

INFORMATION HANDOUT

**For Contract No. 04-172454
At 04-Ala-880-18.4**

**Identified by
Project ID 0413000371**

WATER QUALITY

Storm Water Information Handout, Contract No. 04-172454, 04-ALA-880-PM-18.4, Hayward Parcel Mitigation
Conceptual Stormwater Pollution Prevention Plan for Hayward Parcel Mitigation

AGREEMENTS

California Department of Fish and Wildlife, Streambed Alteration Agreement, Dated November 14, 2014
Notification No. 1600-2014-0337-R3, Hayward Parcel Mitigation Project

MATERIALS INFORMATION

3 CCR § 4500, Cal. Admin. Code tit. 3, § 4500, Barclays Official California Code of Regulations,
Title 3. Food and Agriculture, Division 4. Plant Industry, Chapter 6. Weed Free Areas and Weed Eradication
Areas, Subchapter 6. Noxious Weed Species

Photo Log of Existing Conditions - San Lorenzo Creek Hayward, Parcels Mitigation Project

BACWA: Bay Area Recycled Water Commercial Truck Fill Facilities Location Guide, January 2015

STORM WATER INFORMATION HANDOUT

CONTRACT NO. 04-172451

04-ALA-880-PM-18.4

HAYWARD PARCEL MITIGATION

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

February, 2015

Disclaimer

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

TABLE OF CONTENTS
CONTRACT NO: 04-172451

1 PROJECT INFORMATION

- 1A Project Description
- 1B Receiving Water Bodies

2 CONSTRUCTION GENERAL PERMIT

- 2A Risk Level

3 TEMPORARY CONSTRUCTION SITE BMPs

4 PERMITS

- 4A General

5 ATTACHMENTS

- A LOCATION MAP
- B RISK LEVEL DETERMINATION
- C BIOLOGICAL OPINION/1602 PERMIT
- D WATER POLLUTION CONTROL PLAN
- E RAINFALL DATA

1 Project Information

1A Project Description

The proposed concept is to provide riparian enhancement and restoration by implementing invasive vegetation removal, bank restoration and debris/ trash removal along San Lorenzo Creek in Castro Valley, CA 94546, Hayward. (Location Plan: Attachment A). The design intent is to improve the functions and values of the existing riparian corridor and to preserve the corridor thereafter by placing a Conservation Easement that restricts future development

Latitude and Longitude:	<u>37.6796, -122.0782</u>
Construction Start Date	<u>08/1/2015</u>
Construction End Date	<u>12/01/2015</u>
Project Area	<u>2.0 ac</u>
Disturbed Soil Area	<u>1.83 ac</u>

1B Receiving Water Bodies

The project site is located within Hydrologic Sub-Area (SA) 204.2. The nearest water body is Sam Lorenzo Creek, which runs through the project site. San Lorenzo Creek is on the TMDLs & 303(d) listed water bodies (2010 list) for the diazinon as being addressed with USEPA approved TMDL.

2 Construction General Permit

A Storm Water Pollution Prevention Plan (SWPPP) is required since the disturbed soil area is more than one acre and R value determination is applicable. The SWPPP shall be prepared by project contractor and reported to the SMART before starting any project activity at job site

2A Risk Level

This project has more than one acre disturbed soil area (DSA) hence risk level (RL) analysis is required for this project. The project site is catorized as Risk Level # 2 having low sediment risk and high receiving water (RW) risk. The risk level work sheet is given in Attachment B

3 Temporary Construction Site BMPs

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

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

Displacement of groundwater is not anticipated for the scoped Hayward Parcel Mitigation work. The temporary creek diversion system and temporary access pad are not expected since no construction related equipments or vehicle need to cross the creek.

4 Permits

4A General

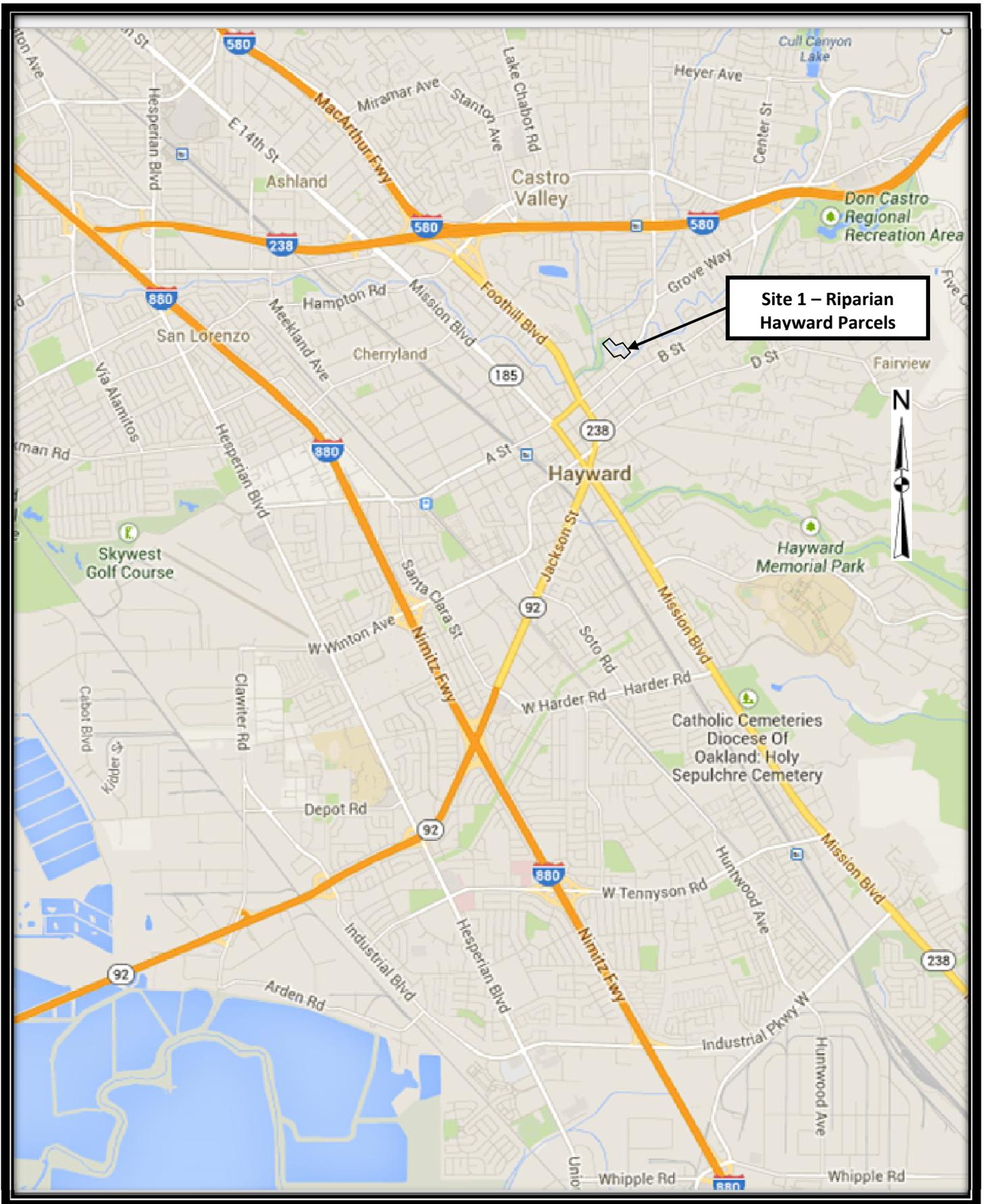
The permits required for the project note conditions that may call for special consideration from the Contractor. Conditions include work windows for in water work and various job site management, including equipment and stockpiles.

Required permits:

1600 Permit from the CA Department of Fish and Game

5 ATTACHMENTS

ATTACHMENT A
LOCATION MAP



Site 1 - Riparian Hayward Parcels

LOCATION MAP
Ala-880-PM 18.4
04-172451 EFIS 0413000371

INDEX OF PLANS

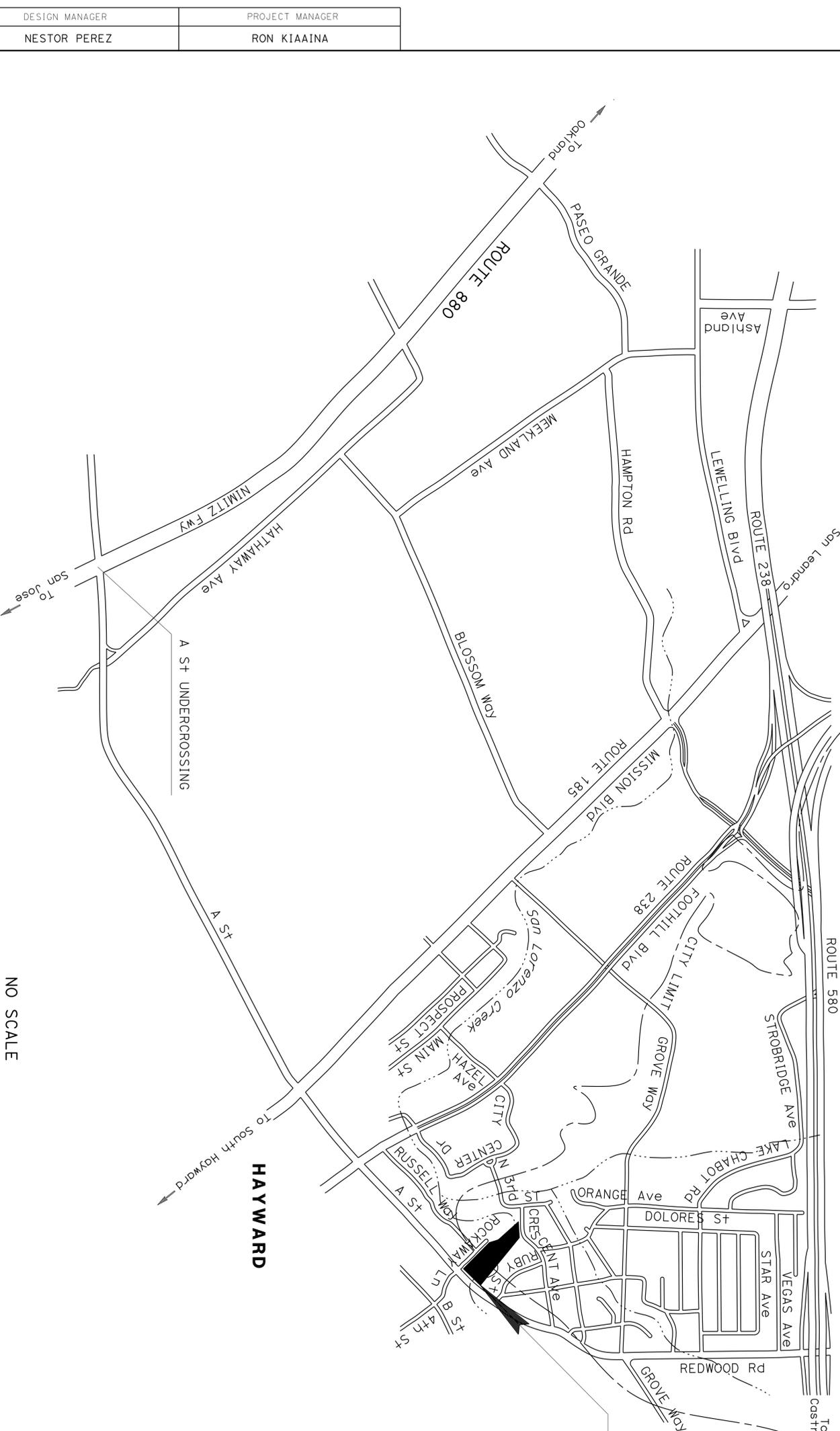
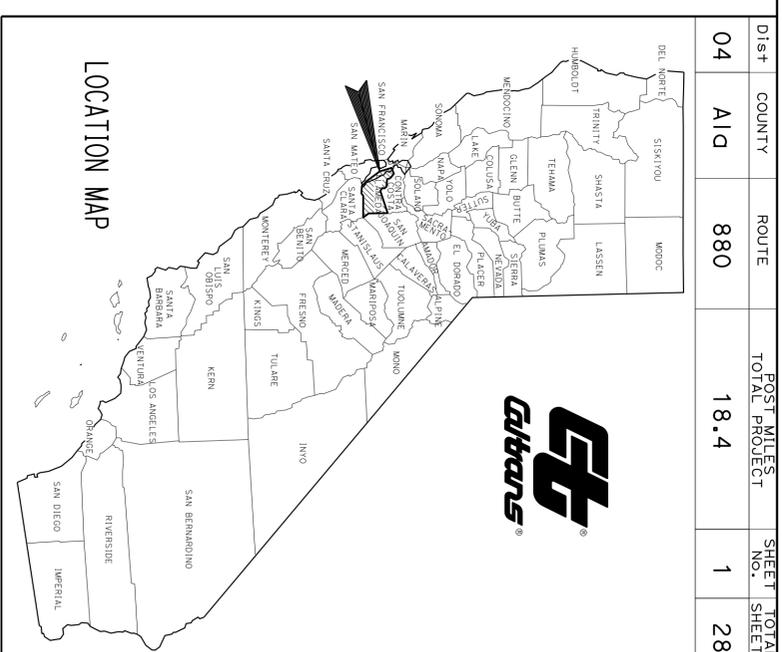
SHEET NO.	DESCRIPTION
1	TITLE SHEET AND LOCATION MAP
2	LAYOUT
3	TEMPORARY WATER POLLUTION CONTROL
4 - 5	SIGN PLANS
6	SUMMARY OF QUANTITIES
7	ROADSIDE CLEARING PLAN
8	IRRIGATION SPRINKLER SCHEDULE
9 - 10	IRRIGATION PLAN AND QUANTITIES
11	PLANT LEGEND
12 - 13	PLANTING PLAN AND QUANTITIES
14 - 17	LANDSCAPE DETAILS
18 - 20	EROSION CONTROL LEGEND, PLAN AND QUANTITIES
21 - 28	REVISED STANDARD PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN ALAMEDA COUNTY
IN HAYWARD AND CASTRO VALLEY
AT A STREET AND ROCKAWAY LANE 1.7 MILES
NORTHEAST OF ROUTE 880 AND A STREET UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010
CASTRO VALLEY



LOCATION OF CONSTRUCTION
SAN LORENZO CREEK
STA "SL" 0+00 TO 13+40

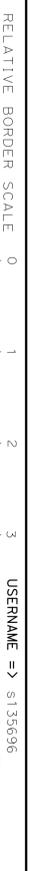


NO SCALE

DESIGN MANAGER	PROJECT MANAGER
NESTOR PEREZ	RON KIAAINA

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

BORDER LAST REVISED 10/4/2013 CALTRANS WEB SITE IS: HTTP://WWW.DOT.CA.GOV/



UNIT 0733 PROJECT NUMBER & PHASE 04130003711

CONTRACT No.	04-172454
PROJECT ID	0413000371

Planned by *Nicholas J. Glitch* 12-23-14
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
 REGISTERED CIVIL ENGINEER
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS
 DEPARTMENT OF TRANSPORTATION
 IS NOT RESPONSIBLE FOR THE
 ACCURACY OR COMPLETENESS OF
 SCANNED COPIES OF THIS PLAN SHEET.

ATTACHMENT B
RISK LEVEL DETERMINATION

	A	B	C
1	Sediment Risk Factor Worksheet		Entry
2	A) R Factor		
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.		
4	http://water.epa.gov/polwaste/npdes/stormwater/Welcome-to-the-Rainfall-Erosivity-Factor-Calculator.cfm		
5	R Factor Value		12.58
6	B) K Factor (weighted average, by area, for all site soils)		
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.		
8	Site-specific K factor guidance		
9	K Factor Value		0.32
10	C) LS Factor (weighted average, by area, for all slopes)		
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.		
12	LS Table		
13	LS Factor Value		2.13
14			
15	Watershed Erosion Estimate (=RxKxLS) in tons/acre		8.574528
16	Site Sediment Risk Factor		Low
17	Low Sediment Risk: < 15 tons/acre		
18	Medium Sediment Risk: >=15 and <75 tons/acre		
19	High Sediment Risk: >= 75 tons/acre		
20			

Receiving Water (RW) Risk Factor Worksheet	Entry	Score
A. Watershed Characteristics	yes/no	
<p>A.1. Does the disturbed area discharge (either directly or indirectly) to a 303(d)-listed waterbody impaired by sediment (For help with impaired waterbodies please visit the link below) or has a USEPA approved TMDL implementation plan for sediment?:</p> <p>http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml</p> <p style="text-align: center;">OR</p>	Yes	High
<p>A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY? (For help please review the appropriate Regional Board Basin Plan)</p> <p>http://www.waterboards.ca.gov/waterboards_map.shtml</p>		
<p>Region 1 Basin Plan</p> <p>Region 2 Basin Plan</p> <p>Region 3 Basin Plan</p> <p>Region 4 Basin Plan</p> <p>Region 5 Basin Plan</p> <p>Region 6 Basin Plan</p> <p>Region 7 Basin Plan</p> <p>Region 8 Basin Plan</p> <p>Region 9 Basin Plan</p>		

Combined Risk Level Matrix

		<u>Sediment Risk</u>		
		Low	Medium	High
<u>Receiving Water Risk</u>	Low	Level 1	Level 2	
	High	Level 2		Level 3

Project Sediment Risk: **Low**

Project RW Risk: **High**

Project Combined Risk: **Level 2**

ATTACHMENT C
BIOLOGICAL OPINION/1602 PERMIT

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5500
WWW.WILDLIFE.CA.GOV



STREAMBED ALTERATION AGREEMENT
NOTIFICATION No. 1600-2014-0337-R3
Hayward Parcel Mitigation Project
EA 04-15148

CALIFORNIA DEPARTMENT OF TRANSPORTATION

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

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on August 28, 2014 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 on a 3-acre parcel along San Lorenzo Creek in the City of Hayward. The parcel is bordered by Crescent Avenue to the north, Ruby Street to the east, A Street to the south, and Rockaway Lane to the west.

PROJECT DESCRIPTION

The California Department of Transportation (Permittee) proposes to enhance and restore riparian woodland along a Permittee-owned section of San Lorenzo Creek (Project). Completion of the proposed Project would enhance and restore 1,860 linear feet of seasonal creek to satisfy a portion of the remaining 2,370 linear feet of mitigation required under the Regional Water Quality Control Board Section 401 Permit (# R2-

2006-0033) for the State Route 84 Pigeon Pass Safety Improvement Project. Enhancement of the ecological function and value of the creek's riparian corridor will be accomplished through the removal and control of invasive vegetation, bank restoration, planting of native plant species, and trash/debris removal.

Invasive species will be mowed and may be subsequently treated with herbicides. When treating all species, wherever possible, injectable herbicides will be used to reduce the spread of herbicide to non-targeted areas. All debris from invasive species will be removed from the parcel and disposed of properly.

After invasive species are removed, restoration will occur within the riparian area along the banks. Disturbed ground will be planted using a combination of beardless wild rye (*Leymus triticoides*) plugs and other native grasses appropriate to the site. Low stature native shrubs like evergreen currant (*Ribes viburnifolium*) will also be planted. Tree planting will not occur until native herbaceous ground cover is established. Erosion control along banks will consist of a 3-inch layer of coarse compost containing a mixture of native seed appropriate to the site. Application of compost will occur above the ordinary high water mark. Truck watering or temporary irrigation directed from the top of bank down will be provided for a two-year period.

Native shrub and willow poles will be planted along the banks above the ordinary high water mark for further erosion control function and low vegetation structure. Willow pole plantings will be established on the lower bank to reduce any small, localized areas of erosion. Planting will not occur within the creek's main channel, but may be planted within the lower portions of the slope, so some of these lower bank plantings may be periodically inundated during high water events.

No excavation of the main creek channel will occur. The majority of trash and debris removal will occur using crews operating on foot. If required, a small excavator will work on level ground along the creek bank but will not operate in water. The excavator will be brought in by crane to suitable work locations adjacent to the creek, placed on construction timber mats, and be used to gather, assemble and organize debris and trash. Organized trash and debris will be hoisted up by winch, loaded on trucks, and disposed of properly.

PROJECT IMPACTS

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

- Amphibians
- Migratory bird nesting and habitat

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. The following conditions apply to areas located within CDFW riparian jurisdiction.

- 2.1 All work within flowing water shall occur between May 15 and October 15.
- 2.2 No living riparian trees or other existing non-invasive vegetation will be removed, and the creek bed will not be re-worked.
- 2.3 Imported compost and mulch shall be free of litter.
- 2.4 At least 30-days prior to commencing Project activities covered by this Agreement, the Permittee shall submit to CDFW, for review and approval, the qualifications for a number of biologists (Qualified Biologist) that shall oversee the implementation of the conditions in

this Agreement. At a minimum, the Qualified Biologists shall have a combination of academic training and professional experience in biological sciences and related resource management activities. The Qualified Biologists shall communicate to the Resident Engineer when any activity is not in compliance with this Agreement and the Resident Engineer shall immediately stop the activity that is not in compliance with this Agreement.

- 2.5 If Project activities will occur between February 15 and September 1, a Qualified Biologist shall conduct pre-construction surveys for nesting birds no more than one week prior to construction. Surveys shall consist of multiple days of observations. If nests are found the Qualified Biologist shall establish an appropriate buffer to be in compliance with Migratory Bird Treaty Act (MBTA) and Fish and Game Code 3503. The Qualified Biologist shall perform at least two hours of pre-construction monitoring of the nest to characterize "typical" bird behavior. The Qualified Biologist shall monitor the nesting birds and shall increase the buffer if the Qualified Biologist determines the birds are showing signs of unusual or distressed behavior by Project activities. Atypical nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The Qualified Biologist shall have authority, through the Resident Engineer, to order the cessation of all Project activities if the nesting birds exhibit atypical behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the Qualified Biologist. Any sign of nest abandonment shall be reported to CDFW within 48 hours.
- 2.6 Permittee shall conduct work defined in the above Project Description, and within the Project area, during periods of dry weather. The Project area is defined as the bed, bank, channel, and associated riparian and wetland habitat. The Permittee shall monitor forecasted precipitation. When ¼ inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No Project activities may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-

two hour weather forecasts from National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less than a 30% forecast for precipitation for the following 24-hour period.

- 2.7 Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waterways. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control installations shall be monitored for effectiveness and shall be repaired or replaced as recommended by a Qualified Biologist or Water Quality Monitor to the Resident Engineer. As needed to prevent sediment transport, Permittee shall deploy soil stabilizer such as hydroseeding, netting, erosion control mats, mulch, fiber rolls, silt fences, check dams, and flow velocity dissipation devices. Permittee shall stabilize and equip construction site entrances and exits with tire washing capability. Materials containing monofilament or plastic shall not be used. Erosion and sediment control measures shall be installed prior to unseasonable rain storms.
- 2.8 All disturbed areas shall be re-graded and hydroseeded. Hydroseed shall not contain invasive exotic plant species. Prohibited exotic plant species include those identified in the California Exotic Pest Plant Council's database, which is accessible at: <http://www.calipc.org/ip/inventory/weedlist.php>.
- 2.9 Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the creek channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.
- 2.10 Refueling of mobile construction equipment and vehicles shall not occur within 50 feet of any water body, or anywhere that spilled fuel could drain to a water body. Refueling of stationary equipment requiring breakdown and setup to move will remain in place. All equipment shall be refueled with appropriate drip pans, absorbent pads, and water quality Best Management Practices. Equipment and vehicles operating in the Project site shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

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

3. Mitigation and Reporting Measures

3.1 This Agreement authorizes the initial restoration work described in the above Project Description. The Permittee shall submit a plan for CDFW approval prior to the start of construction, that outlines the ongoing monitoring, maintenance, and reporting schedule, success criteria, refuse abatement, and corrective actions to be taken to meet success criteria. The Permittee shall monitor survival and vigor of plantings to ensure attainment of 75% survivorship after 5 years. The plan shall include a proposed endowment to fund the ongoing maintenance of the parcel.

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:

California Department of Transportation
Mr. Hardeep Takhar
111 Grand Ave
Oakland, Ca
Hardeep.takhar@dot.ca.gov

To CDFW:

California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, California 94558
Attn: Lake and Streambed Alteration Program – Melissa Escaron

Notification #1600-2014-0337-R3
Fax (707) 944-5553
Melissa.escaron@wildlife.ca.gov

LIABILITY

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

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

SUSPENSION AND REVOCATION

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

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

ENFORCEMENT

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

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

OTHER LEGAL OBLIGATIONS

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

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

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

AMENDMENT

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

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

TRANSFER AND ASSIGNMENT

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

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

EXTENSIONS

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

Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

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

EFFECTIVE DATE

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

TERM

This Agreement shall expire on December 31, 2018 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.

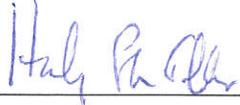
AUTHORIZATION

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 CALIFORNIA DEPARTMENT OF
TRANSPORTATION**

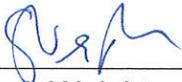


Hardeep Takhar
Office Chief

11-6-14

Date

FOR DEPARTMENT OF FISH AND WILDLIFE



Craig J. Weightman
Environmental Program Manager

11/14/14

Date

Prepared by: Melissa Escaron
Staff Environmental Scientist

Date Sent: November 4, 2014
Revised: November 6, 2014

ATTACHMENT D
WATER POLLUTION CONTROL DRAWING

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

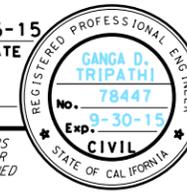
WPC NOTE:

TEMPORARY BMP LOCATIONS ARE SUGGESTIONS ONLY, AND THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR DEVELOPING A SWPPP THAT COMPLIES WITH THE PERMITS, LICENSES, AGREEMENTS, AND CERTIFICATIONS (PLACS).

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	ALA	880	18.4		

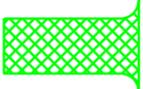
01-06-15
REGISTERED CIVIL ENGINEER DATE

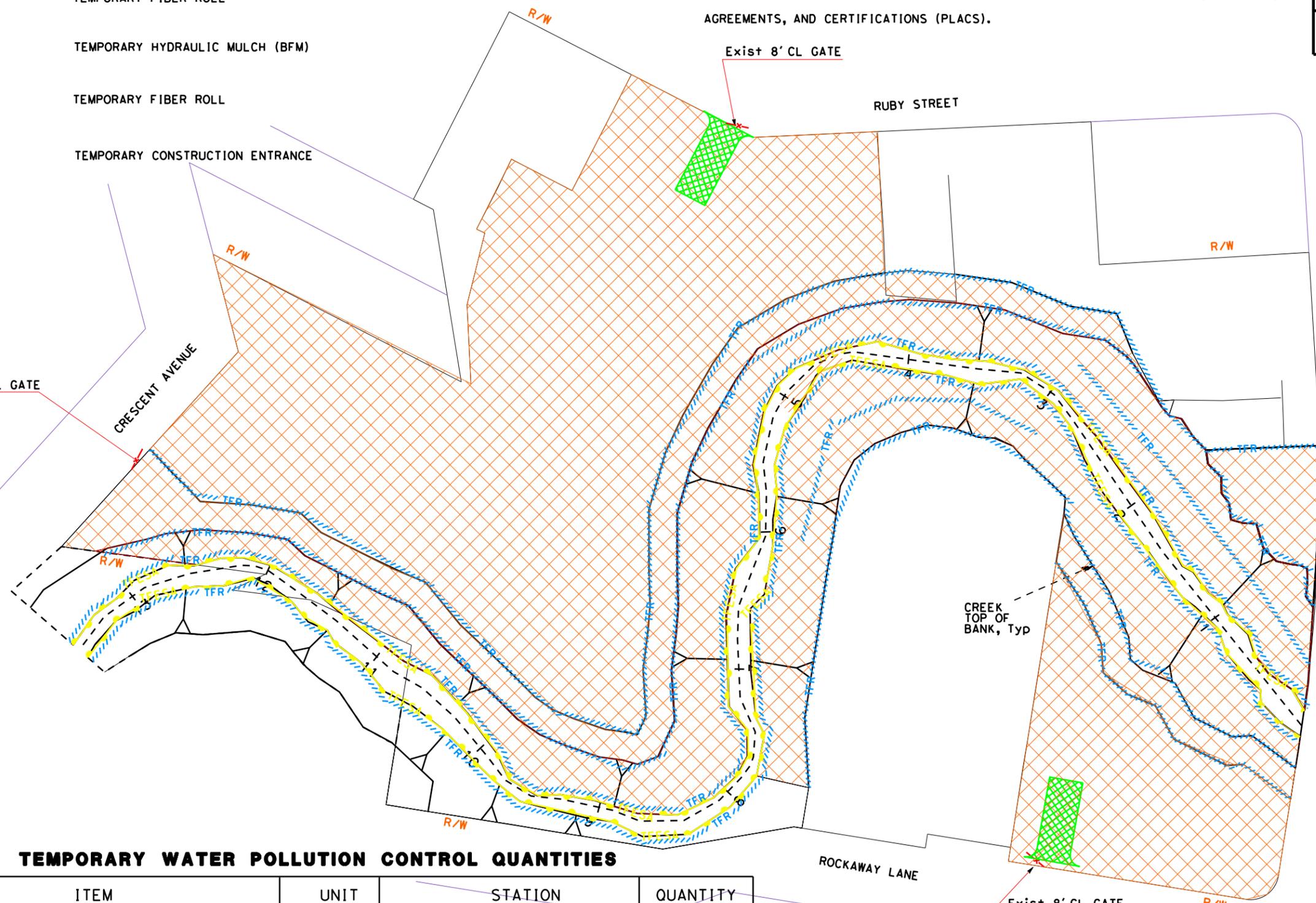
PLANS APPROVAL DATE



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

WPC LEGEND

-  TEMPORARY FIBER ROLL
-  TEMPORARY HYDRAULIC MULCH (BFM)
-  TEMPORARY FIBER ROLL
-  TEMPORARY CONSTRUCTION ENTRANCE



TEMPORARY WATER POLLUTION CONTROL QUANTITIES

ITEM	UNIT	STATION	QUANTITY
TEMPORARY FENCE (TYPE ESA)	LF	AS SHOWN IN THE PLAN	2800
TEMPORARY FIBER ROLL	LF	AS SHOWN IN THE PLAN	6000
TEMPORARY HYDRAULIC MULCH (BFM)	SOYD	AS SHOWN IN THE PLAN	26000
TEMPORARY CONSTRUCTION ENTRANCE	EA	AS SHOWN IN THE PLAN	2

TEMPORARY WATER POLLUTION CONTROL PLAN & QUANTITY

WPC-1

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

NO SCALE



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
WATER QUALITY
 SENIOR WATER POLLUTION CONTROL
 KAMRAN NAKHJIRI
 CALCULATED-DESIGNED BY
 KAMRAN NAKHJIRI
 CHECKED BY
 KAMRAN NAKHJIRI
 REVISOR BY
 GANGA TRIPATHI
 KAMRAN NAKHJIRI
 DATE REVISOR
 DATE REVISOR

LAST REVISION DATE PLOTTED => \$DATE
 01-06-15 TIME PLOTTED => \$TIME

ATTACHMENT E
RAINFALL DATA

Climatography of the United States

No. 20 1971-2000

Station: OAKLAND MUSEUM, CA

COOP ID: 046336

Climate Division: CA 4

NWS Call Sign:

Elevation: 30 Feet

Lat: 37° 48N

Lon: 122° 16W

Precipitation (inches)																								
Precipitation Totals										Mean Number of Days (3)				Precipitation Probabilities (1) Probability that the monthly/annual precipitation will be equal to or less than the indicated amount										
Means/Medians(1)			Extremes							Daily Precipitation				Monthly/Annual Precipitation vs Probability Levels These values were determined from the incomplete gamma distribution										
Month	Mean	Median	Highest Daily(2)	Year	Day	Highest Monthly(1)	Year	Lowest Monthly(1)	Year	>= 0.01	>= 0.10	>= 0.50	>= 1.00	.05	.10	.20	.30	.40	.50	.60	.70	.80	.90	.95
Jan	4.85	4.23	4.74	1982	4	12.45	1998	.31	1976	10.5	7.9	3.2	1.4	.45	.79	1.44	2.12	2.85	3.69	4.68	5.92	7.62	10.46	13.24
Feb	4.27	3.84	3.05	2000	13	15.14	1998	.21	1995	10.1	7.2	3.1	1.2	.31	.58	1.13	1.71	2.37	3.12	4.03	5.18	6.78	9.48	12.15
Mar	3.56	2.81	2.87	1982	31	9.83	1983	.03	1988	10.5	6.8	2.8	.6	.27	.50	.96	1.45	1.99	2.62	3.37	4.33	5.65	7.87	10.07
Apr	1.38	1.00	2.07	1974	1	4.13	1982	.00	1977	5.9	3.1	.8	.2	.04	.13	.31	.51	.73	.98	1.29	1.68	2.22	3.14	4.04
May	.57	.12	1.73	1996	15	2.98	1998	.00+	1992	3.0	1.3	.3	.1	.00	.00	.00	.03	.10	.21	.36	.59	.95	1.62	2.35
Jun	.11	.02	.44	1988	6	.92	1995	.00+	1996	1.0	.4	.0	.0	.00	.00	.00	.00	.00	.02	.05	.11	.19	.34	.50
Jul	.07	.00	.95	1974	8	1.19	1974	.00+	2000	.3	.2	@	.0	.00	.00	.00	.00	.00	.00	.00	.00	.01	.16	.37
Aug	.10	.00	1.00	1997	19	1.25	1997	.00+	2000	.7	.2	.1	@	.00	.00	.00	.00	.00	.00	.00	.00	.06	.29	.53
Sep	.33	.07	.78	1989	16	1.54	1986	.00+	1995	1.8	.9	.2	.0	.00	.00	.00	.00	.04	.11	.21	.36	.58	.98	1.41
Oct	1.33	1.14	2.06	1992	29	4.25	1972	.00	1978	3.8	2.2	.9	.4	.02	.09	.24	.42	.63	.88	1.19	1.59	2.17	3.15	4.14
Nov	3.14	2.42	4.15	1994	5	9.67	1973	.07	1995	8.5	5.5	2.2	.7	.13	.29	.64	1.05	1.53	2.11	2.82	3.75	5.07	7.35	9.63
Dec	3.23	3.06	3.43	1979	24	8.90	1996	.00	1989	8.7	6.0	2.0	.8	.32	.70	1.23	1.70	2.18	2.70	3.28	3.99	4.93	6.45	7.90
Ann	22.94	21.02	4.74	Jan 1982	4	15.14	Feb 1998	.00+	Aug 2000	64.8	41.7	15.6	5.4	10.37	12.40	15.21	17.49	19.62	21.76	24.05	26.67	29.96	34.96	39.47

+ Also occurred on an earlier date(s)

Denotes amounts of a trace

@ Denotes mean number of days greater than 0 but less than .05

** Statistics not computed because less than six years out of thirty had measurable precipitation

(1) From the 1971-2000 Monthly Normals

(2) Derived from station's available digital record: 1970-2001

(3) Derived from 1971-2000 serially complete daily data

Complete documentation available from:

www.ncdc.noaa.gov/oa/climate/normals/usnormals.html

WASTE DISCHARGE IDENTIFICATION (WDID) NUMBER: To be determined

Conceptual Stormwater Pollution Prevention Plan

for

Hayward Parcel Mitigation

CONTRACT NO.: 04-172451

CALTRANS Project Identifier NUMBER: 04130003711

RISK LEVEL: 2

Prepared for:

California Department of Transportation, District 4

3401 Regatta Boulevard

Richmond, CA 94804

Jessica Bailey

(510) 385-8163

Submitted by:

To be determined

To be determined

To be determined,

To be determined

To be determined

Project Site Address

The project is located along San Lorenzo Creek in the City of Hayward. The parcel is bordered by Crescent Avenue to the north, Ruby Street to the east, A Street to the south, and Rockaway Lane to the west. Latitude: 37.6796 degrees N; Longitude: 122.0782 degrees W

To be determined

Contractor's Water Pollution Control (WPC) Manager/Qualified S WPPP Developer(OSD)

To be determined

To be determined

Contractor's Qualified SWPPP Developer (OSD) (if SWPPP not developed by WPC Manager)

To be determined

To be determined

Contractor's Qualified S WPPP Practitioner (OSP) (if different from WPC Manager)

To be determined

To be determined

CSWPPP Developed by:

To be determined

To be determined

To be determined,

To be determined

To be determined - To be determined

CSWPPP Date

2/11/2015

Contents

SECTION 100 SWPPP Certifications and Approval

- 100.1 LRP Certification and Caltrans Approval
- 100.2 Contractor and QSD SWPPP Certification
- 100.3 Amendments
 - 100.3.1 SWPPP Amendments Certification and Approval
 - 100.3.2 Amendment Log
- 100.4 Annual Compliance and Approval

SECTION 200 OBJECTIVES

SECTION 300 PROJECT AND CONTRACTOR INFORMATION

- 300.1 Project Description
- 300.2 Project Risk Level
- 300.3 Construction Sites Estimates
- 300.4 Vicinity and Site Map
- 300.5 Unique Site Features
- 300.6 Contact Information for Responsible Parties
- 300.7 List of Subcontractor and Materials Suppliers
- 300.8 Training

SECTION 400 REFERENCES, OTHER PLANS, PERMITS AND AGREEMENTS

SECTION 500 DETERMINATION OF CONSTRUCTION SITE BEST MANAGEMENT PRACTICES

- 500.1 Pollutant Sources
 - 500.1.1 Inventory of Materials and Activities that May Pollute Stormwater
 - 500.1.2 Potential Pollutants from Site Features or Known Contaminates
 - 500.1.3 Risk Level Determination
- 500.2 Pre-Construction Existing Stormwater Control Measures
- 500.3 BMP Selection for Erosion and Sediment Control
 - 500.3.1 Temporary Run-on Control BMPs
 - 500.3.2 Soil Stabilization (Erosion Control)
 - 500.3.3 Sediment Control
 - 500.3.4 Tracking Control
 - 500.3.5 Wind Erosion Control
- 500.4 BMP Selection for Construction Site Management
 - 500.4.1 Non-Stormwater Site Management
 - 500.4.2 Waste Management and Materials Pollution Control
- 500.5 Water Pollution Control BMP List

- 500.6 Water Pollution Control Drawings
- 500.7 Water Pollution Control Schedule

SECTION 600 PROJECT SITE IMPLEMENTATION PROGRAM

- 600.1 Water Pollution Control Manager Responsibilities
- 600.2 Site Inspections
- 600.3 Weather Forecast Monitoring
- 600.4 Weather Monitoring
- 600.5 Best Management Practices Status Report
- 600.6 Rain Event Action Plans

SECTION 700 CONSTRUCTION SITE MONITORING PROGRAM

- 700.1 Site Visual Monitoring Inspection
 - 700.1.1 Visual Monitoring Locations
 - 700.1.2 Visual Monitoring Schedule
 - 700.1.3 Visual Monitoring Procedures
 - 700.1.4 Visual Monitoring Following-up and Tracking Procedures
 - 700.1.5 Data Management and Reporting
- 700.2 Sampling and Analysis Plans
 - 700.2.1 General
 - 700.2.2 Sampling and Analysis Plan for Non-Visible Pollutants
 - 700.2.3 Sampling and Analysis Plan for Non-Stormwater Discharge
 - 700.2.4 Sampling and Analysis Plan for Stormwater pH and Turbidity
 - 700.2.5 Sampling and Analysis Plan for Monitoring Required by Regional Board
 - 700.2.6 Sampling and Analysis Plan for Monitoring of Active Treatment System (ATS)

SECTION 800 POST CONSTRUCTION CONTROL PRACTICES

- 800.1 Post-Construction Control Practices
- 800.2 Post Construction Operation/Maintenance

SECTION 900 SWPPP REPORTING REQUIREMENTS

- 900.1 Record Keeping
- 900.2 Stormwater Annual Report
- 900.3 Discharge Reporting
- 900.4 Regulatory Agency Notice or Order Reporting
- 900.5 Illicit Connection/Illegal Discharge Reporting

SWPPP Attachments

Attachment ALegally Responsible Person Authorization of Approved Signatory
Attachment BNotice of Construction (NOC) / Notice of Intent (NOI)
Attachment CRisk Level Determination
Attachment DVicinity Map and Site Map
Attachment EContractor Personnel Stormwater Training
Attachment FOther Plans/Permits/Agreements
Attachment AASWPPP Amendments
Attachment BBWater Pollution Control Drawings
Attachment CCWater Pollution Control Best Management Practices List
Attachment DDWater Pollution Control Schedule
Attachment EEStormwater Sampling Locations

SWPPP Appendices

Appendix ACEM-2008 SWPPP/WPCP Amendment Certification and Acceptance Form
Appendix BCEM-2009 SWPPP/WPCP Amendments Log Form
Appendix CCEM-2070 SWPPP/WPCP Annual Certification of Compliance Form
Appendix DSubcontractor/Material Supplier Notification Letter and Contact Information
Appendix ECEM-2023 Stormwater Training Record Form
Appendix FCEM-2024 Stormwater Training Log-Optional Form
Appendix GCEM-2030 Stormwater Site Inspection Report
Appendix H CEM-2034 Monthly Stormwater Best Management & Materials Inventory Report Form
Appendix ICEM-2035 Stormwater Corrective Actions Summary
Appendix JCEM-2045 Rain Event Action Plan Forms
Appendix KCEM- 2061 Notice of Discharge Form
Appendix LCEM-2058 Stormwater Meter Calibration Record– Specialty Meters Form
Appendix MCEM-2051 Stormwater Sampling and Testing Activity Log – Optional Form
Appendix NCEM-2052 Stormwater Sample Field Test Report Form
Appendix OCEM-2062 Numeric Action Level Exceedance Report Form
Appendix PCEM-2063 Numeric Effluent Limitation Violation Report – ATS Discharges Form

SWPPP Files

File Category 20.01Stormwater Pollution Prevention Plan (SWPPP)
File Category 20.02Stormwater Pollution Prevention Plan Amendments
File Category 20.03Water Pollution Control Schedule Updates
File Category 20.05Notice of Construction or Notice of Intent
File Category 20.06Legally Responsible Person Authorization of Approved Signatory

File Category 20.10	Correspondence
File Category 20.21	Subcontractor Contact Information and Notification Letters
File Category 20.22	Material Suppliers Contact Information and Notification Letters
File Category 20.23	Contractor Personnel Training Documentation
File Category 20.31	Contractor Stormwater Site Inspection Reports
File Category 20.32	Caltrans Stormwater Site Inspection Reports
File Category 20.33	Site Visual Monitoring Inspection Reports
File Category 20.34	Best Management Practices Monthly Status Reports
File Category 20.35	Corrective Actions Summary
File Category 20.40	Weather Monitoring Logs
File Category 20.45	Rain Event Action Plans
File Category 20.46	Rain/Storm Event Sampling and Analysis Plan
File Category 20.50	Non-Stormwater Discharge Sampling and Test Results
File Category 20.51	Non-Visible Pollutant Sampling and Test Results
File Category 20.52	Turbidity, pH and SSC Sampling and Test Results
File Category 20.53	Required Regional Water Board Monitoring Sampling and Test Results
File Category 20.54	ATS Monitoring Sampling and Test Results
File Category 20.55	Field Testing Equipment Maintenance and Calibration Records
File Category 20.61	Notice of Discharge Reports
File Category 20.62	Numeric Action Level Exceedance Reports
File Category 20.63	Numeric Effluent Limitation Violation Reports
File Category 20.70	Annual Certification of Compliance
File Category 20.80	Stormwater Annual Reports
File Category 20.90	Notice of Termination

SECTION 100

SWPPP Certifications and Approval

100.1 Legally Responsible Person Certification and Caltrans Approval

The California Department of Transportation (Caltrans) District Director, as the Legally Responsible Person (LRP), has authorized the Caltrans RE to be the authorized Approved Signatory of Caltrans for reviewing, signing, and certifying the Stormwater Pollution Prevention Plan (SWPPP) in conformance with Section IV.I of the Construction General Permit (CGP) (CAS000002, Order No. 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ). The LRP authorization for the RE to be the Approved Signatory is provided as Attachment A. The SWPPP was developed by the Contractor and submitted for review and acceptance to the RE, pursuant to the Special Provisions, the SWPPP / Water Pollution Control Program (WPCP) Preparation Manual, and the Standard Specifications Section 7-1.01G – Water Pollution. The Contractor is responsible and liable at all times for compliance with applicable requirements of the CGP (CAS000002, Order No. 2009-009- DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ) for which compliance is ultimately determined by the Regional Water Quality Control Board (RWQCB), the State Water Resources Control Board (SWRCB), and/or the U.S. Environmental Protection Agency (USEPA). Copies of the SWRCB-issued Waste Discharge Identification Number and Notice of Intent form are provided as Attachment B.

For Caltrans Use Only

RE's Acceptance of the Stormwater Pollution Prevention Plan

Project Name: Hayward Parcel Mitigation

Caltrans Contract Number: 04-172451

Caltrans Project
Identification Number: 04130003711

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

This SWPPP is accepted based on a review performed by myself or personnel acting under my direction that determined that the SWPPP meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications, and the Caltrans SWPPP/WPCP Preparation Manual.

RE's Signature

Date of SWPPP Acceptance

Jessica Bailey

(510) 385-8163

RE's Name

RE's Telephone Number

100.2 Contractor and QSD SWPPP Certification

Contractor's Certification of SWPPP

Project Name: Hayward Parcel Mitigation

Caltrans Contract Number: 04-172451

Caltrans Project Identification Number: 04130003711

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

Contractor's Signature

Date

To be determined

To be determined

Contractor's Name

Telephone Number

To be determined

Contractor's Title

QSD's Certification of SWPPP

Project Name: Hayward Parcel Mitigation

Caltrans Contract Number: 04-172451

Caltrans Project Identification Number: 04130003711

“I certify under penalty of law that I relied upon available project and site information, current watershed and basin plan maps and available soil data to develop this SWPPP so that Best Management Practices (BMPs) were designed and placed in accordance with industry standards and best professional judgment to reduce pollutants from leaving the job site. All other sources relied upon to gain information for this project’s SWPPP were appropriate and dependable, based on my best professional judgment. To the best of my knowledge and belief, the information submitted in this SWPPP is in compliance with all requirements of the Construction General Permit (CAS000002, Order No. 2009-009-DWQ as ammended by Order 2010-0014-DWQ and 2012-006-DWQ). I certify that the ‘required text’ portions of this document are unaltered from the original required text and content.”

QSD’s Signature	Date
To be determined	To be determined
QSD’s Name	QSD’s Telephone Number
To be determined	
QSD’s Title	

100.3 Amendments

100.3.1 SWPPP Amendments Certification and Approval

This SWPPP is meant to be a “living document,” therefore, updated and additional information is expected to be added to the SWPPP as the project progresses, including information regarding changes in the field that do not require an amendment, such as the following:

- adding BMPs as required by a *Rain Event Action Plan*
- increasing or decreasing the quantity of BMPs in the field that are already part of the erosion control plan in the SWPPP,
- moving BMPs shown on the WPCDs to protect water quality during different phases of construction,
- updating WPCDs to reflect actual site conditions, and
- maintenance and repairs to BMPs.

This SWPPP shall be amended when:

- a change in construction or operations affects the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4);
- a contract change order includes additional water pollution control practices, not already specified in the approved SWPPP;
- deemed necessary by the RE;
- SWPPP objectives to reduce or eliminate pollutants in stormwater discharges have not been achieved; or
- a CGP violation has occurred; when the RWQCB determines that a CGP violation has occurred, the SWPPP shall be amended and corrective actions implemented within 14 calendar days after notification by the RWQCB.

The following information shall be included in each amendment:

- who requested the amendment;
- the location of proposed change;
- the reason for the change;
- the original BMP proposed, if any;
- the new BMP proposed; and
- any existing implemented BMP(s).

Approved and certified amendments shall be inserted into the appropriate section or attachment of the SWPPP. All SWPPP amendments prepared by the WPC Manager and approved by the Contractor shall be accepted and certified by the LRP or Approved Signatory. A blank copy of the CEM-2008 SWPPP/WPCP Amendment Certification and Approval form is in Appendix A. For approved amendments, the signed SWPPP Amendment Certification and Approval form shall be attached to the SWPPP amendment.

A copy of each approved and certified amendment shall be inserted into Attachment AA. All SWPPP amendments shall be listed in the SWPPP Amendment Log, available in Appendix B. The Amendment Log shall be kept in SWPPP File Category 20.02 and a copy shall be inserted into Attachment AA.

The SWPPP will be completely revised if either the number of amendments or the amount of information contained in the amendments makes implementation of the SWPPP confusing, as determined by the RE, or the Contractor requests to revise the SWPPP based on planned changes in activities that would require a major SWPPP amendment.

100.3.2 Amendment Log

All approved and certified SWPPP amendments shall be shown on the SWPPP Amendment Log. A blank Amendment Log is available in Appendix B. The SWPPP Amendment Log shall include the following information:

- amendment number;
- amendment date;
- brief description of the amendment;
- name of individual requesting amendment; and
- approval date.

All SWPPP amendment(s) prepared and approved as discussed in Section 100.3.1 shall be documented in the Amendment Log and kept in SWPPP File Category 20.02: Stormwater Pollution Prevention Plan Amendments. A copy of the Amendment Log shall also be inserted into Attachment AA.

100.4 Annual Compliance and Approval

By July 15 of each year, the Contractor shall submit the Contractor's Annual Certification of Compliance to the RE stating that the project is in compliance with the terms and conditions of the Permits and the SWPPP. By August 1 of each year, the Caltrans LRP, or RE as authorized Approved Signatory, will complete an Annual Certification of Compliance stating that the project is in compliance with the terms and conditions of the Permits and the SWPPP. A blank copy of the CEM-2070 SWPPP/WPCP Annual Certification of Compliance form is included in Appendix C. Completed Annual Certification of Compliance forms will be filed in SWPPP File Category 20.70: Annual Certification of Compliance.

SECTION 100 SWPPP Certifications and Approval

100.1 Legally Responsible Person Certification and Caltrans Approval

The California Department of Transportation (Caltrans) District Director, as the Legally Responsible Person (LRP), has authorized the Caltrans RE to be the authorized Approved Signatory of Caltrans for reviewing, signing, and certifying the Stormwater Pollution Prevention Plan (SWPPP) in conformance with Section IV.I of the Construction General Permit (CGP) (CAS000002, Order No. 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ). The LRP authorization for the RE to be the Approved Signatory is provided as Attachment A. The SWPPP was developed by the Contractor and submitted for review and acceptance to the RE, pursuant to the Special Provisions, the SWPPP / Water Pollution Control Program (WPCP) Preparation Manual, and the Standard Specifications Section 7-1.01G – Water Pollution. The Contractor is responsible and liable at all times for compliance with applicable requirements of the CGP (CAS000002, Order No. 2009-009- DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ) for which compliance is ultimately determined by the Regional Water Quality Control Board (RWQCB), the State Water Resources Control Board (SWRCB), and/or the U.S. Environmental Protection Agency (USEPA). Copies of the SWRCB-issued Waste Discharge Identification Number and Notice of Intent form are provided as Attachment B.

For Caltrans Use Only

**RE’s Acceptance of the
Stormwater Pollution Prevention Plan**

Project Name: Hayward Parcel Mitigation

Caltrans Contract Number: 04-172451

Caltrans Project Identification Number: 04130003711

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

This SWPPP is accepted based on a review performed by myself or personnel acting under my direction that determined that the SWPPP meets the requirements set forth in the contract special provisions, Caltrans Standard Specifications, and the Caltrans SWPPP/WPCP Preparation Manual.

RE's Signature

Date of SWPPP Acceptance

Jessica Bailey

(510) 385-8163

RE's Name

RE's Telephone Number

100.2 Contractor and QSD SWPPP Certification

Contractor's Certification of SWPPP

Project Name: Hayward Parcel Mitigation

Caltrans Contract Number: 04-172451

Caltrans Project Identification Number: 04130003711

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

Contractor's Signature

Date

To be determined

To be determined

Contractor's Name

Telephone Number

To be determined

Contractor's Title

QSD's Certification of SWPPP

Project Name: Hayward Parcel Mitigation

Caltrans Contract Number: 04-172451

Caltrans Project Identification Number: 04130003711

“I certify under penalty of law that I relied upon available project and site information, current watershed and basin plan maps and available soil data to develop this SWPPP so that Best Management Practices (BMPs) were designed and placed in accordance with industry standards and best professional judgment to reduce pollutants from leaving the job site. All other sources relied upon to gain information for this project’s SWPPP were appropriate and dependable, based on my best professional judgment. To the best of my knowledge and belief, the information submitted in this SWPPP is in compliance with all requirements of the Construction General Permit (CAS000002, Order No. 2009-009-DWQ as ammended by Order 2010-0014-DWQ and 2012-006-DWQ). I certify that the ‘required text’ portions of this document are unaltered from the original required text and content.”

QSD’s Signature	Date
To be determined	To be determined
QSD’s Name	QSD’s Telephone Number
To be determined	
QSD’s Title	

100.3 Amendments

100.3.1 SWPPP Amendments Certification and Approval

This SWPPP is meant to be a “living document,” therefore, updated and additional information is expected to be added to the SWPPP as the project progresses, including information regarding changes in the field that do not require an amendment, such as the following:

- adding BMPs as required by a *Rain Event Action Plan*
- increasing or decreasing the quantity of BMPs in the field that are already part of the erosion control plan in the SWPPP,
- moving BMPs shown on the WPCDs to protect water quality during different phases of construction,
- updating WPCDs to reflect actual site conditions, and
- maintenance and repairs to BMPs.

This SWPPP shall be amended when:

- a change in construction or operations affects the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4);
- a contract change order includes additional water pollution control practices, not already specified in the approved SWPPP;
- deemed necessary by the RE;
- SWPPP objectives to reduce or eliminate pollutants in stormwater discharges have not been achieved; or
- a CGP violation has occurred; when the RWQCB determines that a CGP violation has occurred, the SWPPP shall be amended and corrective actions implemented within 14 calendar days after notification by the RWQCB.

The following information shall be included in each amendment:

- who requested the amendment;
- the location of proposed change;
- the reason for the change;
- the original BMP proposed, if any;
- the new BMP proposed; and
- any existing implemented BMP(s).

Approved and certified amendments shall be inserted into the appropriate section or attachment of the SWPPP. All SWPPP amendments prepared by the WPC Manager and approved by the Contractor shall be accepted and certified by the LRP or Approved Signatory. A blank copy of the CEM-2008 SWPPP/WPCP Amendment Certification and Approval form is in Appendix A. For approved amendments, the signed SWPPP Amendment Certification and Approval form shall be attached to the SWPPP amendment.

A copy of each approved and certified amendment shall be inserted into Attachment AA. All SWPPP amendments shall be listed in the SWPPP Amendment Log, available in Appendix B. The Amendment Log shall be kept in SWPPP File Category 20.02 and a copy shall be inserted into Attachment AA.

The SWPPP will be completely revised if either the number of amendments or the amount of information contained in the amendments makes implementation of the SWPPP confusing, as determined by the RE, or the Contractor requests to revise the SWPPP based on planned changes in activities that would require a major SWPPP amendment.

100.3.2 Amendment Log

All approved and certified SWPPP amendments shall be shown on the SWPPP Amendment Log. A blank Amendment Log is available in Appendix B. The SWPPP Amendment Log shall include the following information:

- amendment number;
- amendment date;
- brief description of the amendment;
- name of individual requesting amendment; and
- approval date.

All SWPPP amendment(s) prepared and approved as discussed in Section 100.3.1 shall be documented in the Amendment Log and kept in SWPPP File Category 20.02: Stormwater Pollution Prevention Plan Amendments. A copy of the Amendment Log shall also be inserted into Attachment AA.

100.4 Annual Compliance and Approval

By July 15 of each year, the Contractor shall submit the Contractor's Annual Certification of Compliance to the RE stating that the project is in compliance with the terms and conditions of the Permits and the SWPPP. By August 1 of each year, the Caltrans LRP, or RE as authorized Approved Signatory, will complete an Annual Certification of Compliance stating that the project is in compliance with the terms and conditions of the Permits and the SWPPP. A blank copy of the CEM-2070 SWPPP/WPCP Annual Certification of Compliance form is included in Appendix C. Completed Annual Certification of Compliance forms will be filed in SWPPP File Category 20.70: Annual Certification of Compliance.

SECTION 200

OBJECTIVES

This SWPPP has five (5) main objectives, which are listed below.

1. All pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity, are controlled.
2. Where not otherwise required to be under a California Regional Water Quality Control Board (RWQCB) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated.
3. Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non- stormwater discharges from the construction activity to the best available technology (BAT) / best conventional technology (BCT) standard.
4. Calculations and design details for site run-on, as well as BMP controls, are complete and correct.
5. Stabilization BMPs designed to eliminate or reduce pollutants after construction is complete have been installed

This SWPPP was developed to conform to the required elements of the CGP (CAS000002, Order No. 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ) issued by the SWRCB.

This SWPPP is designed to be a useful document for those who must implement the SWPPP on a daily basis in the field. Most of the information necessary for the daily implementation of the SWPPP is contained in Attachment BB: Water Pollution Control Drawings, Attachment CC: Water Pollution Control Best Management Practices List, and Attachment DD: Water Pollution Control Schedule.

This SWPPP is also a “living document” because updated and additional information is added to the SWPPP file categories as the project progresses, including:

- SWPPP Amendments;
- Subcontractor and Material Supplier Information;
- Contractor Personnel Training Documentation;
- Site Inspection Reports;
- Monthly Status Reports;
- Rain Event Action Plans;
- Sampling and Analysis Results; and
- Notice of Discharge Reports.

The SWPPP shall be readily available on site for the duration of the project.

SECTION 300

PROJECT AND CONTRACTOR INFORMATION

300.1 Project Description

This Conceptual SWPPP only covers the preliminary work to be completed in the first 55 days. This CSWPPP is a guideline for only a limited set of activities and that the Contractor has to make their own independent investigations on site conditions (etc.) to meet the requirements of the CGP and CT Permit when they develop the final SWPPP.

Any work beyond the preliminary work that results in soil disturbance is not covered under this Conceptual SWPPP. On the 56th day of construction, this Conceptual SWPPP will no longer be effective.

The SWPPP to be developed by the Contractor and approved by the Resident Engineer will cover all construction work involved with the Project beyond the preliminary work. If the Contractor's SWPPP is approved by the Resident Engineer within the first 55 days of construction, then the Contractor's SWPPP will supercede this Conceptual SWPPP. If preliminary work is completed in less than 55 days, then the Contractor has to wait until their SWPPP is approved to perform any work beyond.

This CSWPPP only pertains to the following preliminary work:

- 1) Deployment of temporary BMPs
- 2) Setting high visibility fence
- 3) Clearing and grubbing
- 4) Environmental stewardship
- 5) Roadside clearing
- 6) Sign and fence installation

The Hayward Mitigation Parcel Project involves riparian enhancement and restoration along San Lorenzo Creek (ALA-880-PM 18.4) to provide compensatory mitigation for permanent impacts to riparian woodland and seasonal creek habitat from the completed 2008 Pigeon Pass Realignment (ALA-84-PM 20.3-23.0). Enhancement and restoration of the creek would occur through the control of invasive vegetation, planting of native species, and trash/debris removal. It is proposed that this project will enhance and restore 1.83 acres of riparian woodland to satisfy a portion of the remaining 3.53 acres of mitigation required under the California Department of Fish and Wildlife (CDFW) Section 1602 Permit from the realignment.

Additionally, completion of the proposed project would enhance and restore 1,860 linear feet of seasonal creek to satisfy a portion of the remaining 2,370 linear feet of mitigation required under the Regional Water Quality Control Board (RWQCB) Section 401 Permit from the realignment.

The project includes the portion of San Lorenzon Creek in the City of Hayward between Crescent Avenue and A Street, and the surrounding uplands (approximately 4.23 acres). No negative impacts to listed plant and wildlife species are anticipated from the proposed project. The total area of temporary impacts (and subsequent enhancement/restoration) from the project is estimated at 1.83 acres. Temporary impacts will occur as a result of vegetation mowing, control and removal of invasive plant species, bank restoration through native plantings and compost placement, and trash/debris removal by crews on foot. Areas subject to temporary impacts will be enhanced or restored to better than pre-Project conditions in terms of native plant occurrence and diversity.

There are 1.83 acres of disturbed soil area. New impervious area is insignificant because it is only concrete work for fence posts and would be buried with soil.

Because of the short duration between Contract Approval and Construction Start, this Conceptual SWPPP was prepared by the Department and included in the supplemental project information to allow the Contractor to start construction immediately after Contract Approval, while they are preparing the SWPPP.

Once the Contractor's SWPPP is approved, it supercedes this Conceptual CWPPP.

300.2 Project Risk Level

The risk level assessment of the project site was calculated to be Risk Level 2 . This risk level will determine the minimum level of BMPs that will be acceptable based on the project site and the project construction activities. The risk level is the basis for the minimum level of site-specific monitoring and reporting that will be required. The risk level is based on project duration, proximity to impaired receiving waters, and soil conditions. The Risk Level Determination is discussed in Section 500.1.3 and the calculations are included in Attachment C.

300.3 Construction Sites Estimates

The following are estimates of the construction site.

- Construction site area 4.23 acres
- Percentage impervious area before construction 0.0
- Runoff coefficient before construction 0.66
- Percentage impervious area after construction 0.0 (insignificant)
- Runoff coefficient after construction 0.66

Run-on from off-site areas anticipated: Yes No

Anticipated stormwater run-on flow rate to the construction site:

Anticipated drainage patterns following the completion of grading activities are shown on the WPCDs from Attachment BB.

Locations of potential run-on with the estimated flow rates shall be noted on the WPCDs. The BMPs designed to handle the run-on flows are included in Section 500.3.1.

300.4 Vicinity and Site Map

The construction project vicinity map showing the project location, surface water boundaries, geographic features, construction site perimeter, and general topography, is located in Attachment D. The project contract plan Title Sheet provides additional detail regarding the project location and is also included in Attachment D.

300.5 Unique Site Features

Project has Fill Material: Yes No

Project has Native Material: Yes No

Contractor

Name: **To be determined**

Title: **Contractor**

Company: **To be determined**

Address: **To be determined**
To be determined,

Phone Number: **To be determined**

Emergency Phone Number (24/7) **To be determined**

Email address: **To be determined**

Erosion and Sediment Control Provider

Name: **To be determined**

Title: **To be determined**

Company: **To be determined**

Address: **To be determined**
To be determined,

Phone Number: **To be determined**

Emergency Phone Number (24/7) **To be determined**

Email address: **To be determined**

Stormwater Sampling and Testing Agent

Name: **To be determined**

Title: **To be determined**

Company: **To be determined**

Address: **To be determined**
To be determined,

Phone Number: **To be determined**

Emergency Phone Number (24/7) **To be determined**

Email address: **To be determined**

300.7 List of Subcontractor and Materials Suppliers

The following subcontractors will be working on this project:

1

SWPPP Responsibility:

Contact information for each subcontractor will be provided in the SWPPP Notification log in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters. Contact information shall include subcontractor name, type of work performed, contact name, phone number and emergency telephone number (24/7).

The following materials suppliers will be delivering materials to the project site and must comply with pertinent SWPPP requirements:

1

Contact information for each material supplier will be provided in the SWPPP Notification log in SWPPP File Category 20.22: Material Supplier Contact Information and Notification Letters. Contact information shall include company name, type of material supplied, contact name and phone number.

All subcontractors and material suppliers shall be notified that the project is covered by the

- SWRCB Order No. 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ, NPDES General Permit No. CAS000002, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, September 02, 2009 (Construction General Permit).

Each subcontractor and material supplier shall also be notified that the project has a SWPPP and the pertinent water pollution control BMPs with which the subcontractor or material supplier must comply. If subcontractors or material suppliers are added during the project, appropriate notification that the project has a SWPPP and the pertinent water pollution control BMPs shall be given to the subcontractor or materials supplier prior to working or supplying materials on the project site.

A SWPPP Notification Letter shall be sent to all subcontractors and material suppliers. A sample notification letter and notification letter log is provided in Appendix D. A copy of SWPPP Notification Letters sent to subcontractors and material suppliers are in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters or 20.22 Material Supplier Contact Information and Notification Letters. Notification letter logs and contact information are filed in SWPPP File Category 20.21: Subcontractor Contact Information and Notification Letters and File Category 20.22: Material Supplier Contact Information and Notification Letters.

300.8 Training

The Contractor's WPC Manager is a QSD. The WPC Manager for this project, meets the qualifications and certification requirements of Section VII, Training Qualifications and Certification Requirements, of the CGP based on:

-

The WPC Manager has received the following training:

-

The WPC Manager has the following SWPPP development and implementation experience:

-

Ongoing, formal training sessions for individuals responsible for SWPPP development and implementation shall be selected from one of the following organizations.

- City of Los Angeles Storm Water Program
- County of Los Angeles Storm Water Program
- State of California RWQCB
- IECA-, ABAG- and/or AGC-sponsored training
- USEPA-sponsored training
- Recognized municipal stakeholder organizations throughout California
- Professional organizations and societies in the building and construction field
-

Contractor or subcontractor employees responsible for water pollution control BMP installation, maintenance and repair have received the following training.

-

Contractor and subcontractor employees shall be trained prior to working on the site in the following subjects:

- water pollution control rules and regulations
- implementation and maintenance for:
 - temporary soil stabilization,
 - temporary sediment control,
 - tracking control,
 - wind erosion control,
 - material pollution prevention control,
 - waste management, and
 - non-stormwater management
- identification and handling of hazardous substances

- potential dangers to humans and the environment from spills and leaks or exposure to toxic or hazardous substances

Informal employee training shall include tailgate site meetings to be conducted weekly; tailgate meetings should address the following topics:

- water pollution control BMP deficiencies and corrective actions;
- BMPs that are required for work activities during the week;
- spill prevention and control;
- material delivery, storage, use, and disposal;
- waste management; and
- non-stormwater management procedures.

A summary of formal and informal training of various personnel is shown in Attachment E. A copy of all training certificate(s) (e.g., Caltrans 24-Hour Training Class and CGP Training) for the WPC Manager and the Qualified SWPPP Developer are included in Attachment E.

Training records for project personnel shall be updated by completing the CEM-2023 Stormwater Training Record form, available in Appendix E, and the CEM-2024 Stormwater Training Log - Optional form, available in Appendix F. Records of training, with training certificates attached, when applicable, and the training log will be kept in SWPPP File Category 20.23: Contractor Personnel Training Documentation. Personnel training records, with required documentation attached and an updated training log, shall be submitted to the RE within five (5) days of completion of training.

Training information, consisting of the following items, shall be provided in the Stormwater Annual Report:

- documentation of all training for individuals responsible for all activities associated with compliance with CGP,
- documentation of all training for individuals responsible for BMP installation, inspection, maintenance, and repair, and
- documentation of all training for individuals responsible for overseeing, revising, and amending the SWPPP.
-

SECTION 400

REFERENCES, OTHER PLANS, PERMITS AND AGREEMENTS

The documents listed below are made a part of this SWPPP by reference.

- Standard Plans and Specifications, dated 2010.
- Contract Plans and Special Provisions for Contract No. 04-172451, dated December 23, 2014, prepared by Nicholas Grgich, Ganga Tripathi, Jerilyn Struven, Bart Van Der Zeeuw, and Alex McDonald.
- SWRCB-Order No. 2009-0009-DWQ, Order No. 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-006-DWQ NPDES General Permit No. CAS000002, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated With Construction and Land Disturbance Activities (Construction General Permit), September 2009
- *Caltrans Statewide Storm Water Management Plan* (SWMP), dated July 2012
- *Caltrans SWPPP/WPCP Preparation Manual*, dated March 2011
- *Caltrans Construction Site Monitoring Program Guidance Manual*, August 2013
- Caltrans Permit - Order No. 2012-011-DWQ, NPDES CAS000003
- Caltrans Construction Site BMP Fact Sheets (<http://www.dot.ca.gov/hq/construc/stormwater/factsheets.htm>)

Attachment F includes copies of the Caltrans Statewide Permit, the CGP, and other local, state, and federal plans and permits. A list of the other local, state, and federal plans and permits included in Attachment F is provided below.

- Streambed Alteration Agreement (Notification #1600-2014-0337-R3)

SECTION 500

DETERMINATION OF CONSTRUCTION SITE BEST MANAGEMENT PRACTICES

500.1 Pollutant Sources

500.1.1 Inventory of Materials and Activities that May Pollute Stormwater

The following table contains a list of construction activities that have the potential to contribute pollutants, including sediment, to stormwater discharges. All potential pollutants, except sediment, and their locations shall be listed in this section, and, where possible, the locations shall be shown on the WPCDs from Attachment BB. Details for controlling these pollutants using soil stabilization and sediment control BMPs are discussed in Sections 500.3.1 through 500.3.5. Potential non-storm water and waste management-related discharges are further described in Sections 500.4.1 and 500.4.2, respectively.

TABLE 500.1.1 ANTICIPATED CONSTRUCTION SITE ACTIVITIES WITH THE POTENTIAL TO DISCHARGE POLLUTANTS	
<input type="checkbox"/> Demolition	<input type="checkbox"/> Pavement Removal (asphalt concrete, concrete) <input type="checkbox"/> Structure Demolition/Removal over or Adjacent to Water <input type="checkbox"/> Building Demolition (Structure, HVAC, insulation) <input type="checkbox"/> Hardscape Demolition (Parking areas, curbs, gutters, sidewalks)
<input checked="" type="checkbox"/> Earthwork	<input checked="" type="checkbox"/> Clearing and Grubbing <input type="checkbox"/> Grading Activities <input type="checkbox"/> Soil Import and Export <input checked="" type="checkbox"/> Stockpiling <input type="checkbox"/> Excavation <input type="checkbox"/> Disturbance of Contaminated Soil <input type="checkbox"/> Dewatering <input type="checkbox"/> Temporary Stream Crossing <input type="checkbox"/> Drainage Construction <input type="checkbox"/> Dredging <input type="checkbox"/> Pile Driving <input type="checkbox"/> Utilities <input type="checkbox"/> Line Flushing (hydrostatic test water, pipe flushing) <input checked="" type="checkbox"/> Landscaping, Planting and Plant Maintenance, Amending of Soil and Mulching <input type="checkbox"/> Material and Equipment Use over Water
<input checked="" type="checkbox"/> Masonry, Concrete, Asphalt Work	<input type="checkbox"/> Saw Cutting (cement and brick dust, saw cut slurries) <input type="checkbox"/> Paving and Grinding

TABLE 500.1.1 ANTICIPATED CONSTRUCTION SITE ACTIVITIES WITH THE POTENTIAL TO DISCHARGE POLLUTANTS	
	<input type="checkbox"/> Concrete Placement (colored chalks) <input type="checkbox"/> Concrete Curing (curing and glazing compounds) <input type="checkbox"/> Concrete Finishing (surface cleaners) <input checked="" type="checkbox"/> Concrete Waste Management
<input type="checkbox"/> Building Construction	<input type="checkbox"/> Paint Preparation, Painting, Stenciling, and Etching <input type="checkbox"/> Material Use <input type="checkbox"/> Material Delivery and Storage <input type="checkbox"/> Adhesives (glues, resins, epoxy synthetics, caulks, sealers, putty, sealing agents and coal tars) <input type="checkbox"/> Cleaning, Polishing (metal, ceramic, tile), and Sandblasting Operations <input type="checkbox"/> Plumbing [solder (lead, tin), flux (zinc chloride), pipe fitting] <input type="checkbox"/> Framing (sawdust, particle board dust and treated woods) <input type="checkbox"/> Interior Construction (tile cutting, flashing, saw-cutting drywall, galvanized metal in nails and fences, and electric wiring)
<input type="checkbox"/> Equipment Use	<input type="checkbox"/> Vehicle and Equipment Cleaning <input type="checkbox"/> Vehicle and Equipment Fueling <input type="checkbox"/> Vehicle and Equipment Maintenance
<input checked="" type="checkbox"/> Waste Management	<input type="checkbox"/> Hazardous Waste Management <input checked="" type="checkbox"/> Solid Waste Management (litter, trash, and debris) <input type="checkbox"/> Liquid Waste Management (wash water) <input checked="" type="checkbox"/> Sanitary Septic Waste Management (portable toilets, disturbance of existing sewer lines)

The WPC Manager shall update the list of potential pollutants in accordance with onsite conditions, documenting all materials or equipment that have been received or produced onsite that are not designed to be outdoors and are potential sources of stormwater contamination.

Materials Management Plan

A list of construction materials that will be on site and have the potential to contribute pollutants, other than sediment, to stormwater runoff, which has been prepared to prevent or minimize the off-site discharge of those pollutants, are provided below.

The following stockpiles will be covered and bermed prior to likely precipitation events.

- Disturbed soils
- Debris from construction
- Debris from removal or clearing
- Soil amendments
- Fertilizer
- Erosion control materials

The following materials will be kept off the ground or bermed and covered prior to likely precipitation events.

- Not Applicable

The following materials will be properly stored according to Material Safety Data Sheet requirements.

- Concrete for fence posts

The following dumpsters shall be covered prior to likely precipitation events.

- Trash and litter
- Construction waste

The following areas will be inspected for leaks or spills prior to likely precipitation events.

- Portable Toilets

Potential pollutants shall not be stored within 50 feet of stormwater conveyance features or concentrated flow paths. In addition, non-stormwater discharges shall not be made within 50 feet of potential pollutants.

500.1.2 Potential Pollutants from Site Features or Known Contaminates

Former site usage or known site contamination may contribute pollutants to stormwater discharges from the site. Based on information available for the project site, the following site usage and historical contamination has been determined:

Former Industrial Operations: Yes No

Description of Former Industrial Operations

Historic Contamination: Yes No

- Not Applicable

The following contaminants are known to exist at the project site locations identified:

- Not Applicable

500.1.3 Risk Level Determination

This project has more than one acre disturbed soil area (DSA) hence risk level (RL) analysis is required for this project. The project site is categorized as Risk Level # 2 having low sediment risk and high receiving water (RW) risk.

There are two major requirements related to site planning and risk determination in this General Permit. The project's overall risk is broken up into two elements – (1) project sediment risk (the relative amount of sediment that can be discharged, given the project and location details) and (2) receiving water risk (the risk sediment discharges pose to the receiving waters).

Project Sediment Risk is determined by multiplying the R, K, and LS factors from the Revised Universal Soil Loss

Equation (RUSLE) to obtain an estimate of project-related bare ground soil loss expressed in tons/acre. The RUSLE equation is as follows:

$$A = (R)(K)(LS)(C)(P)$$

Where:

- A = the rate of sheet and rill erosion
- R = rainfall-runoff erosivity factor
- K = soil erodibility factor
- LS = length-slope factor
- C = cover factor (erosion controls)
- P = management operations and support practices (sediment controls)

This project qualifies as a Risk Level 2 because the sediment risk is low and the receiving water risk is high.

Areas where established vegetation was disturbed during construction will be stabilized and re-vegetated by the end of project. When required, adequate temporary stabilization Best Management Practices (BMPs) will be installed and maintained until vegetation is established to meet minimum cover requirements established in the General Permit for final stabilization.

500.2 Pre-Construction Existing Stormwater Control Measures

The following are existing (pre-construction) control measures encountered within the project site.

- Existing vegetation and ground cover (trees and shrubs that are not being removed)

500.3 BMP Selection for Erosion and Sediment Control

The Contractor shall control construction site erosion through the implementation of effective erosion and sediment control measures in accordance with the CGP. The Contractor and the WPC Manager shall develop a schedule that includes the sequencing of construction activities and the implementation of effective erosion control BMPs while taking local climate (rainfall, wind, etc.) into consideration, thereby reducing the amount and duration of soil exposed to erosion by wind, rain, runoff, and vehicle tracking. The SWPPP schedule shall: describe when work activities will be performed that could cause the discharge of pollutants in stormwater; describe the water pollution control practices associated with each construction phase; and identify the soil stabilization and sediment control practices for all disturbed soil areas. Effective soil cover shall be provided for:

- Disturbed soil areas
- Stockpiles

Additional erosion and sediment control BMPs may be required in other locations on the project site as work progresses in order to prevent sediment from leaving the construction site. These measures shall be determined by the Contractor and the WPC Manager in the field. As long as the water pollution control measures consist of additions to the BMPs already selected in the approved SWPPP, then these additional measures do not require a SWPPP amendment and the WPC Manager shall simply show the additional measures on the WPCDs. If erosion control or sediment control BMPs must be changed because of field conditions or because they are determined to be ineffective, the SWPPP must be amended. Once deemed necessary, corrective actions/design changes to the SWPPP shall be reviewed and signed by the WPC Manager, implemented, as required by Standard Specification 13-1.03A, within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the CGP: implemented within 72 hours of identification and completed as soon as possible thereafter). Immediate corrective action is required for numeric action level (NAL) exceedances. Routine BMP maintenance or the implementation of an additional quantity of a BMP included in the SWPPP as recommended by the WPC Manager does not require an amendment to the SWPPP.

An effective combination of erosion (soil stabilization) and sediment control BMPs shall be implemented and maintained during the project. The following principles shall be followed to the maximum extent practicable to control erosion and sedimentation in disturbed areas at the site.

- Implement effective wind erosion control.
- Provide effective soil cover for inactive areas (areas that have been disturbed and are not scheduled to be redisturbed for at least 14 days).
- Limit the use of plastic materials when more sustainable, environmentally-friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.
- Remove and dispose of litter, trash, debris, and weeds.

A more concise listing of the BMP control measures to be implemented and maintained at the project site are denoted in the BMP selection tables in the following sub-sections.

500.3.1 Temporary Run-on Control BMPs

Risk Level 2 dischargers shall monitor and report site run-on from surrounding areas if there is reason to believe run-on may contribute to an exceedance of NALs.

TABLE 500.3.1 TEMPORARY RUN-ON CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	BMP NAME	CONTRACT MIN REQUIRE- MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				Yes	No	
SS-1	Scheduling	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
SS-9	Earth Dikes / Drainage Swales & Lined Swales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-10	Outlet Protection / Velocity Dissipation Devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-11	Slope Drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-12	Streambank Stabilization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-4	Temporary Check Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-5	Fiber Rolls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	

To be determined

Page 500-5

SC-6	Temporary Gravel Bag Berm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-8	Temporary Sandbag Barrier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
ALTERNATIVE BMPs USED⁽³⁾ <input type="radio"/> Yes <input checked="" type="radio"/> No						

Notes:

- (1) The BMP designations (SS-1, SC-5, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site BMP Reference Manual is a required contract document.
- (2) Minimum requirements are based on the required Contract Provisions, Standard Special Provisions, Plans and Specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
- (3) Use of alternative BMPs will require written approval by the RE.

Implementation of Temporary Run-on Controls BMPs

SS-1 Scheduling

Within 5 days of the Contract award, the Contractor or Contractor's WPC Manager must develop a schedule detailing the work to be completed within the first 55 days of construction, the period covered under this Conceptual SWPPP. The schedule shall present the proposed sequencing of work and planned BMP implementation, including temporary soil stabilization BMPs.

SS-2 Preservation of Existing Vegetation

Temporary Fence (Type ESA) will be the first order of work prior to the start of any work or any soil disturbance. The fencing must be placed around locations identified as outside the limits of work. Fencing placed in the field should be in compliance with the Contract Plans and as directed by the field biologist. No construction work is permitted beyond these fenced locations; and damage or disturbance to these areas shall be identified, reported to the Resident Engineer, and mitigated with corrective actions per direction of the Resident Engineer; and required corrective action will be at the Contractor's expense.

SC-5 Temporary Fiber Roll

Temporary fiber rolls are placed on slopes to intercept runoff, reduce flow velocity, promote sheet flow, and prevent sediment transport. Temporary fiber rolls should be placed on slopes that are disturbed to prevent sediment laden sheet flow due to loss of vegetation cover. The temporary fiber rolls would be removed and replaced or relocated once soil disturbance work has started. The minimum locations of temporary fiber rolls are shown on the Water Pollution Control Drawings included in Attachment BB. The placement of temporary fiber rolls should be adjusted to meet field conditions.

- SS-2 Preservation of Existing Vegetation
- SC-5 Temporary Fiber Roll
- SS-1 Scheduling

500.3.2 Soil Stabilization (Erosion Control)

Soil stabilization, also referred to as erosion control, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding soil particles. This project will incorporate SWPPP/WPCP Preparation Manual minimum temporary soil stabilization requirements, temporary soil stabilization measures required by the contract documents, and other measures selected by the Contractor.

Sufficient soil stabilization materials will be maintained on site to allow implementation in conformance with Caltrans requirements and as described in this SWPPP. This includes implementation requirements for active and non-active areas that require deployment before the onset of rain.

The following soil stabilization BMP selection table indicates the BMPs that shall be implemented to control erosion on the construction site. Temporary soil stabilization BMPs are listed by location in the WPCBMPL in Attachment CC and are shown on the WPCDs from Attachment BB. Any details for temporary soil stabilization BMPs are shown in Attachment BB.

TABLE 500.3.2 TEMPORARY EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	BMP NAME	CONTRACT MIN REQUIRE- MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				Yes	No	
SS-1	Scheduling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
SS-3	Temporary Hydraulic Mulch (Bonded Stabilized Fiber Matrix)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
SS-3	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-4	Temporary Erosion Control (With Temporary Seeding)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-5	Temporary Soil Stabilizer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-7	Temporary Erosion Control Blanket (On Slope)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-7	Temporary Erosion Control Blanket (In swale or ditch)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-7	Temporary Cover (Geotextiles and Mats)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	

To be determined

SS-8	Temporary Mulch (Wood)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-9	Earth Dikes / Drainage Swales & Lined Swales	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-10	Outlet Protection/ Velocity Dissipation Devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-11	Slope Drains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-12	Streambank Stabilization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SS-13	Polyacrylamide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
ALTERNATIVE BMPs USED ⁽³⁾						
<input type="radio"/> Yes <input checked="" type="radio"/> No						

Notes:

(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site BMP Reference Manual is a required contract document.

(2) Minimum requirements are based on the required Contract Provisions, Standard Special Provisions, Plans and Specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.

(3) Use of alternative BMPs will require written approval by the RE.

The BMPs selected for the project are listed below along with an explanation of how they will be incorporated into the project.

- SS-2 Preservation of Existing Vegetation
- SS-3 Temporary Hydraulic Mulch
- SS-1 Scheduling

SS-1 Scheduling

Within 5 days of the Contract award, the Contractor or Contractor's WPC Manager must develop a schedule detailing the work to be completed within the first 55 days of construction, the period covered under this Conceptual SWPPP. The schedule shall present the proposed sequencing of work and planned BMP implementation, including temporary soil stabilization BMPs.

SS-2 Preservation of Existing Vegetation

Temporary Fence (Type ESA) will be the first order of work prior to the start of any work or any soil disturbance. The fencing must be placed around locations identified as outside the limits of work. Fencing placed in the field should be in compliance with the Contract Plans and as directed by the field biologist. No construction work is permitted beyond these fenced locations; and damage or disturbance to these areas shall be identified, reported to the Resident Engineer, and mitigated with corrective actions per direction of the Resident Engineer; and required corrective action will be at the Contractor's expense.

SS-3 Temporary Hydraulic Mulch

Temporary Hydraulic Mulch (Bonded Fiber Matrix - BFM) will be applied to disturbed embankments to provide temporary stabilization and prevent sediment transport from rain or wind. The minimum locations that require the application of temporary hydraulic mulch (bonded fiber matrix) are shown on the Water Pollution Control Drawings included in Attachment BB; additional areas requiring temporary soil stabilization should be identified in the field. Permanent erosion control shall be stage such that minimal DSA are exposed and protected when needed.

500.3.3 Sediment Control

Sediment controls are structural measures that are intended to complement and enhance the selected soil stabilization (erosion control) measures and reduce sediment discharges from construction areas. Sediment controls are designed to intercept and settle out soil particles that have been detached and transported by the force of water. This project will incorporate SWPPP/WPCP Preparation Manual minimum temporary sediment control requirements, temporary sediment control measures required by the contract documents, and other measures selected by the Contractor.

Sediment control BMPs will be installed at all appropriate locations along the site perimeter and at all operational internal inlets to storm drain systems at all times.

Throughout the duration of the project, temporary sediment control materials, equivalent to 10 percent of the materials installed on site, will be maintained on site for implementation in event of predicted rain, or the need for rapid response to failures or emergencies, in conformance with other Caltrans requirements, and as described in the SWPPP. This includes implementation requirements for active areas and non-active areas before the onset of rain.

The following sediment control BMP selection table indicates the BMPs that shall be implemented to control sediment on the construction site. Temporary sediment control BMPs are listed by location in the WPCBMPL in Attachment CC and are shown on the WPCDs from Attachment BB. Any details for temporary sediment control BMPs are shown in Attachment BB.

TABLE 500.3.3 TEMPORARY SEDIMENT CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	BMP NAME	CONTRACT MIN REQUIRE- MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				Yes	No	
SC-1	Temporary Silt Fence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-2	Temporary Sediment Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-3	Temporary Sediment Trap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-4	Temporary Check Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-5	Fiber Rolls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
SC-6	Temporary Gravel Bag Berm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
To be determined						

To be determined

SC-7	Street Sweeping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
SC-8	Temporary Sandbag Barrier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-9	Temporary Straw Bale Barrier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-10	Temporary Drain Inlet Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
SC-11	Temporary Chemical Treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
ALTERNATIVE BMPs USED⁽³⁾						
<input type="radio"/> Yes <input checked="" type="radio"/> No						

Notes:

- (1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site BMP Reference Manual is a required contract document.
- (2) Minimum requirements are based on the required contract provisions, standard special provisions, plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
- (3) Use of alternative BMPs will require written approval by the RE

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

- SC-7 Street Sweeping
- SC-5 Temporary Fiber Roll

SC-5 Temporary Fiber Roll

Temporary fiber rolls are placed on slopes to intercept runoff, reduce flow velocity, promote sheet flow, and prevent sediment transport. Temporary fiber rolls should be placed on slopes that are disturbed to prevent sediment laden sheet flow due to loss of vegetation cover. The temporary fiber rolls would be removed and replaced or relocated once soil disturbance work has started. The minimum locations of temporary fiber rolls are shown on the Water Pollution Control Drawings included in Attachment BB. The placement of temporary fiber rolls should be adjusted to meet field conditions.

SC-7 Street Sweeping

Street sweeping shall be conducted using machine-operated sweepers along paved areas, roadways, and pathways where sediment has been tracked or transported by construction equipment. At least a single sweeper is needed for one day per week. Additional sweepers should be conducted as approved by the Resident Engineer. Debris material generated from street sweeping activities will be managed daily by either immediately disposing of the waste material using and on-site, watertight container or temporarily stockpiling the material using temporary cover and temporary perimeter control BMPs to prevent sediment transport.

500.3.4 Tracking Control

Tracking control BMPs are implemented to reduce sediment tracking from the construction site onto private or public roads. This project will incorporate SWPPP/WPCP Preparation Manual minimum temporary tracking control requirements, temporary tracking control measures required by the contract documents, and other measures selected by the Contractor.

The following tracking control BMP selection table indicates the BMPs that shall be implemented to reduce sediment tracking from the construction site onto private or public roads. Temporary tracking control BMPs are listed by location in the WPCBMPL in Attachment CC and shown on the WPCDs from Attachment BB. Any details for temporary tracking control BMPs are shown in Attachment BB.

TABLE 500.3.4 TEMPORARY TRACKING CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	BMP NAME	CONTRACT MIN REQUIRE- MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				Yes	No	
SC-7	Street Sweeping	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
TC-1	Temporary Construction Entrance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
TC-2	Stabilized Construction Roadway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
TC-3	Temporary Entrance / Outlet Tire Wash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
ALTERNATIVE BMPs USED (3)						
<input type="radio"/> Yes <input checked="" type="radio"/> No						

Notes:

(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site BMP Reference Manual is a required contract document.

(2) Minimum requirements are based on the required Contract Provisions, Standard Special Provisions, Plans and Specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.

(3) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

- TC-1 Temporary Construction Entrance
- SC-7 Street Sweeping

SC-7 Street Sweeping

Manual sweeping shall be performed in lieu of street sweeping.

TC-1 Temporary Construction Entrance

Temporary construction entrances shall be placed at points of ingress and egress at the construction site to reduce tracking mud and sediment onto public roads by construction vehicles. The suggested locations for temporary construction entrances are shown on the Water Pollution Control Drawings included in Attachment BB.

500.3.5 Wind Erosion Control

Wind erosion control BMPs will be implemented to prevent sediment from leaving the construction site. This project will incorporate SWPPP/WPCP Preparation Manual minimum temporary wind erosion control requirements, temporary wind erosion control measures required by the contract documents, and other measures selected by the Contractor.

The following temporary wind erosion control BMP selection table indicates the BMPs that shall be implemented to reduce wind erosion at the construction site. Temporary wind erosion control BMPs are listed by location in the WPCBMPL in Attachment CC and shown on the WPCDs from Attachment BB. Any details for temporary wind erosion control BMPs are shown in Attachment BB.

TABLE 500.3.5 TEMPORARY WIND EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	BMP NAME	CONTRACT MIN REQUIRE- MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				Yes	No	
WE-1	Wind Erosion Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
TC-1	Temporary Construction Entrance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
TC-2	Stabilized Construction Roadway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
----	All Soil Stabilization Measures included in Section 500.3.2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
ALTERNATIVE BMPs USED (3)						
<input type="radio"/> Yes <input checked="" type="radio"/> No						

Notes:

(1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site BMP Reference Manual is a required contract document.

(2) Minimum requirements are based on the required contract provisions, standard special provisions, plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.

(3) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and narrative explain how the selected BMPs shall be incorporated into the project.

- TC-1 Temporary Construction Entrance
- WE-1 Wind Erosion Control

WE-1 Wind Erosion Control

Wind erosion control must be in place and used during windy conditions (forecast or actual wind conditions of 25 mph or greater) and whenever there is a potential for wind erosion. Potable water shall be applied to disturbed soil areas to control dust and maintain optimum moisture levels for compaction. The water shall be applied using water trucks. Wind

erosion control and water conservation practices shall be implemented during construction. Water application rates shall be minimized, as necessary, to prevent runoff and ponding. Water equipment leaks shall be repaired immediately. Wind erosion control is not a separate contract bid item, but is considered as covered under the various other BMPs used to prevent sediment transport and under Job Site Management lump sum.

TC-1 Temporary Construction Entrance

Temporary construction entrances shall be placed at points of ingress and egress at the construction site and at staging areas to reduce tracking mud and sediment onto public roads by construction vehicles. The suggested locations for temporary construction entrances are shown on the Water Pollution Control Drawings included in Attachment BB.

500.4 BMP Selection for Construction Site Management

Construction site management shall consist of controlling potential sources of water pollution before they come in contact with stormwater systems or watercourses. The Contractor shall control material pollution and manage waste and non-stormwater discharges at the construction site by implementing effective handling, storage, use, and disposal practices.

500.4.1 Non-Stormwater Site Management

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the Caltrans Permit or authorized under a separate NPDES permit, shall be prohibited. The selection of non-stormwater BMPs is based on whether construction activities with a potential for non-stormwater discharges will be conducted, as discussed in the Materials Management Plan and in Section 500.4. This project will incorporate SWPPP/WPCP Preparation Manual minimum non-stormwater pollution control requirements, non-stormwater pollution temporary wind erosion control measures required by the contract documents, and other measures selected by the Contractor.

The following non-stormwater control BMP selection table indicates the BMPs that shall be implemented to prevent non-stormwater discharges from construction activities conducted at the project site. Non-stormwater pollution control BMPs are listed by location in the WPCBMPL in Attachment CC and shown on the WPCDs from Attachment BB. Any details for non-stormwater pollution control BMPs are shown in Attachment BB.

TABLE 500.4.1 TEMPORARY NON-STORMWATER POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	BMP NAME	CONTRACT MIN REQUIRE- MENT(2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				Yes	No	
NS-1	Water Control and Conservation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
NS-2	Dewatering(3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-4	Temporary Stream Crossing (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-5	Clear Water Diversion (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	

NS-6	Illegal Connection and Illegal Discharge Detection Reporting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
NS-7	Potable Water / Irrigation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
NS-8	Vehicle and Equipment Cleaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-9	Vehicle and Equipment Fueling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-10	Vehicle and Equipment Maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-11	Pipe Driving Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-12	Concrete Curing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-13	Material and Equipment Used Over Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-14	Concrete Finishing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
NS-15	Structure Demolition / Removal Over or Adjacent to Water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
ALTERNATIVE BMPs USED⁽⁴⁾						
<input type="radio"/> Yes <input checked="" type="radio"/> No						

Notes:

- (1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site BMP Reference Manual is a required contract document.
- (2) Minimum requirements are based on the required contract provisions, standard special provisions, plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
- (3) The BMPs listed above are incidental and do not include operations listed as separated line items in the contract.
- (4) Use of alternative BMPs will require written approval by the RE.

The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

- NS-3 Paving, Sealing, Sawcutting, and Grinding Operations
- NS-6 Illegal Connection and Illegal Discharge
- NS-7 Potable Water/Irrigation
- NS-1 Water Control and Conservation

NS-1 Water Control and Conservation

Water that is used during construction shall be minimized in order to control erosion and discharge into storm drain

systems or receiving water bodies. Water shall be used conservatively to prevent ponding, erosion and transport of sediment, and discharge from watering operations into San Lorenzo Creek shall be documented and reported to the Resident Engineer. Water equipment shall be inspected at least once a week and equipment failures shall be repaired immediately.

NS-6 Illegal Connection and Illegal Discharge

The job site and perimeter shall be inspected for evidence of illegal or illicit connections, illegal discharges and dumping prior to the start of work, and daily after work has started. Illegal connections, discharges, or dumping should be reported to the Resident Engineer and appropriate action taken upon direction of Resident Engineer. All leaks, spills, breaches or other unauthorized discharges observed and identified must be cleaned up immediately and managed and/or disposed of properly.

NS-7 Potable Water/Irrigation

Potable water used during construction activities, including irrigation or wind erosion control uses, shall be controlled so as to not result in permanent standing water or non-stormwater discharge to San Lorenzo Creek. All necessary permit and approvals shall be obtained prior to connecting to and using potable sources.

500.4.2 Waste Management and Materials Pollution Control

An inventory of construction activities, materials, and wastes is provided in Section 500.1.1. The following BMP consideration checklist lists the BMPs that have been selected to control construction site wastes and materials. Locations and details of applicable materials handling and waste management BMPs are shown on the WPCDs from Attachment BB. In the narrative description, a list of waste disposal facilities and the type of waste to be disposed at each facility is also provided. The following list of BMPs and associated narratives explain how the selected BMPs will be incorporated into the project.

TABLE 500.4.2 TEMPORARY WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO.(1)	BMP NAME	CONTRACT MIN REQUIRE- MENT (2)	CONTRACT BID ITEM	BMP USED		IF A CONTRACT MINIMUM REQUIREMENT BUT NOT USED, STATE REASON
				Yes	No	
WM-1	Material Delivery and Storage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
WM-2	Material Use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
WM-3	Stockpile Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
WM-4	Spill Prevention and Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
WM-5	Solid Waste Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
WM-6	Hazardous Waste Management (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
WM-7	Contaminated Soil Management (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	

WM-8	Concrete Waste Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
WM-8	Temporary Concrete Washout (Portable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
WM-8	Temporary Concrete Washout Facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
WM-9	Sanitary/Septic Waste Management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	
WM-10	Liquid Waste Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	
ALTERNATIVE BMPs USED (4)						
<input type="radio"/> Yes <input checked="" type="radio"/> No						

Notes:

- (1) The BMP designations (SS-1, SC-3, etc.) are solely for maintaining continuity with existing Caltrans documents and are not provided to imply that the Construction Site BMP Reference Manual is a required contract document.
- (2) Minimum requirements are based on the required contract provisions, standard special provisions, plans and specifications. Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the QSD or WPC Manager.
- (3) The BMPs listed above are incidental and do not include operations listed as separated line items in the contract.
- (4) Use of alternative BMPs will require written approval by the RE.

WM-1 Material Delivery and Storage and WM-2 Material Use

Minimize or eliminate the discharge of material into the air and San Lorenzo Creek while taking delivery of, using or storing the following material:

1. Soil stabilizers and binders
2. Fertilizers
3. Petroleum materials, including fuel, oil, and grease
4. Concrete components (for fence posts)
5. Pesticides and herbicides

Dedicated refueling areas will be located at least 50 ft from a body of water. Waste materials shall not be placed within 50 linear feet of waters of the State or where the material may be washed by rainfall into waters of the State. For example, no debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement, or concrete or concrete washings, welding slag, oil or associated activity or whatever nature, shall not be allowed to enter into waters of the State. The minimum requirements shall include: storing hazardous material at least 50 linear feet outside of the stream banks; checking equipment for leaks and preventing the use of 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 in a manner that does not result in a discharge to waters of the State.

If materials are stored:

1. Store liquids, petroleum materials, and substances listed in 40 CFR 110, 117, 302, and place them in secondary containment facilities as specified by US DOT for storage of hazardous materials.
2. Secondary containment facilities must be impervious to the materials stored therein for a minimum contact time of 72 hours.

3. Cover secondary containment facilities during non-working days and whenever precipitation is forecasted. Secondary containment facilities must be adequately ventilated.
4. Keep secondary containment facilities free of accumulated stormwater or spills. After precipitation, or in the event of spills or leaks, collect accumulated liquid and place it into drums within 24 hours. Handle the liquid as hazardous waste under "Waste Management" of these special provisions. Unless testing confirms that the liquid is non-hazardous.
5. Do not store incompatible materials in the same secondary containment facility.
6. Store materials in their original material labels maintained in legible condition. Immediately replace damaged or illegible labels.
7. Secondary containment facilities must have the capacity to contain precipitation from a 24-hour, 25-year storm, plus 10 percent of the aggregate volume of all containers or the entire volume of the largest container within the facility, whichever is greater.
8. Store bagged or boxed material on pallets. Protect bagged or boxed material from wind and rain during non-working days and whenever precipitation is forecasted.
9. Provide sufficient separation between stored containers to allow for spill cleanup or emergency response access. Storage areas must be kept clean, well-organized, and equipped with cleanup supplies appropriate for the material being stored.
10. Repair or replace perimeter controls, containment structures, covers, and liners as necessary. Inspect storage areas before and after precipitation and at least weekly during other times.

WM-3 Stockpile Management

Stockpiling of materials at the job site should be minimized. Protection of stockpiles is required and must be implemented in compliance with the Contract Specifications and as directed by the Resident Engineer. Stockpiles will be properly covered and sediment/perimeter controls will be used for stockpiles after 14 days of inactivity. Water pollution control practices should be implemented 72 hours of stockpiling material or before a forecasted storm event, whichever occurs first. If stockpiles are being used, soil, sediment or other debris are not allowed to enter storm drains, open drainages, and watercourses. In addition, stockpile locations must be a minimum, 50 feet away from concentrated flows of stormwater, drainage courses, and inlets. Linear sediment barriers and covers should be repaired or replaced as needed to keep them functioning properly.

Active and inactive soil stockpiles must be:

1. Covered with soil stabilization material or a temporary cover
2. Surrounded with a linear sediment barrier

WM-4 Spill Prevention and Control

Material or waste storage areas must be kept clean, well-organized, and equipped with enough cleanup supplies for the material being stored. Spill and leak prevention procedures should be implemented for chemicals and hazardous substances stored on the job site. All hazardous spills must be reported to the WPC Manager and Resident Engineer immediately. As soon as it is safe, spills of petroleum materials and sanitary and septic waste substances must be contained and cleaned as described under 40 CFR, Parts 110, 117, and 302.

WM-5 Solid Waste Management

Solid waste management BMPs shall be implemented to minimize stormwater contact with waste materials and prevent waste discharges. Solid waste shall be loaded directly onto trucks for offsite disposal. When onsite storage is necessary, solid wastes shall be stored in water tight dumpsters in the general storage area of the contractor's yard.

WM-9 Sanitary/Septic Waste Management

Local health agency provisions shall be complied with when using an on-site disposal system. A sanitary facility discharging into a sanitary sewer system must be properly connected and free from leaks. Portable sanitary facilities must be placed at least 50 feet away from San Lorenzo Creek and 50 feet away from waters of the State or where the material may be washed by rainfall into waters of the State.

500.5 Water Pollution Control Drawings

The WPCDs are the component of the project SWPPP that show the BMPs, by project phase/stage, that are necessary for the project to be in compliance with the CGP. The construction activity phases used in this SWPPP are the preliminary phase, grading phase, highway construction phase, and the highway planting / erosion control establishment phase. These phases are defined below.

Preliminary Phase (Pre-Construction Phase – Part of the Grading Phase)

Includes rough grading/or disking, clearing and grubbing operations, or any soil disturbance prior to mass grading.

Grading Phase

Includes reconfiguring the topography for the highway, including excavation for roadway (e.g., necessary blasting of hard rock), highway embankment construction (fills); mass grading, and stockpiling of select material for capping operations.

Highway Construction Phase

Encompasses both highway and structure construction. Highway construction includes final roadway excavation, placement of base materials and highway paving, finish grading, curbs, gutters and sidewalks, public utilities, public water facilities including fire hydrants, public sanitary sewer systems, storm drain systems and/or other drainage improvements, highway lighting, traffic signals and/or other highway electrical work, guardrail, concrete barriers, sign installation, pavement markers, traffic striping and pavement markings. Structure construction includes structure footings, bridges, retaining walls, major culverts, overhead sign structures and buildings.

Highway Planting / Erosion Control Establishment Phase

Includes clearing and grubbing operations, soil preparation (grading, incorporation of soil amendments, and placement of topsoil), irrigation (trenching, installation and trench backfilling), minor grading (top dressing and fine grading of lawn and ground cover areas), planting (seeding and planting of vegetation), mulching (application of wood chips or other mulches) and plant establishment (weeding, plant replacement, and, if needed, fertilizer application, irrigation maintenance, and reapplication of mulch). Erosion control includes placement of permanent erosion control materials and maintenance of temporary sediment controls during the erosion control establishment period.

The WPCDs provide field staff with the information on where to install BMPs so that they are effective. The WPCDs, WPCBML and Water Pollution Control Schedule provide the necessary tools for a Contractor to plan and implement BMPs to meet the requirements of the project SWPPP.

The WPCD cover sheet(s) shall include a listing of the BMPs that will be used along with the associated BMP symbols used on the WPCDs.

WPCDs are provided for all areas that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within the Caltrans rights-of-way

The WPCDs shall show the construction project site in detail, including:

- the construction site perimeter;
- geographic features within or immediately adjacent to the site; include surface waters such as lakes, streams, springs, wetlands, estuaries, ponds, and the ocean;
- site topography before and after construction; include roads, paved areas, buildings, slopes, drainage facilities, and areas of known or suspected contamination; and
- permanent (post-construction) BMPs.

The WPCDs shall show the following site information:

- discharge points from the project to off-site storm drain systems or receiving waters;
- tributary areas and drainage patterns across the project area (show using flow arrows) into each on-site stormwater inlet or receiving water;
- tributary areas and drainage patterns to each on-site stormwater inlet, receiving water or discharge point;
- off-site tributary drainage areas that generate run-on to the project;
- temporary on-site drainage(s) to carry concentrated flows;
- drainage patterns and slopes anticipated after major grading activities are completed;
- outlines of all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project;
- outlines of all areas of planned soil disturbance (disturbed soil areas, DSAs);
- known location(s) of contaminated or hazardous soils; and
- any potential non-stormwater discharges and activities, such as dewatering operations, concrete saw-cutting or coring, pressure washing, waterline flushing, diversions, cofferdams, and vehicle and equipment cleaning; if operations can't be located on the WPCDs, a narrative description should be provided.

The WPCDs show proposed locations of all construction site BMPs. Additional detail drawings are provided if necessary to convey site-specific BMP configurations. The WPCDs shall show construction site BMPs including the following:

- temporary soil stabilization and temporary sediment control BMPs that will be used during construction; any temporary on-site drainage(s) to carry concentrated flows, BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets;
- construction entrances used for site ingress and egress points and any proposed temporary construction roads;
- BMPs to mitigate or eliminate non-stormwater discharges;
- BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal; and
- BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning.

The WPCDs can be found in Attachment BB of the SWPPP.

500.6 Water Pollution Control BMP List

The Water Pollution Control Best Management Practices List (WPCBMPL) provides, by location and project phase/stage, the BMPs necessary for the project to be in compliance with the CGP. The WPCBMPL provides field staff both with a list of necessary BMPs and with an estimated quantity for each BMP by location and phase/stage of the project. The construction activity phases are typically the Preliminary Phase, Grading Phase, Highway Construction Phase, and the Highway Planting / Erosion Control Establishment Phase. The construction activity phases are defined in Section 500.5.

The WPCBMPL, water pollution control drawings and water pollution control schedule provide the tools necessary for the Contractor to plan and implement BMPs to meet the requirements of the project SWPPP. The BMPs listed on the WPCBMPL are the base line for site inspections and visual monitoring.

The WPCBMPL cover sheet includes a list of all BMPs to be used on the project based on Section 500 Determination of Construction Site Best Management Practices.

The names and number of locations listed on the WPCBMPL were established so that field staff and inspectors can easily identify where BMPs need to be located. The WPCBMPL includes all locations that are directly related to the construction activity, including but not limited to staging areas, storage yards, material borrow areas and storage areas, access roads, etc., whether or not they reside within Caltrans rights-of-way.

Necessary additional information to convey site-specific BMP configurations or BMP modifications are noted on the WPCBMPL.

All construction site BMPs are listed on the WPCBMPL including the following:

- temporary soil stabilization and temporary sediment control BMPs that will be used during construction; include temporary on-site drainage(s) to carry concentrated flows
- BMPs implemented to divert off-site drainage around or through the construction site, and BMPs that protect stormwater inlets
- BMPs to mitigate or eliminate non-stormwater discharges BMPs for waste management and materials pollution control, including, but not limited to storage of soil or waste; construction material loading, unloading, storage and access areas; and areas designated for waste handling and disposal
- BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning
- permanent BMPs that are a component of the project SWPPP

The WPCBMPL can be found in Attachment CC of the SWPPP.

500.7 Water Pollution Control Schedule

The Water Pollution Control Schedule (WPCS) is the component of the project SWPPP that shows the timeline for when BMPs will be installed so that the project is in compliance with the CGP. The WPCS provides field staff with the information necessary to plan for adequate materials and crews to install BMPs at the right time so that they are effective. The WPCS, WPCBMPL, and WPCDs provide the necessary tools for the Contractor to plan and implement BMPs to meet the requirements of the project SWPPP.

The WPCS shall contain an adequate level of detail to show major activities sequenced with the implementation of construction site BMPs, including:

- project start and finish dates, including each stage of the project
- SWPPP review and approval
- annual certifications
- mobilization dates
- mass clearing and grubbing/roadside clearing dates
- major grading/excavation dates
- dates named in other permits such as TRPA, Fish and Game and Army Corps of Engineers Permits
- dates for submittal of SWPPP amendments as required in the contract specifications

The WPCS shall show by location the dates for the deployment of:

- temporary soil stabilization BMPs
- temporary sediment control BMPs
- wind erosion control BMPs
- tracking control BMPs
- non-stormwater BMPs
- waste management and materials pollution control BMPs

The WPCS shall include:

- paving, saw-cutting, and any other pavement-related operations;
- major planned stockpiling operations;
- dates for other significant long-term operations or activities that may cause non-stormwater discharges, such as dewatering, grinding, etc; and
- final stabilization activities for each disturbed soil area of the project.

The WPCS shall be updated quarterly and the quarterly updates shall be filed in SWPPP File Category 20.03: Water Pollution Control Schedule Updates.

The Water Pollution Control Schedule can be found in Attachment DD of the SWPPP.

SECTION 600

PROJECT SITE IMPLEMENTATION PROGRAM

600.1 Water Pollution Control Manager Responsibilities

The WPC Manager shall have primary responsibility and authority to implement the SWPPP and ensure the project is in compliance with the CGP. The WPC Manager is responsible for implementing the SWPPP and amending the SWPPP when any of the conditions specified in Section 100.3 are met. The Contractor has assigned authority to the WPC Manager to mobilize crews and subcontractors, as necessary, for SWPPP and CGP compliance. The WPC Manager will be available at all times throughout duration of the project.

Duties of the Contractor's WPC Manager include but are not limited to the following

- ensuring full compliance with the SWPPP and the CGP
- implementing all elements of the SWPPP, including but not limited to implementing:
 - prompt and effective erosion and sediment control measures
 - all non-stormwater management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); performing general site cleanup; cleaning vehicles and equipment, performing fueling and maintenance activities; providing spill control; ensuring that no materials other than stormwater are discharged in quantities that will have an adverse effect on receiving waters or storm drain systems, etc.
- overseeing and ensuring that the following site inspections and visual site monitoring are conducted:
 - daily required BMP inspections
 - weekly routine stormwater site BMP inspections
 - quarterly non-stormwater site inspections
 - pre-storm inspections prior to forecasted storm events
 - daily inspections during extended forecasted storm events
 - post-storm inspections for qualifying rain events
- mobilizing crews to repair, replace, and/or implement additional BMPs due to deficiencies, failures or other shortcomings identified during inspections, to be completed within 24 hours of identification in compliance with Standard Specification 13-1.03A (the contractor's WPC Manager shall be assigned authority by the Contractor to mobilize crews), unless a longer period is authorized.
- coordinating with the RE to assure that if design changes to BMPs are required due to deficiencies, failures or other shortcomings identified during inspections, the changes are completed as soon as possible and the SWPPP is revised accordingly
- monitoring NWS Forecast Office forecasts for both forecasted storm events and qualifying rain events; these events are defined as follows:
 - a forecasted storm event is defined as a 50% or greater likelihood that 0.10 inch or more of precipitation will fall within a 24-hour period

- a qualifying rain event is defined as a rain event that may produce or has produced ½ inch or greater of precipitation at the time of discharge, with a 72-hour dry period between events
- monitoring weather at the project site
- preparing and implementing qualifying rain event sampling and analysis plans
- preparing and implementing Rain Event Action Plans for forecasted storm events
- mobilizing crews immediately, in the event of NAL exceedances, to repair existing BMPs and/or implement additional BMPs (the Contractor's WPC Manager shall be assigned authority by the Contractor to mobilize crews),
- coordinating with the RE in the event of NAL exceedances to assure that any SWPPP revisions (corrective actions) are made immediately, either to prevent pollutants and authorized non-stormwater discharges from contaminating stormwater, or to substantially reduce the pollutants to levels consistently below the NALs, so that the project complies with the SWPPP, the CGP and approved plans at all times,
- submitting NAL exceedances reports to the RE
- submitting test results for stormwater samples to the RE
- preparing amendments to the SWPPP when required
- preparing contractor's SWPPP Annual Compliance Certification
- preparing the Stormwater Annual Reports
- ensuring elimination of all unauthorized discharges
- preparing and submitting Notice of Discharge reports to the RE
- preparing and submitting reports of illicit connections or illegal discharges to the RE

600.2 Site Inspections

Stormwater site inspections and visual monitoring are necessary to ensure that the project is in compliance with the requirements of the CGP. Project site visual monitoring requirements are covered in Section 700 Construction Site Monitoring Program. Project site inspections of stormwater BMPs are conducted to identify and record:

- that BMPs are properly installed
- what BMPs need maintenance to operate effectively
- what BMPs have failed
- what BMPs could fail to operate as intended.

Routine stormwater site inspections shall be conducted by the contractor's WPC Manager or other 24-hour trained staff at the following minimum frequencies:

- daily inspections of:
 - storage areas for hazardous materials and waste
 - hazardous waste disposal and transporting activities

-
- hazardous material delivery and storage activities
 - vehicle and equipment cleaning facilities if vehicle and equipment cleaning occurs daily
 - vehicle and equipment maintenance and fueling areas if vehicle and equipment maintenance and fueling occurs daily
 - vehicles and equipment at the job site to verify that operators are inspecting vehicles and equipment each day of use.
 - demolition sites within 50 feet of storm drain systems and receiving waters
 - pile driving areas for leaks and spills if pile driving occurs daily
 - temporary concrete washouts if concrete work occurs daily
 - paved roads at job site access points for street sweeping if earthwork and other sediment or debris generating activities occur daily
 - dewatering work if dewatering work occurs daily
 - temporary active treatment system if temporary active treatment system activities occur daily
 - work over water if work over water occurs daily
 - daily inspections for projects within the Lake Tahoe Hydrologic Unit
 - daily inspections of access roadways
 - weekly inspection of site BMPs

Stormwater site inspections shall be documented on CEM-2030 Stormwater Site Inspection Report, in Appendix G. Completed stormwater inspection reports shall be submitted to the RE within 24 hours after completion of the inspection. Copies of completed inspection reports will be kept in SWPPP File Category 20.31: Contractor Stormwater Site Inspection Reports,

Deficiencies identified during site inspections and correction of deficiencies will be tracked on the CEM-2035 Stormwater Corrective Actions Summary, in Appendix I. Corrective Action Summary forms shall be submitted to the RE when corrections are completed but must be submitted within five (5) days after completion of the site inspection. Completed Stormwater Site Inspection Report Corrective Actions Summary forms shall be filed in SWPPP File Category 20.35: Corrective Actions Summary. A copy of the completed Corrective Actions Summary form will also be attached to the corresponding Stormwater Site Inspection Report that generated the need for the CEM-2035 Stormwater Corrective Actions Summary

600.3 Weather Forecast Monitoring

The WPC Manager shall have primary responsibility to monitor the National Weather Service Forecast Office for forecasted precipitation based on project site location. Precipitation forecast information shall be obtained from the National Weather Service Forecast Office accessible at: <http://www.srh.noaa.gov/>.

The project site location to be used for obtaining forecast from National Weather Forecast Office website is:

The project is located along San Lorenzo Creek in the City of Hayward. The parcel is bordered by Crescent Avenue to the north, Ruby Street to the east, A Street to the south, and Rockaway Lane to the west. Latitude: 37.6796 degrees N; Longitude: 122.0782 degrees W

The WPC Manager shall monitor the weather forecast on a daily basis for predicted precipitation within the following 96 hours. The WPC Manager shall monitor the forecast for the next 24, 48, 72 and 96 hours to determine if the forecast for precipitation is 50 percent or greater for any 6-hour period. If the forecast for precipitation is 50 percent or greater, the WPC Manager shall calculate the amount of precipitation forecasted for each 24-hour period and the total precipitation for the forecasted storm event and record the information. Weather forecast monitoring shall be recorded be filed in File Category 20.40: Weather Monitoring Logs.

When the forecast for precipitation is 50 percent or greater and the forecasted amount of precipitation is 0.10 inch or more for any 24-hour period within the next 72 hours, the WPC Manager shall perform a pre-storm site inspection and ensure that the site is prepared for the likely forecasted storm event.

For Risk Level 2 and 3 the WPC Manager will prepare a Rain Event Action Plan for forecasted storm events.

Forecasted storm event site preparation shall include, but is not limited to, the installation of soil stabilization and sediment BMPs on active disturbed soil areas and stockpiles.

600.4 Weather Monitoring

The WPC Manager shall have primary responsibility to monitor weather at the project site. The WPC Manager, on a daily basis, shall monitor the weather and record the weather conditions.

When there is precipitation, the WPC Manager shall ensure that storm precipitation data is obtained from the project site rain gauge. Precipitation monitoring will include recording the time, amount of precipitation measured in the project site rain gauge, amount of precipitation within a 24-hour period, and total cumulative amount of precipitation for the forecasted storm event.

If no pre-storm visual site monitoring was performed, and the amount of precipitation for any 24-hour period is 0.10 inch or greater, the WPC Manager will implement during storm visual site monitoring, as discussed in Section 700.1.

When a forecasted storm event was not forecasted to be a qualifying rain event, but the measured cumulative amount of precipitation for the storm event and the expected severity of the continuing storm event results in ½ inch or more of precipitation, the WPC Manager will prepare to sample.

Weather monitoring will be conducted daily. Weather monitoring documentation shall be kept in File Category 20.40: Weather Monitoring Logs.

600.5 Best Management Practices Status Report

The WPC Manager shall prepare a monthly status report of the water pollution control BMPs (site BMPs) installed on the project site. The monthly BMP status report will be based on the progress of the work and the WPCBMPL for the project, with any additional BMPs the WPC Manager has determined are necessary based on the stage of construction and construction activities.

Because the SWPPP, including the WPCBMPL and WPCDs, are based on the entire project site and all construction activities, the monthly BMP status report should be a “snapshot” of which BMPs are deployed on the project site, so a project inspector or reviewer can easily determine what could be expected to be seen on the project site that month. The monthly status report will be used by stormwater inspectors and contractor personnel to ensure SWPPP compliance.

The weekly status report will be used to ensure that weekly training meetings cover BMPs that are required for work activities during the week. The weekly status report will be provided to regulatory agency staff who visit the project site to indicate which BMPs should be in place and which are scheduled to be implemented during the coming week.

The monthly status of stormwater BMPs will be documented on CEM-2034 Stormwater Best Management Practices and Materials Inventory Report form, in Appendix H. Completed monthly status reports shall be submitted to the RE 48 hours prior to the beginning of the work week. Copies of the completed reports will be kept in SWPPP File Category 20.34: Monthly Best Management Practices and Materials Inventory Reports.

600.6 Rain Event Action Plans (REAP)

REAPs will be prepared by the WPC Manager when there is a forecasted storm event. A forecasted storm event is any weather pattern that is forecasted to have a 50 percent or greater probability of producing precipitation of 0.10 inch or more within any 24-hour period at the project site location. The WPC Manager will prepare the REAP for the forecasted storm event based on the current construction activity phase of the project. For REAPs, the construction activity phases are the Highway Construction Phase, Highway Planting / Erosion Control Establishment Phase or Inactive Project Phase. The construction activity phases are defined in Section 500.5.

When the NWS forecast for 72 hours and greater predicts a forecasted storm event, the WPC Manager will prepare a REAP using the REAP form appropriate to the current project stage. REAP forms are available in Appendix L. Prepared REAPs shall be submitted to the RE at least 48 hours prior to a forecasted storm event. If the NWS forecast changes and a storm event is forecasted to occur within 24-72 hours then a REAP must be prepared. If the NWS forecast changes and a storm event is forecasted to occur within the next 24 hours a REAP will not be prepared and the WPC Manager will take immediate actions to ready the project site for the forecasted storm event.

The WPC Manager shall implement a REAP within the 48 hours prior to the forecasted storm event. A copy of the REAP shall be available on the job site at least 48 hours prior to the forecasted storm event. Copies of REAPs will be maintained in SWPPP File Category 20.45: Rain Event Action Plans in reverse chronological order.

SECTION 700

CONSTRUCTION SITE MONITORING PROGRAM

700.1 *Site Visual Monitoring Inspection*

This Construction Site Monitoring Program includes conducting site visual monitoring inspections of the project site to address the following objectives:

- determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives
- determine whether BMPs included in the SWPPP are effective in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges
- determine whether BMPs included in the REAP are effective in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges
- demonstrate that the site is in compliance with the discharge prohibitions and applicable NALs and Receiving Water Monitor Triggers of the CGP
- determine whether immediate corrective actions, additional BMP implementation, or SWPPP amendments are necessary to reduce pollutants in stormwater and authorized non-stormwater discharges
- demonstrate that the site is in compliance with the discharge prohibitions
- document the presence or evidence of any non-stormwater discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source, if applicable, and the response taken to eliminate unauthorized non-stormwater discharges and to reduce or prevent pollutants from contacting non-stormwater discharges

700.1.1 *Visual Monitoring Locations*

Locations of Visual Monitoring Prior To A Storm Event

Visual monitoring (a pre-storm inspection) of the project site is required when the forecast for precipitation is greater than 50 percent within the next 24, 48, 72, 96 hours, and the amount of precipitation forecasted for any 24-hour period is 0.10 inch or greater. Within 48 hours of a forecasted storm event, a stormwater visual monitoring site inspection shall be performed and shall include observations of:

- stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources
- BMPs to identify whether they have been properly implemented
- any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard

2 drainage area(s) on the project site and the Contractor’s yard, staging areas, and storage areas have been identified as required forecasted storm event visual observation location(s), according to Section I.3.e of Attachments C, D, and E of the CGP. Drainage area(s) are shown on the WPCDs in Attachment BB and are listed by drainage area location number and location description in Table 700.1.1.1: Drainage Areas.

TABLE 700.1.1.1 DRAINAGE AREAS	
Drainage Area No.	Location
1	Right bank of San Lorenzo Creek (2.55 ac; 60.3% of drainage area) Rt "C1" Line Sta 0+00.00 to Rt "C1" Sta 13+15.26
2	Left bank of San Lorenzo Creek (1.68 ac; 39.7% of drainage area) Lt "C1" Line Sta 0+00.00 to Lt "C1" Sta 13+15.26

0 stormwater storage or containment area(s) are located on the project site. These stormwater storage and containment area(s) have been identified as required forecasted storm event visual observation location(s). Stormwater storage or containment area(s) are shown on the WPCDs from Attachment BB and are listed by storage or containment area location number and location description in Table 700.1.1.2: Stormwater Storage and Containment Areas.

TABLE 700.1.1.2 STORMWATER STORAGE AND CONTAINMENT AREAS	
Location No.	Location
Not Applicable	

Locations of Visual Monitoring during Extended Forecasted Storm Events and within 48 Hours After a Qualifying Rain Event

During any extended forecasted storm events and within 48 hours after a qualifying rain event (a rain event that has produced ½ inch or more of precipitation), a stormwater visual monitoring site inspection is required to observe:

- stormwater discharges at all discharge locations
- BMPs to identify and record those that need maintenance to operate effectively, those that have failed, and those that could fail to operate as intended
- the discharge of stored or contained stormwater

1 discharge location(s) are located on the project site. These stormwater discharge location(s) have been identified as required visual observation location(s). Stormwater discharge location(s) are shown on the WPCDs in Attachment BB and are listed in Table 700.1.1.3: Stormwater Discharge Locations.

**TABLE 700.1.1.3
STORMWATER DISCHARGE LOCATIONS**

Unique Sampling Location Identifier	Location
004DL03	5' Rt "CL" Line Sta 12+45.00 Lat: 37.6804 degrees Long: -122.0787 degrees 97% total discharge per sampling location

BMP locations shown on the WPCDs in Attachment BB and are listed on the WPCBMPL in Attachment CC.

0 stormwater storage or containment area(s) are located on the project site. Stormwater storage or containment area(s) are shown on the WPCDs in Attachment BB and are listed on Table 700.1.1.2: Stormwater Storage and Containment Areas.

Locations of Visual Monitoring for Non-Stormwater Discharges

A visual monitoring site inspection for non-stormwater discharges requires that each drainage area be observed for the presence of or indications of prior unauthorized and authorized non-stormwater discharges.

2 drainage area(s) are located on the project site and in the contractor’s yard, staging areas, and storage areas that have been identified as observation location(s) for non-stormwater discharges. Drainage area(s) are shown on the WPCDs in Attachment BB and are listed in Table 700.1.1.1: Drainage Areas.

700.1.2 Visual Monitoring Schedule

On a daily basis, contractor personnel will visual monitor the all immediate access roadways.

On a daily basis contractor personnel will visually monitor BMPs during applicable activities:

- storage areas for hazardous materials and waste
- hazardous waste disposal and transporting activities
- hazardous material delivery and storage activities
- vehicle and equipment cleaning facilities if vehicle and equipment cleaning occurs daily
- vehicle and equipment maintenance and fueling areas if vehicle and equipment maintenance and fueling occurs daily
- vehicles and equipment at the job site to verify that operators are inspecting vehicles and equipment each day of use.
- demolition sites within 50 feet of storm drain systems and receiving waters
- pile driving areas for leaks and spills if pile driving occurs daily
- temporary concrete washouts if concrete work occurs daily
- paved roads at job site access points for street sweeping if earthwork and other sediment or debris generating activities occur daily
- dewatering work if dewatering work occurs daily

- temporary active treatment system if temporary active treatment system activities occur daily
- work over water if work over water occurs daily

Stormwater site visual monitoring inspections shall be conducted at a minimum:

- within 48 hours prior to a forecasted storm event (any weather pattern that is forecasted to have a 50 percent or greater probability of producing 0.1 inches or more of precipitation in the project area within a 24 period)
- at 24-hour intervals during any extended forecasted storm event
- within 48 hours after a qualifying rain event (a rain event that has produced ½ inch or more of precipitation)

Non-stormwater discharge site visual monitoring inspections shall be conducted, at a minimum, during each of the following periods: January-March, April-June, July-September, and October-December.

If visual monitoring of the site for stormwater is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the site inspector shall document the conditions that prevented the inspection. The documentation of the site visual monitoring inspection shall be filed in SWPPP File Category 20.33: Site Visual Monitoring Inspection Reports.

700.1.3 Visual Monitoring Procedures

Site visual monitoring inspections shall be overseen by the contractor’s WPC Manager. Site visual monitoring will be conducted by the WPC Manager, appointed QSP or stormwater inspector.

The name(s) and contact number(s) of the site visual monitoring inspection personnel are listed below and their training qualifications are provided in Attachment E:

- | | |
|---|---------------------------------|
| • Assigned Inspector: To be determined | Contact phone: To be determined |
| • Alternate Inspector: To be determined | Contact phone: To be determined |

Daily Access Road Monitoring

All immediate access roads must be inspected on a daily basis. Any sediment or other construction-related materials deposited on the roads must be removed daily (or more frequently when necessary) and prior to any rain event.

Daily BMP Monitoring During Applicable Activities

Standard Specification 13-1.03C requires that the contractor personnel on the site shall inspect the following activities on a daily basis:

- storage areas for hazardous materials and waste
- hazardous waste disposal and transporting activities
- hazardous material delivery and storage activities
- vehicle and equipment cleaning facilities if vehicle and equipment cleaning occurs daily
- vehicle and equipment maintenance and fueling areas if vehicle and equipment maintenance and fueling occurs daily

-
- vehicles and equipment at the job site to verify that operators are inspecting vehicles and equipment each day of use.
 - demolition sites within 50 feet of storm drain systems and receiving waters
 - pile driving areas for leaks and spills if pile driving occurs daily
 - temporary concrete washouts if concrete work occurs daily
 - paved roads at job site access points for street sweeping if earthwork and other sediment or debris generating activities occur daily
 - dewatering work if dewatering work occurs daily
 - temporary active treatment system if temporary active treatment system activities occur daily
 - work over water if work over water occurs daily

Discharge Monitoring

During inspections, the contractor personnel shall be observant of any discharges or evidence of a prior discharge that could cause adverse conditions in the storm sewer system or the receiving water. If a discharge or evidence of a prior discharge is discovered by the contractor, the WPC Manager or contractor shall immediately notify the RE, and shall file a written report on the CEM-2061 Notice of Discharge form with the RE within 24 hours of the discharge or discovery of evidence of a prior discharge. Corrective measures shall be implemented immediately following the discovery of the discharge. Form CEM-2061 for reporting discharges is available in Appendix K.

Caltrans will notify the owner/operator of the MS4 and the RWQCB as soon as practicable, but no later than 24 hours after onset of or threat of discharge which can cause adverse conditions to the storm sewer system or the receiving water. This applies to any such discharge that is not covered by California Emergency Management Agency procedures for discharges from a highway to a storm sewer system subject to a MS4 permit.

Discharges requiring reporting include:

- stormwater from a DSA discharged to a waterway without treatment by an effective combination of temporary erosion and sediment control BMPs
- non-stormwater, except conditionally exempted discharges, discharged to a waterway or a storm drain system, without treatment by an approved control measure (BMP)
- stormwater discharged to a waterway or a storm drain system where the control measures (BMPs) have been overwhelmed or not properly maintained or installed
- discharge of hazardous substances above the reportable quantities, as provided in 40 CFR 110.3, 117.3 or 302.4
- stormwater runoff containing hazardous substances from spills discharged to a waterway or storm drain system

The initial notification to the RWQCB of a discharge or threat of discharge will be made immediately for any discharge that can cause adverse conditions to the storm sewer system or the receiving water, with a follow-up in writing within 24 hours. Adverse conditions include, but are not limited to, serious violations or serious threatened violations of Waste Discharge Requirements (WDRs), significant spills of petroleum products or toxic chemicals, or serious damage to control facilities that could affect compliance. Caltrans shall perform follow-up monitoring of major spills and/or perform confirmation sampling to ensure that threats to waters of the U.S. have been eliminated as determined by the local RWQCB.

Weekly BMP Monitoring

Weekly monitoring is required to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. The weekly BMP monitoring shall include observations of:

- all stormwater storage and containment areas identified in Table 700.1.1.2 to detect leaks and ensure maintenance of adequate freeboard
- all BMPs for proper installation and adequate maintenance.

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced in the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented within 24 hours.

Visual Monitoring Prior To A Forecasted Storm Event

Visual monitoring of the project site is required when the forecast for precipitation is greater than 50 percent within the next 24, 48, 72, or 96 hours and the amount of precipitation forecasted for any 24-hour period during the storm event is 0.10 inch or greater within a 24-hour period. Site visual monitoring shall be conducted within 48 hours prior to a forecasted storm event. The pre-storm site visual monitoring shall include observations of:

- all drainage areas identified in Table 700.1.1.1 to identify any spills, leaks, or uncontrolled pollutant sources;
- all stormwater storage and containment areas identified in Table 700.1.1.2 to detect leaks and ensure maintenance of adequate freeboard
- all BMPs for proper installation and adequate maintenance.

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced in the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented within 24 hours and prior to the forecasted storm event.

Any corrective actions identified by a pre-storm visual monitoring site inspection shall be included in the REAP for the forecasted storm event.

Visual Monitoring during Extended Forecasted Storm Events

Stormwater visual monitoring site inspections shall be conducted at least once each 24-hour period during any extended forecasted storm events. During any extended forecasted storm event, the site visual monitoring inspector shall visually observe:

- stormwater discharges at all discharge locations (Table 700.1.1.3)
- all stored or contained stormwater that is derived from and discharged subsequent to the qualifying rain event producing precipitation of ½ inch or more at the time of discharge; stored or contained stormwater that will likely discharge after working hours, due to anticipated precipitation, shall be observed prior to the discharge during working hours

Stormwater discharges and stored or contained stormwater will be observed for the presence or absence of floating and suspended materials, sheens on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

During any forecasted storm event, stormwater visual monitoring site inspections will include the observation of all site BMPs for:

- proper installation

- achievement of maintenance requirements
- possible failure
- BMPs that could fail to operate as intended
- effectiveness, so that design changes can be implemented as soon as feasible if needed

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, implemented, as required by Standard Specification 13-1.03A, within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the CGP: implemented within 72 hours of identification and completed as soon as possible thereafter). If BMPs require design changes, the changes shall be implemented and the SWPPP shall be amended to include the changes.

Visual Monitoring Within 48 Hours after a Qualifying Rain Event

Site visual monitoring post-qualifying rain events shall be conducted within 48 hours after the qualifying rain event. The post-storm site visual monitoring inspection shall include observations of:

- discharges of stormwater that have not been processed by a BMP or evidence of stormwater that has not been processed by a BMP at all discharge locations
- evidence of a breach at stored or contained stormwater that is derived from and discharged subsequent to the qualifying rain event producing precipitation of ½ inch or more at the time of discharge; stored or contained stormwater that will likely discharge after working hours, due to anticipated precipitation, shall be observed prior to the discharge during working hours

Stormwater discharges and stored or contained stormwater will be observed for the presence or absence of floating and suspended materials, sheens on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

Post-qualifying rain event stormwater visual monitoring site inspections will include observation of all site BMPs to determine if BMPs have failed to operate as intended because of:

- improper installation
- lack of maintenance
- lack of effectiveness

Observations of the site and any recommended corrective actions will be documented in the CEM-2030 Stormwater Site Inspection Report. Any photographs used to document observations will be referenced on the stormwater site inspection report. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary, necessary implemented, as required by Standard Specification 13-1.03A, within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the CGP: implemented within 72 hours of identification and completed as soon as possible thereafter). If BMPs require design changes, the changes shall be implemented and the SWPPP shall be amended to include the changes.

Visual Monitoring of Non-Stormwater Discharges

For non-stormwater site visual monitoring, each drainage area will be monitored quarterly for the presence or prior indications of unauthorized and authorized non-stormwater discharges, and their sources. The presence or absence of non-stormwater discharges based on site observations will be documented in the CEM-2030 Stormwater Site Inspection Report. Documentation of observed non-stormwater discharges will include presence or absence of floating and suspended materials, sheens on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

Site observations of the site and any recommended corrective actions will be documented. Corrective actions documented in site inspection reports shall be immediately reviewed by the WCP Manager and, if deemed necessary implemented, as required by Standard Specification 13-1.03A, within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the CGP: implemented within 72 hours of identification and completed as soon as possible thereafter). If BMPs require design changes, the changes shall be implemented and the SWPPP shall be amended to include the changes. Corrective actions shall be documented in the CEM-2035 Stormwater Corrective Actions Summary. Any photographs used to document observations will be referenced in the CEM-2030 Stormwater Site Inspection Report.

700.1.4 Visual Monitoring Follow-up and Tracking Procedures

For deficiencies identified during visual monitoring (site inspections), the required repairs or maintenance of BMPs shall begin and be completed as soon as possible, while taking into consideration worker safety. For deficiencies identified during visual site inspections that require design changes, including additional BMPs, the implementation, as required by Standard Specification 13-1.03A, will begin within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the CGP: implemented within 72 hours of identification and completed as soon as possible thereafter). When design changes to BMPs are required, the SWPPP shall be amended, including the WCBMPL and WPCDs. If NALs are exceeded, corrective actions shall be approved by the WPC Manager and implemented immediately.

Deficiencies identified on site inspection reports, as well as corrections of deficiencies, will be tracked on the CEM-2035 Stormwater Corrective Actions Summary, in Appendix I. Corrective action summaries shall be submitted to the RE when corrections are completed, but must be submitted within five (5) days of a site inspection.

700.1.5 Data Management and Reporting

The results of site visual monitoring (pre-storm, during storm, post-storm, and quarterly inspections) shall be recorded on the CEM-2030 Stormwater Site Inspection Report, in Appendix G. A copy of each report shall be kept in SWPPP File Category 20.33.

All reports shall be provided to the RE within 24 hours of the site inspection.

Deficiencies identified during visual monitoring (site inspections) and correction of deficiencies will be tracked on the CEM-2035 Stormwater Corrective Actions Summary, in Appendix I. Corrective Action Summary forms shall be submitted to the RE when corrections are completed, but must be submitted within five (5) days of the site inspection. Completed Stormwater Corrective Actions Summary forms shall be filed in SWPPP File Category 20.35: Corrective Actions Summary. A copy of the completed Corrective Actions Summary form will also be attached to the corresponding inspection report and shall be kept in the SWPPP Category 20.33.

If a discharge or evidence of a prior discharge that could cause adverse condition in the storm sewer or the receiving water is discovered by the Contractor, the WPC Manager or Contractor shall immediately notify the RE, and no more than 6 hours after discovery, and will file a written report to the RE within 24 hours of the discovery of evidence of a prior discharge. The written report to the RE will contain:

- the date, time, location, and type of unauthorized discharge;
- The nature of the operation that caused the discharge;
- An initial assessment of any impacts caused by the discharge;
- the BMPs deployed before the discharge;

-
- the date of deployment and type of BMPs deployed after the discharge, including additional measures installed or planned to reduce or prevent re-occurrence
 - steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Reporting of discharges shall be documented on the CEM-2061 Notice of Discharge form, in Appendix K. Completed Notice of Discharge reports shall be submitted to the RE within 24 hours of discovery of evidence of a discharge. Copies of the Notice of Discharge reports will be kept in SWPPP File Category 20.61: Notice of Discharge Reports.

700.2 Sampling and Analysis Plans

700.2.1 General SAP

A sampling and analysis plan (SAP) describes how samples will be collected, under what conditions, where and when the samples will be collected, what the sample will be tested for, what test methods and detection limits will be used, and what methods/procedures will be performed to ensure the integrity of the sample during collection, storage, shipping and testing (i.e., quality assurance/quality control protocols). Therefore, a SAP shall include the components listed below.

1. Scope of Monitoring Activities
2. Monitoring Preparation
3. Monitoring Strategy
4. Sample Collection and Handling
5. Sampling Analysis
6. Quality Control and Assurance
7. Data Management and Reporting
8. Data Evaluation
9. Change of Conditions

This SWPPP contains a non-visible pollutants SAP. The SWPPP may also contain four additional specific SAPS based on the project risk level, project dewatering requirements, RWQCB sampling and analysis requirements, and a SAP for monitoring an active treatment system.

700.2.1.1 Scope of Monitoring Activities

For specific details with regard to monitoring activities, refer to the specific SAP identified below.

- Non-visible Pollutants (Section 700.2.2.1)
- Non-Stormwater Discharges (Section 700.2.3.1)
- Stormwater pH and Turbidity (Section 700.2.4.1)
- Monitoring required by the Regional Board (Section 700.2.5.1)
- Monitoring for Active Treatment Systems (ATS) (Section 700.2.6.1)

700.2.1.2 Monitoring Preparation

To ensure an effective construction site monitoring and reporting program, the following monitoring preparation activities are required:

- identifying qualified sampling personnel
- ensuring the availability of an adequate quantity of monitoring supplies
- ensuring the availability of field instruments; field instruments must be properly maintained and calibrated prior to sampling events
- identifying a qualified testing laboratory that is capable of performing stormwater and non-stormwater analysis for those constituents that must be tested in a laboratory

700.2.1.2.1 Qualified Sampling Personnel

Sampling personnel shall be trained to collect, maintain, and ship samples in accordance with the Surface Water Ambient Monitoring Program (SWAMP) 2008 Quality Assurance Program Plan (QAPrP).

- Stormwater sampling and field analysis will be performed by the following primary and alternative stormwater samplers: To be determined
- To be determined

The primary stormwater sampler has received the following stormwater sampling training:

-

The primary stormwater sampler has the following stormwater sampling experience:

-

The alternate stormwater sampler has received the following stormwater sampling training:

-

The alternate stormwater sampler has the following stormwater sampling experience:

-

Training records of designated contractor sampling personnel are provided in Attachment D, Contractor Personnel Stormwater Training.

Safety practices for sample collection will be in accordance with the To be determined.

700.2.1.2.2 Monitoring Supplies

700.2.1.2.3 Field Instruments

The field instrument(s) shown in Table 700.2.1.2.3: Field Instruments will be used to analyze the constituents shown:

**TABLE 700.2.1.2.3
FIELD INSTRUMENTS**

Field Instrument	Constituent
pH meter	pH
turbidity meter	turbidity

The instrument(s) shall be maintained in accordance with manufacturer’s instructions.

The instrument(s) shall be calibrated before each sampling and analysis event.

A Standard Operating Procedure (SOP) for calibration and maintenance of field instruments shall be implemented based on the meter manufacturer’s instructions. A copy of the manufacturer’s instructions shall be attached to the SOP so that they are readily available.

Maintenance and calibration records shall be maintained in SWPPP File Category 20.55: Field Testing Equipment Maintenance and Calibration Records.

700.2.1.2.4 Testing Laboratory

Samples collected on the project site that require laboratory testing will be tested by a laboratory certified by the State Department of Health Services. Samples collected on the project site will be analyzed by:

- Laboratory Name: **To be determined**
- Address: **To be determined**
To be determined,
- Contact Name: **To be determined**
- Title: **To be determined**
- Phone Number: **To be determined**
- Emergency Phone Number (24/7): **To be determined**
- Email Address: **To be determined**

700.2.1.3 Monitoring Strategy

The monitoring strategy includes identifying analytical constituents, potential sampling locations, identification of actual sampling locations, and sampling schedule,

700.2.1.3.1 Analytical Constituents

Stormwater and non-stormwater discharges shall be monitored for the analytical constituents specified in the specific SAP(s) in this SWPPP.

700.2.1.3.2 Potential Sampling Locations

Potential sampling locations must be representative of the stormwater and non-stormwater discharges from the construction site. Existing conditions and associated construction activities within each drainage area form the basis for determining representative stormwater sampling locations.

Project drainage areas and potential sampling locations have been determined by:

- reviewing project plans
- visiting project site
- reviewing topography maps

The WPCDs show the demarcation of all drainage areas that are either:

- within the project site
- cover part of the project site

The QSD must identify potential sampling locations where concentrated run-off:

- leaves the Caltrans right-of-way
- drains into an MS4
- discharges into a receiving water

Potential run-on sampling locations were determined where concentrated run-on:

- enters the right-of-way
- combines with the stormwater on site and then discharges into an MS4, including the location(s) of discharge into the MS4

The following locations were determined when runoff discharges directly into receiving water bodies:

- the discharge location(s) into the receiving water
- a potential sampling location upstream of all discharge locations
- a potential sampling location downstream from all discharge location(s) into the receiving water.

Necessary potential sampling locations were determined when:

- there are potential sources of non-visible pollutants, as discussed in Section 500.1, and discharge locations are downgradient
- run-on locations are present that may contribute non-visible pollutants
- there are potential non-stormwater discharges and corresponding discharge locations are downgradient
- there are proposed dewatering construction activities

If an ATS is used on site, then sample locations must be included in Section 700.2.6.

Potential stormwater and non-stormwater sampling locations must be shown on the WPCDs in Attachment BB and listed in Attachment EE: Stormwater Sample Locations. The QSD has identified each of the potential sampling locations with a unique sample location identification code, as shown below. The identification code must start with a number and must be different for each location. If the construction site lies in a west-to-east orientation, starting with one (01) from the east, the potential sampling locations shall be numbered toward the west. If the construction site lies in a south-to-north orientation, the potential sampling locations shall be numbered toward the north.

To further distinguish among the locations, each potential sampling location has been identified with one of the following abbreviations based on the sampling location type:

- discharge locations leaving Caltrans right-of-way: DL
- discharge locations from areas with known non-visible pollutants: NVP
- discharge locations upgradient of areas with known non-visible pollutants: UNVP
- discharge locations to an MS4: MS
- run-on locations: RO
- discharge locations into a receiving water: RW
- downstream of all discharge locations: RWD
- upstream of all discharge locations: RWU
- dewatering discharge locations: DDL
- contained stormwater discharge locations: CSDL
- discharge locations for ATS: ATS

The unique sample location identification code shall follow this format, **SSSTTTTXX** , where:

SSS	=	sampling location identifier number (e.g., 010)
TTTT	=	sampling location type (e.g. DL)
XX	=	identifier number for the type of sampling location

For example, the sampling location identification for the 15th sampling location based on starting from the south end of the project for a stormwater discharge location that has been identified to be the ninth discharge location would be **015DL09**.

Potential sampling locations shown on the WPCDs shall be identified with unique sampling location identifiers. Each potential sample location must be listed on Stormwater Sample Locations in Attachment EE. The unique identification of each potential sampling location based on its number and abbreviation of type shall be used on all sampling documentation.

The WPC Manager may have to revise and/or add additional sampling locations during the course of construction as conditions dictate.

700.2.1.3.3 Identification of Actual Sampling Locations

For each forecasted storm event, actual sampling locations will be determined by the WPC Manager based on the strategy described in each specific SAP.

700.2.1.3.4 Sampling Schedule

For the sampling schedule, see the specific SAPs in this CSMP. If a scheduled sampling activity is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the stormwater sampler shall document why an exception to performing the sampling was necessary.

700.2.1.4 Sample Collection and Handling

Sample collection procedures shall be used to ensure that representative samples are collected and that the potential for contamination of samples is minimized. Sample handling procedures are followed to ensure that samples are identified accurately and that the required analysis is clearly documented. Chain-of-custody requirements for samples are necessary to trace the possession of the sample from collection through analysis.

700.2.1.4.1 Sample Collection Procedures

Samples shall be collected, maintained and shipped in accordance with the SWAMP's 2008 QAPrP.

Grab samples shall be collected and preserved in accordance with the methods identified in each specific SAP. Only personnel trained in proper water quality sampling shall collect samples.

Samples from areas of sheet flow can be collected using the collection procedures shown in the video at <http://www.youtube.com/watch?v=AmEJUNp44aU>. For pH and turbidity sampling, sheet flow sampling can be conducted as described below to concentrate the flow in order to collect a sample or follow other procedures approved by the RE.

- Place several rows of sandbags in a half circle directly in the path of the sheet flow to pond water, and wait for enough water to spill over. Then place a cleaned or decontaminated flexible hose along the top, and cover with another sandbag so that ponded water will only pour through the flexible hose and into sample bottles. Do not reuse the same sandbags during future sampling events as they may cross-contaminate future samples.
- Place a cleaned or decontaminated dustpan with open handle in the path of the sheet flow so that water will pour through the handle and into sample bottles.

For receiving water sampling, upstream samples shall be collected to represent the water body upgradient of the construction site. Downstream samples shall be collected to represent the water body mixed with direct discharge from the construction site. Samples shall not be collected directly from ponded, sluggish, or stagnant water.

Receiving water upstream and downstream samples shall be collected using one of the following methods:

- placing a sample bottle directly into the stream flow in or near the main current upstream of sampling personnel and allowing the sample bottle to fill completely;
- OR
- placing a decontaminated or sterile bailer or other sterile collection device in or near the main current to collect the sample and then transferring the collected water to appropriate sample bottles allowing the sample bottle to fill completely.

To maintain sample integrity and prevent cross-contamination, sampling collection personnel shall follow the procedures listed below.

- Wear a clean pair of surgical gloves donned prior to the collection and handling of each sample at each location.

-
- Decontaminate sampling equipment prior to sample collection using a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water. Dispose of decontamination water/soaps appropriately (i.e., do not discharge to the storm drain system or receiving water).
 - Do not allow the inside of the sample bottle to come into contact with any material other than the run-off sample.
 - Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection.
 - Do not leave the cooler lid open for an extended period of time once samples are placed inside.
 - Do not sample near a running vehicle where exhaust fumes may impact the sample.
 - Do not touch the exposed end of a sampling tube, if applicable.
 - Avoid allowing rainwater to drip from rain gear or other surfaces into sample bottles.
 - Do not eat, smoke, or drink during sample collection/field measurement.
 - Do not sneeze or cough in the direction of an open sample bottle.
 - Minimize the exposure of the samples to direct sunlight, as sunlight may cause biochemical transformation of the sample.

700.2.1.4.2 Sample Handling Procedures

Immediately following collection, sample bottles to be forwarded for laboratory analytical testing shall be capped, labeled, documented on the Chain-of-Custody Record, sealed in a re-sealable storage bag, placed in an ice-chilled cooler, at 0 ± 4 degrees Celsius, and delivered within 24 hours to the laboratory shown in sub-section 700.2.1.2.4.

Immediately following collection, samples used for field analysis shall be tested in accordance with the field instrument manufacturer's instructions and results recorded on the CEM-2052 Stormwater Sample Field Test Report form.

700.2.1.4.3 Sample Documentation Procedures

All original data documented on sample bottle identification labels, the Chain-of-Custody, and the CEM-2051 Stormwater Sampling and Testing Activity Log - Optional Form, shall be recorded using waterproof ink. These shall be considered accountable documents. If an error is made on an accountable document, the individual shall make corrections by lining through the error and entering the correct information. The erroneous information shall not be obliterated. All corrections shall be initialed and dated.

The following form, used for sample documentation, is provided in the SWPPP appendices:

- CEM-2051 Stormwater Sampling and Testing Activity Log - Optional Form, in Appendix M

Duplicate samples shall be identified in a manner consistent with the numbering system for other samples to prevent the laboratory from identifying duplicate samples. Duplicate samples can be identified in the CEM-2051 Stormwater Sampling and Testing Activity Log - Optional Form.

Sample Bottle Identification Labels: Sampling personnel shall attach an identification label to each sample bottle, which shall include, at a minimum, the following information:

- project name
- contract number and/or project identifier number

- unique sample identification code, which shall follow this format, **SSSSYYMMDDHHmmTT** , where

SSSSS	=	sampling location identifier number (e.g., 01MS1)
YY	=	last two digits of the year (e.g. 11)
MM	=	month (01-12)
DD	=	day (01-31)
HH	=	hour sample collected (00-23)
mm	=	minute sample collected (00-59)
TT	=	Type or QA/QC Identifier (if applicable)
G	=	grab
FS	=	field duplicate

For example, the sample number for a grab sample collected at Station 01MS1, collected at 4:15PM on December 8, 2011 would be **01MS11112081615G**.

- constituent to be analyzed
- initials of person who collected the sample

Stormwater Sampling and Testing Activity Log: A log of sampling events and test results shall include:

- sampling date
- separate times for collected samples and QA/QC samples, recorded to the nearest minute
- unique sample identification number and location
- constituent analyzed
- names of sampling personnel
- weather conditions (including precipitation amount)
- test results
- other pertinent data

Sample Information, Identification and Chain-of-Custody Record Forms: All samples to be analyzed by a laboratory will be accompanied by a Chain-of-Custody. The samplers will sign the Chain-of-Custody when samples are turned over to the testing laboratory. Chain-of-custody procedures will be strictly adhered to for QA/QC purposes.

700.2.1.5 Sample Analysis

For the analytical methods to be used to determine the presence of pollutant(s), see the specific SAPs in this CSMP.

700.2.1.6 Quality Assurance/Quality Control

For verification of laboratory or field analysis, duplicate samples shall be collected at a rate of 10 percent or 1 minimum duplicate per sampling event. The duplicate sample shall be collected, handled, and analyzed using the same protocols as primary samples. A duplicate sample shall be collected immediately after the primary sample has been collected. Duplicate samples shall not influence any evaluations or conclusions; however, they shall be used as a check on laboratory or field analysis quality assurance.

700.2.1.7 Data Management and Reporting

All test results shall be documented on either the CEM-2052 Stormwater Sample Field Test Report form and/or may be entered on the CEM-2051 Stormwater Sampling and Testing Activity Log - Optional Form. These shall be considered accountable documents. If an error is made on an accountable document, the individual shall make corrections by lining through the error and entering the correct information. The erroneous information shall not be obliterated. All corrections shall be initialed and dated.

For field tests, the submitted information shall include a signed copy of the Chain-of-Custody and CEM-2052 Stormwater Sample Field Test Report form. Appendix N contains the CEM-2052 Stormwater Sample Field Test Report form, which must accompany the Chain-of-Custody Record. The test results can be recorded on the CEM-2051 Stormwater Sampling and Testing Activity Log - Optional Form, in Appendix M.

For laboratory testing, all laboratory analysis results shall be reviewed for consistency among laboratory methods, sample identifications, dates, and times for both primary samples and QA/QC samples. The test results may be recorded on the CEM-2051 Stormwater Sampling and Testing Activity Log - Optional Form.

All sampling and testing documentation, including the Chain-of-Custody, CEM-2051 Stormwater Sampling and Testing Activity Logs - Optional Form, CEM-2052 Stormwater Sample Field Test Reports, and Laboratory Test Reports shall be kept in the appropriate SWPPP file category. Sampling and testing documentation shall be filed in the appropriate following SWPPP file category based on the specific SAP that required the sampling and analysis:

- non-visible pollutant sampling and testing – SWPPP File Category 20.51;
- non-stormwater discharge sampling and testing – SWPPP File Category 20.50
- turbidity, pH, and SSC sampling and testing – SWPPP File Category 20.52
- required RWQCB sampling and testing – SWPPP File Category 20.53
- ATS sampling and testing – SWPPP File Category 20.54

If corrective actions are taken as a result of the data evaluation, a copy of the completed CEM-2035 Stormwater Corrective Actions Summary shall be filed in File Category 20.35: Corrective Actions Summary.

A copy of completed sampling records and reports and an updated CEM-2051 Stormwater Sampling and Testing Log - Optional shall be submitted to the RE. All water quality analytical results, including QA/QC data, shall be submitted to the RE within 48 hours of sampling for field analyzed samples, and within 30 days for laboratory analyses.

In addition to a paper copy of the water quality test results, the test results shall be submitted electronically in Microsoft Excel (.xls) format, and shall include, at a minimum, the following information from the lab: Sample ID Number, Contract Number, Constituent, Reported Value, Laboratory Name, Method Reference, Method Number, Method Detection Limit, and Reported Detection Limit. Electronic copies of stormwater data shall be forwarded by email to Jessica Bailey at Jessica.Bailey@dot.ca.gov for inclusion into a statewide database.

700.2.1.8 Data Evaluation

For data evaluation of stormwater sample test results, see specific SAPs.

700.2.1.9 Change of Conditions

Whenever stormwater visual monitoring site inspections indicate a change in site conditions that might affect the appropriateness of sampling locations, sampling and testing protocols shall be revised accordingly. All such revisions shall be implemented as soon as feasible, and the SWPPP updated or amended.

700.2.2 Sampling and Analysis Plan for Non-Visible Pollutants

This SAP has been prepared for monitoring non-visible pollutants in stormwater and non-stormwater discharges from the project site and off-site activities directly related to the project, in accordance with the requirements of the CGP and applicable requirements of the Caltrans Construction Site Monitoring Program Guidance Manual, August 2013. This SAP for monitoring non-visible pollutants includes all of the components listed in Section 700.2.1.

700.2.2.1 Scope of Monitoring Activities

The scope of monitoring for discharges of non-visible pollutants from the construction site is based on the construction materials and construction activities to be performed on the project site, potential for the presence of non-visible pollutants, based on the historical use of the site, and potential non-visible pollutants in run-off from areas where soil amendments have been used on the project site.

The construction materials, wastes or activities listed below, and identified in Section 500.1.1, are potential sources of non-visible pollutants to stormwater discharges from the project. Storage, use, and operational locations are shown on the WPCDs in Attachment BB.

- Concrete washout/waste
- Litter
- Vehicles

The existing site features listed below, and identified in Section 500.1.2, are potential sources of non-visible pollutants to stormwater discharges from the project.

- None

The soil amendments listed below have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil and will be used on the project site.

- Soil stabilization products

700.2.2.2 Monitoring Preparation

Refer to the general requirements in General SAP Section 700.2.1.2 for monitoring preparation.

700.2.2.2.1 Qualified Sampling Personnel

Refer to the general requirements in General SAP Section 700.2.1.2.1 for Qualified Sampling Personnel.

700.2.2.2.2 Monitoring Supplies

Refer to the general information in General SAP Section 700.2.1.2.2 regarding monitoring supplies.

700.2.2.2.3 Field Instruments

Refer to the general information in General SAP Section 700.2.1.2.3 regarding field instruments.

700.2.2.2.4 Testing Laboratory

Refer to the contact information found in General SAP Section 700.2.1.2.4 for the Testing Laboratory.

700.2.2.3 Monitoring Strategy

The monitoring strategy for non-visible pollutants in stormwater discharges is to identify all potential non-visible pollutants that may be on the project site, non-visible pollutant sources, and water quality indicators that will indicate the presence of the non-visible pollutant in stormwater discharges. Locations will be identified where sources of non-visible pollutants will be used, stored or exist because of historical use of the project site so that these areas are monitored prior to and during forecasted storm events.

Non-visible pollutant monitoring is only required where a discharge can cause or contribute to an exceedance of a water quality standard based on one of the following triggers:

- construction materials are waste are exposed
- the site contains historical non-visible pollutants
- construction activity has occurred or material has been placed within the past 24 hours that may cause an exceedance of a water quality standard
- there is run-on to the site that may contains non-visible pollutants
- there is a breach, malfunction, leak or spill from a BMP

When one of the triggers that indicates a non-visible pollutant source may have come in contact with stormwater is discovered during a site inspection conducted prior to, during or after a forecasted storm event, the WPC Manager will require that sampling and analysis of the stormwater discharge be conducted for the applicable non-visible pollutant water quality indicator(s).

For the forecasted storm event in which a trigger for a non-visible pollutant sampling and analysis has occurred, the WPC Manager will also require the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. The WPC Manager will perform an evaluation of the analysis results from the non-visible pollutant stormwater discharge sampling location and the analysis results from the uncontaminated run-off sampling location to determine if there is an increased level of the tested non-visible pollutant analyte in the stormwater discharge.

700.2.2.3.1 Analytical Constituents

Identification of Potential Non-Visible Pollutants

The following table lists the specific sources and types of potential non-visible pollutants on the project site and the applicable water quality indicator constituent(s) for that pollutant.

TABLE 700.2.2.3.1 POTENTIAL NON-VISIBLE POLLUTANTS AND WATER QUALITY INDICATOR CONSTITUENTS		
Pollutant Source	Pollutant	Water Quality Indicator Constituent
Adhesives	Adhesives	COD, Phenols, SVOC
Dust Palliative	Salts	Chloride, TDS, Cations
Vehicle	Batteries	Sulfuric Acid, Lead, pH
Concrete	Sealant, Curing Compounds	pH, Alkalinity, Methyl Methacrylate, Cobalt, Zinc, Calcium, SVOC & VOC

700.2.2.3.2 Potential Sampling Locations

Using the criteria in Section 700.2.1.3.2, the potential sampling locations on the project site for monitoring non-visible pollutants were identified. Sampling locations are based on: proximity to planned non-visible pollutant storage; occurrence or use; accessibility for sampling and personnel safety; and other factors in accordance with the applicable requirements in the Caltrans Construction Site Monitoring Program Guidance Manual, latest edition. Sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE:

0 sampling location(s) on the project site and the contractor’s support facilities have been identified as potential locations for the collection of samples of runoff from planned material and waste storage areas and areas where non-visible pollutant producing construction activities are planned. Potential non-visible pollutant sampling locations are listed in the Table 700.2.2.3.2.1: Potential Non-Visible Pollutant Sampling Locations.

TABLE 700.2.2.3.2.1 POTENTIAL NON-VISIBLE POLLUTANT SAMPLING LOCATIONS	
Sampling Location Identifier	Location Description

Potential non-visible pollutant sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE:

1 sampling location(s) has been identified for the collection of an uncontaminated sample of runoff as a background sample for comparison with the samples being analyzed for non-visible pollutants. This location(s) was selected such that the sample will not have come in contact with (1) operational or storage areas associated with the materials, wastes, and activities identified in Section 500.1.1; (2) potential non-visible pollutants due to historical use of the site, as identified in Section 500.1.2; (3) areas in which soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied; or (4) disturbed soils areas. Potential non-visible pollutant uncontaminated sampling locations are listed in Table 700.2.2.3.2.2: Potential Uncontaminated Non-visible Pollutant Sampling Locations.

TABLE 700.2.2.3.2.2 POTENTIAL UNCONTAMINATED NON-VISIBLE POLLUTANT SAMPLING LOCATIONS	
Sampling Location Identifier	Location Description
001UNVP01	17' Rt "C1" Line Sta 0+51.00

Potential non-visible pollutant uncontaminated sampling locations shall be shown on the WPCDs from Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

700.2.2.3.3 Actual Sampling Locations

Sampling for non-visible pollutants at any potential non-visible pollutant sampling location will be based on any of the conditions listed below having been identified during the visual monitoring site inspections.

- Locations where materials or wastes containing potential non-visible pollutants are not stored under watertight conditions. Watertight conditions are defined as (1) storage in a watertight container, (2) storage under a watertight roof or within a building, or (3) protected by temporary cover and containment that prevents stormwater contact and runoff from the storage area.
- Locations where materials or wastes containing potential non-visible pollutants are stored under watertight conditions, but (1) a breach, malfunction, leakage, or spill is observed, (2) the leak or spill is not cleaned up prior to the forecasted storm event, and (3) the potential exists for discharge of non-visible pollutants to surface waters or a storm drain system.
- Locations where a construction activity (including but not limited to those identified in Section 500.1.1) with the potential to contribute non-visible pollutants (1) was occurring during or within 24 hours prior to the forecasted storm event, (2) involved the use of applicable BMPs that were observed to be breached, malfunctioning, or improperly implemented, and (3) resulted in the potential for discharge of non-visible pollutants to surface waters or a storm drain system.
- Locations where soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied, and the potential exists for discharge of non-visible pollutants to surface waters or a storm drain system.
- Locations where stormwater runoff from an area contaminated by historical usage of the site has been observed to combine with stormwater runoff from the site, and the potential exists for discharge of non-visible pollutants to surface waters or a storm drain system.

If the presence of a material storage, waste storage, or operations area where spills have been observed or the potential for the discharge of non-visible pollutants to surface waters or a storm drain system was noted during a site inspection conducted prior to or during a forecasted storm event and such an area has not been identified on the list of potential non-visible pollutant sampling locations, the WPC Manager must identify the corresponding discharge location and the corresponding upgradient sampling location as actual non-visible sampling locations. The additional sampling location for non-visible pollutant monitoring shall be shown on the WPCDs from Attachment BB and added to Attachment EE: Stormwater Sampling Locations.

For forecasted storm events, the selection of the actual sampling locations for non-visible pollutants by the WPC Manager will be documented on the CEM-2048 Storm Event Sampling and Analysis Plan form, in Appendix N. The completed SAP for each storm event will be filed in File Category 20.46: Storm/Rain Event Action, Sampling and Analysis Plans. Within 24 hours prior to a storm event, a copy of the storm event SAP shall be submitted to the RE.

For qualifying rain events, the selection of the actual sampling locations for non-visible pollutants by the WPC Manager will be documented on the CEM-2049 Qualifying Rain Event Sampling and Analysis Plan, in Appendix O. The

completed SAP for each qualifying rain event will be filed in File Category 20.46: Storm/Rain Event Sampling and Analysis Plans. Within 24 hours prior to a storm event, a copy of the SAP shall be attached to the REAP and submitted to the RE.

700.2.2.3.4 Sampling Schedule

In addition to the general scheduling requirements in General SAP Section 700.2.1.3.4, samples for non-visible pollutant monitoring, including both the non-visible pollutants samples and uncontaminated background samples, shall be collected during the first two hours of discharge from storm events that result in a sufficient discharge for sample collection. Samples shall be collected during daylight hours, 7 days a week.

700.2.2.4 Sample Collection and Handling

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

700.2.2.4.1 Sample Collection Procedures

Refer to the general procedures for sample collection in General SAP Section 700.2.1.4.1.

700.2.2.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 700.2.1.4.2.

700.2.2.4.3 Sample Documentation Procedures

In addition to the general sample documentation procedures provided in General SAP Section 700.2.1.4.3, when applicable, the contractor's stormwater inspector will document in the CEM-2030 Stormwater Site Inspection Report, that samples for non-visible pollutants were taken during a storm event, based on the criteria for non-visible pollutant sampling described in Section 700.2.2.3.3.

700.2.2.5 Sample Analysis

Samples collected for monitoring of non-visible pollutants will be analyzed by the laboratory identified in Section 700.2.1.2.4. Samples shall be analyzed for the constituents identified in Table 700.2.2.3.1, using the analytical methods identified in the following table, entitled "Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants."

Constituent	Analytical Method	Minimum Sample Volume	Sample Bottle	Sample Preservation	Reporting Limit	Maximum Holding Time
Herbicides	EPA 8151A	1 x 1 L	Glass-Amber	Store at 4°C	Check Lab	7 days
COD	EPA 410.4	1 x 250 mL	Glass-Amber	Store at 4°C, H2SO4 to pH<2	5 mg/L	28 days

pH	Field test with calibrated portable instrument	1 x 100 mL	Polypropylene	None	Unitless	15 minutes
Alkalinity	SM 2320B	1 x 250 mL	Polypropylene	Store at 4°C	1 mg/L	14 days
Metals (Ca, Co, Zn)	EPA 6010B/7470A	1 x 250 mL	Polypropylene	Store at 4°C, HNO3 to pH<2	0.1 mg/L	6 months
VOCs-Solvent	EPA 8260B	3 x 40 mL	VOA-glass	Store at 4°C, HCl to pH<2	1 µg/L	14 days
SVOCs	EPA 8270C	1 x 1 L	Glass-Amber	Store at 4°C	10 µg/L	7 days
Pesticides	EPA 8081A/8082	1 x 1 L	Glass-Amber	Store at 4°C	1 µg/L	7 days

700.2.2.6 Quality Assurance/Quality Control

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in General SAP Section 700.2.1.6.

700.2.2.7 Data Management and Reporting

Refer to general requirements for data management and reporting in Section General SAP 700.2.1.7.

700.2.2.8 Data Evaluation

Water quality sample analytical results for non-visible pollutants shall be compared to the uncontaminated background sample results. Should the discharge (downgradient) sample show an increased level of the tested non-visible pollutant analyte relative to the background sample, the BMPs, site conditions, and surrounding influences shall be assessed to determine the probable cause for the increase.

As determined by the site and data evaluation, appropriate BMPs shall be repaired or modified to mitigate discharges of non-visual pollutant concentrations. Once deemed necessary, corrective actions shall be implemented, as required by Standard Specification 13-1.03A, within 24 hours of identification unless a longer period is authorized (but cannot be authorized longer than required by the CGP: implemented within 72 hours of identification and completed as soon as possible thereafter), and documented on the CEM-2035 Stormwater Corrective Actions Summary. Revisions/design changes to BMPs required as a result of data evaluation and site assessment shall be implemented based on an amendment to the SWPPP.

700.2.2.9 Change of Conditions

Refer to the general requirements for change of conditions in General SAP Section 700.2.1.9.

700.2.3 Sampling and Analysis Plan for Non-Stormwater Discharges

This SAP has been prepared for monitoring non-stormwater discharges from the project site and off-site activities directly related to the project, in accordance with the requirements of the CGP and applicable requirements of the Caltrans Construction Site Monitoring Program Guidance Manual, August 2013. This SAP for monitoring non-stormwater discharges includes all of the components listed in Section 700.2.1.

700.2.3.1 Scope of Monitoring Activities

Non-stormwater discharges can be authorized by a separate NPDES permit or conditional exemption. For non-stormwater discharges that are unauthorized where runoff is discharged off site, sampling and testing of the discharge must be conducted in compliance with the CGP.

Examples of unauthorized non-stormwater discharges common to construction activities include:

- vehicle and equipment wash water, including concrete washout water
- slurries from concrete cutting and coring operations, or grinding operations
- slurries from concrete or mortar mixing operations
- residue from high-pressure washing of structures or surfaces
- wash water from cleaning painting equipment
- runoff from dust control applications of water or dust palliatives
- sanitary and septic wastes
- chemical leaks and/or spills of any kind, including but not limited to, petroleum, paints, cure compounds, etc

When an unauthorized non-stormwater discharge is discovered, the WPC Manager will require sampling and analysis of the effluent to detect whether non-visible pollutants are present in the discharge. Sampling and analysis of non-stormwater discharges shall be performed in accordance with Section 700.2.2, the SAP for non-visible pollutants.

Sampling and analysis for pH and turbidity of stored or impounded stormwater discharges subsequent to a qualifying rain event (a rain event that has produced ½ inch or more of precipitation at the time of discharge) shall be performed in accordance with Section 700.2.4, the SAP for stormwater pH and turbidity.

700.2.3.2 Monitoring Preparation

Refer to the general requirements for monitoring preparation in General SAP Section 700.2.1.2.

700.2.3.2.1 Qualified Sampling Personnel

Refer to the general requirements for Qualified Sampling Personnel in General SAP Section 700.2.1.2.1.

700.2.3.2.2 Monitoring Supplies

Refer to the general information regarding monitoring supplies in General SAP Section 700.2.1.2.2.

700.2.3.2.3 Field Instruments

Refer to the general information regarding field instruments in General SAP Section 700.2.1.2.3.

700.2.3.2.4 Testing Laboratory

Refer to the contact information for the testing laboratory found in General SAP Section 700.2.1.2.4.

700.2.3.3 Monitoring Strategy

Non-stormwater discharges from the construction site will be monitored for exceedances of water quality standards.

700.2.3.3.1 Analytical Constituents

For non-stormwater dewatering discharges and discharges of stored stormwater, samples shall be analyzed for the following constituents:

- turbidity
- pH
- turbidity
- pH

700.2.3.3.2 Potential Sampling Locations

Using the criteria in Section 700.2.1.3.2, potential sampling locations on the project site for monitoring dewatering discharges, discharges of impounded stormwater, and other non-stormwater discharges were identified. Sampling locations were based on: proximity to planned non-stormwater dewatering; non-stormwater occurrence or use; accessibility for sampling and personnel safety; and other factors in accordance with the applicable requirements in the *Caltrans Construction Site Monitoring Program Guidance Manual*, August 2013

Sampling locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sampling Locations in Attachment EE.

sampling location(s) on the project site have been identified as potential locations for the collection of non-stormwater dewatering samples and the sampling location(s) are listed in Table 700.2.3.3.2.1: Potential Non-stormwater Dewatering Sampling Locations.

TABLE 700.2.3.3.2.1 POTENTIAL NON-STORMWATER DEWATERING SAMPLING LOCATIONS	
Sampling Location Identifier	Location Description
N/A	Not Applicable

sampling location(s) on the project site been identified as potential locations for the collection of discharge samples of impounded stormwater and the sampling location(s) are listed in Table 700.2.3.3.2.2: Potential Impounded Stormwater Discharge Sampling Locations.

TABLE 700.2.3.3.2.2 POTENTIAL IMPOUNDED STORMWATER DISCHARGE SAMPLING LOCATIONS	
Sampling Location Identifier	Location Description
N/A	Not Applicable

700.2.3.3.3 Actual Sampling Locations

Actual sampling locations will be determined by the WPC Manager prior to dewatering activities based on the potential dewatering discharge sample locations initially selected.

When stormwater is impounded in excavations on the project site and the impounded stormwater has the potential to create runoff from the project site, the WPC Manager will determine the actual sampling location for collecting impounded stormwater discharge samples.

If new locations for dewatering discharges or impounded stormwater discharges that have not been identified on the list of potential stormwater and non-stormwater sampling locations are identified during the course of construction, the WPC Manager must create sampling location identifiers for the dewatering discharge sampling location. The additional sampling location for dewatering discharge monitoring shall be shown on the WPCDs in Attachment BB and added to Attachment EE: Stormwater Sampling Locations.

700.2.3.3.4 Sampling Schedule

Whenever there are dewatering discharges or impounded stormwater discharges, sampling will be performed daily during discharging. Sampling will be performed upon commencement of the dewatering discharge or impounded stormwater discharge, and then at least a minimum of three (3) samples per day will be collected for analysis, depending on visual monitoring.

700.2.3.4 Sample Collection and Handling

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

700.2.3.4.1 Sample Collection Procedures

Refer to the general procedures for sample collection in General SAP Section 700.2.1.4.1.

700.2.3.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 700.2.1.4.2.

700.2.3.4.3 Sample Documentation Procedures

In addition to the general procedures for sample documentation in General SAP Section 700.2.1.4.3, when applicable, the contractor’s stormwater inspector will document on the CEM-2030 Stormwater Site Inspection Report that samples for non-stormwater discharge pollutants were taken based on a visual monitoring site inspection.

700.2.3.5 Sample Analysis

Samples from non-stormwater discharges shall be analyzed for pH and turbidity.

The WPC Manager may determine that samples of non-stormwater discharges, need to be analyzed for non-visible pollutants. If the WPC Manager determines that non-visible pollutants may have contaminated the discharge, the samples shall be analyzed for the suspected pollutants. Sampling and analysis for non-visible pollutants in non-stormwater discharges shall be performed following the guidance in Section 700.2.2, the SAP for non-visible pollutants.

Samples shall be analyzed for the constituents indicated in the following table, titled “Sample Collection, Preservation and Analysis for Monitoring Water Extracted by Dewatering or Impounded Stormwater Discharges.”

TABLE 700.2.3.5 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING WATER EXTRACTED BY DEWATERING OR IMPOUNDED STORMWATER DISCHARGES						
Parameter	Test Method	Sample Preservation	Minimum Sample Volume⁽¹⁾	Sample Bottle	Maximum Holding Time	Detection Limit (min)
Turbidity	Field test with calibrated portable instrument	Store at 4° C (39.2° F)	100 mL	Polypropylene or Glass	48 hours	1 NTU
pH	Field test with calibrated portable instrument	Store at 4° C (39.2° F)	100 mL	Polypropylene	15 Minutes	0.2

Notes: 1. Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.

- °C - degrees Celsius
- °F - degrees Fahrenheit
- L - liter
- ml - milliliters
- NTU - Nephelometric Turbidity Unit

700.2.3.6 Quality Assurance/Quality Control

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in Section General SAP 700.2.1.6. For samples analyzed for turbidity and pH the following replaces the requirements for QA/QC in Section 700.2.1.6:

The contractor shall coordinate with the Caltrans RE on sampling locations and timing for quality assurance verification of field sampling and analysis. The contractor shall notify the RE at least 24 hours prior to dewatering discharge or impounded stormwater discharge sampling events.

700.2.3.7 Data Management and Reporting

Refer to the general requirements for data management and reporting in General SAP Section 700.2.1.7.

700.2.3.8 Data Evaluation

An evaluation of the water quality sample analytical results, including sampling locations and the QA/QC data, shall be submitted to the RE for every day that the water from dewatering is discharged. Should the dewatering discharge concentrations exceed applicable water quality standards, discharging will be stopped immediately and the WPC Manager or other personnel shall evaluate the dewatering BMPs to determine the probable cause for the exceedance. For dewatering discharges, Caltrans requires that the turbidity of any sample must not exceed 200 NTU. The pH value of any sample must be within the range of 6.7 to 8.3 pH units.

Samples of non-stormwater collected during discharge shall be evaluated by determining if suspected contaminants are present. Unauthorized discharges will be stopped as soon as possible and the RE will be notified immediately and a written report of discharge shall be completed and submitted to the RE. Authorized discharges shall be sampled for pH and turbidity and all suspected pollutants. For pH and turbidity, sample results shall be compared to the NAL.

As determined by the data evaluation and project site assessment, appropriate BMPs shall be repaired or modified to mitigate the exceedances. Corrective actions taken shall be documents on the CEM-2035 Stormwater Corrective Actions Summary. Any revisions/design changes to BMPs shall be implemented based on an amendment to the SWPPP.

700.2.3.9 Changes of Conditions

Refer to the general requirements for changes of conditions in General SAP Section 700.2.1.9.

700.2.4 Sampling and Analysis Plan for Stormwater pH and Turbidity

This SAP has been prepared for monitoring pH and turbidity in stormwater discharges from the project site and off-site activities directly related to the project in accordance with the requirements of the CGP and applicable requirements of the Caltrans Construction Site Monitoring Program Guidance Manual, August 2013. This SAP for monitoring pH and turbidity includes all of the components listed in Section 700.2.1.

700.2.4.1 Scope of Monitoring Activities

The scope of monitoring for this SAP includes monitoring for pH and turbidity in stormwater discharges from the project site and, run-on to the project site.

700.2.4.2 Monitoring Preparation

Refer to the general requirements for monitoring preparation in General SAP Section 700.2.1.2.

700.2.4.2.1 Qualified Sampling Personnel

Refer to the general requirements for Qualified Sampling Personnel in General SAP Section 700.2.1.2.1.

700.2.4.2.2 Monitoring Supplies

Refer to the general information regarding monitoring supplies in General SAP Section 700.2.1.2.2.

700.2.4.2.3 Field Instruments

Refer to the general information regarding field instruments in General SAP Section 700.2.1.2.3.

700.2.4.2.4 Testing Laboratory

Refer to the contact information for the testing laboratory found in General SAP Section 700.2.1.2.4.

700.2.4.3 Monitoring Strategy

Monitor representative stormwater discharges from the project site for pH and turbidity during qualifying rain events (a rain event that has produced precipitation in the form of rain and produced run-off at the time of discharge).

700.2.4.3.1 Analytical Constituents

Stormwater discharge samples are to be analyzed for pH and turbidity.

700.2.4.3.2 Potential Sampling Locations

Using the criteria in Section 700.2.1.3.2, the potential sampling locations on the project site for monitoring pH and turbidity were identified. Potential sampling locations for monitoring stormwater discharges for pH and turbidity are based on drainage areas; run-on and runoff locations; accessibility for sampling and personnel safety; and other factors in accordance with the applicable requirements in the Caltrans Construction Site Monitoring Program Guidance Manual, August 2013. Stormwater discharge locations shall be shown on the WPCDs in Attachment BB and listed on Stormwater Sample Locations in Attachment EE:

The stormwater discharge locations on the project site are listed in Table 700.2.4.3.2.1 “Stormwater Discharge Locations.”

TABLE 700.2.4.3.2.1 STORMWATER DISCHARGE LOCATIONS	
Sampling Location Identifier	Location
004DL03	5' Rt "CL" Line Sta 12+45.00

To be determined

Lat: 37.6804 degrees Long: -122.0787 degrees 97% total discharge per sampling location
--

The project does not receive run-on with the potential to combine with stormwater discharges.

700.2.4.3.3 Actual Sampling Locations

The WPC Manager shall select sampling locations from the list of potential sampling locations for stormwater discharge sampling shown on the WPCDs from Attachment BB and listed on Stormwater Sampling Locations in Attachment EE. If the construction activity has not started within the drainage area at a sampling location, and there is no disturbed soil within a drainage area, sampling from the stormwater discharge location from that drainage area is not required.

Within 72 to 48 hours prior to each qualifying rain event, the WPC Manager must identify the drainage areas that must be sampled. To identify these drainage areas, the WPC Manager must refer to the WPCDs and consider the conditions described below and activities within each drainage area that could have an effect on the stormwater discharge pH or turbidity.

1. **Turbidity:** The area of the disturbed soil at the time of precipitation could have an impact on the stormwater run-off turbidity. The area of the disturbed soil at the time of predicted precipitation must be expressed as a percentage of the total drainage area. It is reasonable to assume that a larger percentage of disturbed soil area could result in a more turbid run-off.
2. **pH:** The type of construction activities that could have an impact on stormwater run-off pH (for example, concrete work and saw cutting, lime stabilization work, use of crushed concrete, etc).

For representative sampling of construction site discharges, 20 percent of the drainage areas with disturbed soil areas and 20 percent of the drainage areas where activities that could potentially have an impact on the discharge pH must be sampled. At least five (5) drainage area discharge locations for each qualifying rain event must be sampled. If there are five (5) or fewer drainage area sampling locations in a project, then all drainage area sampling locations must be sampled. The drainage areas with the largest percentage of disturbed soil area must be included in the selected drainage areas to be sampled. The drainage areas where the most extensive activities (activities that potentially can alter discharge pH) are in progress must be included in the selected drainage areas to be sampled.

This representative monitoring strategy for stormwater discharges requires collection of additional samples based upon the preceding sampling event stormwater discharge pH or turbidity analysis results when the:

- turbidity analysis results – even in one sampling location – in the previous sampling event have exceeded 200 NTU, the number of drainage areas with disturbed soil areas requiring sampling will be raised to 50 percent.
- turbidity analysis results – even in one sampling location – in the previous sampling event have exceeded 250 NTU, the number of drainage areas with disturbed soil areas requiring sampling will be raised to 100 percent.
- pH analysis results – even in one sampling location – in the previous sampling event have not fallen within 6.5 to 8.5 pH unit range, the number of drainage areas requiring sampling where construction activities could have an impact on the discharge pH readings will be raised to 50 percent.
- pH analysis results – even in one sampling location – in the previous sampling event have not fallen within 6.0 to 9.0 pH unit range, the number of drainage areas requiring sampling where construction activities could have an impact on the discharge pH readings will be raised to 100 percent.

The selection of additional sampling locations, based on turbidity results, will involve drainage areas with the highest percentage of disturbed soil area. The selection of additional sampling locations, based on pH results, will involve drainage areas with construction activities that are most likely to affect stormwater discharge pH.

To meet the requirements of the CGP, District 4 follows the following procedure:

If there are any discrepancies between the SWPPP template/CSWPPP and the CGP, the CGP governs. Sampling must meet the 3 criteria of the CGP; (1) minimum of 3 samples per day, (2) sample all discharge locations, (3) samples must fully characterize discharges from all active areas. SAP shall include all sampling locations.

1. The project site is divided into drainage areas (DA's) with at least one sampling location chosen per DA.
2. All sampling locations are sampled when there is discharge.
3. For each sampling location, 3 samples are taken when there is discharge.
4. Grab samples are taken any time there is discharge observed. Rain event size is checked at the conclusion of the rain event. (CGP FAQ #39)

700.2.4.3.4 Sampling Schedule

Discharge samples shall be collected for turbidity and pH for qualifying rain events that result in a discharge from the project site. When applicable, upstream, downstream, and run-on samples shall be collected for analysis of turbidity and pH. Sampling and testing for turbidity and pH will be performed daily during all qualifying rain events. Samples shall be collected during working hours.

At least 48 hours prior to each qualifying rain event, the WPC Manager must prepare a list of sampling locations that must be sampled for the qualifying rain event.

The locations shall include all of the following sampling location types:

- discharge locations from the drainage areas with the largest percentage of disturbed soil areas,
- discharge locations from the drainage areas where construction activities that could have an impact on stormwater run-off pH are in progress, and
- if applicable, at least one sampling location from drainage areas where the disturbed soil areas have been stabilized.

The sampling locations must be sampled in the following order: starting with the sampling location on the northwest corner of the WPCDs as the first entry and move clockwise on the WPCDs.

The Caltrans stormwater site inspector and contractor inspector must coordinate and select the sampling locations and the time to meet and collect simultaneous samples for the purposes of QA/QC.

Every reasonable attempt has to be made to collect at least three grab samples per day from each sampling location during the qualifying rain event.

Sampling must start immediately after the flow begins or as soon as possible thereafter. The individual responsible for collecting samples must begin sampling with the first sampling location identified and move on to the next sampling location until all locations are sampled. It is preferable that the three rounds of sampling are performed over the first three hours of the flow; however, depending on the time of the day or other dictating conditions in the field, the three rounds of sampling could be performed over a shorter period of time to ensure that three samples per location are collected.

If stormwater sampling is unsafe because of dangerous weather conditions, such as flooding and electrical storms, then the stormwater sampler shall document the conditions resulting in the sampling not being performed as planned.

To meet the requirements of the CGP, District 4 follows the following procedure:

If there are any discrepancies between the SWPPP template/CSWPPP and the CGP, the CGP governs. Sampling must meet the 3 criteria of the CGP; (1) minimum of 3 samples per day, (2) sample all discharge locations, (3) samples must fully characterize discharges from all active areas. SAP shall include all sampling locations.

1. The project site is divided into drainage areas (DA's) with at least one sampling location chosen per DA.
2. All sampling locations are sampled when there is discharge.
3. For each sampling location, 3 samples are taken when there is discharge.
4. Grab samples are taken any time there is discharge observed. Rain event size is checked at the conclusion of the rain event. (CGP FAQ #39)

700.2.4.4 Sample Collection and Handling

Refer to the general requirements for sample collection and handling in General SAP Section 700.2.1.4.

700.2.4.4.1 Sample Collection Procedures

In addition to the general procedures for sample collection in General SAP Section 700.2.1.4.1, the procedures described below apply to sample collection for monitoring of pH and turbidity.

- Grab samples shall be collected and preserved in accordance with the methods identified in Table 700.2.4.5.1: Sample Collection, Preservation and Analysis for Monitoring Turbidity and pH, provided in Section 700.2.4.5.
- Only personnel trained in proper water quality sampling shall collect samples.

700.2.4.4.2 Sample Handling Procedures

Refer to the general procedures for sample handling in General SAP Section 700.2.1.4.2.

700.2.4.4.3 Sample Documentation Procedures

Refer to the general procedures for sample documentation in General SAP Section 700.2.1.4.3.

700.2.4.5 Sample Analysis

Samples shall be analyzed for the constituents indicated in Table 700.2.4.5.1: "Sample Collection, Preservation and Analysis for Monitoring Turbidity and pH."

TABLE 700.2.4.5.1 SAMPLE COLLECTION, PRESERVATION AND ANALYSIS FOR MONITORING TURBIDITY AND PH						
Parameter	Test Method	Sample Bottle	Minimum Sample Volume ⁽¹⁾	Sample Preservation	Maximum Holding Time	Detection Limit (min)
Turbidity	Field test with calibrated portable	Polypropylene or Glass	100 mL	Store at 4° C (39.2° F)	48 hours	1 NTU

To be determined

Hayward Parcel Mitigation

04-172451

	instrument					
pH	Field test with calibrated portable instrument	Polypropylene	100 mL	Store at 4° C (39.2° F)	15 minutes	0.2

Acronyms/Notes:

- C = Celsius
- F = Fahrenheit
- Min = minimum
- mL = milliliter
- NTU = Nephelometric Turbidity Units

(1) Minimum sample volume recommended. Specific volume requirements will vary by instrument; check instrument manufacturer instructions.

700.2.4.6 Quality Assurance/Quality Control

Refer to the general requirements regarding Quality Assurance/Quality Control (QA/QC) in General SAP Section 700.2.1.6. The following replaces the requirements for QA/QC in Section 700.2.1.6 for turbidity and pH quality assurance testing. However, Section 700.2.1.6 requirements apply for SSC quality assurance testing: The contractor shall coordinate with Caltrans RE on sampling locations and timing for quality assurance verification of field sampling and analysis activities. The contractor shall notify the RE at least 24 hours prior to sampling events.

700.2.4.7 Data Management and Reporting

Refer to general requirements for data management and reporting in General SAP Section 700.2.1.7.

In addition to the general requirements for data management and reporting in Section 700.2.1.7, the additional reporting described below is required.

Numeric Action Limit Exceedance Reportin - This project is subject to NALs for pH and turbidity as shown in Table 700.2.4.7.1 “NALs for Monitoring pH and Turbidity.”

TABLE 700.2.4.7.1 NALs FOR MONITORING pH AND TURBIDITY				
Parameter	Test Method	Detection Limit (min)	Unit	Numeric Action Level
pH	Field test with calibrated portable instrument	0.2	pH units	Lower NAL = 6.5 Upper NAL = 8.5
Turbidity	Field test with calibrated portable instrument	1	NTU	250 NTU

Acronyms:

Min = Minimum

NAL = numeric action level

NTU = Nephelometric Turbidity Units

If the NAL for pH or turbidity or both are exceeded, then form CEM-2062 NAL Exceedance Report will be completed and submitted to the RE within 48 hours after the sampling and analysis event. The NAL Exceedance Report will

- test results, analytical methods, reporting units, and detection limits
- date, sampling location, time of sampling, and visual observations
- predicted quantity of precipitation of the forecasted storm event, and estimated quantity of precipitation at the time of sampling
- description of BMPs
- corrective actions taken to manage the NAL exceedance

Once deemed necessary, corrective actions shall be immediately implemented and documented. Appendix I contains the CEM-2035 Stormwater Corrective Actions Summary form and Appendix O contains the CEM-2062 NAL Exceedance Report form. NAL exceedance reports will be filed in SWPPP File Category 20.62: Numeric Action Level Exceedance Reports.

700.2.4.8 Data Evaluation

An evaluation of the water quality sample analytical results, including sampling locations and the QA/QC data, shall be submitted to the RE for every day of stormwater sampling. If the stormwater discharge concentrations exceed applicable water quality standards, the WPC Manager or other personnel shall evaluate the project site BMPs to determine the probable cause for the exceedance.

As determined by the data evaluation and project site assessment, appropriate BMPs shall be repaired or modified to mitigate the exceedances. Corrective actions taken shall be documented on the CEM-2035 Stormwater Corrective Actions Summary. Any revisions/design changes to BMPs shall be implemented based on an amendment to the SWPPP.

700.2.4.9 Change of Condition

Refer to the general requirements for changes of conditions in General SAP Section 700.2.1.9.

700.2.5 Sampling and Analysis Plan for Monitoring Required by Regional Board

This project does not require a Sampling and Analysis Plan for Monitoring required by a RWQCB.

700.2.6 Sampling and Analysis Plan for Monitoring of Active Treatment System

This project does not require a SAP for an ATS because deployment of such a system is not planned.

SECTION 800

POST-CONSTRUCTION CONTROL PRACTICES

800.1 Post-Construction Control Practices

The following are the post-construction BMPs for the project site

- Erosion Control 2 (Fiber Rolls, Compost, Hydroseed, Hydromulch)
- Erosion Control 3 (Rolled Erosion Control Product [Netting], Fiber Rolls, Hydroseed, Hydromulch)
- Plant (Group H)
- Plant (Group M)
- Artemisia Douglasiana (Douglas Mugwort)
- Baccharis Salicifolia (Mule's Fat)
- Bromus Carinatus (California Brome)
- Elymus Glaucus (Blue Wildrye)
- Erosion Control 1 (Fiber Rolls, Hydroseed, and Hydromulch)

800.2 Post-Construction Operation/Maintenance

The post-construction BMPs that are listed above will be funded and maintained in the following manner.

short-term funding: Caltrans District 4

long-term funding: Caltrans District 4

The responsible party for the long-term maintenance of post-construction BMPs is Caltrans regional maintenance staff

SECTION 900

SWPPP REPORTING REQUIREMENTS

900.1 Recordkeeping

To manage the various documents required by the SWPPP and to provide easy access to the documents, the following SWPPP file categories will be used to file SWPPP compliance documents:

File Category 20.01	.....Stormwater Pollution Prevention Plan (SWPPP)
File Category 20.02	.....Stormwater Pollution Prevention Plan Amendments
File Category 20.03	.....Water Pollution Control Schedule Updates
File Category 20.05	.....Notice of Construction or Notice of Intent
File Category 20.06	.....Legally Responsible Person Authorization of Approved Signatory
File Category 20.10	.....Correspondence
File Category 20.21	.....Subcontractor Contact Information and Notification Letters
File Category 20.22	.....Material Suppliers Contact Information and Notification Letters
File Category 20.23	.....Contractor Personnel Training Documentation
File Category 20.31	.....Contractor Stormwater Site Inspection Reports
File Category 20.32	.....Caltrans Stormwater Site Inspection Reports
File Category 20.33	.....Site Visual Monitoring Inspection Reports
File Category 20.34	.....Best Management Practices Weekly Status Reports
File Category 20.35	.....Corrective Actions Summary
File Category 20.40	.....Weather Monitoring Logs
File Category 20.45	.....Rain Event Action Plans
File Category 20.46	.....Storm/Rain Event Sampling and Analysis Plan
File Category 20.50	.....Non-Stormwater Discharge Sampling and Test Results
File Category 20.51	.....Non-Visible Pollutant Sampling and Test Results
File Category 20.52	.....Turbidity, pH and SSC Sampling and Test Results
File Category 20.53	.....Required Regional Water Board Monitoring Sampling and Test Results
File Category 20.54	.....ATS Monitoring Sampling and Test Results
File Category 20.55	.....Field Testing Equipment Maintenance and Calibration Records
File Category 20.61	.....Notice of Discharge Reports
File Category 20.62	.....Numeric Action Level Exceedance Reports
File Category 20.63	.....Numeric Effluent Limitation Violation Reports
File Category 20.70	.....Annual Certification of Compliance
File Category 20.80	.....Stormwater Annual Reports
File Category 20.90	.....Notice of Termination

Records shall be retained for a minimum of three years for the following items:

- approved SWPPP document and amendments
- Stormwater Site Inspection Reports
- Site Inspection Report Corrections Summary
- Rain Event Action Plans (REAPs)
- Notice of Discharge Reports
- Numeric Action Limit (NAL) Exceedance Reports
- Numeric Effluent Limitation (NEL) Violation Reports
- sampling records and analysis reports
- Annual Compliance Certifications
- copies of all applicable permits

900.2 Stormwater Annual Report

A Stormwater Annual Report will be prepared for this project to document the stormwater monitoring information and training information.

The stormwater monitoring information listed below shall be included in the Stormwater Annual Report.

- A summary and evaluation of all sampling and analysis results, including copies of laboratory reports.
- The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter.
- A summary of all corrective actions taken during the compliance year.
- Identification of any compliance activities or corrective actions that were not implemented.
- A summary of all violations of the CGP.
- The names of individual(s) who performed site inspections, sampling, site visual monitoring inspections and/or measurements.
- The date, place, and time of site inspections, sampling, site visual monitoring inspections, and/or measurements, including precipitation (rain gauge).
- Any site visual monitoring inspection and sample collection exception records.

The stormwater training information listed below shall be included in the Stormwater Annual Report.

- Documentation of all training for individuals responsible for all activities associated with compliance with the CGP.
- Documentation of all training for individuals responsible for BMP installation, inspection, maintenance, and repair.
- Documentation of all training for individuals responsible for overseeing, revising and amending the SWPPP.

900.3 Discharge Reporting

If an unauthorized discharge is discovered or evidence of a previously unseen discharge is discovered, the Contractor shall notify the RE within 6 hours of the discovery, and will file a written report with the RE within 24 hours after the discovery. The written report to the RE will contain the following items:

- date, time, location, and type of unauthorized discharge
- nature of operation that caused the discharge
- initial assessment of any impacts caused by the discharge
- BMPs deployed before the discharge event and date(s) of deployment
- BMPs deployed after the discharge event, including re-installation, maintenance or repair of initial BMPs
- steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Reporting of discharges shall be documented on the CEM-2061 Notice of Discharge form in Appendix M. A log of all reportable discharges shall be documented on CEM-2065 Discharge Reporting Log form in Appendix Z. Completed CEM-2061 Notice of Discharge forms shall be submitted to the RE within 24 hours after the discharge event or discovery of evidence of a prior discharge. Copies of completed forms will be kept in File Category 20.61: Notice of Discharge Reports.

900.4 Regulatory Agency Notice or Order Reporting

If a written notice or order is issued to the project by any regulatory agency, the Contractor will notify the RE within 6 hours of receiving the notice or order and will file a written report to the RE within 48 hours of receiving the notice or order. Corrective measures will be implemented immediately following receipt of the notice or order.

The report to the RE will contain the following items

- the date, time, location, and cause or nature of the notice or order
- the BMPs deployed prior to receiving the notice or order
- the date of deployment and type of BMPs deployed after receiving the notice or order, including additional BMPs installed or planned to reduce or prevent recurrence
- an implementation and maintenance schedule for any affected BMPs

900.5 Illicit Connection/Illegal Discharge Reporting

If the Contractor discovers an illicit connection to a storm drain system or any pipe discharging onto the project site, not shown on the project plans, the Contractor shall notify the RE within 6 hours of the discovery and shall file a written report to the RE within 48 hours of the discovery.

If the Contractor discovers any illegal discharge, including illegal disposing of material on the project site, the Contractor shall immediately notify the RE and shall file a written report to the RE within 3 days of discovery.

The report to the RE will contain the following items:

- the date, time, and location of the discovery
- the details for the illicit connection or illegal discharge, including any photographs taken
- any actions taken to contain the illegal discharge

- any sampling and testing performed on material that was illegally disposed of or discharged

Continuation of Section 900.3 Discharge Reporting

Caltrans Permit Order No. 2012-011-DWQ, Findings #42 states: NPDES regulations require the Department to notify the Regional Water Board and/or State Water Board of anticipated non-compliance with this Order (40 C.F.R., § 122.41(l)(2)); or of instances of non-compliance that endanger human health or the environment (40 C.F.R., § 122.41(l)(6)).

To meet this requirement, when there is injury or mortality of any of the listed regulated species, provide verbal report immediately to the biologist and Engineer followed by a written report within 24 hours to the Engineer.

Attachment C Risk Level Determination

	A	B	C
1	Sediment Risk Factor Worksheet		Entry
2	A) R Factor		
3	Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of EI30 for storm events during a rainfall record of at least 22 years. "Isoerodent" maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.		
4	http://water.epa.gov/polwaste/npdes/stormwater/Welcome-to-the-Rainfall-Erosivity-Factor-Calculator.cfm		
5	R Factor Value		12.58
6	B) K Factor (weighted average, by area, for all site soils)		
7	The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.		
8	Site-specific K factor guidance		
9	K Factor Value		0.32
10	C) LS Factor (weighted average, by area, for all slopes)		
11	The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.		
12	LS Table		
13	LS Factor Value		2.13
14			
15	Watershed Erosion Estimate (=RxKxLS) in tons/acre		8.574528
16	Site Sediment Risk Factor		Low
17	Low Sediment Risk: < 15 tons/acre		
18	Medium Sediment Risk: >=15 and <75 tons/acre		
19	High Sediment Risk: >= 75 tons/acre		
20			

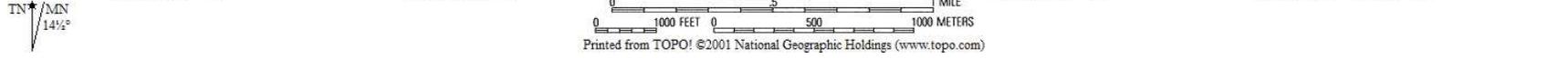
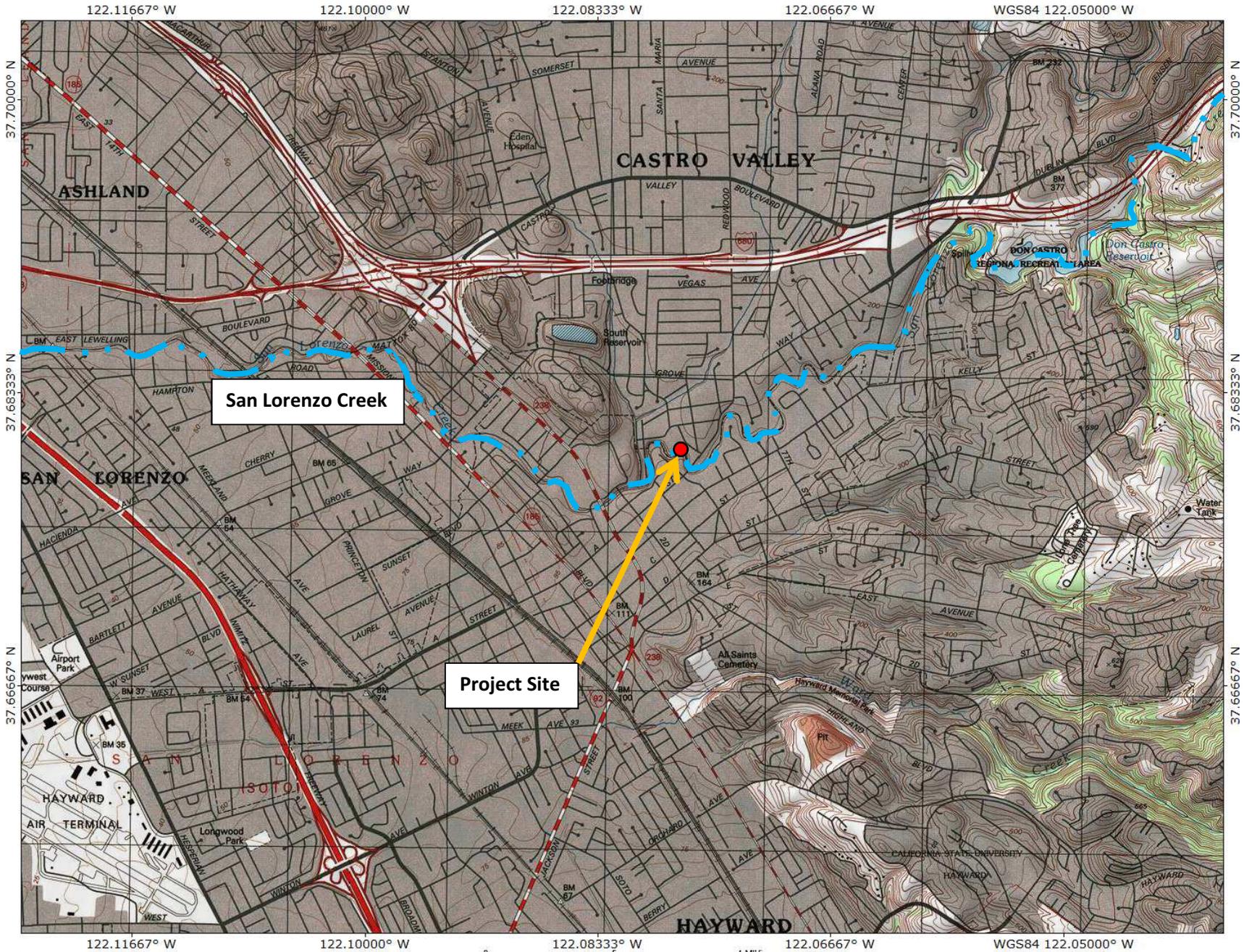
Receiving Water (RW) Risk Factor Worksheet	Entry	Score
A. Watershed Characteristics	yes/no	
<p>A.1. Does the disturbed area discharge (either directly or indirectly) to a 303(d)-listed waterbody impaired by sediment (For help with impaired waterbodies please visit the link below) or has a USEPA approved TMDL implementation plan for sediment?:</p> <p>http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml</p> <p style="text-align: center;">OR</p>	Yes	High
<p>A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of SPAWN & COLD & MIGRATORY? (For help please review the appropriate Regional Board Basin Plan)</p> <p>http://www.waterboards.ca.gov/waterboards_map.shtml</p>		
<p>Region 1 Basin Plan</p> <p>Region 2 Basin Plan</p> <p>Region 3 Basin Plan</p> <p>Region 4 Basin Plan</p> <p>Region 5 Basin Plan</p> <p>Region 6 Basin Plan</p> <p>Region 7 Basin Plan</p> <p>Region 8 Basin Plan</p> <p>Region 9 Basin Plan</p>		

Combined Risk Level Matrix

		<u>Sediment Risk</u>		
		Low	Medium	High
<u>Receiving Water Risk</u>	Low	Level 1	Level 2	
	High	Level 2		Level 3

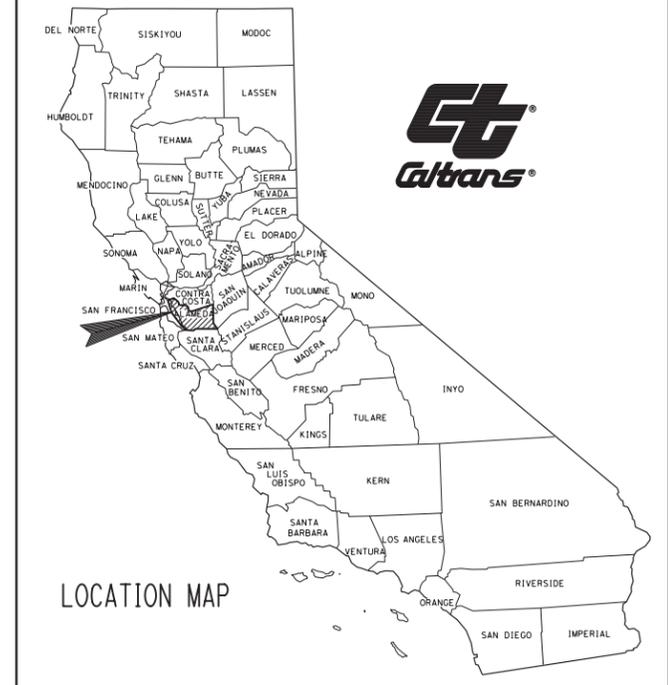
Project Sediment Risk: **Low**
Project RW Risk: **High**
Project Combined Risk: **Level 2**

Attachment D Vicinity Map and Site Map



Project Vicinity Map

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	880	18.4	1	28



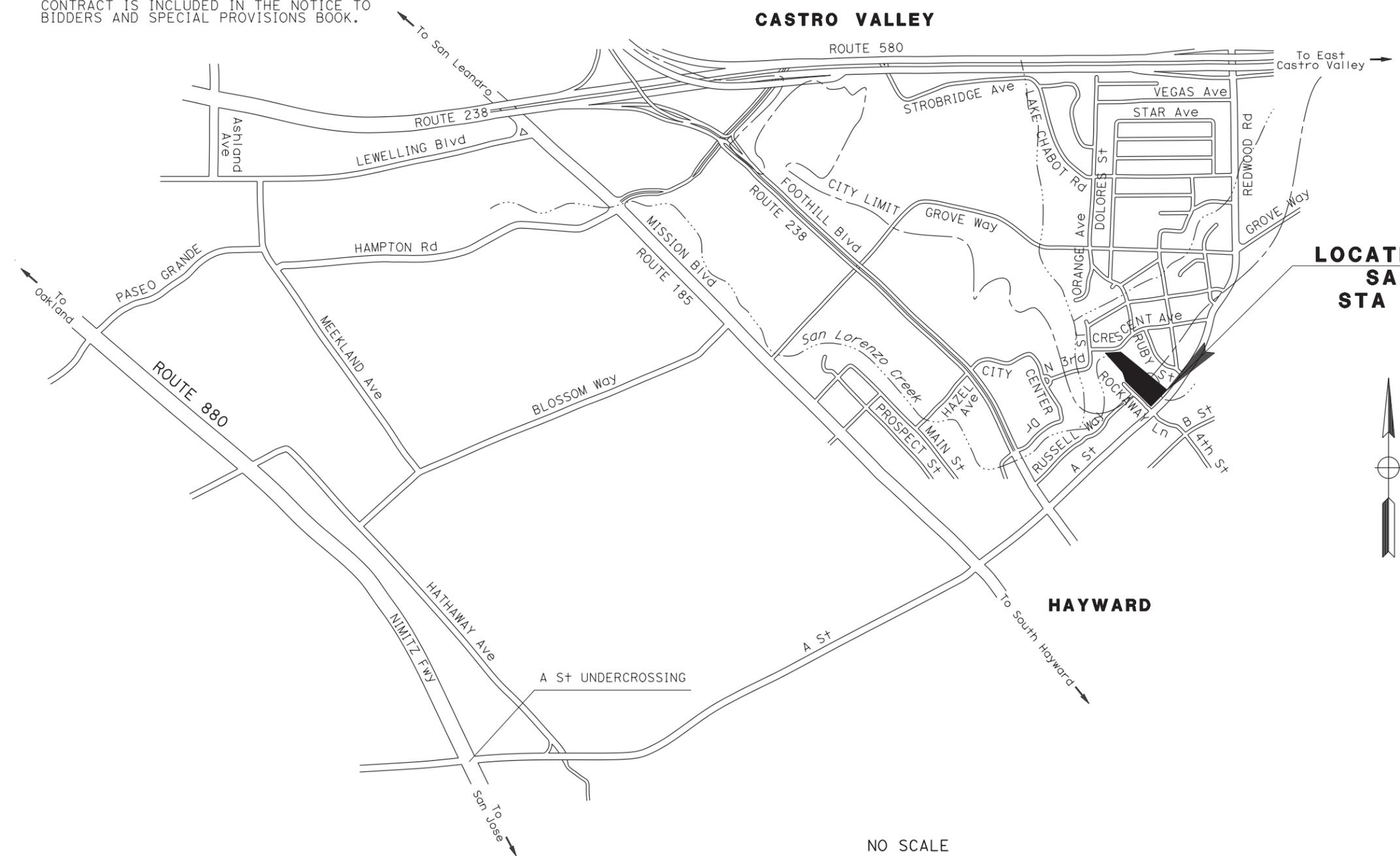
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE SHEET AND LOCATION MAP
2	LAYOUT
3	TEMPORARY WATER POLLUTION CONTROL
4 - 5	SIGN PLANS
6	SUMMARY OF QUANTITIES
7	ROADSIDE CLEARING PLAN
8	IRRIGATION SPRINKLER SCHEDULE
9 - 10	IRRIGATION PLAN AND QUANTITIES
11	PLANT LEGEND
12 - 13	PLANTING PLAN AND QUANTITIES
14 - 17	LANDSCAPE DETAILS
18 - 20	EROSION CONTROL LEGEND, PLAN AND QUANTITIES
21 - 28	REVISED STANDARD PLANS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN ALAMEDA COUNTY
IN HAYWARD AND CASTRO VALLEY
AT A STREET AND ROCKAWAY LANE 1.7 MILES
NORTHEAST OF ROUTE 880 AND A STREET UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.



LOCATION OF CONSTRUCTION
SAN LORENZO CREEK
STA "SL" 0+00 TO 13+40



PROJECT MANAGER	RON KIAAINA
DESIGN MANAGER	NESTOR PEREZ

Nicholas J. Grigich 12-23-14
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER



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

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

NO SCALE

CONTRACT No.	04-172454
PROJECT ID	0413000371

DATE PLOTTED => 03-FEB-2015
 TIME PLOTTED => 14:46
 12-19-14

Attachment F

Other Plans/Permits/Agreements

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5500
WWW.WILDLIFE.CA.GOV



STREAMBED ALTERATION AGREEMENT
NOTIFICATION No. 1600-2014-0337-R3
Hayward Parcel Mitigation Project
EA 04-15148

CALIFORNIA DEPARTMENT OF TRANSPORTATION

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

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on August 28, 2014 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 on a 3-acre parcel along San Lorenzo Creek in the City of Hayward. The parcel is bordered by Crescent Avenue to the north, Ruby Street to the east, A Street to the south, and Rockaway Lane to the west.

PROJECT DESCRIPTION

The California Department of Transportation (Permittee) proposes to enhance and restore riparian woodland along a Permittee-owned section of San Lorenzo Creek (Project). Completion of the proposed Project would enhance and restore 1,860 linear feet of seasonal creek to satisfy a portion of the remaining 2,370 linear feet of mitigation required under the Regional Water Quality Control Board Section 401 Permit (# R2-

2006-0033) for the State Route 84 Pigeon Pass Safety Improvement Project. Enhancement of the ecological function and value of the creek's riparian corridor will be accomplished through the removal and control of invasive vegetation, bank restoration, planting of native plant species, and trash/debris removal.

Invasive species will be mowed and may be subsequently treated with herbicides. When treating all species, wherever possible, injectable herbicides will be used to reduce the spread of herbicide to non-targeted areas. All debris from invasive species will be removed from the parcel and disposed of properly.

After invasive species are removed, restoration will occur within the riparian area along the banks. Disturbed ground will be planted using a combination of beardless wild rye (*Leymus triticoides*) plugs and other native grasses appropriate to the site. Low stature native shrubs like evergreen currant (*Ribes viburnifolium*) will also be planted. Tree planting will not occur until native herbaceous ground cover is established. Erosion control along banks will consist of a 3-inch layer of coarse compost containing a mixture of native seed appropriate to the site. Application of compost will occur above the ordinary high water mark. Truck watering or temporary irrigation directed from the top of bank down will be provided for a two-year period.

Native shrub and willow poles will be planted along the banks above the ordinary high water mark for further erosion control function and low vegetation structure. Willow pole plantings will be established on the lower bank to reduce any small, localized areas of erosion. Planting will not occur within the creek's main channel, but may be planted within the lower portions of the slope, so some of these lower bank plantings may be periodically inundated during high water events.

No excavation of the main creek channel will occur. The majority of trash and debris removal will occur using crews operating on foot. If required, a small excavator will work on level ground along the creek bank but will not operate in water. The excavator will be brought in by crane to suitable work locations adjacent to the creek, placed on construction timber mats, and be used to gather, assemble and organize debris and trash. Organized trash and debris will be hoisted up by winch, loaded on trucks, and disposed of properly.

PROJECT IMPACTS

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

- Amphibians
- Migratory bird nesting and habitat

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. The following conditions apply to areas located within CDFW riparian jurisdiction.

- 2.1 All work within flowing water shall occur between May 15 and October 15.
- 2.2 No living riparian trees or other existing non-invasive vegetation will be removed, and the creek bed will not be re-worked.
- 2.3 Imported compost and mulch shall be free of litter.
- 2.4 At least 30-days prior to commencing Project activities covered by this Agreement, the Permittee shall submit to CDFW, for review and approval, the qualifications for a number of biologists (Qualified Biologist) that shall oversee the implementation of the conditions in

this Agreement. At a minimum, the Qualified Biologists shall have a combination of academic training and professional experience in biological sciences and related resource management activities. The Qualified Biologists shall communicate to the Resident Engineer when any activity is not in compliance with this Agreement and the Resident Engineer shall immediately stop the activity that is not in compliance with this Agreement.

- 2.5 If Project activities will occur between February 15 and September 1, a Qualified Biologist shall conduct pre-construction surveys for nesting birds no more than one week prior to construction. Surveys shall consist of multiple days of observations. If nests are found the Qualified Biologist shall establish an appropriate buffer to be in compliance with Migratory Bird Treaty Act (MBTA) and Fish and Game Code 3503. The Qualified Biologist shall perform at least two hours of pre-construction monitoring of the nest to characterize "typical" bird behavior. The Qualified Biologist shall monitor the nesting birds and shall increase the buffer if the Qualified Biologist determines the birds are showing signs of unusual or distressed behavior by Project activities. Atypical nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The Qualified Biologist shall have authority, through the Resident Engineer, to order the cessation of all Project activities if the nesting birds exhibit atypical behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the Qualified Biologist. Any sign of nest abandonment shall be reported to CDFW within 48 hours.
- 2.6 Permittee shall conduct work defined in the above Project Description, and within the Project area, during periods of dry weather. The Project area is defined as the bed, bank, channel, and associated riparian and wetland habitat. The Permittee shall monitor forecasted precipitation. When $\frac{1}{4}$ inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No Project activities may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-

two hour weather forecasts from National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less than a 30% forecast for precipitation for the following 24-hour period.

- 2.7 Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waterways. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control installations shall be monitored for effectiveness and shall be repaired or replaced as recommended by a Qualified Biologist or Water Quality Monitor to the Resident Engineer. As needed to prevent sediment transport, Permittee shall deploy soil stabilizer such as hydroseeding, netting, erosion control mats, mulch, fiber rolls, silt fences, check dams, and flow velocity dissipation devices. Permittee shall stabilize and equip construction site entrances and exits with tire washing capability. Materials containing monofilament or plastic shall not be used. Erosion and sediment control measures shall be installed prior to unseasonable rain storms.
- 2.8 All disturbed areas shall be re-graded and hydroseeded. Hydroseed shall not contain invasive exotic plant species. Prohibited exotic plant species include those identified in the California Exotic Pest Plant Council's database, which is accessible at: <http://www.calipc.org/ip/inventory/weedlist.php>.
- 2.9 Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the creek channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.
- 2.10 Refueling of mobile construction equipment and vehicles shall not occur within 50 feet of any water body, or anywhere that spilled fuel could drain to a water body. Refueling of stationary equipment requiring breakdown and setup to move will remain in place. All equipment shall be refueled with appropriate drip pans, absorbent pads, and water quality Best Management Practices. Equipment and vehicles operating in the Project site shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

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

3. Mitigation and Reporting Measures

3.1 This Agreement authorizes the initial restoration work described in the above Project Description. The Permittee shall submit a plan for CDFW approval prior to the start of construction, that outlines the ongoing monitoring, maintenance, and reporting schedule, success criteria, refuse abatement, and corrective actions to be taken to meet success criteria. The Permittee shall monitor survival and vigor of plantings to ensure attainment of 75% survivorship after 5 years. The plan shall include a proposed endowment to fund the ongoing maintenance of the parcel.

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:

California Department of Transportation
Mr. Hardeep Takhar
111 Grand Ave
Oakland, Ca
Hardeep.takhar@dot.ca.gov

To CDFW:

California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, California 94558
Attn: Lake and Streambed Alteration Program – Melissa Escaron

Notification #1600-2014-0337-R3
Fax (707) 944-5553
Melissa.escaron@wildlife.ca.gov

LIABILITY

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

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

SUSPENSION AND REVOCATION

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

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

ENFORCEMENT

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

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

OTHER LEGAL OBLIGATIONS

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

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

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

AMENDMENT

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

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

TRANSFER AND ASSIGNMENT

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

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

EXTENSIONS

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

Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

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

EFFECTIVE DATE

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

TERM

This Agreement shall expire on December 31, 2018 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.

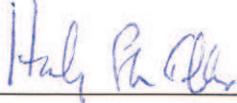
AUTHORIZATION

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 CALIFORNIA DEPARTMENT OF
TRANSPORTATION**

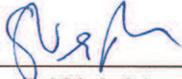


Hardeep Takhar
Office Chief

11-6-14

Date

FOR DEPARTMENT OF FISH AND WILDLIFE



Craig J. Weightman
Environmental Program Manager

11/14/14

Date

Prepared by: Melissa Escaron
Staff Environmental Scientist

Date Sent: November 4, 2014
Revised: November 6, 2014

Attachment I

Incident Report Form

ATTACHMENT I Incident Report Form

Type of incident: <input type="checkbox"/> Field <input type="checkbox"/> Administrative	
Name of person completing this form: _____	Person's agency name and address:
	Person's phone and e-mail:

For Field incidents complete Sections 1 and 3. For Administrative incidents complete Section 2. See Non-Compliance Notification Schedule on Page 2.

SECTION 1: Field incidents

Date(s) and time(s) of incident:	1. Start date / time:
	2. End date / time:
Location of Incident:	3. Nearest city / town:
	4. Street address / nearest cross street:
	5. Latitude / Longitude:
	6. Additional location detail:
County: _____	
Materials involved in the incident: (use Comments Section below if necessary):	6. Name(s) of material(s) discharged:
	7. Approximate quantity discharged (specify units):
	8. Approximate concentration of material:
Discharge to surface water? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, answer questions 9-11	9. Name of waterbody:
	10. Apparent effects (if any) on waterbody:
	11. Estimated extent of impacts to waterbody:
Was CalEMA notified? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, answer questions 12-14	12. Date and time of notification:
	13. Name of person making the notification:
	14. Phone number of person making the notification:
Was the Regional Water Board (RWB) notified? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, answer questions 15-17	15. Name of RWB contact:
	16. RWB contact's phone / e-mail:
	17. Name of person making the notification:
Were downgradient communities / people notified? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, answer questions 18 - 20	18. Date and time of notification:
	19. Name of person making the notification:
	20. Phone number of person making the notification:
	21. Name of downgradient community/ person:
Field Non-Compliance (check all that apply)	
<input type="checkbox"/>	Lack of BMP(s), ineffective implementation of BMP(s), or failure of BMP(s) resulted in a discharge of pollutants to surface water.
<input type="checkbox"/>	Monitoring data indicates an exceedance of a defined standard. Defined standards include TMDL Waste Load Allocations, and water quality standards in the Water Quality Control Plans and promulgated policies and regulations of the State and Regional Water Boards, including California Ocean Plan limitations and prohibitions.
<input type="checkbox"/>	Discharge of prohibited non-storm water.
<input type="checkbox"/>	Failure to comply with Facility Pollution Prevention Plan (FPPP) requirements.
<input type="checkbox"/>	Failure to comply with inspection, monitoring, and reporting requirements and protocols.
<input type="checkbox"/>	Other (describe - use Comments Section below if needed):

SECTION 2: Administrative Non-Compliance (check all that apply)

<input type="checkbox"/>	Failure to submit reports or documents required by the Permit and/or SWMP, failure of timely submittal, and/or failure to submit required information.
<input type="checkbox"/>	Failure to develop and/or maintain a site-specific FPPP or to implement any other procedural requirement of the Permit.
<input type="checkbox"/>	Other (describe - use Comments Section below if needed):

SECTION 3: Description of Incident

Activities in the area prior to the incident (If any):
Initial assessment of any impact caused by the discharge (If any):
Samples collected and analyses requested (If any):
Steps taken to mitigate damage and prevent reoccurrence (If any):
Current Status:
Schedule for proposed mitigation/abatement (If any):
Other Comments:

Non-Compliance Notification Schedule

Type of Incident	Within 5 Working Days (Verbal)	Within 10 Working Days (Written)	Within 30 Calendar Days (Written)	In Annual Report
Emergency Incidents ¹	—	—	—	Chronological summary and status of all incidents
Field ²	Notify RWB Executive Officer	To RWB Executive Officer and copies to Dept. HQ	—	Chronological summary and status of all incidents
Administrative ³	Notify RWB Executive Officer or SWB Contact ³	—	To RWB Executive Officer, SWB Executive Director, and copies to Dept. HQ.	Chronological summary and status of all incidents

¹ Sudden, unexpected, unpreventable incidents that threaten public health, public safety, property, or the environment that pose a clear and imminent danger requiring immediate action to prevent or mitigate the damage or threat, and that result in a discharge or potential discharge.

² Failure to meet any non-administrative requirement of the SWMP or Permit or to meet any applicable water quality standard. This includes failure to install required BMPs or conduct required monitoring or maintenance. It also includes discharges or prohibited non-storm water that do not meet the definition of emergency incidents. It does not include determinations by the Department or a Regional Water Board Executive Officer that a discharge is causing or contributing to an exceedance of an applicable WQS. See provision E.2.c.6)c).

³ Failure to meet any administrative or procedural requirement of the SWMP or Permit including submission of required reports, notifications and certifications. The report of non-compliance shall be submitted to the same organization (State or Regional Water Board) to which the required report was originally due.

<i>Certification – I certify that under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>			
Signature of Contractor (if applicable)	Title	Telephone	Date:
Signature of Department Representative	Title	Telephone	Date:

Attachment BB Water Pollution Control Drawings

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
WATER QUALITY

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

WPC LEGEND

-  TEMPORARY FIBER ROLL
-  TEMPORARY HYDRAULIC MULCH (BFM)
-  ORDINARY HIGH WATER MARK
-  TEMPORARY CONSTRUCTION ENTRANCE

WPC NOTE:

TEMPORARY BMP LOCATIONS ARE SUGGESTIONS ONLY, AND THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR DEVELOPING A SWPPP THAT COMPLIES WITH THE PERMITS, LICENSES, AGREEMENTS, AND CERTIFICATIONS (PLACS).

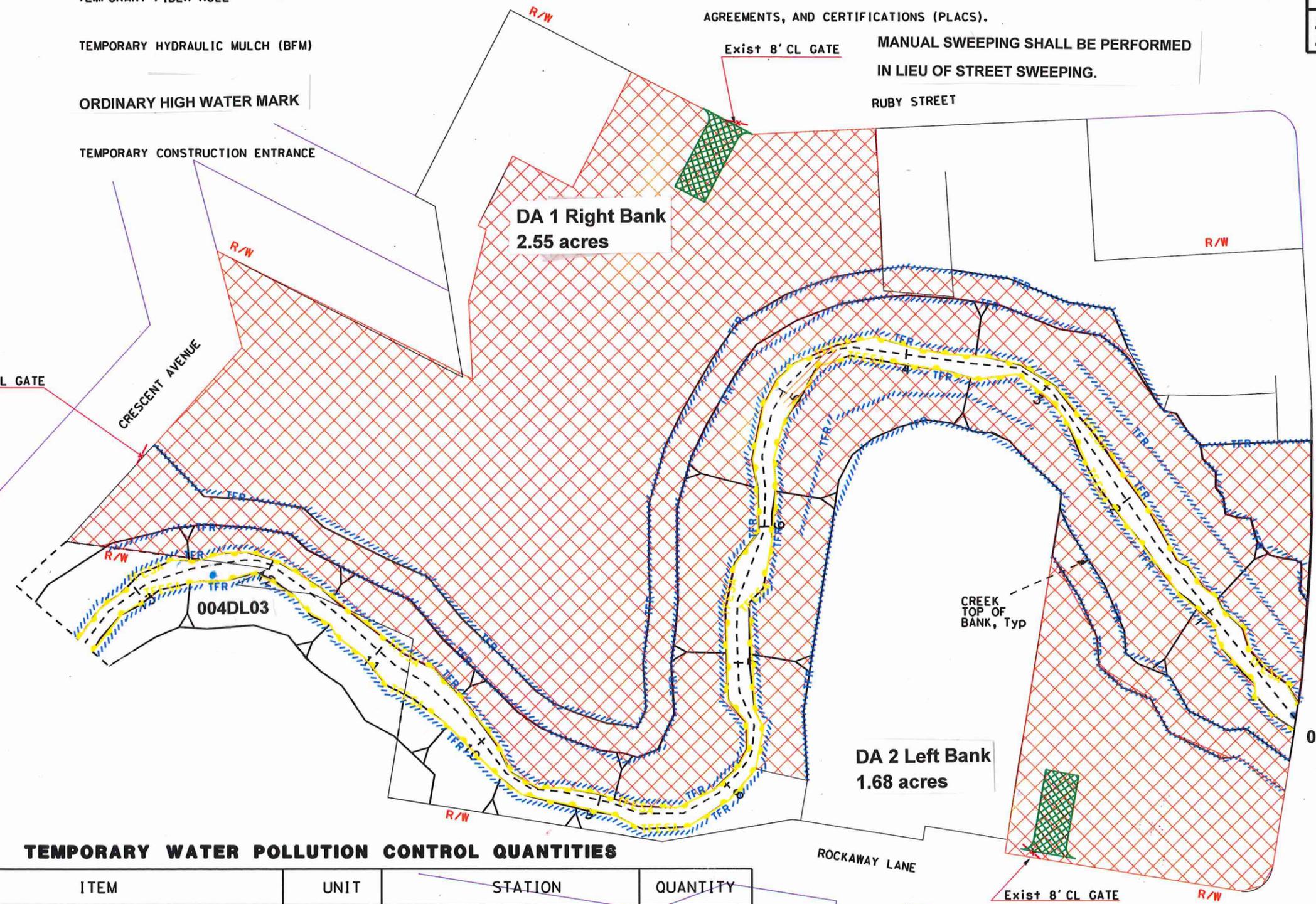
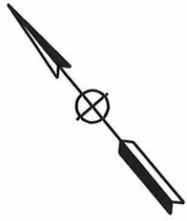
MANUAL SWEEPING SHALL BE PERFORMED
 IN LIEU OF STREET SWEEPING.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	ALA	880	18.4		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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

TEMPORARY WATER POLLUTION CONTROL QUANTITIES

ITEM	UNIT	STATION	QUANTITY
TEMPORARY FENCE (TYPE ESA)	LF	AS SHOWN IN THE PLAN	2800
TEMPORARY FIBER ROLL	LF	AS SHOWN IN THE PLAN	6000
TEMPORARY HYDRAULIC MULCH (BFM)	SOYD	AS SHOWN IN THE PLAN	26000
TEMPORARY CONSTRUCTION ENTRANCE	EA	AS SHOWN IN THE PLAN	2

WATER POLLUTION CONTROL DRAWINGS
WPCD-1

**Attachment CC Water Pollution Control Best Management
Practices List**

**ATTACHMENT CC WATER POLLUTION CONTROL
BEST MANAGEMENT PRACTICES LIST**

CEM-20CC (NEW 9/2012)

PROJECT INFORMATION NAME AND SITE ADDRESS Hayward Parcel Mitigation (along San Lorenzo Creek and bordered by Crescent Avenue, Ruby Street, A Street & Rockaway Lane) City of Hayward Alameda County	CONTRACT NUMBER/CO/RTE/PM 04-172451
	PROJECT IDENTIFIER NUMBER 0413000371
CONTRACTOR NAME AND SITE ADDRESS To be determined	PROJECT SITE RISK LEVEL <input type="checkbox"/> Risk Level 1 <input checked="" type="checkbox"/> Risk Level 2 <input type="checkbox"/> Risk Level 3

Water Pollution Control Best Management Practices List (WPCBMPL)

Project Phases included in WPCBMPL <input checked="" type="checkbox"/> Preliminary Phase <input type="checkbox"/> Grading Phase <input type="checkbox"/> Highway Construction Phase <input checked="" type="checkbox"/> Highway Planting / Erosion Control Phase	Projected Stages included in WPCBMPL <input checked="" type="checkbox"/> 1 Stage <input type="checkbox"/> 2 Stages <input type="checkbox"/> 3 Stages <input type="checkbox"/> 4 Stages
--	--

Project Required BMP	Best Management Practice (BMP)	BMP ID	Total Quantity Required
	TEMPORARY SOIL STABILIZATION		
<input type="checkbox"/>	Preservation of Existing Vegetation	SS-02	
<input checked="" type="checkbox"/>	Hydraulic Mulch	SS-03	26,000 SQ YD
<input type="checkbox"/>	Hydroseeding	SS-04	
<input type="checkbox"/>	Soil Binders	SS-05	
<input type="checkbox"/>	Straw Mulch	SS-06	
<input type="checkbox"/>	Geotextiles, Mats, Plastic Covers, and Erosion Control Blankets	SS-07	
<input type="checkbox"/>	Wood Mulching	SS-08	
<input type="checkbox"/>	Earth Dikes/Drainage Swales, and Lined Ditches	SS-09	
<input type="checkbox"/>	Outlet Protection/Velocity Dissipation Devices	SS-10	
<input type="checkbox"/>	Slope Drains	SS-11	
<input type="checkbox"/>	Streambank Stabilization	SS-12	
	TEMPORARY SEDIMENT CONTROL		
<input type="checkbox"/>	Silt Fence	SC-01	
<input type="checkbox"/>	Sediment/Distilling Basin	SC-02	
<input type="checkbox"/>	Sediment Trap	SC-03	
<input type="checkbox"/>	Check Dams	SC-04	
<input checked="" type="checkbox"/>	Fiber Rolls	SC-05	6,000 LF
<input type="checkbox"/>	Gravel Bad Berm	SC-06	
<input type="checkbox"/>	Sandbag Barrier	SC-07	
<input type="checkbox"/>	Straw Bale Barrier	SC-09	
<input type="checkbox"/>	Storm Drain Inlet Protection	SC-10	

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

**ATTACHMENT CC WATER POLLUTION CONTROL
BEST MANAGEMENT PRACTICES LIST**

CEM-20CC (NEW 9/2012)

Page 2 of 5

PROJECT INFORMATION NAME AND SITE ADDRESS Hayward Parcel Mitigation (along San Lorenzo Creek and bordered by Crescent Avenue, Ruby Street, A Street & Rockaway Lane) City of Hayward Alameda County	CONTRACT NUMBER/CORTE/PM 04-172451
	PROJECT IDENTIFIER NUMBER 0413000371

Water Pollution Control Best Management Practices List

Project Required BMP	Best Management Practice (BMP)	BMP ID	Total Quantity Required
	WIND EROSION CONTROL		
<input checked="" type="checkbox"/>	Wind Erosion Control	WE-01	As Needed
	TRACKING CONTROLS		
<input checked="" type="checkbox"/>	Stabilized Construction Entrance/Exit	TC-01	2 EA
<input type="checkbox"/>	Stabilized Construction Roadway	TC-02	
<input type="checkbox"/>	Entrance/Exit Tire Wash	TC-03	
<input checked="" type="checkbox"/>	Street Sweeping	SC-07	As Needed
	NON-STORMWATER MANAGEMENT		
<input checked="" type="checkbox"/>	Water Conservation Practices	NS-01	As Needed
<input type="checkbox"/>	Dewatering Operations	NS-02	
<input checked="" type="checkbox"/>	Paving and Grinding Operations	NS-03	As Needed
<input type="checkbox"/>	Temporary Stream Crossing	NS-04	
<input type="checkbox"/>	Clear Water Diversion	NS-05	
<input checked="" type="checkbox"/>	Illicit Connection/Illegal Discharge Detection and Reporting	NS-06	As Needed
<input checked="" type="checkbox"/>	Potable Water/Irrigation	NS-07	As Needed
<input type="checkbox"/>	Vehicle and Equipment Cleaning	NS-08	
<input type="checkbox"/>	Vehicle and Equipment Fueling	NS-09	
<input type="checkbox"/>	Vehicle and Equipment Maintenance	NS-10	
<input type="checkbox"/>	Pile Driving Operations	NS-11	
<input type="checkbox"/>	Concrete Curing	NS-12	
<input type="checkbox"/>	Material and Equipment Use Over Water	NS-13	
<input type="checkbox"/>	Concrete Finishing	NS-14	
<input type="checkbox"/>	Structure Demolition/Removal Over or Adjacent to Water	NS-15	
	WASTE MANAGEMENT AND POLLUTION CONTROL		
<input checked="" type="checkbox"/>	Material Delivery and Storage	WM-01	As Needed
<input checked="" type="checkbox"/>	Material Use	WM-02	As Needed
<input checked="" type="checkbox"/>	Stockpile Management	WM-03	As Needed
<input checked="" type="checkbox"/>	Spill Prevention and Control	WM-04	As Needed
<input checked="" type="checkbox"/>	Solid Waste Management	WM-05	As Needed
<input type="checkbox"/>	Hazardous Waste Management	WM-06	
<input type="checkbox"/>	Contaminated Soil Management	WM-07	
<input checked="" type="checkbox"/>	Concrete Waste Management	WM-08	As Needed
<input checked="" type="checkbox"/>	Sanitary/Septic Waste Management	WM-09	As Needed
<input type="checkbox"/>	Liquid Waste Management	WM-10	

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

ATTACHMENT CC WATER POLLUTION CONTROL BEST MANAGEMENT PRACTICES LIST

CEM-20CC (NEW 9/2012)

Page 3 of 5

PROJECT INFORMATION NAME AND SITE ADDRESS Hayward Parcel Mitigation (along San Lorenzo Creek and bordered by Crescent Avenue, Ruby Street, A Street & Rockaway Lane) City of Hayward Alameda County	CONTRACT NUMBER/CO/RTE/PM 04-172451
	PROJECT IDENTIFIER NUMBER 0413000371

No.	Water Pollution Control Best Management Practices List			
1	Location: Hayward Parcel Mitigation (along San Lorenzo Creek)	Project Phase: Preliminary Phase Stage: Preliminary	Location shown on WPCD sheet number: 1	Disturbed Soil Area: <u>1.83</u> acres
	Best Management Practice (BMP)		BMP ID	Quantity Required
	Scheduling		SS-1	As Needed
	Preservation of Property/Preservation of Existing Vegetation		SS-2	As Needed
	Temporary Hydraulic Mulch (Bonded Stabilized Fiber Matrix)		SS-3	26,000 SQ YD
	Fiber Rolls		SC-5	6,000 LF
	Street Sweeping		SC-7	As Needed
	Temporary Construction Entrance		TC-1	2 EA
Comments:				
2	Location: Hayward Parcel Mitigation (along San Lorenzo Creek)	Project Phase: Preliminary Phase Stage: Preliminary	Location shown on WPCD sheet number: 1	Disturbed Soil Area: <u>1.83</u> acres
	Best Management Practice (BMP)		BMP ID	Quantity Required
	Water Control and Conservation		NS-1	As Needed
	Paving, Sealing, Sawcutting, and Grinding Operations		NS-3	As Needed
	Illegal Connection and Illegal Discharge Detection Reporting		NS-6	As Needed
	Potable Water/Irrigation		NS-7	As Needed
Comments:				

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

**ATTACHMENT CC WATER POLLUTION CONTROL
BEST MANAMGEMENT PRACTICES LIST**

CEM-20CC (NEW 9/2012)

PROJECT INFORMATION NAME AND SITE ADDRESS Hayward Parcel Mitigation (along San Lorenzo Creek and bordered by Crescent Avenue, Ruby Street, A Street & Rockaway Lane) City of Hayward Alameda County	CONTRACT NUMBER/CO/RTE/PM 04-172451
	PROJECT IDENTIFIER NUMBER 0413000371

No.	Water Pollution Control Best Management Practices List			
3	Location: Hayward Parcel Mitigation (along San Lorenzo Creek)	Project Phase: Preliminary Phase Stage: Preliminary	Location shown on WPCD sheet number: 1	Disturbed Soil Area: <u>1.83</u> acres
	Best Management Practice (BMP)		BMP ID	Quantity Required
	Material Delivery and Storage		WM-1	As Needed
	Material Use		WM-2	As Needed
	Stockpile Management		WM-3	As Needed
	Spill Prevention and Control		WM-4	As Needed
	Solid Waste Management		WM-5	As Needed
	Temporary Concrete Washout Facility		WM-8	As Needed
	Sanitary/Septic Waste Management		WM-9	As Needed
	Comments:			
	Location:	Project Phase: Stage:	Location shown on WPCD sheet number:	Disturbed Soil Area: _____ acres
	Best Management Practice (BMP)		BMP ID	Quantity Required
	Comments:			

**ATTACHMENT CC WATER POLLUTION CONTROL
BEST MANAGEMENT PRACTICES LIST**

CEM-20CC (NEW 9/2012)

PROJECT INFORMATION NAME AND SITE ADDRESS	CONTRACT NUMBER/CORTE/PM
	PROJECT IDENTIFIER NUMBER

No.	Water Pollution Control Best Management Practices List			
—	Location:	Project Phase: Stage:	Location shown on WPCD sheet number:	Disturbed Soil Area: _____ acres
	Best Management Practice (BMP)		BMP ID	Quantity Required
Comments:				
—	Location:	Project Phase: Stage:	Location shown on WPCD sheet number:	Disturbed Soil Area: _____ acres
	Best Management Practice (BMP)		BMP ID	Quantity Required
Comments:				
—	Location:	Project Phase: Stage:	Location shown on WPCD sheet number:	Disturbed Soil Area: _____ acres
	Best Management Practice (BMP)		BMP ID	Quantity Required
Comments:				

Attachment DD Water Pollution Control Schedule

Order of Work:

Range of Potential Dates*:

- | | | |
|--|--|------------------------------|
| 1. | Install ESA Fence | Between 7/21/2015-7/27/2015 |
| 2. | Install Fiber Rolls | After 1: 7/23/2015-7/30/2015 |
| 3. | Install Construction Site Entrance | After 2: 7/28/2015-8/4/2015 |
| 4. | Site Preparation: Clearing and Grubbing | After 3: 7/29/2015-8/5/2015 |
| (Work in San Lorenzo Creek [riparian zone] must be completed by October 15) | | |
| 5. | Install Hydraulic Mulch (BFM) | After 4: 7/31/2015-8/7/2015 |
| 6. | Install Non-Stormwater Site Management | After 5: 8/3/2015-8/10/2015 |
| 7. | Install Waste Management & Materials Pollution Control | After 6: 8/5/2015-8/12/2015 |

*Contractor to provide actual dates.

Attachment EE Stormwater Sampling Locations

**SWPPP ATTACHMENT EE
STORMWATER SAMPLING LOCATIONS**

CEM-20EE (NEW 9/2012)

PROJECT INFORMATION NAME AND SITE ADDRESS Hayward Parcel Mitigation (along San Lorenzo Creek and bordered by Crescent Avenue, Ruby Street, A Street & Rockaway Lane) City of Hayward, Alameda County	CONTRACT NUMBER/CO/RTE/PM 04-172451	PROJECT SITE RISK LEVEL <input type="checkbox"/> Risk Level 1 <input checked="" type="checkbox"/> Risk Level 2 <input type="checkbox"/> Risk Level 3
	PROJECT IDENTIFIER NUMBER 0413000371	

STORMWATER SAMPLING LOCATIONS

Project Site Non-Visible Pollutant Sampling Locations

SWPPP Table 700.2.2.3.2.1 & Table 700.2.2.3.2.2

Location No.	Uncontaminated Location No.	Location	Pollutant Source	Pollutant	Water Quality Indicator Constituent
005NVP01		192' Lt "C1" Line Sta 1+00.00			
006NVP02		165' Rt "C1" Line Sta 4+78.00			
	001UNVP01	17' Rt "C1" Line Sta 0+51.00			

Instruction: Include the following Table for all Risk Levels.

Project Site Drainage Areas

SWPPP Table Table 700.1.1.1

Drainage Area No.	Location	Drainage Area (acres)	Disturbed Soil Area (acres)	Percentage of Drainage Area that is Disturbed Soil Area (%)
1	Right bank of San Lorenzo Creek; Rt "C1" 0+00.00 to 13+15.26			
2	Left bank of San Lorenzo Creek; Lt "C1" 0+00.00 to 13+15.26			

**SWPPP ATTACHMENT EE
STORMWATER SAMPLING LOCATIONS**

CEM-20EE (NEW 9/2012)

PROJECT NAME Hayward Parcel Mitigation	CONTRACT NUMBER/CO/RTE/PM 04-172451	PROJECT IDENTIFIER NUMBER 0413000371
---	--	---

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for all Risk Levels when dewatering will be performed on the project site. Delete the Table if there is no dewatering planned for the project site.

Project Site Dewatering Sampling Locations

(SWPPP Table 700.2.3.3.2.1)

Location No.	Location	Dewatering Permit?	Pollutant From Construction Activity	Water Quality Indicator Constituent
N/A	Not Applicable	<input type="checkbox"/> YES <input type="checkbox"/> NO		
		<input type="checkbox"/> YES <input type="checkbox"/> NO		
		<input type="checkbox"/> YES <input type="checkbox"/> NO		

Instruction: Include the following Table for all Risk Levels when there is a potential for impounded stormwater that will have to be discharged from the project site.

Project Site Potential Impounded Stormwater Sampling Locations

(SWPPP Table 700.2.3.3.2.2)

Location No.	Location	Dewatering Permit?	Pollutant From Construction Activity	Water Quality Indicator Constituent
N/A	Not Applicable	<input type="checkbox"/> YES <input type="checkbox"/> NO		
		<input type="checkbox"/> YES <input type="checkbox"/> NO		
		<input type="checkbox"/> YES <input type="checkbox"/> NO		

Instruction: Include the following Table for all Risk Levels when there are dewatering activities or a potential for impounded stormwater that will have to be discharged from the project site and there is a high risk receiving water.

Project Site Potential Dewatering/Impounded Stormwater Sampling Locations and Receiving Water Sampling Locations

(SWPPP Table 700.2.3.3.2.3)

Dewatering/Impounded Stormwater Location No.	Location	Receiving Water Location No.	Location
N/A	Not Applicable		

**SWPPP ATTACHMENT EE
STORMWATER SAMPLING LOCATIONS**

CEM-20EE (NEW 9/2012)

PROJECT NAME Hayward Parcel Mitigation	CONTRACT NUMBER/CO/RTE/PM 04-172451	PROJECT IDENTIFIER NUMBER 0413000371
---	--	---

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for Risk Level 2 and Risk Level 3 projects. Delete the Table for Risk Level 1 projects.

Project Site Discharge Sampling Locations for Turbidity and pH

SWPPP Table 700.2.4.3.2.1

Location No.	Location	Drainage Area (acres)	Disturbed Soil Area (acres)	Percentage of Drainage Area that is Disturbed Soil Area (%)	Are there construction activities that may affect pH of stormwater discharges?
002DL01	7' Rt "CL" Line Sta 5+00.00				<input type="checkbox"/> YES <input type="checkbox"/> NO
003DL02	15' Lt "CL" Line Sta 8+35.00				<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
004DL03	5' Rt "CL" Line Sta 12+45.00				<input type="checkbox"/> YES <input type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO

Instruction: Include the following Table for Risk Level 2 and Risk Level 3 when project site has discharge locations that discharge directly to a receiving water. Delete the Table for Risk Level 1 projects.

Receiving Water Sampling Locations for Turbidity and pH When Project Site Discharges Directly To The Receiving Water

SWPPP Table 700.2.4.3.2.2

Location No.	Location	Drainage Area (acres)	Disturbed Soil Area (acres)	Percentage of Drainage Area that is Disturbed Soil Area (%)	Are there construction activities that may affect pH of stormwater discharges?
N/A	Not Applicable				<input type="checkbox"/> YES <input type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO

**SWPPP ATTACHMENT EE
STORMWATER SAMPLING LOCATIONS**

CEM-20EE (NEW 9/2012)

PROJECT NAME Hayward Parcel Mitigation	CONTRACT NUMBER/CO/RTE/PM 04-172451	PROJECT IDENTIFIER NUMBER 0413000371
---	--	---

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for all Risk Levels. Delete the Table for Risk Level 1 projects if there are no project site run-on locations.

Project Site Run-on Sampling Locations

SWPPP Table 700.2.4.3.2.4

Location No.	Location	Run-on May Affect Water Quality Discharged at Project Site Discharge Location No.	Is there any off-site disturbed soil area that could affect run-on water quality at this location?	Are there any off-site pollutants identified that could affect run-on water quality at this location?	Identified Potential Off-site Pollutants
N/A	Not Applicable		<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	
			<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	

Instruction: Include the following Table for all Risk Level 3 projects. Delete the Table for Risk Level 1 and Risk Level 2 projects.

Receiving Water Sampling Locations

SWPPP Table 700.2.4.3.2.5

Location No.	Location	Project Site Discharge Location No.	Do discharges from this project site discharge location reach receiving water?
N/A	Not Applicable		<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

**SWPPP ATTACHMENT EE
STORMWATER SAMPLING LOCATIONS**

CEM-20EE (NEW 9/2012)

PROJECT NAME Hayward Parcel Mitigation	CONTRACT NUMBER/CO/RTE/PM 04-172451	PROJECT IDENTIFIER NUMBER 0413000371
---	--	---

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table when the RWQCB has requested specific water quality standard monitoring of project site discharge locations.

Stormwater Discharge Locations Required To Be Monitored By RWQCB

SWPPP Table 700.5.3.2.1

Location No.	Location	Water Quality Standard(s)	Is there potential site run-on that may affect water quality standard(s)?
N/A	Not Applicable		<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

Instruction: Include the following Table when the RWQCB has requested specific water quality standard monitoring of receiving waters.

Receiving Water Sampling Locations Required To Be Monitored By RWQCB

SWPPP Table 700.2.4.3.2.5

Location No.	Location	Water Quality Standard(s)
N/A	Not Applicable	

Instruction: Include the following Table when the project receives run-on with the potential to combine with stormwater discharges locations or receiving waters that require RWQCB specified water quality monitoring.

Run-on Locations With Potential To Combine With Stormwater Discharges Required To Be Monitored By RWQCB

SWPPP Table 700.2.5.3.2.4

Location No.	Location	Water Quality Standard(s)
N/A	Not Applicable	

SWPPP ATTACHMENT EE
STORMWATER SAMPLING LOCATIONS

CEM-20EE (NEW 9/2012)

PROJECT NAME Hayward Parcel Mitigation	CONTRACT NUMBER/CO/RTE/PM 04-172451	PROJECT IDENTIFIER NUMBER 0413000371
---	--	---

STORMWATER SAMPLING LOCATIONS CONTINUED

Instruction: Include the following Table for Risk Level 3 when an active treatment system will be used on the project site. Delete the Table if active treatment system is not planned to be used on the project site.

Active Treatment System (ATS) Sampling Locations

SWPPP Table 700.2.6.3.2

Location No.	Location	Chemical/Additive Used in Active Treatment System	Residual Chemical/Additive Indicator Constituent
N/A	Not Applicable		

Appendices

Download Forms from:

<http://www.dot.ca.gov/hq/construc/forms.htm>



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

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



November 14, 2014

Mr. Hardeep Takhar
California Department of Transportation
111 Grand Avenue
Oakland, CA 94623

Subject: Final Lake or Streambed Alteration Agreement
Notification No. 1600-2014-0337-R3
Hayward Mitigation Parcel

Dear Mr. Takhar:

Enclosed is the final Streambed Alteration Agreement (“Agreement”) for the Hayward Mitigation Parcel (“Project”). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act (“CEQA”). In this case, the Department, acting as a Lead agency, determined your project is exempt from CEQA and filed a notice of exemption (“NOE”) on November 14, 2014.

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

If you have any questions regarding this matter, please contact Melissa Escaron, Senior Environmental Scientist (Specialist), at (925)786-3045 or Melissa.escaron@wildlife.ca.gov.

Sincerely,

Craig J. Weightman
Environmental Program Manager
Bay Delta Region

cc: Denis Coghlan -denis_coghlan@dot.ca.gov
Lieutenant Christensen

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
BAY DELTA REGION
7329 SILVERADO TRAIL
NAPA, CALIFORNIA 94558
(707) 944-5500
WWW.WILDLIFE.CA.GOV



STREAMBED ALTERATION AGREEMENT
NOTIFICATION No. 1600-2014-0337-R3
Hayward Parcel Mitigation Project
EA 04-15148

CALIFORNIA DEPARTMENT OF TRANSPORTATION

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

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified CDFW on August 28, 2014 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 on a 3-acre parcel along San Lorenzo Creek in the City of Hayward. The parcel is bordered by Crescent Avenue to the north, Ruby Street to the east, A Street to the south, and Rockaway Lane to the west.

PROJECT DESCRIPTION

The California Department of Transportation (Permittee) proposes to enhance and restore riparian woodland along a Permittee-owned section of San Lorenzo Creek (Project). Completion of the proposed Project would enhance and restore 1,860 linear feet of seasonal creek to satisfy a portion of the remaining 2,370 linear feet of mitigation required under the Regional Water Quality Control Board Section 401 Permit (# R2-

2006-0033) for the State Route 84 Pigeon Pass Safety Improvement Project. Enhancement of the ecological function and value of the creek's riparian corridor will be accomplished through the removal and control of invasive vegetation, bank restoration, planting of native plant species, and trash/debris removal.

Invasive species will be mowed and may be subsequently treated with herbicides. When treating all species, wherever possible, injectable herbicides will be used to reduce the spread of herbicide to non-targeted areas. All debris from invasive species will be removed from the parcel and disposed of properly.

After invasive species are removed, restoration will occur within the riparian area along the banks. Disturbed ground will be planted using a combination of beardless wild rye (*Leymus triticoides*) plugs and other native grasses appropriate to the site. Low stature native shrubs like evergreen currant (*Ribes viburnifolium*) will also be planted. Tree planting will not occur until native herbaceous ground cover is established. Erosion control along banks will consist of a 3-inch layer of coarse compost containing a mixture of native seed appropriate to the site. Application of compost will occur above the ordinary high water mark. Truck watering or temporary irrigation directed from the top of bank down will be provided for a two-year period.

Native shrub and willow poles will be planted along the banks above the ordinary high water mark for further erosion control function and low vegetation structure. Willow pole plantings will be established on the lower bank to reduce any small, localized areas of erosion. Planting will not occur within the creek's main channel, but may be planted within the lower portions of the slope, so some of these lower bank plantings may be periodically inundated during high water events.

No excavation of the main creek channel will occur. The majority of trash and debris removal will occur using crews operating on foot. If required, a small excavator will work on level ground along the creek bank but will not operate in water. The excavator will be brought in by crane to suitable work locations adjacent to the creek, placed on construction timber mats, and be used to gather, assemble and organize debris and trash. Organized trash and debris will be hoisted up by winch, loaded on trucks, and disposed of properly.

PROJECT IMPACTS

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

- Amphibians
- Migratory bird nesting and habitat

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. The following conditions apply to areas located within CDFW riparian jurisdiction.

- 2.1 All work within flowing water shall occur between May 15 and October 15.
- 2.2 No living riparian trees or other existing non-invasive vegetation will be removed, and the creek bed will not be re-worked.
- 2.3 Imported compost and mulch shall be free of litter.
- 2.4 At least 30-days prior to commencing Project activities covered by this Agreement, the Permittee shall submit to CDFW, for review and approval, the qualifications for a number of biologists (Qualified Biologist) that shall oversee the implementation of the conditions in

this Agreement. At a minimum, the Qualified Biologists shall have a combination of academic training and professional experience in biological sciences and related resource management activities. The Qualified Biologists shall communicate to the Resident Engineer when any activity is not in compliance with this Agreement and the Resident Engineer shall immediately stop the activity that is not in compliance with this Agreement.

- 2.5 If Project activities will occur between February 15 and September 1, a Qualified Biologist shall conduct pre-construction surveys for nesting birds no more than one week prior to construction. Surveys shall consist of multiple days of observations. If nests are found the Qualified Biologist shall establish an appropriate buffer to be in compliance with Migratory Bird Treaty Act (MBTA) and Fish and Game Code 3503. The Qualified Biologist shall perform at least two hours of pre-construction monitoring of the nest to characterize "typical" bird behavior. The Qualified Biologist shall monitor the nesting birds and shall increase the buffer if the Qualified Biologist determines the birds are showing signs of unusual or distressed behavior by Project activities. Atypical nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The Qualified Biologist shall have authority, through the Resident Engineer, to order the cessation of all Project activities if the nesting birds exhibit atypical behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. To prevent encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the Qualified Biologist. Any sign of nest abandonment shall be reported to CDFW within 48 hours.
- 2.6 Permittee shall conduct work defined in the above Project Description, and within the Project area, during periods of dry weather. The Project area is defined as the bed, bank, channel, and associated riparian and wetland habitat. The Permittee shall monitor forecasted precipitation. When $\frac{1}{4}$ inch or more of precipitation is forecasted to occur, the Permittee shall stop work before precipitation commences. No Project activities may be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, the Permittee shall inspect all sites currently under construction and all sites scheduled to begin construction within the next 72 hours for erosion and sediment problems and take corrective action as needed. Seventy-

two hour weather forecasts from National Weather Service shall be consulted and work shall not start back up until runoff ceases and there is less than a 30% forecast for precipitation for the following 24-hour period.

- 2.7 Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter waterways. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control installations shall be monitored for effectiveness and shall be repaired or replaced as recommended by a Qualified Biologist or Water Quality Monitor to the Resident Engineer. As needed to prevent sediment transport, Permittee shall deploy soil stabilizer such as hydroseeding, netting, erosion control mats, mulch, fiber rolls, silt fences, check dams, and flow velocity dissipation devices. Permittee shall stabilize and equip construction site entrances and exits with tire washing capability. Materials containing monofilament or plastic shall not be used. Erosion and sediment control measures shall be installed prior to unseasonable rain storms.
- 2.8 All disturbed areas shall be re-graded and hydroseeded. Hydroseed shall not contain invasive exotic plant species. Prohibited exotic plant species include those identified in the California Exotic Pest Plant Council's database, which is accessible at: <http://www.calipc.org/ip/inventory/weedlist.php>.
- 2.9 Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the creek channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located within or adjacent to the creek shall be positioned over drip pans. Any equipment or vehicles driven and/or operated within or adjacent to the stream must be checked and maintained daily, to prevent leaks of materials that if introduced to water could be deleterious to aquatic life.
- 2.10 Refueling of mobile construction equipment and vehicles shall not occur within 50 feet of any water body, or anywhere that spilled fuel could drain to a water body. Refueling of stationary equipment requiring breakdown and setup to move will remain in place. All equipment shall be refueled with appropriate drip pans, absorbent pads, and water quality Best Management Practices. Equipment and vehicles operating in the Project site shall be checked and maintained daily to prevent leaks of fuels, lubricants, or other liquids.

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

3. Mitigation and Reporting Measures

3.1 This Agreement authorizes the initial restoration work described in the above Project Description. The Permittee shall submit a plan for CDFW approval prior to the start of construction, that outlines the ongoing monitoring, maintenance, and reporting schedule, success criteria, refuse abatement, and corrective actions to be taken to meet success criteria. The Permittee shall monitor survival and vigor of plantings to ensure attainment of 75% survivorship after 5 years. The plan shall include a proposed endowment to fund the ongoing maintenance of the parcel.

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:

California Department of Transportation
Mr. Hardeep Takhar
111 Grand Ave
Oakland, Ca
Hardeep.takhar@dot.ca.gov

To CDFW:

California Department of Fish and Wildlife
Bay Delta Region
7329 Silverado Trail
Napa, California 94558
Attn: Lake and Streambed Alteration Program – Melissa Escaron

Notification #1600-2014-0337-R3
Fax (707) 944-5553
Melissa.escaron@wildlife.ca.gov

LIABILITY

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

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

SUSPENSION AND REVOCATION

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

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

ENFORCEMENT

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

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

OTHER LEGAL OBLIGATIONS

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

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

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

AMENDMENT

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

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

TRANSFER AND ASSIGNMENT

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

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

EXTENSIONS

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

Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with FGC 1605(b) through (e).

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

EFFECTIVE DATE

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

TERM

This Agreement shall expire on December 31, 2018 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.

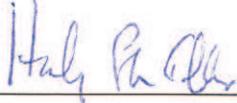
AUTHORIZATION

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 CALIFORNIA DEPARTMENT OF
TRANSPORTATION**

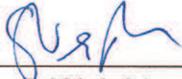


Hardeep Takhar
Office Chief

11-6-14

Date

FOR DEPARTMENT OF FISH AND WILDLIFE



Craig J. Weightman
Environmental Program Manager

11/14/14

Date

Prepared by: Melissa Escaron
Staff Environmental Scientist

Date Sent: November 4, 2014
Revised: November 6, 2014

3 CCR § 4500
Cal. Admin. Code tit. 3, § 4500

BARCLAYS OFFICIAL CALIFORNIA CODE OF REGULATIONS
TITLE 3. FOOD AND AGRICULTURE
DIVISION 4. PLANT INDUSTRY
CHAPTER 6. WEED FREE AREAS AND WEED ERADICATION AREAS
SUBCHAPTER 6. NOXIOUS WEED SPECIES
This database is current through 8/7/09, Register 2009, No. 32

§ 4500. Noxious Weed Species.

It has been determined that the following species of plants are noxious weeds within the meaning of Section 5004 of the Food and Agricultural Code:

Acacia paradoxa (Kangaroo thorn)
Acaena anserinifolia (biddy biddy)
Acaena novae-zelandiae (biddy biddy)
Acaena pallida (biddy biddy)
Achnatherum brachychaetum (punagrass)
Acroptilon repens (Russian knapweed)
Aegilops cylindrica (jointed goatgrass)
Aegilops ovata (ovate goatgrass)
Aegilops triuncialis (barb goatgrass)
Aeschynomene rudis (rough jointvetch)
Alhagi maurorum (camelthorn)
Ailanthus altissima (tree of heaven)
Allium paniculatum (panicked onion)
Allium vineale (wild garlic)
Alternanthera philoxeroides (alligatorweed)
Ambrosia trifida (giant ragweed)
Araujia sericofera (bladderflower)
Arctotheca calendula (capeweed, as seed or fertile plants)
Arundo donax (giant reed)
Cardaras chalepensis (lens-podded hoary cress)
Cardaria draba (heart-podded hoary cress)
Cardaria pubescens (globe-podded hoary cress)
Carduus acanthoides (plumeless thistle)
Carduus nutans (musk thistle)
Carduus pycnocephalus (Italian thistle)
Carduus tenuiflorus (Italian thistle)
Carthamus baeticus (smooth distaff thistle)
Carthamus lanatus (woolly distaff thistle)
Carthamus leucocaulos (whitestem distaff thistle)
Cenchrus echinatus (southern sandbur)
Cenchrus incertus (coast sandbur)
Cenchrus longispinus (mat sandbur)
Centaurea calcitrapa (purple starthistle)
Centaurea diffusa (diffuse knapweed)
Centaurea iberica (Iberian starthistle)
Centaurea maculosa (spotted knapweed)
Centaurea melitensis (tocalote)
Centaurea solstitialis (yellow starthistle)
Centaurea squarrosa (squarrose knapweed)
Centaurea sulphurea (Sicilian thistle)
Chondrilla juncea (skeletonweed)
Chorisporea tenella (purple mustard)
Cirsium arvense (Canada thistle)

Cirsium ochrocentrum (yellowspine thistle)
Cirsium undulatum (wavyleaf thistle)
Cirsium vulgare (bull thistle)
Convolvulus arvensis (field bindweed)
Coronopus squamatus (swinecress)
Cortaderia jubata (jubata grass)
Crepina vulgaris (bearded creeper)
Cucumis melovar. dudaim (dudaim melon)
Cucumis myriocarpus (paddy melon)
Cuscuta spp. (dodder)
Cynara cardunculus (artichoke thistle)
Cyperus esculentus (yellow nutsedge)
Cyperus rotundus (purple nutsedge)
Cytisus scoparius (Scotch broom)
Elytrigia repens (quackgrass)
Euphorbia esula (leafy spurge)
Euphorbia oblongata (oblong spurge)
Euphorbia serrata (serrate spurge)
Gaura drummondii (scented gaura)
Gaura sinuata (wavyleaf gaura)
Genista monspessulana (French broom)
Halimodendron halodendron (Russian salt tree)
Halogeton glomeratus (halogeton)
Helianthus ciliaris (blueweed)
Heteropogon contortus (tanglehead)
Hydrilla verticillata (hydrilla)
Hyoscyamus niger (black henbane)
Hypericum perforatum (Klamath weed)
Isatis tinctoria (dyer's woad)
Lepidium latifolium (perennial peppergrass)
Linaria genitifoliassp. dalmatica (Dalmatian toadflax)
Lythrum salicaria (purple loosestrife)
Muhlenbergia schreberi (nimblewill)
Nothoscordum inodorum (false garlic)
Nymphaea mexicana (banana waterlily)
Onopordum (spp. onopordum thistles)
Orobanche ramosa (branched broomrape)
Oryza rufipogon (red rice)
Panicum antidotale (blue panicgrass)
Peganum harmala (harmel)
Pennisetum clandestinum (Kikuyugrass)
Physalis virginianavar. sonorae (smooth groundcherry)
Physalis viscosa (grape groundcherry)
Polygonum cuspidatum (Japanese knotweed)
Polygonum polystachyum (Himalayan knotweed)
Polygonum sachalinense (giant knotweed)
Prosopis strombulifera (creeping mesquite)
Rorippa austriaca (Austrian fieldcress)
Salsola australis (common Russianthistle)
Salsola paulsenii (barbwire Russianthistle)
Salsola vermiculata (wormleaf salsola)
Salvia aethiopis (Mediterranean sage)
Salvia virgata (meadow sage)
Scolymus hispanicus (golden thistle)
Senecio jacobaea (tansy ragwort)
Senecio mikanioides (Delairea odorata) (Cape ivy)
Senecio squalidus (Oxford ragwort)
Setaria faberi (giant foxtail)
Solanum cardiophyllum (heartleaf nightshade)

Solanum carolinense (Carolina horsenettle)
Solanum dimidiatum (Torrey's nightshade)
Solanum elaeagnifolium (white horsenettle)
Solanum lanceolatum (lanceleaf nightshade)
Solanum marginatum (white-margined nightshade)
Sonchus arvensis (perennial sowthistle)
Sorghum halepense (Johnsongrass and other perennial Sorghum spp. including but not limited to sorghum almumand perennial sweet sudangrass)
Spartium junceum (Spanish broom)
Sphaerophysa salsula (Austrian peaweed)
Striga lutea (witchweed)
Symphytum asperum (rough comfrey)
Taeniatherum caput-medusae (medusahead)
Tagetes minuta (wild marigold)
Tamarix chinensis (salt cedar)
Tamarix gallica (salt cedar)
Tamarix parviflora (salt cedar)
Tamarix ramosissima (salt cedar)
Tribulus terrestris (puncture vine)
Ulex europaeus (gorse)
Viscum album (European mistletoe)
Zygophyllum fabago (Syrian beancaper)

This regulation shall in no way restrict the designation of a weed pest to those species listed herein.

<General Materials (GM) - References, Annotations, or Tables>

Note: Authority cited: Sections 407 and 5004, Food and Agricultural Code. Reference: Section 5004, Food and Agricultural Code.

HISTORY

1. Amendment filed 12-21-77 as an emergency; designated effective 1-1-78 (Register 77, No. 52). For prior history, see Register 77, No. 31.
2. Certificate of Compliance filed 1-6-78 (Register 78, No. 1).
3. Amendment of NOTE filed 3-9-83; effective thirtieth day thereafter (Register 83, No. 11).
4. Amendment filed 5-7-97; operative 6-6-97 (Register 97, No. 19).
5. Amendment filed 8-12-2003; operative 9-11-2003 (Register 2003, No. 33).
6. Amendment filed 1-28-2008; operative 2-27-2008 (Register 2008, No. 5).

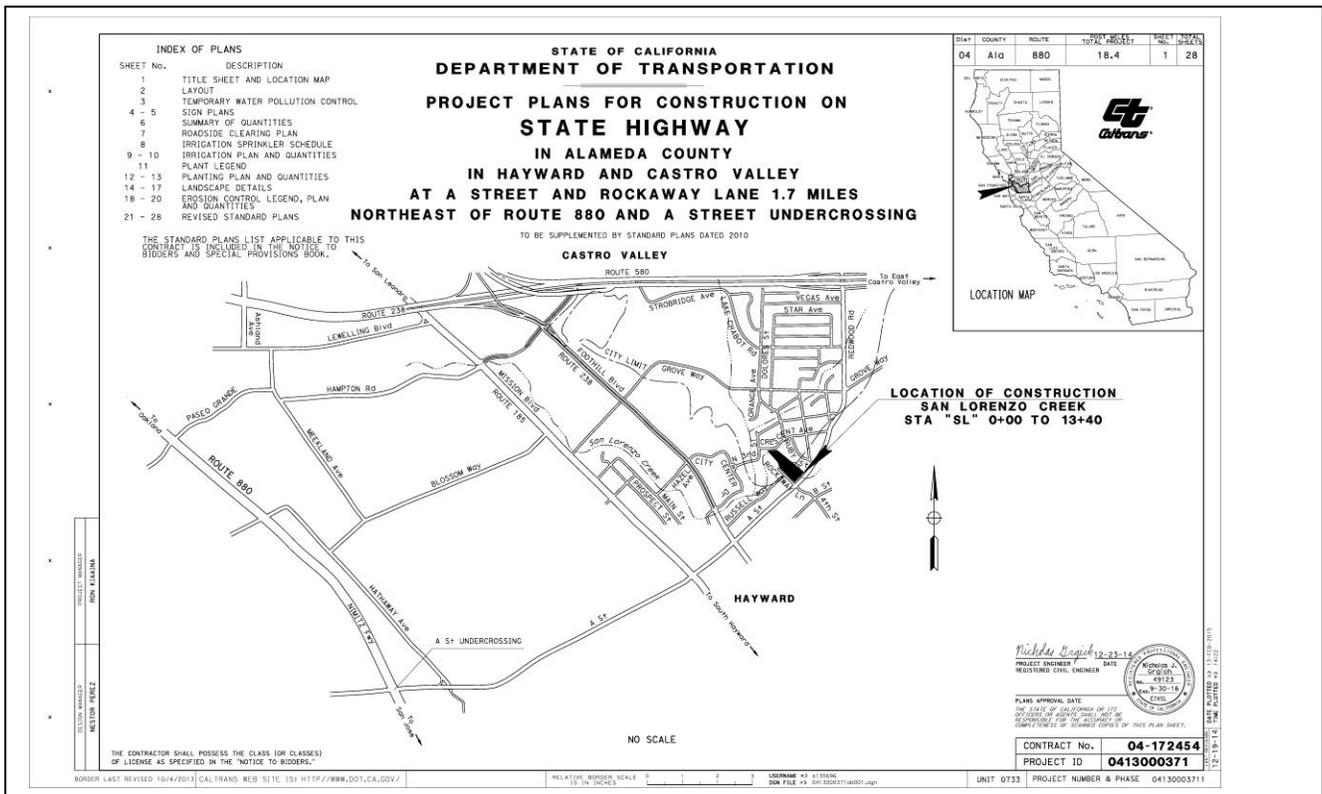
3 CCR § 4500, 3 CA ADC § 4500
1CAC

3 CA ADC § 4500

END OF DOCUMENT

Photo Log of Existing Conditions – San Lorenzo Creek Hayward Parcels Mitigation Project

This document accompanies Project Plans and Specifications for Contract No. 04-17245



Project Existing Conditions Description

This document describes general existing conditions in regard to invasive vegetation and trash and debris. It is not intended to be comprehensive list or modify any of the contract requirements. Removal of trash and debris shall include all noticeable trash and debris in San Lorenzo Creek and throughout the continuous project area, with concentrated trash and debris accumulation at various locations. Concrete debris that is embedded in the stream banks or stream bed that in the opinion of the Engineer will cause significant damage to the creek if removed may be left in place at the Engineer's direction. Hazardous waste will be removed by others prior to start of this project. Site access will be restricted to the easement areas as shown in the contract during Plant Establishment work.

Invasive Removal Photo 1:

Bank and upland area near Crescent Avenue

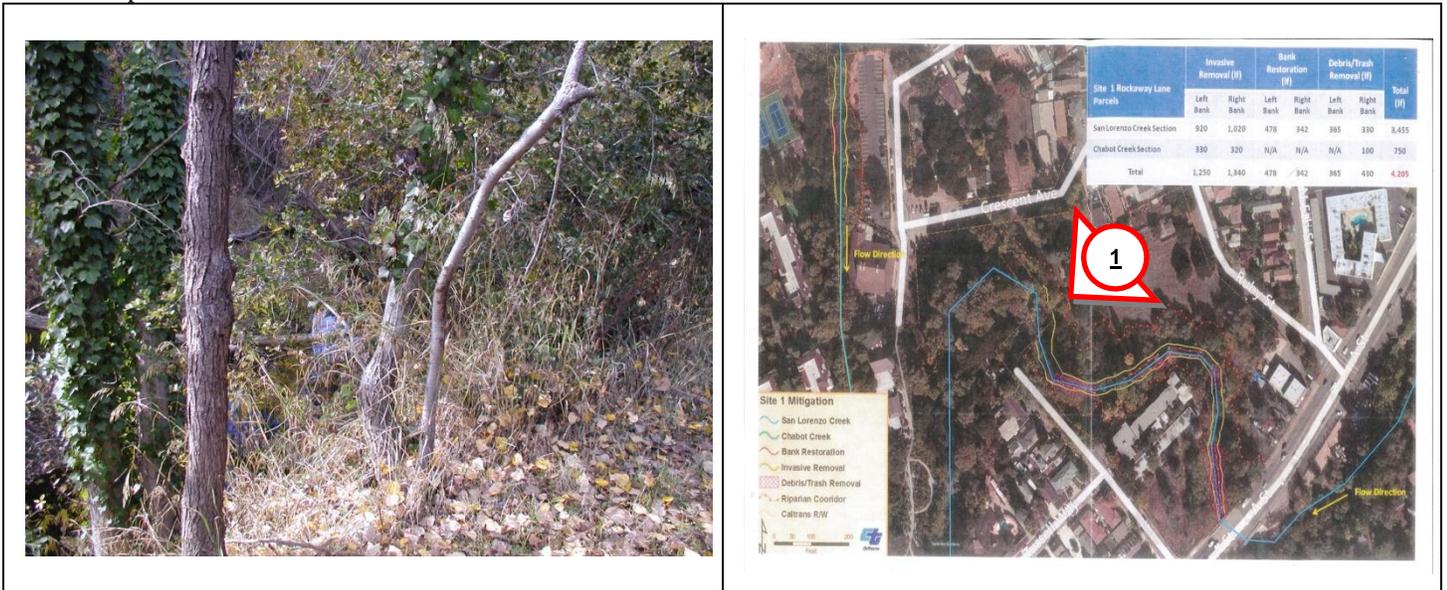


Photo 1: Invasive Removal – Hedera helix growing on tree trunks and along bank (01-24-2014)

Invasive Removal Photo 2:

Bank and upland area near Ruby Street

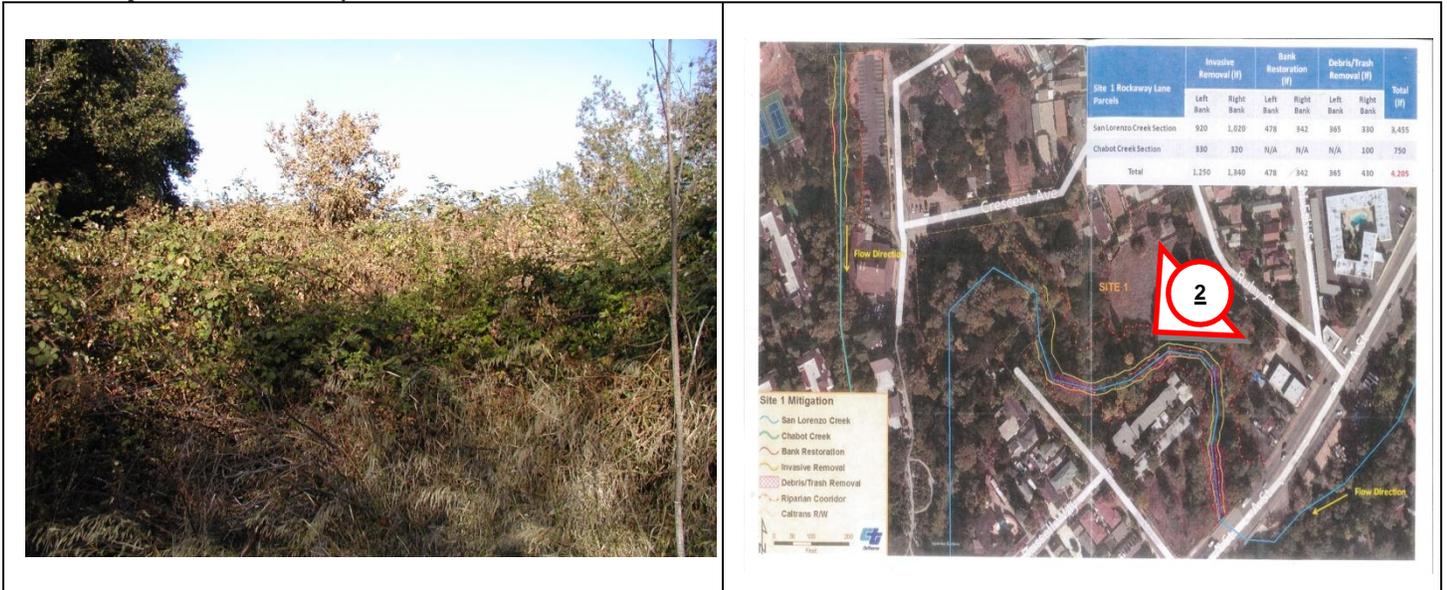


Photo 2: Invasive Removal – Rubus spp. growing on top of bank (01-24-2014)

Invasive Removal Photo 3:

Bank and upland area near Ruby and A Street

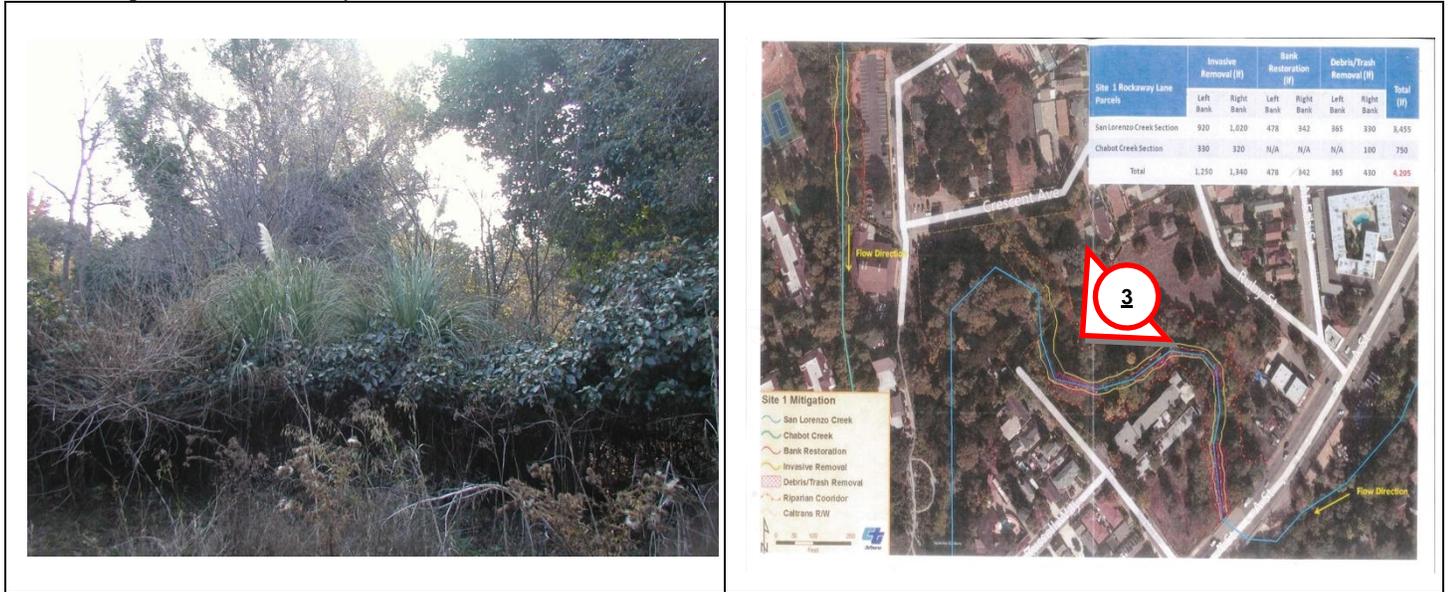


Photo 3: Invasive Removal – Cortaderia selloana on the project area(01-24-2014)

Invasive Removal Photo 4:

Bank and upland area near Ruby and A Street

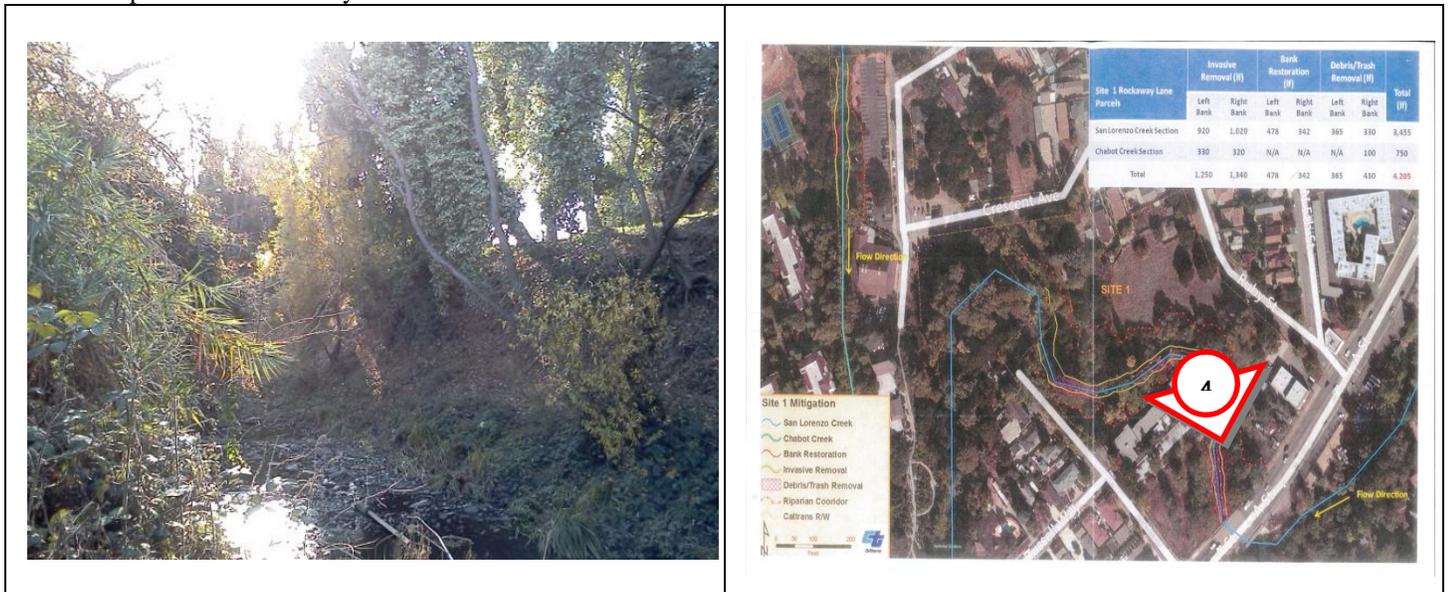


Photo 4: Invasive Removal – Arundo donax and Hedera helix on the project area (01-24-2014)

Invasive Removal Photo 5:

Creek bank existing conditions



Photo 5: extensive ivy growth that has brought down existing trees due to weight (01-24-2014)

Invasive Removal Photo 6:

Creek bottom existing conditions



Photo 6: Trash and debris removal; existing concrete providing bed or bank stability (01-24-2014)

Invasive Removal Photo 7:

Large ivy specimen weighing down large existing oak tree adjacent to apartment building at Rockaway Lane.

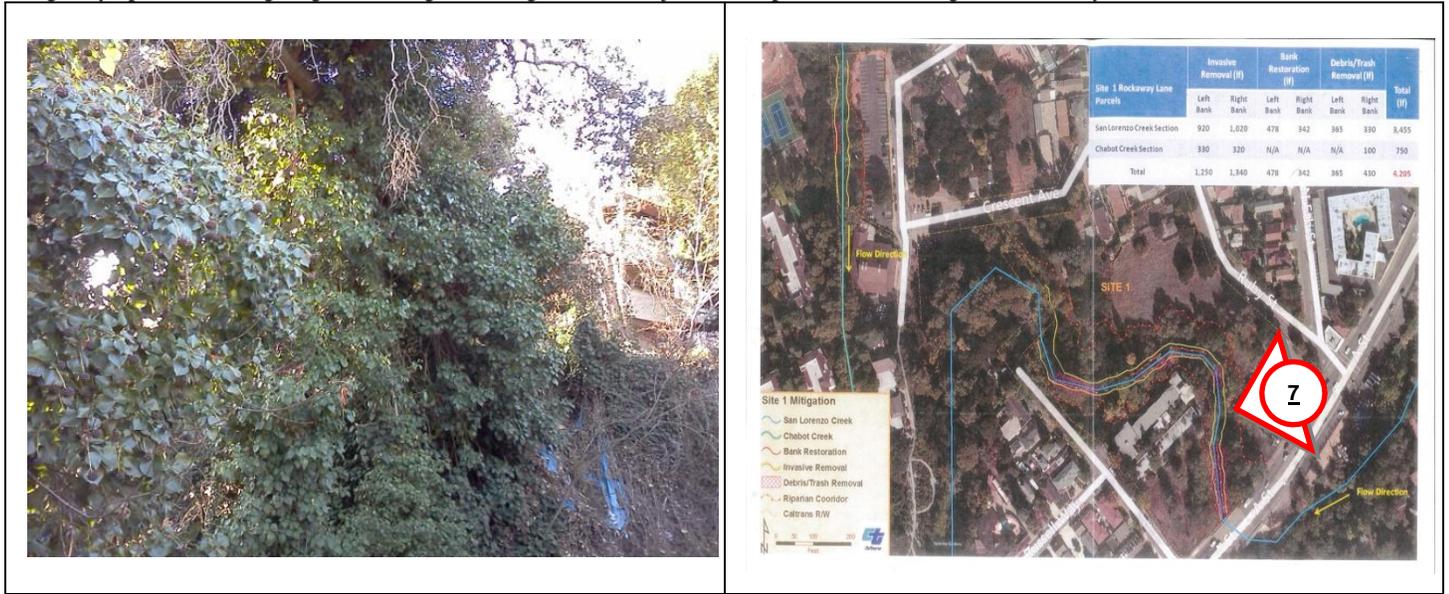


Photo 7: Invasive Removal – Hedera helix weighing down tree limbs on existing oak tree (01-24-2014)

Trash/ debris Removal Photo 8:

Concentrations of debris and trash at various locations on the Project Site.

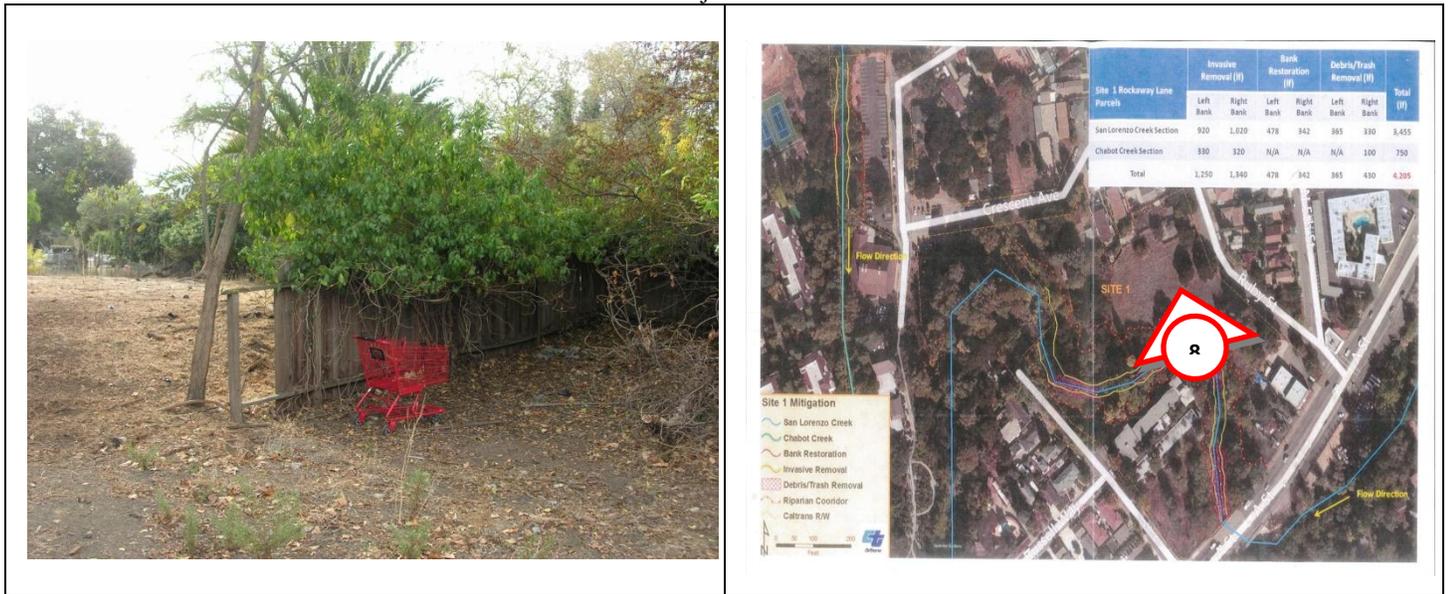


Photo 8: Trash/ Debris Removal (10-23-2014)

Vegetation Debris Removal Photo 9:

Large woody debris

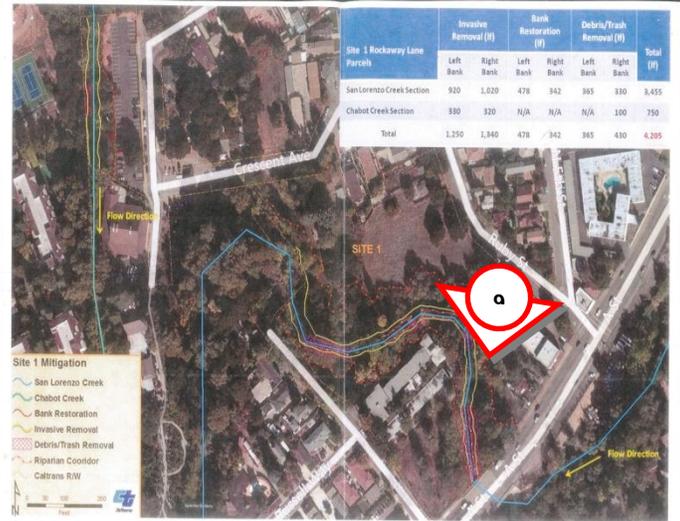


Photo 9: Large woody debris on the top of bank (10-23-2014)

Bay Area Recycled Water Commercial Truck Fill Facilities Location Guide January 2015



Background

This Guide was prepared by Whitley Burchett & Associates under contract with Bay Area Clean Water Agencies and under the direction of the BACWA Recycled Water Committee.

The Guide was prepared in response to inquiries of commercial recycled water truck fill facilities in the Bay Area. It is the Recycled Water Committee's intention to update this Guide annually. If you see any information that should be updated, have a facility to add to this Guide, or have any questions please email Info@bacwa.org.

Disclaimer

The intent of this Guide is to provide prospective water haulers with general information regarding the location of Bay Area Recycled Water Commercial Truck Fill Facilities, permit requirements, and associated fees for recycled water. Information in this Guide represents data collected in the fall of 2014. Please contact agencies directly for current information.

Cover Photos

Top row from left to right: San Francisco Public Utilities Commission,
Dublin San Ramon Services District

Bottom row: East Bay Municipal Utility District

Acknowledgements

This Guide was prepared in conjunction with the BACWA agencies. The time spent by agencies providing program information and review of this document is greatly appreciated.

Electronic Version

The BACWA Truck Fill Guide is available on the BACWA website at <http://bacwa.org>.

TABLE OF CONTENTS

Bay Area Commercial Recycled Water Truck Fill Facilities Location Map..... ii
List of Agencies with Commercial Fill Facilities Sorted by County/City..... iii

SECTION 1 - RECYCLED WATER COMMERCIAL TRUCK FILL FACILITIES INFORMATION

Calistoga, City of..... 1
Central Contra Costa Sanitary District..... 2
Dublin San Ramon Services District..... 3
East Bay Municipal Utility District..... 4
Livermore, City of..... 5
Marin Municipal Water District..... 6
Milpitas, City of..... 7
Napa Sanitation District..... 8
North Marin Water District..... 9
Oro Loma/East Bay Dischargers Authority..... 10
Palo Alto, City of..... 11
Petaluma, City of..... 12
Redwood City, City of..... 13
San Francisco International Airport..... 14
San Francisco Public Utilities Commission..... 15
Santa Rosa, City of..... 16
Sonoma County Water Agency..... 17
South Bay Water Recycling and City of San Jose..... 18
Sunnyvale, City of..... 19
Yountville, Town of..... 20

SECTION 2 - ADDITIONAL COMMERCIAL TRUCK FILL FACILITIES IN 2015

Commercial Fill Facilities Planned to be Operational in 2015..... 21

SECTION 3 - POTENTIAL FUTURE COMMERCIAL TRUCK FILL FACILITIES

Agencies That May Consider Fill Facilities in the Future..... 22

SECTION 4 - Recycled Water Uses Allowed in California

Recycled Water Uses Allowed in California..... 23

Bay Area Commercial Recycled Water Truck Fill Facilities Location Map



* Indicates the general location of a truck fill facility.

**List of Agencies with Recycled Water Commercial Truck Fill Facilities
Sorted by County/City**

COUNTY/CITY	AGENCY	PAGE NO.
ALAMEDA COUNTY		
Dublin	Dublin San Ramon Services District	3
Livermore	City of Livermore	5
Oakland	East Bay Municipal Utility District	4
San Lorenzo	Oro Loma/East Bay Dischargers Authority	10
CONTRA COSTA COUNTY		
Concord	Central Contra Costa Sanitary District	2
Martinez	Central Contra Costa Sanitary District	2
Richmond	East Bay Municipal Utility District	4
MARIN COUNTY		
Novato	North Marin Water District	9
San Rafael	Marin Municipal Water District	6
NAPA COUNTY		
Calistoga	City of Calistoga	1
Napa	Napa Sanitation District	8
Yountville	Town of Yountville	20
SAN FRANCISCO		
San Francisco	San Francisco Public Utilities Commission	15
SAN MATEO COUNTY		
San Francisco	San Francisco International Airport	14
Redwood City	City of Redwood City	13
SANTA CLARA COUNTY		
Milpitas	City of Milpitas	7
Palo Alto	City of Palo Alto	11
San Jose	South Bay Water Recycling and City of San Jose	18
Sunnyvale	City of Sunnyvale	19
SONOMA COUNTY		
Petaluma	City of Petaluma	12
Santa Rosa	City of Santa Rosa	16
Sonoma	Sonoma County Water Agency	17

SECTION 1

Recycled Water Commercial Truck Fill Facilities Information

DUBLIN SAN RAMON SERVICES DISTRICT

925.875.2334

www.dsrdsd.com**Recycled Water Fill Facilities:**

Treatment Plant Yes

Distribution System Yes

Can water be used outside of this agency's service area? Yes

Hydrant Fill Facilities

Location: Dublin, CA - see website for locations

Number of Fill Facilities: 10+

Connection Device: Construction Meter

Quality: Disinfected Tertiary

Truck Size Limits: None

Quantity Limitations per Trip: No Minimum

Truck Weight Limits: None

Maximum up to truck limit

Other Restrictions: Permit plus \$1,000 refundable deposit for meter required.

Additional Access Information: Obtain permit and meter at 7051 Dublin Blvd, Dublin.

Fill Facilities at Treatment Plant

Location: DSRSD Wastewater Treatment Plant

7399 Johnson Drive, Pleasanton

Quality: Disinfected Tertiary

Type of Connection: Overhead and Large Hose Bib

Quantity Limitations per Trip: No Minimum

Hours: 24 hrs/day, 7 days/wk*

Maximum up to truck limit

Appointment Required: No

Quantity Limitations per Day: No Minimum

Truck Size Limits: None

No Maximum

Truck Weight Limits: None

Additional Access Information: *After business hours truck drivers must use special gate access code to enter the plant. The access code is valid only during hours specified in the permit.

Training

Required: Yes

Duration: 15 min

Who: Truck Owner and Driver

Frequency: Once

Schedule: By Appointment

Location: Recycled Water Plant

Length of time to become authorized truck hauler: 1 business day

Signage

Area Use Signage Required: No

Vehicle Signage Required: Yes

Signs Provided by Water Agency: N/A

Signs Provided by Water Agency: Yes

Vehicle Inspection

Required: No

Inspection Location:

Duration:

Re-inspection Required:

How to schedule:

Fees

Water: Hydrant- check with DSRSD

Training: No Charge

for current fee;

Permit: Hydrant- No permit fee;

Plant- \$10/truck load

Treatment Plant- \$73/year

Connection Device: Hydrant access- \$1,000

Use Area Signage: N/A

deposit for construction

meter; Treatment Plant-

No connection device charge

Vehicle Signage: No Charge

Other:

EAST BAY MUNICIPAL UTILITY DISTRICT

510.287.1346

www.ebmud.com

Recycled Water Fill Facilities:

Treatment Plant Yes

Distribution System No

Can water be used outside of this agency's service area? Check with EBMUD

Hydrant Fill Facilities

Location: None

Number of Fill Facilities:

Connection Device:

Quality:

Truck Size Limits:

Quantity Limitations per Trip:

Truck Weight Limits:

Other Restrictions:

Additional Access Information: www.ebmud.com, search "Recycled Water Truck Program"

Fill Facilities at Treatment Plant

Locations: 1) EBMUD Wastewater Treatment Plant, Oakland

2) North Richmond Water Recycling Plant, Richmond

Quality: Disinfected Tertiary

Type of Connection: Hydrant

Quantity Limitations per Trip: No Minimum

Hours: 24 hrs/day, 7 days/wk

Maximum up to truck limit

Appointment Required: Only for first visit

Quantity Limitations per Day: No Minimum

Truck Size Limits: None

No Maximum

Truck Weight Limits: None

Additional Access Information: 1) EBMUD Wastewater Treatment Plant - enter through the main security gate at the plant to obtain access to the fill hydrant. 2) North Richmond Plant - hydrant is located outside of the plant gate and is accessible with a hydrant key.

Training

Required: Yes

Duration: 15 minutes

Who: Truck Driver

Frequency: Once

Schedule: By Appointment

Location: Recycled Water Plant

Length of time to become authorized truck hauler: 5 business days

Signage

Area Use Signage Required: No

Vehicle Signage Required: Yes

Signs Provided by Water Agency: N/A

Signs Provided by Water Agency: Yes

Vehicle Inspection

Required: Yes

Inspection Location: Recycled Water Plant

Duration: Less than 1 hour

Re-inspection Required: No

How to schedule: To be conducted at time of training

Fees

Water: No Charge

Training: No Charge

Connection Device: No Charge

Permit: No Charge

Vehicle Signage: No Charge

Use Area Signage: N/A

Other:

ORO LOMA	
510.276.4700	
Recycled Water Fill Facilities:	
Treatment Plant Yes	Distribution System No
Can water be used outside of this agency's service area? Yes	
Hydrant Fill Facilities	
Location: None	
Number of Fill Facilities:	Connection Device:
Quality:	Truck Size Limits:
Quantity Limitations per Trip:	Truck Weight Limits:
Other Restrictions:	
Additional Access Information:	
Fill Facilities at Treatment Plant	
Location: Oro Loma Treatment Facility (call for address)	
Quality: Disinfected Secondary-2.2	Type of Connection: Overhead
Quantity Limitations per Trip: No Minimum	Hours: M-F: 6 a.m. - 5 p.m.
Maximum up to truck limit	Appointment Required: No
Quantity Limitations per Day: No Minimum	Truck Size Limits: None
No Maximum	Truck Weight Limits: None
Additional Access Information:	
Training	
Required: Yes	Duration: 15 min
Who: Truck Driver	Frequency: Once
Schedule: By Appointment	Location: Recycled Water Plant
Length of time to become authorized truck hauler: 1 business day	
Signage	
Area Use Signage Required: No	Vehicle Signage Required: No
Signs Provided by Water Agency: N/A	Signs Provided by Water Agency: N/A
Vehicle Inspection	
Required: No	Inspection Location:
Duration:	Re-inspection Required:
How to schedule:	
Fees	
Water: No Charge	Training: No Charge
Connection Device: No Charge	Permit: No Charge
Vehicle Signage: N/A	Use Area Signage: N/A
Other:	

SONOMA COUNTY WATER AGENCY	
707.521.1865 www.scwa.ca.gov	
Recycled Water Fill Facilities:	
Treatment Plant	Yes
Distribution System	No
Can water be used outside of this agency's service area? Yes	
Hydrant Fill Facilities	
Location: None	
Number of Fill Facilities:	Connection Device:
Quality:	Truck Size Limits:
Quantity Limitations per Trip:	Truck Weight Limits:
Other Restrictions:	
Additional Access Information:	
Fill Facilities at Treatment Plant	
Locations: Sonoma Valley County Sanitation District (call for address)	
Quality: Disinfected Tertiary	Type of Connection: Side
Quantity Limitations per Trip: No Minimum	Hours: Mon-Fri 8 a.m. - 4 p.m.; with permission could be 24/7
Maximum up to truck limit	
Quantity Limitations per Day: No Minimum	Appointment Required: No
No Maximum	Truck Size Limits: None
	Truck Weight Limits: None
Additional Access Information: Contact treatment plant for site access outside of business hours	
Training	
Required: Yes	Duration: 2 hours or less
Who: Truck Driver	Frequency: With each new application
Schedule: By Appointment	Location: Recycled Water Plant
Length of time to become authorized truck hauler: 5 business days	
Signage	
Area Use Signage Required: No	Vehicle Signage Required: Yes
Signs Provided by Water Agency: N/A	Signs Provided by Water Agency: Yes
Vehicle Inspection	
Required: Yes	Inspection Location: Recycled Water Plant
Duration: 1 hour or less	Re-inspection Required: With each new application
How to schedule: Appointment	
Fees	
Water: \$5.00 per 1,000 gal	Training: No Charge
Connection Device: \$100 deposit	Permit: \$300
Vehicle Signage: First set free	Use Area Signage: N/A
Other:	

CITY OF SUNNYVALE	
408.760.7560	
Recycled Water Fill Facilities: Treatment Plant Yes Distribution System No Can water be used outside of this agency's service area? Yes	
Hydrant Fill Facilities	
Location: None Number of Fill Facilities: Connection Device: Quality: Truck Size Limits: Quantity Limitations per Trip: Truck Weight Limits: Other Restrictions: Additional Access Information:	
Fill Facilities at Treatment Plant	
Location: Sunnyvale Water Pollution Control Plant (call for address) Quality: Disinfected Tertiary Type of Connection: Hydrant Quantity Limitations per Trip: No Minimum Hours: Mon-Fri 7 a.m. - 4 p.m. Maximum up to truck limit Appointment Required: No Quantity Limitations per Day: No Minimum Truck Size Limits: None No Maximum Truck Weight Limits: None Additional Access Information:	
Training	
Required: Yes Duration: 2 hours or less Who: Truck Owner, Truck Frequency: Annually Driver, and Customer Location: Agency Corp Yard using water Length of time to become authorized truck hauler: 8+ business days Schedule: By Appointment	
Signage	
Area Use Signage Required: Yes Vehicle Signage Required: Yes Signs Provided by Water Agency: No Signs Provided by Water Agency: No	
Vehicle Inspection	
Required: Yes Inspection Location: Corp Yard Duration: 1 hour or less Re-inspection Required: Annually How to schedule: Appointment	
Fees	
Water: No Charge Training: No Charge Connection Device: No Charge Permit: No Charge Vehicle Signage: User provides Use Area Signage: User provides Other:	

TOWN OF YOUNTVILLE	
707.944.2988 townofyountville.com	
Recycled Water Fill Facilities: Treatment Plant Yes Distribution System No Can water be used outside of this agency's service area? No, not without authorization	
Hydrant Fill Facilities	
Location: None Number of Fill Facilities: 0 Connection Device: Quality: Truck Size Limits: Quantity Limitations per Trip: Truck Weight Limits: Other Restrictions: Additional Access Information:	
Fill Facilities at Treatment Plant	
Location: Town of Yountville Wastewater Reclamation Facility 7501 Solano Avenue, Yountville, CA 94599 Quality: Disinfected Tertiary and Disinfected Secondary-2.2 Type of Connection: Hydrant and Side Quantity Limitations per Trip: No Minimum Hours: Mon-Fri 8 a.m. - 3:30 p.m. Maximum 5,000 gal Appointment Required: Yes, for initial fill-up and training Quantity Limitations per Day: No Minimum Truck Size Limits: None Maximum 25,000 gal per day Truck Weight Limits: None Additional Access Information:	
Training	
Required: Yes Duration: 2 hours or less Who: Truck Owner, Truck Driver, and Customer using water Frequency: Annually Location: Wastewater Reclamation Facility Schedule: By Appointment Length of time to become authorized truck hauler: 3 business days	
Signage	
Area Use Signage Required: Yes Vehicle Signage Required: No Signs Provided by Water Agency: No Signs Provided by Water Agency: N/A	
Vehicle Inspection	
Required: No Inspection Location: Duration: Re-inspection Required: How to schedule:	
Fees	
Water: \$992 for first 100,000 gal Training: No Charge Connection Device: No Charge Permit: \$350 Vehicle Signage: N/A Use Area Signage: User provides Other:	

SECTION 2

Additional Commercial Truck Fill Facilities in 2015

Commercial Fill Facilities Planned to be Operational in 2015

COUNTY/CITY	AGENCY
SAN MATEO COUNTY	
Pacifica	North Coast County Water District (contact for availability) Contact: www.nccwd.com
SONOMA COUNTY	
Windsor	Town of Windsor (operational Spring 2015) Contact: (707) 838-5343

SECTION 3

Potential Future Commercial Truck Fill Facilities

Agencies That May Consider Commerical Fill Facilities in the Future

At the time this Guide was prepared, the agencies below indicated they may consider development of commercial fill facilities, in particular if the drought continues.

COUNTY/CITY	AGENCY
ALAMEDA COUNTY	
Piedmont Union City	City of Piedmont Union Sanitary District
CONTRA COSTA COUNTY	
Antioch Brentwood Richmond	Delta Diablo Sanitation District City of Brentwood West County Wastewater District
MARIN COUNTY	
San Rafael	Ross Valley Sanitary District
SAN FRANCISCO	
South San Francisco	South San Francisco
SAN MATEO COUNTY	
Menlo Park San Mateo	West Bay Sanitary District City of San Mateo
SOLANO COUNTY	
Benicia	City of Benicia
SONOMA COUNTY	
Guerneville Petaluma Santa Rosa Santa Rosa Sonoma	Sonoma County Water Agency City of Petaluma City of Santa Rosa Sonoma County Water Agency Sonoma County Water Agency

SECTION 4

Recycled Water Uses Allowed in California

Recycled Water Uses Allowed¹ in California

Use of Recycled Water	Treatment Level			
	Disinfected Tertiary Recycled Water	Disinfected Secondary – 2.2 Recycled Water	Disinfected Secondary – 23 Recycled Water	Undisinfected Secondary Recycled Water
<i>Irrigation of:</i>				
Food crops where recycled water contacts the edible portion of the crop, including all root crops	Allowed	Not Allowed	Not Allowed	Not Allowed
Parks and playgrounds	Allowed	Not Allowed	Not Allowed	Not Allowed
School yards	Allowed	Not Allowed	Not Allowed	Not Allowed
Residential landscaping	Allowed	Not Allowed	Not Allowed	Not Allowed
Unrestricted-access golf courses	Allowed	Not Allowed	Not Allowed	Not Allowed
Any other irrigation uses not prohibited by other provisions of the California Code of Regulations	Allowed	Not Allowed	Not Allowed	Not Allowed
Food crops, surface-irrigated, above-ground edible portion, and not contacted by recycled water	Allowed	Allowed	Not Allowed	Not Allowed
Cemeteries	Allowed	Allowed	Allowed	Not Allowed
Freeway landscaping	Allowed	Allowed	Allowed	Not Allowed
Restricted-access golf courses	Allowed	Allowed	Allowed	Not Allowed
Ornamental nursery stock and sod farms with unrestricted public access	Allowed	Allowed	Allowed	Not Allowed
Pasture for milk animals for human consumption	Allowed	Allowed	Allowed	Not Allowed
Non-edible vegetation with access control to prevent use as a park, playground or school yard	Allowed	Allowed	Allowed	Not Allowed
Orchards with no contact between edible portion and recycled water	Allowed	Allowed	Not Allowed ²	Not Allowed ²
Vineyards with no contact between edible portion and recycled water	Allowed	Allowed	Not Allowed ²	Not Allowed ²
Non food-bearing trees, including Christmas trees not irrigated less than 14 days before harvest	Allowed	Allowed	Allowed	Allowed
Fodder and fiber crops and pasture for animals not producing milk for human consumption	Allowed	Allowed	Allowed	Allowed
Seed crops not eaten by humans	Allowed	Allowed	Allowed	Allowed
Food crops undergoing commercial pathogen-destroying processing before consumption by humans	Allowed	Allowed	Allowed	Allowed
Ornamental nursery stock, sod farms not irrigated less than 14 day before harvest	Allowed	Allowed	Allowed	Allowed
<i>Supply for impoundment:</i>				
Non-restricted recreational impoundments, with supplemental monitoring for pathogenic organisms	Allowed ³	Not Allowed	Not Allowed	Not Allowed
Restricted recreational impoundments and publicly-accessible fish hatcheries	Allowed	Allowed	Not Allowed	Not Allowed
Landscape impoundments without decorative fountains	Allowed	Allowed	Allowed	Not Allowed
<i>Supply for cooling or air conditioning:</i>				
Industrial or commercial cooling or air conditioning involving cooling tower, evaporative condenser, or spraying that creates a mist	Allowed ⁴	Not Allowed	Not Allowed	Not Allowed
Industrial or commercial cooling or air conditioning not involving cooling tower, evaporative condenser, or spraying that creates a mist	Allowed	Allowed	Allowed	Not Allowed

Recycled Water Uses Allowed¹ in California

(continued)

Use of Recycled Water	Treatment Level			
	Disinfected Tertiary Recycled Water	Disinfected Secondary – 2.2 Recycled Water	Disinfected Secondary – 23 Recycled Water	Undisinfected Secondary Recycled Water
<i>Other uses:</i>				
Groundwater recharge	Allowed under special case-by-case permits by RWQCBs ⁵			
Flushing toilets and urinals	Allowed	Not Allowed	Not Allowed	Not Allowed
Priming drain traps	Allowed	Not Allowed	Not Allowed	Not Allowed
Industrial process water that may contact workers	Allowed	Not Allowed	Not Allowed	Not Allowed
Structural fire fighting	Allowed	Not Allowed	Not Allowed	Not Allowed
Decorative fountains	Allowed	Not Allowed	Not Allowed	Not Allowed
Commercial laundries	Allowed	Not Allowed	Not Allowed	Not Allowed
Consolidation of backfill material around potable water pipelines	Allowed	Not Allowed	Not Allowed	Not Allowed
Artificial snow making for commercial outdoor uses	Allowed	Not Allowed	Not Allowed	Not Allowed
Commercial car washes, not heating the water, excluding the general public from washing process	Allowed	Not Allowed	Not Allowed	Not Allowed
Industrial process water that will not come into contact with workers	Allowed	Allowed	Allowed	Not Allowed
Industrial boiler feedwater	Allowed	Allowed	Allowed	Not Allowed
Non-structural fire fighting	Allowed	Allowed	Allowed	Not Allowed
Backfill consolidation around non-potable piping	Allowed	Allowed	Allowed	Not Allowed
Soil compaction	Allowed	Allowed	Allowed	Not Allowed
Mixing concrete	Allowed	Allowed	Allowed	Not Allowed
Dust control on roads and streets	Allowed	Allowed	Allowed	Not Allowed
Cleaning roads, sidewalks, and outdoor work areas	Allowed	Allowed	Allowed	Not Allowed
Flushing sanitary sewers	Allowed	Allowed	Allowed	Allowed

This summary is prepared from the December 2, 2000-adopted Title 22 Water Recycling Criteria and supersedes all earlier versions. Prepared by Bahman Sheikh and edited by EBMUD Office of Water Recycling, who acknowledge this is a summary and not the formal version of the regulations referenced above.

¹ Refer to the full text of the December 2, 2000 version of Title 22: California Code of Regulations, Chapter 3 Water Recycling Criteria. This chart is only an informal summary of the uses allowed in this version, with the exception of orchards and vineyards noted as "Not Allowed²" on page 1 and explained below.

² Per California Department of Public Health letter of January 8, 2003 to California Regional Water Quality Control Boards.

³ Allowed with "conventional tertiary treatment." Additional monitoring for two years or more is necessary with direct filtration.

⁴ Drift eliminators and/or biocides are required if public or employees can be exposed to mist.

⁵ Refer to Groundwater Recharge Guidelines, available from the California Department of Public Health.