CREEK ROAD

OPTIONAL IMPORT BORROW SITE
TRI-299 Post Mile 13.0
Burnt Ranch Dump

Note: The records from which this compilation was made may be inspected in the District Office at 1656 Union Street, Eureka, CA 95501 or Contact the Disposal Site Coordinator, Johnathon Jackson, (707) 445-6479,
e-mail: Johnathon_Jackson@dot.ca.gov

Facts stated herein are as known to the State of California, Caltrans, and are to be verified by the Contractor as per Section 6-2 of the Standard Specifications.

Table of Contents

INFORMATION HANDOUT

General Provisions

This site is provided by Caltrans, at the option of the contractor, for obtaining import borrow materials to be used in the Collins Bar Curve Project. Existing facilities at this import borrow site shall be preserved from damage by the Contractor.

Cooperation with Others

- This site may also be used by Caltrans Maintenance. Contact for Caltrans is District 1 Maintenance Supt. Weldon Hailey at (707) 464-4868
- This location could be used by the contractor as a disposal site for another Caltrans roadway project at Whole Enchilada Curve located at Trinity 299 Post Mile 0.4/0.9. This could be up to 12,000 cubic yards of earth material to be placed at this location if the contractor elects to use this site.

Buried man-made objects may exist within this import borrow site

- The State assumes no liability for damage to Contractor's equipment. No compensation will be made to the contractor for the handling of non-hazardous man-made objects.
- Hazardous materials will be the responsibility of the State upon notification to the State Engineer.

Removal of import borrow material

- Excavation of borrow material shall not be within 20 feet of the existing drainage facility at the base of the original slope.
- The new slopes of the excavated areas shall be a minimum of 2:1 (H:V) or flatter.
- The finished surface shall be uniformly graded and slopes cat-tracked.
- Materials shall be compacted to the extent that it will firmly support rubber tired equipment, and there is no visible evidence of further consolidation of the material being compacted.
- Final Erosion Control on newly finished slopes shall be treated with **Hydroseed (Seed mix 1),** the same as those for the project.
- Original drainage facilities (ditches & swales) shall be reconfigured to convey all drainage back to its original convergence points. All areas must drain, no standing water. Drainage channels adjacent to the Trinity River will be grass or rock lined,.

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTION
3	LAYOUT

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

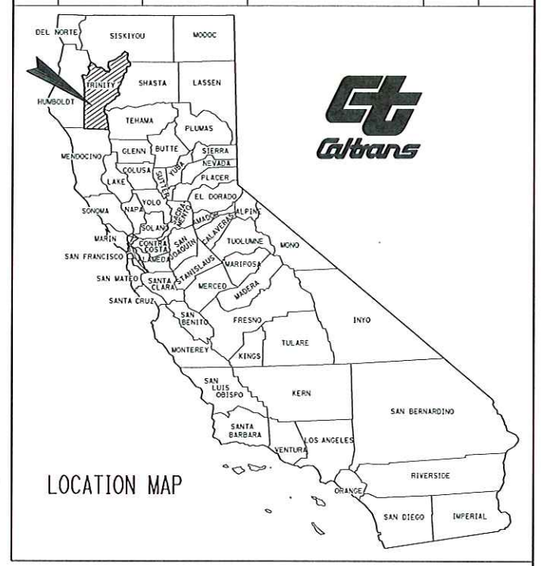
PROJECT PLANS FOR CONSTRUCTION ON

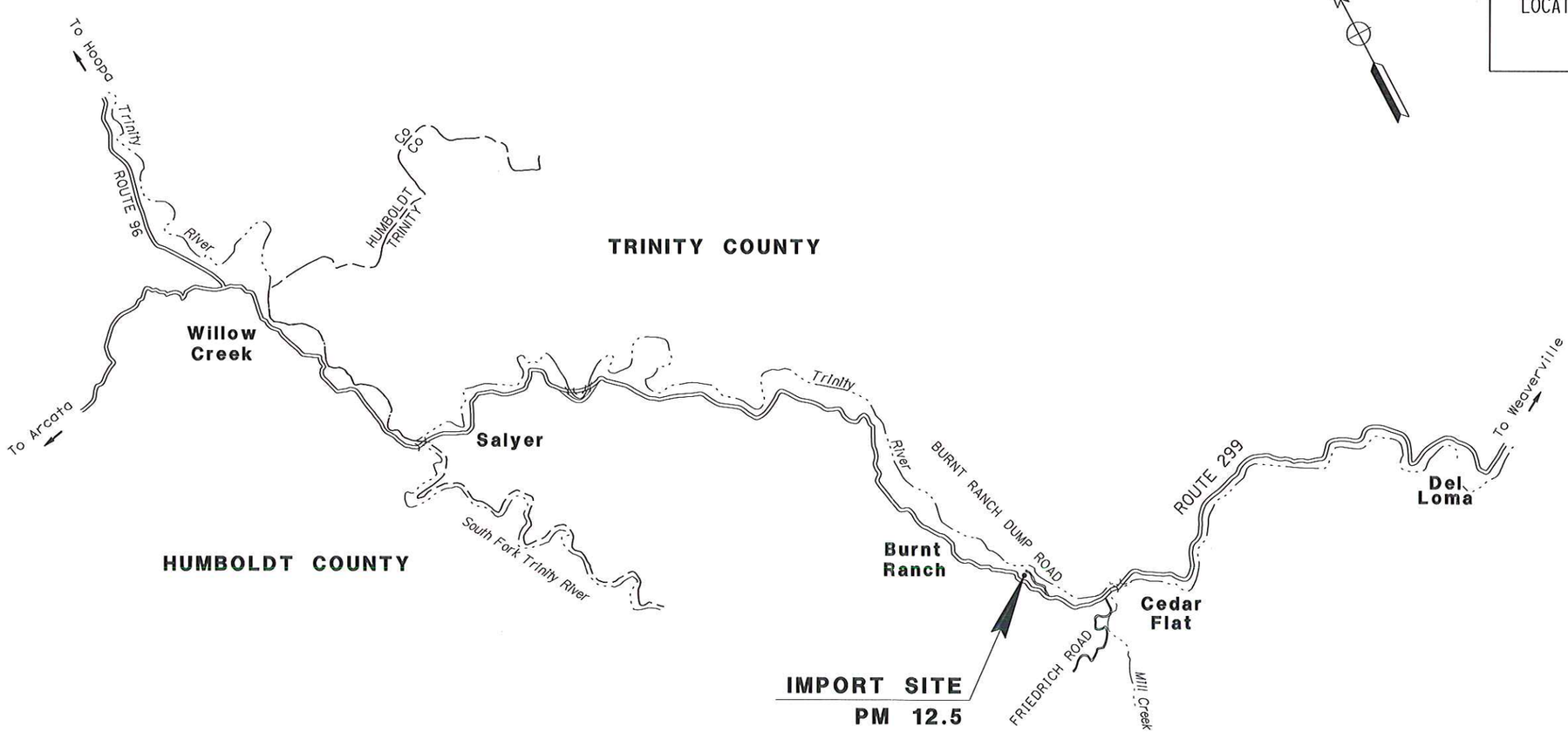
STATE HIGHWAY

OPTIONAL IMPORT SITE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	12.5	1	3





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PROJECT ENGINEER _____ DATE _____
REGISTERED CIVIL ENGINEER

KEN HALLIS
No. C38203
Exp. 3-31-15
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

PLANS APPROVAL DATE _____

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DESIGN ENGINEER	SHAUN ALEXANDER
PROJECT MANAGER	CHRIS HARVEY

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LAST REVISION 10-30-12
DATE PLOTTED => 19-SEP-2013
TIME PLOTTED => 10:36

CONTRACT No. 02-3e7904

CU 03 242 | EA 3e7901

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AADD REVIEW 09-04-13
REGISTERED CIVIL ENGINEER DATE

?
PLANS APPROVAL DATE

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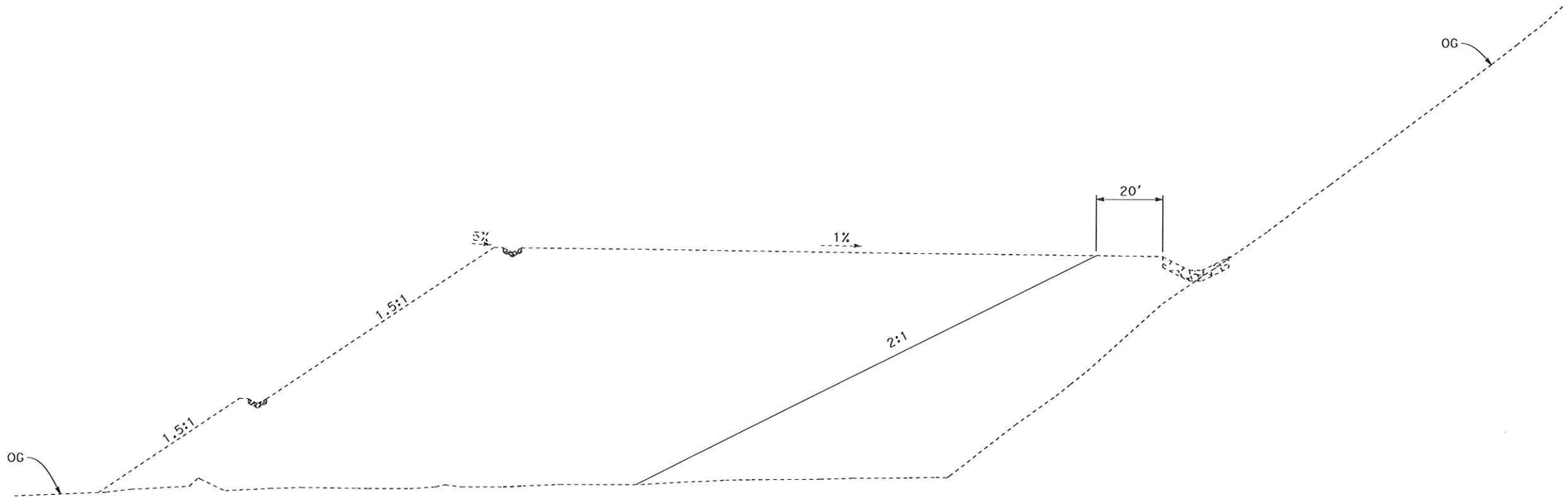
REGISTERED PROFESSIONAL ENGINEER
KEN HALLIS
No. C38203
Exp. 3-31-15
CIVIL
STATE OF CALIFORNIA



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CALCULATED-DESIGNED BY	RYAN PRINS	REVISED BY	
CHECKED BY	KEN HALLIS	DATE REVISED	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® **DESIGN**

FUNCTIONAL SUPERVISOR
AL TRUJILLO

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TIME PLOTTED => 10:35

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AADD REVIEW 09-04-13
REGISTERED CIVIL ENGINEER DATE

?
PLANS APPROVAL DATE

KEN HALLIS No. C38203 Exp. 3-31-15 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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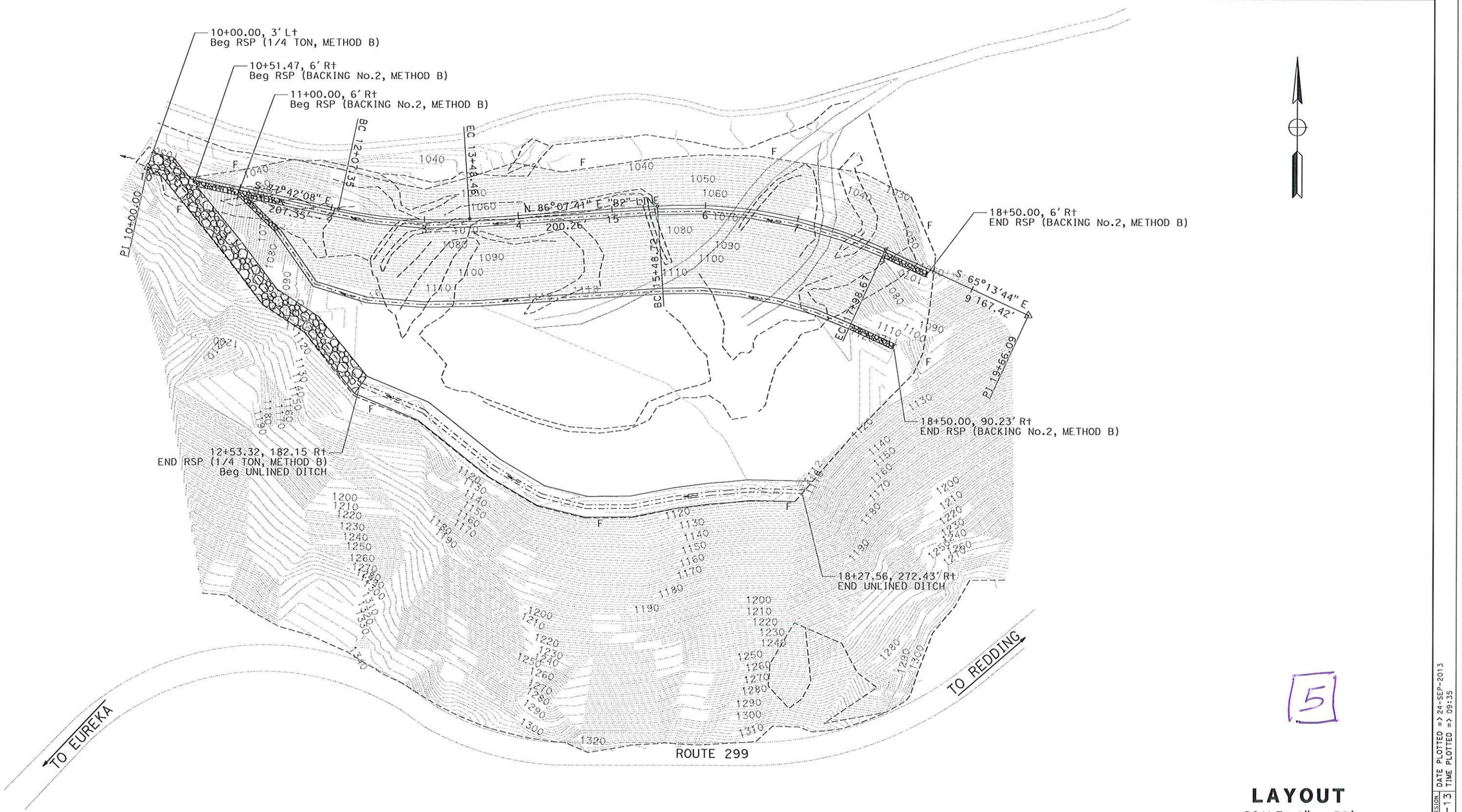

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REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: RYAN PRINS
CHECKED BY: KEN HALLIS
FUNCTIONAL SUPERVISOR: AL TRUJILLO

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

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02-3E7904
02-Tri- 299-12.3/12.9
Project ID 0200020151

PLAC - Responsibility Summary

PERMITS

PLAC - California Department of Fish and Wildlife

Incidental Take Permit for the Trinity Bristle Snail, No. 2081-2013-049-01

PLAC - United States Army Corps of Engineers

Non-Reporting Nationwide Permit 404, No. 14

WATER QUALITY

PLAC - California Regional Water Quality Control Board

North Coast Region
Water Quality Certification, WDID No. 1A13120WNTR

AGREEMENTS

PLAC - California Department of Fish and Wildlife

Streambed Alteration Agreement
Notification No. 1600-2013-0265-R1

MATERIALS INFORMATION

Revised Foundation Report for Collins Bar Sidehill Viaduct No. 1

Dated: May 28, 2013

Foundation Report for Collins Bar Sidehill Viaduct No. 2

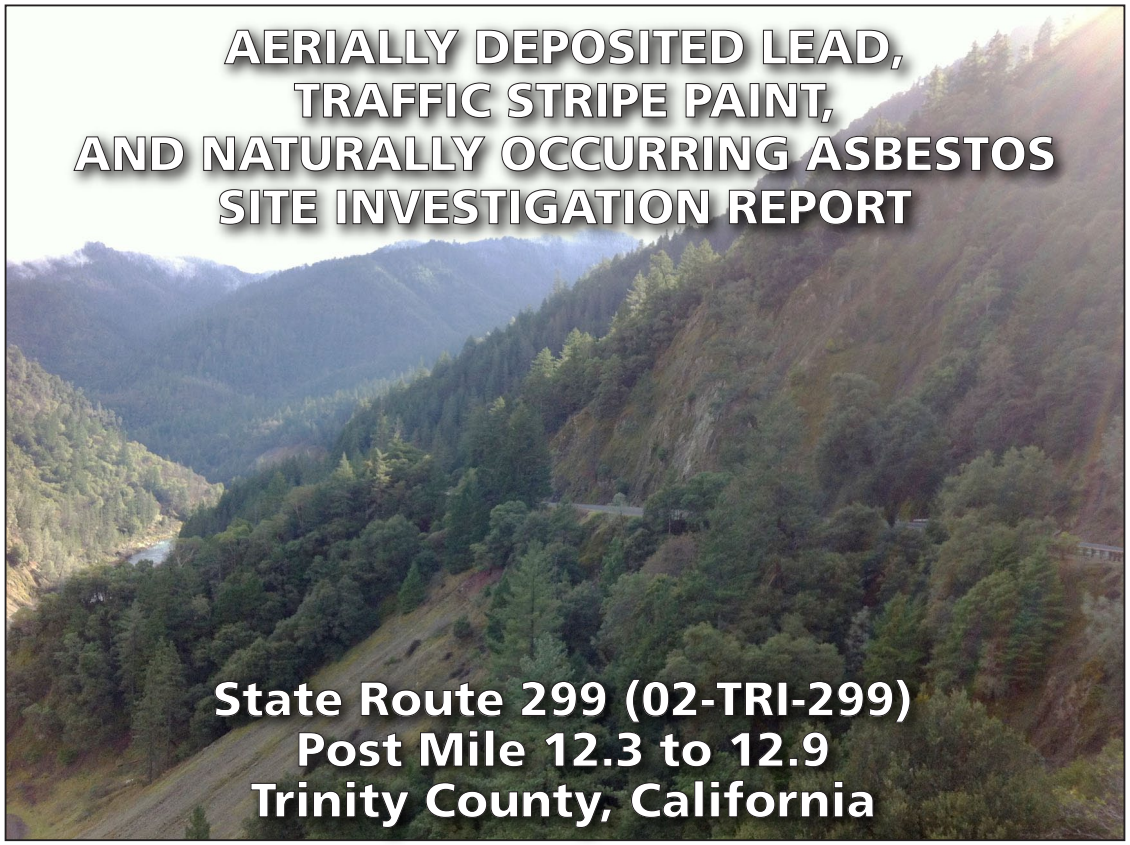
Dated: May 6, 2013

Optional Import Borrow Site

Site Investigation Report

Arieally Deposited Lead, Traffic Stripe Paint, and Naturally Occurring Asbestos
Dated: April 2013

AERIALLY DEPOSITED LEAD, TRAFFIC STRIPE PAINT, AND NATURALLY OCCURRING ASBESTOS SITE INVESTIGATION REPORT



State Route 299 (02-TRI-299)
Post Mile 12.3 to 12.9
Trinity County, California

PREPARED FOR:

CALIFORNIA DEPARTMENT OF TRANSPORTATION – DISTRICT 3
ENVIRONMENTAL ENGINEERING OFFICE
703 B STREET
MARYSVILLE, CALIFORNIA 95901

Caltrans®

PREPARED BY:

GEOCON CONSULTANTS, INC.
3160 GOLD VALLEY DRIVE, SUITE 800
RANCHO CORDOVA, CALIFORNIA 95742

GEOCON

GEOCON PROJECT NO. S9300-06-200
TASK ORDER NO. 200, EA 02-3E7900

APRIL 2013

GEOCON
CONSULTANTS, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Project No. S9300-06-200
April 10, 2013

Mr. Rajive Chadha
California Department of Transportation - District 3
Environmental Engineering Office
703 B Street
Marysville, California 95901

Subject: AERIALLY DEPOSITED LEAD, TRAFFIC STRIPE PAINT, AND NATURALLY OCCURRING ASBESTOS SITE INVESTIGATION REPORT
STATE ROUTE 299 (02-TRI-299), POST MILE 12.3 TO 12.9
TRINITY COUNTY, CALIFORNIA
CONTRACT NO. 03A1368, TASK ORDER NO. 200, EA 02-3E7900

Dear Mr. Chadha:

In accordance with California Department of Transportation (Caltrans) Contract No. 03A1368, Task Order No. 200, and Expense Authorization 02-3E7900, we have performed environmental engineering services at the project site. The Site consists of State Route 299 in Trinity County, California, from approximate Post Mile 12.3 to 12.9. The accompanying report summarizes the services performed including the excavation of 30 direct-push and 10 hand-auger borings for the collection of soil samples for aerially deposited lead testing, traffic stripe paint sampling for total lead analysis, and one hand-auger boring and surface soil/rock sampling from existing cut slopes and stockpiles for naturally occurring asbestos analysis.

The contents of this report reflect the views of the author, who is 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.

Please contact us if you have any questions concerning the contents of this report or if we may be of further service.

Sincerely,

GEOCON CONSULTANTS, INC.

Gemma G. Reblando
Project Geologist

John C. Pfeiffer, PG, CEG
Senior Geologist

PROFESSIONAL GEOLOGIST
JOHN C. PFEIFFER
No. 2372
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

(4 + 2 CD) Addressee

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AERIALLY DEPOSITED LEAD, TRAFFIC STRIPE PAINT, AND NATURALLY OCCURRING ASBESTOS SITE INVESTIGATION REPORT

1.0 INTRODUCTION

This Aerially Deposited Lead (ADL), Traffic Stripe Paint, and Naturally Occurring Asbestos (NOA) Site Investigation Report was prepared under California Department of Transportation (Caltrans) Contract No. 03A1368, Task Order (TO) No. 200, and Expense Authorization (EA) 02-3E7900.

1.1 Project Description and Proposed Improvements

The project area consists of the unpaved shoulders and adjacent road embankment along State Route 299 (SR-299) from approximate Post Mile (PM) 12.3 to 12.9 (the Site) southeast of the town of Willow Creek in Trinity County, California. The approximate project location is depicted on the attached Vicinity Map, Figure 1. Caltrans proposes roadway improvements along the shoulder of SR-299 between PM 12.3 and 12.9 near Burnt Ranch. The approximate sampling locations are depicted on the attached Site Plan, Figure 2.

1.2 General Objectives

Construction of planned roadway improvements along SR-299 will require the disturbance of soil and existing pavement at the Site and may generate excess soil. The purpose of the scope of services outlined in TO No. 200 was to evaluate the Site for potential impacts due to ADL from motor vehicle exhaust in the surface and near-surface soils, to determine whether the yellow traffic stripe paint on the roadway contains lead, and for the presence of NOA derived from ultramafic rock. The investigative results will be used by Caltrans to inform the construction contractors if ADL- and/or NOA-impacted soils and/or lead-containing traffic stripe paint are present at levels of concern within the project boundaries for construction worker health and safety, soil reuse evaluation and waste management/disposal purposes.

2.0 BACKGROUND

The Site consists of the existing Caltrans right-of-way along approximately 0.6 mile of SR-299. Caltrans requested the site investigation to provide data regarding the potential presence of ADL, lead-containing traffic stripe paint, and/or NOA within the proposed roadway improvement areas.

Regulatory criteria to classify a waste as "California hazardous" for handling and disposal purposes are contained in the California Code of Regulations (CCR), Title 22, Division 4.5, Chapter 11, Article 3, § 66261.24. Criteria to classify a waste as "Resource, Conservation, and Recovery Act (RCRA) hazardous" are contained in Chapter 40 of the Code of Federal Regulations (40 CFR), § 261.

2.1 Potential Lead Soil Impacts

Ongoing testing by Caltrans has indicated that ADL exists along major freeway routes due to emissions from vehicles powered by leaded gasoline.

2.2 Hazardous Waste Determination Criteria

For waste containing metals, the waste is classified as California hazardous when: 1) the representative total metal content equals or exceeds the respective Total Threshold Limit Concentration (TTLC); or 2) the representative soluble metal content equals or exceeds the respective Soluble Threshold Limit Concentration (STLC) based on the standard Waste Extraction Test (WET). A waste may have the potential of exceeding the STLC when the waste's total metal content is greater than or equal to ten times the respective STLC value, since the WET uses a 1:10 dilution ratio. Hence, when a total metal is detected at a concentration greater than or equal to ten times the respective STLC, and assuming that 100 percent of the total metals are soluble, soluble metal analysis is required. A material is classified as RCRA hazardous, or Federal hazardous, when the representative soluble metal content equals or exceeds the Federal regulatory level 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 and corrosivity; 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 corrosivity. Waste that is classified as either California-hazardous or RCRA-hazardous requires management as a hazardous waste.

The Department of Toxic Substances Control (DTSC) regulates and interprets hazardous waste laws in California. DTSC generally considers excavated or transported materials that exhibit "hazardous waste" characteristics to be a 'waste' requiring proper management, treatment and disposal. Soil that contains lead above hazardous waste thresholds and is left in-place would not be necessarily classified by DTSC as a 'waste.' The DTSC has provided site-specific determinations that "movement of wastes within an area of contamination does not constitute 'land disposal' and, thus, does not trigger hazardous waste disposal requirements." Therefore, lead-impacted soil that is scarified in-place, moisture-conditioned, and recompacted during roadway improvement activities might not be considered a 'waste.' DTSC should be consulted to confirm waste classification. It is noted that in addition to DTSC regulations, health and safety requirements and other local agency requirements may also apply to the handling and disposal of lead-impacted soil.

2.3 Potential Lead-based Traffic Stripe Paint Impacts

Yellow traffic stripe paint utilized by Caltrans may contain lead. The presence of elevated lead requires sampling and analytical testing of the paint stripe materials to determine appropriate health and safety procedures and proper management and disposal practices. Disposal of removed traffic stripe paint materials is dependent on the method utilized to remove these materials (i.e. focused stripe removal vs. pavement grinding).

2.4 Naturally Occurring Asbestos

The construction activities proposed by Caltrans may disturb NOA-containing soil and/or rock units, if present at the Site. The California Air Resources Board (CARB) has mitigation practices for construction, grading, quarrying and surface mining operations that may disturb natural occurrences of asbestos as outlined in CCR Title 17, § 93105. NOA potentially poses a health hazard when it becomes an airborne particulate. Mitigation practices can reduce the risk of exposure to asbestos-containing dust. The primary mitigation practice used for controlling exposure to potentially asbestos-containing dust is the implementation of engineering controls including wetting the materials being disturbed. If engineering controls do not adequately control exposure to potentially asbestos-containing dust, the use of personal protective equipment including wearing air purifying respirators with High Efficiency Particulate Air (HEPA) filters is required during construction activities. Dust control methods similar to those in CCR Title 17, § 93105 are outlined in CCR Title 17, § 93106 for airborne asbestos in road surfacing applications. Using surfacing material with 0.25% or more asbestos material is not permitted and wetting of the material or the application of a surface sealant is recommended to minimize disturbance of the asbestos material. Onsite reuse or disposal of NOA-containing materials is allowed by CCR Title 17, § 93106 and CCR Title 17, § 93105 if it is buried under at least 3 inches of material that does not contain NOA.

3.0 SCOPE OF SERVICES

The scope of services requested by Caltrans in TO No. 200 included the collection of soil samples for analysis to determine lead and asbestos content, collection of yellow traffic stripe paint samples to determine lead content, and the preparation of this report.

3.1 Pre-field Activities

- Utilized a *Health and Safety Plan* dated March 2009 from previous TO No. 78 to provide guidelines on the use of personal protective equipment and the health and safety procedures implemented during the field activities.
- Provided 48-hour notification to Underground Service Alert (USA Ticket No. 451177) prior to job site mobilization.
- Retained the services of Advanced Technologies Laboratories (ATL), a Caltrans-approved and California-certified analytical laboratory, to perform the chemical analyses of soil and paint samples.

- Retained the services of EMSL Inc., a Caltrans-approved analytical laboratory, to perform the asbestos analyses of samples.
- Reviewed documents pertaining to the geologic setting of the site vicinity.

3.2 Field Activities

On December 12 and 13, 2012, we advanced 30 direct-push and 10 hand-auger borings to an approximate sampling depth of 3.0 feet for collecting soil samples for ADL testing. The borings were advanced along westbound (WB) and eastbound (EB) SR-299. Soil samples were collected at depth intervals of 0.0 to 0.5 foot, 0.5 to 1.0 foot, 1.0 to 2.0 feet, and 2.0 to 3.0 feet.

On December 13, 2012, a Geocon Professional Geologist performed geologic reconnaissance of the Site. The geologist collected additional composite samples and one discrete soil/rock sample from existing roadway cut slopes and stockpiles for NOA analysis. We also advanced one hand-auger boring to collect additional soil samples for NOA analysis.

We collected yellow traffic stripe paint samples at Caltrans-designated sampling locations for lead analysis.

On February 21, 2013, a Geocon Professional Geologist performed further geologic reconnaissance of the Site. The geologist advanced three additional hand-auger borings to collect six discrete soil/rock samples from the existing roadway shoulder. We also collected four composite soil samples from two additional stockpiles for NOA analysis.

The sample locations were selected in the field by the Geocon field manager. Following sample collection, the borings were backfilled with excess soil cuttings. Eleven of the borings (WB11 through WB16, EB17 through EB19, WB39, WB40, and EBH41) and one traffic stripe paint sample location (PC1) were not from the Site and are not associated with this study. Details of the field activities are presented in the following sections.

4.0 INVESTIGATIVE METHODS

4.1 ADL Soil Sampling Procedures

A total of 101 soil samples were collected for lead analysis from 33 ADL borings at the Site (WB1 through WB10, EB20 through EB25, WBH26 through WBH30, EBH31 through EBH35, and WB36 through WB38). Up to four soil samples were collected from each boring. Refusal conditions were encountered in several borings at depths between 1.0 and 3.0 feet. The soil samples were placed in labeled Ziploc® re-sealable plastic bags for field homogenization and subsequently labeled, placed in

an ice chest, and delivered to ATL for analytical testing under chain-of-custody (COC) documentation. Following sample collection, the borings were backfilled with excess soil cuttings.

The coordinates of the boring locations were determined using a global positioning system (GPS) except borings EBH31 through EBH33, EBH35 and WB37. Coordinates for these borings could not be obtained due to failed satellite connection. The GPS was utilized during the field activities to locate the horizontal position of the boring locations with an error of no more than 3.3 feet. The latitude and longitude of the boring locations are summarized in Table 1. The approximate ADL boring locations at the Site are shown on Figure 2.

4.2 Traffic Stripe Paint Sampling Procedures

We collected one traffic stripe paint sample from the Site for lead analysis (PC2). The traffic stripe paint sample was collected using a hammer to break a chip off the traffic stripe paint, then the sample was placed in a Ziploc® re-sealable plastic bag, labeled, and delivered to ATL under standard COC documentation. The approximate traffic stripe paint sample location at the Site is shown on Figure 2.

4.3 NOA Soil Sampling

Prior to sample collection, we conducted a reconnaissance assessment of the exposed soil and rock types present within cut slopes and stockpiles at the Site. We obtained soil samples for NOA analysis from 33 ADL borings and three additional hand-auger borings at the Site (WB45 through WB47), and from cut slopes (EB42 through EB44). Composite samples COMP STK 1A,B,C,D and COMP STK 2A,B,C,D were obtained from a stockpile area on the south side of SR-299 approximately 350 feet west of Burnt Ranch Dump Road (Upper Stockpile Area on Figure 2). Composite samples STK3-A, STK3-B, STK4-A, and STK4-B were obtained from two stockpiles located at the west end of Burnt Ranch Dump Road, approximately 450 feet northwest of the Burnt Ranch Dump Transfer Station (Lower Stockpile Area on Figure 2). Composite samples STK3-A, STK3-B, STK4-A, and STK4-B were each composed of soil collected from eight locations across one-half of a stockpile.

ADL samples collected from a depth interval of 2.0 to 3.0 feet were split into two samples, and the second sample was placed in a labeled Ziploc® re-sealable plastic bag and labeled with sample identification for possible asbestos analysis. For ADL borings where refusal was encountered at depths less than 3.0 feet, the deepest sample obtained from that boring was split into two samples and the second sample was retained for possible asbestos analysis. Portions of these discrete soil samples collected from adjacent sample locations were field-composited into two-, three- or four-point composite soil samples (Table 4). The composite samples were placed in labeled Ziploc® re-sealable plastic bags and delivered to EMSL for asbestos analysis under COC protocol. The approximate NOA sample locations at the Site are shown on Figure 2.

4.4 Traffic Control

We provided roadway traffic control during the field sampling activities including the use of "Shoulder Work Ahead" signs and orange traffic cones

4.5 Quality Assurance/Quality Control (QA/QC) Procedures

QA/QC procedures were performed during the field exploration activities. These procedures included the decontamination of sampling equipment before each sample was collected and providing COC documentation for each sample submitted to the laboratories. The soil sampling equipment was cleansed between borings by washing the equipment with an Alconox® solution followed by a double rinse with deionized water. The decontamination water was discharged to the ground surface within the Caltrans right-of-way, away from the roadway and storm drain inlets.

4.6 Laboratory Analyses

4.6.1 ADL Soil and Traffic Stripe Paint Samples

One hundred forty-four soil samples and two traffic stripe paint samples were analyzed for total lead following United States Environmental Protection Agency (EPA) Test Method 6010B under five-day turnaround time (TAT). The laboratory was instructed to homogenize the soil samples prior to analysis in accordance with Contract 03A1368 requirements.

4.6.2 NOA Samples

EMSL performed asbestos fiber analysis on a total of 19 composite samples and two discrete samples under one-week TAT. EMSL analyzed the samples for asbestos using polarized light microscopy (PLM) by CARB Method 435 (CARB 435). The CARB 435 preparation includes milling the sample to a -200 mesh size which also homogenizes the sample. The analytical sensitivity of the PLM analysis was 0.25% by area. Discrete samples collected from borings WB45 through WB47 from the most recent NOA sampling were held by the laboratory.

4.6.3 Laboratory QA/QC Procedures

QA/QC procedures were performed by ATL as applicable for each method of analysis with specificity for each analyte listed in the test method's QA/QC. QA/QC measures for the lead analysis included the following:

- One method blank for every ten samples, batch of samples or type of matrix, whichever was more frequent.
- One sample analyzed in duplicate for every ten samples, batch of samples or type of matrix, whichever was more frequent.

- One spiked sample for every ten samples, batch of samples or type of matrix, whichever was more frequent, with the spike made at ten times the detection limit or at the analyte level.

Prior to submitting the samples to the laboratories, the COC documentation was reviewed for accuracy and completeness. Copies of the laboratory reports and COC documentation are presented in Appendix A.

5.0 FIELD OBSERVATIONS AND INVESTIGATIVE RESULTS

5.1 Geologic Map Review

We reviewed the following documents pertaining to the geologic setting of the Site:

1. *Geologic Map of California - Redding Sheet*, California Department of Conservation, Division of Mines and Geology, Scale 1:250,000, 1962.
2. *Digital Geologic Map of the Redding 1º x 2º Quadrangle, Shasta, Tehama, Humboldt, and Trinity Counties, California*, Department of the Interior, United States Geological Survey, Open-File Report 2012-1228, Scale 1:250,000, 2012.
3. *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos,* California Department of Conservation, Division of Mines and Geology, Open-File Report 2000-19, Scale 1:1,000,000, 2000.
4. *Fault Activity Map of California And Adjacent Areas,* California Department of Conservation, Division of Mines and Geology, California Geologic Data Map Series, Map No. 6, Scale 1:750,000, 1994.

References 1 and 2 depict the rock units underlying the Site along EB and WB SR-299 as described below. The boring/sample locations are included in the general area of the following geologic units as identified in the field.

- Hayfork Terrane is composed mostly of medium-grained monzodiorite and minor gabbro and pyroxenite from the Ironside Mountain Batholith, which are not considered likely to contain NOA. Borings located within this geologic unit are WB1 through WB4, EB22 through EB25, WBH26 through WBH29, EBH35, WB36 and EB43.
- Western Jurassic Terrane is composed of metasedimentary rock (interbedded mudstone, graywacke and conglomerate), which are not considered likely to contain NOA. Borings located within this geologic unit are WB5 through WB10, EB20, EB21, WBH30, EBH31 through EBH34, WB37, WB38, WB45, and WB46.

The nearest ultramafic rocks are depicted at least 3 miles northwest of the Site based on our review of Reference 3. Reference 4 depicts a branch of the Salt Creek Fault cutting across SR-299 just north and south of the Site.

5.2 Field Observations

John Pfeiffer, a California Certified Engineering Geologist (CEG 2372) with experience in the assessment of NOA, performed the geologic assessment of the outcrops visible on the Site. The observed geology of the Site was generally consistent with that depicted on References 1 and 2, consisting of metasedimentary rock (slate and semi-schist), metavolcanic rock (pillow basalt), plutonic rock (dioritic and gabbroic), and a zone of alteration adjacent to the plutonic rock. Based on low-level metamorphism observed at the Site, the observed geology of the Site did not appear likely to contain NOA.

The samples submitted for laboratory analysis consisted of a representative mix of materials observed at the Site. Groundwater was not encountered in the borings during the field sampling activities.

5.3 ADL Soil Analytical Results

Total lead was detected in 100 of the 101 soil samples analyzed from the Site at concentrations ranging from 1.1 to 43 mg/kg. None of the samples from the Site had a total lead concentration greater than 50 mg/kg (i.e., ten times the STLC value for lead of 5.0 mg/l).

A summary of the ADL analytical results for soil samples from the Site are presented on Table 2. A copy of the ATL laboratory report and COC documentation is presented in Appendix A.

5.4 Traffic Stripe Paint Sample Analytical Results

Total lead was detected in the yellow traffic stripe paint sample from the Site at a concentration of 3.4 mg/kg, less than 50 mg/kg (i.e., ten times the STLC value for lead of 5.0 mg/l).

The analytical result for the traffic stripe paint sample from the Site is provided on Table 3. A copy of the ATL laboratory report and COC documentation is presented in Appendix A.

5.5 NOA Results

A total of 16 composite samples and 1 discrete sample from the Site and the Upper and Lower Stockpile Areas were analyzed by EMSL for asbestos by the PLM method using the CARB 435 sample preparation method. Results for the 10 composite samples and 1 discrete sample from locations at the Site were reported as none detected for asbestos and 100% non-fibrous. Results for both composite stockpile samples from the Upper Stockpile Area and 1 composite stockpile sample from the Lower Stockpile Area were reported as none detected for asbestos and 100% non-fibrous. Three composite stockpile samples from the Lower Stockpile Area were reported to contain chrysotile asbestos at less than 0.25%. A summary of NOA analytical results for soil samples from the Site are presented on Table 4. A copy of the EMSL laboratory report and COC documentation is in Appendix A.

5.6 Laboratory QA/QC

We reviewed the QA/QC provided with the ATL laboratory report. The relative percent differences for sample duplicates were outside acceptance criteria for several samples. Calculation is based on raw values as noted in the laboratory report. Based on the laboratory QA/QC data, no additional qualification of the data presented herein is necessary, and the data are of sufficient quality for the purposes of this report.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 ADL

Total lead concentrations at the Site ranged from less than the reporting limit of 1.0 to 43 mg/kg, with an average total lead concentration of 8.7 mg/kg. Soil excavated to a depth of 3.0 feet or shallower within the project limits as represented by borings WB1 through WB10, EB20 through EB25, WBH26 through WBH30, EBH31 through EBH35, and WB36 through WB38 will not require special soil handling and disposal procedures based on lead content and can be reused or disposed of as non-hazardous soil since the total lead concentrations are less than 50 mg/kg (ten times the lead STLC of 5.0 mg/l).

Per Caltrans' requirements, the contractor(s) should prepare a project-specific Lead Compliance Plan (CCR Title 8, Section 1532.1, the "Lead in Construction" standard) to minimize worker exposure to lead-containing soil. The plan should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of lead-containing soil.

6.2 Traffic Stripe Paint

The yellow traffic stripe paint was sampled per Caltrans' request since it may be removed from the underlying asphalt concrete by grinding or sand blasting, which would create a paint waste stream. The analytical results of the traffic stripe paint will be used by Caltrans to provide contractors with preliminary analytical data of the traffic stripe paint.

Total lead was detected in yellow traffic stripe paint sample PC2 at 3.4 mg/kg, less than ten times the STLC value for lead of 5.0 mg/l and the TTLC value for lead of 1,000 mg/kg. Thus, the yellow traffic stripe paint at the Site will not require disposal as a California hazardous waste based on lead content.

6.3 Naturally Occurring Asbestos

Geologic conditions observed at the Site are consistent with the mapped geology of the area, consisting of metasedimentary, metavolcanic and plutonic rocks, and a zone of alteration. We did not observe ultramafic rock or other geologic conditions conducive to the formation of NOA on the Site.

Results for all 10 samples submitted for NOA analysis from the Site were reported as none detected for asbestos and 100% non-fibrous. Since geologic conditions conducive to the formation of NOA were not observed on the Site and the laboratory did not report asbestos in the samples from the Site, engineering controls to minimize the aerial dispersion of NOA are not required for operations at the Site, and soils generated from the Site during construction can be reused or disposed of without restrictions with regard to NOA.

Results for both samples submitted for NOA analysis from the Upper Stockpile Area were reported as none detected for asbestos and 100% non-fibrous. Since geologic materials considered likely to contain NOA were not observed in the Upper Stockpile Area and the laboratory did not report asbestos in the samples from the Upper Stockpile Area, engineering controls to minimize the aerial dispersion of NOA are not required for operations associated with reuse of materials obtained from the Upper Stockpile Area.

Three of the four composite soil/rock samples submitted for analysis from the Lower Stockpile Area were reported to contain chrysotile asbestos at less than 0.25%. While these results are below CARB's regulatory limit (0.25%), we recommend that if Caltrans uses material from the Lower Stockpile Area, the contractor(s) should implement NOA-containing soil management practices and asbestos worker protection measures as discussed in the following sections.

6.3.1 NOA-containing Soil Management

The contractor(s) should prepare and implement an Asbestos Dust Mitigation Plan (ADMP) that describes measures that will be taken to control the potential release of NOA-containing dust from the stockpiled materials as a result of construction excavation activities. Asbestos dust control activities to be implemented shall be in compliance with the following:

- CCR § 93105 – Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations (ATCM 93105);
- CCR § 93106 – Asbestos Airborne Toxic Control Measure for Surfacing Applications (ATCM 93106); and
- North Coast Unified Air Quality Management District (AQMD) guidelines.

If reused within the Caltrans right-of-way, the material excavated on the Site may be reused onsite or within Caltrans right-of-way (including surface applications), or disposed of in a landfill without restriction as it contains less than 0.25% asbestos.

6.3.2 Asbestos Worker Protection

Caltrans requires that the contractor(s) prepare a project-specific Asbestos Compliance Plan (CCR Title 8, § 1529, the "Asbestos in Construction" standard) to minimize potential worker exposure to asbestos-containing materials at the project area. The plan should include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of asbestos-containing soil.

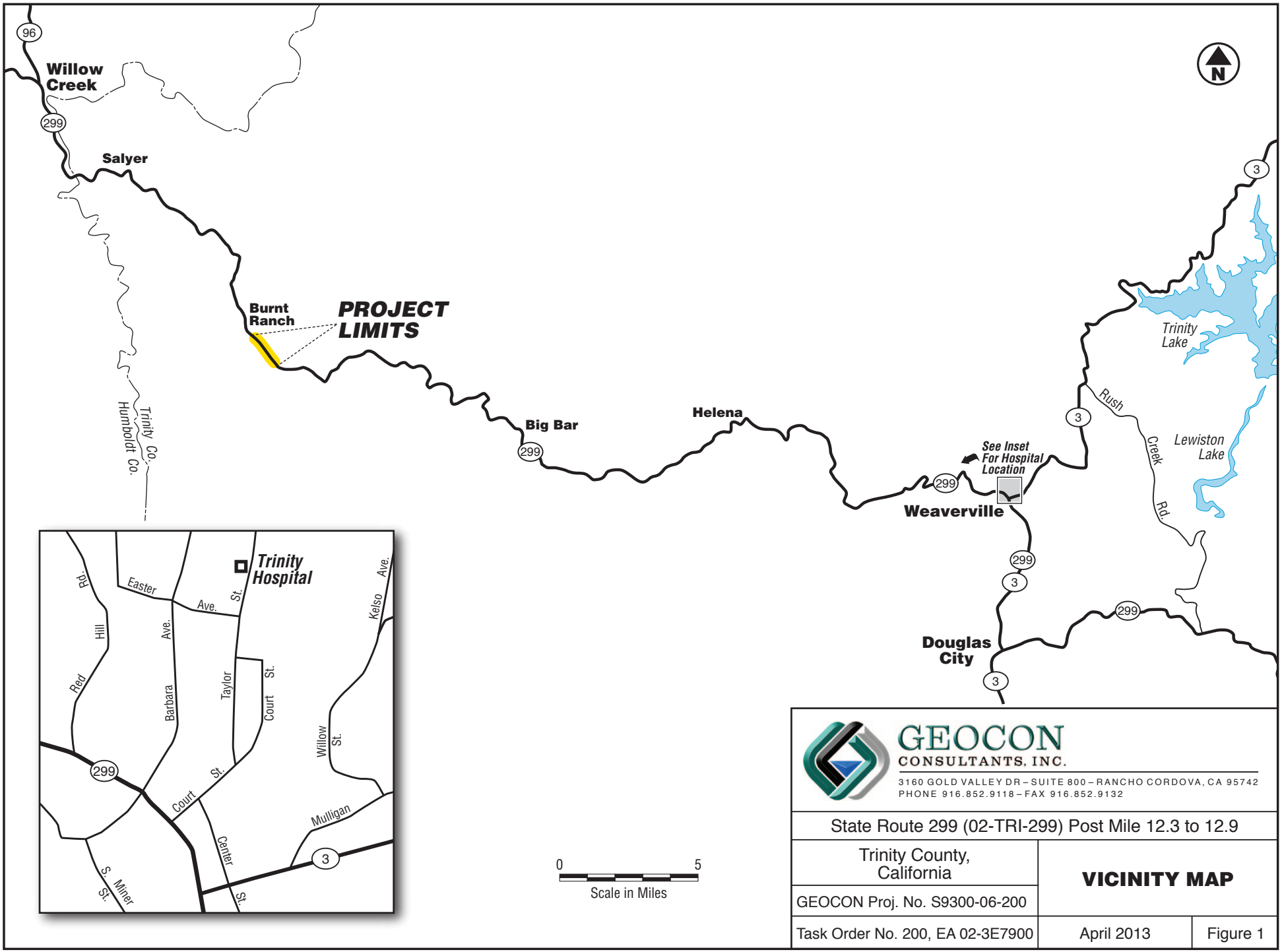
Construction/maintenance activities involving potentially asbestos-containing materials may fall under regulatory jurisdiction of the California Division of the Occupational Safety and Health Administration (Cal-OSHA) under CCR Title 8, § 5208. Mitigation measures during construction/maintenance activities should be utilized to minimize potential releases of NOA to air (dust control) and surface waters (stormwater discharge).

Currently, regulatory exposure limits and health hazard data are not available for NOA in soils. Federal regulations governing asbestos define it as the asbestiform variety of the amphibole minerals actinolite, amosite, anthophyllite, crocidolite, and tremolite, and the asbestiform variety of serpentine, chrysotile. Asbestos fibers occurring in industrial materials are considered by the National Institute for Occupational Safety and Health as potential occupational carcinogens. Prudence is recommended, therefore, in dealing with soils potentially containing NOA. Engineering controls, such as wet methods for dust suppression, should be utilized to minimize aerial dispersion of NOA fibers in planned work areas during excavation and construction activities. Under CCR Title 8, § 5208, disturbance of asbestos-containing materials requires wet working methods and possible respiratory protection and air monitoring. The CARB has established protocols outlined in CCR Title 17, § 93105 for the implementation of worker health, safety and monitoring plans for excavation, grading and transport of NOA-containing soils. The excavation contractor should consult CCR Title 17, § 93105 and contact Cal-OSHA to establish the appropriate regulatory protocol and actions necessary for excavation and/or disturbance of asbestos-containing soils.

7.0 REPORT LIMITATIONS

This report has been prepared exclusively for Caltrans. 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. We 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.



GEOCON
CONSULTANTS, INC.
3160 GOLD VALLEY DR – SUITE 800 – RANCHO CORDOVA, CA 95742
PHONE 916.852.9118 – FAX 916.852.9132

State Route 299 (02-TRI-299) Post Mile 12.3 to 12.9

Trinity County, California	**VICINITY MAP**	
GEOCON Proj. No. S9300-06-200		
Task Order No. 200, EA 02-3E7900	April 2013	Figure 1

LEGEND:

- WB1 ⊗ Approximate Soil Boring Location
- PC1 ▲ Approximate Paint Chip Sample Location
- ⊗ ⊗ ⊗ Composite Sample

0 200
Scale in Feet

GEOCON
CONSULTANTS, INC.
3160 GOLD VALLEY DR – SUITE 800 – RANCHO CORDOVA, CA 95742
PHONE 916.852.9118 – FAX 916.852.9132

State Route 299 (02-TRI-299) Post Mile 12.3 to 12.9

Trinity County, California	**SITE PLAN**	
GEOCON Proj. No. S9300-06-200		
Task Order No. 200, EA 02-3E7900	April 2013	Figure 2

TABLE 1
SUMMARY OF SOIL SAMPLE LOCATION COORDINATES
EA 02-3E7900
STATE ROUTE 299 (02-TRI-299) POST MILE 12.3 TO 12.9
TRINITY COUNTY, CALIFORNIA

BORING ID	SAMPLE DATE	LATITUDE	LONGITUDE
WB1	12/12/2012	40.794248828	-123.458273124
WB2	12/12/2012	40.795237629	-123.459941012
WB3	12/12/2012	40.796726144	-123.460811111
WB4	12/12/2012	40.797174309	-123.461121122
WB5	12/12/2012	40.797518751	-123.461741162
WB6	12/12/2012	40.797733119	-123.462168943
WB7	12/12/2012	40.797921805	-123.462614472
WB8	12/12/2012	40.799592042	-123.463191898
WB9	12/12/2012	40.800111065	-123.463399950
WB10	12/12/2012	40.802392886	-123.463533623
EB20	12/12/2012	40.800534202	-123.464578050
EB21	12/12/2012	40.800305422	-123.463941056
EB22	12/12/2012	40.794984563	-123.459780764
EB23	12/12/2012	40.794586706	-123.459443523
EB24	12/12/2012	40.794215245	-123.458814839
EB25	12/12/2012	40.794071453	-123.458221132
WBH26	12/13/2012	40.794629372	-123.459231302
WBH27	12/13/2012	40.794868046	-123.459535980
WBH28	12/13/2012	40.795787341	-123.460471280
WBH29	12/13/2012	40.796130877	-123.460716377
WBH30	12/13/2012	40.798292941	-123.462989849
EBH31	12/13/2012	NA	NA
EBH32	12/13/2012	NA	NA
EBH33	12/13/2012	NA	NA
EBH34	12/13/2012	40.797486829	-123.461948298
EBH35	12/13/2012	NA	NA
WB36	12/13/2012	40.796830853	-123.460831567
WB37	12/13/2012	NA	NA
WB38	12/13/2012	40.800253855	-123.463565012
WB39	12/13/2012	NA	NA
WB40	12/13/2012	NA	NA
EBH41	12/13/2012	NA	NA
EB42	12/13/2012	NA	NA
EB43	12/13/2012	NA	NA
EB44	12/13/2012	NA	NA
WB45	12/13/2012	NA	NA
WB46	12/13/2012	NA	NA
WB47	12/13/2012	NA	NA

Notes:
NA = GPS data not available

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - LEAD
EA 02-3E7900
STATE ROUTE 299 (02-TRI-299) POST MILE 12.3 TO 12.9
TRINITY COUNTY, CALIFORNIA

BORING ID	SAMPLE DEPTH (feet)	TOTAL LEAD (mg/kg)
WB1-0.0	0.0	41
WB1-0.5	0.5	2.6
WB1-1.0	1.0	5.1
WB2-0.0	0.0	32
WB2-0.5	0.5	2.0
WB2-1.0	1.0	2.5
WB2-2.0	2.0	2.6
WB3-0.0	0.0	7.3
WB3-0.5	0.5	2.9
WB3-1.0	1.0	3.9
WB3-2.0	2.0	2.8
WB4-0.0	0.0	5.3
WB4-0.5	0.5	4.1
WB4-1.0	1.0	4.4
WB4-2.0	2.0	4.2
WB5-0.0	0.0	17
WB5-0.5	0.5	7.6
WB5-1.0	1.0	4.5
WB5-2.0	2.0	4.3
WB6-0.0	0.0	12
WB6-0.5	0.5	13
WB6-1.0	1.0	3.7
WB6-2.0	2.0	4.5
WB7-0.0	0.0	34
WB7-0.5	0.5	4.9
WB7-1.0	1.0	4.9
WB7-2.0	2.0	3.9
WB8-0.0	0.0	27
WB8-0.5	0.5	7.8
WB8-1.0	1.0	6.5
WB8-2.0	2.0	8.6
WB9-0.0	0.0	6.3
WB9-0.5	0.5	7.3
WB9-1.0	1.0	7.9
WB9-2.0	2.0	6.7
WB10-0.0	0.0	10
WB10-0.5	0.5	6.1
WB10-1.0	1.0	7.9
WB10-2.0	2.0	7.6

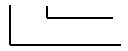
TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - LEAD
EA 02-3E7900
STATE ROUTE 299 (02-TRI-299) POST MILE 12.3 TO 12.9
TRINITY COUNTY, CALIFORNIA

BORING ID	SAMPLE DEPTH (feet)	TOTAL LEAD (mg/kg)
EB20-0.0	0.0	5.5
EB20-0.5	0.5	2.0
EB20-1.0	1.0	6.4
EB20-2.0	2.0	11
EB21-0.0	0.0	7.8
EB21-0.5	0.5	11
EB21-1.0	1.0	16
EB21-2.0	2.0	3.9
EB22-0.0	0.0	2.2
EB22-0.5	0.5	1.1
EB22-1.0	1.0	1.7
EB22-2.0	2.0	<1.0
EB23-0.0	0.0	3.8
EB23-0.5	0.5	8.8
EB23-1.0	1.0	7.4
EB23-2.0	2.0	15
EB24-0.0	0.0	4.0
EB24-0.5	0.5	9.2
EB24-1.0	1.0	9.4
EB24-2.0	2.0	18
EB25-0.0	0.0	17
EB25-0.5	0.5	2.3
EB25-1.0	1.0	1.3
EB25-2.0	2.0	1.3
WBH26-0.0	0.0	16
WBH26-0.5	0.5	9.2
WBH26-1.0	1.0	8.1
WBH27-0.0	0.0	8.5
WBH27-0.5	0.5	23
WBH27-1.0	1.0	8.4
WBH27-2.0	2.0	7.9
WBH28-0.0	0.0	16
WBH28-0.5	0.5	15
WBH28-1.0	1.0	4.5
WBH29-0.0	0.0	5.2
WBH29-0.5	0.5	6.0
WBH29-1.0	1.0	3.4
WBH29-2.0	2.0	2.0

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - LEAD
EA 02-3E7900
STATE ROUTE 299 (02-TRI-299) POST MILE 12.3 TO 12.9
TRINITY COUNTY, CALIFORNIA

BORING ID	SAMPLE DEPTH (feet)	TOTAL LEAD (mg/kg)
WBH30-0.0	0.0	14
WBH30-0.5	0.5	2.4
WBH30-1.0	1.0	1.8
EBH31-0.0	0.0	3.6
EBH31-0.5	0.5	7.7
EBH32-0.0	0.0	3.5
EBH32-0.5	0.5	1.9
EBH33-0.0	0.0	6.7
EBH33-0.5	0.5	9.9
EBH34-0.0	0.0	17
EBH34-0.5	0.5	13
EBH35-0.0	0.0	5.2
EBH35-0.5	0.5	22
WB36-0.0	0.0	6.9
WB36-0.5	0.5	4.9
WB36-1.0	1.0	3.5
WB36-2.0	2.0	4.4
WB37-0.0	0.0	14
WB37-0.5	0.5	3.3
WB37-1.0	1.0	5.2
WB38-0.0	0.0	5.6
WB38-0.5	0.5	43
WB38-1.0	1.0	25
WB38-2.0	2.0	4.0

Notes:



Top of sampling depth interval in feet below ground surface
Boring identification

mg/kg = Milligrams per kilogram
< = Less than the laboratory reporting limits

TABLE 3
SUMMARY OF TRAFFIC STRIPE PAINT ANALYTICAL RESULTS - LEAD
EA 02-3E7900
STATE ROUTE 299 (02-TRI-299) POST MILE 12.3 TO 12.9
TRINITY COUNTY, CALIFORNIA

BORING ID	TRAFFIC PAINT COLOR	TOTAL LEAD (mg/kg)
PC2	YELLOW	3.4

Notes:
mg/kg = Milligrams per kilogram

TABLE 4
SUMMARY OF SOIL ANALYTICAL RESULTS - ASBESTOS
EA 02-3E7900
STATE ROUTE 299 (02-TRI-299) POST MILE 12.3 TO 12.9
TRINITY COUNTY, CALIFORNIA

SAMPLE I.D.	SAMPLE DESCRIPTION	ANALYTICAL METHOD	ASBESTOS %	ASBESTOS TYPE
Study Area				
COMP EB23, EB24, EB25	Composite	PLM	ND	None Reported
COMP WB2, WBH28, WBH29	Composite	PLM	ND	None Reported
COMP WB1, WBH26, WBH27	Composite	PLM	ND	None Reported
COMP EB20, EB21, EBH31	Composite	PLM	ND	None Reported
COMP EBH33, EBH34	Composite	PLM	ND	None Reported
COMP WBH30, EBH32, EB44	Composite	PLM	ND	None Reported
COMP WB3, WB4, WB36	Composite	PLM	ND	None Reported
COMP EB22, EBH35, EB43	Composite	PLM	ND	None Reported
COMP WB5, WB6, WB7, WB37	Composite	PLM	ND	None Reported
COMP WB8, WB9, WB10, WB38	Composite	PLM	ND	None Reported
EB42	Discrete	PLM	ND	None Reported
Upper Stockpile Area				
COMP STK1A, B, C, D	Composite	PLM	ND	None Reported
COMP STK2A, B, C, D	Composite	PLM	ND	None Reported
Lower Stockpile Area				
STK3-A	Composite	PLM	<0.25%	Chrysotile
STK3-B	Composite	PLM	ND	None Reported
STK4-A	Composite	PLM	<0.25%	Chrysotile
STK4-B	Composite	PLM	<0.25%	Chrysotile

Notes:
PLM = Polarized Light Microscopy
ND = Not detected

APPENDIX A

ADVANCED TECHNOLOGY LABORATORIES

December 26, 2012

ELAP No.: 1838
NELAP No.: 02107CA
CSDLAC No.: 10196
ORELAP No.: CA300003
TCEQ No.: T104704502

Rebecca Silva
Geocon Consultants, Inc.
3160 Gold Valley Drive, Suite 800
Rancho Cordova, CA 95742
Tel: (916) 852-9118
Fax:(916) 852-9132

Re: ATL Work Order Number : 1204458
Client Reference : Trinity 299 PM 12.3/12.9, S9300-06-200

Enclosed are the results for sample(s) received on December 15, 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

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : Trinity 299 PM 12.3/12.9, S9300-06-200
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 12/26/2012

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
WB1-0.0	1204458-01	Soil	12/12/12 11:35	12/15/12 10:42
WB1-0.5	1204458-02	Soil	12/12/12 11:36	12/15/12 10:42
WB1-1.0	1204458-03	Soil	12/12/12 11:37	12/15/12 10:42
WB2-0.0	1204458-04	Soil	12/12/12 11:45	12/15/12 10:42
WB2-0.5	1204458-05	Soil	12/12/12 11:46	12/15/12 10:42
WB2-1.0	1204458-06	Soil	12/12/12 11:47	12/15/12 10:42
WB2-2.0	1204458-07	Soil	12/12/12 11:48	12/15/12 10:42
WB3-0.0	1204458-08	Soil	12/12/12 11:55	12/15/12 10:42
WB3-0.5	1204458-09	Soil	12/12/12 11:56	12/15/12 10:42
WB3-1.0	1204458-10	Soil	12/12/12 11:57	12/15/12 10:42
WB3-2.0	1204458-11	Soil	12/12/12 11:58	12/15/12 10:42
WB4-0.0	1204458-12	Soil	12/12/12 12:05	12/15/12 10:42
WB4-0.5	1204458-13	Soil	12/12/12 12:06	12/15/12 10:42
WB4-1.0	1204458-14	Soil	12/12/12 12:07	12/15/12 10:42
WB4-2.0	1204458-15	Soil	12/12/12 12:08	12/15/12 10:42
WB5-0.0	1204458-16	Soil	12/12/12 12:20	12/15/12 10:42
WB5-0.5	1204458-17	Soil	12/12/12 12:21	12/15/12 10:42
WB5-1.0	1204458-18	Soil	12/12/12 12:22	12/15/12 10:42
WB5-2.0	1204458-19	Soil	12/12/12 12:23	12/15/12 10:42
WB6-0.0	1204458-20	Soil	12/12/12 12:25	12/15/12 10:42
WB6-0.5	1204458-21	Soil	12/12/12 12:26	12/15/12 10:42
WB6-1.0	1204458-22	Soil	12/12/12 12:27	12/15/12 10:42
WB6-2.0	1204458-23	Soil	12/12/12 12:28	12/15/12 10:42
WB7-0.0	1204458-24	Soil	12/12/12 12:30	12/15/12 10:42
WB7-0.5	1204458-25	Soil	12/12/12 12:31	12/15/12 10:42
WB7-1.0	1204458-26	Soil	12/12/12 12:32	12/15/12 10:42
WB7-2.0	1204458-27	Soil	12/12/12 12:33	12/15/12 10:42
WB8-0.0	1204458-28	Soil	12/12/12 12:40	12/15/12 10:42
WB8-0.5	1204458-29	Soil	12/12/12 12:41	12/15/12 10:42
WB8-1.0	1204458-30	Soil	12/12/12 12:42	12/15/12 10:42
WB8-2.0	1204458-31	Soil	12/12/12 12:43	12/15/12 10:42
WB9-0.0	1204458-32	Soil	12/12/12 12:45	12/15/12 10:42
WB9-0.5	1204458-33	Soil	12/12/12 12:46	12/15/12 10:42
WB9-1.0	1204458-34	Soil	12/12/12 12:47	12/15/12 10:42

Geocon Consultants, Inc.	Project Number : Trinity 299 PM 12.3/12.9, S9300-06-200
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 12/26/2012

WB9-2.0	1204458-35	Soil	12/12/12 12:48	12/15/12 10:42
WB10-0.0	1204458-36	Soil	12/12/12 12:55	12/15/12 10:42
WB10-0.5	1204458-37	Soil	12/12/12 12:56	12/15/12 10:42
WB10-1.0	1204458-38	Soil	12/12/12 12:57	12/15/12 10:42
WB10-2.0	1204458-39	Soil	12/12/12 12:58	12/15/12 10:42
WB11-0.0	1204458-40	Soil	12/12/12 13:00	12/15/12 10:42
WB11-0.5	1204458-41	Soil	12/12/12 13:01	12/15/12 10:42
WB11-1.0	1204458-42	Soil	12/12/12 13:02	12/15/12 10:42
WB11-2.0	1204458-43	Soil	12/12/12 13:03	12/15/12 10:42
WB12-0.0	1204458-44	Soil	12/12/12 13:05	12/15/12 10:42
WB12-0.5	1204458-45	Soil	12/12/12 13:06	12/15/12 10:42
WB12-1.0	1204458-46	Soil	12/12/12 13:07	12/15/12 10:42
WB12-2.0	1204458-47	Soil	12/12/12 13:08	12/15/12 10:42
WB13-0.0	1204458-48	Soil	12/12/12 13:15	12/15/12 10:42
WB13-0.5	1204458-49	Soil	12/12/12 13:16	12/15/12 10:42
WB13-1.0	1204458-50	Soil	12/12/12 13:17	12/15/12 10:42
WB13-2.0	1204458-51	Soil	12/12/12 13:18	12/15/12 10:42
WB14-0.0	1204458-52	Soil	12/12/12 13:25	12/15/12 10:42
WB14-0.5	1204458-53	Soil	12/12/12 13:26	12/15/12 10:42
WB14-1.0	1204458-54	Soil	12/12/12 13:27	12/15/12 10:42
WB14-2.0	1204458-55	Soil	12/12/12 13:28	12/15/12 10:42
WB15-0.0	1204458-56	Soil	12/12/12 13:35	12/15/12 10:42
WB15-0.5	1204458-57	Soil	12/12/12 13:36	12/15/12 10:42
WB15-1.0	1204458-58	Soil	12/12/12 13:37	12/15/12 10:42
WB15-2.0	1204458-59	Soil	12/12/12 13:38	12/15/12 10:42
WB16-0.0	1204458-60	Soil	12/12/12 13:45	12/15/12 10:42
WB16-0.5	1204458-61	Soil	12/12/12 13:46	12/15/12 10:42
WB16-1.0	1204458-62	Soil	12/12/12 13:47	12/15/12 10:42
WB16-2.0	1204458-63	Soil	12/12/12 13:48	12/15/12 10:42
EB17-0.0	1204458-64	Soil	12/12/12 13:55	12/15/12 10:42
EB17-0.5	1204458-65	Soil	12/12/12 13:56	12/15/12 10:42
EB17-1.0	1204458-66	Soil	12/12/12 13:57	12/15/12 10:42
EB17-2.0	1204458-67	Soil	12/12/12 13:58	12/15/12 10:42
EB18-0.0	1204458-68	Soil	12/12/12 14:05	12/15/12 10:42
EB18-0.5	1204458-69	Soil	12/12/12 14:06	12/15/12 10:42
EB18-1.0	1204458-70	Soil	12/12/12 14:07	12/15/12 10:42
EB18-2.0	1204458-71	Soil	12/12/12 14:08	12/15/12 10:42
EB19-0.0	1204458-72	Soil	12/12/12 14:10	12/15/12 10:42
EB19-0.5	1204458-73	Soil	12/12/12 14:11	12/15/12 10:42

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EB19-1.0	1204458-74	Soil	12/12/12 14:12	12/15/12 10:42
EB19-2.0	1204458-75	Soil	12/12/12 14:13	12/15/12 10:42
EB20-0.0	1204458-76	Soil	12/12/12 14:20	12/15/12 10:42
EB20-0.5	1204458-77	Soil	12/12/12 14:21	12/15/12 10:42
EB20-1.0	1204458-78	Soil	12/12/12 14:22	12/15/12 10:42
EB20-2.0	1204458-79	Soil	12/12/12 14:23	12/15/12 10:42
EB21-0.0	1204458-80	Soil	12/12/12 14:25	12/15/12 10:42
EB21-0.5	1204458-81	Soil	12/12/12 14:26	12/15/12 10:42
EB21-1.0	1204458-82	Soil	12/12/12 14:27	12/15/12 10:42
EB21-2.0	1204458-83	Soil	12/12/12 14:28	12/15/12 10:42
EB22-0.0	1204458-84	Soil	12/12/12 14:35	12/15/12 10:42
EB22-0.5	1204458-85	Soil	12/12/12 14:36	12/15/12 10:42
EB22-1.0	1204458-86	Soil	12/12/12 14:37	12/15/12 10:42
EB22-2.0	1204458-87	Soil	12/12/12 14:38	12/15/12 10:42
EB23-0.0	1204458-88	Soil	12/12/12 14:45	12/15/12 10:42
EB23-0.5	1204458-89	Soil	12/12/12 14:46	12/15/12 10:42
EB23-1.0	1204458-90	Soil	12/12/12 14:47	12/15/12 10:42
EB23-2.0	1204458-91	Soil	12/12/12 14:48	12/15/12 10:42
EB24-0.0	1204458-92	Soil	12/12/12 14:50	12/15/12 10:42
EB24-0.5	1204458-93	Soil	12/12/12 14:51	12/15/12 10:42
EB24-1.0	1204458-94	Soil	12/12/12 14:52	12/15/12 10:42
EB24-2.0	1204458-95	Soil	12/12/12 14:53	12/15/12 10:42
EB25-0.0	1204458-96	Soil	12/12/12 14:55	12/15/12 10:42
EB25-0.5	1204458-97	Soil	12/12/12 14:56	12/15/12 10:42
EB25-1.0	1204458-98	Soil	12/12/12 14:57	12/15/12 10:42
EB25-2.0	1204458-99	Soil	12/12/12 14:58	12/15/12 10:42
WBH26-0.0	1204458-AA	Soil	12/13/12 8:45	12/15/12 10:42
WBH26-0.5	1204458-AB	Soil	12/13/12 8:47	12/15/12 10:42
WBH26-1.0	1204458-AC	Soil	12/13/12 8:49	12/15/12 10:42
WBH27-0.0	1204458-AD	Soil	12/13/12 8:55	12/15/12 10:42
WBH27-0.5	1204458-AE	Soil	12/13/12 8:57	12/15/12 10:42
WBH27-1.0	1204458-AF	Soil	12/13/12 8:59	12/15/12 10:42
WBH27-2.0	1204458-AG	Soil	12/13/12 9:01	12/15/12 10:42
WBH28-0.0	1204458-AH	Soil	12/13/12 9:15	12/15/12 10:42
WBH28-0.5	1204458-AI	Soil	12/13/12 9:17	12/15/12 10:42
WBH28-1.0	1204458-AJ	Soil	12/13/12 9:19	12/15/12 10:42
WBH29-0.0	1204458-AK	Soil	12/13/12 9:25	12/15/12 10:42
WBH29-0.5	1204458-AL	Soil	12/13/12 9:27	12/15/12 10:42
WBH29-1.0	1204458-AM	Soil	12/13/12 9:29	12/15/12 10:42

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WBH29-2.0	1204458-AN	Soil	12/13/12 9:31	12/15/12 10:42
WBH30-0.0	1204458-AO	Soil	12/13/12 9:45	12/15/12 10:42
WBH30-0.5	1204458-AP	Soil	12/13/12 9:47	12/15/12 10:42
WBH30-1.0	1204458-AQ	Soil	12/13/12 9:49	12/15/12 10:42
EBH31-0.0	1204458-AR	Soil	12/13/12 10:05	12/15/12 10:42
EBH31-0.5	1204458-AS	Soil	12/13/12 10:07	12/15/12 10:42
EBH32-0.0	1204458-AT	Soil	12/13/12 10:15	12/15/12 10:42
EBH32-0.5	1204458-AU	Soil	12/13/12 10:17	12/15/12 10:42
EBH33-0.0	1204458-AV	Soil	12/13/12 10:20	12/15/12 10:42
EBH33-0.5	1204458-AW	Soil	12/13/12 10:22	12/15/12 10:42
EBH34-0.0	1204458-AX	Soil	12/13/12 10:40	12/15/12 10:42
EBH34-0.5	1204458-AY	Soil	12/13/12 10:42	12/15/12 10:42
EBH35-0.0	1204458-AZ	Soil	12/13/12 10:55	12/15/12 10:42
EBH35-0.5	1204458-BA	Soil	12/13/12 10:57	12/15/12 10:42
WB36-0.0	1204458-BB	Soil	12/13/12 11:10	12/15/12 10:42
WB36-0.5	1204458-BC	Soil	12/13/12 11:11	12/15/12 10:42
WB36-1.0	1204458-BD	Soil	12/13/12 11:12	12/15/12 10:42
WB36-2.0	1204458-BE	Soil	12/13/12 11:13	12/15/12 10:42
WB37-0.0	1204458-BF	Soil	12/13/12 11:15	12/15/12 10:42
WB37-0.5	1204458-BG	Soil	12/13/12 11:16	12/15/12 10:42
WB37-1.0	1204458-BH	Soil	12/13/12 11:17	12/15/12 10:42
WB38-0.0	1204458-BJ	Soil	12/13/12 11:25	12/15/12 10:42
WB38-0.5	1204458-BK	Soil	12/13/12 11:26	12/15/12 10:42
WB38-1.0	1204458-BL	Soil	12/13/12 11:27	12/15/12 10:42
WB38-2.0	1204458-BM	Soil	12/13/12 11:28	12/15/12 10:42
WB39-0.0	1204458-BN	Soil	12/13/12 11:30	12/15/12 10:42
WB39-0.5	1204458-BO	Soil	12/13/12 11:31	12/15/12 10:42
WB39-1.0	1204458-BP	Soil	12/13/12 11:32	12/15/12 10:42
WB39-2.0	1204458-BQ	Soil	12/13/12 11:33	12/15/12 10:42
WB40-0.0	1204458-BR	Soil	12/13/12 11:40	12/15/12 10:42
WB40-0.5	1204458-BS	Soil	12/13/12 11:41	12/15/12 10:42
WB40-1.0	1204458-BT	Soil	12/13/12 11:42	12/15/12 10:42
PC1	1204458-BU	Paint Chip	12/13/12 11:49	12/15/12 10:42
PC2	1204458-BV	Paint Chip	12/13/12 12:00	12/15/12 10:42

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3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
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Total Metals by ICP-AES EPA 6010B

Analyte: Lead **Analyst: PT**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1204458-BU	PC1	**27**	mg/kg	2.0	NA	1	B2L0464	12/19/2012	12/20/12 11:10	
1204458-BV	PC2	**3.4**	mg/kg	2.0	NA	1	B2L0464	12/19/2012	12/20/12 11:12	

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Lead by ICP-AES EPA 6010B

Analyte: Lead **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1204458-01	WB1-0.0	**41**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:17	
1204458-02	WB1-0.5	**2.6**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:17	
1204458-03	WB1-1.0	**5.1**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:18	
1204458-04	WB2-0.0	**32**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:19	
1204458-05	WB2-0.5	**2.0**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:19	
1204458-06	WB2-1.0	**2.5**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:20	
1204458-07	WB2-2.0	**2.6**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:21	
1204458-08	WB3-0.0	**7.3**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:23	
1204458-09	WB3-0.5	**2.9**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:23	
1204458-10	WB3-1.0	**3.9**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:24	
1204458-11	WB3-2.0	**2.8**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:26	
1204458-12	WB4-0.0	**5.3**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:27	
1204458-13	WB4-0.5	**4.1**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:27	
1204458-14	WB4-1.0	**4.4**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:28	
1204458-15	WB4-2.0	**4.2**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:29	
1204458-16	WB5-0.0	**17**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:31	
1204458-17	WB5-0.5	**7.6**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:32	
1204458-18	WB5-1.0	**4.5**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:32	
1204458-19	WB5-2.0	**4.3**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:33	
1204458-20	WB6-0.0	**12**	mg/kg	1.0	NA	1	B2L0418	12/18/2012	12/19/12 10:34	
1204458-21	WB6-0.5	**13**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:40	
1204458-22	WB6-1.0	**3.7**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:40	
1204458-23	WB6-2.0	**4.5**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:41	
1204458-24	WB7-0.0	**34**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:42	
1204458-25	WB7-0.5	**4.9**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:42	
1204458-26	WB7-1.0	**4.9**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:43	
1204458-27	WB7-2.0	**3.9**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:44	
1204458-28	WB8-0.0	**27**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:44	
1204458-29	WB8-0.5	**7.8**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:45	
1204458-30	WB8-1.0	**6.5**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:47	

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Lead by ICP-AES EPA 6010B

Analyte: Lead **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1204458-31	WB8-2.0	**8.6**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:50	
1204458-32	WB9-0.0	**6.3**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:51	
1204458-33	WB9-0.5	**7.3**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:52	
1204458-34	WB9-1.0	**7.9**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:52	
1204458-35	WB9-2.0	**6.7**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:53	
1204458-36	WB10-0.0	**10**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:54	
1204458-37	WB10-0.5	**6.1**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:54	
1204458-38	WB10-1.0	**7.9**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:56	
1204458-39	WB10-2.0	**7.6**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:57	
1204458-40	WB11-0.0	**2.8**	mg/kg	1.0	NA	1	B2L0419	12/18/2012	12/19/12 10:58	
1204458-41	WB11-0.5	**33**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:02	
1204458-42	WB11-1.0	**12**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:04	
1204458-43	WB11-2.0	**11**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:05	
1204458-44	WB12-0.0	**7.6**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:06	
1204458-45	WB12-0.5	**47**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:06	
1204458-46	WB12-1.0	**38**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:07	
1204458-47	WB12-2.0	**3.6**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:08	
1204458-48	WB13-0.0	**4.8**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:08	
1204458-49	WB13-0.5	**64**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:09	
1204458-50	WB13-1.0	**13**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:10	
1204458-51	WB13-2.0	**3.2**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:13	
1204458-52	WB14-0.0	**13**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:14	
1204458-53	WB14-0.5	**1.4**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:14	
1204458-54	WB14-1.0	**1.4**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:15	
1204458-55	WB14-2.0	**1.5**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:16	
1204458-56	WB15-0.0	**5.8**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:16	
1204458-57	WB15-0.5	**1.6**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:17	
1204458-58	WB15-1.0	**2.3**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:18	
1204458-59	WB15-2.0	**2.3**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:18	
1204458-60	WB16-0.0	**10**	mg/kg	1.0	NA	1	B2L0420	12/18/2012	12/19/12 11:20	

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Lead by ICP-AES EPA 6010B

Analyte: Lead **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1204458-61	WB16-0.5	**2.9**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:25	
1204458-62	WB16-1.0	**1.3**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:26	
1204458-63	WB16-2.0	**1.6**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:26	
1204458-64	EB17-0.0	**23**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:29	
1204458-65	EB17-0.5	**15**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:29	
1204458-66	EB17-1.0	**9.5**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:30	
1204458-67	EB17-2.0	**7.7**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:31	
1204458-68	EB18-0.0	**32**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:31	
1204458-69	EB18-0.5	**20**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:32	
1204458-70	EB18-1.0	**6.2**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:33	
1204458-71	EB18-2.0	**4.2**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:35	
1204458-72	EB19-0.0	**33**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:37	
1204458-73	EB19-0.5	**40**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:37	
1204458-74	EB19-1.0	**5.3**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:38	
1204458-75	EB19-2.0	**1.2**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:39	
1204458-76	EB20-0.0	**5.5**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:39	
1204458-77	EB20-0.5	**2.0**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:40	
1204458-78	EB20-1.0	**6.4**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:41	
1204458-79	EB20-2.0	**11**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:41	
1204458-80	EB21-0.0	**7.8**	mg/kg	1.0	NA	1	B2L0421	12/18/2012	12/19/12 11:42	
1204458-81	EB21-0.5	**11**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:18	
1204458-82	EB21-1.0	**16**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:19	
1204458-83	EB21-2.0	**3.9**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:20	
1204458-84	EB22-0.0	**2.2**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:20	
1204458-85	EB22-0.5	**1.1**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:21	
1204458-86	EB22-1.0	**1.7**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:22	
1204458-87	EB22-2.0	**ND**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:22	
1204458-88	EB23-0.0	**3.8**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:24	
1204458-89	EB23-0.5	**8.8**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:25	
1204458-90	EB23-1.0	**7.4**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:26	

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : Trinity 299 PM 12.3/12.9, S9300-06-200
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 12/26/2012

Lead by ICP-AES EPA 6010B

Analyte: Lead **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1204458-91	EB23-2.0	**15**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:28	
1204458-92	EB24-0.0	**4.0**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:28	
1204458-93	EB24-0.5	**9.2**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:29	
1204458-94	EB24-1.0	**9.4**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:30	
1204458-95	EB24-2.0	**18**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 10:30	
1204458-96	EB25-0.0	**17**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 11:13	
1204458-97	EB25-0.5	**2.3**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 11:13	
1204458-98	EB25-1.0	**1.3**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 11:14	
1204458-99	EB25-2.0	**1.3**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 11:15	
1204458-AA	WBH26-0.0	**16**	mg/kg	1.0	NA	1	B2L0422	12/18/2012	12/20/12 11:15	
1204458-AB	WBH26-0.5	**9.2**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:11	
1204458-AC	WBH26-1.0	**8.1**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:12	
1204458-AD	WBH27-0.0	**8.5**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:12	
1204458-AE	WBH27-0.5	**23**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:13	
1204458-AF	WBH27-1.0	**8.4**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:14	
1204458-AG	WBH27-2.0	**7.9**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:14	
1204458-AH	WBH28-0.0	**16**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:15	
1204458-AI	WBH28-0.5	**15**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:17	
1204458-AJ	WBH28-1.0	**4.5**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:18	
1204458-AK	WBH29-0.0	**5.2**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:18	
1204458-AL	WBH29-0.5	**6.0**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:20	
1204458-AM	WBH29-1.0	**3.4**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:21	
1204458-AN	WBH29-2.0	**2.0**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:22	
1204458-AO	WBH30-0.0	**14**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:22	
1204458-AP	WBH30-0.5	**2.4**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:23	
1204458-AQ	WBH30-1.0	**1.8**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:25	
1204458-AR	EBH31-0.0	**3.6**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:26	
1204458-AS	EBH31-0.5	**7.7**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:26	
1204458-AT	EBH32-0.0	**3.5**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:27	
1204458-AU	EBH32-0.5	**1.9**	mg/kg	1.0	NA	1	B2L0423	12/18/2012	12/19/12 12:28	

Certificate of Analysis

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3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
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Lead by ICP-AES EPA 6010B

Analyte: Lead **Analyst: SB**

Laboratory ID	Client Sample ID	Result	Units	PQL	MDL	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1204458-AV	EBH33-0.0	**6.7**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:34	
1204458-AW	EBH33-0.5	**9.9**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:34	
1204458-AX	EBH34-0.0	**17**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:35	
1204458-AY	EBH34-0.5	**13**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:36	
1204458-AZ	EBH35-0.0	**5.2**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:36	
1204458-BA	EBH35-0.5	**22**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:37	
1204458-BB	WB36-0.0	**6.9**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:38	
1204458-BC	WB36-0.5	**4.9**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:38	
1204458-BD	WB36-1.0	**3.5**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:39	
1204458-BE	WB36-2.0	**4.4**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:41	
1204458-BF	WB37-0.0	**14**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:43	
1204458-BG	WB37-0.5	**3.3**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:44	
1204458-BH	WB37-1.0	**5.2**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:44	
1204458-BJ	WB38-0.0	**5.6**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:45	
1204458-BK	WB38-0.5	**43**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:46	
1204458-BL	WB38-1.0	**25**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:46	
1204458-BM	WB38-2.0	**4.0**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:47	
1204458-BN	WB39-0.0	**3.5**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:49	
1204458-BO	WB39-0.5	**2.8**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:50	
1204458-BP	WB39-1.0	**3.6**	mg/kg	1.0	NA	1	B2L0424	12/18/2012	12/19/12 12:50	
1204458-BQ	WB39-2.0	**3.8**	mg/kg	1.0	NA	1	B2L0425	12/18/2012	12/19/12 12:54	
1204458-BR	WB40-0.0	**11**	mg/kg	1.0	NA	1	B2L0425	12/18/2012	12/19/12 12:55	
1204458-BS	WB40-0.5	**16**	mg/kg	1.0	NA	1	B2L0425	12/18/2012	12/19/12 12:57	
1204458-BT	WB40-1.0	**29**	mg/kg	1.0	NA	1	B2L0425	12/18/2012	12/19/12 12:58	

Certificate of Analysis

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3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 12/26/2012

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 B2L0464 - EPA 3050B									
Blank (B2L0464-BLK1)					Prepared: 12/19/2012 Analyzed: 12/20/2012				
Lead	ND	1.0			NR				
LCS (B2L0464-BS1)					Prepared: 12/19/2012 Analyzed: 12/20/2012				
Lead	46.2234	1.0	50.0000		92.4	80 - 120			
Duplicate (B2L0464-DUP1)		**Source: 1204457-10**			Prepared: 12/19/2012 Analyzed: 12/20/2012				
Lead	6.04869	1.0		5.49514	NR		9.59	20	
Matrix Spike (B2L0464-MS1)		**Source: 1204457-10**			Prepared: 12/19/2012 Analyzed: 12/20/2012				
Lead	80.2702	1.0	125.000	5.49514	59.8	45 - 111			
Matrix Spike Dup (B2L0464-MSD1)		**Source: 1204457-10**			Prepared: 12/19/2012 Analyzed: 12/20/2012				
Lead	77.0741	1.0	125.000	5.49514	57.3	45 - 111	4.06	20	

Certificate of Analysis

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3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
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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 B2L0418 - EPA 3050 Modified									
Blank (B2L0418-BLK1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
Blank (B2L0418-BLK2)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
LCS (B2L0418-BS1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	53.2672	1.0	50.0000		107	80 - 120			
Duplicate (B2L0418-DUP1)		**Source: 1204458-20**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	14.1802	1.0		12.0496	NR		16.2	20	
Duplicate (B2L0418-DUP2)		**Source: 1204458-10**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	3.17488	1.0		3.88639	NR		20.2	20	R
Matrix Spike (B2L0418-MS1)		**Source: 1204458-20**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	221.003	1.0	250.000	12.0496	83.6	46 - 116			
Matrix Spike (B2L0418-MS2)		**Source: 1204458-10**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	209.653	1.0	250.000	3.88639	82.3	46 - 116			
Matrix Spike Dup (B2L0418-MSD1)		**Source: 1204458-20**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	216.660	1.0	250.000	12.0496	81.8	46 - 116	1.98	20	
Batch B2L0419 - EPA 3050 Modified									
Blank (B2L0419-BLK1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
Blank (B2L0419-BLK2)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
LCS (B2L0419-BS1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	51.1690	1.0	50.0000		102	80 - 120			
Duplicate (B2L0419-DUP1)		**Source: 1204458-40**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	3.31285	1.0		2.83196	NR		15.7	20	
Duplicate (B2L0419-DUP2)		**Source: 1204458-30**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	7.13298	1.0		6.48958	NR		9.45	20	
Matrix Spike (B2L0419-MS1)		**Source: 1204458-40**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	193.032	1.0	250.000	2.83196	76.1	46 - 116			
Matrix Spike (B2L0419-MS2)		**Source: 1204458-30**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	207.160	1.0	250.000	6.48958	80.3	46 - 116			
Matrix Spike Dup (B2L0419-MSD1)		**Source: 1204458-40**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	211.191	1.0	250.000	2.83196	83.3	46 - 116	8.98	20	
Batch B2L0420 - EPA 3050 Modified									

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Project Number : Trinity 299 PM 12.3/12.9, S9300-06-200
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Lead 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
Blank (B2L0420-BLK1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
Blank (B2L0420-BLK2)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
LCS (B2L0420-BS1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	51.6155	1.0	50.0000		103	80 - 120			
Duplicate (B2L0420-DUP1)		**Source: 1204458-60**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	7.74318	1.0		10.1454	NR		26.9	20	R
Duplicate (B2L0420-DUP2)		**Source: 1204458-50**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	14.9116	1.0		13.1623	NR		12.5	20	
Matrix Spike (B2L0420-MS1)		**Source: 1204458-60**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	239.757	1.0	250.000	10.1454	91.8	46 - 116			
Matrix Spike (B2L0420-MS2)		**Source: 1204458-50**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	205.880	1.0	250.000	13.1623	77.1	46 - 116			
Matrix Spike Dup (B2L0420-MSD1)		**Source: 1204458-60**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	220.458	1.0	250.000	10.1454	84.1	46 - 116	8.39	20	
Batch B2L0421 - EPA 3050 Modified									
Blank (B2L0421-BLK1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
Blank (B2L0421-BLK2)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
LCS (B2L0421-BS1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	54.0812	1.0	50.0000		108	80 - 120			
Duplicate (B2L0421-DUP1)		**Source: 1204458-80**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	10.4272	1.0		7.77442	NR		29.1	20	R
Duplicate (B2L0421-DUP2)		**Source: 1204458-70**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	12.3933	1.0		6.15954	NR		67.2	20	R
Matrix Spike (B2L0421-MS1)		**Source: 1204458-80**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	197.528	1.0	250.000	7.77442	75.9	46 - 116			
Matrix Spike (B2L0421-MS2)		**Source: 1204458-70**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	214.467	1.0	250.000	6.15954	83.3	46 - 116			
Matrix Spike Dup (B2L0421-MSD1)		**Source: 1204458-80**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	209.976	1.0	250.000	7.77442	80.9	46 - 116	6.11	20	
Batch B2L0422 - EPA 3050 Modified									
Blank (B2L0422-BLK1)					Prepared: 12/18/2012 Analyzed: 12/20/2012				

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Lead 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 B2L0422 - EPA 3050 Modified (continued)									
Blank (B2L0422-BLK1) - Continued					Prepared: 12/18/2012 Analyzed: 12/20/2012				
Lead	ND	1.0			NR				
Blank (B2L0422-BLK2)					Prepared: 12/18/2012 Analyzed: 12/20/2012				
Lead	ND	1.0			NR				
LCS (B2L0422-BS1)					Prepared: 12/18/2012 Analyzed: 12/20/2012				
Lead	51.2860	1.0	50.0000		103	80 - 120			
Duplicate (B2L0422-DUP1)		**Source: 1204458-AA**			Prepared: 12/18/2012 Analyzed: 12/20/2012				
Lead	15.6676	1.0		16.3052	NR		3.99	20	
Duplicate (B2L0422-DUP2)		**Source: 1204458-90**			Prepared: 12/18/2012 Analyzed: 12/20/2012				
Lead	18.4458	1.0		7.36936	NR		85.8	20	R
Matrix Spike (B2L0422-MS1)		**Source: 1204458-AA**			Prepared: 12/18/2012 Analyzed: 12/20/2012				
Lead	223.145	1.0	250.000	16.3052	82.7	46 - 116			
Matrix Spike (B2L0422-MS2)		**Source: 1204458-90**			Prepared: 12/18/2012 Analyzed: 12/20/2012				
Lead	231.796	1.0	250.000	7.36936	89.8	46 - 116			
Matrix Spike Dup (B2L0422-MSD1)		**Source: 1204458-AA**			Prepared: 12/18/2012 Analyzed: 12/20/2012				
Lead	221.163	1.0	250.000	16.3052	81.9	46 - 116	0.892	20	
Batch B2L0423 - EPA 3050 Modified									
Blank (B2L0423-BLK1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
Blank (B2L0423-BLK2)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
LCS (B2L0423-BS1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	51.2768	1.0	50.0000		103	80 - 120			
Duplicate (B2L0423-DUP1)		**Source: 1204458-AU**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	5.94134	1.0		1.89459	NR		103	20	R
Duplicate (B2L0423-DUP2)		**Source: 1204458-AK**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	5.35093	1.0		5.17141	NR		3.41	20	
Matrix Spike (B2L0423-MS1)		**Source: 1204458-AU**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	147.455	1.0	250.000	1.89459	58.2	46 - 116			
Matrix Spike (B2L0423-MS2)		**Source: 1204458-AK**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	207.808	1.0	250.000	5.17141	81.1	46 - 116			
Matrix Spike Dup (B2L0423-MSD1)		**Source: 1204458-AU**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	216.338	1.0	250.000	1.89459	85.8	46 - 116	37.9	20	R
Batch B2L0424 - EPA 3050 Modified									

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Project Number : Trinity 299 PM 12.3/12.9, S9300-06-200
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Lead 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
Blank (B2L0424-BLK1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
Blank (B2L0424-BLK2)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
LCS (B2L0424-BS1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	49.6836	1.0	50.0000		99.4	80 - 120			
Duplicate (B2L0424-DUP1)		**Source: 1204458-BP**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	21.7843	1.0		3.59016	NR		143	20	R
Duplicate (B2L0424-DUP2)		**Source: 1204458-BE**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	5.71382	1.0		4.44067	NR		25.1	20	R
Matrix Spike (B2L0424-MS1)		**Source: 1204458-BP**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	203.643	1.0	250.000	3.59016	80.0	46 - 116			
Matrix Spike (B2L0424-MS2)		**Source: 1204458-BE**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	190.358	1.0	250.000	4.44067	74.4	46 - 116			
Matrix Spike Dup (B2L0424-MSD1)		**Source: 1204458-BP**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	201.838	1.0	250.000	3.59016	79.3	46 - 116	0.890	20	
Batch B2L0425 - EPA 3050 Modified									
Blank (B2L0425-BLK1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	ND	1.0			NR				
LCS (B2L0425-BS1)					Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	48.9714	1.0	50.0000		97.9	80 - 120			
Duplicate (B2L0425-DUP1)		**Source: 1204458-BT**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	22.2206	1.0		29.4024	NR		27.8	20	R
Matrix Spike (B2L0425-MS1)		**Source: 1204458-BT**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	197.757	1.0	250.000	29.4024	67.3	46 - 116			
Matrix Spike Dup (B2L0425-MSD1)		**Source: 1204458-BT**			Prepared: 12/18/2012 Analyzed: 12/19/2012				
Lead	211.826	1.0	250.000	29.4024	73.0	46 - 116	6.87	20	
Batch S2L0259 - B2L0015									
Instrument Blank (S2L0259-IBL1)					Prepared: 12/19/2012 Analyzed: 12/19/2012				
Lead	ND	0.005			NR				
Batch S2L0272 - B2L0015									
Instrument Blank (S2L0272-IBL1)					Prepared: 12/20/2012 Analyzed: 12/20/2012				
Lead	ND	1.0			NR				
Batch S2L0274 - B2L0015									

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : Trinity 299 PM 12.3/12.9, S9300-06-200
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 12/26/2012

Lead by ICP-AES EPA 6010B - Quality Control (cont'd)

Analyte	Result (mg/L)	PQL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch S2L0274 - B2L0015 (continued)									
Instrument Blank (S2L0274-IBL1)					Prepared: 12/20/2012 Analyzed: 12/20/2012				
Lead	ND	1.0			NR				

Certificate of Analysis

Geocon Consultants, Inc.	Project Number : Trinity 299 PM 12.3/12.9, S9300-06-200
3160 Gold Valley Drive, Suite 800	Report To : Rebecca Silva
Rancho Cordova , CA 95742	Reported : 12/26/2012

Notes and Definitions

R	RPD value outside acceptance criteria. Calculation is based on raw values.
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)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.

CHAIN OF CUSTODY RECORD

1/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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: ONTRAC

Sample Condition Upon Receipt
1. CHILLED 14.4, 15.~ 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	Address: 3160 Gold Valley Drive, Suite 800	Tel: 916.852.9118
Attention: Rebecca Silva	City: Rancho Cordova State: CA Zip Code: 95742	Fax: 916.852.9132

Project Name:	Project #:	Sampler: (Printed Name) / (Signature)
Trinity 299 PM 12.3/12.9	S9300-06-200	Mike O'Brien

	Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
1	Mike O'Brien	12/14/12	1600	ontrac	12/14/12	1600
2				FPOLWA	12/15/12	1040
3						

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Rebecca Silva 12/14/12 (Print Name / Date)
(Signature)

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

QA/QC
RTNE ☐ CT ☑
SWRCB ☐ Logcode_____
OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	1204458-1	WB1-0.0	12/12/12	1135										X		X				E	1	baggie	
	-2	0.5		1136																			
	-3	1.0		1137																			
		2		1138																			
	-4	WB2-0.0		1145																			
	-5	0.5		1146																			
	-6	1.0		1147																			
	-7	2.0		1148																			
	-8	WB3-0.0		1155																			
	-9	-0.5		1156																			

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

2/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Mike O'Brien	12/14/12	1600	anthpac	12/14/12	1600
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
				12/15/12	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: Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	1204458-10	WB3-1.0	12/12/12	1157										X		X					E	1	baggie
	-11	-2.0		1158																			
	-12	WB4-0.0		1205																			
	-13	-0.5		1206																			
	-14	-1.0		1207																			
	-15	-2.0		1208																			
	-16	WB5-0.0		1220																			
	-17	0.5		1221																			
	-18	1.0		1222																			
	-19	2.0		1223																			

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

3/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name)	Date	Time	Received by: (Signature and Printed Name)	Date	Time
Mike O'Brien	12/14/12	1600	ONTRAC	12/14/12	1600
				12/15/12	1042

I hereby authorize ATL to perform the work indicated below:
Project Mgr /Submitter: Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	120445R-20	WB6-0.0	12/12/12	1225										X		X					E	1	baggie
	-21	0.5		1226																			
	-22	1.0		1227																			
	-23	2.0		1228																			
	-24	WB7-0.0		1230																			
	-25	0.5		1231																			
	-26	1.0		1232																			
	-27	2.0		1233																			
	-28	WB8-0.0		1240																			
	-29	0.5		1241																			

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

4/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) Date: 12/14/12 Time: 1600

Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 Time: 1040

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: Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode_____ OTHER _____

PRESERVATION

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	120 44557-30	WB8-1.0	12/12/12	1242										X	X					E	1	baggie	
	-31	-2.0		1243																			
	-32	WB9-0.0		1245																			
	-33	0.5		1246																			
	-34	1.0		1247																			
	-35	2.0		1248																			
	-36	WB10-0.0		1255																			
	-37	-0.5		1256																			
	-38	-1.0		1257																			
	-39	-2.0		1258																			

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

5/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) ontrac Date: 12/14/12 Time: 1600

Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metal), 8015B (GRO) / 8020 (BTEX), 8015B (DRO), 8021 (BTEX), TITLE 22 / CAM 17 (6010 / 7000), Total lead (Bid Item 67)

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

PRESERVATION

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

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A	8082	8260B	8270C	6010B	8015B (GRO)	8015B (DRO)	8021	TITLE 22	Total lead	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	204457-40	WB11-0.0	12/12/12	1300										X	X					E	1	baggie	
	-41	0.5		1301																			
	-42	1.0		1302																			
	-43	2.0		1303																			
	-44	WB12-0.0		1305																			
	-45	0.5		1306																			
	-46	1.0		1307																			
	-47	2.0		1308																			
	-48	WB13-0.0		1315																			
	-49	0.5		1316																			

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

6/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) ONTRA C Date: 12/14/12 Time: 1600

Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 Time: 1042

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: Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested: 8081A (Pesticides), 8082 (PCB), 8260B (Volatiles), 8270C (BNA), 6010B (Total Metal), 8015B (GRO) / 8020 (BTEX), 8015B (DRO), 8021 (BTEX), TITLE 22 / CAM 17 (6010 / 7000), Total lead (Bid Item 67)

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

PRESERVATION

QA / QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A	8082	8260B	8270C	6010B	8015B (GRO)	8015B (DRO)	8021	TITLE 22	Total lead	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	1204437-50	WB13-1.0	12/12/12	1317										X		X				E	1	baggie	
	-51	-2.0		1318																			
	-52	WB14-0.0		1325																			
	-53	0.5		1326																			
	-54	1.0		1327																			
	-55	2.0		1328																			
	-56	WB15-0.0		1335																			
	-57	0-5		1336																			
	-58	1.0		1337																			
	-59	2.0		1338																			

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

7/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) Date: 12/14/12 Time: 1600

Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 Time: 1042

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: Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
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Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	PRESERVATION	REMARKS
	12444 -C0	WB16-0.0	12/12/12	1345										X		X					E	1	baggie		
	-C1	0.5		1346																				
	-C2	1.0		1347																				
	-C3	2.0		1348																				
	-C4	EB17-0.0		1355																				
	-C5	0.5		1356																				
	-C6	1.0		1357																				
	-C7	2.0		1358																				
	-C8	EB18-0.0		1405																				
	-C9	0.5		1406																				

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Preservatives:
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Z=$Zn(AC)_2$ O=NaOH T=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

8/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) Date: 12/14/12 Time: 1600

Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 Time: 1042

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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

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Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	12447[illegible]-70	EB18-1.0	12/12/12	1407										X		X					E	1	baggie	
	-71	2.0		1408																			
	-72	EB19-0.0		1410																			
	-73	0.5		1411																			
	-74	1.0		1412																			
	-75	2.0		1413																			
	-76	EB20-0.0		1420																			
	-77	0.5		1421																			
	-78	1.0		1422																			
	-79	2.0		1423																			

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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 $T=Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

9/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) ontrac Date: 12/14/12 Time: 1600

Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 Time: 1042

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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

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

PRESERVATION

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	120457 -80	EB21-0.0	12/12/12	1425										X		X					E	1	baggie	
	-81	0.5		1426																			
	-82	1.0		1427																			
	-83	2.0		1428																			
	-84	EB22-0.0		1435																			
	-85	0.5		1436																			
	-86	1.0		1437																			
	-87	2.0		1438																			
	-88	EB23-0.0		1445																			
	-89	0.5		1446																			

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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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

10/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Mike O'Brien	12/14/12	1600	Ontrac	12/14/12	1600
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
				12/15/12	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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

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

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
	12044557-90	EB23-1.0	12/12/12	1447										X		X				E	1	baggie	
	-91	-2.0		1448																			
	-92	EB24-0.0		1450																			
	-93	0.5		1451																			
	-94	1.0		1452																			
	-95	2.0		1453																			
	-96	EB25-0.0		1455																			
	-97	0.5		1456																			
	-98	1.0		1457																			
	-99	2.0		1458																			

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H=HCl $N=HNO_3$ $S=H_2SO_4$ C=4°C
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CHAIN OF CUSTODY RECORD

11/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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: _____

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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 ☐

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Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) ontrac Date: 12/14/12 Time: 1600

Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

Bill To:
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Special Instructions/Comments:
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Homogenzie samples for lead analysis.

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SPECIFY APPROPRIATE MATRIX

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

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100	1204459-AA	WBH26-0.0	12/13/12	845										X		X					E	1	baggie		
101	-AB	0.5		847																				
102	-AC	1.0		849																				
103	-AD	WBH27-0.0		855																				
104	-AE	0.5		857																				
105	-AF	1.0		859																				
106	-AG	2.0		901																				
107	-AH	WBH28-0.0		915																				
108	-AI	0.5		918																				
109	-AJ	1.0		919																				

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CHAIN OF CUSTODY RECORD

12/15

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

FOR LABORATORY USE ONLY

P.O. #: _____
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Method of Transport: Client ☐ ATL ☐ CA OverN ☐ FedEx ☐ Other: _____

Sample Condition Upon Receipt:
1. CHILLED Y ☐ N ☐ 4. SEALED Y ☐ N ☐
2. HEADSPACE (VOA) Y ☐ N ☐ 5. # OF SPLS MATCH COC Y ☐ N ☐
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Client: GEOCON Consultants, Inc
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
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Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) ontrac Date: 12/14/12 Time: 1600
Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

Bill To:
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Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

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Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode_____ OTHER _____

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110	120445-9 -AK	WBH29-0.0	12/13/12	925										X		X					E	1	baggie	
111	-AL	0.5		927																			
112	-AM	1.0		929																			
113	-AN	2.0		931																			
114	-AO	WBH30-0.0		945																			
115	-AP	0.5		947																			
116	-AQ	1.0		949																			
117	-AR	EBH31-0.0		1005																			
118	-AS	0.5		1007																			
119	-AT	EBH32-0.0		1015																			

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

13/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Address: 3160 Gold Valley Drive, Suite 800
Tel: 916.852.9118
Attention: Rebecca Silva
City: Rancho Cordova State: CA Zip Code: 95742
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) ONTRAC Date: 12/14/12 Time: 1600

Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 Time: 1042

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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

QA/QC: RTNE ☐ CT ☑ SWRCB ☐ Logcode_____ OTHER _____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
120	1204459-AU	EBH32-0.5	12/13/12	1017										X		X					E	1	baggie	
121	-AV	EBH33-0.0		1020																				
122	-AW	↓ 0.5		1022																				
123	-AX	EBH34-0.0		1040																				
124	-AY	↓ 0.5		1042																				
125	-AZ	EBH35-0.0		1055																				
126	-BA	↓ 0.5		1057																				
127	-BB	WB36-0.0		1110																				
128	-BC	↓ 0.5		1111																				
129	-BD	↓ 1.0	↓	1112																				

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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=$Na_2S_2O_3$

CHAIN OF CUSTODY RECORD

14/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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	Address: 3160 Gold Valley Drive, Suite 800		Tel: 916.852.9118
Attention: Rebecca Silva	City: Rancho Cordova	State: CA Zip Code: 95742	Fax: 916.852.9132

Project Name:	Project #:	Sampler: (Printed Name)	(Signature)
Trinity 299 PM 12.3/12.9	S9300-06-200	Mike O'Brien	

Relinquished by: (Signature and Printed Name) Mike O'Brien	Date: 12/14/12	Time: 1600	Received by: (Signature and Printed Name) ontrac	Date: 12/14/12	Time: 1600
Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date: 12/15/12	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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

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 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

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

PRESERVATION

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	TAT	Container(s) #	Container(s) Type	REMARKS
130	1204495-BE	WB36-2.0	12/13/12	1113										X		X					E	1	baggie	
131	-BF	WB37-0.0		1115																			
132	-BG	0.5		1116																			
133	-BH	1.0		1117																			
134	-BI	2.0		1118																			
135	-BJ	WB38-0.0		1125																			
136	-BK	0.5		1126																			
137	-BL	1.0		1127																			
138	-BM	2.0		1128																			
139	-BN	WB39-0.0		1130																			

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

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

CHAIN OF CUSTODY RECORD

15/15

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Tel: (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 ☐ 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
Attention: Rebecca Silva
Address: 3160 Gold Valley Drive, Suite 800
City: Rancho Cordova State: CA Zip Code: 95742
Tel: 916.852.9118
Fax: 916.852.9132

Project Name: Trinity 299 PM 12.3/12.9
Project #: S9300-06-200
Sampler: (Printed Name) Mike O'Brien (Signature)

Relinquished by: (Signature and Printed Name) Mike O'Brien Date: 12/14/12 Time: 1600
Received by: (Signature and Printed Name) DHL Date: 12/14/12 Time: 1600
Relinquished by: (Signature and Printed Name) Date: Time:
Received by: (Signature and Printed Name) Date: 12/15/12 Time: 1042
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:
Rebecca Silva 12/14/12
Print Name Date
Signature

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

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

Special Instructions/Comments:
Caltrans 03A1368
Homogenzie samples for lead analysis.

Please copy Kari Cook on the results and include an excel file. Thank you. (cook@geoconinc.com)

Sample/Records - Archival & Disposal
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- Sample :$2.00 / sample /mo (after 45 days)
- Records: $1 /ATL workorder /mo (after 1 year)

Circle or Add Analysis(es) Requested

SPECIFY APPROPRIATE MATRIX

PRESERVATION

QA/QC
RTNE ☐
CT ☑
SWRCB ☐ Logcode____
OTHER ____

ITEM	LAB USE ONLY: Lab No.	Sample Description: Sample ID / Location	Date	Time	8081A (Pesticides)	8082 (PCB)	8260B (Volatiles)	8270C (BNA)	6010B (Total Metal)	8015B (GRO) / 8020 (BTEX)	8015B (DRO)	8021 (BTEX)	TITLE 22 / CAM 17 (6010 / 7000)	Total lead (Bid Item 67)	SOIL	WATER	GROUND WATER	WASTEWATER	CARBON	Pb-T Ca-D	TAT	Container(s) #	Container(s) Type	REMARKS
140	204459-BO	WB39-0.5	12/13/12	1131										X		X					E	1	baggie	
141	-BP	1.0		1132																				
142	-BQ	2.0		1133																				
143	-BR	WB40-0.0		1140																				
144	-BS	0.5		1141																				
145	-BT	1.0		1142																				
		2		1143																				
146	-BU	PC1	12/13/12	1149										X					X					
147	-BV	PC2		1200										X					X					

■ TAT starts 8AM the following day if samples received after 3 PM

TAT: A = Overnight ≤ 24 hrs 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 $T=Na_2S_2O_3$

Carmen Aguila

From: Wm. Michael O'Brien [obrien@geoconinc.com]
Sent: Saturday, December 15, 2012 3:23 PM
To: Fernando Diwa
Cc: Carmen Aguila; Diane Galvan; Rebecca Silva
Subject: Re: Trinity 299 PM 12.3/12.9, S9300-06-200

Sorry about that. I believe that sample doesn't exist.
Thanks.

Wm. Michael O'Brien

On Dec 15, 2012, at 2:41 PM, Fernando Diwa <Fernando@atlglobal.com> wrote:

> Hi Mike,
>
> This is to inform you that no sample was received for WB37-2.0, collected on 12/13/12 @ 1118.
>
> Please advise.
>
> Regards,
>
> **Fernando Diwa**
>
> <image001.jpg>**Advanced Technology Laboratories**
> www.atlglobal.com
> Tel: (562) 989-4045 ext. 236
> Fax: (562) 989-8807
>
> Advanced Technology Laboratories is a full-service environmental lab providing organic and inorganic analyses of soil, water, wastewater, storm water and hazardous waste samples. ATL is accredited by the State of California, NELAP and State of Nevada and holds various SBE, DBE and MBE certificates and a USDA soil permit. ATL takes pride in providing our customers with quick turnaround time, excellent customer service and defensible data while offering very competitive rates. *Advanced Technology Labs - Your Partner for Quality Environmental Testing*
>
>

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:	091216423
CustomerID:	GECN80
CustomerPO:	S9300-06-200
ProjectID:	S9300-06-**

Attn: **Rebecca Silva**
Geocon Consultants, Inc.
3160 Gold Valley Drive
Suite 800
Rancho Cordova, CA 95742

Phone:	(916) 852-9118
Fax:	(916) 852-9132
Received:	12/17/12 9:00 AM
Analysis Date:	12/24/2012
Collected:	12/13/2012

Project: **S9300-06-200 / TRINITY 299 - TO #200**

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**
COMP, EB22, EB23, EB24 *091216423-0001*	THREE-POINT COMPOSITE SAMPLE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, WB2, WBH28, WBH29 *091216423-0002*	THREE-POINT COMPOSITE SAMPLE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, WB1, WBH26, WBH27 *091216423-0003*	THREE-POINT COMPOSITE SAMPLE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, EB20, EB21, EB31 *091216423-0004*	THREE-POINT COMPOSITE SAMPLE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, EBH35, EBH34 *091216423-0005*	TWO-POINT COMPOSITE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, WBH30, EBH32, EB44 *091216423-0006*	THREE-POINT COMPOSITE SAMPLE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**

Analyst(s)

Matthew Batongbacal (16)

Baojia Ke, Laboratory Manager
or other approved signatory

Initial report from 12/24/2012 13:05:34

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:	091216423
CustomerID:	GECN80
CustomerPO:	S9300-06-200
ProjectID:	S9300-06-**

Attn: **Rebecca Silva**
Geocon Consultants, Inc.
3160 Gold Valley Drive
Suite 800
Rancho Cordova, CA 95742

Phone:	(916) 852-9118
Fax:	(916) 852-9132
Received:	12/17/12 9:00 AM
Analysis Date:	12/24/2012
Collected:	12/13/2012

Project: **S9300-06-200 / TRINITY 299 - TO #200**

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**
COMP, WB3, WB4, WB36 *091216423-0007*	THREE-POINT COMPOSITE SAMPLE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, EB22, EBH35, EB43 *091216423-0008*	THREE-POINT COMPOSITE SAMPLE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, WB5, WB6, WB7, WB37 *091216423-0009*	FOUR-POINT COMPOSITE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, WB9, WB10, WB38, WB8 *091216423-0010*	FOUR-POINT COMPOSITE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, WB11, WB12, WB39, WB40 *091216423-0011*	FOUR-POINT COMPOSITE	Tan Non-Fibrous Homogeneous		99.25% Non-fibrous (other)	**0.75% Chrysotile**
COMP, WB13, WB14, WB15, WB16 *091216423-0012*	FOUR-POINT COMPOSITE	Tan Non-Fibrous Homogeneous		99.50% Non-fibrous (other)	**0.50% Chrysotile**

Analyst(s)

Matthew Batongbacal (16)

Baojia Ke, Laboratory Manager
or other approved signatory

Initial report from 12/24/2012 13:05:34

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:	091216423
CustomerID:	GECN80
CustomerPO:	S9300-06-200
ProjectID:	S9300-06-**

Attn: **Rebecca Silva**
Geocon Consultants, Inc.
3160 Gold Valley Drive
Suite 800
Rancho Cordova, CA 95742

Phone:	(916) 852-9118
Fax:	(916) 852-9132
Received:	12/17/12 9:00 AM
Analysis Date:	12/24/2012
Collected:	12/13/2012

Project: **S9300-06-200 / TRINITY 299 - TO #200**

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**
COMP, EB18, EB19, EBH41, EB17 *091216423-0013*	FOUR-POINT COMPOSITE	Tan Non-Fibrous Homogeneous		99.00% Non-fibrous (other)	**1.00% Chrysotile**
COMP, STK1A, B, C, D, , *091216423-0014*	FOUR-POINT COMPOSITE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
COMP, STK2A, 2B, C, D, , *091216423-0015*	FOUR-POINT COMPOSITE	Tan Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
EB42 *091216423-0016*	DISCRETE	Gray Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**

Analyst(s)

Matthew Batongbacal (16)

Baojia Ke, Laboratory Manager
or other approved signatory

Initial report from 12/24/2012 13:05:34

Asbestos Lab Services Chain of Custody

EMSL Order Number *(Lab Use Only)*: 091216123

EMSL ANALYTICAL, INC.
San Leandro, CA
Suite 230
2235 Polvorosa Ave
San Leandro, CA 94577
PHONE (510) 895-3675
FAX (510) 895-3680

Company: Geocon Consultants	**EMSL-Bill to:** ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 3160 Gold Valley Drive, Suite 800	
City/State/Zip: Rancho Cordova, CA 95742	
Report To (Name): Rebecca Silva	**Fax:**
Telephone: 916-852-9118	**Email Address:** silva@geoconinc.com
Project Name/Number: Trinity 299/59300-06-200 TO#200	
Please Provide Results: Email **Purchase Order:**	**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 hr through 6 hr, 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 ☐ Check if samples are from NY
- ☐ 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** **Filter Pore Size (Air Samples):** ☐ 0.8µm ☐ 0.45µm

Samplers Name: John Pfeiffer/Mike O'Brien **Samplers Signature:** John Pfeiffer

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
COMP EB22, EB23, EB24	Three-Point Composite sample		12/13/12
COMP WB2, WBH28, WBH29			
COMP WB1, WBH26, WBH27			
COMP EB20, EB21, EB31			
COMP EBH35, EBH34	Two-point Composite sample		
COMP WBH30, EBH32, EB44	Three-Point composite sample		
COMP WB3, WB4, WB36			
COMP EB22, EBH35, EB43			

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

Relinquished (Client): John Pfeiffer **Date:** 12/14/12 **Time:** 1600

Received (Lab): **Date:** RECEIVED DEC 17 2012 **Time:** 0900

Comments/Special Instructions:

Geocon Project No. 59300-06-200

Asbestos Lab Services Chain of Custody TO#200

EMSL Order Number *(Lab Use Only)*: 091216423

EMSL ANALYTICAL, INC

San Leandro, CA
Suite 230
2235 Polvorosa Ave
San Leandro, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
COMP WB5, WB6, WB7, WB37	Four-Point Composite sample		12/13/12
COMP WB9, WB10, WB38, WB8			
COMP WB11, WB12, WB39, WB40			
COMP WB13, WB14, WB15, WB16			
COMP EB18, EB19, EBH41, EB17			
COMP STK1A, B, C, D			
COMP STK2A, B, C, D			
EB42	Discrete sample		

Comments/Special Instructions:

RECEIVED DEC 17 2012

0900 PK

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:	091302757
CustomerID:	GECN80
CustomerPO:	S9300-06-200
ProjectID:	

Attn: **John Pfeiffer**
Geocon Consultants, Inc.
3160 Gold Valley Drive
Suite 800
Rancho Cordova, CA 95742

Phone:	(916) 852-9118
Fax:	(916) 852-9132
Received:	02/21/13 11:45 AM
Analysis Date:	2/28/2013
Collected:	12/12/2012

Project: **S9300-05-200 / TRINITY 299 NOA**

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**
WB11-1		Tan		100.00% Non-fibrous (other)	**None Detected**
091302757-0001		Non-Fibrous Homogeneous			

Analyst(s)

Matthew Batongbacal (1)

Baojia Ke, Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc San Leandro, CA

Initial report from 02/28/2013 13:59:24

Asbestos Lab Services Chain of Custody

EMSL Order Number *(Lab Use Only)*: 091302756

EMSL ANALYTICAL, INC.
San Leandro, CA
Suite 230
2235 Polvorosa Ave
San Leandro, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Company: Geocon Consultants, Inc.	**EMSL-Bill to:** ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 3160 Gold Valley Drive, Suite 800	
City/State/Zip: Rancho Cordova, CA 95742	
Report To (Name): John Pfeiffer	**Fax:**
Telephone: 916-852-9118	**Email Address:** pfeiffer@geoconinc.com
Project Name/Number: S9300-06-200 / Trinity 299 NOA	
Please Provide Results: Email	**Purchase Order:** **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 hr through 6 hr, 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 ☐ Check if samples are from NY
- ☐ 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** **Filter Pore Size (Air Samples):** ☐ 0.8µm ☐ 0.45µm

Samplers Name: John Pfeiffer **Samplers Signature:** John Pfeiffer

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
WB11-1			12/12/12 13:02

Client Sample # (s): **Total # of Samples:** 1

Relinquished (Client): John Pfeiffer **Date:** 2/19/13 **Time:** 16:45

Received (Lab): RECEIVED FEB 21 2013 **Date:** **Time:** 1145

Comments/Special Instructions:

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:	091303018
CustomerID:	GECN80
CustomerPO:	S9300-06-200
ProjectID:	S9300-06-**

Attn: **John Pfeiffer**
Geocon Consultants, Inc.
3160 Gold Valley Drive
Suite 800
Rancho Cordova, CA 95742

Phone:	(916) 852-9118
Fax:	(916) 852-9132
Received:	02/27/13 9:00 AM
Analysis Date:	3/6/2013
Collected:	2/22/2013

Project: **S9300-06-200 / TRINITY 299**

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

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
WB45-0 *091303018-0001*	- / HOLD				**Not Analyzed**
		On hold			
WB45-1 *091303018-0002*	- / HOLD				**Not Analyzed**
		On Hold			
WB46-0 *091303018-0003*	- / HOLD				**Not Analyzed**
		On hold			
WB46-1 *091303018-0004*	- / HOLD				**Not Analyzed**
		On hold			
WB47-0 *091303018-0005*	- / HOLD				**Not Analyzed**
		On hold			
WB47-1 *091303018-0006*	- / HOLD				**Not Analyzed**
		On hold			
STK3-A *091303018-0007*		Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**<0.25% Chrysotile**

Analyst(s)

Jorge Leon (4)

Baojia Ke, Laboratory Manager
or other approved signatory

Initial report from 03/06/2013 08:33:54

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:	091303018
CustomerID:	GECN80
CustomerPO:	S9300-06-200
ProjectID:	S9300-06-**

Attn: **John Pfeiffer**
Geocon Consultants, Inc.
3160 Gold Valley Drive
Suite 800
Rancho Cordova, CA 95742

Phone:	(916) 852-9118
Fax:	(916) 852-9132
Received:	02/27/13 9:00 AM
Analysis Date:	3/6/2013
Collected:	2/22/2013

Project: **S9300-06-200 / TRINITY 299**

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**
STK3-B *091303018-0008*		Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**None Detected**
STK4-A *091303018-0009*		Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**<0.25% Chrysotile**
STK4-B *091303018-0010*		Brown Non-Fibrous Homogeneous		100.00% Non-fibrous (other)	**<0.25% Chrysotile**

Analyst(s)

Jorge Leon (4)

Baojia Ke, Laboratory Manager
or other approved signatory

Initial report from 03/06/2013 08:33:54

Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only): 091303018

EMSL ANALYTICAL, INC.
San Leandro, CA
Suite 230
2235 Polvorosa Ave
San Leandro, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Company: Geocon Consultants, Inc.	**EMSL-Bill to:** ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 3160 Gold Valley Drive, Suite 800	
City/State/Zip: Rancho Cordova, CA 95742	
Report To (Name): John Pfeiffer	**Fax:**
Telephone: 916-852-9118	**Email Address:** pfeiffer@geoconinc.com
Project Name/Number: 59300-06-200/Trinity 2.99	
Please Provide Results: Email **Purchase Order:**	**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 hr through 6 hr, 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 ☐ Check if samples are from NY
- ☐ 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** **Filter Pore Size (Air Samples):** ☐ 0.8µm ☐ 0.45µm

Samplers Name: John Pfeiffer **Samplers Signature:** John Pfeiffer

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
WB45-0	HOLD		2/22/13
WB45-1	HOLD		
WB46-0	HOLD		
WB46-1	HOLD		
WB47-0	HOLD		
WB47-1	HOLD		
STK3-A			
STK3-B			

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

Relinquished (Client): John Pfeiffer **Date:** 2/26/13 **Time:** 1600

Received (Lab): **Date:** 2/27/13 **Time:** 9:00

Comments/Special Instructions:

Geocon Project S9300-06-200

EMSL ANALYTICAL, INC.

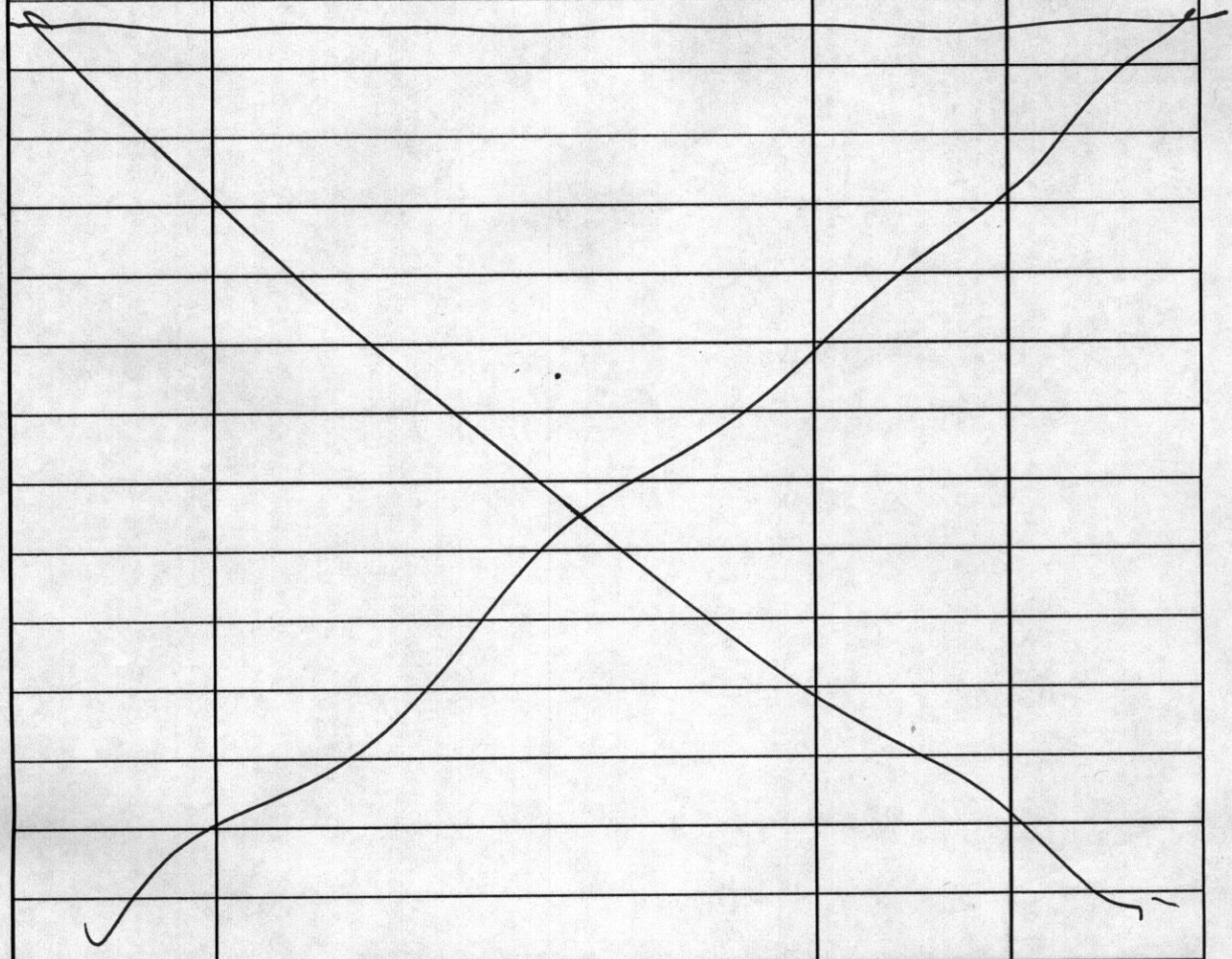
Asbestos Lab Services Chain of Custody

EMSL Order Number *(Lab Use Only):*

091303018

San Leandro, CA
Suite 230
2235 Polvorosa Ave
San Leandro, CA 94577
PHONE: (510) 895-3675
FAX: (510) 895-3680

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
STK4-A			2/22/13
STK4-B			



Comments/Special Instructions:

Controlled Document – Asbestos Lab Services COC – A1.0 – 11/23/2009

Page 2 of 2 Pages

2/27/13 Nina