Stormwater Quality Handbooks

Project Planning and Design Guide

Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual

Construction Site Best Management Practices (BMPs) Reference Manual

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

March 2007
CTSW-RT-06-171.11-1

Stormwater Quality Handbooks

Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual

Caltrans

March 2007

Stormwater Quality Handbooks

Project Planning and Design Guide

Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual

Construction Site Best Management Practices (BMPs) Reference Manual

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

California Department of Transportation
Division of Construction — Stormwater Unit
1120 N Street, MS-44, Sacramento, CA 95814
http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm

March 2007
CTSW-RT-06-171.11-1

For individuals with sensory disabilities, this document is available in alternate formats upon request. Please call or write to Storm Water Liaison, Caltrans Division of Environmental Analysis, MS 27, P.O. Box 942874, Sacramento, CA 94274-0001, (916) 653-8896 Voice, or dial 711 to use a relay service.

Caltrans®, the California Department of Transportation® and the Caltrans logo are registered service marks of the California Department of Transportation and may not be copied, distributed, displayed, reproduced or transmitted in any form without prior written permission from the California Department of Transportation.

Table of Contents

Section 1 Introduction and Background 1-1
1.1 Purpose and Scope of This Manual 1-1
1.2 Regulations and Permits 1-1
1.2.1 Federal Regulations 1-1
1.2.2 Caltrans Statewide NPDES Permit 1-2
1.3 Caltrans Construction Site BMPs 1-3
1.3.1 Approved Construction Site BMPs for Statewide Use 1-3
1.3.2 Approved Construction Site BMPs for Use on a Project-by-Project Basis 1-4
1.3.3 Minimum Requirements for Construction Sites 1-4
1.3.4 BMP Identification and Selection 1-4
1.4 Implementation of Construction Site Best Management Practices .. 1-9
1.4.1 Definitions 1-9
1.4.1.1 Disturbed Soil Area (DSA) 1-9
1.4.2 Active Areas and Non-Active Areas 1-9
1.4.2.1 Slope Length and Benches 1-10
1.4.2.2 Rainy Season 1-10
1.4.3 Temporary Soil Stabilization and Sediment Control Implementation Guidance 1-12
1.4.3.1 Scheduling 1-12
1.4.3.2 Preservation of Existing Vegetation 1-12
1.4.3.3 Stormwater Run-on and Concentrated Flows 1-12
1.4.3.4 Disturbed Soil Area Management 1-12
1.4.3.5 Disturbed Soil Area Size Limitations 1-13
1.4.4 DSA Protection by Temporary Soil Stabilization and Temporary Sediment Controls 1-13
1.4.4.1 Soil Stockpiles 1-14
1.4.4.2 Sediment/Desilting Basins 1-14
1.4.5 Procedures for Rainfall Area 7 1-14
1.5 Guidance for Implementation of Other BMPs 1-19
1.5.1 Mobile Operations 1-19
1.5.2 Wind Erosion Controls 1-19
1.5.3 Tracking Controls 1-19
1.5.4 Construction Site Management (Non-Stormwater and Waste Management and Materials Pollution Controls) 1-19

Section 2 Preparing a Stormwater Pollution Prevention Plan (SWPPP) 2-1
2.1 Preparation and Approval of a SWPPP 2-1
2.2 Information Provided by Caltrans..... 2-1
2.2.1 Line Items, Specifications, and Details 2-2
2.2.2 Construction Site Management 2-2
2.2.3 Stormwater Information Handout..... 2-2
2.2.4 Other Stormwater Information 2-4
2.3 SWPPP Template 2-5
2.3.1 SWPPP and Monitoring Program Checklist.....2-5
Section 3 Preparing a Water Pollution Control Program (WPCP)..... 3-1
3.1 Preparation and Approval of a WPCP 3-1
3.1.1 Information Provided by Caltrans 3-1
3.1.2 Minimum Requirements for Construction Sites 3-4
3.2 WPCP Template 3-4

Tables

1-1 Caltrans Construction Site BMPs
1-2 Area Definitions
1-3 Required Combination of Temporary Soil Stabilization and Temporary Sediment Controls and Barriers (Non-Active Disturbed Soil Areas)
1-4 Required Combination of Temporary Soil Stabilization and Temporary Sediment Controls and Barriers (Active Disturbed Soil Areas)

Figures

1-1 Designation of Rainy Seasons

Appendices

Appendix A Attachments for use in preparing a SWPPP
Attachment A Vicinity Map / Site Map (Samples)
Attachment B Water Pollution Control Drawings (Sample)
Attachment C Amendments
Attachment D Computation Sheet for Determining Runoff Coefficients (Sample)
Attachment E Computation Sheet for Determining Run on Discharges (Sample)
Attachment F Notice of Construction (NOC) / Notice of Intent (NOI)
Attachment G Maintenance, Inspection, and Repair of Construction Site BMPs
Attachment H Stormwater Quality Construction Site Inspection Checklist
Attachment I Trained Contractor Personnel Log
Attachment J Subcontractor Notification Letter (Sample) and Log
Attachment K Notice of Discharge
Attachment L (Intentionally Left Blank)
Attachment M Annual Certification of Compliance Form
Attachment N Other Plans/Permits/Agreements
Attachment O (Intentionally Left Blank)
Attachment P Notice of Completion of Construction (NCC)/Notice of Termination (NOT)
Attachment Q (Intentionally Left Blank)
Attachment R Sampling Activity Log and Chain-of-Custody Forms
Attachment S Pollutant Testing Guidance Table
Attachment T Sampling Data Reporting Form
Attachment U Discharge Reporting Log
Appendix B Attachments for use in preparing a WPCP
Attachment A Water Pollution Control Drawings
Attachment B Maintenance, Inspection, and Repair of Construction Site BMPs
Attachment C Stormwater Quality Construction Site Inspection Checklist
Attachment D Amendments
Attachment E Notice of Discharge
Attachment F Discharge Reporting Log
Attachment G Trained Contractor Personnel Log
Appendix C Abbreviations, Acronyms, Definition of Terms and References
Appendix D Selection of Temporary Soil Stabilization Controls
Appendix E List of Standard Caltrans Construction Site BMP Symbols

Section 1
Introduction and Background

1.1 Purpose and Scope of This Manual

Caltrans has a comprehensive and coordinated statewide effort to prevent pollution in stormwater runoff from Caltrans properties, facilities, and activities. This effort includes an integrated approach that addresses the stormwater quality activities of various functional areas, including construction.

This document guides Contractors and Caltrans staff through the process of preparing a Stormwater Pollution Prevention Plan (SWPPP) or a Water Pollution Control Program (WPCP). The organization of this Manual is shown below. Working details and instructions for the implementation of construction site BMPs are presented in the Standard Plans, Contract Plans, and contract Special Provisions.

- Section 1 provides the purpose and scope of this Manual and background information on the National Pollutant Discharge Elimination System (NPDES) regulations and the Caltrans Statewide NPDES Permit.
- Section 2 provides detailed instructions for the preparation of a SWPPP.
- Section 3 provides detailed instructions for the preparation of a WPCP.
- Appendix A provides attachments for use in preparing a SWPPP.
- Appendix B provides attachments for use in preparing a WPCP
- Appendix C provides a listing of frequently used abbreviations, acronyms, and the definitions of terms used throughout this Manual.
- Appendix D provides a listing of various types of products used in implementation of Temporary Soil Stabilization Controls.
- Appendix E provides a list of standard Caltrans Construction Site BMP symbols.

1.2 Regulations and Permits

1.2.1 Federal Regulations

Federal regulations for controlling discharges of pollutants from municipal separate storm sewer systems, construction sites, and industrial activities, were brought under the NPDES permit process by the 1987 amendments to the Clean Water Act (CWA), and the subsequent 1990 promulgation of federal stormwater regulations issued by the U.S. Environmental Protection Agency (USEPA). The USEPA regulations require municipal and industrial stormwater discharges to comply with an NPDES permit. In California, the USEPA delegated authority to issue NPDES permits to the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs).

1.2.2 Caltrans Statewide NPDES Permit

On July 15, 1999, the SWRCB issued the "*Order No. 99-06-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans)*"; hereby called the "Permit". The Permit regulates stormwater discharges from Caltrans properties, facilities and activities, and requires that the Caltrans construction program comply with the requirements of the "*State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Runoff Associated with Construction Activity (General Permit)*" issued and modified by the SWRCB, to regulate discharges from construction sites that disturb 5 acres (ac) or more. This is now referred to as the NPDES Phase I regulations.

Based on a petition challenging the General Permit, the provisions for monitoring, sampling and analysis were modified pursuant to a court order. The modified provisions were issued as Resolution No. 2001-046, "*Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit For Storm Water Discharges Associated With Construction Activity (General Permit)*", adopted by the SWRCB on April 26, 2001. The modifications require permittees to implement specific sampling and analytical procedures to determine if BMPs implemented on a construction site are:

(1) Preventing further impairment by sediment in stormwaters discharged directly into waters listed as impaired (Clean Water Act Section 303(d) List [303(d) List]) for sediment, silt, or turbidity; and

(2) Preventing other pollutants that are known or should be known by permittees to occur on construction sites and that can not be visually observed or detected in stormwater discharges, from causing or contributing to exceedances of water quality objectives.

On December 2, 2002, the SWRCB approved the "*Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General Permit For Storm Water Discharges Associated With Construction Activity (General Permit) to include Small Construction Activity (One to Five Acres)*". This modification was issued to comply with the NPDES Phase II regulations and expands the existing General Permit to include/regulate discharges from construction sites that disturb land equal to or greater than one (1) acres (ac) and less than five (5) acres (ac), known as small construction activity, as of March 10, 2003.

The Permit gives RWQCBs the option to specify additional requirements they may consider necessary to meet water quality standards. In addition, RWQCBs retain the authority to issue NPDES permits for individual projects or adopt Regional Permits. Copies of the Permit and the General Permit can be downloaded from the SWRCB Web site, at http://www.waterboards.ca.gov/stormwtr/index.html

Permit Requirements

The Permit and the General Permit require Caltrans to implement a year-round program in all parts of the State to effectively control stormwater and non-stormwater discharges. Furthermore, the Permit requires Caltrans to meet water quality standards through implementation of permanent and temporary (during construction) BMPs and other measures. The Permit prohibits the discharge of waste, including soil and sediment, which causes pollution or nuisance. This section does not intend to include all permit requirements. For information and complete listing of all requirements, refer to the Permit.

SWPPP/WPCP

The SWPPP and WPCP are documents that address water pollution control during construction. The General Permit requires that all stormwater discharges associated with construction activity, where clearing, grading, and excavation results in soil disturbance of at least 1 acre of total land area, by law must develop and implement an effective SWPPP.

Construction projects with a disturbed soil area of less than 1 acre do not require coverage under the General Permit at this time and thus do not require a SWPPP. However, Caltrans requires that a WPCP be prepared and implemented by the construction contractor as required by the Caltrans Statewide Storm Water Management Plan (SWMP). Additionally, Caltrans may require the development of a SWPPP for projects with disturbed soil areas of less than 1 acre if it is determined that the project possesses a significant water quality risk.

As part of the SWPPP and WPCP, Caltrans requires that Water Pollution Control Drawings (WPCDs) be developed, showing proposed locations for all construction site BMPs. The project layout sheets, grading plans, stage construction plans, and/or drainage sheets may be used as base sheets for developing the WPCDs. For a list of Standard BMP symbols refer to Appendix E of this Manual.

1.3 Caltrans Construction Site BMPs

This section lists those BMPs considered during the construction of Caltrans projects. Construction site BMPs (also called temporary control practices) are best conventional technology/best available technology (BCT/BAT)-based BMPs that are consistent with the BMPs and control practices required under the General Permit (refer to Table 1-1).

1.3.1 Approved Construction Site BMPs for Statewide Use

Approved construction site BMPs are BMPs that have been approved by Caltrans Deputy Directors or Program Managers for statewide implementation as listed in the SWMP. Implementation is dependent on conditions and applicability of deployment described as part of the BMP. These BMPs are typically implemented in all Caltrans construction projects; they include practices for soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management and waste management. Some of the approved construction site BMPs have been designated as "minimum requirements"; these BMPs will be implemented in all highway construction projects statewide when they are applicable to a project.

1.3.2 Approved Construction Site BMPs for Use on a Project-by-Project Basis

These are other construction site BMPs that have not been approved for statewide use by the SWMP, but may be implemented, on a project-by-project basis, in addition to required approved BMPs and when determined necessary and feasible by the Project Engineer (PE) during design, and the Resident Engineer (RE) during construction. Caltrans may, on a project-by-project basis, specify or require Contractors to implement some of these construction site BMPs.

1.3.3 Minimum Requirements for Construction Sites

Caltrans has designated some BMPs as "minimum requirements" that must be implemented, if applicable, on all highway construction projects that require a SWPPP or a WPCP. Implementation of some minimum requirements may not be applicable to every project as verified by the contractor or as determined by Caltrans. These minimum requirements are identified in Table 1-1.

1.3.4 BMP Identification and Selection

BMPs are selected to reduce or eliminate pollutants in stormwater and non-stormwater discharges associated with construction activities. Described below is the sequence of steps that shall be used to identify BMPs to be included in SWPPPs and WPCPs.

Step 1: Incorporate the temporary water pollution control BMPs that are described in:

- Contract Special Provisions;
- Contract Plans;
- Standard Plans; and
- Standard Specifications.

If the BMPs required in Step 1 are inadequate to address potential pollutants in stormwater discharges and non-stormwater discharges, then:

Step 2: Incorporate the temporary water pollution control BMPs using one or more of the Caltrans minimum requirements listed in Table 1-1.

Step 3: If the BMPs selected from Steps 1 and 2 are inadequate to address potential pollutants in stormwater discharges and non-stormwater discharges, then incorporate the temporary water pollution control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the Construction Site Best Management Practices (BMPs) Reference Manual.

Project and site conditions may allow implementation of enhanced temporary construction site BMPs that go beyond those described above. Caltrans will continue to encourage experimentation and innovation on deploying such measures to minimize pollution. Caltrans may consider a Contractor's recommendation to implement additional construction site BMPs on a project, subject to approval by the RE and headquarters.

TABLE 1-1
Caltrans Construction Site BMPs

TEMPORARY SOIL STABILIZATION BMPs					
Construction BMP ID No.	**BMP NAME**	**MINIMUM REQUIREMENT(1)**	**CONTRACT LINE ITEM COST CODE**	**STANDARD PLAN REFERENCE**	**STANDARD SPECS REFERENCE**
SS-1	Scheduling	✓	------	------	------
SS-2	Preservation of Property/ Preservation of Existing Vegetation	✓	------	------	SS 7-1.11, SS 7-1.01G
SS-3	Temporary Hydraulic Mulch (Bonded Fiber Matrix)	✓(2)	074039	-----	------
	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)	✓(2)	074040	-----	------
SS-4	Temporary Erosion Control (With Temporary Seeding)	✓(2)	074023	-----	------
SS-5	Temporary Soil Stabilizer	✓(2)	074025	-----	------
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	✓(2)	074023	-----	------
SS-7	Temporary Erosion Control Blanket (On Slope)	✓(2)	074027	T54	------
	Temporary Erosion Control Blanket (In Swale or Ditch)	✓(2)	074027	T55	------
SS-7	Temporary Cover (Plastic Covers)	✓(2)	074034	T53	------
SS-8	Temporary Mulch (Wood)		074040	------	SS 16-1.04, SS 20-2.08
SS-9	Earth Dikes / Drainage Swales & Lined Swales		------	------	------
SS-10	Outlet Protection / Velocity Dissipation Devices		------	------	------
SS-11	Slope Drains		------	------	------
SS-12	Streambank Stabilization		------	------	------

TABLE 1-1 (Continued)
Caltrans Construction Site BMPs

TEMPORARY SEDIMENT CONTROL BMPs					
Construction BMP ID No.	**BMP NAME**	**MINIMUM REQUIREMENT(1)**	**CONTRACT LINE ITEM COST CODE**	**STANDARD PLAN REFERENCE**	**STANDARD SPECS REFERENCE**
SC-1	Temporary Silt Fence	✓(2)	074029	T51	------
SC-2	Temporary Sediment Basin		------	-----	------
SC-3	Temporary Sediment Trap		------	-----	------
SC-4	Temporary Check Dam		074035	T57	------
SC-5	Temporary Fiber Rolls	✓(2)	074028	T56	------
SC-6	Temporary Gravel Bag Berm		074031	-----	------
SC-7	Street Sweeping	✓	074041	------	SS 7-1.08
SC-8	Temporary Sandbag Barrier		------	-----	------
SC-9	Temporary Straw Bale Barrier		074030	T52	------
SC-10	Temporary Drain Inlet Protection	✓	074038	-----	------

TEMPORARY TRACKING CONTROL BMPs					
Construction BMP ID No.	**BMP NAME**	**MINIMUM REQUIREMENT(1)**	**CONTRACT LINE ITEM COST CODE**	**STANDARD PLAN REFERENCE**	**STANDARD SPECS REFERENCE**
SC-7	Street Sweeping		074041	------	SS 7-1.08
TC-1	Temporary Construction Entrance		074033	T58	------
TC-2	Stabilized Construction Roadway		------	------	SS 7-1.08
TC-3	Temporary Entrance / Outlet Tire Wash		------	-----	------

TEMPORARY WIND EROSION CONTROL BMPs					
Construction BMP ID No.	**BMP NAME**	**MINIMUM REQUIREMENT(1)**	**CONTRACT LINE ITEM COST CODE**	**STANDARD PLAN REFERENCE**	**STANDARD SPECS REFERENCE**
WE-1	Wind Erosion Control	✓	------	-----	------
TC-1	Temporary Construction Entrance		074033	T58	------
TC-2	Stabilized Construction Roadway		------	-----	------
-----	All Soil Stabilization Measures included in Section 500.3.4		------	-----	------

TABLE 1-1 (Continued)
Caltrans Construction Site BMPs

TEMPORARY CONSTRUCTION SITE MANAGEMENT BMPs					
NON-STORMWATER MANAGEMENT POLLUTION CONTROL BMPs					
Construction BMP ID No.	**BMP NAME**	**MINIMUM REQUIREMENT(1)**	**CONTRACT LINE ITEM COST CODE**	**STANDARD PLAN REFERENCE**	**STANDARD SPECS REFERENCE**
NS-1	Water Control and Conservation		074016	-----	------
NS-2	Dewatering		074016	-----	------
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations		074016	------	SS 42
NS-4	Temp Stream Crossing		------	-----	------
NS-5	Clear Water Diversion		------	-----	------
NS-6	Illegal Connection and Illegal Discharge Detection Reporting	✓	074016	-----	------
NS-7	Potable Water / Irrigation		074016	-----	------
NS-8	Vehicle and Equipment Cleaning	✓	074016	-----	------
NS-9	Vehicle and Equipment Fueling	✓	074016	-----	------
NS-10	Vehicle and Equipment Maintenance	✓	074016	-----	------
NS-11	Pile Driving Operations		074016	-----	------
NS-12	Concrete Curing		074016	-----	------
NS-13	Material and Equipment Used Over Water		074016	------	SS 7-1.01g
NS-14	Concrete Finishing		074016	-----	------
NS-15	Structure Demolition / Removal Over or Adjacent to Water		074016	-----	------

TABLE 1-1 (Continued)
Caltrans Construction Site BMPs

TEMPORARY CONSTRUCTION SITE MANAGEMENT BMPs					
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs					
Construction BMP ID No.	**BMP NAME**	**MINIMUM REQUIREMENT(1)**	**CONTRACT LINE ITEM COST CODE**	**STANDARD PLAN REFERENCE**	**STANDARD SPECS REFERENCE**
WM-1	Material Delivery and Storage	✓	074016	-----	------
WM-2	Material Use	✓	074016	-----	------
WM-3	Stockpile Management	✓	074016	-----	------
WM-4	Spill Prevention and Control	✓	074016	-----	------
WM-5	Solid Waste Management	✓	074016	-----	------
WM-6	Hazardous Waste Management		074016	-----	------
WM-7	Contaminated Soil Management		074016	-----	------
WM-8	Concrete Waste Management		074016	-----	------
	Temporary Concrete Washout Facility		074032	T59	------
	Temporary Concrete Washout (Portable)		074042	-----	------
WM-9	Sanitary/Septic Waste Management	✓	074016	-----	------
WM-10	Liquid Waste Management		074016	-----	------

(1) Implementation depends on applicability to a project.
(2) The Contractor shall ensure implementation of one of the listed measures or a combination thereof to achieve and maintain the contract's rainy and non-rainy season disturbed soil area requirements.

1.4 Implementation of Construction Site Best Management Practices

This section provides instructions for the implementation of construction site BMPs as specified in the Contract Plans and Special Provisions. It is important to note that the requirements of this Section are Caltrans minimum requirements, and that Caltrans Districts may impose more stringent requirements on a project-by-project basis. When the implementation of additional BMPs beyond those required by the contract are necessary to prepare a SWPPP or WPCP, the contractor shall secure the written approval of the RE prior to implementation of the additional BMPs. Any changes to the BMP implementation after approval of the SWPPP or WPCP will require amending the SWPPP or WPCP.

1.4.1 Definitions

1.4.1.1 Disturbed Soil Area (DSA)

Disturbed soil areas (DSAs) are areas of exposed, erodible soil that are within the construction limits and that result from construction activities. The following are not considered DSAs:

- Areas where temporary soil stabilization, erosion control, or slope protection have been applied and associated drainage facilities are in place and functional.
- Roadways, construction roads, access roads or contractor's yards that have been stabilized by the placement of compacted sub-base or base material or paved surfacing.
- Areas where construction has been completed in conformance with the contract plans and permanent erosion control is in place and functional.

Soil stabilization is considered functional when a uniform vegetative cover equivalent to 70 percent of the native background vegetation coverage has been established or equivalent stabilization measures have been employed.

1.4.2 Active Areas and Non-Active Areas

Active Areas are construction areas where soil-disturbing activities have already occurred and continue to occur or will occur during the ensuing 21 days.

Non-Active Areas are construction areas (formerly active areas) that will be idle for at least 21 days.

The RE will conduct a review of the existing active areas on a regular basis to determine if a non-active status should be applied to some DSAs.

1.4.2.1 Slope Length and Benches

Slope length is measured or calculated along the continuous inclined surface. Each discrete slope is between one of the following: top to toe, top to bench, bench to bench, and bench to toe.

Benches are drainage facilities that intercept surface flow and convey the resulting concentrated flow away from a slope. For the purpose of determining slope lengths, fiber rolls or other appropriate BMPs can be considered equivalent to a bench.

1.4.2.2 Rainy Season

The average rainfall in California varies greatly from region to region. To account for the various rainfall patterns (time frame, intensities, and amounts) the state is separated into several rainy seasons. Shown in Figure 1-1 is a map identifying the rainy seasons throughout the state. These rainy seasons are used to identify the appropriate level of soil stabilization and sediment control protection for each rainfall area.

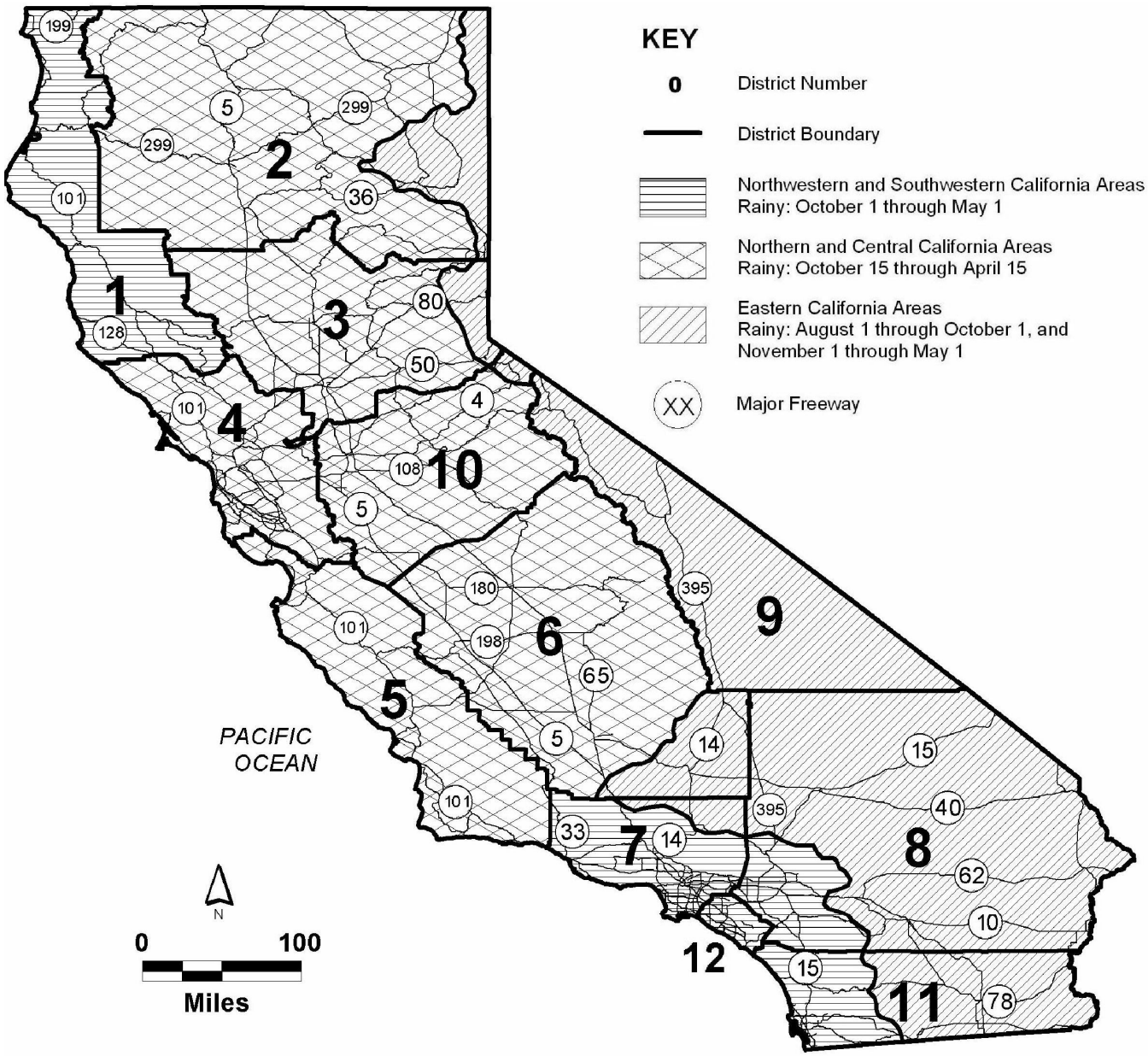


Figure 1-1 DESIGNATION OF RAINY SEASONS

1.4.3 Temporary Soil Stabilization and Sediment Control Implementation Guidance

Stormwater pollution control measures are required to be implemented on a year-round basis at an appropriate level. The requirements must be implemented in a proactive manner during all seasons while construction is ongoing. California has varied rainfall patterns throughout the state; therefore, the appropriate level of BMP implementation will also vary throughout the state. The temporary soil stabilization and sediment controls BMPs specified in this section are based on rainfall patterns (time frames, intensities, and amounts), general soil types, the seasons, slope inclinations and slope lengths. Appropriate water pollution control includes the implementation of an effective combination of both soil stabilization and sediment control BMPs.

The following subsections describe both general principles and specific guidance for selecting and implementing temporary soil stabilization and sediment control BMPs.

1.4.3.1 Scheduling

Construction scheduling shall consider the amount and duration of soil exposed to erosion by wind, rainfall, runoff, and vehicle tracking and seek to minimize disturbed soil area during the rainy season. A graphical schedule shall be prepared that shows the sequencing of construction activities with the installation and maintenance of soil stabilization and sediment control BMPs.

1.4.3.2 Preservation of Existing Vegetation

Preserving existing vegetation to the maximum extent possible and for as long as possible on a construction site reduces or eliminates erosion in those areas. To facilitate this practice, on a year-round basis temporary fencing shall be provided prior to commencement of clearing and grubbing operations or other soil-disturbing activities in areas where no construction activity is planned or construction will occur at a later date.

1.4.3.3 Stormwater Run-on and Concentrated Flows

The diversion of stormwater run-on and conveyance of concentrated flows must be considered in determining the appropriateness of the BMPs chosen. BMPs to divert or manage concentrated flows in a non-erodible fashion may be required on a project-by-project basis to divert off-site drainage through or around the construction site or to properly manage construction site stormwater runoff.

1.4.3.4 Disturbed Soil Area Management

The DSA management guidelines are based on rainfall patterns (time frames, intensities, and amounts), general soil types, the seasons, slope inclinations, and slope lengths. All of these factors must be considered in order to develop the appropriate levels of soil stabilization and sediment control measures.

1.4.3.5 Disturbed Soil Area Size Limitations

Limiting the amount of disturbed soil is a critical component in conducting an effective stormwater management program. Contract Special Provisions may specify limits of disturbed soil area. Standard Specifications Section 7-1.01G, Water Pollution states *"Unless otherwise approved by the Engineer in writing, the Contractor shall not expose a total area of erosible earth material, which may cause water pollution, exceeding 750,000 square feet for each separate location, operation or spread of equipment before either temporary or permanent erosion control measures are accomplished."* This requirement is applicable during the non-rainy season. The RE has the option of increasing the size of disturbed soil areas beyond 750,000 square feet (17 acres) if appropriate control practices and an implementation plan are included in an approved SWPPP. A mobilization plan including a description of the delivery and deployment of the appropriate BMP material to the jobsite prior to all predicted rain events shall also be submitted to the RE for approval and shall be included in the SWPPP. Run-on controls shall be in place prior to opening any additional DSA.

Furthermore, the Contract Special Provisions may further restrict the size of the project's total disturbed soil area to 5 acres during the rainy season. The RE has the option to increase this limit beyond 5 acres if requested in writing by the contractor. If the contractor's request to increase the amount of DSA beyond 5 acres is approved by the RE, the contractor shall have the BMP material(s) required to implement the appropriate control practices available onsite and amend the SWPPP to reflect this change.

1.4.4 DSA Protection by Temporary Soil Stabilization and Temporary Sediment Controls

To account for rainfall patterns (time frames, intensities, and amounts) and to a lesser extent general soil type differences, the state has been divided into seven areas requiring common protection requirements. These rainfall areas are described in Table 1-2. The specific temporary soil stabilization and sediment control practices for DSA protection in each area are determined from Tables 1-3 and 1-4 (for non-active disturbed soil areas and active disturbed soil areas, respectively). Based on consultation with experts, the slope length and slope inclination are seen as the most important criteria for soil stabilization and sediment control requirements, as these factors have the largest potential impact on the erosion rate. As indicated in these tables, the temporary soil stabilization and sediment controls at a construction site will increase with increasing slope length and slope inclination combination.

DSAs shall be protected as follows:

- Temporary control practices for non-active DSAs shall be implemented in accordance with Table 1-3 of this Manual.
- Temporary control practices for active DSAs shall be implemented in accordance with Table 1-4 of this Manual.

- For non-active DSAs, limit the erosive effects of stormwater flow on slopes by implementing BMPs such as fiber rolls to break up the slope lengths as follows:
  - Slope inclination 1:4 (V:H) and flatter: BMPs shall be placed on slopes at intervals no greater than 20 ft.
  - Slope inclination between 1:4 (V:H) and 1:2 (V:H): BMPs shall be placed on slopes at intervals no greater than 15 ft.
  - Slope inclination 1:2 (V:H) or greater: BMPs shall be placed on slopes at intervals no greater than 10 ft.
- For non-active DSAs, permanent erosion control shall be applied to areas deemed complete during the project's defined seeding window.
- Provide construction site BMPs in addition to those specified in Tables 1-3 and 1-4 to convey concentrated flows in a non-erodible fashion.
- Do not use fiber rolls on slopes where soil conditions do not warrant (slopes prone to surface failure).

1.4.4.1 Soil Stockpiles

Temporary soil stockpiles shall be protected with temporary soil stabilization and/or sediment controls when required. Section 500 of the SWPPP or Section 30 of the WPCP lists various materials that can be used for soil stockpile management.

1.4.4.2 Sediment/Desilting Basins

The practices described herein are typical of those that will be implemented on a project-by-project basis. The nature of linear projects and constrained rights-of-way inherent to Caltrans work may prohibit the use of sediment/desilting basins at some locations on certain projects and on some projects altogether. The required sediment/desilting basin shall be constructed in accordance with contract documents and in conjunction with other soil stabilization and sediment control measures.

1.4.5 Procedures for Rainfall Area 7

For construction sites within Rainfall Area 7 (District 8 within the Colorado River Basin RWQCB jurisdictions, District 9 and District 11 within the Colorado River Basin RWQCB jurisdiction), the soil stabilization and sediment control practices required for the construction site will be determined by the applicable RWQCB on a site-by-site basis. The following procedure shall be used to notify the applicable RWQCB for construction sites in Rainfall Area 7:

- Caltrans will notify the applicable RWQCB staff of construction sites in these areas at least 30 days prior to the start of construction.

- During the 30-day notification period, the RWQCB staff may request to review the SWPPP or meet with Caltrans to discuss the construction project.
- Within the 30-day notification period, the RWQCB may respond with specific soil stabilization and sediment control practices required for the site. If the RWQCB does not respond within the 30-day review period, then Caltrans can proceed with its construction activities as scheduled.
- Regardless of the RWQCB action, the RWQCB may inspect the site and take enforcement actions, if necessary, pending inspection findings.

For construction sites within Rainfall Area 7 (District 6, 7, and 8 within the Lahontan RWQCB jurisdiction) and within one mile of the Mojave or Amargosa River and their tributaries that are within one mile of these waterways, soil stabilization and sediment control practices must be implemented as specified for Area 4. All equipment must also be removed from waterways prior to any flash floods.

Table 1-2

RAINFALL AREA DEFINITIONS		
Rainfall Area	**Applicability**	**Elevation**
1	**District 1** in the following areas: all of Del Norte and Humboldt Counties within 20 miles of the coast in Mendocino County	≤3,900 ft
2	**District 1** (except within Area 1) **District 2** within the North Coast, Lahontan, and Central Valley RWQCB jurisdictions **Districts 3, 4** and **5** **District 10**	<800 ft
3	**District 1** (except within Area 1) **District 2** within the North Coast, Lahontan, and Central Valley RWQCB jurisdictions **Districts 3, 4** and **5** **District 10**	800 ft – 3,900 ft
4	**District 6** within the Central Valley RWQCB jurisdiction **District 7** within the Central Coast, Los Angeles, and Central Valley RWQCB jurisdictions **District 8** within the Santa Ana and San Diego RWQCB jurisdictions **District 11** within the San Diego RWQCB jurisdiction **District 12**	<1,600 ft
5	**District 6** within the Central Valley RWQCB jurisdiction **District 7** within the Central Coast, Los Angeles, and Central Valley RWQCB jurisdictions **District 8** within the Santa Ana and San Diego RWQCB jurisdictions **District 11** within the San Diego RWQCB jurisdiction **District 12**	1,600 ft – 3,900 ft
6	**Statewide**	>3,900 ft
7	**District 6** within the Lahontan RWQCB jurisdiction **District 7** within the Lahontan RWQCB jurisdiction **District 8** within the Lahontan and Colorado River Basin RWQCB jurisdictions **District 9** **District 11** within the Colorado River Basin RWQCB jurisdiction	≤3,900 ft

Table 1-3

REQUIRED COMBINATION OF TEMPORARY SOIL STABILIZATION AND TEMPORARY SEDIMENT CONTROLS AND BARRIERS [6]

NON-ACTIVE DISTURBED SOIL AREAS[7]

SEASON	RAINFALL AREA(S)	TEMPORARY BMP	SLOPE (V:H) [1]			
			≤ 1:20	> 1:20 ≤ 1:4	> 1:4 ≤ 1:2	> 1:2
RAINY[2]	1 & 6	SOIL STABILIZATION [5]	X	X	X	X
		SEDIMENT BARRIER [5]	X	X	X	X
		DESILTING BASIN [3]		X	X	X
	2, 3, 4 & 5	SOIL STABILIZATION [5]	X	X	X	X
		SEDIMENT BARRIER		X	X	X
		DESILTING BASIN				
	7	SOIL STABILIZATION AND SEDIMENT CONTROL PRACTICES TO BE DETERMINED BY APPLICABLE RWQCB[8]				
NON-RAINY	1	SOIL STABILIZATION [5]	X[4]	X[4]	X	X
		SEDIMENT BARRIER		X[4]	X	X
		DESILTING BASIN				
	2 & 4	SOIL STABILIZATION				
		SEDIMENT BARRIER				
		DESILTING BASIN				
	3 & 5	SOIL STABILIZATION				
		SEDIMENT BARRIER				X[4]
		DESILTING BASIN				
	6	SOIL STABILIZATION [5]	X[4]	X[4]	X	X
		SEDIMENT BARRIER		X[4]	X	X
		DESILTING BASIN [3]				X
	7	SOIL STABILIZATION AND SEDIMENT CONTROL PRACTICES TO BE DETERMINED BY APPLICABLE RWQCB[8]				

(1) Unless otherwise noted, the temporary BMP is required for the slope inclinations indicated on slope lengths greater than 10 ft.

(2) The maximum slope length is 100 ft for slope inclinations between 1:20 (V:H) and 1:2 (V:H) and 50 ft for steeper slopes, otherwise slope benching or other techniques shall be employed.

(3) Required in addition to the temporary sediment barrier, where feasible. Feasibility will depend on site-specific factors such as available right-of-way within the project limits, topography, soil type, disturbed soil area within watershed, and climate conditions.

(4) Implementation of controls not required except at least 24 hours prior to all predicted rain events.

(5) The indicated temporary BMP is required on all slope lengths.

(6) Sediment controls and barriers include all temporary sediment control construction BMPs identified in the Statewide Storm Water Management Plan (SWMP). Linear barrier systems are equivalent to what are referred to in the General Construction Permit as perimeter controls. The intent is prevent the transport of sediment at the downslope edge of disturbed soil areas.

(7) Unless otherwise noted, implementation of controls are required within 14 days of cessation of soil disturbing activities or one day prior to all predicted rain events, whichever occurs first.

(8) Refer to Section 1.4.5 for procedure.

Table 1-4

REQUIRED COMBINATION OF TEMPORARY SOIL STABILIZATION AND TEMPORARY SEDIMENT CONTROLS AND BARRIERS [6]

ACTIVE DISTURBED SOIL AREAS [3]

SEASON	RAINFALL AREA(S)	TEMPORARY BMP	SLOPE (V:H) [1]		
			≤ 1:20	> 1:20 ≤ 1:2	> 1:2
RAINY	1 & 6	SOIL STABILIZATION		X	X
		SEDIMENT BARRIER [4]	X	X	X
		DESILTING BASIN [2]		X	X
	2, 4 & 5	SOIL STABILIZATION			
		SEDIMENT BARRIER		X	X
		DESILTING BASIN [2]			X
	3	SOIL STABILIZATION			X[5]
		SEDIMENT BARRIER		X	X
		DESILTING BASIN [2]			X
	7	SOIL STABILIZATION AND SEDIMENT CONTROL PRACTICES TO BE DETERMINED BY APPLICABLE RWQCB[7]			
NON-RAINY	1	SOIL STABILIZATION			
		SEDIMENT BARRIER		X	X
		DESILTING BASIN[2]			X
	2, 3, 4 & 5	SOIL STABILIZATION			
		SEDIMENT BARRIER			
		DESILTING BASIN			
	6	SOIL STABILIZATION			
		SEDIMENT BARRIER		X	X
		DESILTING BASIN [2]			X
	7	SOIL STABILIZATION AND SEDIMENT CONTROL PRACTICES TO BE DETERMINED BY APPLICABLE RWQCB[7]			

(1) Unless otherwise noted, the BMP is required for the slope inclinations indicated on slope lengths greater than 10 ft.

(2) Required in addition to the temporary sediment barrier, where feasible. Feasibility will depend on site-specific factors such available right-of-way within the project limits, topography, soil type, disturbed soil area within watershed, and climate conditions.

(3) Implementation of soil stabilization controls are not required except prior to predicted rain.

(4) The indicated temporary BMP required on all slope lengths.

(5) The indicated temporary BMP required on slope lengths greater than 50 ft.

(6) Sediment controls and barriers include all temporary sediment control construction BMPs identified in the Statewide Storm Water Management Plan (SWMP). Linear barrier systems are equivalent to what are referred to in the General Construction Permit as perimeter controls. The intent is to provide a barrier to prevent the transport of sediment at the downslope edge of disturbed soil areas.

(7) Refer to Section 1.4.5 for procedures.

1.5 Guidance for Implementation of Other BMPs

1.5.1 Mobile Operations

Mobile operations common to the construction of a project include asphalt recycling, concrete mixing, crushing and the storage of materials. BMPs shall be implemented year-round, as appropriate, to control the individual situations these mobile operations can create.

1.5.2 Wind Erosion Controls

Wind erosion controls shall be considered year-round for all disturbed soils on the project site that are subject to wind erosion and when significant wind and dry conditions are anticipated during construction of the project. Refer to the Contract Special Provisions for BMP line items for Wind Erosion Control BMPs and for further reference see the Construction Site BMPs Reference Manual.

1.5.3 Tracking Controls

Tracking controls shall be implemented year-round, as needed, to reduce the tracking of sediment and debris from the construction site. At a minimum, entrances and exits shall be inspected daily, and controls implemented as needed. Refer to the Contract Special Provisions for BMP line items for Tracking Control BMPs (including Street Sweeping) and for further reference see the Construction Site BMPs Reference Manual.

1.5.4 Construction Site Management (Non-Stormwater and Waste Management and Materials Pollution Controls)

The objective of the construction site management (non-stormwater and waste management and materials pollution controls) is to reduce the discharge of materials other than stormwater to the stormwater drainage system or to receiving waters. These controls shall be implemented year-round for all applicable activities, material usage, and site conditions. Refer to the Construction Site Management Special Provision and for further reference see the Construction Site BMPs Reference Manual.

Section 2
Preparing a Stormwater Pollution Prevention Plan (SWPPP)

2.1 Preparation and Approval of a SWPPP

The Special Provisions require the contractor to prepare a Stormwater Pollution Prevention Plan (SWPPP) for projects that will create one acre or more of soil disturbance. The SWPPP must comply with Caltrans Standard Specifications Section 7-1.01G - Water Pollution, and it must be prepared in accordance with the Contract Special Provisions, the General Permit, and the procedures and general format set forth in this Manual.

This section provides detailed systematic procedures, instructions and a template that contractors shall use to prepare the project SWPPP. Appendix A contains Attachments that shall be used during preparation of the SWPPP. The Permit requires that the SWPPP apply to all areas that are directly related to the construction activity, including but not limited to asphalt and/or concrete batch plants, staging areas, storage yards, material borrow areas, access roads, etc., whether or not they reside within the Caltrans rights-of-way.

The contractor shall prepare and submit a complete SWPPP to the Caltrans Resident Engineer (RE) for review and approval. If revisions are required, as determined by the RE, the contractor shall revise the SWPPP as noted. The time frames for SWPPP submittal, review, and resubmittal are specified in the Special Provisions. No construction activity having the potential to cause water pollution, as determined by the RE, shall be performed until the SWPPP has been approved by the RE. To allow construction activities to proceed, the RE may conditionally approve the SWPPP while minor revisions are being completed. Construction activities such as traffic control, which will not threaten water quality, may proceed without an approved SWPPP if allowed by the RE.

SWPPPs shall be submitted to Caltrans in a 3-ring binder with dividers and tabs. Furthermore, Caltrans may also require that contractors submit an electronic file (Microsoft® Word) of the SWPPP.

2.2 Information Provided by Caltrans

Caltrans may supply certain water quality-related information developed during the design process for use by the contractor, by way of the Information Handout and contract documents. This information is intended to provide the contractor with information that substantiates Caltrans' generation of quantities for selected construction site (temporary) BMPs, as well as show the location of placement of the construction site (temporary) and post-construction (permanent) BMPs. The contractor may then use this information to prepare a SWPPP as appropriate. Items that may be provided are:

2.2.1 Line Items, Specifications, and Details

Caltrans will provide contract items and quantities for Temporary Construction BMPs perceived necessary during the design phase. The contractor shall use these items to prepare the project SWPPP. The method of payment for these items will be specified in the contract Special Provisions. It should be noted that the location of these BMPs when shown on the plans are approximate. The actual locations shall be determined by the contractor and reflected in the SWPPP.

2.2.2 Construction Site Management

Construction Site Management (CSM) BMPs include all BMPs in Non-Stormwater Management Pollution Control BMPs and Waste Management and Materials Pollution Control BMPs that are not identified in the contract as line items but are necessary to complete the SWPPP.

2.2.3 Stormwater Information Handout

The Stormwater Information Handout may include the following information:

Vicinity Map

A map extending approximately one quarter mile (1,320 feet) beyond the property boundaries of the construction site showing: the construction site, surface water bodies (including known springs and wetlands), known wells, an outline of off site drainage areas that discharge into the construction site, general topography, and the anticipated discharge location(s) where stormwater discharges to a municipal storm drain system or other water bodies. A U.S. Geological Survey (USGS) quad map may be used for showing the project site and a one-quarter mile (1,320 feet) extension beyond the property boundaries of the construction site.

List of Pre-Construction (Existing) Control Practices (BMPs)

The Information Handout may provide a list and/or written descriptions of existing pre-construction practices, if any, that are already in place to reduce sediment and other pollutants in stormwater discharges. These permanent control practices (BMPs) may consist of rock slope protection, infiltration basins, detention basins, biofiltration swales and strips, media filters, etc. If there are no pre-construction control practices, then this may be indicated.

List of Permanent (Post-Construction) Stormwater Control Measures (BMPs)

The Information Handout may provide a written listing and narrative descriptions of post-construction permanent BMPs that have been included and incorporated in the Contract Plans; this may be in the form of a Stormwater Data Report. Narrative descriptions may also include operation and maintenance (O&M) procedures for the permanent BMPs, O&M short term and long term funding, and a statement indicating that the Maintenance Department will be responsible for O&M of the post construction BMPs.

Layout Sheets Showing Suggested Temporary BMP Locations

The Information Handout may provide sheets showing the suggested location of anticipated construction site BMPs such as contractor staging areas, approximate location of concrete washouts, approximate locations for storage of materials, and preferred locations for vehicle and equipment maintenance. These are not intended to be highly detailed drawings. Typically, these layouts can be hand-drawn on 1:200 or 1:500 scale drawings.

Explanation of Construction Site (Temporary) BMPs

The Information Handout may provide a brief narrative explanation of the various temporary BMPs that may be implemented in the project, including any existing permanent BMPs that may be present within the project limits that can be used during construction, as well as any permanent BMPs that should be constructed early for use as a temporary BMP during construction, such as early application of permanent soil stabilization measures in areas that will no longer experience soil disturbance during construction.

Copy of Notice of Construction (NOC)/Notice of Intent (NOI)

The Information Handout will include a copy of the Notice of Construction (NOC) for the project, submitted to the Regional Water Quality Control Board by Caltrans. The contractor shall insert a copy of the NOC in Attachment F of the SWPPP. For oversight projects, the Local Agency / Private Entity administering the project should have submitted a Notice of Intent (NOI) for the project to the State Water Resources Control Board. A copy of the Notice of Intent and the Waste Discharge Identification (WDID) Number issued for the project shall be inserted into Attachment F.

Site-Specific Inspection Sheet

A general Stormwater Quality Construction Site Inspection Checklist has been developed by Caltrans. In some cases, a District may require that a different checklist be used for a specific construction project or activity. If this is the case, the Information Handout will include a copy of the checklist that the District will require that the contractor use for inspection of construction site BMPs.

Other Plans/Permits/Agreements

Other agencies may have issued permits or agreements (such as U.S. Army Corps of Engineers permit or Department of Fish and Game agreement) or have plan requirements for the construction of the project or imposed certain conditions. If so, a written description of the permit/agreement conditions and a copy of the permit/agreement will be provided by Caltrans for inclusion in Attachment N to the SWPPP.

For construction oversight projects, the Local Agency / Private Entity who administers the project is responsible for securing and providing all necessary permits, agreements, and approvals to Caltrans. The Local Agency / Private Entity who administers the project shall include copies of the permit/agreement in Attachment N to the SWPPP.

Construction Site Estimates

The Information Handout may provide the following information to the contractor:

- An estimate of the construction site area in acres;
- An estimate of the total disturbed area in acres;
- An estimate of the runoff coefficient of the construction site before and after construction; and
- An estimate of the percentage of the area of the construction site that is impervious (e.g., pavement, building, etc.) before and after construction.

This information is listed in the Stormwater Data Report.

2.2.4 Other Stormwater Information

The Information Handout may also include any other information that would explain the decisions or rationale behind the selection and deployment of construction site and permanent BMPs chosen by the designer. Examples include the designer's estimated staging of the project and estimated time of year for those stages; any scheduling modifications included in the Order of Work specifications that were included to enhance water pollution control; and any specific BMP deployments that are considered to be critical to the success of the contractors SWPPP.

Drainage Information

The Information Handout may include a copy of the drainage information, such as the drainage report for the project, hydrology maps, delineation of drainage boundaries, concentrations of runoff, and runoff coefficients sufficient to determine peak discharges or run-on flowcharts.

Soils/Geotechnical Report, Project Materials Report and/or Other Reports

To the extent information is available from the soils/geotechnical report, the project materials report, site investigation report developed by the Hazardous Waste Section, or other regulatory or environmental compliance documentation, the Information Handout may include a description of all toxic materials known to have been treated, stored, disposed, spilled, or leaked in significant quantities onto the construction site, and any Waste Discharge Requirements (WDRs) issued by the Regional Water Quality Control Board (RWQCB) related to toxic materials.

The Nature of Fill Material and Existing Data Describing the Soil

The Information Handout may include a copy of the project materials report (geotechnical report). The contractor must describe the conditions of the fill material and the soil that can be found at the construction site (i.e., types of soils, groundwater location and conditions, dewatering operations that may be necessary, etc). Fill material should be described as whether it is native or non native, contaminated or uncontaminated, and its coverage technique (i.e., native soil coverage, asphalt or concrete coverage, and/or landscape).

Conceptual SWPPP

In some cases, Caltrans may prepare a Conceptual SWPPP (CSWPPP) for a project. The CSWPPP will provide additional direction and convey specific BMP expectations to the contractor. However, the CSWPPP shall not be considered a complete SWPPP and shall not replace the contractor's SWPPP, since CSWPPPs are prepared assuming standard construction practices and may not reflect the contractor's actual methods of construction, access requirements or project phasing. When a CSWPPP has been prepared, the information is made available to the contractor as part of the Information Handout. The contractor shall use the CSWPPP as a guide and reference tool to develop and submit the contract SWPPP that includes all elements of the CSWPPP and any additional elements required to complete the SWPPP in conformance with the Special Provisions, the Permits, any other local requirements, and the procedures and general format set forth in this Manual.

2.3 SWPPP Template

This section provides step-by-step SWPPP preparation procedures, instructions and a template. The template has been developed in Microsoft® Word 2000 and 2003 with the following objectives:

(1) Provide easy data entry for contractors to prepare SWPPPs (instructions and examples can be viewed in the template while the SWPPP is being prepared).

(2) Provide consistency in content and format of all SWPPPs prepared and submitted to Caltrans (thus making the SWPPP review process more efficient).

Instructions for using the electronic version of the SWPPP templates:

1. Contractors may download the appropriate template from the Caltrans Web site at: http://www.dot.ca.gov/hq/construc/stormwater/templates.htm

2. Once a contractor has developed the text for the various sections of the SWPPP, a draft SWPPP, including instructions, examples and the completed text for each section, can be printed. The instructions include "check box" items that the preparer may use to review his/her own work and check each of the items as they are completed.

3. The contractor's final SWPPP can be viewed to check format and perform final edits as necessary. The document can then be printed without "instructions and examples" by going to the menu bar in MS Word, selecting the "TOOLS" menu, selecting "OPTIONS" and making sure that the HIDDEN TEXT checkboxes under both the VIEW and PRINT tabs are cleared.

4. The Attachments for the SWPPP are individual Word documents and should be completed as necessary and included in the SWPPP binder. The Attachment files are located at the same website listed in Instruction 1 above.

The step-by-step SWPPP preparation procedures, instructions and template in this section include thefollowing items:

(i) SWPPP Title Page

(ii) SWPPP Table of Contents

Section 100 SWPPP Certifications and Approval Pages

Section 200 SWPPP Amendments - Certification, Approval, and Log

Section 300 Introduction/Project Description

Section 400 Reference Section

Section 500 Body of SWPPP

Section 600 Monitoring Program and Reports

Appendix A contains the following attachments for use in preparation of a SWPPP:

Attachment A Vicinity Map / Site Map (Samples)

Attachment B Water Pollution Control Drawings (Sample)

Attachment C Amendments

Attachment D Computation Sheet for Determining Runoff Coefficients (Sample)

Attachment E Computation Sheet for Determining Run-on Discharges (Sample)

Attachment F Notice of Construction (NOC) / Notice of Intent (NOI)

Attachment G Maintenance, Inspection, and Repair of Construction Site BMPs

Attachment H Stormwater Quality Construction Site Inspection Checklist

Attachment I Trained Contractor Personnel Log

Attachment J Subcontractor Notification Letter (Sample) and Log

Attachment K Notice of Discharge

Attachment L (Intentionally Left Blank)

Attachment M Annual Certification of Compliance Form

Attachment N Other Plans/Permits/Agreements

Attachment O (Intentionally Left Blank)

Attachment P Notice of Completion of Construction (NCC) / Notice of Termination (NOT)

Attachment Q (Intentionally Left Blank)

Attachment R Sampling Activity Log and Chain-of-Custody Forms

Attachment S Pollutant Testing Guidance Table

Attachment T Sampling Data Reporting Form

Attachment U Discharge Reporting Log

2.3.1 SWPPP and Monitoring Program Checklist

Once the SWPPP has been prepared it shall be checked to ensure all the required elements of the permit have been addressed. Use the checklist provided below.

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	**SWPPP SECTION**	**ITEM**	**GENERAL PERMIT REF.**	**COMMENTS**
	100	***SWPPP Certification and Approval***	***C.10***	
	100.1	SWPPP Certification	***C.10***	
	100.2	SWPPP Approval	***C.10***	
	200	***SWPPP Amendments***	***A.4.a, A.16***	
	200.1	Amendment number and date entered into SWPPP – Amendment Log	***A.4.a, A.16***	
	200.2	Amendment Certification and Approval	***A.4.a, A.16***	
	300	***Introduction/Project Description***	***A.5***	
	300.1	Project Description and Location (narrative)	***A.5.a.1***	
	300.2	Unique Site Features (narrative)	***A.5.a.1***	
	300.4	***Project Schedule/Water Pollution Control Schedule (narrative or graphical)***	***A.5.c.5***	
	400	***References***	***A.14***	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	**SWPPP SECTION**	**ITEM**	**GENERAL PERMIT REF.**	**COMMENTS**
	500.2	***Vicinity Map (narrative or graphic)***	***A.5.a.1***	
	500.2	Site perimeter	A.5.a.1	
	500.2	Geographic Features	A.5.a.1	
	500.2	General topography	A.5.a.1	
	500.4	***WATER POLLUTION CONTROL DRAWINGS (WPCDS) (GRAPHIC OR NARRATIVE)***	A.5.a.2	
	500.4	**Site perimeter**	**A.5.a.2**	
	500.4	Existing and proposed buildings, lots, and roadways	**A.5.a.2**	
	500.4	Storm water collection and discharge points	**A.5.a.2**	
	500.4	General topography before and after construction	**A.5.a.2**	
	500.4	Anticipated discharge location(s)	**A.5.a.2**	
	500.4	Drainage patterns including the entire relevant drainage areas	**A.5.a.2**	
	500.4	Temporary on-site drainage(s)	**A.5.a.2**	
	500.3	***Pollutant Source and BMP Identification (narrate/ or indicate on site map)***	A.5.b	
		Drainage	A.5.b.1	
	500.4	Drainage patterns after major grading	A.5.b.1	
	500.4	Slopes after major grading	A.5.b.1	
	Attach. E	Calculations for storm water run-on	A.5.b.1	
	500.4	BMPs that divert off-site drainage from passing through site	A.5.b.1	
	500.4	***Storm Water Inlets***	A.5.b.2	
	500.4	Drainage patterns to storm water inlets or receiving water	A.5.b.2	
	500.4	BMPs that protect storm water inlets or receiving water	A.5.b.2	
		Site History (narrative; if possible, indicate location(s) on the Water Pollution Control Drawings)	A.5.b	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	**SWPPP SECTION**	**ITEM**	**GENERAL PERMIT REF.**	**COMMENTS**
	500.3.3	Nature of fill material and data describing the soil. Description of toxic materials treated, stored, disposed, spilled or leaked on site	A.5.b.3	
	500.3.8	BMPs that minimize contact of contaminants with storm water	A.5.b.3	
		Location of Areas Designated for:	A.5.b.4	
	500.3.8 & 500.4	Vehicle storage & service	A.5.b.4	
	500.3.8 & 500.4	Equipment storage, cleaning, maintenance	A.5.b.4	
	500.3.8 & 500.4	Soil or waste storage	A.5.b.4	
	500.3.8 & 500.4	Construction material loading, unloading, storage and access	A.5.b.4	
	500.3.8	Areas outside of Owners right-of-way (yards, borrow areas, etc.)	A.5.b.5	
		BMP Locations or Descriptions for:	A.5.b.5	
	500.3.8 & 500.4	Waste handling and disposal areas	A.5.b.5	
	500.3.8 & 500.4	On-site storage and disposal of construction materials and waste	A.5.b.5	
	500.3.8 & 500.4	Minimum exposure of storm water to construction materials, equipment, vehicles, waste	A.5.b.5	
	500.6	***Post Construction BMPs***	A.5.b.6	
	500.6.1	Listing or Description of Post-construction BMPs	A.5.b.6	
	500.4	Location of post-construction BMPs	A.5.b.6	
	500.6.2	Parties responsible for long-term maintenance	A.5.b.6	
		Additional Information	A.5.c	
	500.3.1	Description of other pollutant sources and BMPs	A.5.c.1	
	500.3.2	Pre-construction control practices	A.5.c.1	
	500.3.1	Inventory of materials and activities that may pollute storm water	A.5.c.2	
	500.3.8	BMPs to reduce/eliminate potential pollutants listed in the inventory	A.5.c.2	
	300.4	Runoff coefficient (before & after)	A.5.c.3	
	300.4	Percent impervious (before & after)	A.5.c.3	
	Attach. F	Copy of the NOC	A.5.c.4	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	**SWPPP SECTION**	**ITEM**	**GENERAL PERMIT REF.**	**COMMENTS**
	300.3	Construction activity schedule	A.5.c.5	
	300.5	Contact information	A.5.c.6	
	500.4.1	**SOIL STABILIZATION (EROSION CONTROL)**	A.6	
		The SWPPP shall include:	A.6.a-c	
	500.4	Areas of vegetation on site	A.6.a.1	
	500.4	Areas of soil disturbance that will be stabilized during rainy season	A.6.a.2	
	500.4	Areas of soil disturbance which will be exposed during any part of the rainy season	A.6.a.3	
	300.4	Implementation schedule for erosion control measures	A.6.a.4	
	500.3.4	BMPs for erosion control	A.6.b	
	500.3.7	BMPs to control wind erosion	A.6.c	
	500.3.5	**SEDIMENT CONTROL**	**A.8**	
	500.3.5 & 500.4	Description/Illustration of BMPs to prevent increase of sediment load in discharge	A.8	
	300.4, 500.3.5	Implementation schedule for sediment control measures	A.8	
	500.3.6	BMPs to control sediment tracking	A.8	
	500.3.8	**NON-STORM WATER MANAGEMENT**	A.9	
	500.3.8	Description of non-storm water discharges to receiving waters	A.9	
	500.3.8	Locations of discharges	A.9	
	500.3.8	Description of BMPs	A.9	
	300.5	Name and phone number of person responsible for non-storm water management	A.9	
	500.6	**POST-CONSTRUCTION**	A.10	
	500.6.1	Description of post-construction BMPs	A.10	
	500.6.2	Operation/Maintenance of BMPs after project completion (including short-term funding, long-term funding and responsible party)	A.10	
	500.5	**MAINTENANCE, INSPECTIONS, AND REPAIR**	**A.11**	
	300.5, 600.1	Name and phone number of person(s) responsible for inspections	A.11	

SECTION A: STORM WATER POLLUTION PREVENTION PLAN (SWPPP)				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	**SWPPP SECTION**	**ITEM**	**GENERAL PERMIT REF.**	**COMMENTS**
	600.1, Attach. H	Complete inspection checklist: date, weather, inadequate BMPs, visual observations of BMPs, corrective action, inspector's name, title, signature	A.11.a-f	
		OTHER REQUIREMENTS	A.12-16	
	500.7	Documentation of all training	A.12	
	500.8	List of Contractors/Subcontractors	A.13	

SECTION B: MONITORING AND REPORTING REQUIREMENTS				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	**SWPPP SECTION**	**ITEM**	**GENERAL PERMIT REF.**	**COMMENTS**
	600.1	Description of Site Inspection Plans	B.3	
	100.3	Compliance certification (annually 6/15)	B.4	
	600.2	Discharge reporting	B.5	
	600.3	Keep records of all inspections, compliance certifications, and noncompliance reports on site for a period of at least three years	B.6	
	600.4	Sampling and Analysis Plan for Sediment	B.7	
	600.5	Sampling and Analysis Plan for Non-Visible Pollutants	B.8	

SECTION C: STANDARD PROVISIONS FOR CONSTRUCTION ACTIVITIES				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	**SWPPP SECTION**	**ITEM**	**GENERAL PERMIT REF.**	**COMMENTS**
	100.1	Signed SWPPP Certification	C.9,10	

CALTRANS NPDES PERMIT No. CAS000003 REQUIREMENTS				
CHECK IF ADDRESSED N/A IF NOT APPLICABLE	**SWPPP Section**	**ITEM**	**CALTRANS PERMIT REF.**	**COMMENTS**
	500.3 & 500.4	SWPPP references and/or includes permanent and temporary BMPs	H.1.b	
	100 – 600	SWPPP contains all elements required in the State General Permit. CAS000002	H.2.b	
	500.3.8, 500.3.9 & 600.5	SWPPP limits application, generation, & migration of toxic substances	H.6	
	500.3.4 & 500.3.5	Implementation of adequate Erosion and Sediment Controls after construction	H.7	
	100.1 & Attach. F	Copy of the Notice of Construction (NOC)	H.8.a	
	500.3.8	SWPPP contains BMPs for mobile operations (material production or recycling operations) including AC recycling, PCC Recycling, Concrete Mixing, Crushing, & storage of materials that are established by the contractor on the construction site or on other property specifically arranged for by Caltrans.	H.8.b	
	500.4	SWPPP applies to all areas that are directly related to construction including but not limited to staging & storage yards, material borrow areas, or access roads whether or not they reside in CT R/W.	H.8.b	
	500.3.8	The SWPPP contains RWQCB WDR requirements for projects that reuse Aerially Deposited Lead. (Applicable only for projects that reuse ADL soils.)	H.9	

INSTRUCTIONS:

- Refer to the SWPPP/WPCP Instruction document for specific information on the use of the Template. The instruction document is available at: http://www.dot.ca.gov/hq/construc/stormwater/templates.htm
- The title page shall have the following information:
  - ❑ Title: "Stormwater Pollution Prevention Plan";
  - ❑ Construction Project Name;
  - ❑ Caltrans Contract Number;
  - ❑ Identification and address of Lead Agency (Caltrans or Local Agency);
  - ❑ Caltrans' Resident Engineer Name and Telephone Number;
  - ❑ Contractor's Name, Address, Telephone Number and Contact Person;
  - ❑ Job Site Address and Telephone Number, if any;
  - ❑ Name of Contractor's Water Pollution Control Manager (WPCM). This person shall be responsible for SWPPP implementation, inspection and repairs, and shall be available at all times throughout the duration of the project (see also Section 300.5);
- ❑ Name of the company that prepared the SWPPP (if it was prepared by an outside consultant), including name and title of preparer;
- ❑ SWPPP Preparation Date.

REQUIRED TEXT:

STORMWATER POLLUTION PREVENTION PLAN

for

Start Here … Triple Click here to insert PROJECT NAME - then TAB to next field to continue entering project specific information

INSERT CALTRANS CONTRACT NUMBER-THEN TAB TO NEXT FIELD.

Prepared for:

Insert Name of Lead Agency-then TAB.
Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.
Insert City, State, ZIP-then TAB.
Insert Resident Engineer's Name-then TAB.
Insert R.E.'s Telephone Number-then TAB.

Submitted by:
Insert Contractor's Company Name-then TAB.
Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.
Insert City, State, ZIP-then TAB.
Insert Telephone-then TAB.

Insert Owner/Representative's Name-then TAB.

Project Site Address

Insert job site address if any. Press the DELETE key if not and TAB to next field.
Insert job site telephone number, if any. Press the DELETE key if not and TAB to next field.

Contractor's Water Pollution Control Manager

Insert WPCM's Name-then TAB.
Insert Telephone Number(s)-then TAB.

Contractor's Designated Water Pollution Control Inspector (if different from WPCM)

Insert Inspectors Name-then TAB.
Insert Telephone Number(s)-then TAB.

SWPPP Prepared by:

Insert Company Name-then TAB.
Insert Address-then TAB.
Insert City, State, ZIP-then TAB.
Insert Telephone-then TAB
Insert Name and Title of Preparer-then TAB.

SWPPP Preparation Date

Insert Date

INSTRUCTIONS:

- Include the numbers and names for each section of the SWPPP, from Section 100 to Section 600. List the first page number of each subsection.
- Include a Tab for each major section of the SWPPP and for each of the attachments.

REQUIRED TEXT:

Contents

Section 100 SWPPP Certifications and Approval.....18
100.1 Initial SWPPP Certification.....18
100.2 SWPPP Approval.....19
100.3 Annual Compliance Certification.....22
Section 200 SWPPP Amendments..... 23
200.1 SWPPP Amendment Certification and Approval.....23
200.2 Amendment Log 25
Section 300 Introduction and Project Description 27
300.1 Introduction and Project Description 27
300.2 Unique Site Features 27
300.3 Construction Site Estimates.....28
300.4 Project Schedule/Water Pollution Control Schedule 29
300.5 Contact Information/List of Responsible Parties 32
Section 400 References, Other Plans, Permits, and Agreements 34
Section 500 Body of SWPPP 37
500.1 Objectives 37
500.2 Vicinity Map 38
500.3 Pollutant Sources and BMP Identification 39
500.3.1 Inventory of Materials and Activities that May Pollute Stormwater 39
500.3.2 Existing (Pre-Construction) Control Measures 41
500.3.3 Nature of Fill Material and Existing Data Describing the Soil41
500.3.4 Soil Stabilization (Erosion Control) 43
500.3.5 Sediment Control.....51
500.3.6 Tracking Control 57
500.3.7 Wind Erosion Control.....61
500.3.8 Construction Site Management.....65
500.4 Water Pollution Control Drawings (WPCDs) 81
500.5 Construction BMP Maintenance, Inspection and Repair.....83
500.6 Post-Construction Stormwater Management 86

500.6.1 Post-Construction Control Practices 86
500.6.2 Operation/Maintenance after Project Completion 87
500.7 Training 88
500.8 List of Subcontractors 90
Section 600 Monitoring Program and Reports 91
600.1 Site Inspections 91
600.2 Discharge Reporting 92
600.3 Record Keeping and Reports 93
600.4 Sampling and Analysis Plan for Sediment 93
600.4.1 Scope of Monitoring Activities 94
600.4.2 Monitoring Strategy 96
600.4.3 Monitoring Preparation 98
600.4.4 Sample Collection and Handling 100
600.4.5 Sample Analysis 104
600.4.6 Quality Assurance/Quality Control 106
600.4.7 Data Management and Reporting 106
600.4.8 Data Evaluation 107
600.4.9 Change of Conditions 108
600.5 Sampling and Analysis Plan for Non-Visible Pollutants 108
600.5.1 Scope of Monitoring Activities 108
600.5.2 Monitoring Strategy 110
600.5.3 Monitoring Preparation 113
600.5.4 Analytical Constituents 115
600.5.5 Sample Collection and Handling 116
600.5.6 Sample Analysis 120
600.5.7 Quality Assurance/Quality Control 123
600.5.8 Data Management and Reporting 123
600.5.9 Data Evaluation 124
600.5.10 Change of Conditions 124

SWPPP Attachments

Attachment A..... Vicinity Map and Site Map
Attachment B.....Water Pollution Control Drawings
Attachment C…….....Amendments
Attachment D ..... Computation Sheet for Determining Runoff Coefficients
Attachment E.....Computation Sheet for Determining Run-on Discharges
Attachment F ..... Notice of Construction (NOC) / Notice of Intent (NOI)
Attachment G ..... Maintenance, Inspection, and Repair of Construction Site BMPs
Attachment H .....Stormwater Quality Construction Site Inspection Checklist
Attachment I .....Trained Contractor Personnel Log
Attachment J .....Subcontractor Notification Letter and Log
Attachment K..... Notice of Discharge
Attachment L ..... (Intentionally Left Blank)
Attachment M ..... Annual Certification of Compliance Form
Attachment N ..... Other Plans/Permits/Agreements
Attachment O……..... (Intentionally Left Blank)
Attachment P..... Notice of Completion of Construction (NCC) / Notice of Termination (NOT)
Attachment Q …… ..... (Intentionally Left Blank)
Attachment R ..... Sampling Activity Log and Chain-of-Custody Forms
Attachment S.....Pollutant Testing Guidance Table
Attachment T..... Sampling Data Reporting Form
Attachment U ..... Discharge Reporting Log

Section 100
SWPPP Certifications and Approval

100.1 Initial SWPPP Certification

INSTRUCTIONS:

- ❑ Include a Separator and Tab for Section 100 for ready reference.
- ■ The contractor is required by the Special Provisions to prepare and implement the SWPPP, and shall sign and certify the SWPPP in conformance with Section C, Provision 9 of the General Construction Permit (CAS000002, Order No. 99-08-DWQ) and Section M, Provision 10 of the Caltrans Permit (CAS000003, Order No. 99-06-DWQ).
- ■ The SWPPP shall be submitted to the Resident Engineer for review and approval.
- ❑ Fill in the project name and the contract number at the top of the form.
- ❑ Certification shall be signed and dated by Contractor's staff; specifically, the person responsible for overall management of the site, such as a corporate officer or person assigned the responsibility by a corporate officer, according to corporate procedures.
- ❑ Fill in the name, title and telephone number of the person signing the certification.
- ❑ The Notice of Construction (NOC) is to be attached in Attachment F. The completed form will be provided by Caltrans.
- ❑ If the project is being administered by a Local Agency the Notice of Intent (NOI) is to be attached in Attachment F. The contractor or Local Agency is to apply for and provide a copy of the NOI.

REQUIRED TEXT: To be completed by Contractor

Project Name:

Caltrans Contract Number: _____

"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 ensure 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 fine and imprisonment for knowing violations."

_____	_____
Contractor's Signature	Date
_____	_____
Contractor's Name and Title	Contractor's Telephone Number

100.2 SWPPP Approval

INSTRUCTIONS:

- When Caltrans is administering the project (no Local Agency Resident Engineer), the Caltrans Resident Engineer is the authorized representative of the Department for approving, signing, and certifying the SWPPP; in conformance with Section H, Provision 8.b.; and Section M, Provision 10 of the Caltrans Permit (CAS000003, Order No. 99-06-DWQ).
- When a Local Agency is administering the project, then both the Local Agency Resident Engineer and the Caltrans Oversight Engineer must sign the certification and approval.The Local Agency Resident Engineer and the Caltrans Ovesight Engineer are the authorized respresentatives of the Local Agency and the Departement, respectively, for approving, signing, and certifying the SWPPP; in conformance with Section H, Provision 8.b.; and Section M, Provision 10 of the Caltrans Permit (CAS000003, Order No. 99-06-DWQ).
- ❑ The Resident Engineer (and Oversight Engineer if applicable) shall sign and date the approval certification.
- ❑ Print the Resident Engineer's name and telephone number (and Oversight Engineer's name and telephone number if applicable).

Is a Local Agency / Private Entity administering the project?

☐ Yes ☐ No

REQUIRED TEXT WHEN CALTRANS IS ADMINISTERING PROJECT:

The Caltrans Resident Engineer is the authorized representative of the Department for approving, signing, and certifying the SWPPP in conformance with Section H, Provision 8.b; and Section M, Provision 10 of the Caltrans Permit (CAS000003, Order No. 99-06-DWQ). The SWPPP was prepared by the Contractor and submitted for review and approval to the Resident Engineer, pursuant to the Special Provisions, the SWPPP/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 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 (EPA).

For Caltrans Use Only
Resident Engineer's Approval and
Caltrans Certification of the
Stormwater Pollution Prevention Plan

Project Name:

Caltrans Contract Number:

"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 ensure 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 fine and imprisonment for knowing violations."

Resident Engineer's Signature	Date
Resident Engineer's Name	Resident Engineer's Telephone Number

REQUIRED TEXT WHEN LOCAL AGENCY / PRIVATE ENTITY IS ADMINISTERING PROJECT:

The Resident Engineer is the authorized representative of the Local Agency / Private Entity administering the project for approving, signing, and certifying the SWPPP in conformance with Section H, Provision 8.b; and Section M, Provision 10 of the Caltrans Permit (CAS000003, Order No. 99-06-DWQ). The SWPPP was prepared by the Contractor and submitted for review and approval to the Local Agency / Private Entity Resident Engineer and Caltrans Oversight Engineer, pursuant to the Special Provisions, the SWPPP/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 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 (EPA).

For Local Agency / Private Entity Use Only
Resident Engineer's Approval and
Local Agency / Private Entity Certification of the
Stormwater Pollution Prevention Plan

Project Name:

Caltrans Contract Number:
Local Agency / Private
Entity Name

"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 ensure 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 fine and imprisonment for knowing violations."

Resident Engineer's Signature	Date
Resident Engineer's Name	Resident Engineer's Telephone Number

The Caltrans Oversight Engineer is the authorized representative of the Department for approving, signing, and certifying the SWPPP in conformance with Section H, Provision 8.b; and Section M, Provision 10 of the Caltrans Permit (CAS000003, Order No. 99-06-DWQ). The SWPPP was prepared by the Contractor and submitted for review and approval to the Local Agency / Private Entity Resident Engineer and Caltrans Oversight Engineer, pursuant to the Special Provisions, the SWPPP/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 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 (EPA).

For Caltrans Use Only
Oversight Engineer's Approval and
Caltrans Certification of the
Stormwater Pollution Prevention Plan

"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 ensure 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 fine and imprisonment for knowing violations."

Oversight Engineer's Signature	Date
Oversight Engineer's Name	Oversight Engineer's Telephone Number

100.3 Annual Compliance Certification

INSTRUCTIONS:

- Qualified assigned personnel listed by name and contact number in the SWPPP shall certify annually that construction activities comply with the requirements of the Permit and the SWPPP. This Certification is based upon the site inspections required in Section 600.
- The Annual Certification shall be completed by the contractor before June 15 of each year and submitted to the Resident Engineer for approval. Forms for the Annual Certification of Compliance and Resident Engineer Approval of the Annual Certification are provided in Attachment M.
- A blank copy of the Annual Certification of Compliance and Resident Engineer Approval forms shall be included in the SWPPP as Attachment M.
- Completed and signed Annual Compliance Certifications and Resident Engineer Approvals shall be included in this section of the SWPPP following the required text, below.
- Do not complete the Annual Certification during the initial SWPPP approval. Annual certifications are completed by June 15 each year. For those projects that start construction on or after June 15, an Annual Certification will not be required until the following June 15.
- When a Local Agency / Private Entity is administering the project, then both the Local Agency / Private Entity Resident Engineer and the Caltrans Oversight Engineer must sign the approval.

REQUIRED TEXT:

By June 15 of each year, the contractor shall submit an Annual Certification of Compliance to the Resident Engineer (and Oversight Engineer if applicable) stating compliance with the terms and conditions of the Permits and the SWPPP. The Annual Certification of Compliance Form and Resident Engineer Approval Form are included in Attachment M.

Section 200
SWPPP Amendments

200.1 SWPPP Amendment Certification and Approval

INSTRUCTIONS:

- ❑ Include a Separator and Tab for Section 200 for ready reference.
- ■ When changes in the approved SWPPP are required, the contractor shall prepare and certify an amendment and submit it to the Resident Engineer for review and approval.
- ■ The SWPPP shall be amended:
  - Whenever there is a change in construction or operations, which may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4); or
  - If any condition of the Permits is violated or the general objective of reducing or eliminating pollutants in stormwater discharges has not been achieved. If the RWQCB determines that a Permit violation has occurred, the SWPPP shall be amended and implemented within 14 calendar days after notification by the RWQCB;
  - Annually, prior to the defined rainy season, when required by the Contract Special Provisions; and
  - When deemed necessary by the Resident Engineer.
- ■ All SWPPP amendments shall be transmitted in letter format and shall include revised Water Pollution Control Drawing (WPCD) sheets, as appropriate.
- ■ All amendments shall be recorded in the SWPPP amendment log that is located in Section 200.2 of the SWPPP. A copy of the amendment log should also be placed in Attachment C.
- ■ Approved amendments will be inserted into the Contractor's onsite SWPPP in Attachment C. Contractor Certifications and Resident Engineer Approvals for all amendments shall be inserted into Attachment C.
- ■ The following items shall be included in each amendment:
  - Discuss who requested the amendment;
  - Describe the location of proposed change;
  - Describe reason for change;
  - Describe the original BMP proposed, if any;
  - Describe the new BMP proposed; and
  - Describe any existing implemented BMP(s)
- ❑ This SWPPP certification and approval form shall be used as a cover sheet for each amendment.
- ❑ Fill in the Project name and Caltrans contract number.
- ❑ The Contractor shall sign and date the certification form.
- ❑ The Resident Engineer shall sign and date the certification approval form.
- ❑ Print the names and telephone numbers.

EXAMPLE:

The RWQCB has requested the following Amendment:

The concrete washout is to be relocated away from the drainage inlet at Miller Ave. It is now located on the northeast section of the construction site; see revised map. This change will prevent concrete washout water from entering the drainage inlet.

REQUIRED TEXT:

This SWPPP shall be amended:

- Whenever there is a change in construction or operations which may affect the discharge of pollutants to surface waters, groundwater(s), or a municipal separate storm sewer system (MS4); or
- If any condition of the Permits is violated or the general objective of reducing or eliminating pollutants in stormwater discharges has not been achieved. If the RWQCB determines that a Permit violation has occurred, the SWPPP shall be amended and implemented within 14 calendar days after notification by the RWQCB;
- Annually, prior to the defined rainy season, when required by the Contract Special Provisions; and
- When deemed necessary by the Resident Engineer.

The following items shall be included in each amendment:

- Who requested the amendment;
- The location of proposed change;
- The reason for change;
- The original BMP proposed, if any; and
- The new BMP proposed.

The amendments for this SWPPP, along with the Contractor's Certification and the Resident Engineer's Approval, can be found in Attachment C. Amendments are listed in the Amendment Log in Section 200.2 and a copy is also included in Attachment C.

[INSERT ADDITIONAL TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

200.2 Amendment Log

INSTRUCTIONS:

- SWPPP amendment(s) prepared and approved as discussed in Section 200.1 shall be documented in the Amendment Log, which shall be kept in Section 200 of the SWPPP. A copy of the amendment log shall also be included in Attachment C.
- All amendments shall be dated, directly attached to the SWPPP, and listed in the Amendment Log.
- ❑ Enter the project name, and Caltrans contract number at the top of the form.
- ❑ Enter the Amendment number, date, brief description, and name of person who prepared the Amendment in the table.

EXAMPLE:

Amendment No.	Date	Brief Description of Amendment	Prepared By
001	Dec 10, 2000	Grading schedule changed to begin on Feb 10, 2001, and will include additional 2 acres. Amended plans attached to SWPPP.	John Doe, Superintendent

REQUIRED TEXT:

Project Name:

Caltrans Contract Number: _____

Amendment No.	Date	Brief Description of Amendment	Prepared By

Amendment No.	Date	Brief Description of Amendment	Prepared By

Section 300
Introduction and Project Description

300.1 Introduction and Project Description

INSTRUCTIONS:

- ❑ Include a Separator and Tab for Section 300 for ready reference.
- ❑ Provide the project description (county, cities, route and post-mile/kilo-post). Name the receiving waters and describe proximity to receiving waters to which the project will discharge, including surface waters, drainage channels, and drainage systems (identify who owns the drainage system; i.e., municipality or agency.)

EXAMPLE:

The construction project is located in Any County, in Any City, on State Route 42 from Post mile X to Post mile Y. The project will upgrade the westbound two-lane span by replacing the existing substandard steel truss bridge with a four-lane suspension bridge (which includes one HOV lane and a bicycle/pedestrian lane). The receiving water is the Salmon River, and the new suspension bridge consists of two towers in the Strait and a north and south anchorage. The existing maintenance facility will be demolished. This project also includes constructing a vista point at the north end of the bridge and a bicycle lane from the Route 80/29 separation to the south end of the bridge.

REQUIRED TEXT:

[CLICK AND TYPE PROJECT DESCRIPTION HERE]

300.2 Unique Site Features

INSTRUCTIONS:

- ❑ Provide a brief description of any unique site features (water bodies, wetlands, environmentally sensitive areas, endangered or protected species, etc.) and significant or high-risk construction activities that may impact stormwater quality. Include any unique features or activities within or adjacent to water bodies (such as dredging, dewatering, re-use of aerially deposited lead material, large excavations, or work within a water body).

EXAMPLE:

The Salmon River is located within the project limits. A portion of the construction will occur within the river in order to properly construct the towers. The project will also demolish an existing culvert and will replace it with a larger reinforced concrete box within the tributary.

REQUIRED TEXT:

[CLICK AND TYPE PROJECT FEATURES HERE

300.3 Construction Site Estimates

INSTRUCTIONS:

- Provide an estimate of the following site features (Refer also to Attachments D and E):
  - Construction site area (acres);
  - Runoff coefficient before and after construction;
  - Percentage impervious area before and after construction; and
  - Anticipated stormwater run-on to the construction site from off-site and Caltrans right-of- way (Show calculations and include as Attachment E).

EXAMPLE:

The following are estimates of the construction site:

Construction site area:	44 acres
Percentage impervious area before construction:	51.3 % (20.5 acres)
Runoff coefficient before construction [(1), (3)]:	0.68
Percentage impervious area after construction	58.1 % (23.2 acres)
Runoff coefficient after construction [(1), (3)]	0.72
Anticipated stormwater flow onto the construction site [(2)]	33.8 cfs

[(1)] Calculations are shown in Attachment D
[(2)] Calculations are shown in Attachment E.
[(3)] Reference any Hydrology and Hydraulic reports available for the project in Attachments D and E and include in the reference list in Section 400.

REQUIRED TEXT:

The following are estimates of the construction site:

Construction site area	_____	acres
Percentage impervious area before construction	_____	%
Runoff coefficient before construction [(1), (3)]	_____	
Percentage impervious area after construction	_____	%
Runoff coefficient after construction [(1), (3)]	_____	
Anticipated stormwater flow onto the construction site [(2), (3)]	_____	cfs

[(1)] Calculations are shown in Attachment D.
[(2)] Calculations are shown in Attachment E.
[(3)] Reference any Hydrology and Hydraulic reports available for the project in Attachment D and E and also add the reference list in Section 400.

300.4 Project Schedule/Water Pollution Control Schedule

INSTRUCTIONS:

- ❑ Provide a graphical project schedule. Include time for SWPPP review and approval. The schedule shall clearly show how the rainy season relates to soil-disturbing and re-stabilization activities. The schedule shall contain an adequate level of detail to show major activities sequenced with implementation of construction site BMPs, including:
  - ❑ Project start and finish dates, including each stage of the project;
  - ❑ Rainy season dates;
  - ❑ Annual certifications;
  - ❑ Mobilization dates;
  - ❑ Mass clearing and grubbing/roadside clearing dates;
  - ❑ Major grading/excavation dates;
  - ❑ Special dates named in other permits such as Fish and Game and Army Corps of Engineers Permits;
  - ❑ Dates for submittal SWPPP Amendments required by the Special Provisions;
  - ❑ Annual submittal of rainy season implementation schedule as required by the Contract Special Provisions;
  - ❑ Dates for implementation of pre-rainy season temporary soil stabilization and temporary sediment control BMPs, if required by the Contract Special Provisions;
  - ❑ Include 25-, 50-, and 75-percent BMP implementation completion dates;
  - ❑ Rainy season implementation schedule;
    - ❑ Deployment of temporary soil stabilization BMPs;
    - ❑ Deployment of temporary sediment control BMPs;
    - ❑ Deployment of wind erosion control BMPs;
    - ❑ Deployment of tracking control BMPs;
    - ❑ Deployment of non-stormwater BMPs;
    - ❑ Deployment of waste management and materials pollution control BMPs;
  - ❑ Non-rainy season implementation schedule;
    - ❑ Deployment of temporary soil stabilization BMPs;
    - ❑ Deployment of temporary sediment control BMPs;
    - ❑ Deployment of wind erosion control BMPs;
    - ❑ Deployment of tracking control BMPs;
    - ❑ Deployment of non-stormwater BMPs;
    - ❑ Deployment of waste management and materials pollution control BMPs;
  - ❑ Paving, saw-cutting, and any other pavement related operations;
  - ❑ Major planned stockpiling operations;

- ❑ Dates for other significant long-term operations or activities that may plan non-stormwater discharges such as dewatering, grinding, etc; and
- ❑ Final stabilization activities staged over time for each area of the project.

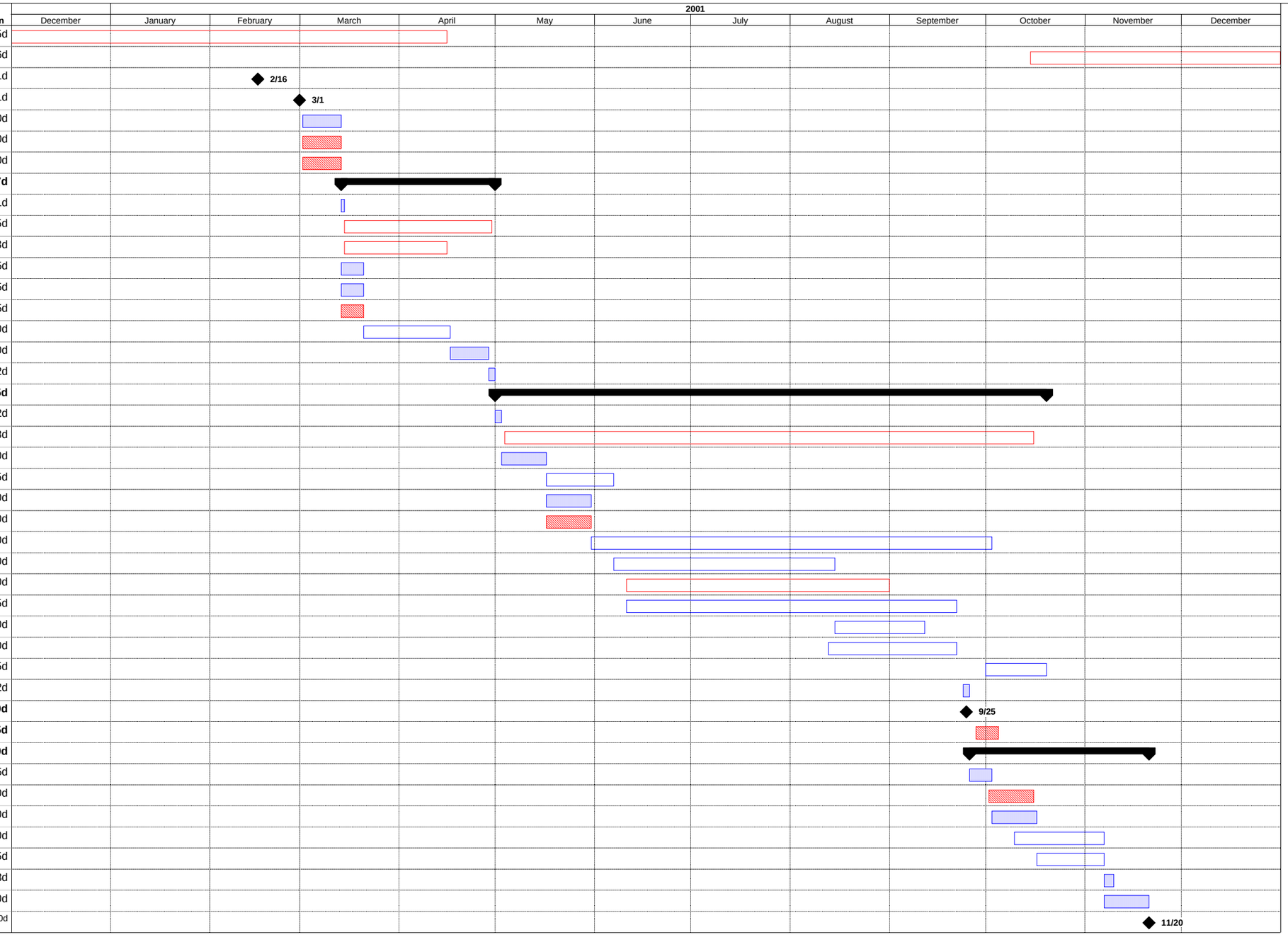
- Note: Projects located in the Lake Tahoe, Truckee River, East Fork Carson River, or West Fork Carson River Hydrologic Units, and projects above 5,000 ft in elevations in the portions of Mono County or Inyo County within the Lahontan RWQCB are not allowed to perform removal of vegetation nor disturbance of existing ground surface conditions between October 15 of each year and May 1 of the following year; except when there is an emergency situation that threatens the public health or welfare, or when the project is granted a variance by the RWQCB Executive Officer.

EXAMPLE: Graphical Schedule

The graphical Water Pollution Control Schedule is provided on the following page.

SAMPLE
WATER POLLUTION CONTROL IMPLEMENTATION SCHEDULE

ID	Task Name	Duration
1	Rainy Season (2000-2001)	135d
2	Rainy Season (2001-2002)	56d
3	SWPPP Approved	1d
4	**Project Start Date**	1d
5	Mobilization	10d
6	Construct Material/Waste Storage Facilities	10d
7	Construct Stabilized Access	10d
8	**Add Temporary Lane in Median (Sta 400 - 900)**	**37d**
9	Median K-rail	1d
10	Install/Maintain Temporary Sediment Controls	35d
11	Install/Maintain Temporary Soil Stabilization	23d
12	Demolish Median	5d
13	PCC Sawcutting	5d
14	Non-storm water BMPs for Sawcutting	5d
15	Median Grading	20d
16	Median Base/ AC Paving	10d
17	Restripe Mainline, Remove K-Rail	2d
18	**Lane Addition (Sta 500-800)**	**125d**
19	K-Rail and Traffic Control	2d
20	Install/Maintain Temporary Sediment Controls	118d
21	Clearing/Grubbing	10d
22	Demolition	15d
23	PCC Sawcutting	10d
24	Non-storm water BMPs for Sawcutting	10d
25	Grading	90d
26	Drainage	50d
27	Install/Maintain Temporary Concrete Washouts	60d
28	Sound Wall Construction	75d
29	Base	20d
30	PCC Paving	30d
31	Permanent Erosion Control/Landscaping	15d
32	Restripe Mainline, Remove K-Rail	2d
33	**Submit Rainy Season Implementation Schedule**	**0d**
34	**Install Pre-Rainy Season Temporary Controls**	**5d**
35	**Remove Temporary Median Lane**	**40d**
36	K-Rail and Traffic Control	5d
37	Install/Maintain Temporary Sediment Controls	10d
38	Demolition	10d
39	Grading	20d
40	Drainage	15d
41	Remove K-Rail	3d
42	Install Permanent Erosion Control Type D	10d
43	**Project Completion**	0d



Implementation of Construction Site BMPs shown in red

Task | Milestone | Rolled Up Task | Rolled Up Progress
Progress | Summary | Rolled Up Milestone

REQUIRED TEXT:

[CLICK AND INSERT GRAPHICAL SCHEDULE (IMAGE FILE FORMAT) OR ADD PAGE BREAKS AS NECESSARY TO KEEP CONSISTENT PAGE NUMBERING AND INSERT HARDCOPY OF SCHEDULE.]

300.5 Contact Information/List of Responsible Parties

INSTRUCTIONS:

- Contractor is required to show the name, address and telephone number(s) of the person(s) responsible for water pollution control during construction. This person is the Water Pollution Control Manager (WPCM).
- The WPCM shall be available at all times throughout the duration of the project.
- Duties of the Contractor's WPCM include but are not limited to:
  - Ensuring full compliance with the SWPPP and the Permit;
  - Implementing all elements of the SWPPP and Special Provisions, including but not limited to:
    - Implementing prompt and effective erosion and sediment control measures; and
    - Implementing all non-stormwater management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than stormwater are discharged in quantities which, will have an adverse effect on receiving waters or storm drain systems; etc.
  - Conducting pre-storm inspections;
  - Conducting post-storm inspections;
  - Conducting storm event inspections;
  - Conducting routine inspection as specified in the Special Provisions or described in the SWPPP;
  - Preparing annual compliance certification;
  - Ensuring elimination of all unauthorized discharges;
  - Mobilizing crews in order to make immediate repairs to the control measures (the Contractor's WPCM shall be assigned authority by the Contractor to mobilize crews);
  - Coordinating with the Resident Engineer to assure all of the necessary corrections/repairs are made immediately, and that the project complies with the SWPPP, the Permit and approved plans at all times; and
  - Submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges.
- Provide the name and telephone number(s) of the Contractor's WPCM. The Contractor's WPCM shall have primary responsibility and significant authority for the implementation, maintenance, inspection and amendments to the approved SWPPP.
- ❑ If anyone other than the Contractor's WPCM is responsible for any of these duties, enter name, address, telephone number(s) of the person(s) and the duty or duties for which they are responsible and edit the template below as needed. Also provide training records of other contractor designated responsible water pollution control personnel in Attachment I.

REQUIRED TEXT:

The Water Pollution Control Manager (WPCM) assigned to this project is:

[Insert WPCM's Name-then TAB.]

[Insert Telephone Number(s)-then TAB.]

[Insert Contractor's Company Name-then TAB.]

[Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.]

[Insert City, State, ZIP-then TAB.]

The WPCM shall have primary responsibility and significant authority for the implementation, maintenance, inspection and amendments to the approved SWPPP. The WPCM will be available at all times throughout duration of the project. Duties of the Contractor's WPCM include but are not limited to:

Ensuring full compliance with the SWPPP and the Permit;

Implementing all elements of the SWPPP, including but not limited to:

- Implementing prompt and effective erosion and sediment control measures; and
- Implementing all non-stormwater management, and materials and waste management activities such as: monitoring discharges (dewatering, diversion devices); general site clean-up; vehicle and equipment cleaning, fueling and maintenance; spill control; ensuring that no materials other than stormwater are discharged in quantities, which will have an adverse effect on receiving waters or storm drain systems, etc.;

Conducting pre-storm inspections;

Conducting post-storm inspections;

Conducting storm event inspections;

Conducting routine inspections as specified in the Special Provisions or described in the SWPPP;

Preparing annual compliance certification;

Ensuring elimination of all unauthorized discharges;

Mobilizing crews in order to make immediate repairs to the control measures (the Contractor's WPCM shall be assigned authority by the Contractor to mobilize crews);

Coordinating with the Resident Engineer to assure all of the necessary corrections/repairs aremade immediately, and that the project complies with the SWPPP, the Permit and approved plans at all times; and

Submitting Notices of Discharge and reports of Illicit Connections or Illegal Discharges.

[INSERT ADDITIONAL RESPONSIBILITIES AND/OR NAMES HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

Section 400
References, Other Plans, Permits, and Agreements

INSTRUCTIONS:

- ❑ Include a Separator and Tab for Section 400 for ready reference.
- ❑ Identify and prepare a list of the documents referenced in the SWPPP. Contract Plans and Specifications, reports, design, and stormwater management-related documents used to prepare the SWPPP shall also be included in the references.
- Documents that shall be referenced are:
  - ❑ All permits that apply to the project (Federal, state and local), such as Fish and Game, U.S. Army Corps of Engineers, DTSC Aerially Deposited Lead Reuse Variance, local RWQCB Permits or specific requirements, etc.
- Referenced materials may also include:
  - ❑ Onsite project information such as the Contract Plans and Specifications, Geotechnical Report, Drainage Report, Stormwater Data Report, District-prepared Conceptual SWPPP, other reports provided by the owner, regulatory guidance from federal or state agencies, and published technical specifications.
- The reference for each document shall include:
  - ❑ Complete name of the referenced document;
  - ❑ Number of the document (if applicable);
  - ❑ Author;
  - ❑ Date Published;
  - ❑ Document date/revision that applies
- Referenced documents shall be kept onsite and be readily available for review.
- The SWPPP shall incorporate appropriate elements of other plans or permits required by local, State, or Federal agencies.
- Include a copy of the Caltrans Statewide Permit No. CAS000003, and the General Permit No. CAS000002 in Attachment N,
- Describe any special requirements for each permit. Insert additional bullets as needed. Delete bullets if not needed.
- Include a copy of all other plans/permits/agreements in Attachment N of the SWPPP.

EXAMPLE:

The following documents are made a part of this SWPPP by reference:

- Standard Plans and Standard Specifications, dated May 2006
- Contract Plans and Specifications No. xx-xxxxxx

- SWRCB Order No. 99-06-DWQ, NPDES No. CAS000003 ("Permit"), National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation. July 15, 1999.

- SWRCB Order No. 99-08-DWQ, NPDES General Permit No. CAS000002 ("General Permit"), WDRs for Discharges of Storm Water Runoff Associated with Construction Activity, August 19, 1999.

- Modification of SWRCB Order 99-08-DWQ, NPDES General Permit No. CAS000002 ("General Permit"), WDRs for Discharges of Storm Water Runoff Associated with Construction Activity to include Small Construction Activity (One to Five Acres).

- SWRCB Resolution No. 2001-046, "Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General *Permit For Storm Water Discharges Associated With Construction Activity (CGP),*" to amend the monitoring provisions of the General Permit for sampling and analysis requirements.

- Caltrans Statewide Storm Water Management Plan (SWMP), dated May, 2003.

- Caltrans SWPPP/WPCP Preparation Manual, dated May 2007.

- RWQCB, Los Angeles Region, Water Quality Control Plan, adopted June 13, 1994.

- Conceptual Stormwater Pollution Prevention Plan (CSWPPP) prepared for the Division of Toll Bridge Program, Contract No. 04-013014. Prepared by California Department of Transportation, District 04, Division of Toll Bridge Engineering Program, Environmental Engineering Branch, October 1999.

- Storm Water Management for Construction Activities – Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-005, October 1992.

- Caltrans "Construction Site Storm Water Quality Sampling Guidance Manual" (CTSW-RT-03-116.31.30), December 2003.

- Caltrans "Water Quality Data-Reporting Protocols" (CTSW-RT-03-095.51.42), November 2003.

Attachment N includes copies of the Caltrans Statewide Permit, the Construction General Permit, and other local, state, and federal plans and permits. Following is a list of the other local, state, and federal plans and permits included in Attachment N:

- RWQCB, Los Angeles Region, Waiver of Clean Water Act Section 401 Water Quality Certification, dated xx/xx/xx.

- US Army Corps of Engineers, Clean Water Act Section 404, Nationwide Permit 26-authorization letter, dated xx/xx/xx.

- California Department of Fish and Game Streambed Alteration Agreement II 564-xx, dated.xx/xx/xx.

REQUIRED TEXT:

The following documents are made a part of this SWPPP by reference:

- Standard Plans and Standard Specifications, dated May 2006.

- Contract Plans and Specifications No. [INSERT NUMBER[, dated [INSERT DATE], prepared by [CALTRANS OR OTHER ENTITY PREPARING PLANS].

- SWRCB Order No. 99-06-DWQ, NPDES No. CAS000003 ("Permit"), National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans), July 1999.

- SWRCB Order No. 99-08-DWQ, NPDES General Permit No. CAS000002 ("General Permit"), WDRs for Discharges of Storm Water Runoff Associated with Construction Activity, August 1999.

- Modification of SWRCB Order 99-08-DWQ, NPDES General Permit No. CAS000002 ("General Permit"), WDRs for Discharges of Storm Water Runoff Associated with Construction Activity to include Small Construction Activity (One to Five Acres).

- SWRCB Resolution No. 2001-046, "Modification of Water Quality Order 99-08-DWQ State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) General *Permit For Storm Water Discharges Associated With Construction Activity (CGP),*" to amend the monitoring provisions of the General Permit for sampling and analysis requirements.

- Caltrans Statewide Storm Water Management Plan (SWMP), dated [TYPE MONTH AND YEAR HERE].
- Caltrans SWPPP/WPCP Preparation Manual, dated [TYPE MONTH AND YEAR HERE].

- [CLICK AND TYPE TO IDENTIFY APPLICABLE RWQCB BASIN PLAN]

- [CLICK AND TYPE OTHER REFERENCES HERE]

Attachment N includes copies of the Caltrans Statewide Permit, the Construction General Permit and other local, state, and federal plans and permits. Following is a list of the other local, state, and federal plans and permits included in Attachment N:

- [INSERT NAME(S), DATE(S) AND SOURCES OF OTHER LOCAL, STATE OR FEDERAL PLANS OR PERMITS HERE]

Section 500
Body of SWPPP

500.1 Objectives

INSTRUCTIONS:

- ❑ Include a Separator and Tab for Section 500 for ready reference.
- ■ The six primary SWPPP objectives are described in the Construction General Permit and are shown below in the "required text" section. Pollutant source identification and BMP selections shall be developed in the body of the SWPPP to support the SWPPP objectives.
- ■ Note: Information on the applicable Permit number and issuing agency is specified in the Special Provisions.

REQUIRED TEXT:

This SWPPP has six main objectives:

- Identify all pollutant sources, including sources of sediment that may affect the quality of stormwater discharges associated with construction activity (stormwater discharges) from the construction site;
- Identify non-stormwater discharges;
- Identify, construct, implement in accordance with a time schedule, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction;
- Develop a maintenance schedule for BMPs installed during construction designed to reduce or eliminate pollutants after construction is completed (post-construction BMPs);
- Identify a sampling and analysis strategy and sampling schedule for discharges from construction activity which discharge directly into water bodies listed on Attachment 3 of the Construction General Permit (Clean Water Act Section 303(d) [303(d)] Water Bodies listed for Sedimentation); and
- For all construction activity, identify a sampling and analysis strategy and sampling schedule for discharges that have been discovered through visual monitoring to be potentially contaminated by pollutants not visually detectable in the runoff.

This SWPPP conforms with the required elements of the Permit and with the required elements of the General Permit issued by the State of California, State Water Resources Control Board (SWRCB). This SWPPP will be modified and amended to reflect any amendments to the Permits, or any changes in construction or operations that may affect the discharge of pollutants from the construction site to surface waters, groundwaters, or the municipal separate storm sewer system (MS4). The SWPPP will also be amended if it is in violation of any condition of the Permit or has not achieved the general objective of reducing pollutants in stormwater discharges. The SWPPP shall be readily available onsite for the duration of the project.

500.2 Vicinity Map

INSTRUCTIONS:

- The General Permit requires that both a vicinity and site map be included in the SWPPP.
- ❑ The Vicinity Map shall be a 8-1/2" x 11" color copy of a USGS map or equal and shall extend approximately one-quarter mile beyond the property boundaries of the construction site (an 11" x 17" may be used if needed). Insert the vicinity map as Attachment A and place a reference in Section 500.2. The Office of Water Programs, Water Quality Planning Tool website can be used to obtain images of USGS topographic maps by selecting the 'Post Miles' option on the webpage at: http://stormwater.water-programs.com/
- ❑ To meet the site map requirement, insert a reduced copy (8-1/2" x 11" or 11" x 17") of the project's Title Sheet in Attachment A and make reference to it in Section 500.2.
- ❑ Provide a brief narrative description of the vicinity to support the map in Attachment A. Describe important features, drainage areas, or receiving waters that could not be shown on the map.
- The vicinity map shall show:
  - ❑ Outline of the site's perimeter;
  - ❑ Easily identifiable major roadways;
  - ❑ Geographic features or landmarks;
  - ❑ Water bodies within or adjacent to the construction limits;
  - ❑ Construction site perimeter;
  - ❑ Staging areas and storage yards;
  - ❑ Known wells;
  - ❑ Outline of the offsite drainage area(s) that discharge into the construction site;
  - ❑ Identification of anticipated discharge location(s) where the construction site's stormwater discharges to a municipal separate storm sewer system or other water body;
  - ❑ Other geographic features surrounding the site,;and
  - ❑ General topography.

REQUIRED TEXT:

The construction project vicinity map showing the project location, surface water boundaries, geographic features, construction site perimeter, staging areas, storage yards, and general topography, is located in Attachment A. The project's Title Sheet provides more detail regarding the project location and is also included in Attachment A.

[INSERT A BRIEF NARRATIVE DESCRIPTION OF THE VICINITY TO SUPPORT THE MAP IN ATTACHMENT A. DESCRIBE IMPORTANT FEATURES, DRAINAGE AREAS, OR RECEIVING WATERS THAT COULD NOT BE SHOWN ON THE MAP. OTHERWISE DELETE THESE LINES.]

500.3 Pollutant Sources and BMP Identification

500.3.1 Inventory of Materials and Activities that May Pollute Stormwater

INSTRUCTIONS:

- ❑ List all construction materials that will be used and construction activities that will have the potential to contribute to the discharge of pollutants to stormwater.
- ❑ List all construction activities that have the potential to contribute sediment to stormwater discharges.
- ❑ Insert as many bullets as necessary to complete the inventory.

EXAMPLE:

The following is a list of construction materials that will be used and activities that will be performed that will have the potential to contribute pollutants, other than sediment, to stormwater runoff (control practices for each activity are identified on the WPCDs provided in Attachment B and/or in Sections 500.3.4 through 500.3.8.2):

- Vehicle fluids, including oil, grease, petroleum, and coolants;
- Asphaltic emulsions associated with asphalt-concrete paving operations;
- Cement materials associated with PCC paving operations, drainage structures, median barriers, and bridge construction;
- Base and subbase material;
- Joint and curing compounds;
- Concrete curing compounds (e.g. methacrylate and epoxy resin products);
- Paints;
- Solvents, thinners, acids;
- Sandblasting materials;
- Mortar Mix;
- Raw landscaping materials and wastes (topsoil, plant materials, herbicides, fertilizers, pesticides, mulch);
- BMP materials (sandbags, liquid copolymer);
- Treated lumber (materials and wastes);
- PCC rubble;
- Masonry block rubble; and
- General litter.

Potential non-stormwater and waste management related discharges are described in Section 500.3.8.1 and 500.3.8.2, respectively.

The following is a list of construction activities that have the potential to contribute sediment to stormwater discharges include (control practices for each activity are identified on the WPCDs provided in Attachment B and/or in Sections 500.3.4 through 500.3.7):

- Clearing and grubbing operations;
- Grading operations;
- Soil import operations;
- Utility excavation operations;
- Sandblasting operations; and
- Landscaping operations

Sections 500.3.4 to 500.3.8.2 lists all Best Management Practices (BMPs) that are contract requirements, including details used for this project. Implementation and location of BMPs, including details, are shown on the WPCDs in Attachment B. Narrative descriptions of BMPs to be used during the project are listed by category in each of the following SWPPP sections.

REQUIRED TEXT:

The following is a list of construction materials that will be used and activities that will be performed that will have the potential to contribute pollutants, other than sediment, to stormwater runoff (control practices for each activity are identified on the WPCDs provided in Attachment B and/or in Sections 500.3.4 through 500.3.8.2):

- [LIST]

Potential non-stormwater and waste management related discharges are described in Section 500.3.8.1 and 500.3.8.2, respectively.

The following is a list of construction activities that have the potential to contribute sediment to stormwater discharges include: (control practices for each activity are identified on the WPCDs provided in Attachment B and/or in Sections 500.3.4 through 500.3.7):

- [LIST]

[INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

Sections 500.3.4 to 500.3.8.2 lists all Best Management Practices (BMPs) that are contract requirements, including details used for this project. Implementation and location of BMPs, including details, are shown on the WPCDs in Attachment B. Narrative descriptions of BMPs to be used during the project are listed by category in each of the following SWPPP sections.

500.3.2 Existing (Pre-Construction) Control Measures

INSTRUCTIONS:

- ❑ Identify the existing control measures in place prior to construction. Pre-construction control measures may include any measures used to reduce erosion, sediment or other pollutants in stormwater discharges. Pre-construction control measures may include but not be limited to: Detention basins, infiltration basins, sediment basins, oil water separators, bridge slope protection, rock slope protection, existing erosion control, existing landscaping, lined ditches, energy dissipaters etc.
- ❑ Describe how the existing control measures will be impacted by the project and how these existing measures will be incorporated into or modified during project implementation.

EXAMPLE:

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

- Detention basin located at the southeast end of the project. This basin was designed as a combination flood control and permanent treatment control measure. It is anticipated that the basin will be used as a temporary sediment basin during construction, and will be restored to original condition prior to project completion.
- Slopes under the existing bridge are protected with concrete. No disturbance to these slopes is anticipated.
- There are two existing slopes that have permanent rock slope protection; they are shown on WPCD-6. No disturbance is anticipated on these slopes.

REQUIRED TEXT:

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

- [LIST]

[INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

500.3.3 Nature of Fill Material and Existing Data Describing the Soil

INSTRUCTIONS:

- ❑ Describe the conditions of the fill material and the soils at the construction site (i.e., types of soils, groundwater location and conditions, dewatering operations that may be necessary, etc.). A general description can usually be found in the project materials report or geotechnical report.
- ❑ Show and/or describe existing site features that, as a result of known past usage, may contribute pollutants to stormwater, (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site). Review the contract documents and associated environmental documents to determine the known site contaminants and list them in this section.

EXAMPLE:

Existing site features that, as a result of known past usage, may contribute pollutants to stormwater, (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site) include:

- This site includes aerially deposited lead located at……..

REQUIRED TEXT:

[DESCRIBE CONDITIONS OF FILL MATERIALS AND EXISTING SOILS AT THE PROJECT SITE]

Existing site features that, as a result of past usage, may contribute pollutants to stormwater (e.g., toxic materials that are known to have been treated, stored, disposed, spilled, or leaked onto the construction site) include:

- [LIST]

[INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

BMP SELECTION PROCESS

INSTRUCTIONS FOR SECTIONS 500.3.4 TO 500.3.8:

The BMP selection process is an iterative process that first identifies potential pollutant sources and then identifies the BMPs necessary to reduce or eliminate pollutant discharges from the site.

- ❑ Identify all contract required BMPs and any other BMPs required by the contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications,for each section. If a non-standard BMP will be used identify it in the BMP implementation table and provide a narrative description of its use and implementation.
- ❑ The example text provided in Sections 500.3.4 to 500.3.8 and the example WPCDs provided in Attachment B are provided only as an examples. Copying example text for project specific basis does not necessarily meet the requirements of the NPDES Permits referenced in Section 1.2.2 of the SWPPP/WPCP Preparation Manual.
- ❑ Select BMPs to eliminate or reduce the pollutants identified in the inventory list (Section 500.3.1). Complete the BMP implementation tables in each of the following sections:

  500.3.4 Soil Stabilization (Erosion Control)

  500.3.5 Sediment Control

  500.3.6 Tracking Control

  500.3.7 Wind Erosion Control

  500.3.8 Construction Site Management (CSM)

  500.3.8.1 Non-Stormwater Control

  500.3.8.2 Waste Management and Materials Pollution Control
- ❑ Show the selected BMPs on the WPCDs. Use the instructions in Section 500.4 to confirm that all WPCD requirements are included. Provide a narrative description of the BMPs selected in the appropriate section and how they will be incorporated into the project.

500.3.4 Soil Stabilization (Erosion Control)

INSTRUCTIONS:

- Soil stabilization consists of source control measures that are designed to prevent soil particles from detaching and becoming suspended in stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding the soil particles.

- Described below is the sequence of steps that shall be used to identify soil stabilization BMPs to be included in the SWPPP.

  Step 1: Incorporate the temporary soil stabilization (erosion control) BMPs that are described in:

  - Contract Special Provisions;
  - Contract Plans;
  - Standard Plans; and
  - Standard Specifications.

If the BMPs required in Step 1 are inadequate to address soil stabilization requirements, then:

Step 2: Incorporate the temporary soil stabilization (erosion control) BMPs using one or more of the Caltrans minimum requirements listed in Table 1-1 of the SWPPP/ WPCP Preparation Manual.

Step 3: If the BMPs selected from Steps 1 and 2 are inadequate to address soil stabilization requirements, then incorporate the temporary soil stabilization (erosion control) BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the Construction Site Best Management Practices (BMPs) Reference Manual.

- ❑ For Steps 1 through 3 above, the tables and guidance in the SWPPP/WPCP Preparation Manual, Sections 1.3 through 1.4 and Appendix D may be used to help identify the soil stabilization BMPs that may be required for the project.
- ❑ Complete the BMP implementation table in this section to indicate the temporary Soil Stabilization BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable check "Not Used" and enter a brief reason. Include non-standard or alternative BMPs selected for the project in the BMP implementation table.
- ❑ Show selected temporary soil stabilization BMPs on the WPCDs in Attachement B. Show BMPs used to divert offsite drainage around and/or through the construction project on the WPCDs.
- ❑ Provide a narrative description of temporary soil stabilization BMPs that can not be adequately identified on the WPCDs. Give a general approach on how temporary soil stabilization BMPs will be implemented on the project.
- ❑ Discuss the onsite availability of temporary soil stabilization materials (materials kept for temporary soil stabilization BMPs) and proposed mobilization and implementation of temporary soil stabilization BMPs in the event of a predicted storm. Sufficient material(s) needed to install temporary soil stabilization BMPs necessary to completely protect the exposed portions (disturbed soil area) of the site from erosion and to prevent sediment discharges shall be stored on site. Areas that have already been protected from erosion using temporary or permanent physical stabilization or established vegetation stabilization BMPs are not considered to be "exposed DSAs" for purposes of this requirement.

EXAMPLE:

Soil Stabilization, also referred to as erosion control, is a source control measure that is designed to prevent soil particles from detaching and becoming transported in the stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding the soil particles. This project will incorporate the minimum temporary soil stabilization requirements, temporary soil stabilization measures required by the contract documents, and other measures selected by the contractor. The steps outlined in the instructions for this section for identifying soil stabilization BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B.

This construction project will implement the following practices to assure effective temporary and final soil stabilization (erosion control) during construction:

1) Preserve existing vegetation where required and when feasible.
2) Apply temporary soil stabilization (erosion control) to remaining active and non-active areas as required by the Contract Specifications and Special Provisions, and the SWPPP/WPCP Preparation Manual, Appendix D. Reapply as necessary to maintain effectiveness.

3) Implement temporary soil stabilization measures at regular intervals throughout the defined rainy season to achieve and maintain the contract's disturbed soil area requirements. When the Contract Special Provisions require it, temporary soil stabilization BMPs will be implemented 20 days prior to the defined rainy season.
4) Stabilize non-active areas within 14 days of cessation of construction activities or one day prior to all predicted rain events, whichever occurs first.
5) Control erosion in concentrated flow paths by applying erosion control blankets, check dams, erosion control seeding, and lining swales with plastic as required in the Special Provisions and/or as shown on plans.
6) Apply seed to areas deemed substantially complete by the Resident Engineer during the defined rainy season.
7) At completion of construction, apply permanent erosion control to all remaining disturbed soil areas as required in the Special Provisions.

Sufficient soil stabilization materials shall be maintained onsite to allow implementation in conformance with Caltrans requirements and described below. This includes implementation requirements for active areas and non-active areas that require deployment before the onset of rain.

The following soil stabilization BMP implementation table indicates the BMPs that shall be implemented to control erosion on the construction site. Locations and details of temporary soil stabilization BMPs are shown on the WPCDs in Attachment B. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SOIL STABILIZATION BMPs

CONSTRUCTION BMP ID NO [1]	BMP NAME	MINIMUM REQUIRE-MENT [3]	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SS-1	Scheduling	✓	☒	☒	☐	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	✓	☒	☒	☐	
SS-3	Temporary Hydraulic Mulch (Bonded Fiber Matrix)	✓[2]	☐	☐	☒	Straw Mulch Used
	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)	✓[2]	☐	☐	☒	Straw Mulch Used
SS-4	Temporary Erosion Control (With Temporary Seeding)	✓[2]	☐	☐	☒	Straw Mulch used
SS-5	Temporary Soil Stabilizer	✓[2]	☐	☐	☒	Straw Mulch Used
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	✓[2]	☒	☒	☐	
SS-7	Temporary Erosion Control Blanket (On Slope)	✓[2]	☐	☐	☒	N/A
	Temporary Erosion Control Blanket (In swale or ditch)		☒	☒	☐	
SS-7	Temporary Cover (Plastic Covers)	✓[2]	☒	☒	☐	
SS-8	Temporary Mulch (Wood)		☐	☐	☒	Straw Mulch Used
SS-9	Earth Dikes / Drainage Swales & Lined Swales		☐	☐	☒	Not required for project
SS-10	Outlet Protection / Velocity Dissipation Devices		☐	☐	☒	Not required for project
SS-11	Slope Drains		☐	☐	☒	Not required for project
SS-12	Streambank Stabilization		☐	☐	☒	Not required for project

TEMPORARY SOIL STABILIZATION BMPs			
ALTERNATIVE SOIL STABILIZATION BMPs USED[4] ☐ Yes ☐ No			IF USED, STATE REASON
CONSTRUCTION BMP ID NO [1]	BMP NAME		

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] The Contractor shall ensure implementation of one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy and non-rainy season requirements.
[3] Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
[4] Use of alternative BMPs will require writtern approval by the Resident Engineer.

SS-1, SS-2 Scheduling and Preservation of Existing Vegetation

- The project schedule will sequence construction activities with the installation of both soil stabilization and sediment control measures. BMPs will be deployed in a sequence to follow the progress of grading and construction. The construction schedule will be arranged as much as practicable to leave existing vegetation undisturbed until immediately prior to grading.

SS-6 Straw Mulch

- Straw mulch will be applied to the disturbed areas adjacent to excavations and on shallow slopes surrounding the site. See the WPCDs in Attachment B of this SWPPP for locations where straw mulch will be used.

SS-7 Geotextiles, Plastic Covers and Erosion Control Blankets/Mats

- Geotextile blankets will be used to provide temporary and permanent stabilization for the flow line of the vegetated swale on the western boundary of the project.

- Polyethylene covers will be used throughout the project area to cover small exposed soil areas prior to forecast storm events, and anchored to prevent damage by wind.

REQUIRED TEXT:

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 minimum temporary soil stabilization requirements, temporary soil stabilization measures required by the contract documents, and other measures selected by the contractor. The steps outlined in the instructions for this section for identifying soil stabilization BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B.

This project will implement the following practices for effective temporary and final soil stabilization during construction:

1) Preserve existing vegetation where required and when feasible.
2) Apply temporary soil stabilization (erosion control) to remaining active and non-active areas as required by the Contract Specifications and Special Provisions and the SWPPP/WPCP Preparation Manual, Tables 1-3 and 1-4, and Appendix D. Reapply as necessary to maintain effectiveness.
3) Implement temporary soil stabilization measures at regular intervals throughout the defined rainy season to achieve and maintain the contract's disturbed soil area requirements. When the Contract Special Provisions require it, temporary soil stabilization will be implemented 20 days prior to the defined rainy season.
4) In accordance with Table 1-3 of the SWPPP/WPCP Preparation Manual, stabilize non-active areas within 14 days of cessation of construction activities or one day prior to all predicted rain events, whichever comes first.
5) Control erosion in concentrated flow paths by applying erosion control blankets, check dams, erosion control seeding, and lining swales as required in the Special Provisions and/or as shown on plans.
6) Apply seed to areas deemed substantially complete by the Resident Engineer during the defined rainy season.
7) At completion of construction, apply permanent erosion control to all remaining disturbed soil areas as required in the Special Provisions and/or as shown on plans.

Sufficient soil stabilization materials will be maintained onsite to allow implementation in conformance with Caltrans requirements and 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 implementation table indicates the BMPs that shall be implemented to control erosion on the construction site. Locations and details of temporary soil stabilization BMPs are shown on the WPCDs in Attachment B. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SOIL STABILIZATION BMPs

CONSTRUCTION BMP ID NO (1)	BMP NAME	MINIMUM REQUIRE-MENT (3)	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SS-1	Scheduling	✓	☐	☐	☐	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	✓	☐	☐	☐	
SS-3	Temporary Hydraulic Mulch (Bonded Fiber Matrix)	✓(2)	☐	☐	☐	
	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)	✓(2)	☐	☐	☐	
SS-4	Temporary Erosion Control (With Temporary Seeding)	✓(2)	☐	☐	☐	
SS-5	Temporary Soil Stabilizer	✓(2)	☐	☐	☐	
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	✓(2)	☐	☐	☐	
SS-7	Temporary Erosion Control Blanket (On Slope)	✓(2)	☐	☐	☐	
	Temporary Erosion Control Blanket (In swale or ditch)		☐	☐	☐	
SS-7	Temporary Cover (Plastic Covers)	✓(2)	☐	☐	☐	
SS-8	Temporary Mulch (Wood)		☐	☐	☐	
SS-9	Earth Dikes / Drainage Swales & Lined Swales		☐	☐	☐	
SS-10	Outlet Protection / Velocity Dissipation Devices		☐	☐	☐	
SS-11	Slope Drains		☐	☐	☐	
SS-12	Streambank Stabilization		☐	☐	☐	

	TEMPORARY SOIL STABILIZATION BMPs		
ALTERNATIVE SOIL STABILIZATION BMPs USED[4] ☐ Yes ☐ No			IF USED, STATE REASON
CONSTRUCTION BMP ID NO [1]	BMP NAME		

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] The Contractor shall ensure implementation of one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy and non-rainy season requirements.
[3] Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
[4] Use of alternative BMPs will require writtern approval by the Resident Engineer.

[INSERT ADDITIONAL NARRATIVE TEXT FOR SOIL STABILIZATION HERE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

500.3.5 Sediment Control

INSTRUCTIONS:

- Sediment controls are used to complement and enhance the selected soil stabilization measures. Sediment controls are designed to intercept runoff and capture suspended soil particles through a settlement or filtration process.

- Described below is the sequence of steps that shall be used to identify temporary sediment control BMPs to be included in the SWPPP.

Step 1: Incorporate the temporary sediment control BMPs that are described in:

- Contract Special Provisions;
- Contract Plans;
- Standard Plans; and
- Standard Specifications.

If the sediment control BMPs required in Step 1 are inadequate to address temporary sediment control requirements, then:

Step 2: Incorporate the temporary sediment control BMPs using one or more of the Caltrans minimum requirements listed in Table 1-1 of the SWPPP/ WPCP Preparation Manual.

Step 3: If the sediment control BMPs selected from Steps 1 and 2 are inadequate to address temporary sediment control requirements, then incorporate the temporary sediment control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the Construction Site Best Management Practices (BMPs) Reference Manual.

- ❑ For Steps 1 through 3 above, the tables and guidance in the SWPPP/WPCP Preparation Manual, Sections 1.3 through 1.4 may be used to help identify the sediment control BMPs that may be required for the project.
- ❑ Complete the BMP imlementation tables in this section to indicate the temporary sediment control BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable check “Not Used” and enter a brief reason. Include non-standard or alternative BMPs selected for the project in the BMP implementation checkist.
- ❑ Show selected temporary sediment control BMPs with detail on the WPCDs in Attachement B. Show BMPs used to divert offsite drainage around and/or through the construction project on the WPCDs.
- ❑ Provide a narrative description of temporary sediment control BMPs. Give a general approach on how temporary sediment control BMPs will be implemented on the project at the draining perimeter of disturbed soil areas, at the toe of slopes, and at inlets and outfall areas at all times.
- ❑ Discuss the onsite availability of temporary sediment control materials (materials kept for temporary sediment control BMPs) and proposed mobilization and implementation of temporary sediment control BMPs in the event of a predicted storm. A minimum of 10% of the installed quantities of sediment control BMPs is required to be maintained onsite as standby sediment control BMPs that may be installed to prevent sediment discharges from exposed portions of the site shall be stored on site.

EXAMPLE:

Sediment controls are structural measures that are intended to complement and enhance the 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 minimum temporary sediment control requirements, temporary sediment control measures required by the contract documents, and other measures selected by the contractor. The steps outlined in the instructions for this section for identifying sediment control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B.

Sediment control BMPs will be installed at all appropriate locations along the site perimeter and at all operational internal inlets to the storm drain system at all times during the rainy season. During the non-rainy season, adequate sediment control materials will be available to control sediment discharges at the downgrade perimeter and operational inlets in the event of a predicted storm.

Temporary sediment control materials, equivalent to 10% of the installed quantities on the site during the rainy and non-rainy seasons will be maintained onsite throughout the duration of the project for implementation in the event of predicted rain, 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.

Prior to the opening of a new DSA in the rainy season, additional temporary sediment control materials necessary to protect this DSA will be stored onsite.

The following sediment control BMP implementation table indicates the BMPs that shall be implemented to control sediment on the construction site. Locations and details of temporary Sediment control BMPs are shown on the WPCDs in Attachment B. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SEDIMENT CONTROL BMPs

CONSTRUCTION BMP ID NO[1]	BMP NAME	MINIMUM REQUIRE-MENT [3]	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SC-1	Temporary Silt Fence	✓[2]	☒	☒	☐	
SC-2	Temporary Sediment Basin		☐	☐	☒	Linear Project with no area for basin
SC-3	Temporary Sediment Trap		☐	☐	☒	Linear Project with no area for a sediment trap
SC-4	Temporary Check Dam		☒	☒	☐	
SC-5	Temporary Fiber Rolls	✓[2]	☒	☒	☐	
SC-6	Temporary Gravel Bag Berm		☒	☒	☐	
SC-7	Street Sweeping	✓	☒	☒	☐	
SC-8	Temporary Sandbag Barrier		☐	☐	☒	Gravel Bag Berm used
SC-9	Temporary Straw Bale Barrier		☐	☐	☒	Gravel Bag Berm Used
SC-10	Temporary Drain Inlet Protection	✓	☒	☒	☐	
ALTERNATIVE SEDIMENT CONTROL BMPs USED[4] ☐ **Yes** ☒ **No**						**IF USED, STATE REASON**

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] The Contractor shall ensure implementation of one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy and non-rainy season requirements.
[3] Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
[4] Use of alternative BMPs will require written approval by the Resident Engineer.

SC-1 Temporary Silt Fence

- Silt fences will be deployed along the toe of exterior cut and fill slopes to settle out soil particles from stormwater runoff.

SC-4 Temporary Check Dam

- Temporary check dams will installed during construction of the temporary earthen channels at the following locations: top of cut slope channel along Coyote Creek between Station 230+00 and 235+00;

northerly fill slope between Stations 238+00 and 240+00; and also along Griffith Road between Stations 26+00 and 51+00.

SC-5 Temporary Fiber Rolls

- Temporary fiber rolls will be installed along cut and fill slopes at locations shown on the drawings. Fiber rolls installed during stage 1 will be left and protected in place during stage 2 between Stations 236+00 and 237+00 and also between Stations 241+00 and 250+00.

SC-6 Temporary Gravel Bag Berm

- Temporary gravel bag berms will be installed along the temporary earthern swales between Stations 206+00 and 225+00 along the southerly edge of the project limits and also along the sides of the roadway between Stations 209+00 to 218+00 during stage 2.

SC-7 Street Sweeping

- Street sweeping is described in Section 500.3.6.

SC-10 Temporary Drain Inlet Protection

- Storm drain inlet protection will be used at all operational internal inlets to the storm drain system durign the rainy season as shown on the WPCDs. Drain inlet protection type is shown on the WPCDs for each inlet for each phase of construction.

REQUIRED TEXT:

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 minimum temporary sediment control requirements, temporary sediment control measures required by the contract documents, and other measures selected by the contractor. The steps outlined in the instructions for this section for identifying sediment control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B.

Sediment control BMPs will be installed at all appropriate locations along the site perimeter and at all operational internal inlets to the storm drain system at all times during the rainy season. During the non-rainy season, adequate sediment control materials will be available to control sediment discharges at the downgrade perimeter and operational inlets in the event of a predicted storm.

Temporary sediment control materials, equivalent to 10% of the installed quantites on the site during the rainy and non-rainy seasons will be maintained onsite throughout the duration of the project for implementation in event of predicted rain, 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.

Prior to the opening of a new DSA in the rainy season, additional temporary sediment control materials necessary to protect this DSA will be stored onsite.

The following sediment control BMP implementation table indicates the BMPs that shall be implemented to control sediment on the construction site. Implementation and locations of temporary sediment control BMPs are shown on the WPCDs in Attachment B and described in this section. The BMP working details can also be found in Attachment B of this SWPPP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SEDIMENT CONTROL BMPs

CONSTRUCTION BMP ID NO[1]	BMP NAME	MINIMUM REQUIRE-MENT [3]	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SC-1	Temporary Silt Fence	✓[2]	☐	☐	☐	
SC-2	Temporary Sediment Basin		☐	☐	☐	
SC-4	Temporary Check Dam		☐	☐	☐	
SC-5	Temporary Fiber Rolls	✓[2]	☐	☐	☐	
SC-6	Temporary Gravel Bag Berm		☐	☐	☐	
SC-7	Street Sweeping	✓	☐	☐	☐	
SC-8	Temporary Sandbags		☐	☐	☐	
SC-9	Temporary Straw Bale Barrier		☐	☐	☐	
SC-10	Temporary Drain Inlet Protection	✓	☐	☐	☐	
ALTERNATIVE SEDIMENT CONTROL BMPs USED[4] ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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) The Contractor shall ensure implementation of one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy and non-rainy season requirements.
(3) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(4) Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT ADDITIONAL NARRATIVE TEXT FOR SEDIMENT CONTROLS HERE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

500.3.6 Tracking Control

INSTRUCTIONS:

- Described below is the sequence of steps that shall be used to identify temporary tracking control BMPs to be included in the SWPPP.

  Step 1: Incorporate the temporary tracking control BMPs that are described in:

  - Contract Special Provisions;
  - Contract Plans;
  - Standard Plans; and
  - Standard Specifications.

  If the tracking control BMPs required in Step 1 are inadequate to address tracking control requirements, then:

  Step 2: Incorporate the temporary tracking control BMPs using one or more of the Caltrans minimum requirements listed in Table 1-1 of the SWPPP/ WPCP Preparation Manual.

  Step 3: If the tracking control BMPs selected from Steps 1 and 2 are inadequate to address tracking control requirements, then incorporate the temporary tracking control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the Construction Site Best Management Practices (BMPs) Reference Manual.

- ❑ For Steps 1 through 3 above, the tables and guidance in the SWPPP/WPCP Preparation Manual, Sections 1.3 through 1.5 may be used to help identify the tracking control BMPs that may be required for the project.
- ❑ Complete the BMP implementation table in this section to indicate the temporary tracking control BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable check “Not Used” and enter a brief reason. Include non-standard or alternative BMPs selected for the project in the BMP implementation table.
- ❑ Tracking controls shall be considered and implemented year round and throughout the duration of the project. Show selected tracking control BMPs on the WPCDs in Attachement B.
- ❑ Provide a narrative description of temporary tracking control BMPs that can not be adequately identified on the WPCDs. Give a general approach on how temporary tracking control BMPs will be implemented on the project at all access (ingress/egress) points to the project site where vehicles and/or equipment may track sediment from the construction site onto public or private roadways.

EXAMPLE:

The following tracking control BMP implementation table indicates the BMPs that shall be implemented to reduce sediment tracking from the construction site onto private or public roads. The steps outlined in the instructions for this section for identifying tracking control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B . Locations and details of tracking control BMPs are shown on the WPCDs in Attachment B. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY TRACKING CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	BMP NAME	MINIMUM REQUIRE-MENT	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SC-7	Street Sweeping		☒	☒	☐	
TC-1	Temporary Construction Entrance		☒	☒	☐	
TC-2	Stabilized Construction Roadway		☒	☒	☐	
TC-3	Temporary Entrance / Outlet Tire Wash		☐	☐	☒	Construction Entrance/Exit with Street Sweeping is sufficient
ALTERNATIVE TRACKING CONTROL BMPs USED[2] ☐ Yes ☒ No						IF USED, STATE REASON

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] Use of alternative BMPs will require written approval by the Resident Engineer.

TC-1 Temporary Construction Entrance/Exit

- A stabilized construction entrance/exit will be constructed and maintained at construction site entrances and exits, equipment yard, PCC batch plants and crushing plants, water filling area for water trucks, and the project office location as shown on the site map.
- The site entrance/exit will be stabilized to reduce tracking of sediment as a result of construction traffic. The entrance will be designated and graded to prevent runoff from leaving the site. Stabilization material will be 3- to 6-inch crushed aggregate. The entrance will be flared where it meets the existing road to provide an adequate turning radius. A site entrance/exit shall only be installed to reduce tracking of sediment during dirt-hauling activities that extend over a one-week time period.

TC-2 Stabilized Construction Roadway

- The construction roadway through the site will also be designated and stabilized to prevent erosion and to control tracking of mud and soil material onto adjacent roads. The roadway will be clearly marked for limited speed to control dust. Refer to the WPCDs for entrance/exit and construction roadway locations. Stabilization material will be 3- to 6-inch crushed aggregate. A regular maintenance program will be conducted to replace sediment-clogged stabilization material with new stabilization material.

SC-7 Street Sweeping

- Road sweeping and vacuuming will occur during soil hauling and as necessary to keep streets clear of tracked material and debris. Washing of sediment tracked onto streets into storm drains will not occur.

REQUIRED TEXT:

The following tracking control BMP implementation table indicates the BMPs that shall be implemented to reduce sediment tracking from the construction site onto private or public roads. The steps outlined in the instructions for this section for identifying tracking control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B. Implementation and locations of sediment tracking BMPs are shown on the WPCDs in Attachment B and described in this section. The BMP working details can also be found in Attachment B of this SWPPP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY TRACKING CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	BMP NAME	MINIMUM REQUIRE-MENT	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SC-7	Street Sweeping		☐	☐	☐	
TC-1	Temporary Construction Entrance		☐	☐	☐	
TC-2	Stabilized Construction Roadway		☐	☐	☐	
TC-3	Temporary Entrance / Outlet Tire Wash		☐	☐	☐	
ALTERNATIVE TRACKING CONTROL BMPs USED[2] ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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] Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT ADDITIONAL NARRATIVE TEXT FOR TRACKING CONTROL HERE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

500.3.7 Wind Erosion Control

INSTRUCTIONS:

- Described below is the sequence of steps that shall be used to identify wind erosion control BMPs to be included in the SWPPP.

Step 1: Incorporate the temporary wind erosion control BMPs that are described in:

- Contract Special Provisions;
- Contract Plans;
- Standard Plans; and
- Standard Specifications.

If the wind erosion control BMPs required in Step 1 are inadequate to address wind erosion control requirements, then:

Step 2: Incorporate the wind erosion control BMPs using one or more of the Caltrans minimum requirements listed in Table 1-1 of the SWPPP/ WPCP Preparation Manual.

Step 3: If the wind erosion control BMPs selected from Steps 1 and 2 are inadequate to address wind erosion control requirements, then incorporate the temporary wind erosion control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the Construction Site Best Management Practices (BMPs) Reference Manual.

- ❑ For Steps 1 through 3 above, the tables and guidance in the SWPPP/WPCP Preparation Manual, Sections 1.3 through 1.5 may be used to help identify the wind erosion control BMPs that may be required for the project.
- ❑ Complete the BMP implementation table in this section to indicate the temporary wind erosion control BMPs that have been selected for use on the project. If a particular BMP will not be used or is not applicable check “Not Used” and enter a brief reason. Include non-standard or alternative BMPs selected for the project in the BMP implementation table.
- ❑ Provide a narrative description of wind erosion control BMPs that gives a general approach on how wind erosion control BMPs will be implemented on the project to control dust during construction operations, including stockpile operations at all times.

EXAMPLE:

The steps outlined in the instructions for this section for identifying wind erosion control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B. Locations and details of wind erosion control BMPs are shown on the WPCDs in Attachment B (as applicable). The following list of BMPs and narrative explain how the selected BMPs shall be incorporated into the project.

TEMPORARY WIND EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	BMP NAME	MINIMUM REQUIRE-MENT[2]	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
WE-1	Wind Erosion Control	✓	☒	☒	☐	
TC-1	Temporary Construction Entrance		☒	☒	☐	
TC-2	Stabilized Construction Roadway		☒	☒	☐	
-----	All Soil Stabilization Measures included in Section 500.3.4		☐	☒	☐	
ALTERNATIVE WIND EROSION CONTROL BMPs USED[3] ☐ Yes ☒ No						IF USED, STATE REASON

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) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

WE-1 Wind Erosion Control

- Potable water shall be applied to disturbed soil areas of the project site to control dust and maintain optimum moisture levels for compaction. The water will be applied using water trucks. As shown on the project schedule, project soils will be disturbed and exposed from approximately May 1 through December 15. Water applications will be concentrated during the late summer and early fall months and especially during the embankment construction operations scheduled for July. The total water to be applied is expected to be between 0.8 and 1.3 million gallons.

- Wind Erosion Control and Water Conservation Practices BMPs will be implemented to provide dust control and prevent discharges from dust control activities and water supply equipment. Water application rates will be minimized as necessary to prevent runoff and ponding and water equipment leaks will be repaired immediately.

- During windy conditions (forecast or actual wind conditions of approximately 25 mph or greater), dust control will be applied to DSAs, including haul roads to adequately control wind erosion.

- Stockpile Management using plastic covers will be implemented to prevent wind dispersal of sediment from stockpiles.

REQUIRED TEXT:

The steps outlined in the instructions for this section for identifying wind erosion control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B. Locations and details of wind erosion control BMPs are shown on the WPCDs in Attachment B (as applicable). The following list of BMPs and narrative explain how the selected BMPs shall be incorporated into the project.

TEMPORARY WIND EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	BMP NAME	MINIMUM REQUIRE-MENT[2]	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
WE-1	Wind Erosion Control	✓	☐	☐	☐	
TC-1	Temporary Construction Entrance		☐	☐	☐	
TC-2	Stabilized Construction Roadway		☐	☐	☐	
-----	All Soil Stabilization Measures included in Section 500.3.4		☐	☐	☐	
ALTERNATIVE WIND EROSION CONTROL BMPs USED[3] ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT ADDITIONAL NARRATIVE TEXT FOR WIND EROSION CONTROL HERE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

500.3.8 Construction Site Management

REQUIRED TEXT:

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 existing at the construction site by implementing effective handling, storage, use, and disposal practices.

500.3.8.1 Non-Stormwater Management Pollution Control

INSTRUCTIONS:

- The Caltrans Statewide NPDES Permit defines non-stormwater discharges as follows: "Non-stormwater discharges consist of all discharges from a municipal stormwater conveyance which do not originate from precipitation events (i.e., all discharges from a conveyance system other than stormwater)."
- There are three types of non-stormwater discharges as specified in the Permit:
  1) Discharges Authorized by a Separate NPDES Permit: Since these discharges have a separate permit, they are not addressed by this Statewide SWMP.
  2) Exempted Discharges: These discharges have not been found to contain pollutants and can therefore be discharged without direct application of BMPs. (Previously described spill prevention, waste management and other practices will be implemented to ensure that these discharges remain uncontaminated.) These discharges include:
     - Flows from riparian habitats or wetlands;
     - Diverted stream flows;
     - Springs;
     - Rising groundwaters; and
     - Uncontaminated groundwater infiltration.
  3) Conditionally Exempt Discharges: The conditionally exempt discharges and their associated BMPs are summarized below:

	Non-Stormwater Discharges	BMP Titles
a.	Uncontaminated pumped groundwater	N/A (1)
b.	Foundation drains	N/A (2)
c.	Water from crawl space pumps	N/A (2)
d.	Footing drains	N/A (2)
e.	Air conditioning condensate	N/A (3)
f.	Irrigation water	Irrigation Potable (Watering) and Non-Potable (E3b) (4)
g.	Landscape irrigation	Irrigation (Watering) Potable and Non-Potable (E3b) (4)
h.	Lawn or garden watering	Irrigation (Watering) Potable and Non-Potable (E3b) (4)
i.	Planned and unplanned discharges from potable water sources	Irrigation (Watering) Potable and Non-Potable (E3b) and Water Line Repairs (E3a) (5)

	Non-Stormwater Discharges	BMP Titles
j.	Water line and hydrant flushing	Water Line Repairs (E3a)[5]
k.	Individual residential car washing	N/A[6]
l.	Discharges or flows from emergency fire fighting activities	N/A[7]

1. Prior to discharge, Caltrans will work directly with the appropriate RWQCB to determine the appropriate monitoring requirements, if needed, for the proposed discharge.
2. These discharges are not known to exist at the Department's facilities.
3. Air-conditioning condensate discharges are not expected to occur. Routinely, the Department's air conditioning systems are so small that any such occurrences will evaporate prior to discharging to receiving waters.
4. Irrigation water, landscape irrigation and lawn or garden watering runoff, though minimized through the Potable Water/Irrigation BMP implementation, occur on a regular basis as a result of excess irrigation water running off vegetated and nearby impervious areas and into storm drains. The preceding statement constitutes notice to the SWRCB and the RWQCBs of such occurrences statewide. The Department is currently conducting characterization studies that may find some irrigation and landscaping practices to be sources of pollutants. If found, BMPs will be implemented to eliminate or reduce the discharge of pollutants associated with irrigation so that such discharges will be conditionally approved under the Permit.
5. Activities by others that generate these discharges will require pollution management as specified in the Permit. Parties that undertake activities on the Department's property that have the potential to result in stormwater discharges of this type will be required to notify the Department and the RWQCB in advance and to implement practices to appropriately manage pollutants.
6. Cleaning of residential cars is not an allowed activity on the Department's property. See the Vehicle and Equipment Cleaning BMP for cleaning of construction vehicles and equipment (not considered an exempt discharge).
7. The Department has no authority over these discharges. The Department will inform all federal, state and local fire officials of the discharge requirements of the Permit and refer them to the SWRCB for advice or assistance in how to achieve these expectations.

- Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the Caltrans Permit or authorized under a separate NPDES permit, are prohibited. Examples of prohibited discharges common to construction activities include:
  - Vehicle and equipment wash water, including concrete washout water;
  - Slurries from concrete cutting and coring operations, PCC grinding or AC grinding operations;
  - Slurries from concrete or mortar mixing operations;
  - Blast 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; and
  - Chemical leaks and/or spills of any kind including but not limited to petroleum, paints, cure compounds, etc.
- Some non-stormwater discharges are authorized under the Caltrans Permit and need not be prohibited unless identified as a source of pollutants. However, specific control measures may be required to minimize adverse impacts from these discharges. Some RWQCBs may require a separate NPDES permit or specific monitoring and reporting requirements for authorized discharges. Check with the Resident Engineer or the applicable RWQCB for requirements in the project area. Non-stormwater discharges exempted by the Caltrans Permit include:
  - Flows from riparian habitats or wetlands;
  - Diverted stream flows;
  - Springs, rising groundwater; and
  - Uncontaminated groundwater infiltration.
- Other discharges such as pumped groundwater, irrigation water, and water line and hydrant flushing (see Caltrans Permit, Section B, Non-stormwater Discharge Prohibitions, Item 3, Conditionally Exempt Discharges, for entire list), are not prohibited if they are identified as not being

sources of pollutants to receiving waters or if appropriate control measures (BMPs) to minimize the adverse impacts of such sources are developed and implemented. Some RWQCBs may require a separate NPDES permit or specific monitoring and reporting requirements for the conditionally exempt discharges. Check with the Resident Engineer on what discharges are conditionally exempt.

- Use the following steps to identify non-stormwater pollution control BMPs.

  Step 1: Incorporate the non-stormwater pollution control BMPs that are described in:

  - Contract Special Provisions;
  - Contract Plans;
  - Standard Plans; and
  - Standard Specifications.

  If the non-stormwater pollution control BMPs required in Step 1 are inadequate to address potential pollutants in non-stormwater discharges, then:

  Step 2: Incorporate the non-stormwater pollution control BMPs using one or more of the Caltrans minimum requirements listed in Table 1-1 of the SWPPP/ WPCP Preparation Manual.

  Step 3: If the non-stormwater pollution control BMPs selected from Steps 1 and 2 are inadequate to address potential pollutants in non-stormwater discharges, then incorporate the temporary non-stormwater pollution control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the Construction Site Best Management Practices (BMPs) Reference Manual.

- For Steps 1 through 3 above use the following process to identify and select BMPs for non-stormwater management pollution control. List each potential non-stormwater discharge and provide the information requested below.

  - ❑ Identify all potential non-stormwater discharges within the project. Examine all project activities and determine what discharges will be generated or may be required to complete each activity, including mobile-type operations. Discuss how mobile operations, such as maintenance and fueling of large or stationary equipment, will be addressed. Examples of common construction activities that may result in non-stormwater discharges on a project are:

    - Vehicle and equipment cleaning, fueling and maintenance;
    - Surface water diversions;
    - Dewatering operations;
    - Saw-cutting;
    - Drilling;
    - Boring;
    - AC and PCC grinding;
    - AC and PCC recycling;
    - Concrete mixing;
    - Washout of concrete equipment;
    - Crushing;
    - Bridge cleaning;
    - Blasting;

- Painting;
- Hydro-demolition;
- Mortar mixing; and
- Air-blown mortar, etc.

- ❑ Complete the BMP implementation table in this section to indicate the selected BMPs. Identify all contract required BMPs and any other BMPs required by the Special Provisions. If a particular BMP will not be used or is not applicable check "Not Used" and enter a brief reason.

- ❑ Describe each planned non-stormwater discharge from the project into the storm drain system or waterway, including flow/quantity and expected pollutants. If a flow or quantity cannot be determined, then fully describe the nature and extent of the activity such that the quantity can be inferred. One-time discharges shall be monitored by the WPCM during the time that such discharges are occurring.

- ❑ Describe each non-stormwater source or activity that may generate a discharge; containment facilities and appurtenances that would be employed; and flow paths of discharge to downstream inlets, drainage facilities, and receiving waters. Where possible, depict BMP locations on the WPCDs.

- ❑ Indicate the time period and frequency of each activity that generates or may generate a discharge.

- ❑ Describe mandatory non-stormwater control BMPs and practices required by Caltrans, the RWQCB (such as WDR requirements for projects that reuse Aerially Deposited Lead soils), other permits, or other federal, state, or local agencies. Provide details and schedules as appropriate. Include maintenance, inspection, testing, and reporting requirements. Provide permit information for discharges covered by a separate NPDES permit.

- ❑ Describe contractor-selected non-stormwater control BMPs and practices to minimize, contain, and dispose prohibited discharges or to minimize adverse impacts of authorized discharges from the project into the storm drain system or waterway. BMPs within both the Non-Stormwater Management and the Materials Handling and Waste Management categories may be applicable to non-stormwater discharges. Include maintenance, inspection, testing, and reporting procedures, if applicable.

- ❑ Indicate how illicit connections and illegal discharges will be handled.

EXAMPLE:

An inventory of construction activities and potential non-stormwater discharges is described in this section and in Section 500.3.1. The following BMP implementation table indicates the BMPs that have been selected to control non-stormwater pollution on the construction site. The steps outlined in the instructions for this section for identifying non-stormwater pollution control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B. Locations and details of applicable non-stormwater control BMPs are shown on the WPCDs in Attachment B.

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.

CONSTRUCTION SITE MANAGEMENT

NON-STORMWATER MANAGEMENT POLLUTION CONTROL BMPs

CONSTRUCTION BMP ID NO (1)	BMP NAME	MINIMUM REQUIRE-MENT (2)	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
NS-1	Water Control and Conservation		☐	☒	☐	
NS-2	Dewatering (3)		☐	☒	☐	
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations		☐	☒	☐	
NS-4	Temp Stream Crossing(3)		☐	☐	☒	Not applicable to this project because no streams to cross.
NS-5	Clear Water Diversion (3)		☐	☐	☒	Not applicable to this project because there are no upstream diversions.
NS-6	Illegal Connection and Illegal Discharge Detection Reporting	✓	☐	☒	☐	
NS-7	Potable Water / Irrigation		☐	☒	☐	
NS-8	Vehicle and Equipment Cleaning	✓	☐	☒	☐	
NS-9	Vehicle and Equipment Fueling	✓	☐	☒	☐	
NS-10	Vehicle and Equipment Maintenance	✓	☐	☒	☐	
NS-11	Pile Driving Operations		☐	☐	☒	No pile driving on project.
NS-12	Concrete Curing		☐	☒	☐	
NS-13	Material and Equipment Used Over Water		☐	☐	☒	No construction over water.
NS-14	Concrete Finishing		☐	☒	☐	
NS-15	Structure Demolition / Removal Over or Adjacent to Water		☐	☐	☒	No structure demolition over/adjacent to water.

CONSTRUCTION SITE MANAGEMENT						
NON-STORMWATER MANAGEMENT POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO (1)	**BMP NAME**	**MINIMUM REQUIRE-MENT (2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
				YES	**NO**	
ALTERNATIVE NON-STORMWATER CONTROL BMPs USED(4) ☐ Yes ☒ No						**IF USED, STATE REASON**

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) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(3) The BMPs listed above are incidental and do not include operations included as separate line items in the contract.
(4) Use of alternative BMPs will require written approval by the Resident Engineer.

NS-1 Water Control and Conservation / Potable Water and Irrigation

- Water application rates will be minimized as necessary to prevent runoff and ponding and water equipment leaks will be repaired immediately. The water truck filling area will be stabilized.
- Irrigated areas within the construction limits will be inspected for excess watering. Watering times and schedules will be adjusted to ensure that the appropriate amount of water is being used and to minimize runoff.

NS-3 Paving, Sealing, Sawcutting, and Grinding Operations

- The project will include placement of approximately 20 acres of AC pavement. Paving locations and adjacent storm drain inlets are shown on WPCDs 2, 3, and 5. Paving operations will generally be conducted in August and September as shown on the project schedule in Section 300.4. Paving and Grinding Operations BMPs will be implemented to prevent paving materials from being discharged offsite. Grate inlets within the AC paving area, will be temporarily covered as shown in the detail on the WPCDs. Inlets outside of the AC paving area will be protected with the type of DI protection as called out on the WPCDs. Following paving operations, the area will be swept, inlet covers will be removed, and the inlets will be inspected for paving materials.

- The project includes approximately 1,000 feet of concrete saw-cutting at the on- and off-ramp project limits where traffic signal and ramp metering detection loops will be installed. Saw-cutting locations and adjacent storm drain inlets are shown on WPCDs 2, 3, and 4. Estimated saw-cutting dates are shown on the schedule in Section 300.4. Saw-cutting operations shall not be conducted during or immediately prior to rainfall events. Saw-cutting operations are expected to produce approximately 400 gallons of waste slurry consisting of water and fine PCC grit. The slurry shall be vacuumed and discharged to the concrete washout facility located at Button Willow Road. Dried and cured concrete wastes shall be disposed offsite during concrete washout maintenance activities.

NS-6 Illegal Connection and Illegal Discharge Detection Reporting

- The contractor will implement the Illegal Connection/Illegal Discharge Detection Reporting BMP throughout the duration of the project.

NS-8, NS-9, NS-10 Vehicle and Equipment Operations

- Several types of vehicles and equipment will be used onsite throughout the project, including graders, scrapers, excavators, loaders, paving equipment, rollers, trucks and trailers, backhoes, forklifts, generators, compressors, and traffic control equipment.
- Vehicle and Equipment Fueling, and Vehicle and Equipment Maintenance BMPs will be utilized to prevent discharges of fuel and other vehicle fluids. Except for concrete washout, which is addressed in Section 500.3.8.2, vehicle cleaning will not be performed onsite.
- A paved temporary fueling area shall be constructed in the contractor's yard as shown on WPCD-14. All wheeled vehicles shall be fueled offsite or at the temporary fueling area. Fuel trucks, each equipped with absorbent spill clean-up materials, shall be used for all onsite fueling, whether at the temporary fueling area or for mobile fueling elsewhere on the site. Drip pans shall be used during all mobile fueling. The fueling truck shall be parked on the paved fueling area during overnight storage.
- Drip pans or absorbent pads shall be used during all vehicle and equipment maintenance activities that involve grease, oil, solvents, or other vehicle fluids.
- All vehicle maintenance and mobile fueling operations shall be conducted at least 50 feet away from operational inlets and drainage facilities and on a level graded area.

NS-12, NS-14 Concrete Curing and Finishing

- Protect drain inlets prior to the application of curing compounds. Excess cure water and water from high pressure blasting will be collected and disposed of, and will not be allowed to runoff to inlets or swales. Wet blankets will be used wherever possible to eliminate excess cure water.

REQUIRED TEXT:

An inventory of potential non-stormwater discharges is provided in this section. The following BMP implementation table indicates the BMPs that have been selected to control non-stormwater pollution on the construction site. The steps outlined in the instructions for this section for identifying non-stormwater pollution control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B. Locations and details of applicable non-stormwater control BMPs are shown on the WPCDs in Attachment B.

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.

]

CONSTRUCTION SITE MANAGEMENT

NON-STORMWATER MANAGEMENT POLLUTION CONTROL BMPs

CONSTRUCTION BMP ID NO (1)	BMP NAME	MINIMUM REQUIRE-MENT (2)	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
NS-1	Water Control and Conservation		☐	☐	☐	
NS-2	Dewatering (3)		☐	☐	☐	
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations		☐	☐	☐	
NS-4	Temp Stream Crossing (3)		☐	☐	☐	
NS-5	Clear Water Diversion (3)		☐	☐	☐	
NS-6	Illegal Connection and Illegal Discharge Detection Reporting	✓	☐	☐	☐	
NS-7	Potable Water / Irrigation		☐	☐	☐	
NS-8	Vehicle and Equipment Cleaning	✓	☐	☐	☐	
NS-9	Vehicle and Equipment Fueling	✓	☐	☐	☐	
NS-10	Vehicle and Equipment Maintenance	✓	☐	☐	☐	
NS-11	Pile Driving Operations		☐	☐	☐	
NS-12	Concrete Curing		☐	☐	☐	
NS-13	Material and Equipment Used Over Water		☐	☐	☐	
NS-14	Concrete Finishing		☐	☐	☐	
NS-15	Structure Demolition / Removal Over or Adjacent to Water		☐	☐	☐	

ALTERNATIVE NON-STORMWATER CONTROL BMPs USED[4] ☐ Yes ☐ No			IF USED, STATE REASON
CONSTRUCTION BMP ID NO [1]	**BMP NAME**		

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] Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
[3] The BMPs listed above are incidental and do not include operations included as separate line items in the contract.
[4] Use of alternative BMPs will require writtern approval by the Resident Engineer.

[INSERT ADDITIONAL NARRATIVE TEXT FOR NON-STORM WATER POLLUTION CONTROL HERE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)

500.3.8.2 Waste Management Pollution Control

INSTRUCTIONS:

- Waste management consists of implementing procedural and structural BMPs for collecting, handling, storing and disposing of wastes generated by a construction project to prevent the release of waste materials into stormwater discharges. Wastes are going to be generated during construction; however, the methods in which the wastes are collected, stored, and removed will determine the success of the waste management activities. Construction site wastes can range from residues collected from non-stormwater discharges (e.g., paint removal) to general site litter and debris (e.g., empty marker paint cans).
- Material pollution control (materials handling) consist of implementing procedural and structural BMPs for handling, storing and using construction materials to prevent the release of those materials into stormwater discharges. The amount and type of construction materials to be utilized at the site will be dependent upon the type of construction and the length of the construction period. The materials may be used continuously, such as fuel for vehicles and equipment, or the materials may be used for a discrete period, such as fertilizer for landscaping.
- Waste management and materials pollution control BMPs shall be implemented to minimize stormwater contact with construction materials, wastes and service areas, and to prevent materials and wastes from being discharged offsite. The primary mechanisms for stormwater contact that shall be addressed are:
  - Direct contact with precipitation;
  - Contact with stormwater run-on and runoff;
  - Wind dispersion of loose materials; and
  - Direct discharge to the storm drain system through spills or dumping.
- Extended contact with some materials and wastes, such as asphalt cold mix and treated wood products can also leach pollutants into stormwater and needs to be addressed.
- Use the following steps to identify waste management and materials pollution control BMPs.

  Step 1: Incorporate the waste management and materials pollution control BMPs that are described in:

  - Contract Special Provisions;
  - Contract Plans;
  - Standard Plans; and
  - Standard Specifications.

  If the waste management and materials pollution control BMPs required in Step 1 are inadequate to address potential pollutants in stormwater and non-stormwater discharges, then:

  Step 2: Incorporate the waste management and materials pollution control BMPs using one or more of the Caltrans minimum requirements listed in Table 1-1 of the SWPPP/ WPCP Preparation Manual.

Step 3: If the waste management and materials pollution control BMPs selected from Steps 1 and 2 are inadequate to address potential pollutants in stormwater and non-stormwater discharges, then incorporate the temporary non-stormwater pollution control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the Construction Site Best Management Practices (BMPs) Reference Manual.

- For Steps 1 through 3 above use the following guidelines to help select appropriate BMPs:
  - ❑ Review construction activities to identify and quantify likely construction materials and wastes. Identify materials and wastes with special handling or disposal requirements such as lead contaminated soils, concrete saw-cutting liquids, waste chemicals and empty chemical containers. (See Section 500.3.1).
  - ❑ Substitute safer, less polluting products where possible. Substitution of materials and products require approval pursuant to the Standard Specifications.
- ❑ Use the waste management BMP implementation table in this Section to identify Caltrans minimum requirements and additional BMPs selected to address project-specific activities. If a particular BMP will not be used or is not applicable check "Not Used" in the BMP implementation table and enter a brief a reason.
- ❑ In the narrative section list the selected BMPs and describe proposed facilities for materials storage and waste management (including onsite storage and disposal of waste). Discuss how each stormwater contact mechanism will be addressed. Include schedules, inspection, and maintenance requirements. Show facility locations and details on the WPCDs where possible.

EXAMPLE:

An inventory of construction activities, materials, and waste is provided in Section 500.3.1. The following BMP implementation table indicates the BMPs that have been selected to control construction site wastes and materials. The steps outlined in the instructions for this section for identifying waste management and materials pollution control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B. Locations and details of materials handling and waste management BMPs are shown on the WPCDs in Attachment B. 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 narrative explain how the selected BMPs will be incorporated into the project.

CONSTRUCTION SITE MANAGEMENT

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

CONSTRUCTION BMP ID NO [1]	BMP NAME	MINIMUM REQUIRE-MENT [2]	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
WM-1	Material Delivery and Storage	✓	☐	☒	☐	
WM-2	Material Use	✓	☐	☒	☐	
WM-3	Stockpile Management	✓	☐	☒	☐	
WM-4	Spill Prevention and Control	✓	☐	☒	☐	
WM-5	Solid Waste Management	✓	☐	☒	☐	
WM-6	Hazardous Waste Management [3]		☐	☒	☐	
WM-7	Contaminated Soil Management [3]		☐	☒	☐	
WM-8	Concrete Waste Management		☐	☒	☐	
	Temporary Concrete Washout Facility		☒	☒	☐	
	Temporary Concrete Washout (Portable)		☐	☐	☒	
WM-9	Sanitary/Septic Waste Management	✓	☐	☒	☐	
WM-10	Liquid Waste Management		☐	☒	☐	

ALTERNATIVE WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs USED[4] ☐ Yes ☒ No			IF USED, STATE REASON
CONSTRUCTION BMP ID NO [1]	BMP NAME		

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] Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be verified by the Contractor or determined by Caltrans.
[3] The BMPs listed above are incidental and do not include operations included as separate line items in the contract.
[4] Use of alternative BMPs will require written approval by the Resident Engineer.

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

- In general, BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage, and use. The general material storage area shall be located in the contractor's yard as shown on WPCD-14. A sandbag barrier shall be provided around the storage area to prevent run-on from adjacent areas. Two types of storage/containment facilities shall be provided within the storage area to minimize stormwater contact with construction materials:

  - Two watertight shipping containers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents and grease.

  - A separate covered storage/containment facility shall be constructed adjacent to the shipping containers to provide storage for larger items such as drums and items shipped or stored on pallets. The containment facility shall consist of a 10 ft by 20 ft raised concrete pad with 5-inch curbed sides. A wood frame and corrugated tin roof and sides shall be constructed to protect the facility from sun and rain. The facility shall provide approximately 530 gallons of containment volume. The containment volume is adequate to store 9, 55-gallon drums and the rainfall from a 24-hr, 25-year storm, pursuant to Material Delivery and Storage BMP.

- Very large items, such as light standards, framing materials, and stockpiled lumber, shall be stored in the open in the general storage area. Such materials shall be elevated with wood blocks to minimize contact with run-on.

- Spill clean-up materials, material safety data sheets, a material inventory, and emergency contact numbers shall be maintained and stored in the southern shipping container.

WM-3 Stockpile Management

- BMP WM-3, Stockpile Management shall be implemented to reduce or eliminate pollution of stormwater from stockpiles of soil and paving materials such as portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate sub-base, pre-mixed aggregate and asphalt binder (so called “cold mix” asphalt). Stockpiles shall be surrounded with sediment controls (BMP SC-5, Fiber rolls or SC-8, sandbag barrier). Plastic covers, or SS-5, Soil Binders, shall be used.

WM-4 Spill Prevention and Control

- BMP WM-4, Spill Prevention and Control shall be implemented to contain and clean-up spills and prevent material discharges to the storm drain system. Spill prevention is also discussed above in Material Delivery, Storage and Use BMP, and below in the following waste management section.

WM-5, WM-6 Waste Management

- BMP WM-5, Solid Waste Management and BMP WM-6, Hazardous Waste Management BMPs shall be implemented to minimize stormwater contact with waste materials and prevent waste discharges. Solid wastes shall be loaded directly onto trucks for offsite disposal. When onsite storage is necessary, solid wastes shall be stored in watertight dumpsters in the general storage area of the contractor’s yard. Dumpster locations are shown on WPCD-14. Solid waste, including rubble stockpiles, shall be removed and disposed offsite at least weekly. ABC Waste Disposal (License CA9999999) shall provide solid waste disposal services. Liquid hazardous wastes shall be stored in the covered containment area discussed above for materials storage. Solid hazardous waste shall be stored in the shipping container or in the covered containment area. Hazardous wastes shall be appropriate and clearly marked containers

and segregated from other non-waste materials. Wastes shall be stored in sealed containers constructed of a suitable material and shall be labeled as required by Title 22 CCR, Division 4.5 and 49 CFR Parts 172, 173, 178, and 179. All hazardous waste shall be stored, transported, and disposed as required in Title 22 CCR, Division 4.5 and 49 CFR 261-263.

WM-7 Contaminated Soil Management

- When contaminated soils are encountered, the Resident Engineer shall be notified, the contaminated soils shall be contained, covered if stockpiled, and disposed of per the Contaminated Soil Management BMP, and the Special Provisions. Employees shall be instructed to recognize evidence of contaminated soil, such as buried debris, discolored soil, and unusual odors.

WM-8 Concrete Residuals and Washout Wastes

- This project includes placement of approximately 130 yd^3 of concrete in four separate pours, the largest pour being approximately 50 yd^3. The estimated maximum washout volume is 3.5 ft^3. Discharges will consist of rinse water and residual concrete (PCC, aggregates, admixture, and water). Estimated pour dates are shown on the project schedule in Section 300.4. Concrete pours shall not be conducted during or immediately prior to rainfall events.

- Concrete Waste Management shall be implemented in accordance with contract documents, and maintained at the contractor's yard as shown on WPCD-14.

- Concrete washout facilities shall be designed in accordance with Standard Detail T59. All excess concrete and concrete washout slurries shall be discharged to the washout facility for drying. BMP maintenance, waste disposal, and BMP removal shall be conducted as described in Concrete Waste Management Special Provision.

WM-9 Sanitary and Septic Wastes

- The contractor shall implement Sanitary and Septic Waste Management BMP. Portable toilets shall be located and maintained at the contractors yard for the duration of the project. Specific locations are shown on WPCD-4. Weekly maintenance shall be provided each Wednesday by ABC Sanitation (license CA0Q45W) and wastes shall be disposed offsite. The toilets shall be located away from concentrated flow paths and traffic flow.

REQUIRED TEXT:

An inventory of construction activities, materials, and waste is provided in Section 500.3.1. The following BMP implementation table indicates the BMPs that have been selected to control construction site wastes and materials. The steps outlined in the instructions for this section for identifying waste management and materials pollution control BMPs to be included in the SWPPP have been followed. The applicable Contract Special Provisions, Contract Plans, Standard Plans, and Standard Specifications are provided or listed in Attachment B. Locations and details of applicable materials handling and waste management BMPs are shown on the WPCDs in Attachment B. 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 narrative explain how the selected BMPs will be incorporated into the project.

CONSTRUCTION SITE MANAGEMENT

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

CONSTRUCTION BMP ID NO [1]	BMP NAME	MINIMUM REQUIRE-MENT [2]	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
WM-1	Material Delivery and Storage	✓	☐	☐	☐	
WM-2	Material Use	✓	☐	☐	☐	
WM-3	Stockpile Management	✓	☐	☐	☐	
WM-4	Spill Prevention and Control	✓	☐	☐	☐	
WM-5	Solid Waste Management	✓	☐	☐	☐	
WM-6	Hazardous Waste Management [3]		☐	☐	☐	
WM-7	Contaminated Soil Management [3]		☐	☐	☐	
WM-8	Concrete Waste Management		☐	☐	☐	
	Temporary Concrete Washout Facility		☐	☐	☐	
	Temporary Concrete Washout (Portable)		☐	☐	☐	
WM-9	Sanitary/Septic Waste Management	✓	☐	☐	☐	
WM-10	Liquid Waste Management		☐	☐	☐	
ALTERNATIVE WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs USED[4] ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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] Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be verified by the Contractor or determined by Caltrans.
[3] The BMPs listed above are incidental and do not include operations included as separate line items in the contract.
[4] Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT ADDITIONAL NARRATIVE TEXT FOR WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL HERE]

500.4 Water Pollution Control Drawings (WPCDs)

INSTRUCTIONS:

- Prepare Water Pollution Control Drawings (WPCDs) in conformance with the following instructions and requirements of the Construction General Permit. Include the WPCDs as Attachment B to the SWPPP. The WPCDs shall be no smaller than the "reduced plans" (approximately 11"x17") issued by Caltrans. A sample WPCD can be referenced in Attachment B, Appendix A of the SWPPP/ WPCP Preparation Manual.
  - The WPCDs shall show locations for the BMPs that will be used.
  - Include a cover sheet(s) listing the BMPs that will be used along with the associated BMP symbols used on the WPCDs. Standard Caltrans Construction Site BMP symbols and linetypes are shown in the SWPPP/WPCP Preparation Manual, Appendix E.
  - Temporary WPC details are included in the applicable Standard Plans, contract plans and Attachment B.
  - Additional details may be necessary to describe site-specific BMP applications. BMP details other than the ones shown in the contract plans and Standard Plans shall be submitted to the Resident Engineer for approval. Use project layout, grading, stage construction, drainage sheets and/or erosion sheets as base sheets for the WPCDs. Use Section 500.3, "Pollutant Source Identification and BMP Selection" as a guide to identify pollutant sources and BMPs for construction activities. Select BMPs that are appropriate for the site and show their locations on the site map.
- The base sheets shall show the construction project 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. These are usually shown on the Contract Plans.
- Also delineate the following site information:
  - Discharge points from the project to offsite storm drain systems or receiving waters;
  - Tributary areas and drainage patterns across the project area (show using flow arrows) into each onsite stormwater inlet or receiving water;
  - Tributary areas and drainage patterns to each onsite stormwater inlet, receiving water or discharge point;
  - Offsite tributary drainage areas that generate run-on to the project. (Where offsite tributary drainage areas are too large to depict on the drawings, use map notes or inserts illustrating the upstream drainage areas);
  - Temporary onsite drainage(s) to carry concentrated flows;
  - Drainage patterns and slopes anticipated after major grading activities are completed;
  - Outline all areas of existing vegetation, soil cover, or native vegetation that will remain undisturbed during the project;
  - Outline all areas of soil disturbance (disturbed soil areas, DSAs). Indicate which areas will be disturbed during the rainy season and which areas will be left exposed during the rainy season;
  - Identify location(s) of contaminated or hazardous soils;

- ❑ Locate 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, provide a narrative description.

- Show proposed locations of all construction site BMPs. Include additional detail drawings if necessary to convey site-specific configurations.
  - ❑ Show temporary soil stabilization and temporary sediment control BMPs that will be used during construction. Include temporary onsite drainage(s) to carry concentrated flows, BMPs implemented to divert offsite drainage around or through the construction site, and BMPs that protect stormwater inlets;
  - ❑ Locate site ingress and egress points and any proposed temporary construction roads;
  - ❑ Show BMPs to mitigate or eliminate non-stormwater discharges;
  - ❑ Show 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
  - ❑ Show BMPs for vehicle and equipment storage, fueling, maintenance, and cleaning.
- The Caltrans Permit states: "The SWPPP shall apply to 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 reflect the Contractor's phasing and/or construction staging, and shall address the entire scope of the contract work. (The contractor may address certain individual operations at a later date per the SWPPP amendment process established in Sections 200.1 and 200.2).

EXAMPLE:
(Note: Examples of Water Pollution Control Drawings can be found in Attachment B of the SWPPP/WPCP Preparation Manual)

The Water Pollution Control Drawings can be found in Attachment B of the SWPPP.

REQUIRED TEXT:

The Water Pollution Control Drawings can be found in Attachment B of the SWPPP.

500.5 Construction BMP Maintenance, Inspection and Repair

INSTRUCTIONS:

- The purpose of stormwater inspections is to evaluate BMP effectiveness and implement repairs or design changes as soon as feasible.
- Inspections shall be conducted by the Contractor's WPCM or other Caltrans approved 24-hour trained staff.
- Inspections are required on a regular basis during dry weather. The purpose of dry-weather inspections is to ensure proper implementation of BMPs that are not necessarily weather-related. Examples include non-stormwater, waste management, and sediment tracking control BMPs.
- A sample maintenance, inspection, and repair pogram is provided in Attachment G.
- A checklist must be completed during each inspection. A Stormwater Quality Construction Site Inspection Checklist is included as Attachment H of the SWPPP. This checklist shall be used for all

inspections unless the Contract Special Provisions require the Contractor to use a different checklist.

- Inspections are required as follows:
  - Prior to a forecast storm;
  - After a rain event that causes runoff from the construction site;
  - At 24-hour intervals during extended rain events;
  - Daily inspections shall be conducted for projects within the Lake Tahoe Hydrologic Unit
  - Weekly during the rainy season;
  - Every 2 weeks during the non-rainy season; and
  - At any other time(s) or intervals of time specified in the Contract Special Provisions.
- Completed inspection checklists shall be submitted to the Resident Engineer within 24 hours of inspection. Copies of the completed checklists shall be kept with the SWPPP.
- A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs.
- ❑ Include a discussion of the program to inspect and maintain all BMPs as identified in the site plan or other narrative documents throughout the duration of the project. Refer to Standard Specifications or project specific Special Provisions. The program for Maintenance, Inspection, and Repair of BMPs shall be included in Attachment G of this SWPPP.

EXAMPLE:

Site inspections shall be conducted by the Contractor's WPCM or other Caltrans approved 24-hour trained staff at the following minimum frequencies:

- Prior to a forecast storm;
- After a rain event that causes runoff from the construction site;
- At 24-hour intervals during extended rain events;
- Daily inspections within the Lake Tahoe Hydrologic Unit;
- Weekly during the rainy season;
- Every 2 weeks during the non-rainy season; and
- At any other time(s) or intervals of time specified in the Contract Special Provisions.

Completed inspection checklists shall be submitted to the Resident Engineer within 24 hours of inspection. Copies of the completed checklists shall be kept with the SWPPP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs. A program for Maintenance, Inspection and Repair of BMPs shall be provided in Attachment G of this SWPPP.

REQUIRED TEXT:

Site inspections shall be conducted by the Contractor's WPCM or other Caltrans approved 24-hour trained staff at the following minimum frequencies:

- Prior to a forecast storm;
- After a rain event that causes runoff from the construction site;
- At 24-hour intervals during extended rain events;
- Daily inspections within the Lake Tahoe Hydrologic Unit;
- Weekly during the rainy season;
- Every 2 weeks during the non-rainy season; and
- At any other time(s) or intervals of time specified in the Contract Special Provisions.

Completed inspection checklists shall be submitted to the Resident Engineer within 24 hours of inspection. Copies of the completed checklists will be kept with the SWPPP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs. A program for Maintenance, Inspection and Repair of BMPs shall be provided in Attachment G of this SWPPP.

[INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

500.6 Post-Construction Stormwater Management

500.6.1 Post-Construction Control Practices

INSTRUCTIONS:

- Post-Construction BMPs are permanent measures installed during construction, designed to reduce or eliminate pollutant discharges from the site after construction is completed. Caltrans may provide listings, descriptions, and special operations and maintenance requirements for post-construction BMPs in the Stormwater Information Handout, which includes the Stormwater Data Report.
- ❑ Provide descriptions of the BMPs employed after all construction phases have been completed at the site (Post-Construction BMPs). Direct reference to the Stormwater Data Report may be made if one is available for the project. Examples of post-construction measures are:
  - Infiltration basins;
  - Detention basins;
  - Biofiltration strips and/or swales;
  - Permanent erosion control, seeding and planting;
  - Outlet protection/velocity dissipation devices;
  - Earth dikes, drainage swales, and lined ditches;
  - Bridge slope protection;
  - Rock slope protection; and
  - Mulching.

EXAMPLE:

The following are the post-construction BMPs that are to be used at this construction site after all construction is complete:

- Outlet protection/velocity dissipation devices at all culvert outlets;
- Rock slope protection in slopes under and adjacent to all bridges;
- All other slopes will be seeded with Erosion Control Type D, planted and protected with wood mulch;
- Numerous biofiltration strips and swales; and
- An infiltration basin.

Refer to the Stormwater Data Report for a complete summary and description of post-construction BMPs.

REQUIRED TEXT:

The following are the post-construction BMPs that are to be used at this construction site after all construction is complete:

- [LIST]

[INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

500.6.2 Operation/Maintenance after Project Completion

INSTRUCTIONS:

- Describe the following information regarding post-construction BMPs. Caltrans may provide specific language for any operations and maintenance requirements of post-construction control practices via the Stormwater Information Handout or the Resident Engineer. Any pertinent language provided by Caltrans shall be added by the Contractor to this section of the SWPPP. The Stormwater Data Report may be referenced if one has been prepared for the project.
- ❑ List the parties responsible for long-term operation and maintenance of permanent BMPs. One of three alternatives must be included: (1) Caltrans regional maintenance staff; (2) a Local Agency / Private Entity ; or (3) Caltrans maintenance staff and Local Agency / Private Entity (if the project maintenance will be shared or a portion of the project is to be maintained by a Local Agency / Private Entity). This information may be provided by Caltrans.
- ❑ Short and long-term funding sources for operations and maintenance.

EXAMPLE:

The post-construction BMPs that are described above will be funded and maintained as follows:

Short Term Funding: Caltrans District 7 Maintenance

Long Term Funding: Caltrans District 7 Maintenance

The responsible party for the post-construction BMPs is Caltrans District 7 Maintenance. Refer to the Stormwater Data Report.

REQUIRED TEXT:

The post-construction BMPs that are described above will be funded and maintained as follows:

Short Term Funding:

Long Term Funding:

The responsible party for the long-term maintenance of post-construction BMPs is [ENTER ONE OF THE THREE ALTERNATIVES LISTED IN THE INSTRUCTIONS].

[INSERT ANY ADDITIONAL LANGUAGE PROVIDED BY CALTRANS HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)]

500.7 Training

INSTRUCTIONS:

- Individuals responsible for SWPPP preparation, implementation, and permit compliance are required to be trained, and the SWPPP shall document all training. This includes those personnel responsible for installation, inspection, maintenance, and repair of BMPs. Describe the types of training that the contractor's inspection, maintenance, and repair personnel have received or will receive that are directly related to stormwater pollution prevention.
- Training may be both formal and informal (Caltrans 24 Hour Training Class, Construction General Permit training, etc).
- Formal stormwater pollution prevention or erosion and sediment control training sessions may include certification as a Certified Professional in Erosion and Sediment Control (CPESC); workshops offered by the SWRCB, RWQCB, Community College or University of California Extension; or other locally recognized agencies or professional organizations such as the International Erosion Control Association (IECA), Association of Bay Area Governments (ABAG), Association of General Contractors (AGC), etc. Contractors are encouraged to contact the RWQCB or the SWRCB to inquire about availability of training.
- A listing of training organizations, subject matter and classes are located at: http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.html
- The Contractor's WPCM and the SWPPP preparer shall have a minimum of 24 hours (3 days) of formal stormwater pollution prevention training and required qualifications and training under the Construction General Permit (CAS000002).
- Onsite stormwater pollution prevention training shall be conducted on an ongoing basis.
- Training of water quality sampling personnel shall be in accordance with the Caltrans *Construction Site Storm Water Quality Sampling Guidance Manual,December 2003,* CTSW-RT-03-116.31.30.
- Document informal stormwater training using the sample training log sheet provided as Attachment I.
- Document formal stormwater training by providing a list of classes and copies of class completion documentation. Documentation shall be submitted to the Resident Engineer within 24 hours of completion of training.
- Training records shall be updated, documented and reported in the SWPPP quarterly.

EXAMPLE:

Section 300.5 shows the name of the contractor's WPCM. This person has received the following training:

- 24-hour Caltrans Training provided by ABC Consultant
- Attended 2001 IECA 3-day Conference

The training log showing formal and informal training of various personnel is shown in Attachment I. A copy of all training certificate(s) (e.g., Caltrans 24 Hour Training Class and Construction General Permit training) for the WPCM and the SWPPP Preparer are included in Attachment I. Training records shall be updated, documented and reported in the SWPPP quarterly. Documentation of new training shall be submitted to the Resident Engineer within 24-hours of training.

Ongoing, formal training sessions shall be selected from one of the following organizations:

- City of Los Angeles Stormwater Program;

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

Informal training shall include tailgate site briefings to be conducted bi-weekly and address the following topics:

- Erosion Control BMPs;
- Sediment Control BMPs;
- Tracking and Wind Erosion Control BMPs;
- Non-Stormwater BMPs;
- Waste Management and Materials Pollution Control BMPs;
- Emergency Procedures specific to the construction site stormwater management; and
- Sampling and Analysis.

Other personnel attending tailgate training shall document attendance using the form in Attachment I.

This SWPPP was prepared by ABC Engineering, under the direction of Mr. John Doe, a registered Professional Civil Engineer in the State of California. Mr. Doe has over 5 years of experience in the preparation of Stormwater Pollution Prevention Plans (SWPPPs), and has the following previous experience:

- Has prepared over 15 project-specific SWPPPs;
- Over 15 years of experience in storm drain design, hydrology, and hydraulics;
- SWPPP Preparation training sponsored by Orange County Stormwater Program, June 2002;
- Attended the 1999, 2000, 2001, and 2002 International Erosion Control Association (IECA) 3-day conferences;
- Received certification as a Certified Professional in Erosion and Sediment Control (CPESC) in July 2001;
- Attended "NPDES Storm Water Permit Compliance" course in spring 2002, sponsored by the American Society of Civil Engineers (ASCE).

REQUIRED TEXT:

Section 300.5 shows the name of the contractor's WPCM. This person has received the following training:

- [LIST]

The training log showing formal and informal training of various personnel is shown in Attachment I. A copy of all training certificate(s) (e.g., Caltrans 24 Hour Training Class and Construction General Permit training) for the WPCM and the SWPPP Preparer are included in Attachment I. Training records shall be updated, documented and reported in the SWPPP quarterly. Documentation of new training shall be submitted to the Resident Engineer within 24-hours of training.

[INSERT HERE ANY ADDTIONAL TEXT REGARDING TRAINING OF PERSONNEL.]

This SWPPP was prepared by [INSERT COMPANY, NAME AND PROFESSIONAL REGISTRATION OR OTHER QUALIFICATIONS (INCLUDING INFORMATION REGARDING OTHER TRAINING COURSES, SUCH AS CALTRANS SWPPP PREPARATION TRAINING) OF PERSON THAT PREPARED THE SWPPP.]

500.8 List of Subcontractors

INSTRUCTIONS:

- The SWPPP is required to include a list of names of all contractors, (or subcontractors) and individuals responsible for implementation of the SWPPP. This list shall include telephone numbers and addresses. Specific areas of responsibility of each subcontractor (type of work to be performed) and emergency contact numbers shall also be included.
- A sample subcontractor notification letter and log is provided as Attachment J. Discuss pertinent conditions in the contractual agreement and/or letter of approval that address subcontractor responsibility for General Permit compliance.
- ❑ Include a completed Attachment J in the SWPPP.

EXAMPLE:

All contractors and subcontractors shall be notified of the requirement for stormwater management measures during the project. A list of contractors shall be maintained and included in the SWPPP. If subcontractors change during the project, the list shall be updated accordingly. The completed subcontractor notification letter and log is included in the SWPPP as Attachment J.

REQUIRED TEXT:

All contractors and subcontractors shall be notified of the requirement for stormwater management measures during the project. A list of contractors shall be maintained and included in the SWPPP. If subcontractors change during the project, the list shall be updated accordingly. The completed subcontractor notification letter and log is included in the SWPPP as Attachment J.

Section 600
Monitoring Program and Reports

600.1 Site Inspections

INSTRUCTIONS:

- ❑ Include a Separator and Tab for Section 600 for ready reference.
- Site inspections shall be conducted by the Contractor's WPCM or other Caltrans approved 24-hour trained staff at the following minimum frequenices:
  - Prior to a forecast storm;
  - After a rain event that causes runoff from the construction site;
  - At 24-hour intervals during extended rain events;
  - Daily within the Lake Tahoe Hydrologic Unit.
  - Weekly during the rainy season;
  - Every 2 weeks during the non-rainy season;
  - As specified in the Construction Site Management section of the Contract Special Provisions.
- BMPs shall be evaluated for adequacy, proper implementation, and whether additional BMPs are required in accordance with the terms of the Permits and the Special Provisions.
- Implementation of non-stormwater discharge BMPs shall be verified and their effectiveness evaluated.
- One-time discharges of non-stormwater shall be inspected when such discharges occur.
- The results of the inspections and assessments shall be recorded on the Stormwater Quality Construction Site Inspection Checklist included in Attachment H. This checklist shall be used for all inspections unless the Contract Special Provisions require the Contractor to use a different checklist.
- A copy of each completed Stormwater Quality Construction Site Inspection Checklist shall be provided to the Resident Engineer within 24 hours of the inspection, and a copy attached to the onsite SWPPP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs.
- Cross check recommended BMP inspection frequency with Contract Special Provisions.

REQUIRED TEXT:

Site inspections shall be conducted by the Contractor's WPCM or other Caltrans approved 24-hour trained staff at the following minimum frequencies:

- Prior to a forecast storm;
- After a rain event that causes runoff from the construction site;
- At 24-hour intervals during extended rain events;
- Daily inspections within the Lake Tahoe Hydrologic Unit;
- Weekly during the rainy season;
- Every 2 weeks during the non-rainy season; and
- At any other time(s) or intervals of time specified in the Contract Special Provisions.

The results of all inspections and assessments shall be documented, a copy shall be provided to the Resident Engineer within 24 hours of the inspection, and copies of the completed inspection checklists shall be maintained with the SWPPP. Site inspections conducted for monitoring purposes shall be performed using the inspection checklist shown in Attachment H.

The name(s) and contact number(s) of the assigned inspection personnel are listed below and their training qualifications are provided in Attachment I:

Assigned inspector: Contact phone:
Alternate inspector: Contact phone:

600.2 Discharge Reporting

INSTRUCTIONS:

- Discharges will be reported to the Resident Engineer verbally upon discovery and in writing within 7 days (3 days for Districts 7 and 11) of occurrence, or as specified in the Special Provisions. A sample form for reporting discharges is shown in Attachment K. A discharge reporting log is provided in Attachment U.
- Note: USEPA has issued regulations that define Reportable Quantity (RQ) volumes for oil and hazardous substances. These regulations are found in the Code of Federal Regulations at 40 CFR Part 110, Part 117, or Part 302.
  - For example, an oily sheen in stormwater runoff as a result of a spill or release is an exceedance of a RQ level. The RQ level for dieldrin, a pesticide, is 1 kilogram. A spill or release of one or more kg of dieldrin is an exceedance of the RQ threshold.

REQUIRED TEXT:

If a discharge occurs or if the project receives a written notice or order from any regulatory agency, the contractor will immediately notify the Resident Engineer, and will file a written report to the Resident Engineer within 7 days (3 days for Districts 7 and 11) of the discharge event, notice, or order. Corrective measures will be implemented immediately following the discharge, notice or order. All discharges will be documented on a Notice of Discharge in Attachment K and recorded in a Discharge Reporting Log in Attachment U.

Discharges requiring reporting include:

- Stormwater from a DSA discharged to a waterway without treatment by an effective combinatin 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 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;

- Where water quality sample results from a CWA Section 303(d) stream listed for sediment, siltation or turbidity indicate elevated levels of sediment or turbidity in downstream samples;
- Where water quality sample results indicate elevated levels of non-visible pollutants;
- Discharges that may endanger health or the environment; and
- Other discharge reporting as directed by the Resident Engineer.

The report to the Resident Engineer will contain the following items:

- The date, time, location, nature of operation, and type of unauthorized discharge, including the cause or nature of the notice or order;
- The control measures (BMPs) deployed before the discharge event, or prior to receiving notice or order;
- The date of deployment and type of control measures (BMPs) deployed after the discharge event, or after receiving the notice or order, including additional measures installed or planned to reduce or prevent re-occurrence; and
- An implementation and maintenance schedule for any affected BMPs.

600.3 Record Keeping and Reports

REQUIRED TEXT:

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

- Site inspections;
- Compliance certifications;
- Discharge reports;
- Approved SWPPP document and amendments;
- Sampling and analysis results; and
- Copies of all applicable permits.

600.4 Sampling and Analysis Plan for Sediment

INSTRUCTIONS:

- If the project has the potential to discharge directly into a water body listed as impaired due to Sedimentation/Siltation and/or Turbidity pursuant to Section 303(d) of the Clean Water Act, the SWPPP must include a Sampling and Analysis Plan (SAP) for Sediment. The purpose of a SAP for Sediment is to determine if BMPs implemented on the construction site are effective for preventing impacts to levels of sedimentation/siltation and/or turbidity in 303(d) listed water bodies impaired by those pollutants.

- Refer to the SWRCB web site at http://www.swrcb.ca.gov/tmdl/303d_lists2006.html for the list of 303(d) water bodies in California. Determine if the project will discharge directly into one of the 303(d) water bodies listed as impaired due to Sedimentation/Siltation and/or Turbidity.
- ***Direct discharge*** is defined as a point source or conveyance that discharges directly to the 303(d) listed water body, that does not first flow through a tributary river or stream (that itself is not listed as impaired) or combine with stormwater from offsite in a municipal separate storm sewer system (MS4).
- Include the following required text to identify whether or not the project discharges directly to a 303(d) listed water body.
- Include the following required text if the project will discharge collected stormwater by dewatering.
- If the project does not discharge to a 303(d) listed water body and dewatering is not anticipated then Sections 600.4.1 through 600.4.9 of the template are not applicable and will be hidden.
- If the project does discharge to a 303(d) listed water body and/or dewatering is anticipated, then complete Sections 600.4.1 through 600.4.9 by following the instructions provided at the beginning of each Section.
- Note that if the cursor does not go to the next form field after answering a yes/no radio button question, then scroll down and click in the next applicable form field.

Does this project have the potential to discharge directly to a water body listed as impaired due to Sedimentation/Siltation and/or Turbidity pursuant to Clean Water Act, Section 303(d)?

☐ Yes ☐ No

Does this project have the potential to discharge collected stormwater by dewatering?

☐ Yes ☐ No

REQUIRED TEXT:

This project does not have the potential to discharge directly to a water body listed as impaired due to Sedimentation/Siltation and/or Turbidity pursuant to Clean Water Act, Section 303(d).

This project does have the potential to discharge collected stormwater by dewatering.

600.4.1 Scope of Monitoring Activities

INSTRUCTIONS:

- ❑ Provide the name(s) of the 303(d) listed water bodies and identify the reason for impairment (Sedimentation/Siltation and/or Turbidity).
- ❑ Describe the location(s) of direct discharge from the project site to the 303(d) water body and show the locations of direct discharge on the WPCDs.
- ❑ Describe the location(s) of the stormwater dewatering discharge from the project site to the MS4 and/or water body and show the locations of discharge on the WPCDs.
- ❑ Copies of the *Caltrans Construction Site Storm Water Quality Sampling Guidance Manual, December 2003, CTSW-RT-03-116.31.30,* can be obtained from the Caltrans web page at: http://www.dot.ca.gov/hq/env/stormwater/special/newsetup/index.htm
- ❑ Include the appropriate required text to identify whether run-on to the Caltrans right-of-way may combine with stormwater and directly discharge to the 303(d) water body. If the project does receive run-on, describe the locations of run-on and show the locations on the WPCDs.

REQUIRED TEXT for Projects that Directly Discharge to a 303(d) Water body:

This project discharges directly into [specify 303(d) water body], a water body listed as impaired due to [specify reason(s) for impairment: Sedimentation/Siltation and/or Turbidity] pursuant to Clean Water Act, Section 303(d). This SAP has been prepared pursuant to the requirements of Resolution 2001-046 and the applicable sections of the *Caltrans Construction Site Storm Water Quality Sampling Guidance Manual, December 2003.* The SAP describes the sampling and analysis strategy and schedule for monitoring [specify impairment: Sedimentation/Siltation and/or Turbidity] in the 303(d) listed water body and potential increases in the [specify impairment: Sedimentation/Siltation and/or Turbidity] levels caused by stormwater discharges from the project site.

The project has the potential for direct (concentrated) stormwater discharges to [specify 303(d) water body] at the following locations, as shown on the WPCDs in Attachment B.

- [LIST LOCATIONS]

INSTRUCTIONS:

Does the project receive run-on with the potential to combine with stormwater that discharges directly to the 303(d) listed water body?

☐ Yes ☐ No

REQUIRED TEXT for PROJECTs that do not RECEIVE RUN-ON:

The project does not receive run-on with the potential to combine with stormwater that discharges directly to the 303(d) listed water body.

REQUIRED TEXT for PROJECTs that RECEIVE RUN-ON:

The project receives run-on with the potential to combine with stormwater that discharges directly to the 303(d) listed water body at the following locations, as shown on the WPCDs in Attachment B:

- [LIST LOCATIONS]

REQUIRED TEXT for Projects that Discharge Collected Stormwater by Dewatering:

This project discharges accumulated stormwater into [specify water body or MS4]. This SAP has been prepared pursuant to the requirements of the *Caltrans Construction Site Storm Water Quality Sampling Guidance Manual*, December 2003. The SAP describes the sampling and analysis strategy and schedule for monitoring turbidity in the water body and stormwater discharges from the project site.

The project will discharge to [specify water body or MS4] at the following location(s), as shown on the WPCDs in Attachment B:

- [LIST LOCATIONS]

[INSERT ADDITIONAL BULLETS HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert bullets)]

600.4.2 Monitoring Strategy

INSTRUCTIONS:

- ❑ Describe the sampling schedule for monitoring the impacts of direct stormwater discharges to the 303(d) or other water body.
- ❑ Describe the sampling locations for monitoring the impacts of direct stormwater discharges from the project to the 303(d) or other water body.
- ❑ Describe the rationale for the selection of sampling locations.
- ❑ Identify a location upstream of all direct discharge from the construction site that appears to represent the flow of the water body, to analyze the prevailing condition of the receiving water without any influence from the construction site. Describe exactly, either using GPS coordinates or post kilometer/post mile, where the sample will be collected. Note: Sampling too far upstream may not show prevailing conditions immediately upstream of the construction site.
- ❑ Identify a location immediately downstream from the last point of direct discharge from the construction site that appears to represent the nature of the flow to analyze potential impacts to the 303(d) listed water body from the project. Describe exactly where the sample will be collected. Downstream samples should represent the receiving water mixed with flow from the construction site. Note: Sampling too far downstream may detect pollutants from other discharges.
- ❑ For projects that, in Section 600.4.1, identified locations of run-on to the Caltrans right-of-way include the required text to identify run-on sampling location(s) to determine potential impairments that originate off the project site. Describe exactly where the sample will be collected.
- ❑ Show all sampling locations on the WPCDs.
- ■ Locate sampling locations in areas that are safe, out of the path of heavy traffic, and reasonably accessible.
- ❑ Describe surrounding areas such as agricultural fields, or other sites that may contribute run-on sediment to the site.
- ❑ Do not locate sampling points at point sources or confluences to minimize backwater effects or poorly mixed flows.

REQUIRED TEXT for Projects that Directly Discharge to a 303(d) Water Body:

Sampling Schedule

Upstream, downstream, discharge, and run-on samples, if applicable, shall be collected for [specify impairment: Sedimentation/Siltation and/or Turbidity] during the first two hours of discharge from rain events that result in a direct discharge from the project site to [enter 303(d) water body]. Samples shall be collected during daylight hours (sunrise to sunset) and shall be collected regardless of the time of the year, status of the construction site, or day of the week.

All storm events that occur during daylight hours will be sampled up to a maximum of four rain

events within a 30-day period. In conformance with the U.S. Environmental Protection Agency definition, a minimum of 72 hours of dry weather will be used to distinguish between separate rain events.

Sampling Locations

Sampling locations are based on proximity to identified discharge or run-on location(s), accessibility for sampling, personnel safety, and other factors in accordance with the applicable requirements in the Caltrans *Construction Site Storm Water Quality Sampling Guidance Manual*. Sampling locations are shown on the WPCDs and include:

- A sample location (designated number [Enter Number]) is upstream of all direct discharge from the construction site for the collection of a control sample to be analyzed for the prevailing condition of the receiving water without any influence from the construction site. The control sample will be used to determine the background levels of [specify impairment: Sedimentation/Siltation and/or Turbidity] in the 303(d) listed water body upstream of the project, if any.
    - Sample location number [Enter Number] is located [Enter Location].
- A sample location **(**designated number [Enter Number]) is immediately downstream from the last point of direct discharge from the construction site for the collection of a sample to be analyzed for potential increases in [specify impairment: Sedimentation/Siltation and/or Turbidity] in the 303(d) listed water body caused by stormwater discharges from the project, if any.
    - Sample location number [Enter Number] is located [Enter Location].

REQUIRED TEXT only for PROJECTs that RECEIVE RUN-ON:

- The upstream sampling location (designated number [Enter Number]) has been identified for the collection of samples that represent flow to the water body, to analyze the prevailing condition of the receiving water without any influence from the construction site. The sample point is located [Enter Location].
- The downstream sampling location (designated number [Enter Number]) has been identified for the collection of samples that represent the nature of the flow to analyze potential impacts to the 303(d) listed water body from the project. The sample point is located [Enter Location].
- [Enter number of locations] sampling location(s) (designated number(s) [Enter Number]) have been identified for the collection of samples of run-on to the Caltrans right-of-way with the potential to combine with discharges from the construction site in other than MS4 to the 303(d) water body. These samples will identify potential [specify impairment: Sedimentation/Siltation and/or Turbidity] that originates off the project site and contributes to direct stormwater discharges from the construction site to the 303(d) listed water body. The sample point(s) is located [Enter Location].

REQUIRED TEXT for Projects that Discharge Collected Stormwater by Dewatering:

Upstream, downstream, and discharge samples shall be collected for turbidity during the discharge from the project site to the [specify water body or MS4]. Samples shall be collected at the commencement of dewatering and routinely during the dewatering activity.

600.4.3 Monitoring Preparation

INSTRUCTIONS:

- Training of water quality sampling personnel shall be in accordance with the Caltrans *Construction Site Storm Water Quality Sampling Guidance Manual, December* 2003. Identify whether samples will be collected by the contractor's personnel, by a commercial laboratory, or by an environmental consultant.
- ❑ Identify training and experience of individuals responsible for collecting water samples in Attachment I.
- ❑ Identify the health and safety procedures for sampling personnel.
- ❑ Identify alternate sampling personnel in case of emergency, sick leave, and/or vacations during stormwater monitoring. Identify training of alternate sampling personnel.
- ❑ Identify the state-certified laboratory(ies) that will analyze the samples. For a the list of California state-certified laboratories that are accepted by Caltrans, access the following web site: www.dhs.ca.gov/ps/ls/elap/html/lablist.htm
- ❑ Include the appropriate required text to describe the strategy for ensuring that adequate sample collection supplies are available to the project in preparation for a sampling event.
- ❑ Describe the strategy for ensuring that appropriate field testing equipment is available to the project in preparation for a sampling event. If equipment is to be rented, contact a local environmental equipment rental company.

Samples will be collected by (check one or more):

Contractor Personnel	❑ Yes	❑ No
Commercial Laboratory	❑ Yes	❑ No
Environmental Consultant	❑ Yes	❑ No

REQUIRED TEXT IF contractor personnel will collect samples:

Samples from the project site shall be collected by contractor sampling personnel:

Name/Telephone Number:

Name/Telephone Number:

Alternate(s)/Telephone Number:

Alternate(s)/Telephone Number:

Prior to the rainy season, all sampling personnel and alternates shall review Section 600 through 600.5.10 of this SWPPP. Qualifications of designated contractor personnel describing environmental sampling training and experience are provided in Attachment I.

An adequate stock of supplies and equipment for monitoring [specify impairment: Sedimentation/Siltation and/or Turbidity] shall be available on the project site or provided by [specify laboratory] prior to a sampling event. Monitoring supplies and equipment shall be stored in a cool-temperature environment that will not come into contact with rain or direct sunlight. Sampling personnel shall be available to collect samples in accordance with the sampling schedule.

Supplies maintained at the project site shall include, but will be not limited to, nitrile or latex gloves, sample collection equipment, coolers, appropriate number, type, and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, Sampling Activity Log forms, and Chain-of-Custody (COC) forms.

The contractor shall obtain and maintain the field testing instruments, as identified in Section 600.4.5, for analyzing samples in the field by contractor sampling personnel. Safety practices for sample collection will be in accordance with the [enter title and publication date of contractor health and safety plan for the project].

REQUIRED TEXT only if consultant or laboratory will collect samples:

Samples on the project site will be collected by the following [specify laboratory or environmental consultant]:

Company Name:

Address:

Telephone Number:

Point of Contact:

Qualifications of designated sampling personnel describing environmental sampling training and experience are provided in Attachment I.

The WPCM will contact [specify name of laboratory or environmental consultant] 24 hours prior to a predicted rain event to ensure that adequate sample collection personnel, supplies and field test equipment for monitoring [specify impairment: Sedimentation/Siltation and/or Turbidity] are available and will be mobilized to collect samples on the project site in accordance with the sampling schedule.

[Specify name of laboratory or environmental consultant] will obtain and maintain the field-testing instruments, as identified in Section 600.4.5, for analyzing samples in the field by their sampling personnel.

600.4.4 Sample Collection and Handling

INSTRUCTIONS:

- ❑ Describe sample collection procedures to be used on the project. For sample collection procedures, refer to the Caltrans *Construction Site Storm Water Quality Sampling Guidance Manual, December 2003* for general guidance.
- ■ Run-on samples could be collected using the following collection procedures or others approved by the Resident Engineer:
- - Place several rows of sandbags in a half circle directly in the path of the run-on 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 in future sampling events as they may cross-contaminate future samples.
- - Place a cleaned or decontaminated dustpan with open handle in the path of the run-on so that water will pour through the handle and into sample bottles.
- ■ For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136.
- ■ For the list of California state-certified laboratories that are accepted by Caltrans, access the following web site: www.dhs.ca.gov/ps/ls/elap/html/lablist.htm
- ❑ Describe sample handling procedures.
- ❑ Describe decontamination waste disposal requirements (e.g., trisodium phosphate (TSP) soapy water shall not be discharged to the storm drainage system or receiving water).
- ❑ Describe sample collection documentation procedures.
- ❑ Describe procedures for recording, checking, and correcting sampling data.
- ■ A Chain-of-Custody (COC) form is required to be submitted to the laboratory with the samples to trace the possession and handling of samples from collection through analysis. Copies of completed COCs will be placed in Attachment R of the SWPPP.
- ■ A Sampling Activity Log is required to document details of all sampling events and to record results for samples analyzed in the field. A sample Sampling Activity Log is located in Attachment R.
- ■ Each sample bottle is required to have a proper and complete identification label.

REQUIRED TEXT:

Sample Collection Procedures

Grab samples shall be collected and preserved in accordance with the methods identified in Table 600-1, "Sample Collection, Preservation and Analysis for Monitoring Sedimentation/Siltation and/or Turbidity", provided in Section 600.4.5. Only personnel trained in proper water quality sampling shall collect samples. Include training qualifications in Attachment I.

Upstream samples shall be collected to represent the condition of the water body upgradient of the construction site. Downstream samples shall be collected to represent the water body mixed with direct flow from the construction site. Samples shall not be collected directly from ponded, sluggish, or stagnant 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 bottles to fill completely.

Run-on samples, if applicable, shall be collected to identify potential sedimentation/siltation and/or turbidity that originates off the project site and contributes to direct discharges from the construction site to the 303(d) listed water body. Run-on samples shall be collected downgradient and within close proximity of the point of run-on to the project by pooling or ponding water and allowing the ponded water to spill over into sample bottles directly in the stream of water.

Samples from dewatering discharge, if applicable, shall be collected to identify potential turbidity. Samples shall also be collected upstream and downstream of the discharge in the receiving water body.

To maintain sample integrity and prevent cross-contamination, sampling collection personnel shall:

- Wear a clean pair of nitrile gloves prior to the collection and handling of each sample at each location.
- Not contaminate the inside of the sample bottle by not allowing it to come into contact with any material other than the water sample.
- Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection.
- Not leave the cooler lid open for an extended period of time once samples are placed inside.
- 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.
- Not eat, smoke, or drink during sample collection.
- 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 to take place.
- 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).

INSTRUCTIONS:

All or some of samples will be analyzed by (select one or both):

Laboratory	☐ Yes	☐ No
Contractor (Field Measurement)	☐ Yes	☐ No

Sample Handling Procedures

REQUIRED TEXT only If laboratory will analyze ALL or SOME OF THE samples:

Immediately following collection, sample bottles for laboratory analytical testing will be capped, labeled, documented on a COC form provided by the analytical laboratory, sealed in a resealable plastic storage bag, placed in an ice-chilled cooler, at ±4 degrees Celsius as practicable, and delivered within 24 hours to the following California state-certified laboratory:

Laboratory Name:
Address:

Telephone Number:
Point of Contact:

REQUIRED TEXT only If contractor will analyze ALL OR SOME OF THE samples:

Immediately following collection, samples for field analysis shall be tested in accordance with the field instrument manufacturer's instructions and results recorded on the Sampling Activity Log.

REQUIRED TEXT:

Sample Documentation Procedures

All original data documented on sample bottle identification labels, COC forms, Sampling Activity Logs, and Inspection Checklists 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. Copies of the COC forms and Sampling Activity Log are provided in Attachment R.

Sampling and field analysis activities shall be documented using the following:

- Sample Bottle Identification Labels: Sampling personnel shall attach an identification label to each sample bottle. At a minimum, the following information shall be recorded on the label, as appropriate:
  - Project name
  - Project number
  - Unique sample identification code as shown below:

    SSSSSYYMMDDHHmmTT

    Where:

SSSSS	=	sampling point number (e.g., CCUP1, CCDN2)
YY	=	last two digits of the year (e.g., 06)
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 CCUP1 collected at 4:15PM on December 8, 2006 would be:

    CCUP10612081615G

  - Collection date/time
  - Analysis constituent
  - Initials of person who collected the sample

- Sampling Activity Logs: A log of sampling events will identify:
  - Sampling date
  - Separate times for sample collection of upstream, downstream, run-on, dewatering, and QA/QC samples recorded to the nearest minute
  - Unique sample identification number and location
  - Analysis constituent
  - Names of sampling personnel
  - Weather conditions (including precipitation amount)
  - Field analysis results
  - Other pertinent data

- Chain-of-Custody (COC) forms: All samples to be analyzed by a laboratory shall be accompanied by a COC form provided by the laboratory. Only the sample collectors shall sign the COC form over to the lab. COC procedures shall be strictly adhered to for Quality Assurance and Quality Control (QA/QC) purposes.
- Stormwater Quality Construction Inspection Checklists: When applicable, the contractor's stormwater inspector shall document on the checklist that samples for sedimentation/siltation and/or turbidity were taken during a rain event.

600.4.5 Sample Analysis

INSTRUCTIONS:

- ❑ Identify the tests to be used on the project by completing Table 600-1, "Sample Collection, Preservation and Analysis for Monitoring Sedimentation/Siltation and/or Turbidity."
- ❑ For 303(d) listed water bodies impaired due to Sedimentation/Siltation, select YES for (b) and (c) OR YES for (b), and (c) and/or (a).
- ❑ For 303(d) or other listed water bodies impaired due to Turbidity, select YES for (d).
- ❑ If Suspended Sediment Concentration (SSC) test is selected, fill in the blank fields in the table. Contact the selected laboratory for the specifications to obtain the necessary information.

REQUIRED TEXT:

Samples shall be analyzed for the constituents indicated in Table 600-1, "Sample Collection, Preservation and Analysis for Monitoring Sedimentation/Siltation and/or Turbidity."

TABLE 600-1
Sample Collection, Preservation and Analysis for Monitoring Sedimentation/Siltation and/or Turbidity

Constituent [1]	Analytical Method	Test to be Used?		Sample Preservation	Minimum Sample Volume[2]	Sample Bottle	Maximum Holding Time	Reporting Limit
		YES	NO					
(a) Suspended Sediment Concentration (SSC)	ASTM D3977-97	☐	☐	Store at 4˚ C (39.2˚ F)	200 mL	Contact Laboratory	7 days	Contact Laboratory
(b) Settleable Solids	EPA 160.5 Std Method 2540(f)	☐	☐	Store at 4˚ C (39.2˚ F)	1 L	Polypropylene	48 hours	0.1 mL/L/hr
(c) Total Suspended Solids (TSS)	EPA 160.2 Std Method 2540(d)	☐	☐	Store at 4˚ C (39.2˚ F)	100 mL	Polypropylene	7 days	1 mg/L
(d) Turbidity	EPA 180.1 Std Method 2130(b)	☐	☐	Store at 4˚ C (39.2˚ F)	100 mL	Polypropylene or Glass	48 hours	1 NTU

Notes: [1] Samples shall be analyzed by using methods (b) and (c), or only method (a)

ASTM – American Society for Testing and Materials
°C – Degrees Celsius
°F – Degrees Fahrenheit
EPA – U.S. Environmental Protection Agency
L – Liter
mL/L/hr – Milliliters per liter per hour
mg/L – Milligrams per liter
mL – Milliliters
NTU – Nephelometric Turbidity Unit
Std Method – Per the *Standard Methods for the Examination of Water and Wastewater*, 20th Edition, American Water Works Association

[2] Minimum sample volume recommended. Specific volume requirements will vary by laboratory; check with laboratory when setting up bottle orders.

INSTRUCTIONS:

Will samples be analyzed in the field?:

☐ Yes ☐ No

REQUIRED TEXT only if samples will be analyzed in the field:

For samples collected for field analysis, collection, analysis and equipment calibration shall be in accordance with the field instrument manufacturer's specifications.

The following field instrument(s) will be used to analyze the following constituents:

TABLE 600-2
Field Instruments

Field Instrument	Constituent

- The instrument(s) shall be maintained in accordance with manufacturer's instructions.
- The instrument(s) shall be calibrated before each sampling and analysis event.
- Maintenance and calibration records shall be maintained with the SWPPP.

600.4.6 Quality Assurance/Quality Control

REQUIRED TEXT:

For an initial verification of laboratory or field analysis, duplicate samples shall be collected at a rate of 10 percent or 1 duplicate per sampling event. The duplicate sample shall be collected, handled, and analyzed using the same protocols as primary samples, and shall be collected where contaminants are likely, and not on the upstream sample. 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 quality assurance.

600.4.7 Data Management and Reporting

INSTRUCTIONS:

- ❑ Electronic data results shall be provided to the Resident Engineer, unless he/she provides the name, company and email address of the person to whom the data should be submitted.

REQUIRED TEXT:

A copy of all water quality analytical results and QA/QC data shall be submitted to the Resident Engineer within 5 days of sampling (for field analyses) and within 30 days of sampling (for laboratory analyses). Electronic results shall be submitted on diskette 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. Attachment T contains the Sampling Data Reporting Form, which must accompany the submittal of sampling data.

Laboratory reports and COCs shall be reviewed for consistency between laboratory methods, sample identifications, dates, and times for both primary samples and QA/QC samples. All data, including COC forms, Sampling Activity Logs, and Sampling Data Reporting Forms shall be kept with the SWPPP document. Electronic results shall be emailed to [Name] of [Company] at [email address] after final sample results are received after each sampling event. Electronic copies shall be forwarded by email to [Resident Enginer Name] at [email address] for inclusion into a statewide database.

600.4.8 Data Evaluation

INSTRUCTIONS:

- The General Permit requires that BMPs be implemented on the construction site to prevent a net increase of sediment load in stormwater discharges relative to pre-construction levels. The upstream sample, while not representative of pre-construction levels, provides a basis for comparison with the sample collected downstream of the construction site.
- The downstream water quality sample analytical results shall be evaluated to determine if the downstream sample(s) show elevated levels of the tested constituent relative to the levels found in the upstream sample. The run-on sample analytical results shall be used as an aid in evaluating potential offsite influences on water quality results. If elevated levels of pollutants are identified, additional BMPs must be implemented in an iterative manner to prevent a net increase in pollutants to receiving waters.
- Sample results from dewatering discharges shall be evaluated to determine if the concentrations are less than or equal to the applicable water quality standard.

REQUIRED TEXT:

An evaluation of the water quality sample analytical results, including figures with sample locations, shall be submitted to the Resident Engineer with the water quality analytical results and the QA/QC data for every event that samples are collected. Should the downstream sample concentrations exceed the upstream sample concentrations or dewatering discharge concentrations exceed applicable water quality standards, then the WPCM or other personnel shall evaluate the BMPs, site conditions, surrounding influences (including run-on sample analysis), and other site factors to determine the probable cause for the increase.

As determined by the data and project evaluation, appropriate BMPs shall be repaired or modified to mitigate increases in sediment and/or turbidity concentrations in the water body. Any revisions to the BMPs shall be recorded as an amendment to the SWPPP.

600.4.9 Change of Conditions

REQUIRED TEXT:

Whenever SWPPP monitoring, pursuant to Section B of the General Permit, indicates a change in site conditions that might affect the appropriateness of sampling locations, testing protocols shall be revised accordingly. All such revisions will be recorded as amendments to the SWPPP.

600.5 Sampling and Analysis Plan for Non-Visible Pollutants

INSTRUCTIONS:

- The project SWPPP must include a Sampling and Analysis Plan (SAP) for pollutants not visually detectable in stormwater. The purpose of a SAP for Non-Visible Pollutants is to determine if BMPs implemented on the construction site are effective in preventing pollutants not visually detectable in stormwater, from leaving the construction site and potentially impacting water quality objectives.

REQUIRED TEXT:

This Sampling and Analysis Plan (SAP) for Non-Visible Pollutants describes the sampling and analysis strategy and schedule for monitoring non-visible pollutants in stormwater discharges from the project site and offsite activities directly related to the project in accordance with the requirements of Section B of the General Permit, and applicable requirements of the Caltrans *Construction Site Storm Water Quality Sampling Guidance Manual,* December 2003.

600.5.1 Scope of Monitoring Activities

INSTRUCTIONS:

- ❑ Identify the general sources and locations of potential non-visible pollutants on the project site in the following categories:
- Materials or wastes as identified in Section 500.3.1, containing potential non-visible pollutants and that are not stored under watertight conditions.
- Materials or wastes containing potential non-visible pollutants that are stored under watertight conditions, but (1) a breach, leakage, malfunction, or spill is observed; and (2) the leak or spill has not been cleaned up prior to the rain event; and (3) there is the potential for discharge of non-visible pollutants to surface waters or drainage system.
- Construction activities such as application of fertilizers, pesticides, herbicides or non-pigmented curing compounds, that have occurred during a rain event or within 24 hours preceding a rain event, and there is the potential for discharge of pollutants to surface waters or drainage system.
- Existing site features contaminated with non-visible pollutants as identified in Section 500.3.3.
- Applications of soil amendments, including soil stabilizing products, with the potential to alter pH levels or other properties of soil (such as chemical properties, engineering properties, or erosion resistance), or contribute toxic pollutants to stormwater runoff, and there is the potential for discharge of pollutants to surface waters or drainage system (unless independent test data are available that demonstrate acceptable concentration levels of non-visible pollutants in the soil amendment).

- Certain soil amendments identified in Attachment S, Note 7 when sprayed on straw or mulch, are not considered visible pollutants and are not subject to water quality monitoring requirements.
- Stormwater runoff from an area contaminated by historical usage of the site is observed to combine with stormwater, and there is the potential for discharge of pollutants to surface waters or drainage system.
- Stormwater run-on to the Caltrans right-of-way with the potential to contribute non-visible pollutants to discharges from the project.
- Breaches, malfunctions, leakages, or spills from a BMP.

EXAMPLE:

The following construction materials, wastes, or activities, as identified in Section 500.3.1, 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 B.

- Solvents, thinners
- Concrete curing
- Treated wood
- Soil stabilizers
- Lime treated subgrade
- Fertilizers, herbicides, and pesticides

The following existing site features, as identified in Section 500.3.3, are potential sources of non-visible pollutants to stormwater discharges from the project. Locations of existing site features contaminated with non-visible pollutants are shown on the WPCDs in Attachment B.

- Southwest portion of the construction site was previously used as a municipal landfill until 1987 and may have volatile organics in the soil.
- North portion of the construction site was a storage area for a metal plating shop until 1960 and may have metals in the soil.

The following soil amendments have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil and will be used on the project site. Locations of soil amendment application are shown on the WPCDs in Attachment B.

- None

The project has the potential to receive stormwater run-on with the potential to contribute non-visible pollutants to stormwater discharges from the project. Locations of such run-on to the Caltrans right-of-way are shown on the WPCDs in Attachment B.

- One location downgradient of the Millennium Chemical Company chemical plant and the Progress Industrial Park is identified as a run-on location to the construction site.
- Two locations are identified as run-on locations along the eastern edge of the construction site boundary.
- The northern boundary of the construction site has one location where run-on is likely.

REQUIRED TEXT:

The following construction materials, wastes or activities, as identified in Section 500.3.1, 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 B.

- [LIST]

The following existing site features, as identified in Section 500.3.3, are potential sources of non-visible pollutants to stormwater discharges from the project. Locations of existing site features contaminated with non-visible pollutants are shown on the WPCDs in Attachment B.

- [DESCRIBE]

The following soil amendments have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil and will be used on the project site. Locations of soil amendment application are shown on the WPCDs in Attachment B.

- [LIST]

The project has the potential to receive stormwater run-on with the potential to contribute non-visible pollutants to stormwater discharges from the project. Locations of such run-on to the Caltrans right-of-way are shown on the WPCDs in Attachment B.

- [LIST LOCATIONS]

Sampling for non-visible pollutants will be conducted when (1) a breach, leakage, malfunction, or spill is observed; and (2) the leak or spill has not been cleaned up prior to the rain event; and (3) there is the potential for discharge of non-visible pollutants to surface waters or drainage system.

600.5.2 Monitoring Strategy

INSTRUCTIONS:

- ❑ Describe the sampling schedule for monitoring potential non-visible pollutants in stormwater runoff. Note the specific conditions under which a sampling event for non-visible pollutants is triggered.
- ❑ Describe the sampling locations for monitoring non-visible pollutants.
- ❑ Describe the rationale for the selection of sampling locations.
- ❑ Identify a location for collecting samples of stormwater runoff from each source location of non-visible pollutant identified in Section 600.5.1. Describe exactly where the sample will be collected.
- ❑ Identify a location for collecting an uncontaminated background sample of runoff that has not come into contact with the non-visible pollutants identified in Section 600.5.1 or disturbed soil areas of the project. Describe exactly where the sample will be collected.
- ❑ Identify a location for collecting samples of stormwater run-on from each of the locations identified in Section 600.5.1 to identify possible sources of contamination that may originate from off the project site. Describe exactly where the sample will be collected.

- ❑ Identify sampling locations at offsite activities directly related to the project such as storage areas, contractor's yard, PCC or asphalt batch plants, etc., whether on not it is located on the Caltrans right-of-way.
- ❑ Show all sampling locations on the WPCDs.
- ❑ Locate sampling locations in areas that are safe, out of the path of heavy traffic, and have attainable access.
- ❑ Describe or list surrounding areas, such as industrial sites, that may contribute run-on or airborne constituents to the site.

REQUIRED TEXT:

Sampling Schedule

Samples for the applicable non-visible pollutant(s) and a sufficiently large uncontaminated background sample shall be collected during the first two hours of discharge from rain events that result in a sufficient discharge for sample collection. Samples shall be collected during daylight hours (sunrise to sunset) and shall be collected regardless of the time of year, status of the construction site, or day of the week.

In conformance with the U.S. Environmental Protection Agency definition, a minimum of 72 hours of dry weather will be used to distinguish between separate rain events.

Collection of discharge samples for non-visible pollutant monitoring will be triggered when any of the following conditions are observed during the required inspections conducted before or during rain events:

- 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.
- 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 rain event, and (3) there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.
- An operational activity, including but not limited to those in Section 600.5.1, with the potential to contribute non-visible pollutants (1) was occurring during or within 24 hours prior to the rain event, (2) applicable BMPs were observed to be breached, malfunctioning, or improperly implemented, and (3) there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.
- Soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil have been applied, and there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.

- Stormwater runoff from an area contaminated by historical usage of the site has been observed to combine with stormwater runoff from the site, and there is the potential for discharge of non-visible pollutants to surface waters or a storm sewer system.

Sampling Locations

Sampling locations are based on proximity to planned non-visible pollutant storage, occurrence or use; accessibility for sampling, personnel safety; and other factors in accordance with the applicable requirements in the Caltrans *Construction Site Storm Water Quality Sampling Guidance Manual,* December 2003. Planned sampling locations are shown on the WPCDs and include the following:

If any of the following is not applicable, place cursor in a field and use the "Delete Line" option on the toolbar.

[Enter Number] sampling location(s) on the project site and the contractor's yard have been identified for the collection of samples or runoff from planned material and waste storage areas and from areas where that non-visible pollutant producing operations are planned.

Sample location number(s) [Enter Number] is located [Enter Location].

[Enter number of locations] sampling locations have been identified for the collection of samples of runoff that drain areas where soil amendments that have the potential to change the chemical properties, engineering properties, or erosion resistance of the soil will be applied.

If applicable Sample location number(s) [Enter Number] is located [Enter Location].

[Enter number of locations] sampling locations have been identified for the collection of samples of runoff that drain areas contaminated by historical usage of the site.

If applicable Sample location number(s) [Enter Number] is located [Enter Location].

[Enter number of locations] sampling locations have been identified for the collection of samples of run-on to the Caltrans right–of-way with the potential to combine with discharges being sampled for non-visible pollutants. These samples are intended to identify sources of potential non-visible pollutants that originate off the project site.

If applicable Sample location number(s) [Enter Number] is located [Enter Location].

[Enter Number]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 500.3.1; (2) potential non-visible pollutants due to historical use of the site as identified in Section 500.3.3; (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.

If applicable Sample location number(s) [Enter Number] is located [Enter Location].

If an operational activity or stormwater inspection conducted 24 hours prior to or during a rain event identifies the presence of a material storage, waste storage, or operations area with spills or the potential for the discharge of non-visible pollutants to surface waters or a storm sewer system that was an unplanned location and has not been identified on the WPCDs, sampling locations will be selected using the same rationale as that used to identify planned locations.

600.5.3 Monitoring Preparation

INSTRUCTIONS:

- Training of water quality sampling personnel shall be in accordance with the *Caltrans Construction Site Storm Water Quality Sampling Guidance Manual, December 2003*.
- ❑ Identify whether samples will be collected by the contractor's personnel, or by a commercial laboratory, or by an environmental consultant.
- ❑ Identify training and experience of individuals responsible for collecting water samples.
- ❑ Identify the contractor's health and safety procedures for sampling personnel.
- ❑ Identify alternate sampling personnel in case of emergency, sick leave, and/or vacations during stormwater monitoring. Identify training of alternate sampling personnel.
- ❑ Identify the state-certified laboratory(ies) that will analyze the samples. For a list of California state-certified laboratories that are accepted by Caltrans, access the following web site: http://www.dhs.ca.gov/ps/ls/elap/html/lablist.htm.
- ❑ Include the appropriate required text to describe the strategy for ensuring that adequate sample collection supplies are available to the project in preparation for a sampling event.
- ❑ Describe the strategy for ensuring that appropriate field testing equipment is available to the project in preparation for a sampling event. If equipment is to be rented, contact a local environmental equipment rental company.

Samples will be collected by:

Contractor	❑ Yes	❑ No
Consultant	❑ Yes	❑ No
Laboratory	❑ Yes	❑ No

REQUIRED TEXT if contractor personnel will collect samples:

Samples on the project site will be collected by the following contractor sampling personnel:

Name/Telephone Number:

Name/Telephone Number:

Alternate(s)/Telephone Number:

Alternate(s)/Telephone Number:

Prior to the rainy season, all sampling personnel and alternates will review Section 600 through 600.5.10 of this SWPPP. Qualifications of designated contractor personnel describing environmental sampling training and experience are provided in Attachment I.

An adequate stock of monitoring supplies and equipment for monitoring non-visible pollutants will be available on the project site prior to a sampling event. Monitoring supplies and equipment will be stored in a cool temperature environment that will not come into contact with rain or direct sunlight. Sampling personnel with be available to collect samples in accordance with the sampling schedule. Supplies maintained at the project site will include, but are not limited to, surgical gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, Sampling Activity Log forms, and COC forms.

The contractor will obtain and maintain the field testing instruments, as identified in Section 600.5.6, for analyzing samples in the field by contractor sampling personnel.

Safety practices for sample collection will be in accordance with the [ENTER TITLE AND PUBLICATION DATE OF CONTRACTOR'S HEALTH AND SAFETY PLAN FOR THE PROJECT OR PROVIDE SPECIFIC REQUIREMENTS HEREIN].

REQUIRED TEXT if consultant or laboratory will collect samples:

Samples on the project site will be collected by the following [specify laboratory or environmental consultant]:

Company Name:

Address:

Telephone Number:

Point of Contact:

Qualifications of designated sampling personnel describing environmental sampling training and experience are provided in Attachment I.

WPCM will contact [specify name of laboratory or environmental consultant] 24 hours prior to a predicted rain event and if one of the triggering conditions is identified during an inspection before, during, or after a storm event to ensure that adequate sample collection personnel, supplies and field test equipment for monitoring non-visible pollutants are available and will be mobilized to collect samples on the project site in accordance with the sampling schedule.

[Specify name of laboratory or environmental consultant] will obtain and maintain the field testing instruments, as identified in Section 600.5.6, for analyzing samples in the field by their sampling personnel.

600.5.4 Analytical Constituents

INSTRUCTIONS:

- ❑ Identify the specific non-visible pollutants on the project site by completing Table 600-3, "Potential Non-Visible Pollutants and Water Quality Indicator Constituents" table.
- ❑ List the non-visible pollutant source, non-visible pollutant name, and water quality indicator.
- ❑ Refer to the "Pollutant Testing Guidance Table," Attachment S for a partial list of some of the common non-visible pollutants.
- ❑ Add lines to the table as needed.
- ■ Do not include visible pollutants such as:
  - Petroleum products: gas, diesel, and lubricants;
  - Colored paints;
  - Sand, gravel or topsoil; and
  - Asphalt cold mix
- ❑ Fill in Table 600-4, Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants.

REQUIRED TEXT:

Identification of 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 600-3
Potential Non-Visible Pollutants and Water Quality Indicator Constituents

Pollutant Source	Pollutant	Water Quality Indicator Constituent
Example: Vehicle batteries	Lead, Sulfate, Acid	Lead, sulfate or pH

600.5.5 Sample Collection and Handling

INSTRUCTIONS:

- For sampling collection procedures, refer to the Caltrans *Construction Site Storm Water Quality Sampling Guidance Manual, December 2003* for general guidance.
- For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136.
- For a list of California state-certified laboratories that are accepted by Caltrans, access the following web site: www.dhs.ca.gov/ps/ls/elap/html/lablist.htm.
- A COC form is required to be submitted to the laboratory with the samples to trace the possession and handling of samples from collection through analysis. Copies of completed COCs will be placed in the SWPPP.
- A Sampling Activity Log is required to document details of all sampling events and to record results for samples analyzed in the field. A Sampling Activity Log is located in Attachment R.
- Each sample bottle is required to have a proper and complete identification label.
- Run-on samples could be collected using the following collection procedures or other approved by the Resident Engineer:
  - Place several rows of sandbags in a half circle directly in the path of the run-on to pond water and wait for enough water to spill over. Then place a decontaminated or clean 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 in future sampling events as they may cross-contaminate future samples.
  - Place a decontaminated or clean dustpan with open handle in the path of the run-on so that water will pour through the handle and into sample bottles.
  - If not using clean equipment, decontaminate by washing equipment in a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water.

- ❑ Describe sample collection procedures to be used on the project site.
- ❑ Describe sample handling procedures.
- ❑ Describe decontamination waste disposal requirements (e.g., TSP soapy water shall not be discharged to the storm drainage system or receiving water)
- ❑ Describe sample collection documentation procedures.
- ❑ Describe procedures for recording and correcting sampling data.
- ❑ Fill in Table 600-3, Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants, in Section 600.5.6.

REQUIRED TEXT:

Sample Collection Procedures

Samples of discharge shall be collected at the designated sampling locations shown on the WPCDs for observed breaches, malfunctions, leakages, spills, operational areas, soil amendment application areas, and historical site usage areas that triggered the sampling event.

Grab samples shall be collected and preserved in accordance with the methods identified in Table 600-3, "Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants" table

provided in Section 600.5.6. Only personnel trained in proper water quality sampling shall collect samples. Include copies of training records in Attachment I.

Samples shall be collected by placing a separate laboratory-provided sample container directly into a stream of water downgradient and within close proximity to the potential non-visible pollutant discharge location. This separate laboratory-provided sample container shall be used to collect water, which shall be transferred to sample bottles for laboratory analysis. The upgradient and uncontaminated background samples shall be collected first prior to collecting the downgradient to minimize cross-contamination. The sampling personnel shall collect the water upgradient of where they are standing. Once the separate laboratory-provided sample container is filled, the water sample shall be poured directly into sample bottles provided by the laboratory for the analyte(s) being monitored.

To maintain sample integrity and prevent cross-contamination, sampling collection personnel shall:

- Wear a clean pair of surgical gloves prior to the collection and handling of each sample at each location;
- Not contaminate the inside of the sample bottle by not allowing it to come into contact with any material other than the water sample;
- Discard sample bottles or sample lids that have been dropped onto the ground prior to sample collection;
- Not leave the cooler lid open for an extended period of time once samples are placed inside;
- Not sample near a running vehicle where exhaust fumes may impact the sample;
- 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;
- Not eat, smoke, or drink during sample collection;
- 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 to take place;
- Decontaminate sampling equipment prior to sample collection using a TSP-soapy water wash, distilled water rinse, and final rinse with distilled water; and
- Dispose of decontamination water/soaps appropriately (i.e., not discharge to the storm drain system or receiving water).

Sample Handling Procedures

All or some of samples will be analyzed by (select one or both):

Laboratory	☐ Yes	☐ No
Contractor (Field Measurement)	☐ Yes	☐ No

REQUIRED TEXT only if a laboratory will analyze ALL OR SOME OF THE samples:

Immediately following collection, sample bottles for laboratory analytical testing shall be capped, labeled, documented on a COC form provided by the analytical laboratory, sealed in a re-sealable storage bag, placed in an ice-chilled cooler, at ±4 degrees Celsius as practicable, and delivered within 24 hours to the following California Environmental Laboratory Accreditation Program (ELAP) – certified laboratory:

Laboratory Name:

Address:

Telephone Number:

Point of Contact:

REQUIRED TEXT only If contractor will analyze SOME OR ALL samples:

Immediately following collection, samples for field analysis shall be tested in accordance with the field instrument manufacturer's instructions and results recorded on the Sampling Activity Log.

REQUIRED TEXT:

Sample Documentation Procedures

All original data documented on sample bottle identification labels, COC forms, Sampling Activity Logs, and Inspection Checklists 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. Copies of the COC form and Sampling Activity Log are provided in Attachment R.

Duplicate samples shall be identified consistent with the numbering system for other samples to prevent the laboratory from identifying duplicate samples. Duplicate samples shall be identified in the Sampling Activity Logs.

Sampling and field analysis activities shall be documented using the following:

Sample Bottle Identification Labels: Sampling personnel shall attach an identification label to each sample bottle. At a minimum, the following information shall be recorded on the label, as appropriate:

- Project name
- Project number
- Unique sample identification code as shown below:

SSSSSYYMMDDHHmmTT

Where:

SSSSS	=	sampling point number (e.g., CCUP1, CCDN2)
YY	=	last two digits of the year (e.g. 06)
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 CCUP1 collected at 4:15PM on December 8, 2006 would be:

CCUP10612081615G

- Collection date/time (No time applied to QA/QC samples)
- Analysis constituent
- Initials of person who collected the sample

Sampling Activity Logs: A log of sampling events shall identify:

- Sampling date;
- Separate times for collected samples and QA/QC samples recorded to the nearest minute;
- Unique sample identification number and location;
- Analysis constituent;
- Names of sampling personnel;
- Weather conditions (including precipitation amount);
- Field analysis results; and
- Other pertinent data.

COC Forms: All samples to be analyzed by a laboratory will be accompanied by a COC form provided by the laboratory. Only the sample collectors will sign the COC form over to the lab. COC procedures will be strictly adhered to for QA/QC purposes.

Stormwater Quality Construction Inspection Checklists: When applicable, the contractor's Stormwater inspector will document on the checklist that samples for non-visible pollutants were taken during a rain event.

600.5.6 Sample Analysis

INSTRUCTIONS:

- ❑ Identify the test method and specifications to be used to monitor the non-visible pollutants included in the "Potential Non-Visible Pollutants and Water Quality Indicator Constituents" table in Section 600.5.4.
- ❑ Fill in Table 600-4, "Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants."
- ❑ There should be a test method identified for each Water Quality Indicator Constituent listed in the table in Section 600.5.4.
- ❑ Contact the selected laboratory for the appropriate test method(s)/specifications to be used for each constituent.
- ❑ Identify field test instruments to be used for analyzing samples in the field, if any.

REQUIRED TEXT:

Samples shall be analyzed for the applicable constituents using the analytical methods identified in Table 600-4, "Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants" table in this section.

Example:

TABLE 600-4 (Sample)
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
VOCs-Solvents	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/PCBs	EPA 8081A/8082	1 x 1 L	Glass-Amber	Store at 4˚ C	0.1µg/L	7 days
Herbicides	EPA 8151A	1 x 1 L	Glass-Amber	Store at 4˚ C	Check Lab	7 days
BOD	EPA 405.1	1 x 500 mL	Polypropylene	Store at 4˚ C	1 mg/L	48 hours
COD	EPA 410.4	1 x 250 mL	Glass-Amber	Store at 4˚ C, H_2SO_4 to pH<2	5 mg/L	28 days
DO	SM 4500-O G	1 x 250 mL	Glass-Amber	Store at 4˚ C	Check Lab	8 hours
pH	EPA 150.1	1 x 100 mL	Polypropylene	None	Unitless	Immediate
Alkalinity	SM 2320B	1 x 250 mL	Polypropylene	Store at 4˚ C	1 mg/L	14 days
Metals (Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, Se, Na, Th, Va, Zn)	EPA 6010B/7470A	1 x 250 mL	Polypropylene	Store at 4˚ C, HNO_3 to pH<2	0.1 mg/L	6 months
Metals (Chromium VI)	EPA 7199	1 x 500 mL	Polypropylene	Store at 4˚ C	1.0µg/L	24 hours

Notes:

°C	–	Degrees Celsius	µg/L	–	Micrograms per Liter
	–	Biological Oxygen Demand	mL	–	Milliliter
BOD	–	Chemical Oxygen Demand	PCB	–	Polychlorinated Biphenyl
COD	–	Dissolved Oxygen	SVOC	–	Semi-Volatile Organic Compound
DO	–	Environmental Protection Agency	SM	–	Standard Method
EPA	–	Hydrogen Chloride	H_2SO_4	–	Hydrogen Sulfide
HCl	–	Nitric Acid	VOA	–	Volatile Organic Analysis
HNO_3	–	Liter	VOC	–	Volatile Organic Compound
L	–	Milligrams per Liter			
mg/L					

REQUIRED TEXT:

TABLE 600-4
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
Notes:						

INSTRUCTIONS:

Will samples be analyzed in the field?:

☐ Yes ☐ No

REQUIRED TEXT only If samples will be analyzed in the field:

For samples collected for field analysis, collection, analysis and equipment calibration shall be in accordance with the field instrument manufacturer's specifications.

The following field instrument(s) will be used to analyze the following constituents:

TABLE 600-5
Field Instruments

Field Instrument	Constituent

- The instrument(s) shall be maintained in accordance with manufacturer's instructions.
- The instrument(s) shall be calibrated before each sampling and analysis event.
- Maintenance and calibration records shall be maintained with the SWPPP.

600.5.7 Quality Assurance/Quality Control

REQUIRED TEXT:

For an initial verification of laboratory or field analysis, duplicate samples shall be collected at a rate of 10 percent or 1 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 at each location immediately after the primary sample has been collected. Duplicates shall be collected where contamination is likely, not on the background sample. Duplicate samples shall not influence any evaluations or conclusions; however, they shall be used as a check on laboratory quality assurance.

600.5.8 Data Management and Reporting

INSTRUCTIONS:

- ☐ Electronic data results shall be provided to the Resident Engineer, unless he/she provides the name, company and email address of the person to whom the data should be submitted.

REQUIRED TEXT:

A copy of all water quality analytical results and QA/QC data shall be submitted to the Resident Engineer within 5 days of sampling (for field analyses) and within 30 days (for laboratory analyses). All submitted information shall include a signed copy of the sampling data reporting certification form. Electronic results shall be submitted on diskette 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, Lab Name, Method Reference, Method Number, Method Detection Limit, and Reported Detection Limit. Attachment T contains the Sampling Data Reporting Form, which must accompany the submittal of sampling data.

Lab reports and COCs shall be reviewed for consistency between lab methods, sample identifications, dates, and times for both primary samples and QA/QC samples. All data, including COC forms, Sampling Activity Logs, and Sampling Data Reporting Forms shall be kept with the SWPPP document. Electronic results shall be emailed to [Name] of [COMPANY] at [email address] after final sample results are received after each sampling event. Electronic copies shall be forwarded by email to the [Resident Engineer Name] at [email address] for inclusion into a statewide database.

600.5.9 Data Evaluation

INSTRUCTIONS:

- The General Permit requires that BMPs be implemented on the construction site to reduce non-visible pollutants in discharges of Stormwater from the construction site.
- The runoff/downgradient water quality sample analytical results shall be evaluated to determine if the runoff/downgradient sample(s) show significantly elevated concentrations of the tested analyte relative to the concentrations found in the uncontaminated background sample.
- The water quality sample analytical results shall be evaluated to determine if the runoff and run-on samples show significantly elevated levels of the tested constituent relative to the levels found in the background sample. The run-on sample analytical results shall be used as an aid in evaluating potential offsite influences on water quality results.

REQUIRED TEXT:

An evaluation of the water quality sample analytical results, including figures with sample locations, shall be submitted to the Resident Engineer with the water quality analytical results and the QA/QC data. Should the runoff/downgradient sample show an increased level of the tested 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. Any revisions to the BMPs shall be recorded as an amendment to the SWPPP.

600.5.10 Change of Conditions

REQUIRED TEXT:

Whenever SWPPP monitoring, pursuant to Section B of the General Permit, indicates a change in site conditions that might affect the appropriateness of sampling locations or introduce additional non-visible pollutants of concern, testing protocols shall be revised accordingly. All such revisions shall be recorded as amendments to the SWPPP.

Section 3
Preparing a Water Pollution Control Program (WPCP)

3.1 Preparation and Approval of a WPCP

The Special Provisions require the contractor to prepare a Water Pollution Control Program (WPCP) for each project resulting in less than 1 acre of soil disturbance or not otherwise subject to the requirements of the NPDES program. The WPCP must comply with Caltrans Standard Specifications Section 7-1.01G – Water Pollution, and must be prepared in accordance with the Special Provisions following the procedures and format set forth in this Manual.

The section provides detailed, step-by-step procedures, instructions and a template that contractors shall use to prepare a WPCP. Appendix B contains Attachments that shall be used during preparation of the WPCP. Instructions for selection and implementation of construction site BMPs, and working details for the BMPs, are presented in the Standard Plans, Contract Plans, and Contract Special Provisions.

The contractor shall prepare and submit a complete WPCP to the Caltrans Resident Engineer (RE) for review and approval. If revisions are required, as determined by the RE, the contractor must revise and resubmit the WPCP. The time frames for WPCP submittal, review, and re-submittal are specified in the Special Provisions. No activity having the potential to cause water pollution, as determined by the RE, shall be performed until the WPCP has been approved by the RE. In order to allow construction activities to proceed, the RE may conditionally approve the WPCP while minor amendments are being completed. Construction activities that will not threaten water quality, such as traffic control, may proceed without an approved WPCP if allowed by the RE. The WPCP shall be submitted to Caltrans in a 3-ring binder with separators and tabs.

3.1.1 Information Provided by Caltrans

In addition to information shown on the Contract Plans, Caltrans may supply to the contractor certain information developed during the design process. The contractor shall use this information to prepare the WPCP, as appropriate. Items that may be provided are:

Vicinity Map

A map extending approximately one quarter mile (1,320 feet) beyond the property boundaries of the construction site showing: the construction site; surface water bodies (including known springs and wetlands); known wells; an outline of off site drainage areas that discharge into the construction site; general topography; and the anticipated discharge location(s) where the construction site's stormwater discharges to a municipal storm drain system or other water body. A U.S. Geological Survey (USGS) quad map may be used for showing the project site and a one-quarter mile (1,320 feet) extension beyond the property boundaries of the construction site.

Soils/Geotechnical Report, Project Materials Report and/or Other Reports

Toxic History of the Site: To the extent information is available from the soils/geotechnical report, the project materials report, site investigation report developed by the Hazardous Waste Section, or other regulatory or environmental compliance documentation, the Information Handout may include a description of all toxic materials known to have been treated, stored, disposed, spilled, or leaked in significant quantities onto the construction site.

The Nature of Fill Material and Existing Data Describing the Soil: The Information Handout may include a copy of the project materials report (geotechnical report). The contractor must describe the conditions of the fill material and the soil that can be found at the construction site. Fill material should be described as whether it is native or non native, contaminated or uncontaminated, and its coverage technique (i.e., native soil coverage, asphalt or concrete coverage, and/or landscape).

List of Pre-Construction (Existing) Control Practices (BMPs)

The Information Handout may provide a list and written descriptions of existing pre-construction practices, if any, that are already in place to reduce sediment and other pollutants in stormwater discharges. These permanent control practices (BMPs) may consist of biofiltration swales and strips, media filters, etc. If there are no pre construction control practices, then this should be indicated.

List of Permanent (Post-Construction) Stormwater Control Measures (BMPs)

The Information Handout may provide a written listing and narrative descriptions of post-construction permanent BMPs that have been included in the project. Narrative descriptions may also include operation and maintenance (O&M) procedures for the permanent BMPs, O&M short term and long term funding, and a statement indicating that the Maintenance Department will be responsible for O&M of the post construction BMPs.

Layout Sheets Showing Suggested Temporary BMP Locations

The Information Handout may provide sheets showing the location of anticipated temporary BMPs such as contractor staging areas, approximate location of concrete washouts, approximate locations for storage of materials, and preferred locations for vehicle and equipment maintenance. These are not intended to be highly detailed drawings. Typically, these layouts can be hand-drawn on 200 scale drawings.

Explanation of Construction Site (Temporary) BMPs

The Information Handout may provide a brief narrative explanation of the various temporary BMPs that may be implemented in the project, including any existing permanent BMPs that may be present within the project limits that can be used during construction, as well as any permanent BMPs that should be constructed early for use as a temporary BMP during construction, such as early application of permanent soil stabilization measures in areas that will no longer experience soil disturbance during construction.

Drainage Report

The Information Handout may include a copy of the drainage report for the project or appropriate information, such as the hydrology maps, delineation of drainage boundaries, concentrations of runoff, and runoff coefficients.

Construction Site Estimates

The Information Handout may provide the following information to the contractor:

- An estimate of the construction site area in acres;
- An estimate of the runoff coefficient of the construction site before and after construction; and
- An estimate of the percentage of the area of the construction site that is impervious (e.g., pavement, building, etc.) before and after construction.

Site-Specific Inspection Sheet

A general Stormwater Quality Construction Inspection Checklist has been developed by Caltrans. In some cases, a District may require that a different checklist is used for a specific construction project or activity. If this is the case, the Information Handout will include a copy of the checklist that the District will require that the contractor use for inspection of construction site BMPs.

Other Information

The Information Handout may also include any other information that would explain the decisions or thought process behind the selection and deployment of the BMPs chosen by the designer. Examples include the designer's estimated staging of the project and estimated time of year for those stages; any scheduling modifications included in the Order of Work specifications that were included to enhance water pollution control; and any specific BMP deployments that are considered to be critical to the success of the contractor's WPCP.

Other Plans/Permits/Agreements

Other agencies may have issued permits/agreements or have plan requirements for the construction of the project or imposed certain conditions. If so, a written description of the permit/agreement conditions and a copy of the permit/agreement will be provided by Caltrans for inclusion in an appendix to the WPCP. Hazardous materials must be handled in accordance with specific laws and regulations and disposed of as a hazardous waste. If during the preparation of the PS&E, it is known that special permits for accomplishing disposal of hazardous waste is known, then a written explanation will be provided to the contractor to be incorporated within this section and it must be consistent with other specifications in the contract. In addition, information regarding other related permits/agreements such as California Department of Fish and Game or U.S. Army Corps of Engineers permits/agreements may also be included. For oversight projects, the Local Agency / Private Entity administering the project is responsible for securing all necessary permits, certifications, and approvals. Copies of such documents shall be provided by the Local Agency / Private Entity and included in the attachment to the WPCP.

3.1.2 Minimum Requirements for Construction Sites

In order to ensure a minimum level of water pollution control, Caltrans has designated some BMPs as minimum requirements that contractors must implement during construction of highway projects statewide. These minimum requirements are listed in Table 1-1.

3.2 WPCP Template

This section provides step-by-step WPCP preparation procedures, instructions and a template. The template has been developed in Microsoft® Word 2000 and 2003 with the following objectives:

(1) To make it easier for contractors to prepare WPCPs (instructions and examples can be viewed in the template while the WPCP is being prepared).

(2) To make sure that all WPCPs prepared and submitted to Caltrans are consistent (thus making the review and approval process more efficient). Contractors may download the appropriate template from the Caltrans Web site at: http://www.dot.ca.gov/hq/construc/stormwater/templates.htm

Once a contractor has developed the text for the various sections of the WPCP, including instructions, examples and the completed text for each section, can be printed. The instructions include "check box" items that the preparer may use to review his/her own work and check each of the items as they are completed. The Contractor's final WPCP can then be viewed to check format and perform final edits as necessary. The document can then be printed without instructions and examples by going to the menu bar in MS Word, selecting the "TOOLS" menu, selecting "OPTIONS" and making sure that the HIDDEN TEXT checkboxes under both the VIEW and PRINT tabs are cleared.

The format of the WPCP includes the following sections:

Section 10 WPCP Certification and Approval

Section 20 Project Information

Section 30 Pollution Sources and Control Measures

Section 40 Amendments

Section 50 Reporting

Appendix B contains the following attachments for use in preparation of a WPCP

Attachment A Water Pollution Control Drawings

Attachment B Maintenance, Inspection, and Repair of Construction Site BMPs

Attachment C Stormwater Quality Construction Site Inspection Checklist

Attachment D Amendments

Attachment E Notice of Discharge

Attachment F Discharge Reporting Log

Attachment G Trained Contractor Personnel Log

INSTRUCTIONS

- Fill in the following information:

REQUIRED TEXT

WATER POLLUTION CONTROL PROGRAM (WPCP)

for

START HERE…CLICK HERE TO INSERT PROJECT NAME-THEN TAB TO NEXT FIELD

Caltrans Contract Number:
INSERT CALTRANS CONTRACT NUMBER-THEN TAB TO NEXT FIELD.

Prepared for:
Insert Name of Lead Agency-then TAB.
Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.
Insert City, State, ZIP-then TAB.
Insert Resident Engineer's Name-then TAB.
Insert Resident Engineer's Telephone Number-then TAB.

Submitted by:
Insert Contractor's Company Name-then TAB.
Insert Address 1 and press ENTER for Address 2 or TAB to next field.-then TAB.
Insert City, State, ZIP-then TAB.
Insert Telephone-then TAB.
Insert Owner/Representative's Name-then TAB.

Project Site Address
Insert job site address, if any-then TAB.
Insert job site telephone number, if any-then TAB.

Contractor's Water Pollution Control Manager
Insert WPCM's Name-then TAB.
Insert Telephone Number(s)-then TAB.

Contractor's Designated Water Pollution Control Inspector (if different from WPCM)
Insert Inspectors Name-then TAB.
Insert Telephone Number(s)-then TAB.

WPCP Prepared by:
Insert Company Name-then TAB.
Insert Address 1 and press ENTER to insert Address 2 or TAB to next field.
Insert City, State, ZIP-then TAB.
Insert Telephone-then TAB.
Insert Name and Title of Preparer-then TAB.

WPCP Preparation Date
Insert Date

Contents

Section 10 WPCP Certification and Approval.....7
10.1 Contractor's Certification and Approval by the Resident Engineer.....7
Section 20 Project Information.....9
Section 30 Pollution Sources and Control Measures.....13
30.1 Soil Stabilization (Erosion Control) and Sediment Control.....13
30.1.1 Soil Stabilization BMPs.....14
30.1.2 Sediment Control BMPs.....17
30.1.3 Tracking Control BMPs.....19
30.1.4 Wind Erosion Control BMPs.....21
30.2 Construction Site Management.....23
30.2.1 Non-Stormwater Management BMPs.....23
30.2.2 Waste Management and Materials Pollution Control BMPs.26
30.3 Water Pollution Control Drawings (WPCDs).....28
30.4 Construction BMP Maintenance, Inspection, and Repair.....28
30.5 Training.....29
Section 40 Amendments.....31
Section 50 Reporting.....33
50.1 Discharge Reporting.....33

WPCP Attachments

Attachment A .....Water Pollution Control Drawings
Attachment B .....Maintenance, Inspection, and Repair of Construction Site BMPs
Attachment C ..... Stormwater Quality Construction Site Inspection Checklist
Attachment D .....Amendments
Attachment E ..... Notice of Discharge
Attachment F .....Discharge Reporting Log
Attachment G .....Trained Contractor Personnel Log
[INSERT ADDITIONAL ATTACHMENT REFERENCES OR DELETE THIS LINE]

Section 10
WPCP Certification and Approval

10.1 Contractor's Certification and Approval by the Resident Engineer

INSTRUCTIONS

- The contractor, authorized and required by the Special Provisions to prepare and implement the WPCP, shall provide and sign the following certification:

REQUIRED TEXT

CONTRACTOR'S CERTIFICATION OF WPCP

"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 ensure 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 fine and imprisonment for knowing violations."

Signature	Date
Name and Title	Telephone Number

INSTRUCTIONS

- If Caltrans is administering the project, then the Caltrans Resident Engineer, as the authorized representative of the Department shall provide and sign the following certification upon approval of the WPCP.
- If a Local Agency / Private Entity is administering the project, then both the Local Agency / Private Entity Resident Engineer and the Caltrans Oversight Engineer shall provide and sign the following certification upon approval of the WPCP.

Is a Local Agency / Private Entity administering the project?

○ Yes ○ No

REQUIRED TEXT WHEN CALTRANS IS ADMINISTERING PROJECT

For Use by Caltrans Only

CALTRANS RESIDENT ENGINEER'S APPROVAL OF WPCP

I, and/or personnel acting under my direction and supervision, have reviewed this WPCP and find that it meets the requirements set forth in the Special Provisions, the Caltrans SWPPP and WPCP Preparation Manual, and the Standard Specifications Section 7-1.01G - Water Pollution.

Caltrans Resident Engineer's Signature	Date of WPCP Approval
Caltrans Resident Engineer's Name (printed)	Caltrans Resident Engineer's Phone Number

REQUIRED TEXT WHEN LOCAL AGENCY / PRIVATE ENTITY IS ADMINISTERING PROJECT

For Use by Local Agency / Private Entity Only

LOCAL AGENCY / PRIVATE ENTITY RESIDENT ENGINEER'S APPROVAL OF WPCP

I, and/or personnel acting under my direction and supervision, have reviewed this WPCP and find that it meets the requirements set forth in the Special Provisions, the Caltrans SWPPP and WPCP Preparation Manual, and the Standard Specifications Section 7-1.01G - Water Pollution.

Resident Engineer's Signature	Date of WPCP Approval
Resident Engineer's Name (printed)	Resident Engineer's Phone Number

For Use by Caltrans Only

CALTRANS OVERSIGHT ENGINEER'S CONCURENCE OF WPCP

I, and/or personnel acting under my direction and supervision, have reviewed this WPCP and concur with the Resident Engineer's findings that it meets the requirements set forth in the Special Provisions, the Caltrans SWPPP and WPCP Preparation Manual, and the Standard Specifications Section 7-1.01G - Water Pollution.

Caltrans Oversight Engineer's Signature	Date of WPCP Concurrence
Caltrans Oversight Engineer's Name	Caltrans Oversight Engineer's Phone Number

Section 20
Project Information

INSTRUCTIONS

- Provide narrative text addressing the following topics in a format that can be easily understood by a person who is not familiar with the project.
  - Introduction and Project Description:
    - ❑ Provide a brief description of the project.
    - ❑ Describe the type(s) of work that will be performed.
    - ❑ Provide a brief description of the project location, including descriptive items such as county, route, post mile, city, and street names.
    - ❑ Describe proximity to receiving waters to which the project will discharge, including surface waters, drainage channels, and drainage systems.
    - ❑ Identify drainage system owners (municipality or agency).
  - Unique Site Features:
    - ❑ Provide a brief description of any unique site features (water bodies, wetlands, environmentally sensitive area, endangered or protected species, etc.)
    - ❑ Describe significant or high-risk activities that may impact stormwater quality. Include any unique features or activities within or adjacent to water bodies (such as dredging, re-use of aerially deposited lead material, large excavations, or work within a water body).
  - Project Schedule: Provide a graphical project schedule. A graphical schedule in the form of an image file can be copied into the form field for the graphical schedule. Alternatively the graphical schedule can be manually included in the document. The schedule shall clearly show how the rainy season relates to soil-disturbing and re-stabilization activities. The schedule only needs to be detailed enough to show major activities sequenced with the implementation of construction site BMPs, including:
    - ❑ Project start and finish dates
    - ❑ Rainy season dates
    - ❑ Mobilization dates
    - ❑ Mass clearing and grubbing, roadside clearing dates
    - ❑ Major grading and excavation dates
    - ❑ Dates for special activities named in other permits, such as Fish and Game
    - ❑ Rainy season implementation schedule
    - ❑ Deployment of temporary soil stabilization BMPs

- ❑ Deployment of temporary sediment control BMPs
- ❑ Deployment of non-stormwater BMPs
- ❑ Deployment of waste management and materials pollution control BMPs
- ❑ Paving, sawcutting, and any other pavement related operations
- ❑ Planned stockpiling operations
- ❑ Dates for other significant long-term operations or activities that may plan non-stormwater discharges such as dewatering, grinding, etc.

- Note: Projects located in the Lake Tahoe, Truckee River, East Fork Carson River, or West Fork Carson River Hydrologic Units, and projects above 5,000 ft in elevation in the portions of Mono County or Inyo County within the Lahontan RWQCB are not allowed to perform removal of vegetation nor disturbance of existing ground surface conditions between October 15 of each year and May 1 of the following year; except when there is an emergency situation that threatens the public health and safety, or when the project is granted a variance by the RWQCB Executive Officer.

  - Pollutant Source Identification:

    - ❑ Review the contract documents and associated environmental documents to determine the known site contaminants and list them in this section.

EXAMPLE

1. Introduction and Project Description:

The project consists of sound wall construction, shoulder work, and PCC pavement removal and replacement along approximately 1300 feet of highway. The project is located on northbound I-5 in Stockton (San Joaquin County), north from W. March Lane. Project runoff is conveyed approximately 2600 feet south to the Calaveras River via a combination of Caltrans-owned roadside ditches and underground drainage facilities. The Calaveras River discharges to the San Joaquin River approximately 1.9 miles downstream from I-5. The total disturbed area is about 0.8 acres.

2. Unique Site Features:

Relative proximity to Calaveras and San Joaquin Rivers.

3. Project Schedule (graphical):

The attached graphical project schedule shows the projected progress of the project and includes implementation of water pollution control items.

4. Potential Pollutant Sources:

The primary construction activities, related materials, and wastes that have the potential to pollute stormwater include:
a) Soil disturbing activities and resulting exposed soil areas, including minor grading along the shoulder and trenching for conduits and sound wall footings.
b) Slurries from mortar mixing and PCC saw-cutting and placement.
c) Solid wastes from PCC demolition and removal, sound-wall construction, and form work

d) Temporary on-site storage of construction materials, including mortar mix, raw landscaping, soil stabilization materials, and treated lumber.
e) General site litter.
f) Equipment operation and maintenance.

REQUIRED TEXT

1. Introduction and Project Description:

2. Unique Site Features:

3. Project Schedule (graphical):

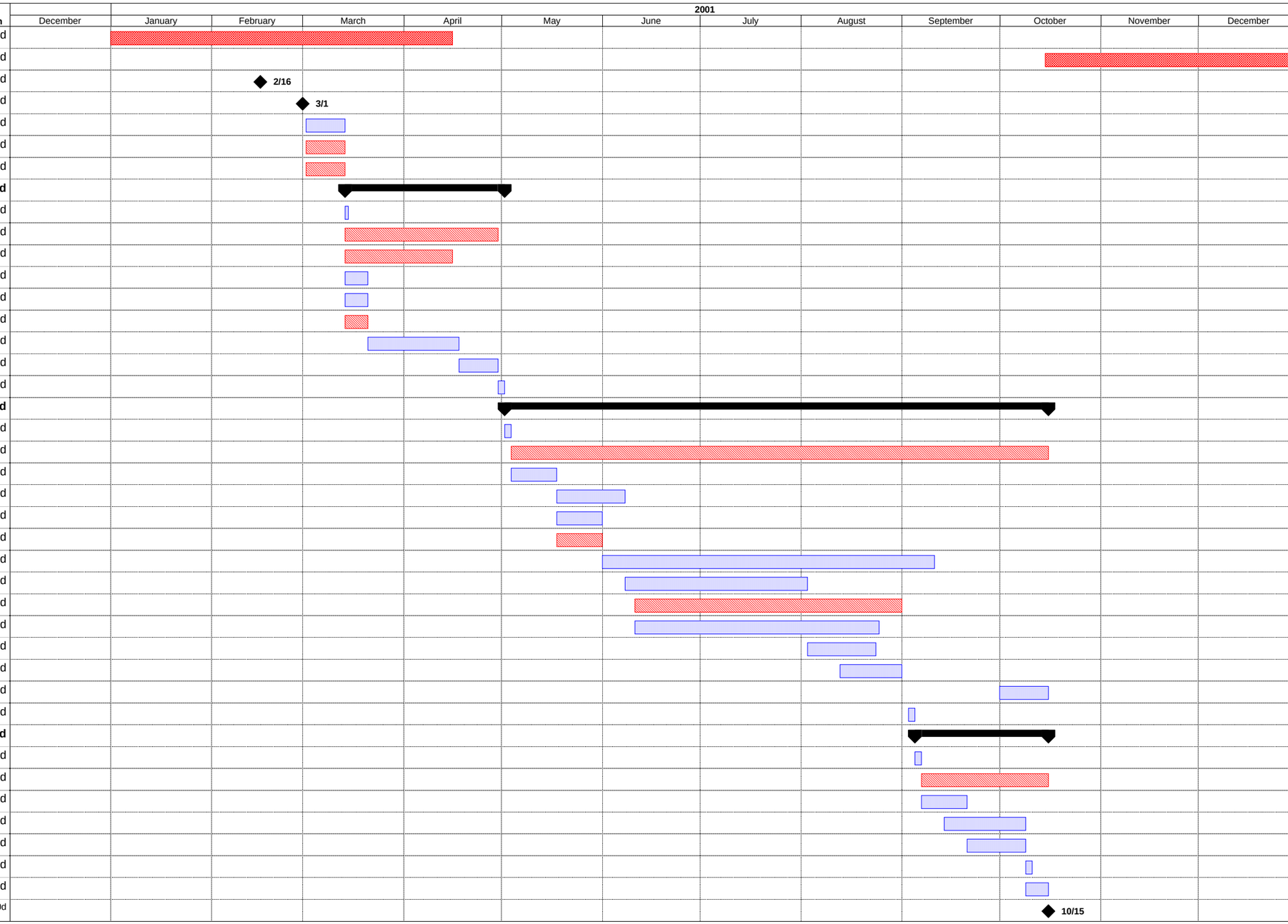
4. Potential Pollutant Sources:

EXAMPLE: GRAPHICAL SCHEDULE

The graphical Water Pollution Control Schedule is provided on the following page.

SAMPLE
WATER POLLUTION CONTROL IMPLEMENTATION SCHEDULE

ID	Task Name	Duration
1	Rainy Season (2000-2001)	79d
2	Rainy Season (2001-2002)	56d
3	SWPPP Approved	1d
4	**Project Start Date**	1d
5	Mobilization	10d
6	Construct Material/Waste Storage Facilities	10d
7	Construct Stabilized Access	10d
8	**Add Temporary Lane in Median (Sta 400 - 900)**	**37d**
9	Median K-rail	1d
10	Install/Maintain Temporary Sediment Controls	35d
11	Install/Maintain Temporary Soil Stabilization	23d
12	Demolish Median	5d
13	PCC Sawcutting	5d
14	Non-storm water BMPs for Sawcutting	5d
15	Median Grading	20d
16	Median Base/ AC Paving	10d
17	Restripe Mainline, Remove K-Rail	2d
18	**Lane Addition (Sta 500-800)**	**120d**
19	K-Rail and Traffic Control	2d
20	Install/Maintain Temporary Sediment Controls	118d
21	Clearing/Grubbing	10d
22	Demolition	15d
23	PCC Sawcutting	10d
24	Non-storm water BMPs for Sawcutting	10d
25	Grading	73d
26	Drainage	41d
27	Install/Maintain Temporary Concrete Washouts	60d
28	Sound Wall Construction	55d
29	Base	15d
30	PCC Paving	15d
31	Permanent Erosion Control/Landscaping	11d
32	Restripe Mainline, Remove K-Rail	2d
33	**Remove Temporary Median Lane**	**29d**
34	K-Rail and Traffic Control	2d
35	Install/Maintain Temporary Sediment Controls	27d
36	Demolition	10d
37	Grading	17d
38	Drainage	12d
39	Remove K-Rail	2d
40	Install Permanent Erosion Control Type D	5d
41	**Project Completion**	0d



Implementation of Construction Site BMPs shown in red

Task | Milestone | Rolled Up Task | Rolled Up Progress
Progress | Summary | Rolled Up Milestone

Section 30
Pollution Sources and Control Measures

INSTRUCTIONS

BMP SELECTION PROCESS

- BMPs are selected to reduce or eliminate pollutants in stormwater and non-stormwater discharges associated with construction activities. Described below is the sequence of steps that shall be used to identify BMPs to be included in WPCPs.

  Step 1: Incorporate the temporary water pollution control BMPs that are described in:

  - Contract Special Provisions;
  - Contract Plans;
  - Standard Plans; and
  - Standard Specifications.

  If the BMPs required in Step 1 are inadequate to address potential pollutants in stormwater discharges and non-stormwater discharges, then:

  Step 2: Incorporate the temporary water pollution control BMPs using one or more of the Caltrans minimum requirements listed in Table 1-1 of the SWPPP/WPCP Preparation Manual.

  Step 3: If the BMPs selected from Steps 1 and 2 are inadequate to address potential pollutants in stormwater discharges and non-stormwater discharges, then incorporate the temporary water pollution control BMPs that are described in Section 4.5 of the SWMP. For reference on these BMPs see the Construction Site Best Management Practices (BMPs) Reference Manual.

- Show the selected BMPs on the WPCDs.

- Complete the BMP implementation tables and descriptions in each of the following sections:

  30.1 Soil Stabilization (Erosion Control) and Sediment Control

  30.2 Construction Site Management

30.1 Soil Stabilization (Erosion Control) and Sediment Control

INSTRUCTIONS

- Use each of the following sections to identify erosion and sediment controls that will be implemented during the project.

  30.1.1 Soil Stabilization Practices

  30.1.2 Sediment Control Practices

  30.1.3 Sediment Tracking Controls

  30.1.4 Wind Erosion Controls

30.1.1 Soil Stabilization BMPs

INSTRUCTIONS

- Soil stabilization consists of source control measures that are designed to prevent soil particles from detaching and becoming suspended in stormwater runoff. Soil stabilization BMPs protect the soil surface by covering and/or binding the soil particles.
- Provide a brief description of soil-disturbing activities, such as clearing and grubbing, grading, excavation, trenching, etc. Show the limits of the soil-disturbed areas on the WPCDs.
- Complete the following BMP implementation table for temporary soil stabilization BMPs.
- Describe the locations and scheduled installations for each selected soil stabilization BMP.
- If the project will not create disturbed soil areas, state as such and check "No" for all BMPs in the soil stabilization BMP implementation table and enter "N/A" as the reason not used.

EXAMPLE

The following soil stabilization BMP implementation table indicates the BMPs that shall be implemented to control erosion on the construction site. Implementation and locations of temporary soil stabilization BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

Soil disturbing activities consist of minor grading along the shoulder and trenching for utilities and sound wall footings as shown on WPCD-2. Existing vegetation will be preserved outside the immediate construction zone as shown.

SS-1 Scheduling

SS-2 Preservation of Existing Vegetation

- Clearing and grubbing will be limited to the boundaries of active construction as shown on WPCD-2. Surrounding areas of existing vegetation will be protected by installing ESA fencing around the drip lines of the trees.

SS-5 Soil Binders (Copolymer)

- BMP SS-5 was selected to minimize interference with the final (permanent) erosion control measures (decorative landscaping). Soil binders will be applied to all non-active soil disturbed areas during the rainy season in conformance with the DSA protection requirements in the Stormwater Pollution Prevention Plan/Water Pollution Control Program Preparation Manual.

REQUIRED TEXT

The following soil stabilization BMP implementation table indicates the BMPs that shall be implemented to control erosion on the construction site. Implementation and locations of temporary soil stabilization BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SOIL STABILIZATION BMPs						
CONSTRUCTION BMP ID NO (1)	BMP NAME	MINIMUM REQUIRE-MENT (3)	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SS-1	Scheduling	✓	☐	☐	☐	
SS-2	Preservation of Property/ Preservation of Existing Vegetation	✓	☐	☐	☐	
SS-3	Temporary Hydraulic Mulch (Bonded Fiber Matrix)	✓(2)	☐	☐	☐	
	Temporary Hydraulic Mulch (Polymer Stabilized Fiber Matrix)	✓(2)	☐	☐	☐	
SS-4	Temporary Erosion Control (With Temporary Seeding)	✓(2)	☐	☐	☐	
SS-5	Temporary Soil Stabilizer	✓(2)	☐	☐	☐	
SS-6	Temporary Erosion Control (Straw Mulch with Stabilizing Emulsion)	✓(2)	☐	☐	☐	
SS-7	Temporary Erosion Control Blanket (On Slope)	✓(2)	☐	☐	☐	
	Temporary Erosion Control Blanket (In swale or ditch)		☐	☐	☐	
SS-7	Temporary Cover (Plastic Covers)	✓(2)	☐	☐	☐	
SS-8	Temporary Mulch (Wood)		☐	☐	☐	
SS-9	Earth Dikes / Drainage Swales & Lined Swales		☐	☐	☐	
SS-10	Outlet Protection / Velocity Dissipation Devices		☐	☐	☐	

TEMPORARY SOIL STABILIZATION BMPs						
CONSTRUCTION BMP ID NO (1)	BMP NAME	MINIMUM REQUIRE-MENT (3)	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SS-11	Slope Drains		☐	☐	☐	
SS-12	Streambank Stabilization		☐	☐	☐	
ALTERNATIVE SOIL STABILIZATION BMPs USED(4) ☐ Yes ☐ No						IF USED, STATE REASON

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) The Contractor shall ensure implementation of one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy and non-rainy season requirements.
(3) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(4) Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT NARRATIVE DESCRIBING SELECTED SOIL STABILIZATION BMPs]

30.1.2 Sediment Control BMPs

INSTRUCTIONS

- Sediment controls are used to complement and enhance the selected soil stabilization measures. Sediment controls are designed to intercept runoff and capture suspended soil particles through a settlement or filtration process.
- Provide a brief description of soil-disturbed areas that will necessitate sediment control BMPs. References to the WPCDs and/or Section 30.1.1 are often sufficient.
- Complete the following BMP implementation table for temporary sediment control BMPs. All listed BMPs shall be considered for the project.
- Describe the locations and scheduled installations for each selected sediment control BMP.
- Show selected BMPs on the WPCDs.

EXAMPLE

The following sediment control BMP implementation table indicates the BMPs that shall be implemented to control sediment on the construction site. Implementation and locations of temporary sediment control BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

Temporary fiber rolls will be used at the toe of slopes and as perimeter sediment controls. According to the Contract Special Provisions, sediment controls for this project are required during the rainy season - continuously on non-active DSAs and before rain on active DSAs. Deployment locations will be as follows:

SC-5 Temporary Fiber Rolls

- Fiber rolls will be deployed along the downstream (southern) construction site perimeter as shown on WPCD-2. Once the drainage channel is constructed and lined, fiber rolls will be extended north, along each side of the channel. See SC-4, Temporary Check Dam, below.

SC-4 Temporary Check Dam

- Concentrated flows will be conveyed by the drainage channel that runs north-south, adjacent to the shoulder. During channel construction, sediment control will be provided by gravel bag check dams, spaced at 30 feet. Once the channel is lined, temporary fiber rolls will be installed along the channel banks to prevent sediment from entering the channel.

REQUIRED TEXT

The following sediment control BMP implementation table indicates the BMPs that shall be implemented to control sediment on the construction site. Implementation and locations of temporary sediment control BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY SEDIMENT CONTROL BMPs						
CONSTRUCTION BMP ID NO[1]	BMP NAME	MINIMUM REQUIRE-MENT [3]	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
SC-1	Temporary Silt Fence	✓[2]	☐	☐	☐	
SC-2	Temporary Sediment Basin		☐	☐	☐	
SC-4	Temporary Check Dam		☐	☐	☐	
SC-5	Temporary Fiber Rolls	✓[2]	☐	☐	☐	
SC-6	Temporary Gravel Bag Berm		☐	☐	☐	
SC-7	Street Sweeping	✓	☐	☐	☐	
SC-8	Temporary Sandbags		☐	☐	☐	
SC-9	Temporary Straw Bale Barrier		☐	☐	☐	
SC-10	Temporary Drain Inlet Protection	✓	☐	☐	☐	
ALTERNATIVE SEDIMENT CONTROL BMPs USED[4] ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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) The Contractor shall ensure implementation of one of the two measures listed or a combination thereof to achieve and maintain the contract's rainy and non-rainy season requirements.
(3) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(4) Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT NARRATIVE DESCRIBING TEMPORARY SEDIMENT CONTROL BMPs]

30.1.3 Tracking Control BMPs

INSTRUCTIONS

- Refer to the following BMP implementation table for sediment tracking control BMPs. If a particular BMP will not be used or is not applicable enter a brief reason.
- Tracking controls shall be considered and implemented year round and throughout the duration of the project. Show selected sediment tracking control BMPs on the WPCDs in Attachment A.

REQUIRED TEXT

The following tracking control BMP implementation table indicates the BMPs that shall be implemented to reduce sediment tracking from the construction site onto private or public roads. Implementation and locations of tracking control BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details can also be found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

TEMPORARY TRACKING CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	**BMP NAME**	**MINIMUM REQUIRE-MENT**	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
				YES	**NO**	
SC-7	Street Sweeping		☐	☐	☐	
TC-1	Temporary Construction Entrance		☐	☐	☐	
TC-2	Stabilized Construction Roadway		☐	☐	☐	
TC-3	Temporary Entrance / Outlet Tire Wash		☐	☐	☐	
ALTERNATIVE TRACKING CONTROL BMPs USED(2) ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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) Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT NARRATIVE DESCRIBING TRACKING CONTROL BMPs]

30.1.4 Wind Erosion Control BMPs

INSTRUCTIONS

- Refer to the following BMP implementation table for wind erosion control BMPs. If a particular BMP will not be used or is not applicable enter a brief reason.
- Provide a narrative description of wind erosion control BMPs. Give a general approach on how wind erosion control BMPs will be implemented on the project to control dust during construction operations, including stockpile operations at all times.
- If the project will not create disturbed soil areas, indicate this in the narrative description.

REQUIRED TEXT

The following wind erosion control BMP implementation table indicates the BMPs that shall be implemented to control wind erosion on the construction site. Implementation and locations of wind erosion control BMPs are shown on the WPCDs in Attachment A and/or described in this section. The BMP working details can be found in Attachment A. The following list of BMPs and narrative explain how the selected BMPs shall be incorporated into the project.

TEMPORARY WIND EROSION CONTROL BMPs						
CONSTRUCTION BMP ID NO(1)	BMP NAME	MINIMUM REQUIRE-MENT(2)	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
WE-1	Wind Erosion Control	✓	☐	☐	☐	
TC-1	Temporary Construction Entrance		☐	☐	☐	
TC-2	Stabilized Construction Roadway		☐	☐	☐	
-----	All Soil Stabilization Measures included in Section 500.3.4		☐	☐	☐	
ALTERNATIVE WIND EROSION CONTROL BMPs USED(3 ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(3) Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT NARRATIVE DESCRIBING WIND EROSION CONTROL BMPs]

30.2 Construction Site Management

30.2.1 Non-Stormwater Management BMPs

INSTRUCTIONS

- Non-stormwater discharges which are not authorized under the Caltrans Permit or authorized under a separate NPDES permit are prohibited. Examples of prohibited discharges common to construction activities include:
  - Vehicle and equipment wash water, including concrete washout water.
  - Slurries from concrete cutting and coring operations or AC grinding operations.
  - Slurries from concrete or mortar mixing operations.
  - Blast 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.
- List all activities that have the potential to produce non-stormwater discharges. (Consider dewatering operations and any construction activity that requires water use.) Discuss planned dewatering operations with the Resident Engineer to determine possible requirement for permits and/or treatment. Discuss how mobile operations, such as maintenance and fueling for large or stationary equipment, will be addressed.
- Use the following BMP implementation table to select BMPs as necessary to contain, remove, and dispose potential non-stormwater discharges.
- Describe the locations and scheduled installations for each selected Non-Stormwater Management BMPs.

REQUIRED TEXT

The following BMP implementation table indicates the BMPs that have been selected to control non-stormwater pollution on the construction site. Implementation and locations of non-stormwater control BMPs are shown on the WPCDs in Attachment A and described in this section. The BMP working details that will be adhered to are found in Attachment A of this WPCP.

CONSTRUCTION SITE MANAGEMENT						
NON-STORMWATER MANAGEMENT POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO (1)	BMP NAME	MINIMUM REQUIRE-MENT (2)	CONTRACT BID ITEM	BMP USED		IF NOT USED, STATE REASON
				YES	NO	
NS-1	Water Control and Conservation		☐	☐	☐	
NS-2	Dewatering (3)		☐	☐	☐	
NS-3	Paving, Sealing, Sawcutting, and Grinding Operations		☐	☐	☐	
NS-4	Temp Stream Crossing (3)		☐	☐	☐	
NS-5	Clear Water Diversion (3)		☐	☐	☐	
NS-6	Illegal Connection and Illegal Discharge Detection Reporting	✓	☐	☐	☐	
NS-7	Potable Water / Irrigation		☐	☐	☐	
NS-8	Vehicle and Equipment Cleaning	✓	☐	☐	☐	
NS-9	Vehicle and Equipment Fueling	✓	☐	☐	☐	
NS-10	Vehicle and Equipment Maintenance	✓	☐	☐	☐	
NS-11	Pile Driving Operations		☐	☐	☐	
NS-12	Concrete Curing		☐	☐	☐	
NS-13	Material and Equipment Used Over Water		☐	☐	☐	
NS-14	Concrete Finishing		☐	☐	☐	

CONSTRUCTION SITE MANAGEMENT						
NON-STORMWATER MANAGEMENT POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO (1)	**BMP NAME**	**MINIMUM REQUIRE-MENT (2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
				YES	**NO**	
NS-15	Structure Demolition / Removal Over or Adjacent to Water		☐	☐	☐	
ALTERNATIVE NON-STORMWATER CONTROL BMPs USED(4) ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be determined by the Contractor and approved by the Resident Engineer.
(3) The BMPs listed above are incidental and do not include operations included as separate line items in the contract.
(4) Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT NARRATIVE DESCRIBING NON-STORM WATER MANAGEMENT POLLUTION CONTROL BMPs]

30.2.2 Waste Management and Materials Pollution Control BMPs

INSTRUCTIONS

- Waste management consists of implementing procedural and structural BMPs for collecting, handling, storing and disposing of wastes generated by a construction project to prevent the release of waste materials into stormwater discharges. Wastes are going to be generated during construction; however, the methods in which the wastes are collected, stored, and removed will determine the success of the waste management activities. Construction site wastes can range from residues collected from non-stormwater discharges (i.e. paint removal) to general site litter and debris (i.e. empty marker paint cans).

- Material pollution control (materials handling) consist of implementing procedural and structural BMPs for handling, storing and using construction materials to prevent the release of those materials into stormwater discharges. The amount and type of construction materials to be utilized at the site will be dependent upon the type of construction and the length of the construction period. The materials may be used continuously, such as fuel for vehicles and equipment, or the materials may be used for a discrete period, such as fertilizer for landscaping.

- Waste management and materials pollution control BMPs must be implemented to minimize stormwater contact with construction materials, wastes and service areas, and to prevent materials and wastes from being discharged off-site.

- Review project activities to identify likely construction materials and wastes. Identify materials and wastes with special handling or disposal requirements, such as lead contaminated soils. List anticipated materials and wastes below.

- Based on the listed materials and wastes, use the following materials handling and waste management BMP implementation table to select appropriate BMPs.

- Describe the locations and scheduled installations for each selected waste management and materials pollution control BMPs. For Solid Waste Management WM-5, a list of waste disposal facilities and the type of waste to be disposed at each facility is provided.

REQUIRED TEXT

The following BMP implementation table indicates the BMPs that have been selected to control construction site wastes and materials. Implementation and locations of materials handling and waste management BMPs are shown on the WPCDs in Attachment A. The BMP working details that will be adhered to are found in Attachment A of this WPCP. The following list of BMPs and narrative explain how the selected BMPs will be incorporated into the project.

CONSTRUCTION SITE MANAGEMENT						
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs						
CONSTRUCTION BMP ID NO (1)	**BMP NAME**	**MINIMUM REQUIRE-MENT (2)**	**CONTRACT BID ITEM**	**BMP USED**		**IF NOT USED, STATE REASON**
				YES	**NO**	
WM-1	Material Delivery and Storage	✓	☐	☐	☐	
WM-2	Material Use	✓	☐	☐	☐	
WM-3	Stockpile Management	✓	☐	☐	☐	
WM-4	Spill Prevention and Control	✓	☐	☐	☐	
WM-5	Solid Waste Management	✓	☐	☐	☐	
WM-6	Hazardous Waste Management (3)		☐	☐	☐	
WM-7	Contaminated Soil Management (3)		☐	☐	☐	
WM-8	Concrete Waste Management		☐	☐	☐	
	Temporary Concrete Washout Facility		☐	☐	☐	
	Temporary Concrete Washout (Portable)		☐	☐	☐	
WM-9	Sanitary/Septic Waste Management	✓	☐	☐	☐	
WM-10	Liquid Waste Management		☐	☐	☐	
ALTERNATIVE WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs USED(4) ☐ **Yes** ☐ **No**						**IF USED, STATE REASON**

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) Not all minimum requirements may be applicable to every project. Applicability to a specific project shall be verified by the Contractor or determined by Caltrans.
(3) The BMPs listed above are incidental and do not include operations included as separate line items in the contract.
(4) Use of alternative BMPs will require written approval by the Resident Engineer.

[INSERT NARRATIVE DESCRIBING WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs]

30.3 Water Pollution Control Drawings (WPCDs)

INSTRUCTIONS

- The contractor shall include WPCDs in the WPCP to show the locations, applications, and deployment of the BMPs checked in the preceding sections.
- The WPCDs shall include one or more drawings at a scale sufficient to clearly show on-site drainage patterns and the location of erosion and sediment control BMPs. The WPCDs shall be no smaller than the "reduced plans" (approximately 11" x 17") issued by Caltrans. A sample WPCD can be referenced in Attachment A of Appendix B of the "SWPPP and WPCP Preparation Manual."
- The WPCDs shall include:
  - Detail sheets showing construction details for the BMPs that will be used.
  - Location sheets, usually modified layout, grading, stage construction, and/or drainage sheets, showing the locations of BMPs that will be used. Delineation of BMPs to be implemented during project construction will be in the form of construction notes and/or symbols.

REQUIRED TEXT

The WPCDs are included as Attachment A to this Water Pollution Control Program.

30.4 Construction BMP Maintenance, Inspection, and Repair

INSTRUCTIONS

- A program for the regular inspection, maintenance, and repair of BMPs will be included in the WPCP in Attachment B. The contractor's attention is directed to the Contract Specifications and Special Provisions for requirements for maintenance and inspection of BMPs.
- Appendix B, Attachment B of the “SWPPP and WPCP Preparation Manual”, shows a sample Maintenance, Inspection and Repair of Construction Site BMPs form.
- At a minimum, the contractor shall inspect the site before and after storm events, and at 24-hour intervals during extended storms. The Contract Special Provisions may require additional inspections.
- The results of the inspection and assessment shall be recorded on the Construction Site Inspection Checklist included in Appendix B, Attachment C to the “SWPPP and WPCP Preparation Manual,” and included as Attachment C of this WPCP.
- A copy of each completed Construction Site Inspection Checklist shall be provided to the Resident Engineer within 24-hours of an inspection, and a copy attached to the on-site WPCP.
- A tracking or follow-up procedure must follow any inspection that identifies deficiencies in BMPs.

REQUIRED TEXT

A completed Inspection, Maintenance, and Repair Program shall be provided in Attachment B of the WPCP.

Site inspections shall be conducted by the Contractor's WPCM or other Caltrans approved 24-hour trained staff at the following minimum frequencies:

- Prior to a forecast storm;
- After a rain event that causes runoff from the construction site;
- At 24-hour intervals during extended rain events;
- Daily inspections within the Lake Tahoe Hydrologic Unit;
- Weekly during the rainy season;
- Every 2 weeks during the non-rainy season; and
- At any other time(s) or intervals of time specified in the Contract Special Provisions.

Completed inspection checklists (Attachment C) will be submitted to the Resident Engineer within 24 hours of inspection. Copies of the completed checklists will be kept with the WPCP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs.

30.5 Training

INSTRUCTIONS

- Individuals responsible for WPCP preparation, implementation, and permit compliance are required to be trained, and the WPCP shall document all training. This includes those personnel responsible for installation, inspection, maintenance, and repair of BMPs. Describe the types of training that the contractor's inspection, maintenance, and repair personnel have received or will receive that are directly related to stormwater pollution prevention.
- Training may be both formal and informal.
- Formal stormwater pollution prevention or erosion and sediment control training sessions may include certification as a Certified Professional in Erosion and Sediment Control (CPESC); workshops offered by the SWRCB, RWQCB, Community College or University of California Extension; or other locally recognized agencies or professional organizations such as the International Erosion Control Association (IECA), Association of Bay Area Governments (ABAG), Association of General Contractors (AGC), etc. Contractors are encouraged to contact the RWQCB or the SWRCB to inquire about availability of training.
- A listing of training organizations, subject matter and classes are located at: http://www.dot.ca.gov/hq/construc/stormwater/stormwater1.html
- The Contractor's WPCM and the WPCP preparer shall have a minimum of 24 hours (3 days) of formal stormwater pollution prevention training.
- Onsite stormwater pollution prevention training shall be conducted on an ongoing basis.
- Document informal stormwater training using the sample training log sheet provided as Attachment G.
- Document formal stormwater training by providing a list of classes and copies of class completion documentation. Documentation shall be submitted to the Resident Engineer within 24 hours of completion of training.
- Training records shall be updated, documented and reported in the WPCP quarterly.

REQUIRED TEXT

The Water Pollution Control Manager (WPCM) assigned to this project is:

[Insert WPCM's Name-then TAB.]

[Insert Telephone Number(s)-then TAB.]

[Insert Contractor's Company Name-then TAB.]

[Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.]

[Insert City, State, ZIP-then TAB.]

The WPCM shall have primary responsibility and significant authority for the implementation, maintenance, inspection and amendments to the approved WPCP. The WPCM will be available at all times throughout duration of the project. Duties of the Contractor's WPCM include but are not limited to:

- Ensuring full compliance with the WPCP and the Permit; and
- Implementing all elements of the WPCP.

The WPCM shall have the authority to mobilize crews in order to make immediate repairs to the water pollutin control measures.

The training log showing formal and informal training of various personnel is shown in Attachment G. A copy of all training certificate(s) (e.g., Caltrans 24 Hour Training Class, etc.) for the WPCM and the WPCP Preparer are included in Attachment G. Training records shall be updated, documented and reported in the WPCP quarterly. Documentation of new training shall be submitted to the Resident Engineer within 24-hours of training.

[INSERT HERE ANY ADDTIONAL TEXT REGARDING TRAINING OF PERSONNEL.]

This WPCP was prepared by [INSERT COMPANY, NAME AND PROFESSIONAL REGISTRATION OR OTHER QUALIFICATIONS (INCLUDING INFORMATION REGARDING OTHER TRAINING COURSES, SUCH AS CALTRANS SWPPP PREPARATION TRAINING) OF PERSON THAT PREPARED THE WPCP.]

Section 40
Amendments

INSTRUCTIONS

- The WPCP shall be amended whenever there is a change in construction or operations that may cause the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems, or when deemed necessary by the Resident Engineer. All WPCP amendments shall be documented in letter format and include revised WPCD sheets, as appropriate. WPCP amendments shall be certified by the contractor and require approval by the Caltrans or Local Agency / Private Entity Resident Engineer (and Caltrans Oversight Engineer if applicable). Approved amendments shall be attached to the Contractor's on-site WPCP in Attachment D.
- The following items will be included in the amendment, as appropriate:
  - ❑ Discuss who requested the amendment.
  - ❑ Describe location of proposed change.
  - ❑ Describe reason for change.
  - ❑ Describe the original BMP proposed, if any.
  - ❑ Describe the new BMP proposed.
  - ❑ Include any revised WPCDs for detail or location changes.
  - ❑ Include a copy of the completed Amendment Log in Attachment D.
- The certification form shall be included in Attachment D and shall be signed by the contractor and Resident Engineer (and Oversight Engineer if applicable) for each amendment. The signed forms shall be included with the Amendment.
- If Caltrans is administering the project, then the Caltrans Resident Engineer, as the authorized representative of the Department shall provide and sign the following certification.
- If a Local Agency / Private Entity is administering the project, then the Local Agency / Private Entity Resident Engineer shall sign and provide the certification form to the Caltrans Oversight Engineer for approval.
- The Amendment shall be documented in the following Amendment Log Table. Enter the Amendment number, date, brief description, and name of the person who prepared the Amendment in the table. Include a copy of the completed Amendment Log in Attachment D.

REQUIRED TEXT

The WPCP shall be amended whenever there is a change in construction or operations that may cause the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems, or when deemed necessary by the Resident Engineer. All WPCP amendments shall be documented in letter format and include revised WPCD sheets, as appropriate. WPCP amendments shall be certified by the contractor and require approval by the Caltrans or Local

Agency / Private Entity Resident Engineer (and Caltrans Oversight Engineer if applicable). Approved amendments and log shall be attached to the Contractor's on-site WPCP in Attachment D.

Project Name:

Caltrans Contract Number: _____

Amendment No.	Date	Brief Description of Amendment	Prepared By

Section 50
Reporting

50.1 Discharge Reporting

INSTRUCTIONS

- Discharges will be reported in writing to the Resident Engineer verbally upon discovery and in writing within 7 days (3 days for Districts 7 and 11) of occurrence or as required in the Special Provisions. A Notice of Discharge form for reporting discharges shall be included in Attachment E. A Discharge Reporting Log shall be included in Attachment F.
- Note: USEPA has issued regulations that define Reportable Quantity (RQ) levels for oil and hazardous substances. These regulations are found in the Code of Federal Regulations at 40 CFR Part 110, Part 117, or Part 302.

REQUIRED TEXT

If a discharge occurs or if the project receives a written notice or order from any regulatory agency, the contractor will immediately notify the Engineer and will file a written report to the Resident Engineer within 7 days (3 days for Districts 7 and 11) of the discharge event, notice, or order. Corrective measures will be implemented immediately following the discharge, notice or order. A Notice of Discharge form is provided in Attachment E. All discharges shall be documented on a Discharge Reporting Log in Attachment F.

The report to the Resident Engineer will contain the following items:

- The date, time, location, nature of operation, and type of discharge, including the cause or nature of the notice or order.
- The BMPs deployed before the discharge event, or prior to receiving notice or order.
- The date of deployment and type of BMPs deployed after the discharge event, or after receiving the notice or order, including additional BMPs installed or planned to reduce or prevent re-occurrence.
- An implementation and maintenance schedule for any affected BMPs.

Discharges requiring reporting include:

- Stormwater from a DSA discharged to a waterway without treatment by a temporary construction BMP.
- 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 in 40 CFR 117.3 or 302.4.
- Stormwater runoff containing hazardous substances from spills discharged to a waterway or storm drain system.
- Discharges that may endanger health or the environment.
- Other discharge reporting as directed by the Resident Engineer.

APPENDIX A
Attachments for use in Preparing a SWPPP

Attachment A

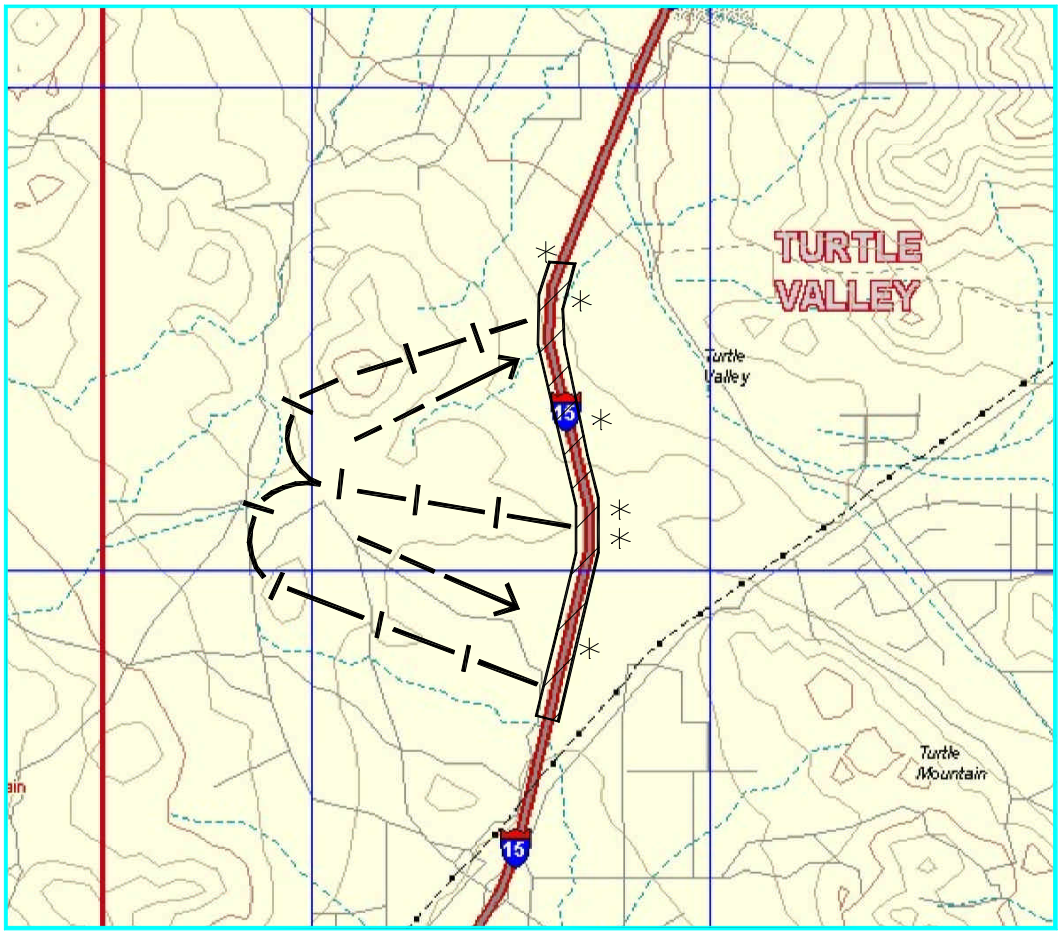
Vicinity Map / Site Map (Samples)

STORMWATER POLLUTION PREVENTION PLAN

SAMPLE VICINITY MAP

FOR

THE CONSTRUCTION ON STATE HIGHWAY 15
IN SAN BERNARDINO COUNTY NEAR BARSTOW
FROM 1.5 miles NORTH OF POWERLINE ROAD
OVERCROSSING TO WILDWASH BRIDGE



LEGEND:

PROJECT AREA

* DISCHARGE POINTS

OFFSITE DRAINAGE AREAS DISCHARGING ON TO SITE

N.T.S.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
BB	SB	15	82.5/85.1	1	X

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

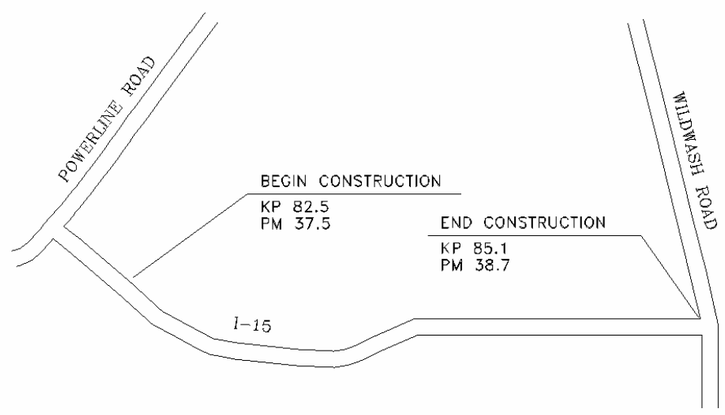
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN SAN BERNARDINO COUNTY
NEAR BARSTOW
FROM 1.5 miles NORTH OF POWERLINE ROAD
OVERCROSSING TO WILDWASH BRIDGE

To be supplemented by Standard Plans dated July, 1995

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



SWPPP SITE MAP

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

Contract No.	00-00000B

FORM DC-OE-03-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => $USER
DGN FILE => $REQUEST

CU 00000 | EA 000000

PROJECT ENGINEER DATE | PROJECT MANAGER DATE | LAST REVISION 00-00-00 | DATE PLOTTED => $DATE | $TIME

Attachment B

Water Pollution Control Drawings

INSTRUCTIONS

- Include Water Pollution Control Drawings in this Attachment.
- Include Contract Special Provisions, Contract Plan Water Pollution Control Sheets, Standard Specifications, or Standard BMP Details or provide a table cross referencing these items and their location.
- The WPCDs shall be no smaller than the "reduced plans" (approximately 11"x17") issued by Caltrans.

WATER POLLUTION CONTROL DRAWINGS (WPCDs)

FOR

ROUTE BB

STAGE 1

ANYTOWN, ANY COUNTY
CALTRANS CONTRACT NO. 00-00000

PREPARED BY:

ZZZ CONSTRUCTION COMPANY

SAMPLE WPCD NOTE: DO NOT SIMPLY COPY THE FOLLOWING NOTES FOR PROJECT SPECIFIC USE. COPYING TEXT FROM THESE SAMPLE WPCDs DOES NOT NECESSARILY MEET NPDES PERMIT REQUIREMENTS. USE PROJECT SPECIFIC NOTES.

LEGEND

- CWM — WM-8 Concrete Waste Management
- SC-10 Storm Drain Inlet Protection
- ESA — Environmentally Sensitive Area
- Surface Flow Direction
- Pipe/Underground Flow Direction
- VEC — NS-8 Vehicle & Equipment Cleaning
- VEF — NS-9 Vehicle & Equipment Fueling
- VEM — NS-10 Vehicle & Equipment Maintenance
- PEV — SS-2 Preservation of Existing Vegetation
- TSP — SS-4 Hydroseeding
- S — SS-6 Straw Mulch
- SOS — SS-5 Soil Binders
- PS — Permanent Seeding
- TC-1 Stabilized Construction Entrance/Exit
- TSD — SS-11 Slope drains
- SS-9 Earth Dike/Drainage Swales and Lined Ditches
- CD — SC-4 Check Dams
- SC-1 Silt Fences
- SC-3 Sediment Traps
- FR — SC-5 Fiber Rolls
- SB — SC-8 Sandbag Barrier
- Stormwater Discharge Location

GENERAL WATER POLLUTION CONTROL NOTES

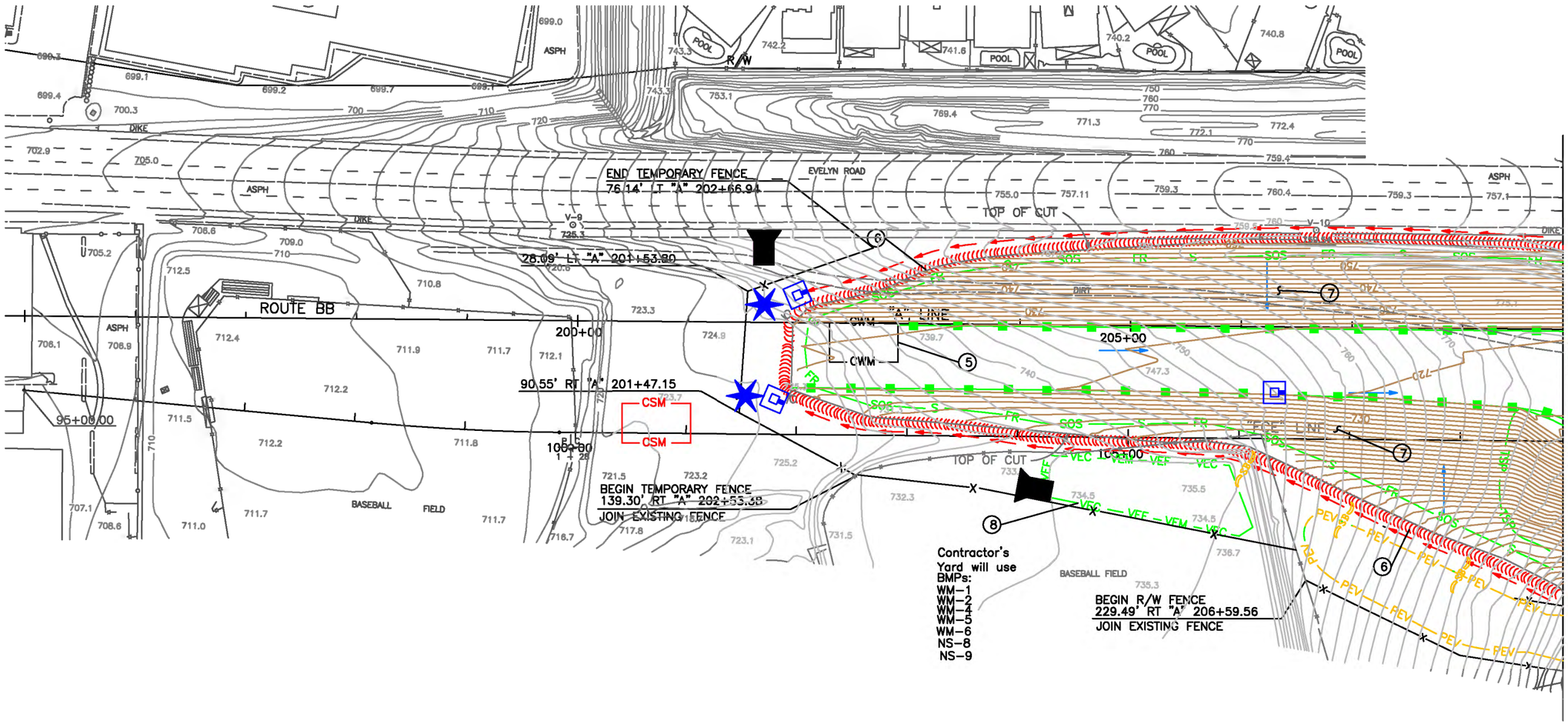
1. THE INFORMATION ON THESE DRAWINGS ARE ACCURATE FOR WATER POLLUTION CONTROL PURPOSES ONLY.
2. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. tHESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
3. FIELD CONDITIONS MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.
4. PERMANENT EROSION CONTROL WILL BE INSTALLED AS AREAS ARE DETERMINED TO BE SUBSTANTIALLY COMPLETE.

STORM WATER POLLUTION CONTROL CONSTRUCTION NOTES:

1. Rock check dams.
2. Gravel bag check dams
3. Install hydroseeding BMP's SS-4
4. Contractor proposed alternate concrete washout detail, Type-1 Below Ground. See WPCD-14 for detail.
5. Contractor proposed alternate concrete washout detail, Type-2 Above Ground. See WPCD-14 for detail.
6. Earth berms installed during excavation staging.
7. Surface roughening required on all slope areas before applying soil binders (on active slope or roadway) and/or straw mulch (on inactive slopes only). Inactive slopes greater than 60 feet in height will be hydroseeded.
8. Temporary slope drain without energy dissipation.
9. Combined Vehicle Cleaning, Fueling and Maintenance area.

WPCD-1

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS TITLE SHEET					
DRAWN D.J.D						
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 1 OF 14	



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1.

STAGE 1
WPCD-2

SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

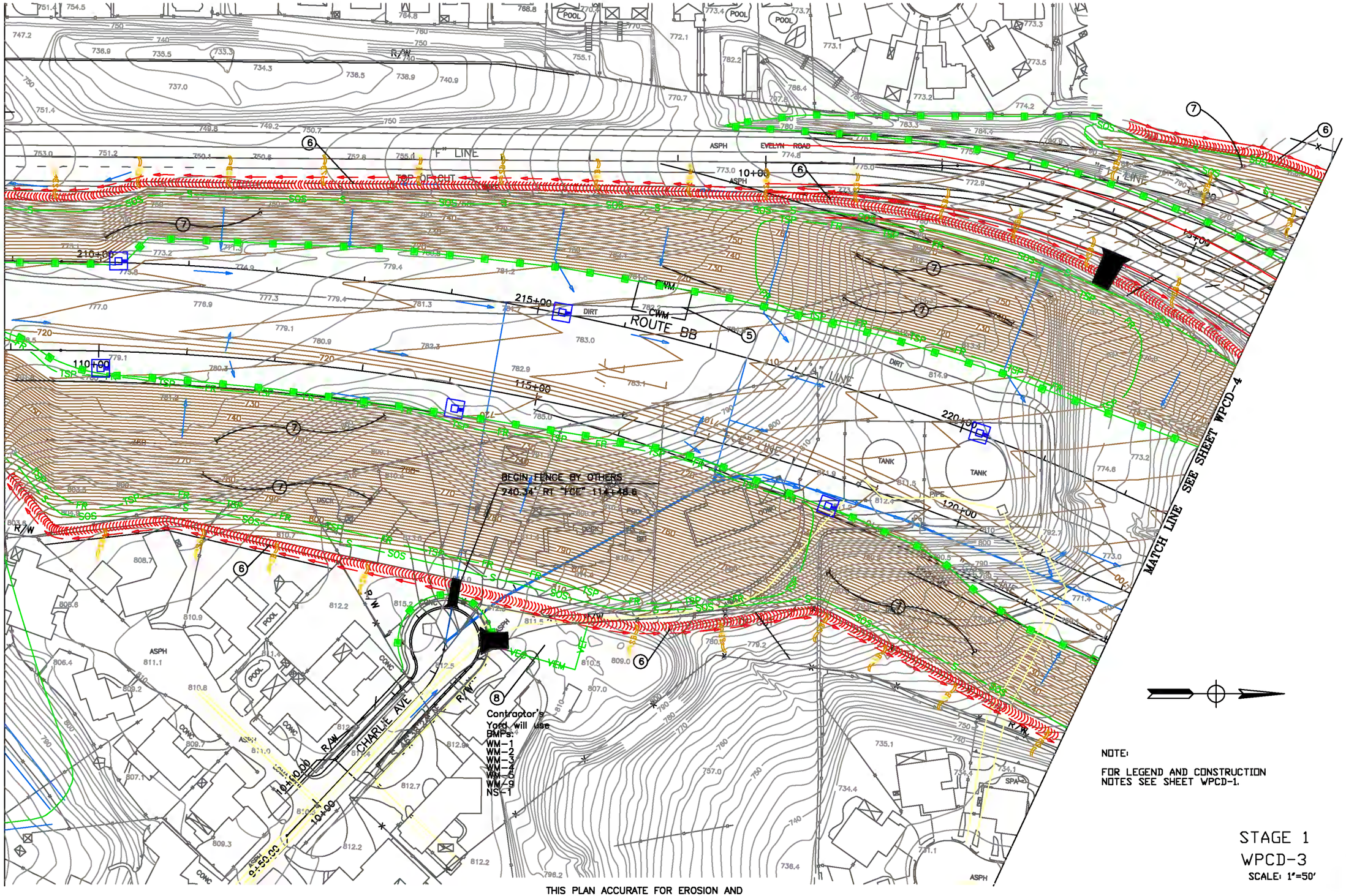
Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1.

STAGE 1
WPCD-3
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

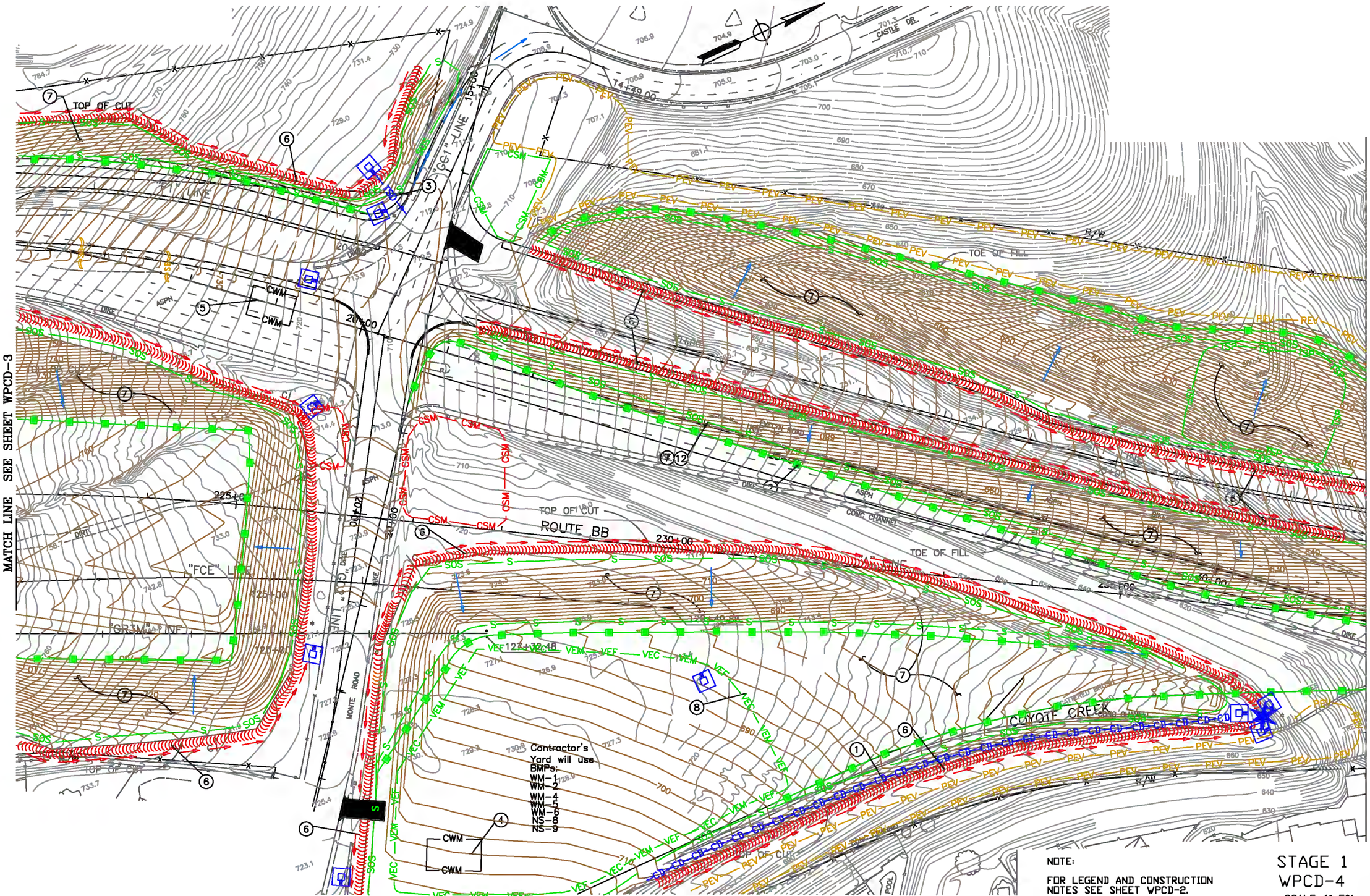
Caltrans

FORM DC-OE-92-PF (REV. 3/98)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-2.

STAGE 1
WPCD-4
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

PROJECT ENGINEER	CALCULATED/ DESIGNED BY	DATE	REVISED BY
	CHECKED BY		DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

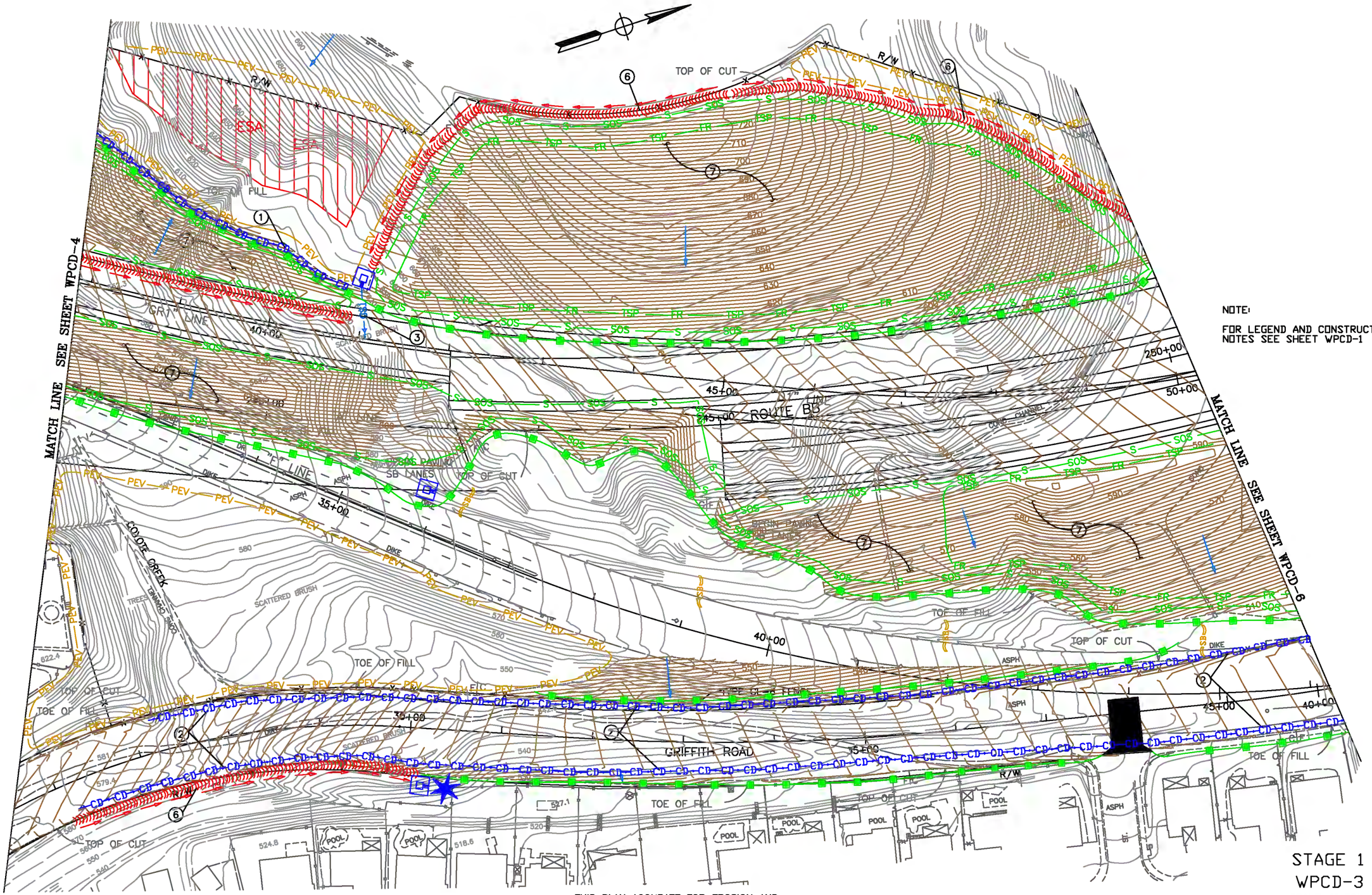
Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1

STAGE 1
WPCD-3
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

CALCULATED/ DESIGNED BY	
CHECKED BY	
DATE	REVISED BY
	DATE REVISED

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

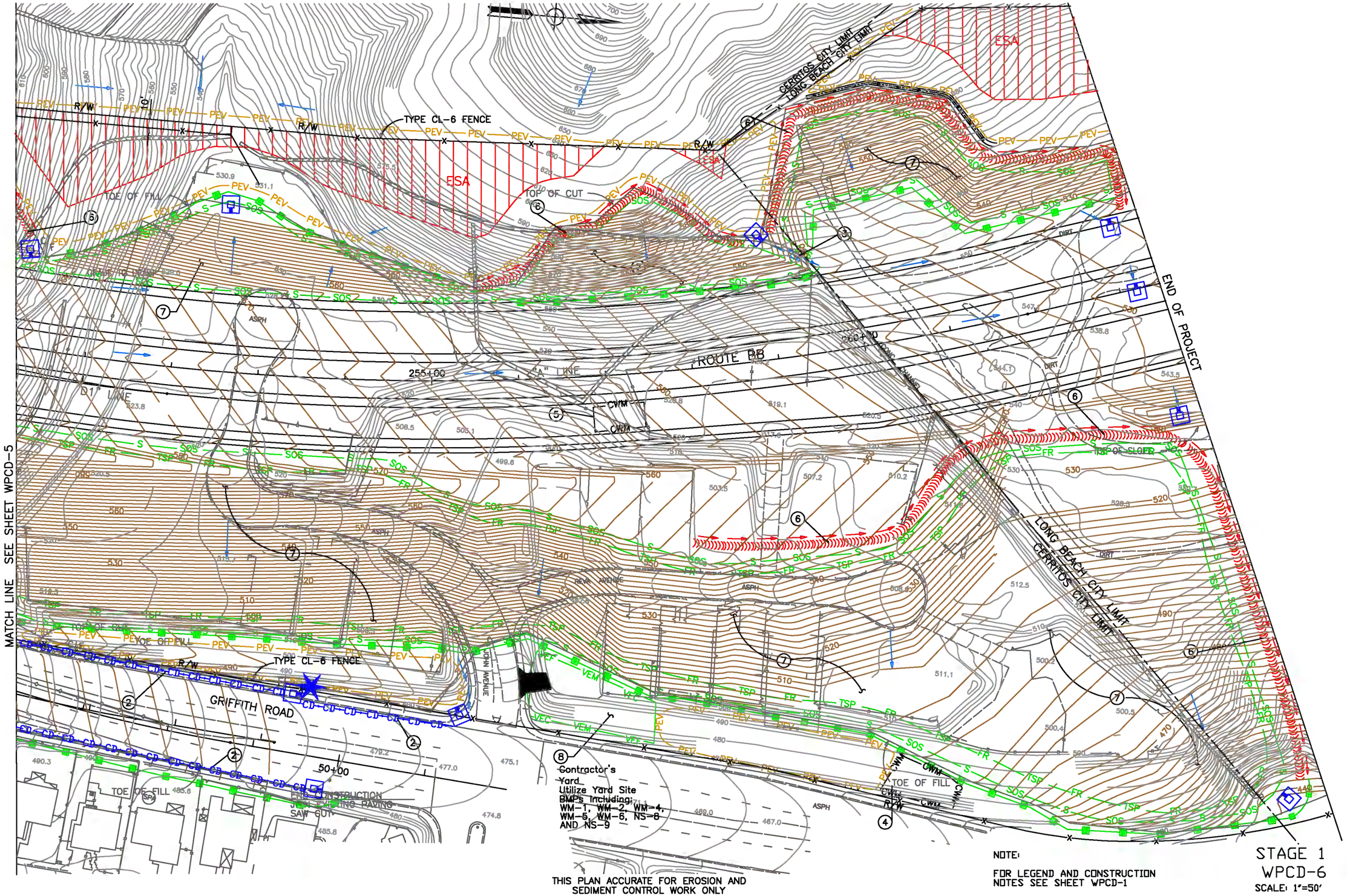
Caltrans

FORM DC-OE-92-PF (REV. 3/98)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA



DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA

LAST REVISION

WATER POLLUTION CONTROL DRAWINGS (WPCDs)

FOR

ROUTE BB

STAGE 2

ANYTOWN, ANY COUNTY
CALTRANS CONTRACT NO. 00-00000

PREPARED BY:

ZZZ CONSTRUCTION COMPANY

LEGEND

- CWM — WM-8 Concrete Waste Management
- SC-10 Storm Drain Inlet Protection
- ESA — Environmentally Sensitive Area
- Surface Flow Direction
- Pipe/Underground Flow Direction
- CSM — WM-7 Contaminated Soil Management
- VEC — NS-8 Vehicle & Equipment Cleaning
- VEF — NS-9 Vehicle & Equipment Fueling
- VEM — NS-10 Vehicle & Equipment Maintenance
- PEV — SS-2 Preservation of Existing Vegetation
- TSP — SS-4 Hydroseeding
- S — SS-6 Straw Mulch
- SOS — SS-5 Soil Binders
- PS — Permanent Seeding
- TC-1 Stabilized Construction Entrance/Exit
- TSD — SS-11 Slope drains
- SS-9 Earth Dike/Drainage Swales and Lined Ditches
- CD — SC-4 Check Dams
- SC-1 Silt Fences
- SC-3 Sediment Traps
- FR — SC-5 Fiber Rolls
- SB — SC-8 Sandbag Barrier
- Stormwater Discharge Location
- DW — NS-2 Dewatering Operations

GENERAL WATER POLLUTION CONTROL NOTES

1. THE INFORMATION ON THESE DRAWINGS ARE ACCURATE FOR WATER POLLUTION CONTROL PURPOSES ONLY.
2. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
3. FIELD CONDITIONS MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.
4. PERMANENT EROSION CONTROL WILL BE INSTALLED AS AREAS ARE DETERMINED TO BE SUBSTANTIALLY COMPLETE.

SAMPLE WPCD NOTE: DO NOT SIMPLY COPY THE FOLLOWING NOTES FOR PROJECT SPECIFIC USE. COPYING TEXT FROM THESE SAMPLE WPCDs DOES NOT NECESSARILY MEET NPDES PERMIT REQUIREMENTS. USE PROJECT SPECIFIC NOTES.

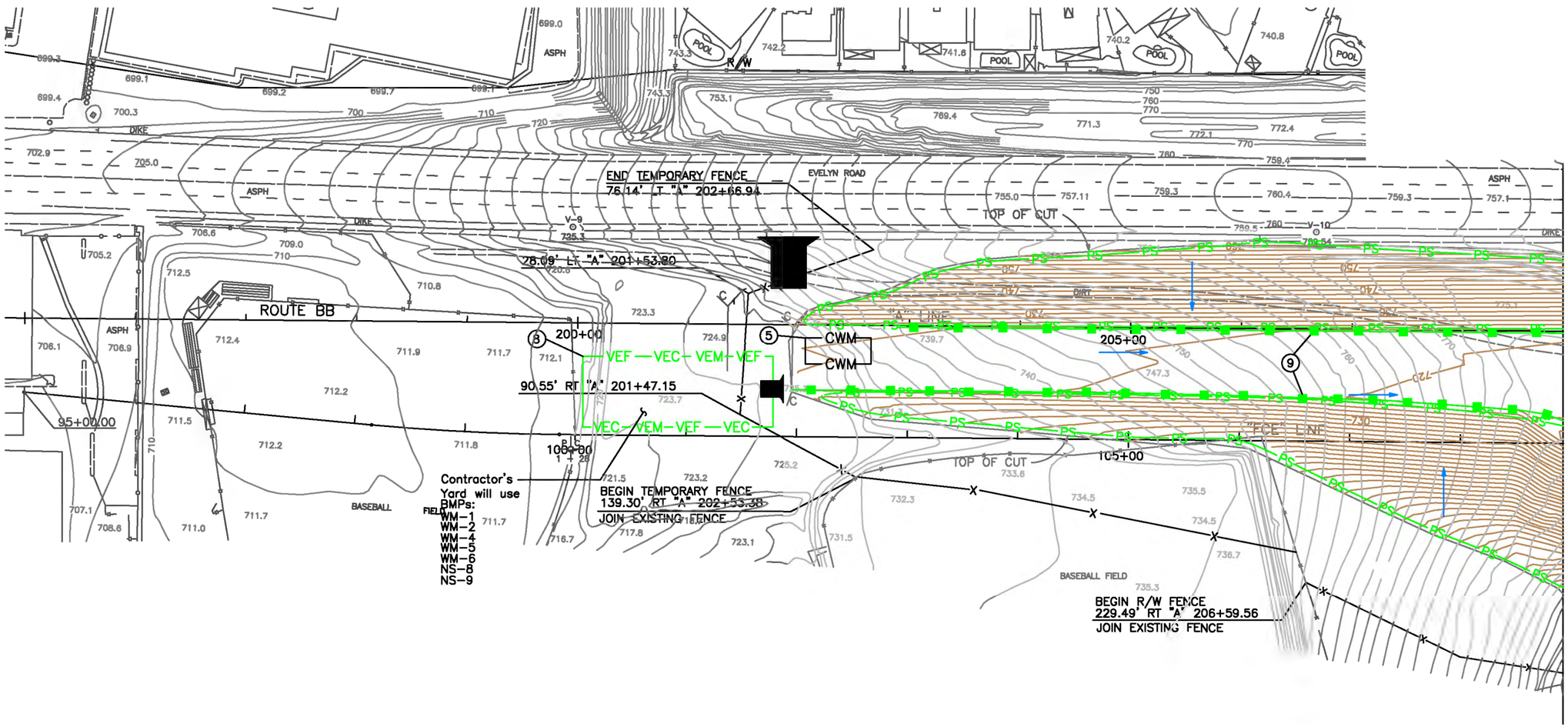
STORM WATER POLLUTION CONTROL CONSTRUCTION NOTES:

(LOCATIONS OF CIRCLED NUMBERS ARE SHOWN ON THE WPCD SHEETS)

1. Install Type 1 inlet protection at drop inlet structures.
2. Install Type 3 inlet protection at drop inlet structures.
3. Temporary slope drain without energy dissipation.
4. Contractor proposed alternate concrete washout detail, Type-1 Below Ground. See WPCD-14 for detail.
5. Contractor proposed alternate concrete washout detail, Type-2 Above Ground. See WPCD-14 for detail.
6. Dewatering operations may be necessary during trenching for pipe installation.
7. Pipe outlet energy dissipator.
8. Combined Vehicle Cleaning, Fueling and Maintenance area.
9. Silt fence to be removed after final stabilization is complete.

WPCD-7

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS TITLE SHEET				
DRAWN D.J.D					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 7 OF 14



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1.

STAGE 2
WPCD-8
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

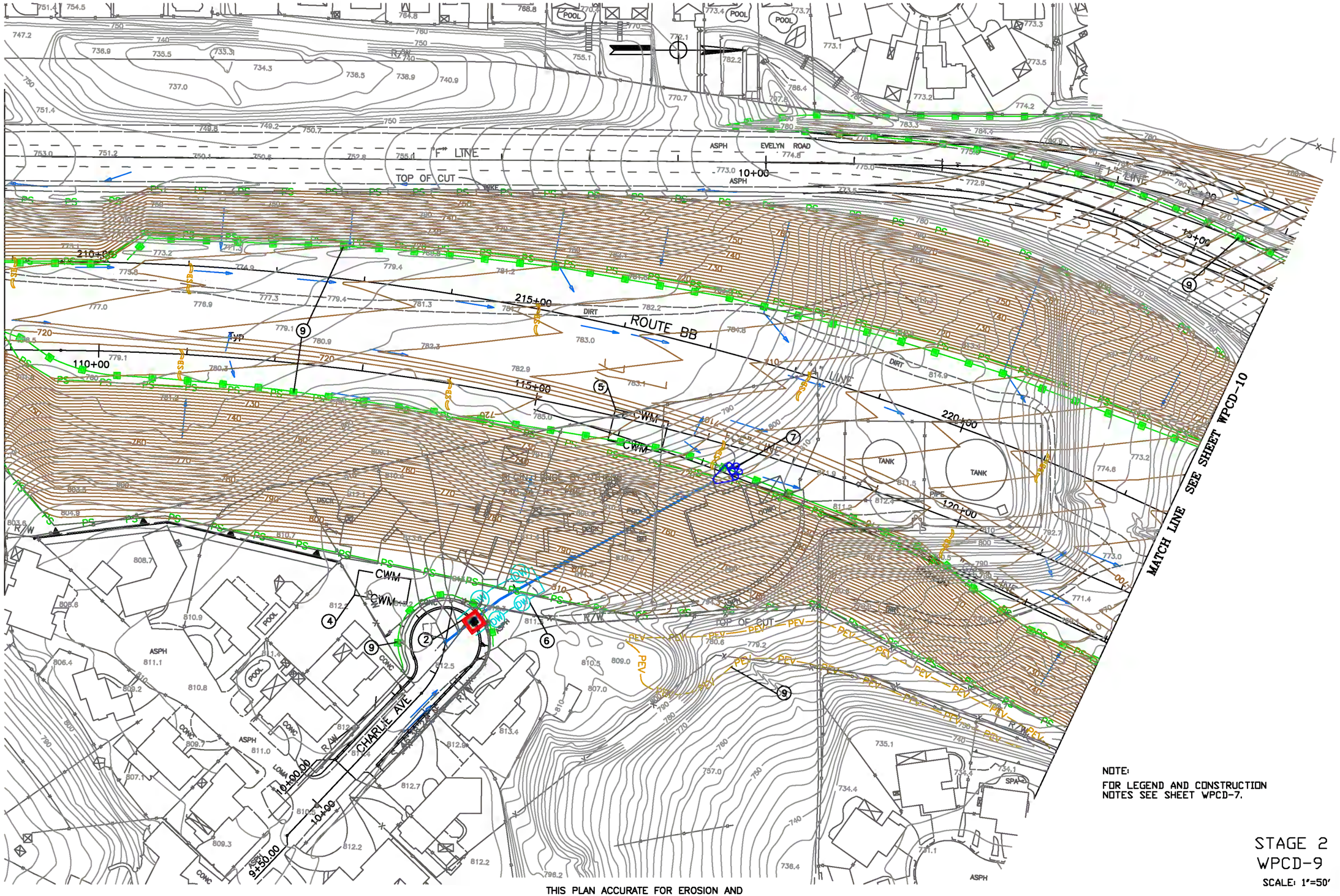
Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-7.

STAGE 2
WPCD-9
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

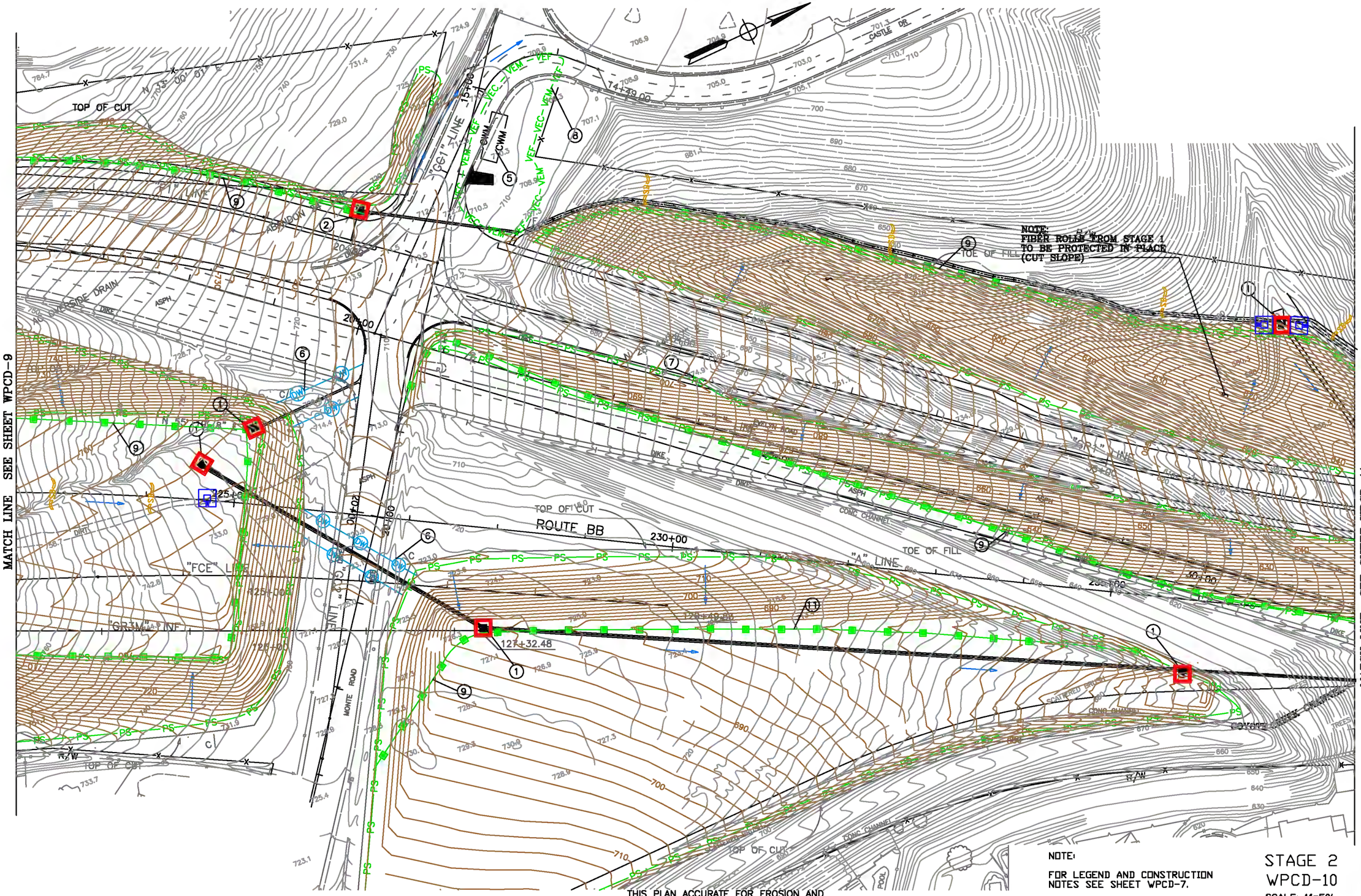
Caltrans

FORM DC-OE-92-PF (REV. 3/98)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA



DATE	REVISED BY	DATE	REVISED BY

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

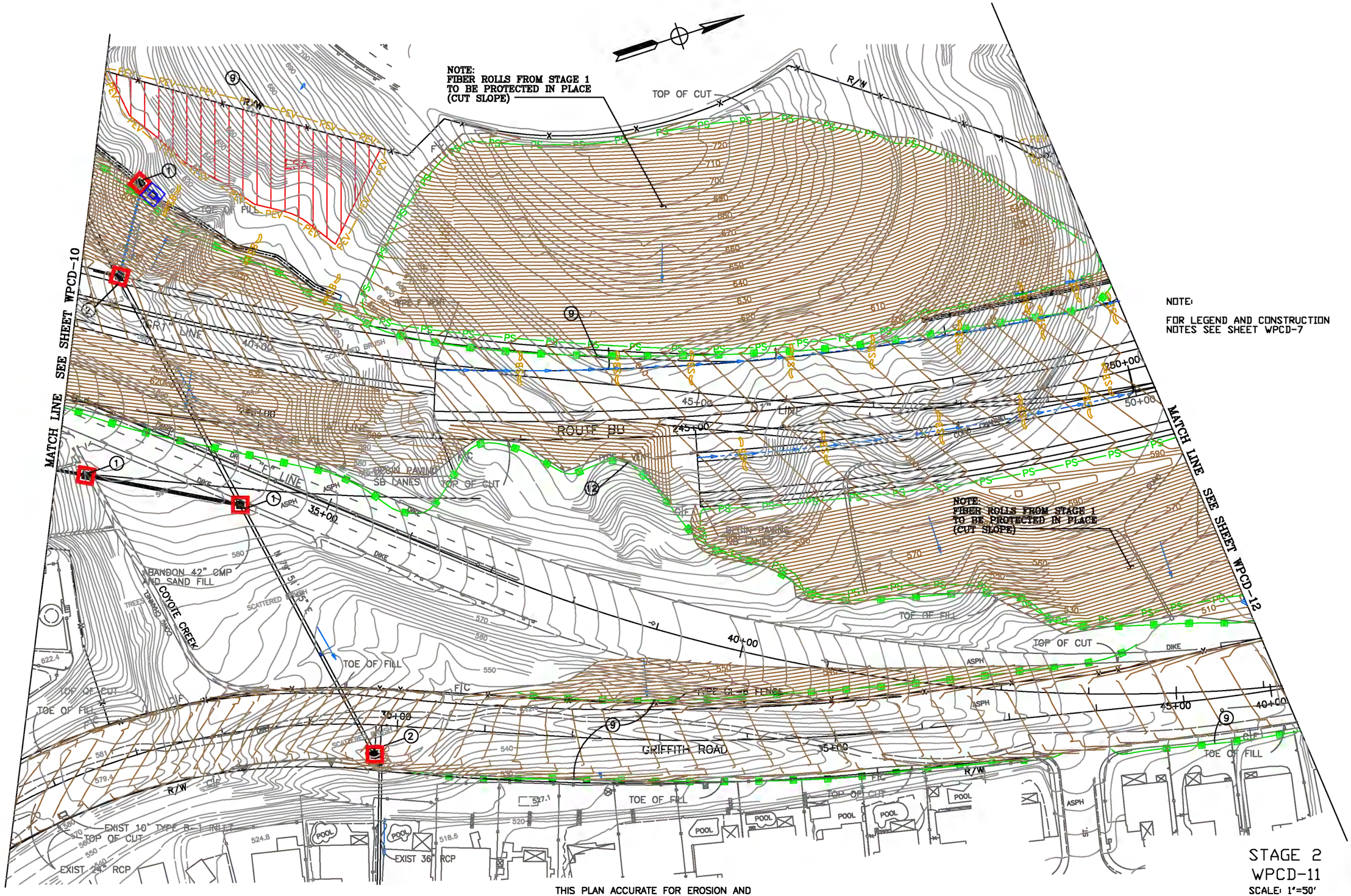
Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 11290

EA 010721



STAGE 2
WPCD-11
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND
SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE	REVISED BY

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

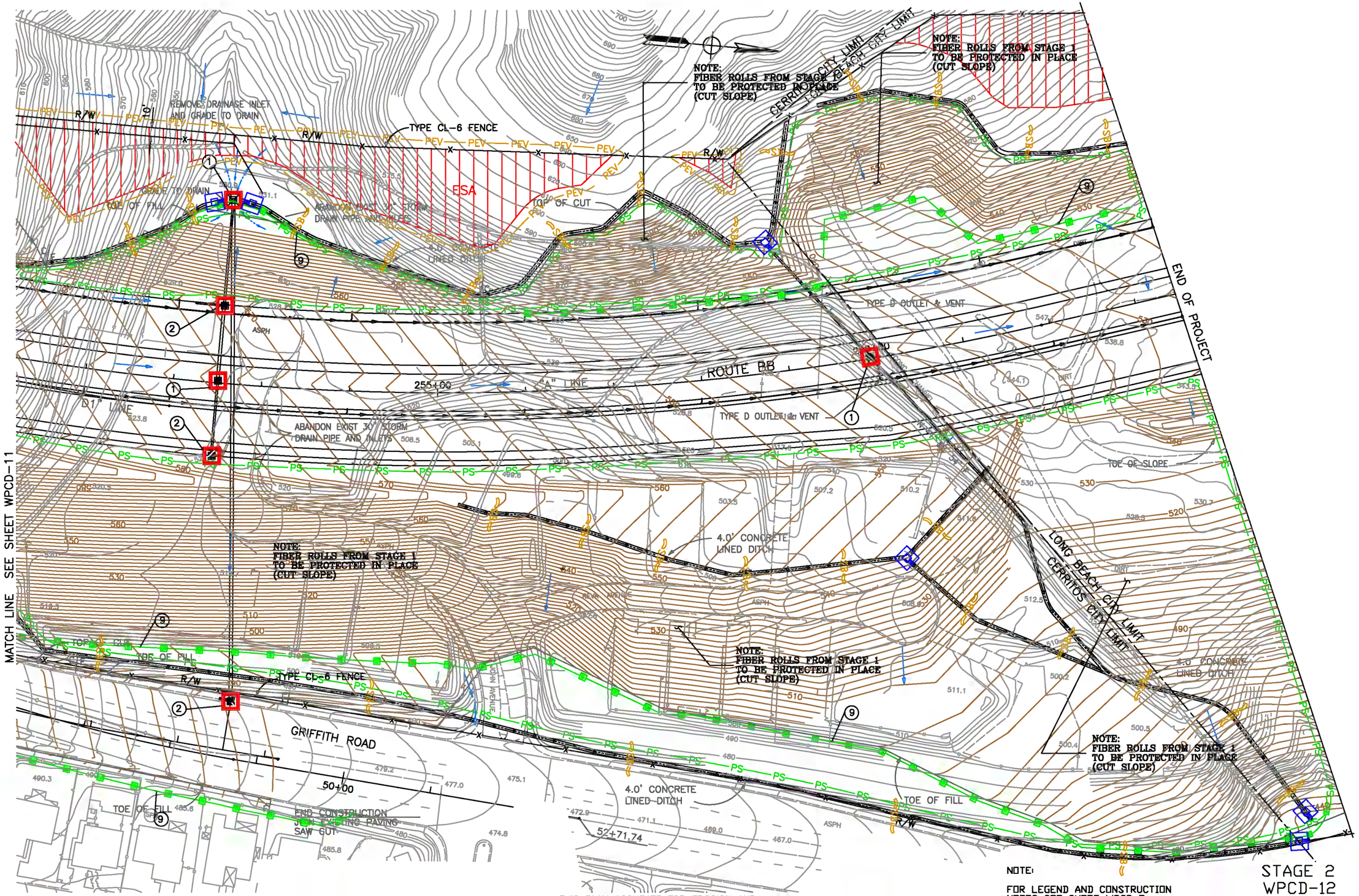
Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS
ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA



THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-7

STAGE 2
WPCD-12
SCALE: 1"=50'

DATE	REVISED BY	DATE	REVISED BY

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

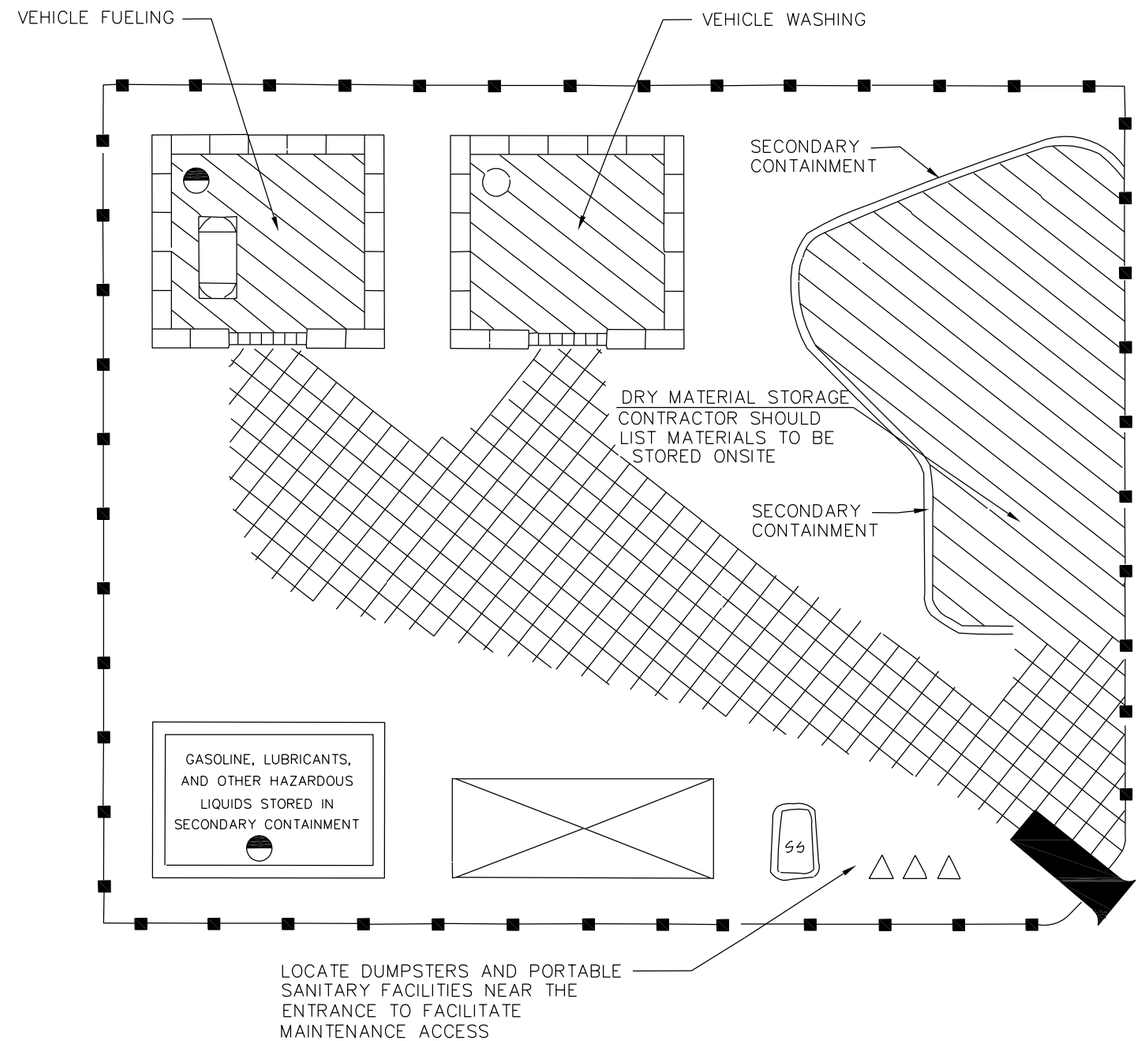
CU

EA

LAST REVISION

LEGEND

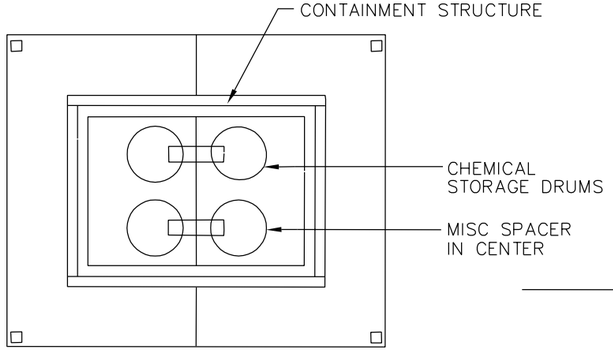
- COVERED STORAGE AREA
- PORTABLE SANITARY FACILITY CONSTRUTED TO RESIST TIPPING
- DUMPSTER
- STRAW BALE BARRIER OR GRAVEL BAG BARRIER
- ABSORBENT MATERIAL
- SUMP
- SILT FENCE AROUND ENTIRE PERIMETER
- STABLIZED CONSTRUCTION ENTRANCE
- STABILIZED CONSTRUCTION ROADWAY
- CONCRETE PAD OR OTHER IMPERVIOUS MATERIAL
- FUELING TANK WITH SECONDARY CONTAINMENT



SAMPLE CONTRACTOR'S CONSTRUCTION YARD

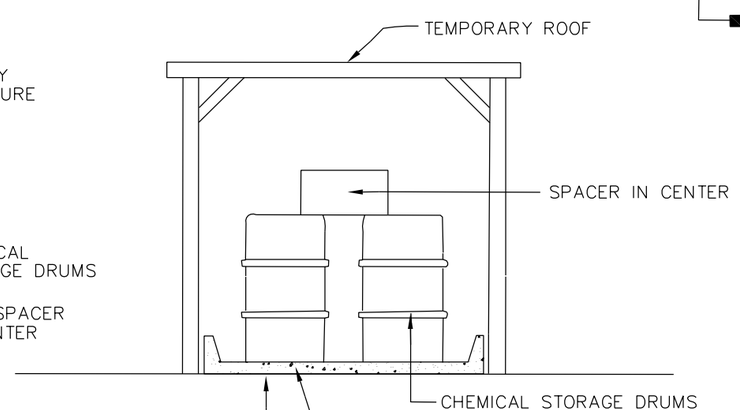
NO SCALE

NOTE: DO NOT COPY THIS SAMPLE ONTO PROJECT SPECIFIC DRAWINGS



PLAN

NO SCALE



CONCRETE SECONDARY CONTAINMENT STRUCTURE SPILL CONTAINMENT VOLUME TO CONTAIN PRECIPITATION FROM A 24-HR, 25-YR STORM EVENT PLUS THE GREATER OF 10% OF THE AGGREGATE VOLUME OF ALL CONTAINERS OR 100% OF THE CAPACITY OF THE LARGEST CONTAINER WITHIN ITS BOUNDARY, WHICHEVER IS GREATER.

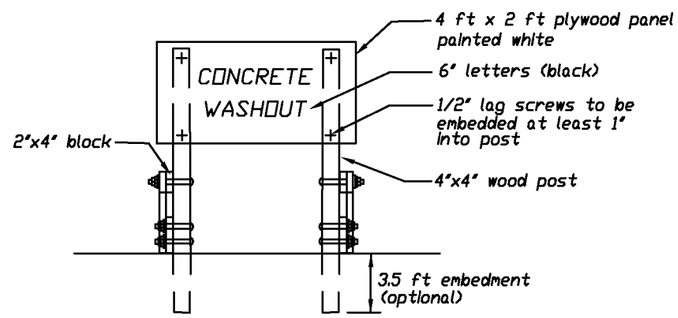
SECTION

NO SCALE

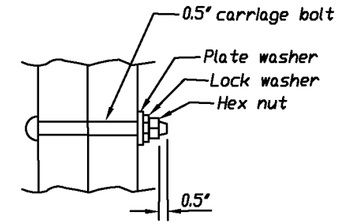
CHEMICAL STORAGE

WPCD-13

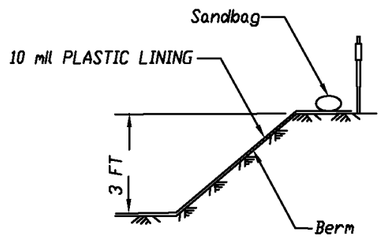
ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS CONSTRUCTION DETAILS				
DRAWN D.J.D.					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 13 OF 14



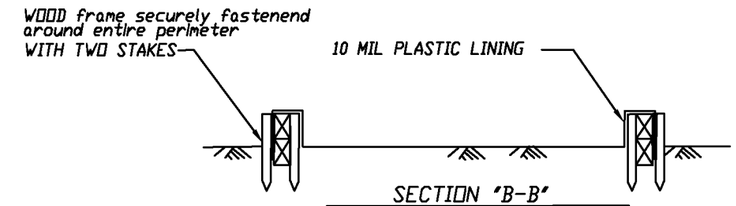
SIGN ELEVATION
NOT TO SCALE



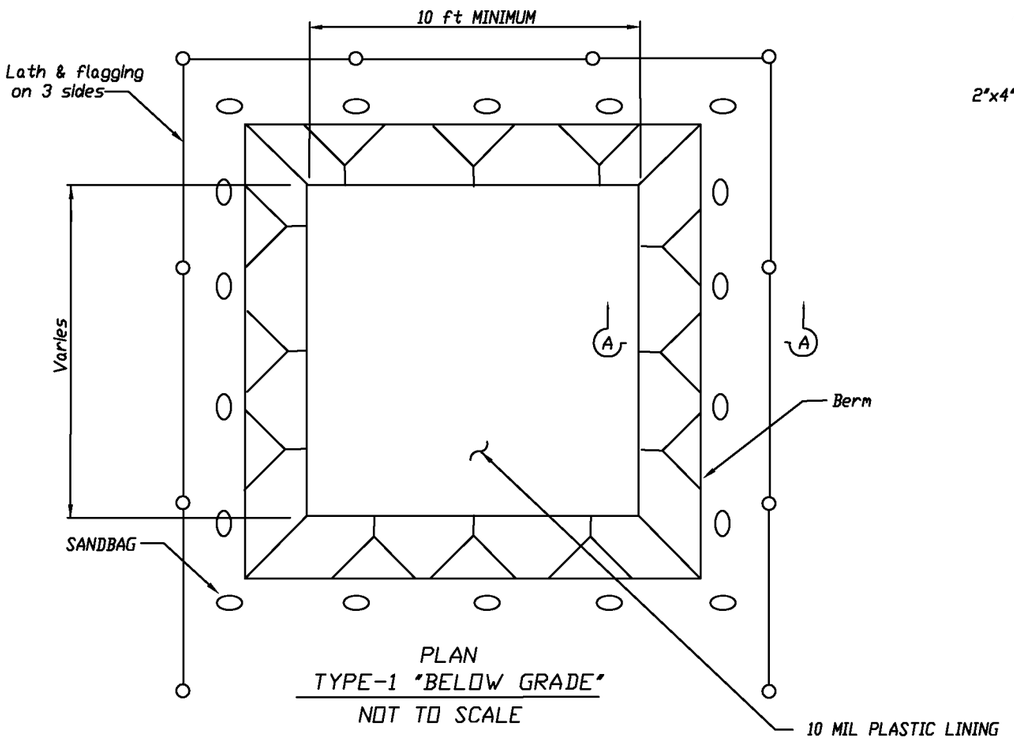
BOLT CONNECTION DETAIL
NOT TO SCALE



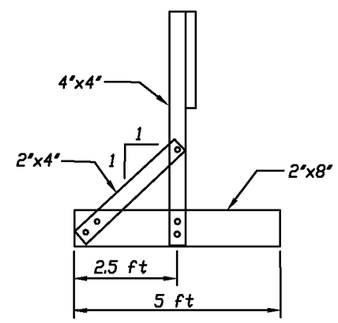
SECTION A-A

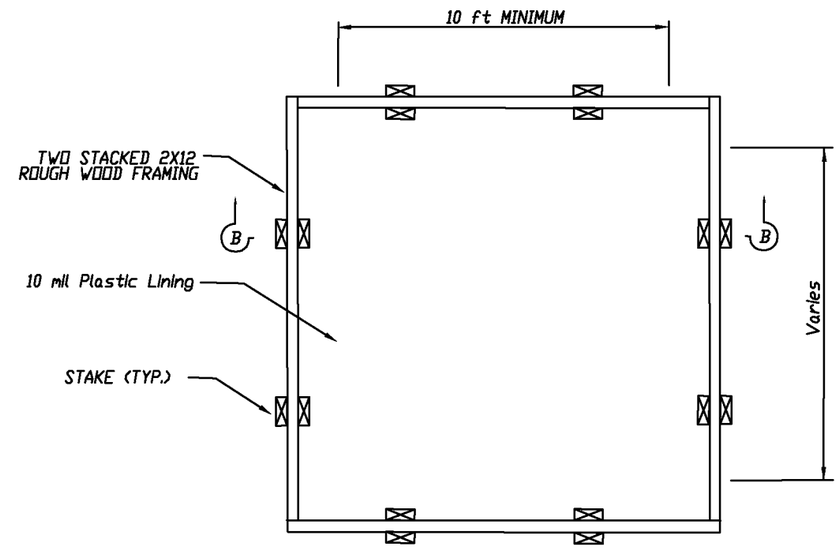


SECTION "B-B"
NOT TO SCALE



PLAN
TYPE-1 "BELOW GRADE"
NOT TO SCALE





PLAN
TYPE-2 "ABOVE GRADE"
NOT TO SCALE

WPCD-14

NOTE:

ACTUAL LAYOUT DETERMINED IN THE FIELD

THE CONCRETE WASHOUT SIGN (SEE PAGE 6) TO BE INSTALLED WITHIN 30 FT OF THE TEMPORARY CONCRETE WASHOUT FACILITY

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS CONCRETE WASHOUT DETAILS (CONTRACTOR PROPOSED ALTERNATE)				
DRAWN D.J.D.					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 14 OF 14

Attachment C

Amendments

INSTRUCTIONS:

- ❑ Contractor to complete and sign first page.
- ❑ If Caltrans is administering the project, then the Resident Engineer should sign the second page.
- ❑ If a Local Agency or Private Entity is administering the project, the Caltrans Oversight Engineer and the Local Agency / Private Entity Resident Engineer should both sign the third page.
- ❑ Include a copy of the latest Amendment Log from Section 200.2 in this Attachment.

SWPPP Amendment No. _____

Project Name:

Caltrans Contract Number: _____

To Be Completed by Contractor

"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 ensure 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 fine and imprisonment for knowing violations."

Contractor's Signature	Date
Contractor's Name and Title	Contractor's Telephone Number

For Use When Caltrans is Administering Project

For Caltrans Use Only
Resident Engineer's Approval and
Caltrans Certification of the
Stormwater Pollution Prevention Plan
or Water Pollution Control Plan
Amendment

"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 ensure 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 fine and imprisonment for knowing violations."

Resident Engineer's Signature	Date
Resident Engineer's Name	Resident Engineer's Telephone Number

For Use When Local Agency / Private Entity is Administering Project

For Local Agency / Private Entity Use Only
Resident Engineer's Approval and
Local Agency / Private Entity Certification of the
Stormwater Pollution Prevention Plan
or Water Pollution Control Plan
Amendment

"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 ensure 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 fine and imprisonment for knowing violations."

Resident Engineer's Signature	Date
Resident Engineer's Name	Resident Engineer's Telephone Number

For Caltrans Use Only
Caltrans Oversight Engineer's Approval and
Caltrans Certification of the
Stormwater Pollution Prevention Plan Amendment

"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 ensure 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 fine and imprisonment for knowing violations."

Oversight Engineer's Signature	Date
Oversight Engineer's Name	Oversight Engineer's Telephone Number

Attachment D

Computation Sheet for Determining Runoff Coefficients

INSTRUCTIONS

- The runoff coefficient ("C" value) is used to estimate the impact on stormwater runoff due to development of a site. The C value is the amount of rainfall that becomes runoff. The less runoff that is absorbed into the ground, the higher the C value. This information may be provided by Caltrans.
- Refer to the Caltrans Highway Design Manual, Topic 819 – Estimating Design Discharge, for a more detailed explanation on calculating weighted runoff coefficients for areas containing varying amounts of different cover.
- Refer to Figure 819.2A, "Runoff Coefficients for Undeveloped Areas", and Table 819.2B, "Runoff Coefficients for Developed Areas" provided with this Attachment.

EXAMPLE

Total Site Area	=	40 acres	(A)

Existing Site Conditions

Impervious Area[1]	=	20.5 acres	(B)
Impervious Area Runoff Coefficient [2, 4]	=	0.95	(C)
20.5 x 0.95	=	19.5 acres	(B x C)
Pervious Area[3]	=	19.5 acres	(D)
Pervious Area Runoff Coefficient[4]	=	0.4	(E)
19.5 x 0.4	=	7.8 acres	(D x E)
Sum: 19.5 + 7.8	=	27.3 acres	(B x C) + (D x E)
Divide: 27.3/40	=	0.68	$\frac{(B \times C) + (D \times E)}{(A)}$
Existing Area Runoff Coefficient	=	0.68	(F)

Proposed Site Conditions

Impervious Area[1]		=	23 acres	(G)
Impervious Area Runoff Coefficient[2, 4]		=	0.95	(H)
	23 x 0.95	=	21.9 acres	(G x H)
Pervious Area[3]		=	17 acres	(I)
Pervious Area Runoff Coefficient[4]		=	0.4	(J)
	17 x 0.4	=	6.8 acres	(I x J)
Sum:	21.9 + 6.8	=	28.7 acres	(G x H) + (I x J)
Divide:	28.7/40	=	0.72	$\frac{(G \times H) + (I \times J)}{(A)}$
Proposed Area Runoff Coefficient		=	0.72	(F)

REQUIRED TEXT:

Total Site Area = _____ (A)

Existing Site Conditions

Impervious Site Area[1] = _____ (B)

Impervious Site Area Runoff Coefficient [2, 4] = _____ (C)

Pervious Site Area[3] = _____ (D)

Pervious Site Area Runoff Coefficient[4] = _____ (E)

Existing Site Area Runoff Coefficient $\frac{(B \times C) + (D \times E)}{(A)}$ = _____ (F)

Proposed Site Conditions (after construction)

Impervious Site Area[1] = _____ (G)

Impervious Site Area Runoff Coefficient [2, 4] = _____ (H)

Pervious Site Area[3] = _____ (I)

Pervious Site Area Runoff Coefficient[4] = _____ (J)

Proposed Site Area Runoff Coefficient $\frac{(G \times H) + (I \times J)}{(A)}$ = _____ (K)

1. Includes paved areas, areas covered by buildings, and other impervious surfaces.
2. Use 0.95 unless lower or higher runoff coefficient can be verified.
3. Includes areas of vegetation, most unpaved or uncovered soil surfaces, and other pervious areas.
4. See the table on the following page for typical C values.

Figure 819.2A

Runoff Coefficients for Undeveloped Areas
Watershed Types

	Extreme	High	Normal	Low
Relief	**.28 -.35** Steep, rugged terrain with average slopes above 30%	**.20 -.28** Hilly, with average slopes of 10 to 30%	**.14 -.20** Rolling, with average slopes of 5 to 10%	**.08 -.14** Relatively flat land, with average slopes of 0 to 5%
Soil Infiltration	**.12 -.16** No effective soil cover, either rock or thin soil mantle of negligible infiltration capacity	**.08 -.12** Slow to take up water, clay or shallow loam soils of low infiltration capacity, imperfectly or poorly drained	**.06 -.08** Normal; well drained light or medium textured soils, sandy loams, silt and silt loams	**.04 -.06** High; deep sand or other soil that takes up water readily, very light well drained soils
Vegetal Cover	**.12 -.16** No effective plant cover, bare or very sparse cover	**.08 -.12** Poor to fair; clean cultivation crops, or poor natural cover, less than 20% of drainage area over good cover	**.06 -.08** Fair to good; about 50% of area in good grassland or wood-land, not more than 50% of area in cultivated crops	**.04 -.06** Good to excellent; about 90% of drainage area in good grassland, woodland or equivalent cover.
Surface Storage	**.10 -.12** Negligible surface depression few and shallow; drainageways steep and small, no marshes	**.08 -.10** Low; well defined system of small drainageways; no ponds or marshes	**.06 -.08** Normal; considerable surface depression storage; lakes and pond marshes	**.04 -.06** High; surface stor-age, high; drainage system not sharply defined; large flood plain storage or large number of ponds or marshes.

Given An undeveloped watershed consisting of;

1) rolling terrain with average slopes of 5%,
2) clay type soils,
3) good grassland area, and
4) normal surface depressions.

Solution:

Relief	0.14
Soil Infiltration	0.08
Vegetal Cover	0.04
Surface Storage	0.06
C=	0.32

Find The runoff coefficient, C, for the above watershed.

Table 819.2B

Runoff Coefficients for Developed Areas

Type of Drainage Area	Runoff Coefficient
Business:	
Downtown areas	0.70 - 0.95
Neighborhood areas	0.50 - 0.70
Residential:	
Single-family areas	0.30 - 0.50
Multi-units, detached	0.40 - 0.60
Multi-units, attached	0.60 - 0.75
Suburban	0.25 - 0.40
Apartment dwelling areas	0.50 - 0.70
Industrial:	
Light areas	0.50 - 0.80
Heavy areas	0.60 - 0.90
Parks, cemeteries:	0.10 - 0.25
Playgrounds:	0.20 - 0.40
Railroad yard areas:	0.20 - 0.40
Unimproved areas:	0.10 - 0.30
Lawns:	
Sandy soil, flat, 2%	0.05 - 0.10
Sandy soil, average, 2-7%	0.10 - 0.15
Sandy soil, steep, 7%	0.15 - 0.20
Heavy soil, flat, 2%	0.13 - 0.17
Heavy soil, average, 2-7%	0.18 - 0.25
Heavy soil, steep, 7%	0.25 - 0.35
Streets:	
Asphaltic	0.70 - 0.95
Concrete	0.80 - 0.95
Brick	0.70 - 0.85
Drives and walks	0.75 - 0.85
Roofs:	0.75 - 0.95

Attachment E

Computation Sheet for Determining Run-on Discharges

INSTRUCTIONS

- ***Item A***. The runoff coefficient represents the percent of water, which will run off the ground surface during the storm. Values of the coefficient, "C", can be determined from Figure 819.2A, "Runoff Coefficients for Undeveloped Areas", and Table 819.2B, "Runoff Coefficients for Developed Areas", from Caltrans, Highway Design Manual, Fifth Edition, provided with this Attachment.

- Refer to the Caltrans Highway Design Manual, Topic 819 – Estimating Design Discharge, for a more detailed explanation on calculating weighted runoff coefficients for areas containing varying amounts of different cover.

- ***Item B***. Rainfall intensity, in inches per hour, is the average rainfall intensity for the selected frequency. Refer to the County Flood Control, or U. S. Army Corps of Engineers manuals for rainfall intensity values.

- ***Item C***. Drainage area in acres includes impervious and pervious areas and surfaces covered by buildings.

- SWPPP preparer shall provide calculations for offsite run-on if flow quantities are not available via the project design documents (Drainage Report, Hydrology Report, etc.)

- The rational method should not be used for drainage areas greater than 0.5 square miles (320 acres). See Caltrans, Highway Design Manual, Fifth Edition, Section 819.2.

Existing Site Conditions

Area Runoff Coefficient		=	_____	(A)
Area Rainfall Intensity		=	_____ in/hr	(B)
Drainage Area		=	_____ acres	(C)
Site Area Run-on Discharge	(A) x (B) x (C)	=	_____ cfs	(D)

Figure 819.2A

Runoff Coefficients for Undeveloped Areas
Watershed Types

	Extreme	High	Normal	Low
Relief	**.28 -.35** Steep, rugged terrain with average slopes above 30%	**.20 -.28** Hilly, with average slopes of 10 to 30%	**.14 -.20** Rolling, with average slopes of 5 to 10%	**.08 -.14** Relatively flat land, with average slopes of 0 to 5%
Soil Infiltration	**.12 -.16** No effective soil cover, either rock or thin soil mantle of negligible infiltration capacity	**.08 -.12** Slow to take up water, clay or shallow loam soils of low infiltration capacity, imperfectly or poorly drained	**.06 -.08** Normal; well drained light or medium textured soils, sandy loams, silt and silt loams	**.04 -.06** High; deep sand or other soil that takes up water readily, very light well drained soils
Vegetal Cover	**.12 -.16** No effective plant cover, bare or very sparse cover	**.08 -.12** Poor to fair; clean cultivation crops, or poor natural cover, less than 20% of drainage area over good cover	**.06 -.08** Fair to good; about 50% of area in good grassland or wood-land, not more than 50% of area in cultivated crops	**.04 -.06** Good to excellent; about 90% of drainage area in good grassland, woodland or equivalent cover.
Surface Storage	**.10 -.12** Negligible surface depression few and shallow; drainageways steep and small, no marshes	**.08 -.10** Low; well defined system of small drainageways; no ponds or marshes	**.06 -.08** Normal; considerable surface depression storage; lakes and pond marshes	**.04 -.06** High; surface stor-age, high; drainage system not sharply defined; large flood plain storage or large number of ponds or marshes.

Given An undeveloped watershed consisting of;

1) rolling terrain with average slopes of 5%,
2) clay type soils,
3) good grassland area, and
4) normal surface depressions.

Solution:

Relief	0.14
Soil Infiltration	0.08
Vegetal Cover	0.04
Surface Storage	0.06
C=	0.32

Find The runoff coefficient, C, for the above watershed.

Table 819.2B

Runoff Coefficients for Developed Areas

Type of Drainage Area	Runoff Coefficient
Business:	
Downtown areas	0.70 - 0.95
Neighborhood areas	0.50 - 0.70
Residential:	
Single-family areas	0.30 - 0.50
Multi-units, detached	0.40 - 0.60
Multi-units, attached	0.60 - 0.75
Suburban	0.25 - 0.40
Apartment dwelling areas	0.50 - 0.70
Industrial:	
Light areas	0.50 - 0.80
Heavy areas	0.60 - 0.90
Parks, cemeteries:	0.10 - 0.25
Playgrounds:	0.20 - 0.40
Railroad yard areas:	0.20 - 0.40
Unimproved areas:	0.10 - 0.30
Lawns:	
Sandy soil, flat, 2%	0.05 - 0.10
Sandy soil, average, 2-7%	0.10 - 0.15
Sandy soil, steep, 7%	0.15 - 0.20
Heavy soil, flat, 2%	0.13 - 0.17
Heavy soil, average, 2-7%	0.18 - 0.25
Heavy soil, steep, 7%	0.25 - 0.35
Streets:	
Asphaltic	0.70 - 0.95
Concrete	0.80 - 0.95
Brick	0.70 - 0.85
Drives and walks	0.75 - 0.85
Roofs:	0.75 - 0.95

Attachment E *-Example*

Computational Sheet for Determining Run-on Discharges

Existing Site Conditions

Area Runoff Coefficient[1]		=	0.32	(A)
Area Rainfall Intensity [2]		=	0.5 in/hr	(B)
Drainage Area[3]		=	175 acres	(C)
Site Area Run-on Discharge	(A)x(B)x (C)	=	28 cfs	(D)

1. The runoff coefficient represents the percent of water, which will run off the ground surface during the storm for the area depicted on page 7. The value for the runoff coefficient, .32, was determined from Figure 819.2A, page 5, based on the site characteristics (terrain, type of soil, vegetation, etc.) for an undeveloped area.

2. Rainfall intensity, in inches per hour, is the average rainfall intensity for the selected frequency and duration (2 year, 1 hour storm). The Rainfall Depth versus Return Period chart, page 7, from the San Bernardino County Flood Control Hydrology Manual gives a value of 0.5 in/hr for the site area.

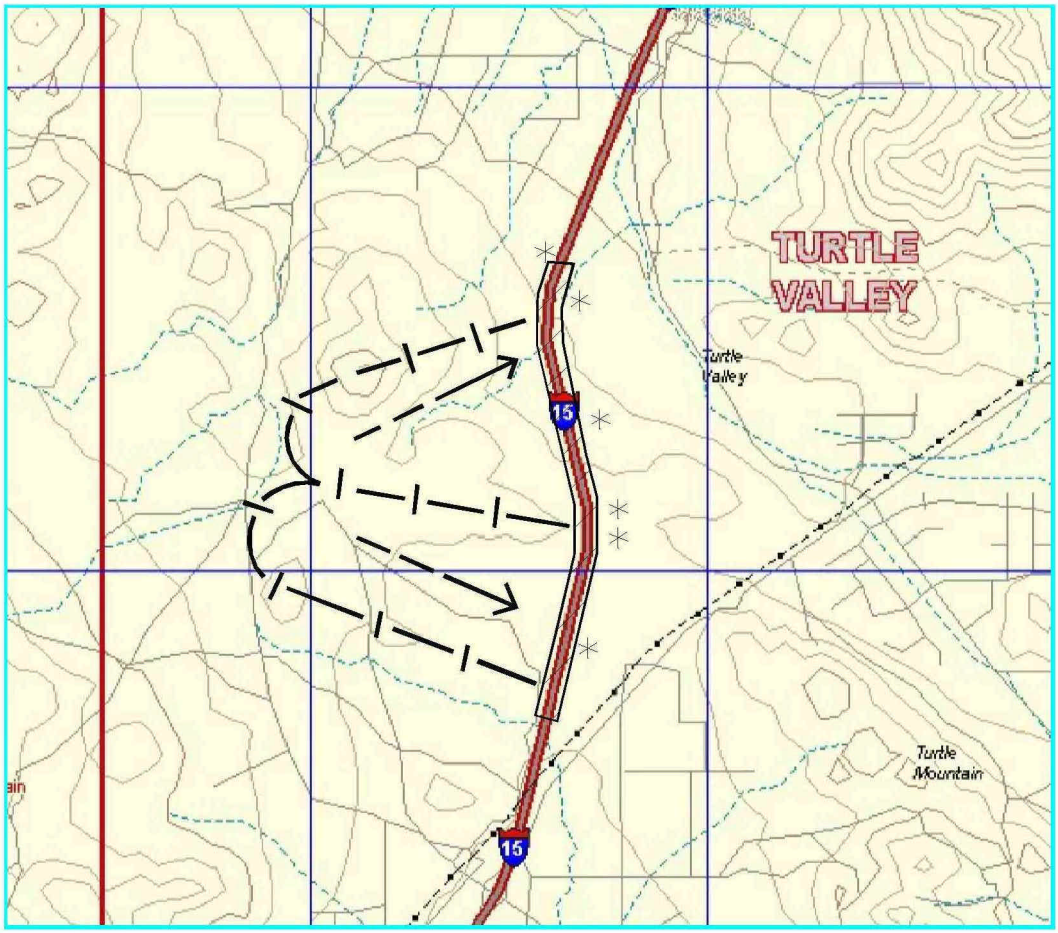
3. Drainage area, in acres, depicted on page 5 is 175 acres.

STORMWATER POLLUTION PREVENTION PLAN

SAMPLE VICINITY MAP

FOR

THE CONSTRUCTION ON STATE HIGHWAY 15
IN SAN BERNARDINO COUNTY NEAR BARSTOW
FROM 1.5 miles NORTH OF POWERLINE ROAD
OVERCROSSING TO WILDWASH BRIDGE



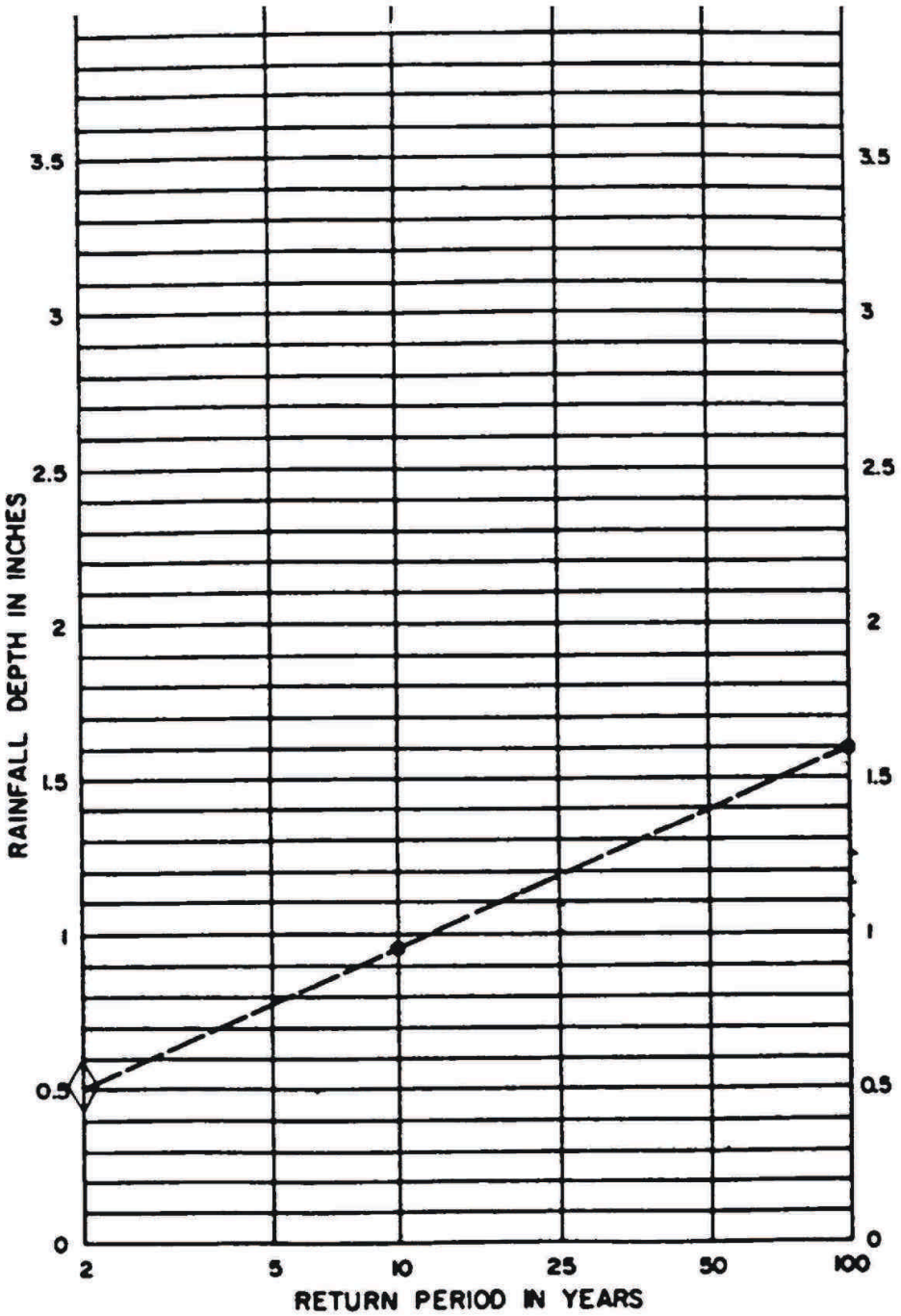
LEGEND:

PROJECT AREA

* DISCHARGE POINTS

OFFSITE DRAINAGE AREAS DISCHARGING ON TO SITE

N.T.S.



NOTE:

1 FOR INTERMEDIATE RETURN PERIODS PLOT 10-YEAR AND 100-YERAR ONE HOUR VALUES FROM MAPS, THEN CONNECT POINTS AND READ VALUE FOR DESIRED RETURN PERIOD. FOR EXAMPLE GIVEN 10-YEAR ONE HOUR = 0.95" AND 100-YEAR ONE HOUR = 1.60", 2-YEAR ONE HOUR = 0.5".

REFERENCE NOAA ATLAS 2, VOLUME II-CAL., 1973

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

RAINFALL DEPTH VERSUS RETURN PERIOD FOR PARTIAL DURATION SERIES

Attachment F

Notice of Construction (NOC) / Notice of Intent (NOI)

INSTRUCTIONS

- **Caltrans Administered Projects**: The Notice of Construction (NOC) form shown in the following page is a blank form. The completed (NOC) will be provided by Caltrans for inclusion in this attachment.
- **Local Agency / Private Entity Administered Projects:** The Notice of Intent (NOI) and Waste Discharge Identification (WDID) number will be provided by the Local Agency / Private Entity. The NOI and WDID number shall be inserted into this attachment.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

NOTICE OF CONSTRUCTION

CEM-2002 (NEW 4/10/2000)

IN COMPLIANCE WITH CALTRANS STATEWIDE NPDES STORM WATER PERMIT Order No. 99-06 DWQ, NPDES No. CAS000003

I. IDENTIFICATION - Attach Vicinity Map, ½ size copy of Title Sheet

PROJECT	CHECK ONE: ☐ First Submittal or Amendment No.	CONTRACT NUMBER EA	DATE MM/DD/YYYY
CITY (if applicable)	COUNTY	TENTATIVE START DATE	TENTATIVE END DATE
ROUTE	POST MILE	KILOMETER POST	TENTATIVE DATE SWPPP AVAILABLE

II. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

☐ Region1, North Coast
☐ Region 2, San Francisco Bay
☐ Region 3, Central Coast
☐ Region 4, Los Angeles

Region 5, Central Valley
☐ Sacramento
☐ Fresno
☐ Redding

Region 6, Lahontan
☐ South Lake Tahoe
☐ Victorville

☐ Region 7, Colorado River
☐ Region 8, Santa Ana
☐ Region 9, San Diego

III. CALTRANS DISTRICT

NAME/NUMBER	PROJECT CONTACT
ADDRESS	POSITION TITLE
CITY	PHONE

IV. CONSTRUCTION FIELD OFFICE - Attach Location Map

STREET ADDRESS			CONSTRUCTION CONTACT
PHYSICAL LOCATION IF DIFFERENT THAN ADDRESS ABOVE			POSITION TITLE
CITY	STATE	ZIP	PHONE

V. CONSTRUCTION SITE INFORMATION

DESCRIPTION AND TYPE OF WORK

ADDITIONAL RELATED REQUIRED APPROVALS: ☐ DTSC Variance ☐ CWA 404/401 ☐ DFG 1601 ☐ NPDES/WDRs ☐ OTHER

DESCRIBE:

TOTAL CONSTRUCTION AREA: ACRES HECTARES	TOTAL DISTURBED AREA: ACRES HECTARES
RECEIVING WATER NAME:	PROJECT IN OR ADJACENT TO RECEIVING WATER? ☐ YES

PROJECT DISCHARGES TO? ☐ GROUNDWATER INFILTRATION	BASIN LOCATION:	MUNICIPAL/OTHER SYSTEM NAME:

VI. CERTIFICATION

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

SIGNATURE	DATE
PRINT/TYPE NAME	TITLE

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 263-2041 or TDD (916) 263-2044 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

NOTICE OF CONSTRUCTION (DESERT AREAS)

(APPLIES TO PROJECTS BELOW ELEVATION 1200 METERS IN RWQCB 6 & 7 JURISDICTION)

CEM-2004 (REV 8/2005)

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

IN COMPLIANCE WITH CALTRANS STATEWIDE NPDES STORM WATER PERMIT Order No. 99-06 DWQ, NPDES No. CAS000003

I. IDENTIFICATION - Attach Vicinity Map, ½ size copy of Title Sheet

PROJECT	NOC SUBMITTAL (Check One) ☐ First Submittal or ☐ Amendment No. ___	CONTRACT NUMBER EA	DATE MM/DD/YYYY
CITY (if applicable)	COUNTY	TENTATIVE START DATE	TENTATIVE END DATE
ROUTE	POST MILE	KILOMETER POST	TENTATIVE DATE SWPPP AVAILABLE

II. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

☐ REGION 6, LAHONTAN RWQCB South VICTORVILLE OFICE 14440 Civic Drive, Ste 200 Victorville, CA 92392 Ph: (760-241-6583 FAX: (760) 241-7308	☐ REGION 7, COLORADO RIVER BASIN RWQCB 73-720 Fred Waring Drive, Ste. 100 Palm Desert, CA 92260 Ph. (760) 346-7491 FAX: (760-341-6820

III. CALTRANS DISTRICT

NAME/NUMBER	PROJECT CONTACT
ADDRESS	POSITION TITLE
CITY	PHONE

IV. CONSTRUCTION OFFICE - Attach location Map

STREET ADDRESS		CONSTRUCTION CONTACT	
PHYSICAL LOCATION IF DIFFERENT THAN ADDRESS ABOVE		POSITION TITLE	
CITY	STATE	ZIP	PHONE

V. CONSTRUCTION SITE INFORMATION

DESCRIPTION AND TYPE OF WORK:

BMPS TO BE IMPLEMENTED (CHECK BOXES THAT APPLY OR ATTACH SWPPP)

Temporary Soil Stabilization BMPs:

- ☐ SS-1 Scheduling
- ☐ SS-2 Pres. of Existing Vegetation
- ☐ SS-3 Hydraulic Mulch
- ☐ SS-4 Hydroseeding
- ☐ SS-5 Soil Binders
- ☐ SS-6 Straw Mulch
- ☐ SS-7 Geotextiles, Plastic Covers & Erosion Control
- ☐ SS-8 Wood Mulching
- ☐ SS-9 Earth Dikes/Drainage Swales & Lined Ditches
- ☐ SS-10 Outlet Protection & Velocity Dissipation Devices
- ☐ SS-11 Slope Drains
- ☐ SS-12 Stream Bank Stabilization

Temporary Sediment Control BMPs:

- ☐ SC-1 Silt Fence
- ☐ SC-2 Desilting Basin
- ☐ SC-3 Sediment Trap
- ☐ SC-4 Check Dam
- ☐ SC-5 Fiber Rolls
- ☐ SC-6 Gravel Bag Berm
- ☐ SC-7 Street Sweeping & Vacuuming
- ☐ SC-8 Sandbag Barrier
- ☐ SC-9 Straw Bale Barrier
- ☐ SC-10 Storm Drain Inlet Protection

☐ Wind Erosion Control BMPs ☐ Tracking Control BMPs ☐ Non-Storm Water Management BMPs ☐ Waste Mgmt. & Materials Pollution Control BMPs

ADDITIONAL RELATED REQUIRED APPROVALS: ☐ DTSC Variance ☐ CWA 404/401 ☐ DFG 1601 ☐ NPDES/WDRS ☐ OTHER

DESCRIBE:

USGS COORDINATES:	NORTHING:	EASTING:	
TOTAL CONSTRUCTION AREA:	ACRES HECTARES	TOTAL DISTURBED AREA:	ACRES HECTARES
RECEIVING WATER NEAREST PROJECT SITE:		APPROXIMATE CLOSEST DISTANCE TO RECEIVING WATER?	
PROJECT DISCHARGES TO? ☐ GROUNDWATER INFILTRATION	BASIN LOCATION	MUNICIPAL/OTHER SYSTEM NAME	

VI. CERTIFICATION

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

SIGNATURE	DATE
PRINT/TYPE NAME	TITLE

Attachment 2

State Water Resources Control Board

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF THE
GENERAL PERMIT TO DISCHARGE STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY (WQ ORDER No. 99-08-DWQ)

I. NOI STATUS (SEE INSTRUCTIONS)

MARK ONLY ONE ITEM 1. ☐ New Construction 2. ☐ Change of Information for WDID#

II. PROPERTY OWNER

Name	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone

Owner Type (*check one*) 1.[ ] Private Individual 2.[ ]Business 3.[ ]Municipal 4.[ ]State 5.[ ]Federal 6.[ ]Other

III. DEVELOPER/CONTRACTOR INFORMATION

Developer/Contractor	Contact Person		
Mailing Address	Title		
City	State	Zip	Phone

IV. CONSTRUCTION PROJECT INFORMATION

Site/Project Name	Site Contact Person		
Physical Address/Location	Latitude _____°	Longitude _____°	County
City (or nearest City)	Zip	Site Phone Number	Emergency Phone Number

A. Total size of construction site area: _____ Acres

B. Total area to be disturbed: _____ Acres (% of total _____)

C. Percent of site imperviousness (including rooftops):

Before Construction: _____%

After Construction: _____%

D. Tract Number(s): _____, _____

E. Mile Post Marker: _____

F. Is the construction site part of a larger common plan of development or sale?

☐ YES ☐ NO

G. Name of plan or development:

H. Construction commencement date: ____/____/____

I. % of site to be mass graded: _____

J. Projected construction dates:

Complete grading: ____/____/____ Complete project: ____/____/____

K. Type of Construction (Check all that apply):

1. ☐ Residential 2. ☐ Commercial 3. ☐ Industrial 4. ☐ Reconstruction 5. ☐ Transportation

6. ☐ Utility Description: _____ 7. ☐ Other (Please List): _____

V. BILLING INFORMATION

SEND BILL TO: ☐ OWNER (as in II. above)	Name	Contact Person	
☐ DEVELOPER (as in III. above)	Mailing Address	Phone/Fax	
☐ OTHER (enter information at right)	City	State	Zip

VI. REGULATORY STATUS

A. Has a local agency approved a required erosion/sediment control plan? ☐ YES ☐ NO

Does the erosion/sediment control plan address construction activities such as infrastructure and structures? ☐ YES ☐ NO

Name of local agency: _____ Phone: _____

B. Is this project or any part thereof, subject to conditions imposed under a CWA Section 404 permit of 401 Water Quality Certification? ☐ YES ☐ No

If yes, provide details: _____

VII. RECEIVING WATER INFORMATION

A. Does the storm water runoff from the construction site discharge to (Check all that apply):

1. ☐ **Indirectly to waters of the U.S.**
2. ☐ **Storm drain system - Enter owner's name:** _____
3. ☐ **Directly to waters of U.S. (e.g. , river, lake, creek, stream, bay, ocean, etc.)**

B. Name of receiving water: (river, lake, creek, stream, bay, ocean): _____

VIII. IMPLEMENTATION OF NPDES PERMIT REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (check one)

☐ A SWPPP has been prepared for this facility and is available for review: Date Prepared: _____/_____/_____ Date Amended: _____/_____/_____

☐ A SWPPP will be prepared and ready for review by (enter date): / /

☐ A tentative schedule has been included in the SWPPP for activities such as grading, street construction, home construction, etc.

B. MONITORING PROGRAM

☐ A monitoring and mainfenance schedule has been developed that includes inspection of the construction BMPs before anticipated storm events and after actual storm events and is available for review.

If checked above: A qualified person has been assigned responsibility for pre-storm and post-storm BMP inspections to identify effectiveness and necessary repairs or design changes ☐ YES ☐ NO

Name: _____ Phone: _____

C. PERMIT COMPLIANCE RESPONSIBILITY

A qualified person has been assigned responsibility to ensure full compliance with the Permit, and to implement all elements of the Storm Water Pollution Prevention Plan including:

1. Preparing an annual compliance evaluation ☐ YES ☐ NO

Name: _____ Phone: _____

2. Eliminating all unauthorized discharges ☐ YES ☐ NO

IX. VICINITY MAP AND FEE (must show site location in relation to nearest named streets, intersections, etc.)

Have you included a vicinity map with this submittal? ☐ YES ☐ NO

Have you included payment of the annual fee with this submittal? ☐ YES ☐ NO

X. CERTIFICATIONS

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. In addition, I certify that I have read the entire General Permit, including all attachments, and agree to comply with and be bound by all of the provisions, requirements, and prohibitions of the permit, including the development and implementation of a Storm Water Pollution Prevention Plan and a Monitoring Program Plan will be complied with."

Printed Name: _____

Signature: _____ **Date:** _____

Title: _____

Attachment G

Maintenance, Inspection, and Repair of Construction Site BMPs

INSTRUCTIONS

- Use this form as an outline for the maintenance, inspection and repair program described in SWPPP Section 500.5.
- Certain projects may require increased inspection frequencies. Refer to the project Special Provisions for additional requirements.
- Inspection frequency and maintenance/repair program must be included for all BMPs selected for the project.
- Include maintenance and inspections for both rainy and non-rainy seasons.

SWPPP Inspection, Maintenance and Repair Program			
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY**		**MAINTENANCE/REPAIR PROGRAM**
	Rainy	**Non-Rainy**	
TEMPORARY SOIL STABILIZATION BMPs			
			▪ ▪
			▪ ▪
TEMPORARY SEDIMENT CONTROL BMPs			
			▪ ▪ ▪ ▪ ▪
			▪ ▪ ▪ ▪ ▪
WIND EROSION CONTROL BMPs			
TRACKING CONTROL BMPs			
			▪ ▪

SAMPLE

SWPPP Inspection, Maintenance and Repair Program			
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY**		**MAINTENANCE/REPAIR PROGRAM**
	Rainy	**Non-Rainy**	
NON-STORM WATER MANAGEMENT BMPs			
			■ ■ ■ ■ ■ ■
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs			
			■ ■ ■ ■ ■ ■
			■ ■ ■ ■ ■ ■

SAMPLE

Site inspections shall be conducted by the Contractor's WPCM or other Caltrans approved 24-hour trained staff at the following minimum frequencies:

- Prior to a forecast storm;
- After a rain event that causes runoff from the construction site;
- At 24-hour intervals during extended rain events;
- Daily inspections within the Lake Tahoe Hydrologic Unit;
- Weekly during the rainy season;
- Every 2 weeks during the non-rainy season; and
- At any other time(s) or intervals of time specified in the Contract Special Provisions.

Completed inspection checklists shall be submitted to the Resident Engineer within 24 hours of inspection. Copies of the completed checklists will be kept with the SWPPP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs.

Attachment H

Stormwater Quality Construction Site Inspection Checklist

INSTRUCTIONS

- Use this form for inspecting BMPs as described in SWPPP Section 500.5.
- This inspection form shall be completed and signed by the Contractor's Water Pollution Control Manager (WPCM).
- The Conceptual SWPPP (CSWPPP) or the Special Provisions may require the Contractor to use a different inspection form
- The weather information shall be the best estimate of beginning of the storm event, duration of the event, time elapsed since the last storm, and approximate amount of rainfall.
- List observations of all BMPs: temporary soil stabilization (erosion control), temporary sediment controls, wind erosion controls, tracking controls, non-storm water controls and waste management and materials pollution controls.
- Evaluate BMPs for adequacy and proper implementation and whether additional BMPs are required in accordance with the terms of the Permits.
- Verify implementation of non-storm water discharge BMPs and evaluate their effectiveness.
- One time discharges of non-storm water shall be inspected when such discharges occur.
- Describe any inadequate BMPs.
- Note the corrective actions required, including any changes to the SWPPP, and implementation dates.
- If you answer "No" to any of the questions, describe the corrective action(s) to be taken and when the corrective action(s) are to be completed. Should you need more space to describe corrective actions, identify your response numerically and use additional sheets as necessary.

GENERAL INFORMATION	
Project Name	
Caltrans Contract No.	
Contractor	
Inspector's Name	
Inspector's Title	
Signature	

GENERAL INFORMATION				
Date of Inspection				
Inspection Type (Check Applicable)	❒ Prior to forecast rain ❒ 24-hr intervals during extended rain		❒ After a rain event ❒ Other _____	
Season (Check Applicable)	❒ Rainy		❒ Non-Rainy	
Storm Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (mm)	

PROJECT AREA SUMMARY AND DISTURBED SOIL AREA (DSA) SIZE LIMITS FROM SPECIAL PROVISIONS				
Total Project Area	_____	Hectares	_____	Acres
Rainy Season DSA Limit	_____	Hectares	_____	Acres
Field Estimate of Non-Active DSAs	_____	Hectares	_____	Acres
Field Estimate of Active DSAs	_____	Hectares	_____	Acres

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Preservation of Existing Vegetation				
Is temporary fencing provided to preserve vegetation in areas where no construction activity is planned?				
Location:				
Location:				
Location:				
Location:				
Temporary Soil Stabilization				
Does the applied temporary soil stabilization provide 100% coverage for the required areas?				
Are any non-vegetated areas that may require temporary soil stabilization?				
Is the area where temporary soil stabilization required free from visible erosion?				
Location:				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Location:				
Location:				
Location:				
Temporary Linear Sediment Barriers				
Are temporary linear sediment barriers properly installed in accordance with the details, functional and maintained?				
Are temporary linear sediment barriers free of accumulated litter?				
Is the built-up sediment less than 1/3 the height of the barrier?				
Are cross barriers installed where necessary and properly spaced?				
Are fiber rolls installed and maintained on required slopes in accordance with the details, functional and maintained?				
Location:				
Location:				
Location:				
Location:				
Location:				
Storm Drain Inlet Protection				
Are storm drain inlets internal to the project properly protected with either Type 1, 2 or 3 inlet protection?				
Are storm drain inlet protection devices in working order and being properly maintained?				
Location:				
Location:				
Location:				
Location:				
Location:				
Desilting Basins				
Are basins maintained to provide the required retention/detention?				
Are basin controls (inlets, outlets, diversions, weirs, spillways, and racks) in working order?				
Location:				
Location:				
Location:				
Location:				
Stockpiles				
Are all locations of temporary stockpiles, including soil, hazardous waste, and construction materials in approved areas?				
Are stockpiles protected from run-on, run-off from adjacent areas and from winds?				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Are stockpiles located at least 50 ft from concentrated flows, downstream drainage courses and storm drain inlets?				
Are required covers and/or perimeter controls in place?				
Location:				
Location:				
Location:				
Location:				
Concentrated Flows				
Are concentrated flow paths free of visible erosion?				
Location:				
Location:				
Location:				
Location:				
Tracking Control				
Are points of ingress/egress to public/private roads inspected, swept, and vacuumed daily?				
Are all paved areas free of visible sediment tracking or other particulate matter?				
Is rock at Temporary Construction Entrance(s) 12-inches or more in thickness?				
Does sediment need to be removed from the rock, or does the rock need to be replaced?				
For Type 2 Construction Entrance, does sediment need to be removed from ribbed plates?				
Location:				
Location:				
Location:				
Location:				
Wind Erosion Control				
Is dust control implemented in conformance with Section 10 of the Standard Specifications?				
Location:				
Location:				
Location:				
Location:				
Dewatering Operations				
Is dewatering handled in conformance with the dewatering permit issued by the RWQCB?				
Is required treatment provided for dewatering effluent?				
Location:				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Location:				
Location:				
Location:				
Vehicle & Equipment Fueling, Cleaning, and Maintenance				
Are vehicle and equipment fueling, cleaning and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious material?				
Are vehicle and equipment fueling, cleaning and maintenance activities performed on an impermeable surface in dedicated areas?				
If no, are drip pans used?				
Are dedicated fueling, cleaning, and maintenance areas located at least 15 m away from downstream drainage facilities and watercourses, and protected from run-on and runoff?				
Is wash water contained for infiltration/ evaporation and disposed of outside the highway right of way?				
Is on-site cleaning limited to washing with water (no soap, soaps substitutes, solvents, or steam)?				
On each day of use, are vehicles and equipment inspected for leaks and if necessary, repaired?				
Location:				
Location:				
Location:				
Location:				
Waste Management & Materials Pollution Control				
Are material storage areas and washout areas protected from run-on and runoff, and located at least 50 ft from concentrated flows and downstream drainage facilities?				
Are all material handling and storage areas clean; organized; free of spills, leaks, or any other deleterious material; and stocked with appropriate clean-up supplies?				
Are liquid materials, hazardous materials, and hazardous wastes stored in temporary containment facilities?				
Are bagged and boxed materials stored on pallets?				
Are hazardous materials and wastes stored in appropriate, labeled containers?				
Are proper storage, clean-up, and spill-reporting procedures for hazardous materials and wastes posted in open, conspicuous and accessible locations adjacent to storage areas?				
Are temporary containment facilities free of spills and rainwater?				
Are temporary containment facilities and bagged/boxed materials covered?				
Are temporary concrete washout facilities designated and being used?				
Are temporary concrete washout facilities functional for receiving and containing concrete waste and are concrete residues prevented from entering the drainage system?				
Do temporary concrete washout facilities provide sufficient volume and freeboard for planned concrete operations?				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Are the temporary concrete washout facilities' PVC liners free from punctures and holes?				
Are concrete wastes, including residues from cutting and grinding, contained and disposed of off-site or in concrete washout facilities?				
Are spills from mobile equipment fueling and maintenance properly contained and cleaned up?				
Is the site free of litter?				
Are trash receptacles provided in the Contractor's yard, field trailer areas, and at locations where workers congregate for lunch and break periods?				
Is litter from work areas within the construction limits of the project site collected and placed in watertight dumpsters?				
Are waste management receptacles free of leaks?				
Are the contents of waste management receptacles properly protected from contact with storm water or from being dislodged by winds?				
Are waste management receptacles filled at or beyond capacity?				
Location:				
Location:				
Location:				
Location:				
Temporary Water Body Crossing or Encroachment				
Are temporary water body crossings and encroachments constructed as shown on the plans or as approved by the engineer?				
Does the project conform to the requirements of the 404 permit and/or 1601agreement?				
Location:				
Location:				
Location:				
Location:				
Illicit Connection/Illegal Discharge Detection and Reporting				
Is there any evidence of illicit discharges or illegal dumping on the project site?				
If yes, has the Engineer been notified?				
Location:				
Location:				
Location:				
Location:				
Discharge Points				
Are discharge points and discharge flows free from noticeable pollutants?				
Are discharge points free of any significant erosion or sediment transport?				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Location:				
Location:				
Location:				
Location:				
WPCP/SWPPP Update				
Do the WPCP/SWPPP, Project Schedule/Water Pollution Control Schedule and WPCDs adequately reflect the current site conditions and contractor operations?				
Are all BMPs shown on the WPCDs installed in the proper location(s) and according to the details for the plan?				
Location:				
Location:				
Location:				
Location:				
General				
Are there any other potential water pollution control concerns at the site?				
Location:				
Location:				
Location:				
Location:				
Storm Water Monitoring				
Does storm water discharge directly to an water body listed as impaired for sediment/sedimentation or turbidity in the General Construction Activity Permit?				
If yes, were samples for sediment/sedimentation or turbidity collected pursuant to the sampling and analysis plan, if required, during rain events?				
Were there any BMPs not properly implemented, or breaches, malfunctions, leakages or spills observed, which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				
Were soil amendments (e.g., gypsum) used on the project?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				
Did storm water contact stored materials or waste and resulted in a discharge from the construction site? (Materials not in watertight containers, etc.)				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				

Attachment I

Trained Contractor Personnel Log

INSTRUCTIONS

- Use this sheet to record individuals attending formal training programs specified in section 500.7 of the SWPPP. This form may also be used to record informal tailgate on-site meetings on storm water management.

Stormwater Management Training Log

Project Name: _____

Caltrans Contract Number: _____

Storm Water Management Topic: (check as appropriate)

- ❑ Temporary Soil Stabilization
- ❑ Temporary Sediment Control
- ❑ Wind Erosion Control
- ❑ Tracking Control
- ❑ Non-storm water management
- ❑ Waste Management and Materials Pollution Control
- ❑ Storm Water Sampling

Specific Training Objective: _____

Location: _____ Date: _____

Instructor: _____ Telephone: _____

Course Length (hours): _____

Attendee Roster (attach additional forms if necessary)

Name	Company	Phone

Name	Company	Phone

COMMENTS:

Attachment J

Subcontractor Notification Letter (Sample) and Notification Log

INSTRUCTIONS

- Use this sample to prepare the subcontractor letter and log required in Section 500.8 of the SWPPP.

SWPPP Notification

ABC Construction Inc,
123 Sunset Blvd., Suite 456
Hollywood, CA 90000

Dear Sir/Madam,

Please be advised that the California State Water Resources Control Board has adopted the NPDES Statewide Storm Water Permit (Permit) to the State of California, Department of Transportation (Caltrans) in 1999 (CAS000003, Order No. 99-06-DWQ); and the General Permit (General Permit) for Storm Water Discharges Associated with Construction Activity (CAS000002, Order No. 99-08-DWQ), and modifications thereto. The goal of these permits is prevent the discharge of pollutants associated with construction activity from entering the storm drain system, ground and surface waters.

[Contractor] has developed a Storm Water Pollution Prevention Plan (SWPPP) in order to implement the requirements of the Permits.

As a subcontractor, you are required to comply with the SWPPP and the Permits for any work that you perform on site. Any person or group who violates any condition of the Permits may be subject to substantial penalties in accordance with state and federal law. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP and the Permits. A copy of the Permits and the SWPPP are available for your review at the construction office. Please contact me if you have further questions.

Sincerely,

John Doe
Project Superintendent

SAMPLE

SUBCONTRACTOR NOTIFICATION LOG

Project Name: _____

Caltrans Contract Number: _____

SUBCONTRACTOR COMPANY NAME	CONTACT NAME	ADDRESS	PHONE NUMBER	PAGER/ FIELD PHONE	DATE NOTIFICATION LETTER SENT	TYPE OF WORK

USE ADDITIONAL PAGES AS NECESSARY

Attachment K

Notice of Discharge

INSTRUCTIONS

- This form be will used to report instances of discharges. The completed form will be submitted to the Resident Engineer within 7 days (3 days for Districts 7 and 11), or as specified by the Special Provisions, of the assessment of discharge, written notice or orders from a regulatory agency.
- Submit photographs (before and after the discharge) with this report.

To: Name of Caltrans Resident Engineer Date: Insert Date

Subject: Notice of Discharge

Project Name: Insert Project Name

Caltrans Contract Number: contract number

In accordance with the Caltrans NPDES Statewide Permit for Storm Water Discharges Associated with Construction Activity, the following instance of discharge is noted:

Date, time, and location of discharge

Insert description and date of event

Nature of the operation that caused the discharge

Insert description of operation

Initial assessment of any impact caused by the discharge

Insert assessment

Existing BMP(s) in place prior to discharge event

List BMPs in place

Date of deployment and type of BMPs deployed after the discharge.

BMPs deployed after the discharge (with dates)

Steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Insert steps taken to prevent recurrence

Implementation and maintenance schedule for any affected BMPs

Insert implementation and maintenance schedule

If further information or a modification to the above schedule is required, notify the contact person below.

Name of Contact Person	Title
Company	Telephone Number
Signature	Date

Attachment L

(INTENTIONALLY LEFT BLANK)

Attachment M

Annual Certification of Compliance Form

INSTRUCTIONS

- By June 15th of each year, the Contractor shall complete and submit this form to the Resident Engineer for approval as required in Section 100.3 of the SWPPP. Annual certification of compliance is based on the site inspections required in the SWPPP. Results of site inspections and remedial actions to correct deficiencies form the basis of the certification.
- A copy of completed and signed Annual Certifications and Approvals shall be included in Section 100.3 of the SWPPP following the required text of the section.
- This Annual Certification of Compliance form does not need to be completed at the initial approval, but it shall be submitted during the first year of the initial SWPPP approval.
- If a Local Agency / Private Entity is administering the project, then both the Local Agency Resident Engineer and the Caltrans Oversight Engineer must sign the annual certification of compliance.

Annual Certification of Compliance for the Construction Contractor

Project Name: _____

Caltrans Contract Number: _____

Contractor Company Name: _____

Contractor Address: _____

Annual Certification Inspection Date: _____

Description of Work:

description of work

Work Now in Progress:

work in progress

Work Planned for Next 12 Months:	work planned

Water Pollution Control Manager Findings

I, and/or personnel acting under my direction and supervision, have inspected the project site and the work described above and certify:

1. ☐ YES ☐ NO Stormwater pollution control measures are being implemented in accordance with the SWPPP approved for the project.

2. ☐ YES ☐ NO The project site and activities thereon are in compliance with the Caltrans Statewide NPDES Permit No. CAS000003, the NPDES General Permit No. CAS000002, or local NPDES permits, which ever is applicable.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly 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 fine and imprisonment for knowing violations

Contractor Signature: _____ Date: _____

Approval by the Resident Engineer for the Annual Certification of Compliance

Resident Engineer's Findings

I, and/or personnel acting under my direction and supervision, have inspected the project site and the work described above and find as follows:

1. ☐ YES ☐ NO Stormwater pollution control measures are being implemented in accordance with the SWPPP approved for the project.

2. ☐ YES ☐ NO The project site and activities thereon are in compliance with the Caltrans Statewide NPDES Permit No. CAS000003, the NPDES General Permit No. CAS000002, or local NPDES permits, which ever is applicable.

When both 1 and 2 above are checked "yes", the resident engineer must complete the annual certification below.

If either 1 or 2 above are checked "no", the resident engineer must:

- File a notice of non-compliance within 30 days of identification of the noncompliance;
- Document follow up actions below;
- Notify the contractor; and
- Initiate corrective actions in accordance with the contract.

Is a Local Agency administering the project?

☐ Yes ☐ No

Resident Engineer's Follow up Actions:

I, and or personnel acting under my direction and supervision, have reviewed and approved of the Contractor's Annual Certification of Compliance. However, the Contractor remains responsible and liable at all times for compliance with applicable requirements for which compliance is ultimately determined by the Regional Water Quality Control Board and/or the State Water Resources Control Board, and/or the EPA.

CERTIFICATION BY CALTRANS OR LOCAL AGENCY / PRIVATE ENTITY RESIDENT ENGINEER

_____ _____

Resident Engineer's Name and Signature Date

CERTIFICATION BY CALTRANS OVERSIGHT ENGINEER (IF LOCAL AGENCY / PRIVATE ENTITY IS ADMINISTERING PROJECT)

_____ _____

Caltrans Oversight Engineer's Name and Signature Date

Attachment N

Other Plans/Permits/Agreements

INSTRUCTIONS

- Include in this attachment a copy of the Caltrans Statewide Permit CAS000003.
- Include in this attachment a copy of the Construction General Permit CAS000002.
- Also include copies of other local, state, and federal plans , permits, and agreements. List of other plans, permits, and agreements shall be included in Section 400 of the SWPPP. Examples include:
  - RWQCB Waiver of Clean Water Act Section 401 Water Quality Certification.
  - US Army Corps of Engineers, Clean Water Act Section 404, Nationwide Permit 26-authorization letter.
  - California Department of Fish and Game Streambed Alteration Agreement II 564-xx.
- Copies of the above documents shall also be included in the Resident Engineer's file.

Attachment O

(INTENTIONALLY LEFT BLANK)

Attachment P

Notice of Completion of Construction / Notice of Termination

INSTRUCTIONS

- **Caltrans Administered Projects**: The Notice of Completion of Construction (NCC) form shown in the following page is a blank form. The completed (NCC) will be provided by Caltrans for inclusion in this attachment.
- **Local Agency / Private Entity Administered Projects:** The Notice of Termination (NOT) will be provided by the Local Agency / Private Entity. The NOT shall be inserted into this attachment.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

NOTICE OF COMPLETION OF CONSTRUCTION

CEM-2003 (NEW 4/12/2000)

IN COMPLIANCE WITH CALTRANS STATEWIDE NPDES STORM WATER PERMIT Order No. 99-06 DWQ, NPDES No. CAS000003

I. IDENTIFICATION

PROJECT	CONTRACT NUMBER	DATE MM/DD/YYYY
	EA	

CITY (if applicable)	COUNTY	ROUTE	KILOMETER POST / POST MILE (S)	START DATE	END DATE

II. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARDS

- ☐ Region1, North Coast
- ☐ Region 2, San Francisco Bay
- ☐ Region 3, Central Coast
- ☐ Region 4, Los Angeles
- Region 5, Central Valley
  - ☐ Sacramento
  - ☐ Fresno
  - ☐ Redding
- Region 6, Lahontan
  - ☐ South Lake Tahoe
  - ☐ Victorville
- ☐ Region 7, Colorado River
- ☐ Region 8, Santa Ana
- ☐ Region 9, San Diego

III. CALTRANS DISTRICT

NAME/NUMBER		PROJECT CONTACT
ADDRESS		POSITION TITLE
CITY	ZIP	PHONE

IV. BASIS OF COMPLETION

☐ 1. The construction job is complete and requirements met as of ***Date:*** _____

☐ 2. Construction activities have been suspended, as of ***Date:*** _____ ***Expected Start Up Date:*** _____

☐ 3. Site can not discharge storm water to waters of the United States ***Reason:*** _____

☐ 4. Discharge is now subject to NPDES Permit ***No.*** _____ ***Date:*** _____

V. DESCRIPTION OF COMPLETION (Attach site photographs)

VI. CERTIFICATION

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

SIGNATURE

PRINT/TYPE NAME

DATE

TITLE

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 263-2041 or TDD (916) 263-2044 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

SEND TO YOUR LOCAL RWQCB FOR APPROVAL

State of California
State Water Resources Control Board

NOTICE OF TERMINATION

OF COVERAGE UNDER THE NPDES GENERAL PERMIT NO. CAS000002
FOR DISCHARGES OF STORM WATER
ASSOCIATED WITH CONSTRUCTION ACTIVITY

Submission of this Notice of Termination constitutes notice that the owner (and his/her agent) of the site identified on this form is no longer authorized to discharge storm water associated with construction activity by NPDES General Permit No. CAS000002.

I. WDID NO.

II. OWNER

COMPANY NAME _____ CONTACT PERSON _____

STREET ADDRESS _____ TITLE _____

CITY _____ STATE _____ ZIP _____ PHONE _____

III. CONSTRUCTION SITE INFORMATION

A. DEVELOPER NAME _____ CONTACT PERSON _____

STREET ADDRESS _____ TITLE _____

CITY _____ CA _____ ZIP _____ PHONE _____

B. SITE ADDRESS _____ COUNTY _____

CITY _____ CA _____ ZIP _____ PHONE _____

IV. BASIS OF TERMINATION

_____ 1. The construction project is complete and the following conditions have been met.

- All elements of the Storm Water Pollution Prevention Plan have been completed.
- Construction materials and waste have been disposed of properly.
- The site is in compliance with all local storm water management requirements.
- A post-construction storm water operation and management plan is in place.

Date of project completion _____

_____ 2. Construction activities have been suspended, either temporarily _____ or indefinitely _____ and the following conditions have been met.

- All elements of the Storm Water Pollution Prevention Plan have been completed.
- Construction materials and waste have been disposed of properly.
- All denuded areas and other areas of potential erosion are stabilized.
- An operation and maintenance plan for erosion and sediment control is in place.
- The site is in compliance with all local storm water management requirements.

Date of suspension _____ Expected start up date _____

_____ 3. Site can not discharge storm water to waters of the United States (check one).

SEND TO YOUR LOCAL RWQCB FOR APPROVAL

_____ All storm water is retained on site.

_____ All storm water is discharged to evaporation or percolation ponds offsite.

_____ 4. Discharge of storm water from the site is now subject to another NPDES general permit or an individual NPDES permit.

NPDES Permit No._____ Date coverage began _____

_____ 5. There is a new owner of the identified site. Date of owner transfer _____

Was the new owner notified of the General Permit requirements? YES ____ NO ____

NEW OWNER INFORMATION

COMPANY NAME _____ CONTACT PERSON

STREET ADDRESS _____ TITLE

CITY _____ STATE _____ ZIP _____ PHONE

V. EXPLANATION OF BASIS OF TERMINATION (Attach site photographs - see instructions).

VI. CERTIFICATION:

I certify under penalty of law that all storm water discharges associated with construction activity from the identified site that are authorized by NPDES General Permit No. CAS000002 have been eliminated or that I am no longer the owner of the site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge storm water associated with construction activity under the general permit, and that discharging pollutants in storm water associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an owner from liability for any violations of the general permit or the Clean Water Act.

PRINTED NAME _____ TITLE

SIGNATURE: _____ DATE _____

REGIONAL WATER BOARD USE ONLY

This Notice of Termination has been reviewed, and I recommend termination of coverage under the subject NPDES general permit.

Printed Name _____ Region No. _____

Signature _____ Date _____/_____/_____

NOT effective date:

Date: ____/____/____

Attachment Q

(INTENTIONALLY LEFT BLANK)

Attachment R

Sampling Activity Log and Chain-of-Custody Forms

INSTRUCTIONS

- Use this form to log sampling activities.
- Maintain completed chain-of-custody forms in this attachment.

RAIN EVENT GENERAL INFORMATION				
Project Name				
Caltrans Contract N^{o}				
Contractor				
Sampler's Name				
Signature				
Date of Sampling				
Season (Check Applicable)	❒ Rainy		❒ Non-Rainy	
Storm Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (mm)	

For rainfall information: http://cdec.water.ca.gov/weather.html or http://www.wrh.noaa.gov/wrhq/nwspage.html

SAMPLE LOG		
Sample Identification	**Sample Location**	**Sample Collection Date and Time**

Specific sample locations descriptions may include: 30m upstream from discharge at eastern boundary, runoff from northern waste storage area, downgradient of inlet 57 at kilometer post 36, etc.

FIELD ANALYSIS		
	Yes No	
Sample Identification	**Test**	**Result**

Attachment S

Pollutant Testing Guidance Table

INSTRUCTIONS

- The following Table will be updated periodically as more information becomes available.

Attachment S
Pollutant Testing Guidance Table [1]

Category	Construction Site Material	Visually Observable?	Pollutant Indicators [2]	Suggested Analyses Field [3]	Laboratory
Asphalt Products (Sections 37, 39, 92, 93, 94, and Special Provisions)	Hot Asphalt	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		
	Asphalt Emulsion				
	Liquid Asphalt (tack coat)				
	Cold Mix				
	Crumb Rubber	Yes – Black, solid material	Visually Observable - No Testing Required		
	Asphalt Concrete (Any Type)	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		
Cleaning Products	Acids	No	**pH** Acidity Anions (acetic acid, phosphoric acid, sulfuric acid, nitric acid, hydrogen chloride)	pH Meter Acidity Test Kit	EPA 150.1 (pH)
					SM 2310B (Acidity)
					EPA 300.0 (Anion)
	Bleaches	No	**Residual Chlorine**	Chlorine	SM 4500-CL G (Res. Chlorine)
	Detergents	Yes - Foam	Visually Observable - No Testing Required		
	TSP	No	**Phosphate**	Phosphate	EPA 365.3 (Phosphate)
	Solvents	No	**VOC**	None	EPA 601/602 or EPA 624 (VOC)
			SVOC	None	EPA 625 (SVOC)

Attachment S
Pollutant Testing Guidance Table [1]

Category	Construction Site Material	Visually Observable?	Pollutant Indicators [2]	Suggested Analyses Field [3]	Laboratory
Portland Concrete Cement & Masonry Products (Section 27, 28, 29, 40, 41, 42, 49, 50, 51, 53, 63, 65, 72, 73, 80, 81, 83, 90, and Special Provisions)	Portland Cement (PCC)	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Masonry products	No	**pH**	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
			Alkalinity		SM 2320 (Alkalinity)
	Sealant (Methyl Methacrylate - MMA)	No	**Methyl Methacrylate**	None	EPA 625 (SVOC)
			Cobalt		EPA 200.8 (Metal)
			Zinc		
	Incinerator Bottom Ash Bottom Ash Steel Slag Foundry Sand Fly Ash Municipal Solid Waste	No	**Aluminum** **Calcium** **Vanadium** **Zinc**	Calcium Test	EPA 200.8 (Metal) EPA 200.7 (Calcium)
	Mortar	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Concrete Rinse Water	Yes - Milky Liquid	Visually Observable - No Testing Required		
	Non-Pigmented Curing Compounds	No	Acidity	pH Meter Alkalinity or Acidity Test Kit	SM 2310B (Acidity)
			Alkalinity		SM 2320 (Alkalinity)
			pH		EPA 150.1 (pH)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)

Attachment S
Pollutant Testing Guidance Table [1]

Category	Construction Site Material	Visually Observable?	Pollutant Indicators [2]	Suggested Analyses Field [3]	Laboratory
Landscaping and Other Products (Section 20, 24, and Special Provisions)	Aluminum Sulfate	No	Aluminum	TDS Meter Sulfate	EPA 200.8 (Metal)
			TDS		EPA 160.1 (TDS)
			Sulfate		EPA 300.0 (Sulfate)
	Sulfur-Elemental	No	**Sulfate**	Sulfate	EPA 300.0 (Sulfate)
	Fertilizers-Inorganic [4]	No	**Nitrate**	Nitrate	EPA 300.0 (Nitrate)
			Phosphate	Phosphate	EPA 365.3 (Phosphate)
			Organic Nitrogen	None	EPA 351.3 (TKN)
			Potassium	None	EPA 200.8 (Metal)
	Fertilizers-Organic	No	TOC	Nitrate	EPA 415.1 (TOC)
			Nitrate		EPA 300.0 (Nitrate)
			Organic Nitrogen		EPA 351.3 (TKN)
			COD		EPA 410.4 (COD)
	Natural Earth (Sand, Gravel, and Topsoil)	Yes - Cloudiness and turbidity	Visually Observable - No Testing Required		
	Herbicide	No	**Herbicide**	None	Check lab for specific herbicide or pesticide
	Pesticide		**Pesticide**		
	Lime		Alkalinity	pH Meter Alkalinity or Acidity Test Kit	SM 2320 (Alkalinity)
			pH		EPA 150.1 (pH)

Attachment S
Pollutant Testing Guidance Table [1]

Category	Construction Site Material	Visually Observable?	Pollutant Indicators [2]	Suggested Analyses Field [3]	Laboratory
Painting Products (Section 12-3.08, 20-2.32, 50-1.05, 59, 91, and Special Provisions)	Paint	Yes	Visually Observable - No Testing Required		
	Paint Strippers	No	**VOC**	None	EPA 601/602 or EPA 624 (VOC)
			SVOC	None	EPA 625 (SVOC)
	Resins	No	**COD**	None	EPA 410.4 (COD)
			SVOC		EPA 625 (SVOC)
	Sealants	No	**COD**	None	EPA 410.4 (COD)
	Solvents	No	**COD**	None	EPA 410.4 (COD)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)
	Lacquers, Varnish, Enamels, and Turpentine	No	**COD**	None	EPA 410.4 (COD)
			VOC		EPA 601/602 or EPA 624 (VOC)
			SVOC		EPA 625 (SVOC)
	Thinners	No	VOC	None	EPA 601/602 or EPA 624 (VOC)
			COD		EPA 410.4 (COD)
Portable Toilet Waste Products	Portable Toilet Waste	Yes	Visually Observable - No Testing Required		

Attachment S
Pollutant Testing Guidance Table [1]

Category	Construction Site Material	Visually Observable?	Pollutant Indicators [2]	Suggested Analyses Field [3]	Laboratory
Contaminated Soil [5]	Aerially Deposited Lead[3]	No	**Lead**	None	EPA 200.8 (Metal)
	Petroleum	Yes – Rainbow Surface Sheen and Odor	Visually Observable - No Testing Required		
	Mining or Industrial Waste, etc.	No	**Contaminant Specific**	Contaminant Specific – Check with laboratory	Contaminant Specific – Check with laboratory
Line Flushing Products	Chlorinated Water	No	**Total chlorine**	Chlorine	SM 4500-CL G (Res. Chlorine)
Adhesives	Adhesives	No	COD	None	EPA 410.4 (COD)
			Phenols	Phenol	EPA 420.1 (Phenol)
			SVOC	None	EPA 625 (SVOC)
Dust Palliative Products (Section 18)	Salts (Magnesium Chloride, Calcium Chloride, and Natural Brines)	No	Chloride	Chloride	EPA 300.0 (Chloride)
			TDS	TDS Meter	EPA 160.1 (TDS)
			Cations (Sodium, Magnesium, Calcium)	None	EPA 200.7 (Cations)
Vehicle	Antifreeze and Other Vehicle Fluids	Yes - Colored Liquid	Visually Observable - No Testing Required		
	Batteries	No	Sulfuric Acid	None	EPA 300.0 (Sulfate)
			Lead	None	EPA 200.8 (Metal)
			pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
	Fuels, Oils, Lubricants	Yes - Rainbow Surface Sheen and Odor	Visually Observable - No Testing Required		

Attachment S
Pollutant Testing Guidance Table [1]

Category	Construction Site Material	Visually Observable?	Pollutant Indicators [2]	Suggested Analyses Field [3]	Laboratory
Soil Amendment/Stabilization Products	Polymer/Copolymer [6, 7]	No	**Organic Nitrogen**	None	EPA 351.3 (TKN)
			BOD	None	EPA 405.1 (BOD)
			COD	None	EPA 410.4 (COD)
			DOC	None	EPA 415.1 (DOC)
			Nitrate	Nitrate	EPA 300.0 (Nitrate)
			Sulfate	Sulfate	EPA 300.0 (Sulfate)
			Nickel	None	EPA 200.8 (Metal)
	Straw/Mulch	Yes - Solids	Visually Observable - No Testing Required		
	Lignin Sulfonate	No	Alkalinity	Alkalinity	SM 2320 (Alkalinity)
			TDS	TDS Meter	EPA 160.1 (TDS)
	Psyllium	No	COD	None	EPA 410.4 (COD)
			TOC		EPA 415.1 (TOC)
	Guar/Plant Gums	No	COD	None	EPA 410.4 (COD)
			TOC		EPA 415.1 (TOC)
			Nickel		EPA 200.8 (Metal)
	Gypsum	No	pH	pH Meter Alkalinity or Acidity Test Kit	EPA 150.1 (pH)
			Calcium	Calcium	EPA 200.7 (Calcium)
			Sulfate	Sulfate	EPA 300.0 (Sulfate)
			Aluminum	None	EPA 200.8 (Metal)
			Barium		
			Manganese		
			Vanadium		

Attachment S
Pollutant Testing Guidance Table [1]

Category	Construction Site Material	Visually Observable?	Pollutant Indicators [2]	Suggested Analyses Field [3]	Laboratory
Treated Wood Products (Section 58, 80-3.01B(2), and Special Provisions)	Ammoniacal-Copper-Zinc-Arsenate (ACZA) Copper-Chromium-Arsenic (CCA) Ammoniacal-Copper-Arsenate (ACA) Copper Naphthenate	No	Arsenic Total Chromium **Copper** Zinc	Total Chromium	EPA 200.8 (Metal)
	Creosote	Yes - Rainbow Surface or Brown Suspension	Visually Observable - No Testing Required		

Notes:

1. 1 If specific pollutant is known, analyze only for that specific pollutant. See MSDS to verify.
2. For each construction material, test for one of the pollutant indicators. Bolded pollutant indicates lowest analysis cost or best indicator. However, the composition of the specific construction material, if known, is the first criterion for selecting which analysis to use.
3. See www.hach.com, www.lamotte.com, www.ysi.com and www.chemetrics.com for some of the test kits
4. If the type of inorganic fertilizer is unknown, analyze for all pollutant indicators listed.
5. Only if special handling requirements are required in the Standard Special Provisions for aerially deposited lead (ADL)
6. If used with a dye or fiber matrix, it is considered visually observable and no testing is required.
7. Based upon research conducted by Caltrans, the following copolymers/polymers do not discharge pollutants and water quality sampling and analysis is **not** required: Super Tak™, M-Binder™, Fish Stik™, Pro40dc™, Fisch-Bond™, Soil Master WR™, and EarthGuard™.

Acronyms:

BOD – Biochemical Oxygen Demand
COD – Chemical Oxygen Demand
DOC – Dissolved Organic Carbon
EPA – Environmental Protection Agency
HACH – Worldwide company that provides advanced analytical systems and technical support for water quality testing.
SM – Standard Method
SVOC – Semi-Volatile Organic Compounds
TDS – Total Dissolved Solids
TKN – Total Kjeldahl Nitrogen
TOC – Total Organic Carbon
TSP – Tri-Sodium Phosphate
VOC - Volatile Organic Compounds

References:

Construction Storm Water Sampling and Analysis Guidance Document, California Stormwater Quality Task Force, October 2001.
Environmental Impact of Construction and Repair Materials on Surface and Ground Waters, Report 448, National Cooperative Highway Research Program, 2001
Soil Stabilization for Temporary Slopes, Environmental Programs, California Department of Transportation, October 1, 1999.
Statewide Storm Water Management Plan, Division of Environmental Analysis, California Department of Transportation, April 2002.
Statewide Storm Water Quality Practice Guidelines, Environmental Program, California Department of Transportation, August 2000.
Soil Stabilization for Temporary Slopes and District 7 Erosion Control Pilot Study, June 2000.
Stormwater Monitoring Protocols, Guidance Manual, California Department of Transportation, May 2000.

Attachment T

Sampling Data Reporting Form

INSTRUCTIONS

- This reporting form shall be submitted electronically to the Resident Engineer and/or another person designated by Caltrans. Copies of all reporting forms shall be kept in the SWPPP.
- The contractor shall sign and certify all sampling data reporting forms.

RAIN EVENT GENERAL INFORMATION				
Project Name				
Caltrans Contract N^{o}				
Contractor				
Sampler's Name				
Signature				
Date of Sampling				
Season (Check Applicable)	❒ Rainy		❒ Non-Rainy	
Storm Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (mm)	

SAMPLE LOG		
Sample Identification	**Sample Location**	**Sample Collection Date and Time**

Specific sample locations descriptions may include: 30m upstream from discharge at eastern boundary, runoff from northern waste storage area, downgradient of inlet 57 at kilometer post 36, etc.

FIELD ANALYSIS		
	Yes No	
Sample Identification	**Test**	**Result**

REQUIRED TEXT:

"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 ensure 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 fine and imprisonment for knowing violations."

Contractor's Signature	Date
Contractor's Name and Title	Contractor's Telephone Number

Attachment U

Discharge Reporting Log

INSTRUCTIONS

- Use this sheet to log discharge incidents as reported in Attachment K, Notice of Discharge.

Project Name: _____

Caltrans Contract Number: _____

Date	Material(s) Discharged	Estimated Quantity	Observed By

APPENDIX B
Attachments for use in Preparing a WPCP

Attachment A
Water Pollution Control Drawings

Attachment A

Water Pollution Control Drawings

INSTRUCTIONS

- Include Water Pollution Control Drawings in this Attachment.
- Include Contract Special Provisions, Contract Plan Water Pollution Control Sheets, Standard Specifications, or Standard BMP Details or provide a table cross referencing these items and their location.
- The WPCDs shall be no smaller than the "reduced plans" (approximately 11" x 17") issued by Caltrans.

WATER POLLUTION CONTROL DRAWINGS (WPCDs)

FOR

ROUTE BB

STAGE 1

ANYTOWN, ANY COUNTY
CALTRANS CONTRACT NO. 00-00000

PREPARED BY:

ZZZ CONSTRUCTION COMPANY

LEGEND

- CWM — WM-8 Concrete Waste Management
- SC-10 Storm Drain Inlet Protection
- ESA — Environmentally Sensitive Area
- Surface Flow Direction
- Pipe/Underground Flow Direction
- CSM — WM-7 Contaminated Soil Management
- VEC — NS-8 Vehicle & Equipment Cleaning
- VEF — NS-9 Vehicle & Equipment Fueling
- VEM — NS-10 Vehicle & Equipment Maintenance
- PEV — SS-2 Preservation of Existing Vegetation
- TSP — SS-4 Hydroseeding
- S — SS-6 Straw Mulch
- SOS — SS-5 Soil Binders
- PS — Permanent Seeding
- TC-1 Stabilized Construction Entrance/Exit
- TSD — SS-11 Slope drains
- SS-9 Earth Dike/Drainage Swales and Lined Ditches
- CD — SC-4 Check Dams
- SC-1 Silt Fences
- SC-3 Sediment Traps
- FR — SC-5 Fiber Rolls
- SB — SC-8 Sandbag Barrier
- Stormwater Discharge Location

GENERAL WATER POLLUTION CONTROL NOTES

1. THE INFORMATION ON THESE DRAWINGS ARE ACCURATE FOR WATER POLLUTION CONTROL PURPOSES ONLY.
2. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO INSTALL WATER POLLUTION CONTROL DEVICES AT GENERAL LOCATIONS THROUGHOUT THE SITE. THESE DRAWINGS ARE TO BE USED IN CONJUNCTION WITH THE NARRATIVE SECTION OF THE WATER POLLUTION CONTROL PROGRAM (WPCP).
3. FIELD CONDITIONS MAY NECESSITATE MODIFICATIONS TO THESE DRAWINGS.
4. PERMANENT EROSION CONTROL WILL BE INSTALLED AS AREAS ARE DETERMINED TO BE SUBSTANTIALLY COMPLETE.

SAMPLE WPCD NOTE: DO NOT SIMPLY COPY THE FOLLOWING NOTES FOR PROJECT SPECIFIC USE. COPYING TEXT FROM THESE SAMPLE WPCDs DOES NOT NECESSARILY MEET NPDES PERMIT REQUIREMENTS. USE PROJECT SPECIFIC NOTES.

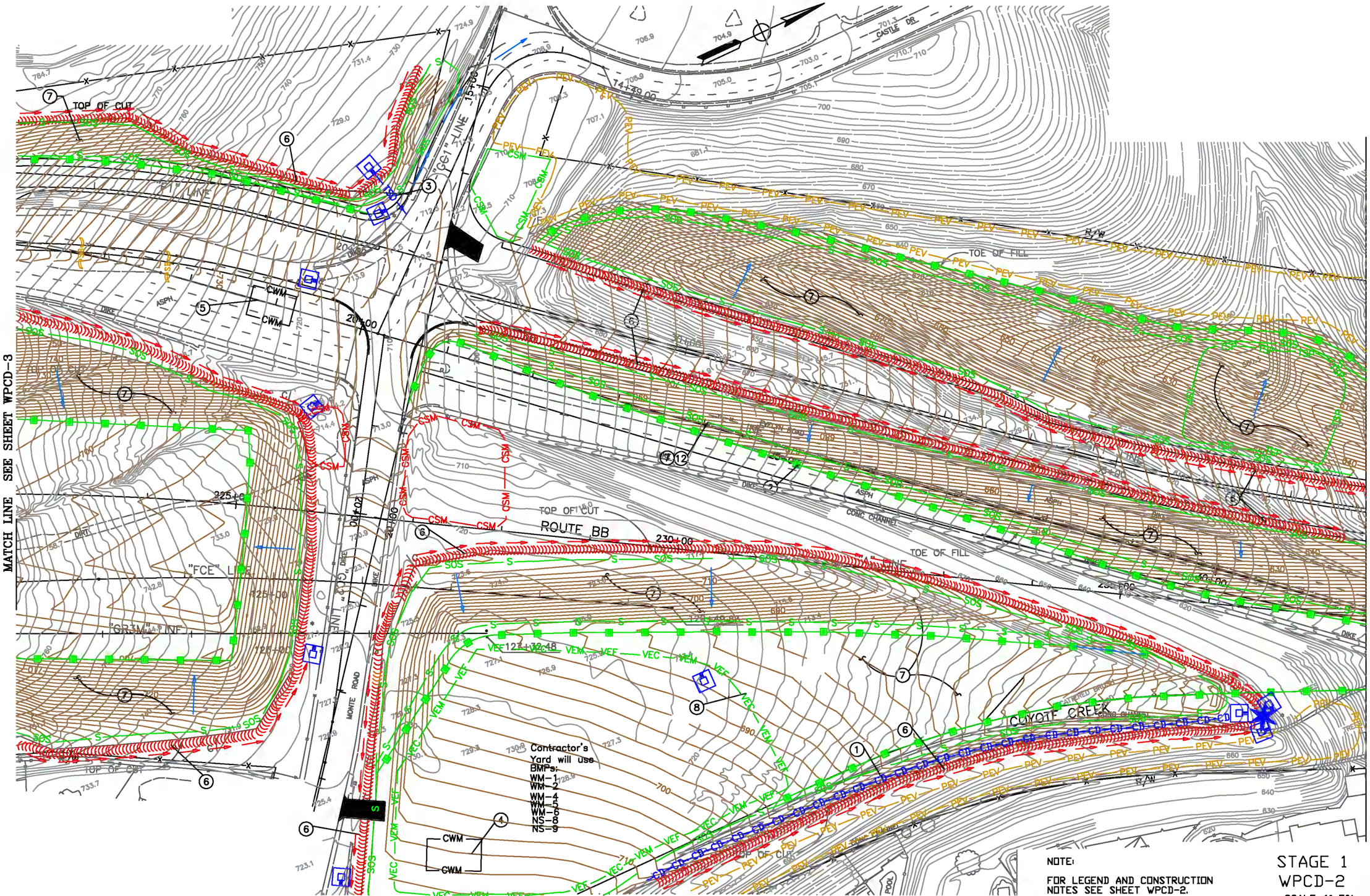
STORM WATER POLLUTION CONTROL CONSTRUCTION NOTES:

(LOCATIONS OF CIRCLED NUMBERS ARE SHOWN ON THE WPCD SHEETS)

1. Rock check dams.
2. Gravel bag check dams
3. Temporary slope drain without energy dissipation.
4. Contractor proposed alternate concrete washout detail, Type-1 Below Ground. See WPCD-5 for detail.
5. Contractor proposed alternate concrete washout detail, Type-2 Above Ground. See WPCD-5 for detail.
6. Earth berms installed during excavation staging.
7. Surface roughening required on all slope areas before applying soil binders (on active slope or roadway) and/or straw mulch (on inactive slopes only). Inactive slopes greater than 60 feet in height will be hydroseeded.
8. Combined Vehicle Cleaning, Fueling and Maintenance area.

WPCD-1

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS TITLE SHEET				
DRAWN D.J.D					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 1 OF 5



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-2.

STAGE 1
WPCD-2
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE	REVISED BY

CALCULATED/DESIGNED BY

CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

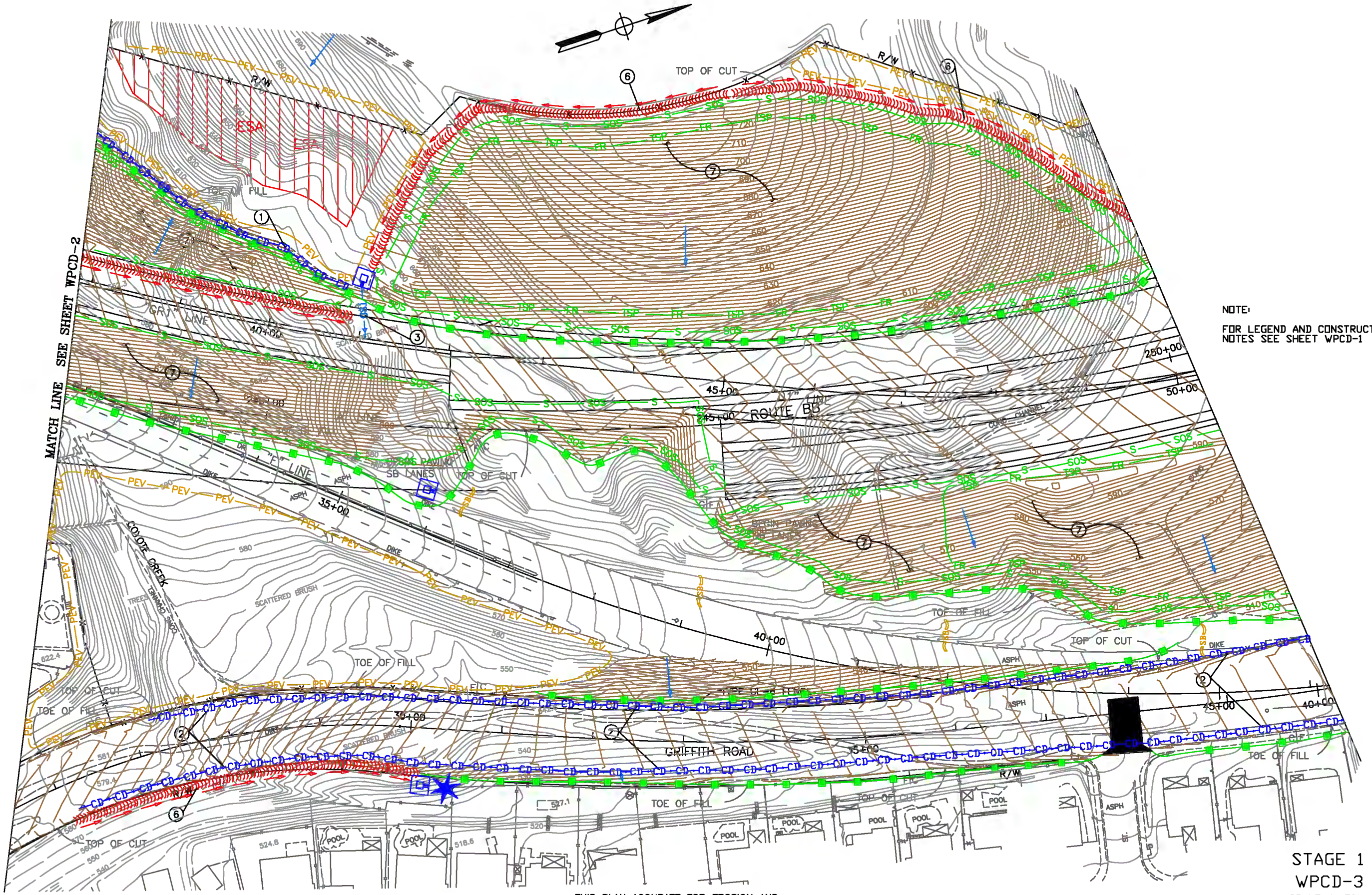
Caltrans

FORM DC-OE-92-PF (REV. 3/88)

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA



NOTE:

FOR LEGEND AND CONSTRUCTION NOTES SEE SHEET WPCD-1

STAGE 1
WPCD-3
SCALE: 1"=50'

THIS PLAN ACCURATE FOR EROSION AND SEDIMENT CONTROL WORK ONLY

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY
CHECKED BY

PROJECT ENGINEER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

FORM DC-OE-92-PF (REV. 3/98)

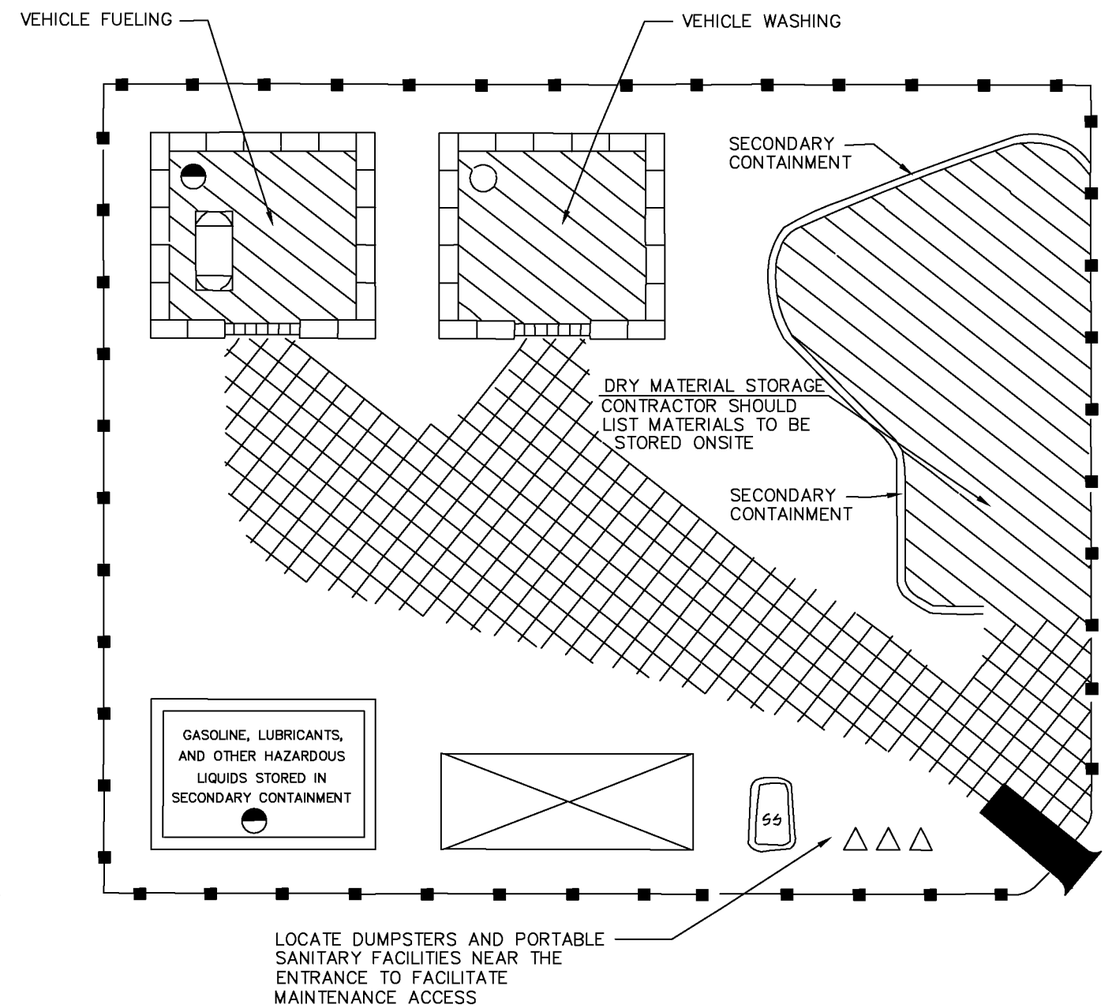
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU

EA

LEGEND

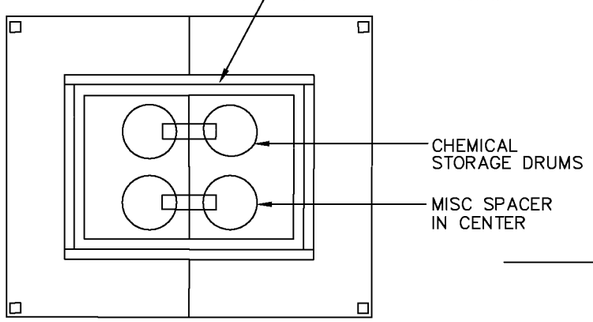
- COVERED STORAGE AREA
- PORTABLE SANITARY FACILITY CONSTRUTED TO RESIST TIPPING
- DUMPSTER
- STRAW BALE BARRIER OR GRAVEL BAG BARRIER
- ABSORBENT MATERIAL
- SUMP
- SILT FENCE AROUND ENTIRE PERIMETER
- STABLIZED CONSTRUCTION ENTRANCE
- STABILIZED CONSTRUCTION ROADWAY
- CONCRETE PAD OR OTHER IMPERVIOUS MATERIAL
- FUELING TANK WITH SECONDARY CONTAINMENT



SAMPLE CONTRACTOR'S CONSTRUCTION YARD

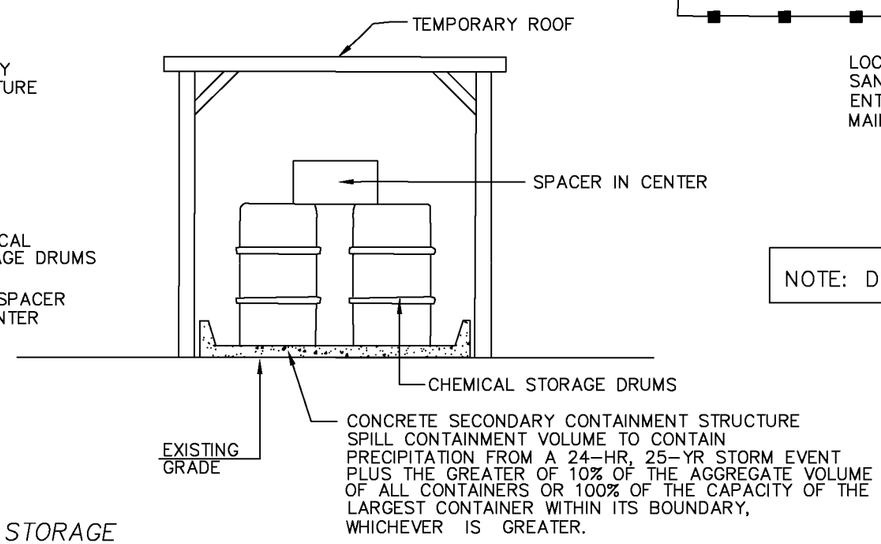
NO SCALE

NOTE: DO NOT COPY THIS SAMPLE ONTO PROJECT SPECIFIC DRAWINGS



PLAN

NO SCALE



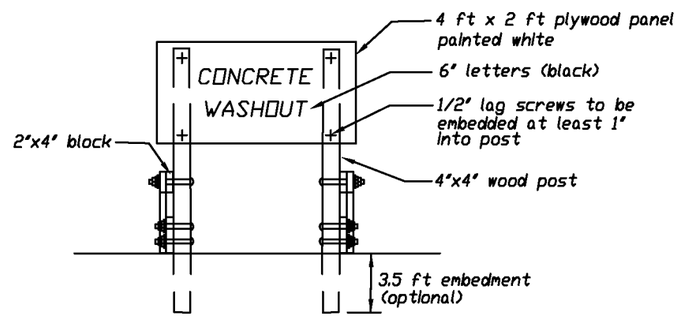
CHEMICAL STORAGE

SECTION

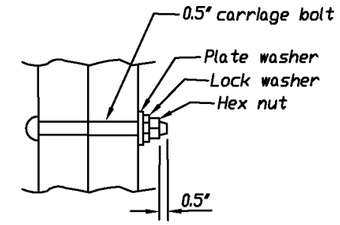
NO SCALE

WPCD-4

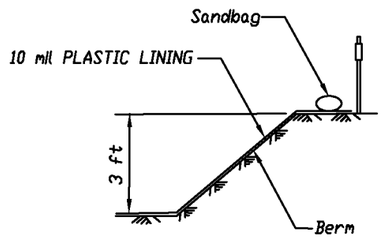
ZZZ CONSTRUCTION COMPANY	*WATER POLLUTION CONTROL DRAWINGS CONSTRUCTION DETAILS*				
DRAWN *D.J.D.*					
APPROVED	SIZE *A*	SCALE *NONE*	DATE *11/00*	REV *0*	SHEET *4* OF *5*



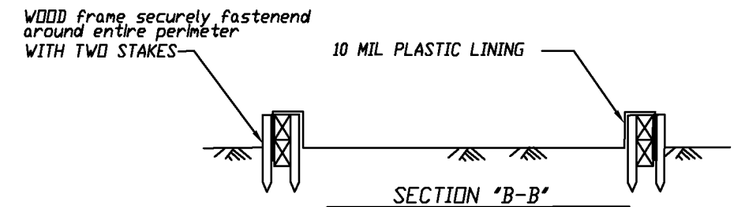
SIGN ELEVATION
NOT TO SCALE



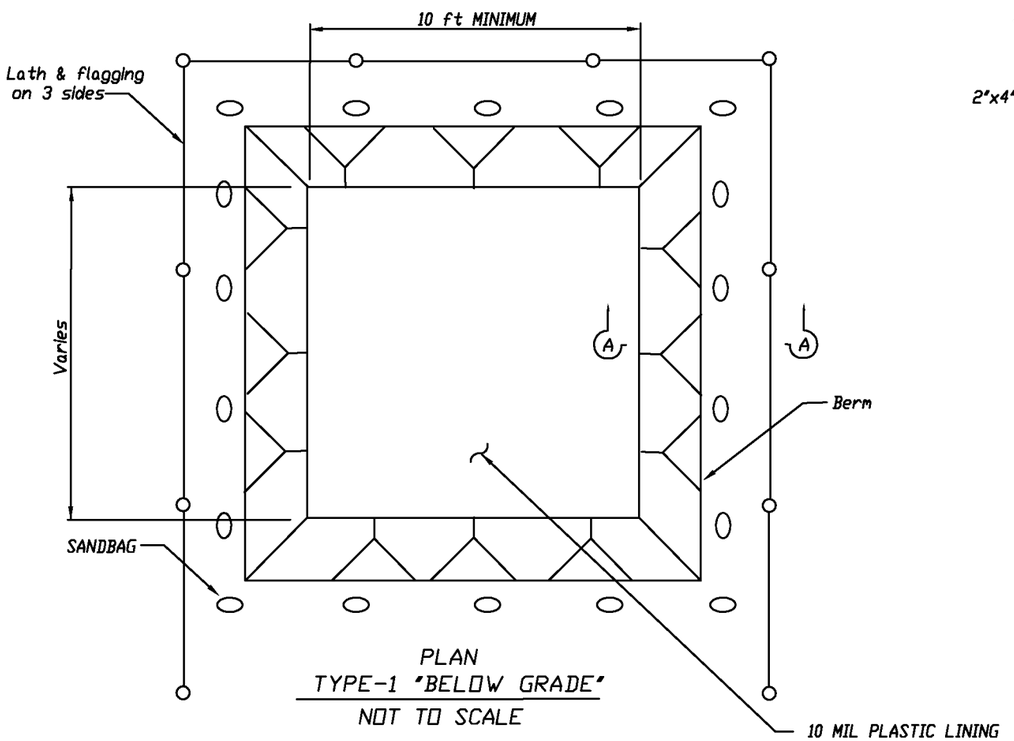
BOLT CONNECTION DETAIL
NOT TO SCALE



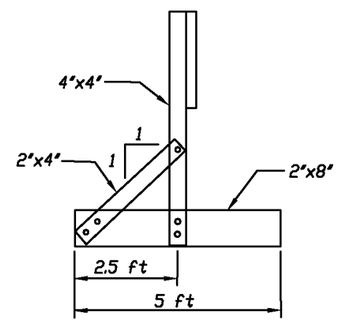
SECTION A-A

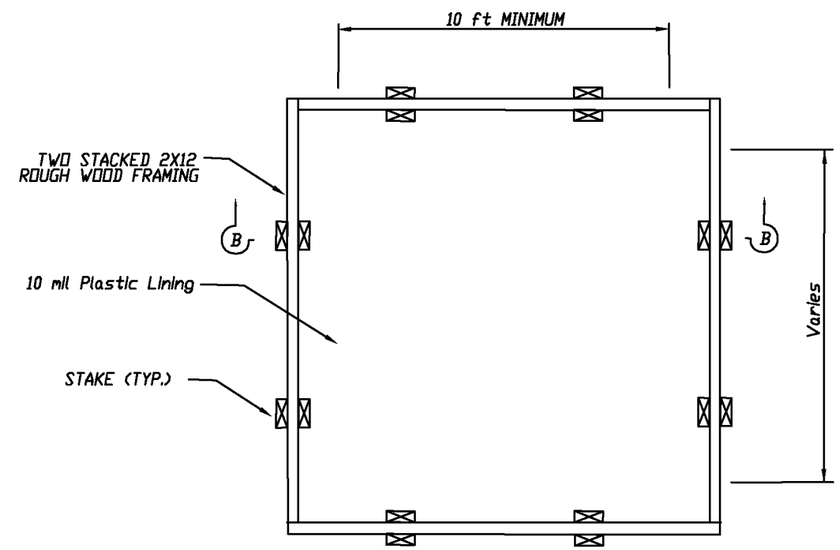


SECTION "B-B"
NOT TO SCALE



PLAN
TYPE-1 "BELOW GRADE"
NOT TO SCALE





PLAN
TYPE-2 "ABOVE GRADE"
NOT TO SCALE

WPCD-5

NOTE:

ACTUAL LAYOUT DETERMINED IN THE FIELD

THE CONCRETE WASHOUT SIGN (SEE PAGE 6) TO BE INSTALLED WITHIN 30 FT OF THE TEMPORARY CONCRETE WASHOUT FACILITY

ZZZ CONSTRUCTION COMPANY	WATER POLLUTION CONTROL DRAWINGS CONCRETE WASHOUT DETAILS (CONTRACTOR PROPOSED ALTERNATE)				
DRAWN D.J.D.					
APPROVED	SIZE A	SCALE NONE	DATE 11/00	REV 0	SHEET 5 OF 5

Attachment B
Maintenance, Inspection, and Repair of Construction Site BMPs

Attachment B

Maintenance, Inspection, and Repair of Construction Site BMPs

INSTRUCTIONS

- Use this form as an outline for the maintenance, inspection and repair program described in the WPCP Section 30.4.
- Certain projects may require increased inspection frequencies. Refer to the project Special Provisions for additional requirements.
- Inspection frequency and maintenance/repair program must be included for all BMPs selected for the project.
- Include maintenance and inspections for both rainy and non-rainy seasons.

SWPPP Inspection, Maintenance and Repair Program			
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY**		**MAINTENANCE/REPAIR PROGRAM**
	Rainy	**Non-Rainy**	
TEMPORARY SOIL STABILIZATION BMPs			
			■ ■
			■ ■
TEMPORARY SEDIMENT CONTROL BMPs			
			■ ■ ■ ■ ■
			■ ■ ■ ■ ■
WIND EROSION CONTROL BMPs			
TRACKING CONTROL BMPs			
			■ ■

SAMPLE

SWPPP Inspection, Maintenance and Repair Program			
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY**		**MAINTENANCE/REPAIR PROGRAM**
	Rainy	**Non-Rainy**	
NON-STORM WATER MANAGEMENT BMPs			
			■ ■ ■ ■ ■ ■
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs			
			■ ■ ■ ■ ■ ■
			■ ■ ■ ■ ■ ■

SAMPLE

Site inspections shall be conducted by the Contractor's WPCM or other Caltrans approved 24-hour trained staff at the following minimum frequencies:

- Prior to a forecast storm;
- After a rain event that causes runoff from the construction site;
- At 24-hour intervals during extended rain events;
- Daily inspections within the Lake Tahoe Hydrologic Unit;
- Weekly during the rainy season;
- Every 2 weeks during the non-rainy season; and
- At any other time(s) or intervals of time specified in the Contract Special Provisions.

Completed inspection checklists shall be submitted to the Resident Engineer within 24 hours of inspection. Copies of the completed checklists will be kept with the WPCP. A tracking or follow-up procedure shall follow any inspection that identifies deficiencies in BMPs.

Attachment C
Stormwater Quality Construction Site Inspection Checklist

Attachment C

Stormwater Quality Construction Site Inspection Checklist

INSTRUCTIONS

- Use this form for inspecting BMPs as described in WPCP Section 30.4.
- This inspection form shall be completed and signed by the Contractor's Water Pollution Control Manager (WPCM).
- The weather information shall be the best estimate of beginning of the storm event, duration of the event, time elapsed since the last storm, and approximate amount of rainfall.
- List observations of all BMPs: temporary soil stabilization (erosion control), temporary sediment controls, wind erosion controls, tracking controls, non-storm water controls and waste management and materials pollution controls.
- Evaluate BMPs for adequacy and proper implementation and whether additional BMPs are required in accordance with the terms of the Permits.
- Verify implementation of non-storm water discharge BMPs and evaluate their effectiveness.
- One time discharges of non-storm water shall be inspected when such discharges occur.
- Describe any inadequate BMPs.
- Note the corrective actions required, including any changes to the WPCP, and implementation dates.
- If you answer "No" to any of the questions, describe the corrective action(s) to be taken and when the corrective action(s) are to be completed. Should you need more space to describe corrective actions, identify your response numerically and use additional sheets as necessary.

GENERAL INFORMATION		
Project Name		
Caltrans Contract No.		
Contractor		
Inspector's Name		
Inspector's Title		
Signature		
Date of Inspection		
Inspection Type (Check Applicable)	❒ Prior to forecast rain	❒ After a rain event

GENERAL INFORMATION				
	❒ 24-hr intervals during extended rain		❒ Other _____	
Season (Check Applicable)	❒ Rainy		❒ Non-Rainy	
Storm Data	Storm Start Date & Time:		Storm Duration (hrs):	
	Time elapsed since last storm (Circle Applicable Units)	Min. Hr. Days	Approximate Rainfall Amount (mm)	

PROJECT AREA SUMMARY AND DISTURBED SOIL AREA (DSA) SIZE LIMITS FROM SPECIAL PROVISIONS				
Total Project Area	_____	Hectares	_____	Acres
Rainy Season DSA Limit	_____	Hectares	_____	Acres
Field Estimate of Non-Active DSAs	_____	Hectares	_____	Acres
Field Estimate of Active DSAs	_____	Hectares	_____	Acres

OTHER REQUIREMENTS

Requirement	Yes	No	N/A	Corrective Action
Preservation of Existing Vegetation				
Is temporary fencing provided to preserve vegetation in areas where no construction activity is planned?				
Location:				
Location:				
Location:				
Location:				
Temporary Soil Stabilization				
Does the applied temporary soil stabilization provide 100% coverage for the required areas?				
Are any non-vegetated areas that may require temporary soil stabilization?				
Is the area where temporary soil stabilization required free from visible erosion?				
Location:				
Location:				
Location:				
Location:				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Temporary Linear Sediment Barriers				
Are temporary linear sediment barriers properly installed in accordance with the details, functional and maintained?				
Are temporary linear sediment barriers free of accumulated litter?				
Is the built-up sediment less than 1/3 the height of the barrier?				
Are cross barriers installed where necessary and properly spaced?				
Are fiber rolls installed and maintained on required slopes in accordance with the details, functional and maintained?				
Location:				
Location:				
Location:				
Location:				
Location:				
Storm Drain Inlet Protection				
Are storm drain inlets internal to the project properly protected with either Type 1, 2 or 3 inlet protection?				
Are storm drain inlet protection devices in working order and being properly maintained?				
Location:				
Location:				
Location:				
Location:				
Location:				
Desilting Basins				
Are basins maintained to provide the required retention/detention?				
Are basin controls (inlets, outlets, diversions, weirs, spillways, and racks) in working order?				
Location:				
Location:				
Location:				
Location:				
Stockpiles				
Are all locations of temporary stockpiles, including soil, hazardous waste, and construction materials in approved areas?				
Are stockpiles protected from run-on, run-off from adjacent areas and from winds?				
Are stockpiles located at least 50 ft from concentrated flows, downstream drainage courses and storm drain inlets?				
Are required covers and/or perimeter controls in place?				
Location:				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Location:				
Location:				
Location:				
Concentrated Flows				
Are concentrated flow paths free of visible erosion?				
Location:				
Location:				
Location:				
Location:				
Tracking Control				
Are points of ingress/egress to public/private roads inspected, swept, and vacuumed daily?				
Are all paved areas free of visible sediment tracking or other particulate matter?				
Is rock at Temporary Construction Entrance(s) 12-inches or more in thickness?				
Does sediment need to be removed from the rock, or does the rock need to be replaced?				
For Type 2 Construction Entrance, does sediment need to be removed from ribbed plates?				
Location:				
Location:				
Location:				
Location:				
Wind Erosion Control				
Is dust control implemented in conformance with Section 10 of the Standard Specifications?				
Location:				
Location:				
Location:				
Location:				
Dewatering Operations				
Is dewatering handled in conformance with the dewatering permit issued by the RWQCB?				
Is required treatment provided for dewatering effluent?				
Location:				
Location:				
Location:				
Location:				
Vehicle & Equipment Fueling, Cleaning, and Maintenance				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Are vehicle and equipment fueling, cleaning and maintenance areas reasonably clean and free of spills, leaks, or any other deleterious material?				
Are vehicle and equipment fueling, cleaning and maintenance activities performed on an impermeable surface in dedicated areas?				
If no, are drip pans used?				
Are dedicated fueling, cleaning, and maintenance areas located at least 15 m away from downstream drainage facilities and watercourses, and protected from run-on and runoff?				
Is wash water contained for infiltration/ evaporation and disposed of outside the highway right of way?				
Is on-site cleaning limited to washing with water (no soap, soaps substitutes, solvents, or steam)?				
On each day of use, are vehicles and equipment inspected for leaks and if necessary, repaired?				
Location:				
Location:				
Location:				
Location:				
Waste Management & Materials Pollution Control				
Are material storage areas and washout areas protected from run-on and runoff, and located at least 50 ft from concentrated flows and downstream drainage facilities?				
Are all material handling and storage areas clean; organized; free of spills, leaks, or any other deleterious material; and stocked with appropriate clean-up supplies?				
Are liquid materials, hazardous materials, and hazardous wastes stored in temporary containment facilities?				
Are bagged and boxed materials stored on pallets?				
Are hazardous materials and wastes stored in appropriate, labeled containers?				
Are proper storage, clean-up, and spill-reporting procedures for hazardous materials and wastes posted in open, conspicuous and accessible locations adjacent to storage areas?				
Are temporary containment facilities free of spills and rainwater?				
Are temporary containment facilities and bagged/boxed materials covered?				
Are temporary concrete washout facilities designated and being used?				
Are temporary concrete washout facilities functional for receiving and containing concrete waste and are concrete residues prevented from entering the drainage system?				
Do temporary concrete washout facilities provide sufficient volume and freeboard for planned concrete operations?				
Are the temporary concrete washout facilities' PVC liners free from punctures and holes?				
Are concrete wastes, including residues from cutting and grinding, contained and disposed of off-site or in concrete washout facilities?				
Are spills from mobile equipment fueling and maintenance properly contained and cleaned up?				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Is the site free of litter?				
Are trash receptacles provided in the Contractor's yard, field trailer areas, and at locations where workers congregate for lunch and break periods?				
Is litter from work areas within the construction limits of the project site collected and placed in watertight dumpsters?				
Are waste management receptacles free of leaks?				
Are the contents of waste management receptacles properly protected from contact with storm water or from being dislodged by winds?				
Are waste management receptacles filled at or beyond capacity?				
Location:				
Location:				
Location:				
Location:				
Temporary Water Body Crossing or Encroachment				
Are temporary water body crossings and encroachments constructed as shown on the plans or as approved by the engineer?				
Does the project conform to the requirements of the 404 permit and/or 1601agreement?				
Location:				
Location:				
Location:				
Location:				
Illicit Connection/Illegal Discharge Detection and Reporting				
Is there any evidence of illicit discharges or illegal dumping on the project site?				
If yes, has the Engineer been notified?				
Location:				
Location:				
Location:				
Location:				
Discharge Points				
Are discharge points and discharge flows free from noticeable pollutants?				
Are discharge points free of any significant erosion or sediment transport?				
Location:				
Location:				
Location:				

OTHER REQUIREMENTS				
Requirement	**Yes**	**No**	**N/A**	**Corrective Action**
Location:				
WPCP/SWPPP Update				
Do the WPCP/SWPPP, Project Schedule/Water Pollution Control Schedule and WPCDs adequately reflect the current site conditions and contractor operations?				
Are all BMPs shown on the WPCDs installed in the proper location(s) and according to the details for the plan?				
Location:				
Location:				
Location:				
Location:				
General				
Are there any other potential water pollution control concerns at the site?				
Location:				
Location:				
Location:				
Location:				
Storm Water Monitoring				
Does storm water discharge directly to an water body listed as impaired for sediment/sedimentation or turbidity in the General Construction Activity Permit?				
If yes, were samples for sediment/sedimentation or turbidity collected pursuant to the sampling and analysis plan, if required, during rain events?				
Were there any BMPs not properly implemented, or breaches, malfunctions, leakages or spills observed, which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				
Were soil amendments (e.g., gypsum) used on the project?				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				
Did storm water contact stored materials or waste and resulted in a discharge from the construction site? (Materials not in watertight containers, etc.)				
If yes, were samples for non-visually detectable pollutants collected pursuant to the sampling and analysis plan during rain events?				

Attachment D
Amendments

Attachment D

Amendments

INSTRUCTIONS:

- ❑ Contractor to complete and sign first page.
- ❑ If Caltrans is administering the project, then the Resident Engineer should sign the second page.
- ❑ If a Local Agency or Private Entity is administering the project, the Caltrans Oversight Engineer and the Local Agency / Private Entity Resident Engineer should both sign the third Page.
- ❑ Include a copy of the latest Amendment Log from WPCP Section 40 in this Attachment.

WPCP Amendment No. _____

Project Name:

Caltrans Contract Number: _____

To Be Completed by Contractor

"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 ensure 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 fine and imprisonment for knowing violations."

Contractor's Signature	Date
Contractor's Name and Title	Contractor's Telephone Number

For Use When Caltrans is Administering Project

For Caltrans Use Only
Resident Engineer's Approval and
Caltrans Certification of the
Water Pollution Control Program
Amendment

"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 ensure 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 fine and imprisonment for knowing violations."

Resident Engineer's Signature	Date
Resident Engineer's Name	Resident Engineer's Telephone Number

For Use When Local Agency / Private Entity is Administering Project

For Local Agency / Private Entity Use Only
Resident Engineer's Approval and
Local Agency / Private Entity Certification of the
Water Pollution Control Program
Amendment

"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 ensure 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 fine and imprisonment for knowing violations."

Resident Engineer's Signature	Date
Resident Engineer's Name	Resident Engineer's Telephone Number

For Caltrans Use Only
Caltrans Oversight Engineer's Approval and
Caltrans Certification of the
Water Pollution Control Program Amendment

"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 ensure 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 fine and imprisonment for knowing violations."

Oversight Engineer's Signature	Date
Oversight Engineer's Name	Oversight Engineer's Telephone Number

Attachment E
Notice of Discharge

Attachment E

Notice of Discharge

INSTRUCTIONS

- This form be will used to report instances of discharges. The completed form will be submitted to the Resident Engineer within 7 days (3 days for Districts 7 and 11), or as specified by the Special Provisions, of the assessment of discharge, written notice or orders from a regulatory agency.
- Submit photographs (before and after the discharge) with this report.

To: Name of Caltrans Resident Engineer Date: Insert Date

Subject: Notice of Discharge

Project Name: Insert Project Name

Caltrans Contract Number: contract number

In accordance with the Caltrans NPDES Statewide Permit for Storm Water Discharges Associated with Construction Activity, the following instance of discharge is noted:

Date, time, and location of discharge

Insert description and date of event

Nature of the operation that caused the discharge

Insert description of operation

Initial assessment of any impact caused by the discharge

Insert assessment

Existing BMP(s) in place prior to discharge event

List BMPs in place

Date of deployment and type of BMPs deployed after the discharge.

BMPs deployed after the discharge (with dates)

Steps taken or planned to reduce, eliminate and/or prevent recurrence of the discharge

Insert steps taken to prevent recurrence

Implementation and maintenance schedule for any affected BMPs

Insert implementation and maintenance schedule

If further information or a modification to the above schedule is required, notify the contact person below.

Name of Contact Person	Title
Company	Telephone Number
Signature	Date

Attachment F
Discharge Reporting Log

Attachment F

Discharge Reporting Log

INSTRUCTIONS

- Use this sheet to log discharge incidents as reported in Attachment E, Notice of Discharge.

Project Name: _____

Caltrans Contract Number: _____

Date	Material(s) Discharged	Estimated Quantity	Observed By

Attachment G
Trained Contractor Personnel Log

Attachment G

Trained Contractor Personnel Log

INSTRUCTIONS

- Use this sheet to record individuals attending formal training programs specified in Section 30.5 of the WPCP. This form may also be used to record informal tailgate on-site meetings on storm water management.

Stormwater Management Training Log

Project Name: _____

Caltrans Contract Number: _____

Storm Water Management Topic: (check as appropriate)

- ❑ Temporary Soil Stabilization
- ❑ Temporary Sediment Control
- ❑ Wind Erosion Control
- ❑ Tracking Control
- ❑ Non-storm water management
- ❑ Waste Management and Materials Pollution Control
- ❑ Storm Water Sampling

Specific Training Objective: _____

Location: _____ Date: _____

Instructor: _____ Telephone: _____

Course Length (hours): _____

Attendee Roster (attach additional forms if necessary)

Name	Company	Phone

COMMENTS:

Appendix C
Abbreviations, Acronyms, and Definition of Terms

ac	acre
ºC	Degrees Celsius
cfs	cubic feet per second
cy	cubic yards
ºF	Degrees Fahrenheit
ft	feet
g	gram
gal	gallon
gpm	gallons per minute
hr	hour
in	inches
kg	kilogram
L	liter
lbs	pound
lf	linear feet
mph	miles per hour
psi	pounds per square inch
s	second
yd	yard
y^2	square yards
y^3	cubic yards
AC	Asphalt Concrete
ABS	Acrylonitrile Butadiene Styrene
ADL	Aerially Deposited Lead
AQMD	Air Quality Management District
ASTM	American Society of Testing Materials
BAT	Best Available Technology
BCT	Best Conventional Technology
BMP	Best Management Practice
CAL-EPA	California Environmental Protection Agency
CAL-OSHA	California Occupation Safety and Health Association
CMP	Corrugated Metal Pipe
CFR	Code of Federal Regulations
COC	Chain of Custody
CSWPPP	Conceptual Stormwater Pollution Prevention Plan
CWA	Clean Water Act
DSA	Disturbed Soil Area
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
L:W	Length versus Width
MEP	Maximum Extent Practicable
MSDS	Material Safety Data Sheet
NCC	Notice of Completion of Construction
NOAA	National Oceanic and Atmospheric Administration
NOC	Notice of Construction
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupation Safety and Health

	Association
PCC	Portland Cement Concrete
PE	Project Engineer
PVC	Polyvinyl Chloride
RE	Resident Engineer
RWQCB	California Regional Water Quality Control Board
SAP	Sampling and Analysis Plan
SSP	Standard Special Provisions
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	California State Water Resources Control Board
V:H	Vertical versus Horizontal
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
US EPA	United States Environmental Protection Agency
USGS	United States Geological Service
USLE	Universal Soil Loss Equation
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirement
WPCD	Water Pollution Control Drawing
WPCM	Water Pollution Control Manager
WPCP	Water Pollution Control Program

Definition of Terms

Active Construction Area: Construction areas where soil-disturbing activities have already occurred and continue to occur or will occur during the ensuing 21 days. This may include areas where soils have been disturbed as well as areas where soil disturbance has not yet occurred.

Antecedent Moisture: Amount of moisture present in soil prior to the application of a soil stabilization product.

Best Management Practice (BMP): Any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces pollution.

Construction Activity: Includes clearing, grading, or excavation and contractor activities that result in soil disturbance.

Construction Site: The area involved in a construction project as a whole.

Construction Site BMPs: Temporary control practices (BMPs) that are required only temporarily to address a short-term stormwater contamination threat. For example, silt fences are located near the base of newly graded slopes that have substantial area of exposed soil. Then, during rainfall, the silt fences allow capture sediment from erosion of the slopes.

Contamination: An impairment of the quality of the waters of the state by waste to a degree that creates a hazard to the public health through poisoning or through the spread of disease including any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected.

Contractor: Party responsible for carrying out the contract per plans and specifications. The Standard Specifications and Special Provisions contain stormwater protection requirements the contractor must address.

Degradability: Method by which the chemical components of a soil stabilization product are degraded over time.

Desert Areas: Areas within the Colorado River Basin RWQCB and the North and South Lahontan RWQCB jurisdictions (excluding the Mono and Antelope areas, East and West Walker River, East and West Carson River, and the Truckee and Little Truckee River).

Discharge: Any release, spill, leak, pump, flow, escape, dumping, or disposal of any liquid, semi-solid or solid substance.

Disturbed Soil Areas (DSAs): Areas of exposed, erodible soil, including stockpiles, that are within the construction limits and that result from construction activities.

Drying Time: Time it takes for a soil stabilization product to dry or cure for it to become erosion control effective.

Environmental Protection Agency (EPA): Agency that issued the regulations to control pollutants in stormwater runoff discharges (The Clean Water Act and NPDES permit requirements).

Erosion: The wearing away of land surface primarily by wind or water. Erosion occurs naturally as a result of weather or runoff but can be intensified by clearing, grading, or excavation of the land surface.

Erosion Control Effectiveness: The ability of a particular product to reduce soil erosion relative to the amount of erosion measured for bare soil. Percentage of erosion that would be reduced as compared to an untreated or control condition.

Exempt Construction Activities: Activities exempt from the General Permit, including routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility; and emergency construction activities required to protect public health and safety. Local permits may not exempt these activities.

Existing vegetation: Any vegetated area that has not already been cleared and grubbed.

Fair Weather Prediction: When there is no precipitation in the forecast between the current calendar day and the next working day. The National Weather Service NOAA Weather Radio forecast shall be used. The contractor may propose an alternative forecast for use if approved by the Resident Engineer.

Feasible: Economically achievable or cost-effective measures, which reflect a reasonable degree of pollutant reduction achievable through the application of available nonpoint pollution control practices, technologies, processes, site criteria, operating methods, or other alternatives.

General Permit: The Construction General Permit for Storm Water Discharges Associated with Construction Activity (Order No. 99-08-DWQ, NPDES Permit CAS000002) issued by the State Water Resources Control Board.

Good Housekeeping: A common practice related to the storage, use, or cleanup of materials, performed in a manner that minimizes the discharge of pollutants.

Local permit: An NPDES stormwater permit issued to a District by the RWQCB having jurisdiction over the job site. Requirements of the local permit are generally similar to, but supersede the requirements of the General Permit. The District Stormwater Coordinator should be consulted to identify and to incorporate variances between the local permit and General Permit.

Longevity: The time the soil erosion product maintains its erosion control effectiveness.

Mode of Application: Type of labor or equipment that is required to install the product or technique.

National Pollutant Discharge Elimination System (NPDES) Permit: A permit issued pursuant to the Clean Water Act that requires the discharge of pollutants to waters of the United States from stormwater be controlled.

Native: Living or growing naturally in a particular region. Compatibility and competitiveness of selected plant materials with the environment.

Non-active Construction Area: Any area not considered to be an active construction area. Active construction areas become non-active construction areas whenever construction activities are expected to be discontinued for a period of 21 days or longer.

Non-Stormwater Discharge: Any discharge to a storm drain system or receiving water that is not composed entirely of stormwater.

Permit: The Caltrans Statewide NPDES Permit for discharges from Caltrans properties, facilities, and activities (Order No. 99-06-DWQ, NPDES No. CAS000003), issues by the State Water Resources Control Board.

Pollution: The man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water. An alteration of the quality of the water of the state by waste to a degree, which unreasonably affects either the waters for beneficial uses or facilities that serve these beneficial uses.

Rainy Season: The dates of the rainy season shall be as specified: use dates in the local permit if a local permit is applicable to the project site and rainy season dates are specified therein; or, if the local permit does not specify rainy season dates and/or in areas of the state not subject to a local permit, the rainy season dates shall be determined using Figure 1-1.

Receiving Waters: All surface water bodies within the permit area.

Regional Water Quality Control Board (RWQCB): California agencies that implement and enforce Clean Water Act Section 402(p) NPDES permit requirements, and are issuers and administrators of these permits as delegated by EPA. There are nine regional boards working with the State Water Resources Control Board.

Resident Engineer (RE): The Caltrans representative charged with administration of construction contracts. The RE decides questions regarding acceptability of material furnished and work performed. The RE has "contractual authority" to direct the contractor and impose sanctions if the contractor fails to take prompt and appropriate action to correct deficiencies. The following contractual sanctions can be imposed by the RE: (a) withholding payments (or portions of payments), (b) suspending work, (c) bringing in a separate contractor to complete work items (the contractor is billed for such costs), (d) assessing liquidated damages including passing along fines for permit violations, (e) initiating cancellation of the construction contract.

Residual Impact: The impact that a particular practice might have on construction activities once they are resumed on the area that was temporarily stabilized.

Runoff Effect: The effect that a particular soil stabilization product has on the production of stormwater runoff. Runoff from an area protected by a particular product may be compared to the amount of runoff measured for bare soil.

Sampling and Analysis Plan: A document or portion of the SWPPP that describes how the samples will be collected and under what conditions, where and when the samples will be collected, what the samples will be tested for, what test methods and detection limits will be used, and what methods/procedures will be maintained to insure the integrity of the sample during collection, storage, shipping, and testing (i.e., quality assurance/quality control protocols).

Sediment: Organic or inorganic material that is carried by or suspended in water and that settles out to form deposits in the storm drain system or receiving waters.

State Water Resources Control Board (SWRCB): California agency that implements and enforces Clean Water Act Section 402(p) NPDES permit requirements, is issuer and administrator of these permits as delegated by EPA. Works with the nine Regional Water Quality Control Boards.

Storm Drain System: Streets, gutters, inlets, conduits, natural or artificial drains, channels and watercourses, or other facilities that are owned, operated, maintained and used for the purpose of collecting, storing, transporting, or disposing of stormwater.

Stormwater: Rainfall runoff, snow melt runoff, and surface runoff and drainage. It excludes infiltration and runoff from agricultural land.

Stormwater Inspector: Caltrans staff member who provides support to the Resident Engineer. Coordinates activities and correspondence related to WPCP and SWPPP review and implementation.

Stormwater Pollution Prevention Plan (SWPPP): A plan required by the Permit that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. A SWPPP prepared in accordance with the Special Provisions and the Handbooks will satisfy Standard Specifications Section 7-1.01G - Water Pollution, requirement for preparation of a program to control water pollution.

Temporary Construction Site BMPs: Construction Site BMPs that are required only temporarily to address a short-term stormwater contamination threat. For example, silt fences are located near the base of newly graded slopes that have a substantial area of exposed soil. Then, during rainfall, the silt fences filter and collect sediment from runoff flowing off the slope.

Waste Discharge Identification Number (WDID): The unique project number issued by the SWRCB upon receipt of the notice of intent (NOI).

Water Pollution Control Program (WPCP): A program that must be prepared and implemented by the construction contractor under Standard Specifications Section 7-1.01G - Water Pollution.

Appendix D
Selection of Temporary Soil Stabilization Controls

There are many treatments available to provide soil stabilization. A group of criteria was developed to allow for comparison and differentiation among the product types that are available. These criteria include erosion control effectiveness, drying time, and others. For some criteria, values have been assigned by characteristics: an example would be mode of application (e.g., hydraulic seeder, water truck, and hand labor). For other criteria, actual numeric values should be considered based on available data, such as drying time in hours. Refer to Table D-1 for a summary of selection criteria information and ratings for temporary soil stabilization BMPs.

D.1 Antecedent Moisture

This criterion relates to the effect of existing soil moisture on the effectiveness of a soil stabilization method. While antecedent soil moisture conditions can have an effect on the performance of some methods, (e.g., hydraulic soil stabilizers, temporary seeding) other methods, such as erosion control blankets or impervious covers, are not affected – except perhaps in their ease of installation.

Suppliers of manufactured soil stabilization products affected by antecedent soil moisture specify the conditions under which their products are to be applied. For example, some products clearly benefit from having the soil "pre-wetted" before application of the hydraulic soil stabilizer and as a result, some manufacturers recommend application of water by itself as a first step. Conversely, the binding action of some adhesives on soil particles (and thereby their erosion control effectiveness) can be affected by excessive soil moisture. Therefore, some manufacturers recommend that their products not be applied when the soil is visibly saturated or when standing water is present.

D.2 Availability

A critical aspect of product specification and use is whether or not a soil stabilization product is readily available. While local sources may be preferable, the seasonal nature of soil stabilization work can create localized shortages of materials. In these cases, usually the material that can be delivered to the job most quickly is the material that is selected for application.

D.3 Ease of Clean-Up

This criterion applies primarily to the hydraulically-applied soil stabilization materials, but there may be clean-up issues associated with some of the other categories as well (e.g., packaging materials, disposal of excess product, etc).

All of the approved hydraulic soil stabilization products are typically applied using water as a carrier, and to varying degrees, these products can be removed from application machinery and overspray areas with the application of clean water as well. However, cleaning must occur before the material sets or dries, otherwise stronger cleaning solutions of detergent, a strong alkali solution, or a petrochemical solvent must be used. A prudent contractor will take precautions when working with hydraulic products that have some clean-up limitations, and must follow the BMPs in the SWPPP or WPCP for cleaning of equipment on site.

Regardless of which approach is used for temporary soil stabilization, site clean-up can be problematic due to the following:

- Added time to dispose of waste materials
- Added time to clean hydraulic equipment before the material sets or dries
- Additional quantities of water needed for cleaning operations
- Impact of quick-setting materials on overspray areas such as sidewalks, roads, vehicles
- Contractor resistance to products that require excessive clean-up
- Additional operation and maintenance costs included in contractor's bid.

D.4 Degradability

Degradability relates to the method by which the chemical components of a soil stabilization product are degraded over time. As might be expected, the way in which a product degrades is related to longevity, which is another selection criterion. Both degradability and longevity are sometimes key issues in temporary soil stabilization and long term erosion and sediment control planning.

Soil properties, climate, existing vegetation as well as slope aspect contribute to the degradation of soil stabilization materials. Knowing something about the physical and chemical properties of a product and how these characteristics might interact with site conditions is important when selecting a particular material.

D.5 Length of Drying Time

Not all materials require drying time, and the drying criterion may be used to differentiate categorical approaches as well as a final screen for the various types of materials within a class of approaches. The drying time shall be based upon manufacturer's recommendations and specifications.

D.6 Time to Effectiveness

Not all soil stabilization products are immediately effective in controlling erosion: some take time to dry (e.g., hydraulic soil stabilizers) and others take time to grow (e.g., temporary seeding). However, when some treatments are applied (e.g., rolled erosion control products, plastic sheeting, and straw mulch) they are immediately effective.

D.7 Erosion Control Effectiveness

This criterion measures the ability of a particular product to reduce soil erosion relative to the amount of erosion measured for bare soil. Erosion control effectiveness is described as a percentage the erosion would be reduced as compared to an untreated or control condition.

D.8 Longevity

This criterion simply considers the time that a soil stabilization product maintains its erosion control effectiveness.

D.9 Mode of Application

The mode of application criterion refers to the type of labor or equipment that is required to install the product or technique.

D.10 Residual Impact

This criterion relates to the impact that a particular practice might have on construction activities once they are resumed on the area that was temporarily stabilized. Some examples include:

- Temporary vegetation covers or standard biodegradable mulches might create problems with achieving final slope stability or compaction due to their organic content, and therefore would require removal and disposal.

- Applications of straw or hay fibers might keep soil from drying out as quickly as it might if it was bare.

- Plastic sheeting, netting or materials used in a soil stabilization product might persist longer than needed on or in the soil.

D.11 Native

This criterion relates primarily to selection of plant materials and is important from the standpoint of environmental compatibility and competitiveness.

D.12 Runoff Effect

This criterion measures the effect that a particular soil stabilization product has on the production of stormwater runoff. Similar to the erosion control effectiveness criterion, runoff from an area protected by a particular product may be compared to the amount of runoff measured for bare soil and is presented in the matrix as a percentage of the runoff that would occur in an untreated, or control condition.

Table D-1
Temporary Soil Stabilization Criteria Matrix

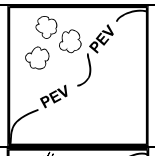
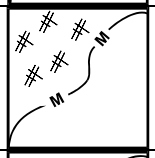
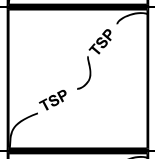
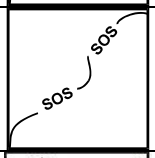
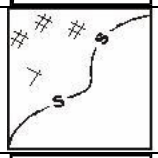
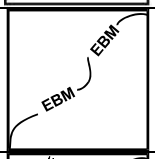
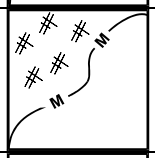
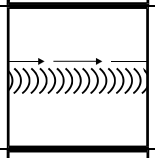
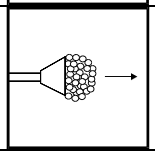
CLASS	TYPE	Antecedent Moisture	Availability	Ease of Clean-Up	EC Effectiveness (%)	Degradability	Length of Drying Time (hrs)	Time to Effectiveness	Longevity	Mode of Application	Residual Impact	Native	Runoff Effect
Straw Mulch	Wheat Straw	D	S	H	90-95	B	0	1	M	L/M	M		+
	Rice Straw	D	S	H	90-95	B	0	1	M	L/M	M		+
Wood Fiber Mulch	Wood Fiber	D	S	H	50-60	B	0-4	1	M	H	L		+
Recycled Paper Mulch	Cellulose Fiber	D	S	H	50-60	B	0-4	1	S	H	L		+
Bonded Fiber Matrix	Biodegradable	D	S	H	90-95	B	12-18	1	M	H	M		+
Biodegradable	Jute Mesh	D	S	H	65-70	B		1	M	L	M		+
	Curled Wood Fiber	D	S	H	85-90	P/B		1	M	L	M		+
	Straw	D	S	H	85-90	P/B		1	M	L	M		+
	Wood Fiber	D	S	H	85-90	P/B		1	M	L	M		+
	Coconut Fiber	D	S	H	90-95	P/B		1	L	L	M		+
	Coconut Fiber Mesh	D	S	H	85-90	B		1	L	L	M		+
	Straw Coconut Fiber	D	S	H	90-95	P/B		1	L	L	M		+
Non-Biodegradable	Plastic Netting	D	M	H	<50	P		1	L	L	H		+
	Plastic Mesh	D	M	H	75-80	P		1	L	L	H		+
	Synthetic Fiber with Netting	D	M	H	90-95	P		1	L	L	H		+
	Bonded Synthetic Fibers	D	M	H	90-95	P		1	L	L	H		+
	Combination with Biodegradable	D	M	H	85-90	P		1	L	L	H		+
High-Density	Ornamentals		S-M	H	50-60			28	M-L	H	L-M	N/E	+
	Turf species		S	H	50-60			28	L	H	M-H	N/E	+
	Bunch grasses		S-M	H	50-60			28	L	H	L-M	N	+
Fast-Growing	Annual		S	H	50-60			28	L	H	L-H	N/E	+
	Perennial		S	H	50-60			28	L	H	M	N/E	+
Non-Competing	Native		S-M	H	50-60			28	L	H	L-M	N	+
	Non-Native		S-M	H	50-60			28	L	H	L-H	E	+
Sterile	Cereal Grain		S	H	50-60			28	L	H	L	E	+
Plastic	Rolled Plastic Sheeting		S		100	P		1	M	L	H		-
	Geotextile (Woven)		S		90-95	P		1	M	L	H		-
(PBS) Plant Material Based- Short Lived	Guar	D	S	H	80-85	B	12-18	Same as Length of Drying Time.	S	B	L		0/+
	Psyllium	P	S	H	25-35	B	12-18		M	B	L		0
	Starches	D	S	H	25-30	B	9-12		S	H	L		0
(PBL) Plant Material Based- Long Lived	Pitch/ Rosin Emulsion	D	S	M	60-75	B	19-24		M	B	M		-
(PEB) Polymeric Emulsion Blends	Acrylic polymers and copolymers	D	S	M	35-70	P/C	19-24		L	B	M		+/-
	Methacrylates and acrylates	D	M	M	35-40	P/C	12-18		S	W	L		0/+
	Sodium acrylates and acrylamides	D	M	M	20-70	P/C	12-18		S	H	L		+/-
	Polyacrylamide	D	M	M	55-65	P/C	4-8		M	H	L		0/+
	Hydro-colloid polymers	D	M	H	25-40	P/C	0-4		M	H	L		0/+
(PRB) Petroleum/ Resin-Based Emulsions	Emulsified Petroleum Resin	D	M	L	10-50	P/C	0-4		M	B	M		0/-
(CBB) Cementitious Based Binders	Gypsum	D	S	M	75-85	P/C	4-8		M	H	L		-
	= not applicable for category, class or type												
UNK	= unknown												

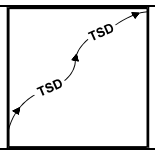
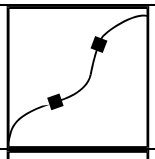
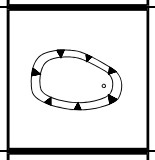
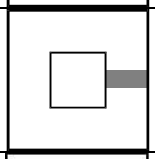
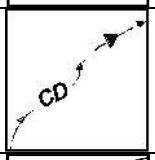
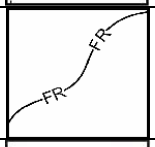
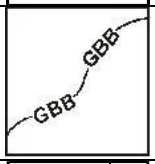
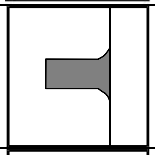
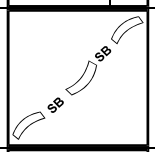
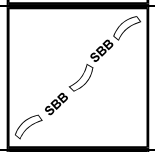
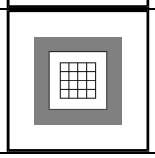
Source: *Guidance Document – Soil Stabilization for Temporary Slopes*, URS Greiner Woodward Clyde, November 1999.

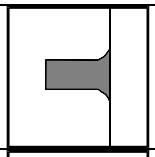
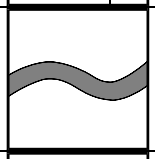
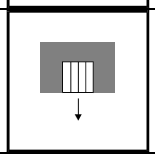
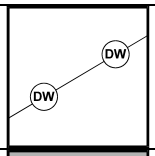
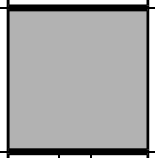
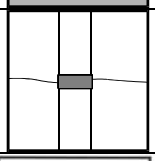
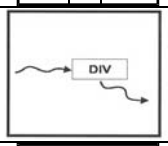
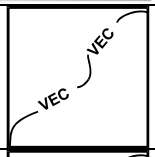
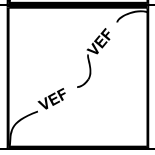
Table D-1 (Definitions of Symbols)
TEMPORARY SOIL STABILIZATION CRITERIA MATRIX

Antecedent Moisture	**D** **P**	Soil should be relatively dry before application Soil should be pre-wetted before application
Availability	**S** **M**	A short turn-around time between order and delivery, usually 3-5 days A moderate turnaround time, between 1-2 weeks
Ease of Clean-Up	**L** **M** **H**	Require pressure washing, a strong alkali solution, or solvent to clean up Requires cleanup with water while wet; more difficult to clean up once dry May be easily removed from equipment and overspray areas by a strong stream of water
Erosion Control Effectiveness		Percent reduction in soil loss over bare soil condition.
Degradability	**C** **P** **B**	Chemically degradable Photodegradable Biodegradable
Length of Drying Time		Estimated hours
Time to Effectiveness		Estimated days
Longevity	**S** **M** **L**	1 - 3 months 3 – 12 months > than 12 months
Application Mode	**L** **W** **H** **B** **M**	Applied by hand labor Applied by water truck Applied by hydraulic mulcher Applied by either water truck or hydraulic mulcher Applied by a mechanical method other than those listed above (e.g., straw blower)
Residual Impact	**L** **M** **H**	Projected to have a low impact on future construction activities Projected to have a moderate impact on future construction activities Projected to have a significant impact on future construction activities
Native	**N** **E**	Plant or plant material native to the State of California Exotic plant not native to the State of California
Runoff Effect	**+** **0** **-**	Runoff is decreased over baseline (bare soil) No change in runoff from baseline Runoff is increased over baseline

Appendix E
List of Standard Caltrans Construction Site BMP Symbols

WATER POLLUTION CONTROL BMP SYBMOLS	
SOIL STABILIZATION	
SS-2: Preservation of Existing Vegetation	
SS-3: Hydraulic Mulch (Note: Symbol -M- is generic Hydraulic Mulch symbol. Use linetype symbol -BFM- for Bonded Fiber Matrix, and -PSFM- for Polymer Stabilized Fiber Matrix)	
SS-4: Hydroseeding	
SS-5: Soil Binders	
SS-6: Straw Mulch	
SS-7: Geotextiles, Mats, Plastic Covers and Erosion Control Blankets	
SS-8: Wood Mulching	
SS-9: Earth Dikes/Drainage Swales and Lined ditches	
SS-10: Outlet Protection/Velocity Dissipation Devices	

SS-11: Slope Drains	
SEDIMENT CONTROL	
SC-1: Silt Fence	
SC-2: Sediment/Desilting Basin	
SC-3: Sediment Trap	
SC-4: Check Dams	
SC-5: Fiber Rolls	
SC-6: Gravel Bag Berm	
SC-7: Street Sweeping and Vacuuming	
SC-8: Sandbag Barrier	
SC-9: Straw Bale Barrier	
SC-10: Storm Drain Inlet Protection	

WIND EROSION CONTROL	
WE-1: Wind Erosion Control	
TRACKING CONTROL	
TC-1: Stabilized Construction Entrance/Exit	
TC-2: Stabilized Construction Roadway	
TC-3: Entrance/Outlet Tire Wash	
NON-STORMWATER MANAGEMENT	
NS-2: Dewatering Operations	
NS-3: Paving and Grinding Operations	
NS-4: Temporary Stream Crossing	
NS-5: Clear Water Diversion	
NS-8: Vehicle and Equipment Cleaning	
NS-9: Vehicle and Equipment Fueling	

NS-10: Vehicle and Equipment Maintenance	VEM
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL	
WM-1: Material Delivery and Storage	MS
WM-3: Stockpile Management	CS
WM-5: Solid Waste Management	SWM
WM-6: Hazardous Waste Management	!
WM-7: Contaminated Soil Management	CSM
WM-8: Concrete Waste Management	CWM
WM-9: Sanitary/Septic Waste Management	SS
WM-10: Liquid Waste Management	LWM