ADDENDUM NO. 2

CONTRACT NO. 4383

FOR CONSTRUCTION OF

LEVEE ACCREDITATION PROGRAM - NORTH AREA STREAMS
ROBLA CREEK WOODLAND MITIGATION AND ENHANCEMENT PROJECT

COUNTY OF SACRAMENTO, CALIFORNIA

July 24, 2017

APPROVED BY SAFCA:

[Signature]
JASON D. CAMPBELL
Deputy Executive Director
Sacramento Area Flood Control Agency

Date
24 July 2017

TO ALL PROSPECTIVE BIDDERS:

All prospective bidders are hereby advised that this addendum includes amendments to the Contract Documents that were issued by SAFCA on June 22, 2017. The bidders are to review all of the amendments listed herein, and acknowledge receipt of this addendum in the BID FORM.

AMENDMENTS TO CONTRACT DOCUMENTS

REFERENCES

The Draft Storm Water Pollution Prevention Plan, attached hereto, is added to the Reference section of the Specifications.
DRAFT STORMWATER POLLUTION PREVENTION PLAN

for

North Area Streams Levee Accreditation Program
Robla Creek Woodland Mitigation and Enhancement Project

RISK LEVEL 1

Legally Responsible Person (LRP):
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814
Contact: Pete Ghelfi
(916)874-8733

Prepared for:
Sacramento Area Flood Control Agency
1007 7th Street, 7th Floor
Sacramento, CA 95814
Contact: Pete Ghelfi
(916)874-8733

Project Address:
Along Robla Creek, Rio Linda, CA

SWPPP Prepared by:
WSP
2150 River Plaza Drive
Sacramento, CA
Contact: Jim Lorenzen, QSD/QSP #00629
(916) 416-8202

SWPPP Preparation Date:
June 29, 2017

Estimated Project Dates:

<table>
<thead>
<tr>
<th>Start of Construction</th>
<th>September 1, 2017</th>
<th>Complete Site Stabilization</th>
<th>November 30, 2018</th>
</tr>
</thead>
</table>
This page intentionally left blank.
Table of Contents

Section 1   SWPPP Requirements................................................................. 1-1
  1.1 Introduction......................................................................................... 1-1
  1.2 Permit Registration Documents......................................................... 1-1
  1.3 SWPPP Availability and Implementation............................................. 1-2
  1.4 SWPPP Amendments......................................................................... 1-2
  1.5 Retention of Records.......................................................................... 1-3
  1.6 Required Non-Compliance Reporting ................................................ 1-3
  1.7 Annual Report.................................................................................... 1-4
  1.8 Changes to Permit Coverage............................................................... 1-4
  1.9 Notice of Termination.......................................................................... 1-4

Section 2   Project Information ................................................................. 2-1
  2.1 Site and Project Site Descriptions...................................................... 2-1
    2.1.1 General Site Description.............................................................. 2-1
    2.1.2 Hydrology and Water Quality..................................................... 2-1
    2.1.3 Project Description...................................................................... 2-1
    2.1.4 Developed Site Condition............................................................ 2-1
  2.2 Permits and Governing Documents................................................... 2-2
  2.3 Stormwater Run-On and run-off......................................................... 2-2
  2.4 Findings of the Construction SiteS Sediment and Receiving Water Risk
    Determination...................................................................................... 2-2
  2.5 Construction Schedule ..................................................................... 2-3
  2.6 Potential Construction Activity and Pollutant Sources....................... 2-3
  2.7 Identification of Non-Stormwater Discharges.................................... 2-4
  2.8 Required Site Map Information.......................................................... 2-4

Section 3   Best Management Practices.................................................... 3-1
  3.1 Schedule for BMP Implementation..................................................... 3-1
  3.2 Erosion and Sediment Control............................................................ 3-2
    3.2.1 Erosion Control.......................................................................... 3-2
    3.2.2 Sediment Control....................................................................... 3-5
  3.2.3 Non-Stormwater Control Measures.............................................. 3-7
  3.2.4 Materials Management and Waste Management........................... 3-11
3.3 Post-construction Stormwater Management Measures............................................. 3-13

Section 4 BMP Inspection, and Maintenance, and Rain Event Action Plans .......... 4-1
4.1 BMP Inspection and Maintenance ........................................................................ 4-1
4.2 Rain Event Action Plans ....................................................................................... 4-1

Section 5 Training ..................................................................................................... 5-1

Section 6 Responsible Parties and Operators .......................................................... 6-1
6.1 Responsible Parties .............................................................................................. 6-1
6.2 Contractor List ..................................................................................................... 6-2

Section 7 Construction Site Monitoring Program..................................................... 7-3
7.1 Purpose .................................................................................................................. 7-3
7.2 Applicability of Permit Requirements ................................................................. 7-3
7.3 Weather and Rain Event Tracking ....................................................................... 7-3
7.3.1 Weather Tracking ......................................................................................... 7-4
7.3.2 Rain Gauges .................................................................................................. 7-4
7.4 Monitoring Locations ........................................................................................... 7-4
7.5 Safety and Monitoring Exemptions ...................................................................... 7-4
7.6 Visual Monitoring .................................................................................................. 7-5
7.6.1 Routine Observations and Inspections ............................................................. 7-5
7.6.2 Rain-Event Triggered Observations and Inspections .................................... 7-6
7.6.3 Visual Monitoring Procedures ........................................................................ 7-7
7.6.4 Visual Monitoring Follow-Up and Reporting .................................................. 7-7
7.6.5 Visual Monitoring Locations .......................................................................... 7-8
7.7 Water Quality Sampling and Analysis .................................................................. 7-8
7.7.1 Sampling and Analysis Plan for Non-Visible Pollutants in Stormwater Runoff Discharges ........................................................................................................... 7-8
7.7.2 Sampling and Analysis Plan for pH and Turbidity in Stormwater Runoff Discharges ........................................................................................................... 7-8

7.7.3 Additional Monitoring Following an NEL Exceedance Error! Bookmark not defined.
7.7.4 Sampling and Analysis Plan for Non-Stormwater Discharges ....................... 7-14
7.7.5 Training of Sampling Personnel ...................................................................... 7-18
7.7.6 Sample Collection and Handling ...................................................................... 7-19
7.8 Active Treatment System Monitoring ................................................................. 7-21
7.9 Bioassessment Monitoring .................................................................................. 7-21
7.10 Watershed Monitoring Option ................................................................................... 7-21
7.11 Quality Assurance and Quality Control ................................................................. 7-21
  7.11.1 Field Logs ............................................................................................................. 7-22
  7.11.2 Clean Sampling Techniques ................................................................................. 7-22
  7.11.3 Chain of Custody ................................................................................................. 7-22
  7.11.4 QA/QC Samples .................................................................................................... 7-22
  7.11.5 Data Verification ................................................................................................. 7-23
7.12 Records Retention .................................................................................................... 7-24

Section 8 References ........................................................................................................... 8-1

List of Attachments:
CSMP Attachment 1: Weather Reports
CSMP Attachment 2: Monitoring Records
CSMP Attachment 3: Example Forms
CSMP Attachment 4: Field Meter Instructions
CSMP Attachment 5: Supplemental Information

List of Appendices:
Appendix A Calculations
Appendix B Site Maps
Appendix C Permit Registration Documents
Appendix D SWPPP Amendment Certifications
Appendix E Submitted Changes to PRDs
Appendix F Construction Schedule
Appendix G Construction Activities, Materials Used, and Associated Pollutants
Appendix H Select BMP Fact Sheets
Appendix I BMP Inspection Form
Appendix J Not Used
Appendix K Training Reporting Form
Appendix L Responsible Parties
Appendix M Contractors and Subcontractors
Appendix N Construction General Permit, Attachment C – Risk Level 1 Requirements
List of Tables

Table 1.1  List of Changes to be Field-Determined .................................................. 1-3
Table 2.1  Construction Site Estimates ................................................................. 2-1
Table 2.2  Summary of Sediment Risk ................................................................. 2-3
Table 2.3  Summary of Receiving Water Risk ...................................................... 2-3
Table 2.4  Numeric Action Levels ........................................................................... Error! Bookmark not defined.
Table 2.5  Required Map Information ................................................................. 2-5
Table 3.1  BMP Implementation Schedule .......................................................... 3-1
Table 3.2  Temporary Erosion Control BMPs ......................................................... 3-3
Table 3.3  Temporary Sediment Control BMPs ..................................................... 3-5
Table 3.4  Temporary Non-Stormwater BMPs ...................................................... 3-9
Table 3.5  Temporary Materials Management BMPs .......................................... 3-11
Table 3.6  Approved Signatories Assigned to Project .......................................... 6-1
Table 7.1  Summary of Visual Monitoring and Inspections .................................. 7-5
Table 7.2  Visual Monitoring Locations ............................................................... 7-8
Table 7.3  Non-Visible Pollutant Sample Locations .............................................. 7-10
Table 7.4  Non-Visible Pollutant Sample Locations – Background (Unaffected Sample) .......................................................... 7-10
Table 7.5  Potential Non-Visible Pollutants and Water Quality Indicator Constituents .................................................................................. 7-12
Table 7.6  Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants .......................................................... 7-12
Table 7.7  Turbidity and pH Runoff Sample Locations ........................................ Error! Bookmark not defined.
Table 7.8  Sample Collection and Analysis for Monitoring Turbidity and pHError! Bookmark not defined.
Table 7.9  Field Instruments .................................................................................. Error! Bookmark not defined.
Table 7.10 Numeric Action Levels ........................................................................ Error! Bookmark not defined.
Table 7.11 Non-Stormwater Discharge Sample Locations ..................................... 7-14
Table 7.12 Potential Non-Stormwater Discharge Pollutants and Water Quality Indicator Constituents ..................................................................... 7-16
Table 7.13 Sample Collection, Preservation and Analysis for Monitoring Pollutants in Non-Stormwater Discharges .......................................................... 7-17
### Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATS</td>
<td>Active Treatment System</td>
</tr>
<tr>
<td>Basin Plan</td>
<td>Central Valley Water Board’s Water Quality Control Plan</td>
</tr>
<tr>
<td>BAT/BCT</td>
<td>Best Available Technology/Best Control Technology</td>
</tr>
<tr>
<td>BMPs</td>
<td>Best Management Practices</td>
</tr>
<tr>
<td>BSSCP</td>
<td>bentonite slurry spill contingency plan</td>
</tr>
<tr>
<td>CASQA</td>
<td>California Stormwater Quality Association</td>
</tr>
<tr>
<td>CLSM</td>
<td>controlled low strength material</td>
</tr>
<tr>
<td>CoC</td>
<td>Chain of Custody</td>
</tr>
<tr>
<td>CVFPB</td>
<td>Central Valley Flood Protection Board</td>
</tr>
<tr>
<td>DSM</td>
<td>Deep Soil Mixing</td>
</tr>
<tr>
<td>DWR</td>
<td>California Department of Water Resources</td>
</tr>
<tr>
<td>EFH</td>
<td>Essential Fish Habitat</td>
</tr>
<tr>
<td>EPA</td>
<td>U.S. Environmental Protection Agency</td>
</tr>
<tr>
<td>FRWLP</td>
<td>Feather River West Levee Project</td>
</tr>
<tr>
<td>General Permit</td>
<td>NPDES California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities</td>
</tr>
<tr>
<td>LRP</td>
<td>Legally Responsible Person</td>
</tr>
<tr>
<td>MS4</td>
<td>Municipal Separate Storm Sewer System</td>
</tr>
<tr>
<td>MSDS</td>
<td>Material Safety Data Sheets</td>
</tr>
<tr>
<td>NAL</td>
<td>Numeric Action Level</td>
</tr>
<tr>
<td>NAL/NEL</td>
<td>Numeric Action Level/ Numeric Effluent Level</td>
</tr>
<tr>
<td>NMFS</td>
<td>National Marine Fisheries Service</td>
</tr>
<tr>
<td>NOAA</td>
<td>National Oceanographic and Atmospheric Administration</td>
</tr>
<tr>
<td>NOI</td>
<td>Notice of Intent</td>
</tr>
<tr>
<td>NOT</td>
<td>Notice of Termination</td>
</tr>
<tr>
<td>PRDs</td>
<td>Permit Registration Documents</td>
</tr>
<tr>
<td>QA/QC</td>
<td>Quality Assurance and Quality Control</td>
</tr>
<tr>
<td>QAPrP</td>
<td>Quality Assurance Program Plan</td>
</tr>
<tr>
<td>QSD</td>
<td>Qualified SWPPP Developer</td>
</tr>
<tr>
<td>QSP</td>
<td>Qualified SWPPP Practitioner</td>
</tr>
<tr>
<td>REAP</td>
<td>Rain Event Action Plan</td>
</tr>
<tr>
<td>Acronym</td>
<td>Definition</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>RWQCB</td>
<td>California Regional Water Quality Control Board</td>
</tr>
<tr>
<td>SBFCA</td>
<td>Sutter Butte Flood Control Agency</td>
</tr>
<tr>
<td>SMARTS</td>
<td>Stormwater Multiple Application and Report Tracking System</td>
</tr>
<tr>
<td>SS</td>
<td>Settleable Solids</td>
</tr>
<tr>
<td>SSC</td>
<td>Suspended Sediment Concentration</td>
</tr>
<tr>
<td>State Water Board</td>
<td>State Water Resources Control Board</td>
</tr>
<tr>
<td>SWAMP</td>
<td>Surface Water Ambient Monitoring program</td>
</tr>
<tr>
<td>TMDL</td>
<td>Total Maximum Daily Load</td>
</tr>
<tr>
<td>TSS</td>
<td>Total Suspended Solids</td>
</tr>
<tr>
<td>UPRR</td>
<td>Union Pacific Railroad</td>
</tr>
<tr>
<td>USACE</td>
<td>U.S. Army Corps of Engineers</td>
</tr>
<tr>
<td>USEPA</td>
<td>United States Environmental Protection Agency</td>
</tr>
<tr>
<td>WDID</td>
<td>Waste Discharge Identification</td>
</tr>
<tr>
<td>YCRW</td>
<td>Yuba City Raw Water intake</td>
</tr>
</tbody>
</table>
Qualified SWPPP Developer

Approval and Certification of the Stormwater Pollution Prevention Plan

Project Name: North Area Streams Robla Creek Woodland Mitigation and Enhancement Project

Project Number/ID: TBD

“This Storm Water Pollution Prevention Plan, including its attachments were prepared under my direction to meet the requirements of the California Construction General Permit (SWRCB Order No. 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-0006-DWQ). I certify that I am a Qualified SWPPP Developer in good standing as of the date signed below.”

QSD Signature

Jim Lorenzen

QSD Name

Construction Manager, WSP

Title and Affiliation

Email

Date

QSD/QSP Certificate No. 00629

QSD Certificate Number

916-416-8202

Telephone Number
## Amendment Log

**Project Name:**  
*North Area Streams Robla Creek Woodland Mitigation and Enhancement Project*

**Project Number/ID**  
*TBD*

<table>
<thead>
<tr>
<th>Amendment No.</th>
<th>Date</th>
<th>Brief Description of Amendment, include section and page number</th>
<th>Prepared and Approved By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 1  SWPPP Requirements

1.1 INTRODUCTION
This SWPPP covers the Robla Creek Woodland Mitigation and Planting Contract work located along Rio Linda Boulevard in Rio Linda.

This SWPPP was prepared using the California Stormwater Quality Association’s (CASQA) SWPPP template, and has incorporate both CASQA and CalTrans Best Management Practices (BMPs).

The preparation of this SWPPP for Risk Level 1 was prompted by a low sediment risk and a low receiving water risk. Receiving water risk is based on whether a project drains to a sediment-sensitive waterbody. A sediment-sensitive waterbody 1) is on the most recent Section 303(d) list for waterbodies impaired for sediment; 2) has a United States Environmental Protection Agency (USEPA)-approved Total Maximum Daily Load (TMDL) implementation plan for sediment; or 3) has the beneficial uses of COLD, SPAWN, and MIGRATORY. In this case, the receiving water body, Robla Creek, is not listed.

This SWPPP is designed to comply with California’s General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) Order No. 2009-0009-DWQ as amended by Order No. 2010-0014-DWQ and 2012-0006-DWQ issued by the State Water Resources Control Board (State Water Board). This SWPPP has been prepared using the SWPPP template provided on the California Stormwater Quality Association (CASQA) Best Management Practice Handbook Portal: Construction (CASQA 2010). In accordance with the General Permit, Section XIV, this SWPPP is designed to address the following:

- Pollutants and their sources, including sources of sediment associated with construction, construction site erosion and other activities associated with construction activity are controlled;

- Where not otherwise required to be under a Regional Water Quality Control Board (Regional Water Board) permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated;

- Site Best Management Practices (BMPs) are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity to the Best Available Technology/Best Control Technology (BAT/BCT) standard;

Calculations, such as the Post-construction Water Balance Calculator, are contained in Appendix A.

1.2 PERMIT REGISTRATION DOCUMENTS
Required Permit Registration Documents (PRDs) will be submitted to the State Water Board via the Stormwater Multiple Application and Report Tracking System (SMARTS) by the Legally Responsible Person (LRP), or other authorized personnel (e.g., the Approved Signatory) under the direction of the LRP. The project-specific PRDs include:
1. Notice of Intent (NOI);
2. Risk Assessment (Construction Site Sediment and Receiving Water Risk Determination);
3. Site Maps;
4. Annual Fee;
5. Signed Certification Statement (LRP Certification is provided electronically with SMARTS PRD submittal); and
6. This SWPPP.

The Site Maps are contained in Appendix B. The remaining PRDs are contained in Appendix C along with the Waste Discharge Identification (WDID) number confirmation.

1.3 SWPPP AVAILABILITY AND IMPLEMENTATION

The discharger will make the SWPPP available at the construction sites during working hours and will be made available upon request by state or municipal inspectors. When the original SWPPP is retained by a field person in a construction vehicle and is not currently at the construction site, current copies of the BMPs and maps/drawings will be left with the field crews and the original SWPPP will be made available upon request (see General Permit Section XIV.C).

The SWPPP will be implemented concurrently with the start of ground disturbing activities.

1.4 SWPPP AMENDMENTS

The SWPPP should be revised when:

- If there is a General Permit violation.
- When there is a reduction or increase in total disturbed acreage (General Permit Section II Part C).
- BMPs do not meet the objectives of reducing or eliminating pollutants in stormwater discharges.

Additionally, the SWPPP will be amended when:

- 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);
- When there is a change in the project duration that changes the project’s risk level; or
- When deemed necessary by the QSD. The QSD has determined that the changes listed in Table 1.1 can be field determined by the QSP. All other changes will be made by the QSD as formal amendments to the SWPPP.

The following items will 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.

Amendments will be logged at the front of the SWPPP and certification kept in Appendix D. The SWPPP text will be revised replaced, and/or hand annotated as necessary to properly convey the amendment. SWPPP amendments must be made by a QSD. The following changes listed in Table 1.1 have been designated by the QSD as “to be field determined” and constitute minor changes that the QSP may implement based on field conditions.

Table 1.1 List of Changes to be Field-Determined

<table>
<thead>
<tr>
<th>Candidate Changes for Field Location or Determination by QSP(1)</th>
<th>Check Changes that can be Modified, Field-Located, or Field Determined by QSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase quantity of an erosion or sediment control measure</td>
<td>X</td>
</tr>
<tr>
<td>Relocate/add stockpiles or stored materials</td>
<td>X</td>
</tr>
<tr>
<td>Relocate or add toilets</td>
<td>X</td>
</tr>
<tr>
<td>Relocate vehicle storage and/or fueling locations</td>
<td>X</td>
</tr>
<tr>
<td>Relocate areas for waste storage</td>
<td>X</td>
</tr>
<tr>
<td>Relocate water storage and/or water transfer location</td>
<td>X</td>
</tr>
<tr>
<td>Changes to access points (entrance/exists)</td>
<td>X</td>
</tr>
<tr>
<td>Change type of erosion or sediment control measure</td>
<td>X</td>
</tr>
<tr>
<td>Change in location of erosion or sediment control measure</td>
<td>X</td>
</tr>
<tr>
<td>Minor changes to schedule or phases</td>
<td>X</td>
</tr>
</tbody>
</table>

(1) Any field changes not identified for field location or field determination by QSP must be approved by QSD

1.5 RETENTION OF RECORDS

Paper or electronic records of documents required by this SWPPP will be retained for a minimum of three years from the date generated or date submitted, whichever is later, for the following items:

- Submitted Changes to PRDs (Appendix E)
- Material Safety Data Sheets (MSDS)
- Documentation of training activities (Appendix K)
- Storm monitoring event forms (Attachments 1–3; Appendix I, J)

These records will be available at the site until construction is complete. Records assisting in the determination of compliance with the General Permit will be made available within a reasonable time to the Regional Water Board, State Water Board, and U.S. Environmental Protection Agency (EPA) upon request. Requests by the Regional Water Board for retention of records for a period longer than three years will be adhered to.

1.6 REQUIRED NON-COMPLIANCE REPORTING

If a discharge violation occurs, the QSP will immediately notify the LRP. The LRP will file a violation report electronically to the Central Valley Regional Water Quality Control Board (Regional Water Board) within 30 days of identification of non-compliance using SMARTS, unless other laws and regulations may require notifications sooner depending on the nature of the
release from the construction site. Corrective measures will be implemented immediately following the discharge or written notice of non-compliance from the Regional Water Board. The report to the LRP and to the Regional Water Board will contain the following items:

- The date, time, location, nature of operation and type of unauthorized discharge.
- 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.

1.7 ANNUAL REPORT

The General Permit requires that permittees prepare, certify, and electronically submit an Annual Report for all sites enrolled from more than one continuous three-month period, no later than September 1st of each year. Reporting requirements are identified in Section XVI of the General Permit. Annual reports will be filed in SMARTS and in accordance with information required by the on-line forms.

1.8 CHANGES TO PERMIT COVERAGE

The General Permit allows for the reduction or increase of the total acreage covered under the General Permit when: a portion of the project is complete and/or conditions for termination of coverage have been met; when ownership of a portion of the project is purchased by a different entity; or when new acreage is added to the project.

Modified PRDs will be filed electronically within 30 days of a reduction or increase in total disturbed area if a change in permit covered acreage is to be sought. The SWPPP will be modified appropriately, will be logged at the front of the SWPPP and cetrification of SWPPP amendments are to be kept in Appendix D. Updated PRDs submitted electronically via SMARTS can be found in Appendix E.

1.9 NOTICE OF TERMINATION

A Notice of Termination (NOT) must be submitted electronically by the LRP via SMARTS to terminate coverage under the General Permit. The NOT must include a final Site Map and representative photographs of the project site that demonstrate final stabilization has been achieved. The NOT will be submitted within 90 days of completion of construction. The Regional Water Board will consider a construction site complete when the conditions of the General Permit, Section II.D have been met.
This page intentionally left blank.
Section 2  Project Information

2.1  SITE AND PROJECT SITE DESCRIPTIONS

2.1.1  General Site Description

The areas covered by this SWPPP comprise approximately 6 acres. The land is currently a fallow pasture and is essentially flat with a low berm adjacent to Robla Creek.

2.1.2  Hydrology and Water Quality

Precipitation in the vicinity occurs mostly as rain and the mean annual precipitation is 20.0 inches. Approximately 95% of the annual rainfall occurs between October and April.

The site is graded as a pasture and has a low berm along Robla Creek, preventing drainage from leaving the site.

There are no impervious areas on the site.

2.1.3  Project Description

The project will convert the existing pasture into a riparian woodland with native perennial grassland.

Materials imported to the site would include irrigation and planting materials.

Staging areas will be established only within the project footprint, the exact locations will be determined by the contractor. Staging areas will be used for staging construction activities and to provide space to house construction equipment and materials, employee parking, and other uses needed for construction.

Staging, access, and other temporary construction areas will be located away from wetlands, woody vegetated areas, wildlife species habitat, known cultural resources, and other sensitive areas and will be limited to disturbed or ruderal vegetation.

2.1.4  Developed Site Condition

Post-construction surface runoff will not appreciably change as a result of the project. Site grading retains water, where it is expected to infiltrate into the soil.

There will be no changes to post-construction drainage patterns. Table 2.1 provides information on the percent impervious area and the estimated Rational Method runoff coefficient before and after construction.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated percent impervious before construction</td>
<td>0%</td>
</tr>
<tr>
<td>Rational Method runoff coefficient before construction</td>
<td>0.20</td>
</tr>
<tr>
<td>Estimated percent impervious after construction</td>
<td>2%</td>
</tr>
<tr>
<td>Rational Method runoff coefficient after construction</td>
<td>0.20</td>
</tr>
</tbody>
</table>
2.2 PERMITS AND GOVERNING DOCUMENTS

In addition to the General Permit, the following is a partial list of permits pertaining to sensitive areas and water quality that are expected for the project:

- California Department of Fish and Wildlife Section 1600 Streambed Alteration Agreement
- California Regional Water Quality Control Board (RWQCB) Central Valley Region Section 401 Water Quality Certification
- National Marine Fisheries Service (NMFS) Biological Opinion
- United States Army Corps of Engineers (USACE) Section 404 Nationwide Permit 12
- Central Valley Flood Protection Board permit
- USACE Section 408 permit for improvements in or over navigable waters

In addition to the approved permits and documents, the following documents have been taken into account while preparing this SWPPP:

- Central Valley Water Quality Control Board’s Water Quality Control Plan (Basin Plan)
- State Water Board’s 2008–2010 Clean Water Act Section 303(d) List of Water Quality Limited Segments
- State Water Board’s NPDES California General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (General Permit)
- California Stormwater Quality Association’s (CASQA) Stormwater BMP Handbook
- California Department of Transportation (Caltrans) Construction Site BMPs Manual
- Project documents, plans and specifications

2.3 STORMWATER RUN-ON AND RUN-OFF

At the construction areas, there will be no run-on from offsite areas because the site slope configuration is essentially flat. Overall, no runoff is expected to leave the project.

As shown in Table 2.1, the anticipated run-off coefficient for the construction areas is approximately 0.20. One coefficient is considered to be applicable because of the soils (i.e., generally loam and silty loam) are generally uniform, the grades are consistently flat throughout the site, and the dominant vegetative cover is annual grasses.

2.4 FINDINGS OF THE CONSTRUCTION SITES SEDIMENT AND RECEIVING WATER RISK DETERMINATION

A construction site risk assessment has been performed and the result is Risk Level 1.

The risk level was determined for the site based on the procedure described in the General Permit and based on project duration, location, proximity to impaired receiving waters, topography, and soil characteristics. Risk Level 1 was determined based on the fact that sediment risk is low and receiving water risk (Robla Creek) is not listed as 303d impacted water body. A copy of the Risk Level determination that will be submitted in SMARTS with the PRDs is included in Appendix C.
Tables 2.2 and 2.3 summarize the sediment and receiving water risk factors and document the sources of information used to derive the factors.

### Table 2.2 Summary of Sediment Risk

<table>
<thead>
<tr>
<th>RUSLE Factor</th>
<th>Value</th>
<th>Method for Establishing Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>40</td>
<td>Isoerodent Map</td>
</tr>
<tr>
<td>K</td>
<td>0.35</td>
<td>Nomograph Method</td>
</tr>
<tr>
<td>LS</td>
<td>.43</td>
<td>Field observations and LS Table from Sediment Risk Factor Worksheet in General Permit.</td>
</tr>
</tbody>
</table>

| Total Predicted Sediment Loss (tons/acre) | 6.02 |

**Overall Sediment Risk**
- Low Sediment Risk < 15 tons/acre
- Medium Sediment Risk >= 15 and < 75 tons/acre
- High Sediment Risk >= 75 tons/acre

(If yes is selected for any option the Receiving Water Risk is High)

### Table 2.3 Summary of Receiving Water Risk

<table>
<thead>
<tr>
<th>Receiving Water Name</th>
<th>303(d) Listed for Sediment Related Pollutant(1)</th>
<th>TMDL for Sediment Related Pollutant(1)</th>
<th>Beneficial Uses of COLD, SPAWN, and MIGRATORY(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robla Creek</td>
<td>☐ Yes ☒ No</td>
<td>☐ Yes ☒ No</td>
<td>☐ Yes ☒ No</td>
</tr>
</tbody>
</table>

| Overall Receiving Water Risk | ☒ Low |

(1) If yes is selected for any option the Receiving Water Risk is High

Risk Level 1 sites are subject the narrative effluent limitations. The narrative effluent limitations require stormwater discharges associated with construction activity to minimize or prevent pollutants in stormwater and authorized non-stormwater through the use of control structures and BMPs.

### 2.5 CONSTRUCTION SCHEDULE

The project area’s sediment risk was determined based on construction activities beginning in September 2017 and planting (stabilization) completed by November 30, 2017.

Modification or extension of the schedule (start and end dates) may affect the sediment risk and risk level determinations. The LRP will contact the QSD if the schedule changes during construction to address potential impacts on the SWPPP. The preliminary construction schedule is found in Appendix F.

### 2.6 POTENTIAL CONSTRUCTION ACTIVITY AND POLLUTANT SOURCES

Appendix G includes a list of construction activities and associated materials that are anticipated to be used onsite. These activities and associated materials will or could potentially contribute pollutants, other than sediment, to stormwater runoff. These construction activities and materials include the following:

- Site preparation
- Vehicle and equipment use
• Solid waste
• Vegetation management
• Sanitary waste
• Liquid waste
• Plant Materials

The anticipated activities and associated pollutants were used in Section 3 to select the BMPs for the project. Locations of anticipated pollutants and associated BMPs are shown on Figures 3a-i in Appendix B.

For sampling requirements for non-visible pollutants associated with construction activity, please refer to Section 7.7.1. For a full and complete list of onsite pollutants, refer to the Material Safety Data Sheets (MSDS), which are retained onsite.

2.7 IDENTIFICATION OF NON-STORMWATER DISCHARGES

Non-stormwater discharges consist of discharges which do not originate from precipitation events. The General Permit provides allowances for specified non-stormwater discharges that do not cause erosion or carry other pollutants.

Non-stormwater discharges into storm drainage systems or waterways, which are not authorized under the General Permit and listed in the SWPPP, or authorized under a separate NPDES permit, are prohibited.

Non-stormwater discharges that are authorized from this project site include the following:

• Watering for dust control

These authorized non-stormwater discharges will be managed with the stormwater and non-stormwater BMPs described in Section 3 of this SWPPP and will be minimized by the contractor.

Activities at the site that may result in unauthorized non-stormwater discharges include:

• None

Measures will be taken, including the implementation of appropriate BMPs, to ensure that unauthorized discharges are eliminated, controlled, disposed, or treated on-site.

Discharges of construction materials and wastes, such as fuel or paint, resulting from dumping, spills, or direct contact with rainwater or stormwater runoff, are also prohibited.

The following discharge(s) have been authorized by (a) regional NPDES permit(s):

• None

2.8 REQUIRED SITE MAP INFORMATION

The maps showing the project site location, surface water boundaries, geographic features, construction site perimeter, general topography, and other requirements identified in Attachment B of the General Permit are contained in Appendix B. Table 2.5 identifies Map or Sheet Numbers where required elements are illustrated.
<table>
<thead>
<tr>
<th>Included on Map/Plan Sheet No.</th>
<th>Required Element</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix B, Figure 1</td>
<td>The project site’s vicinity</td>
</tr>
<tr>
<td>Appendix B, Figure 1</td>
<td>The project site’s location</td>
</tr>
<tr>
<td>Appendix B, Figure 2</td>
<td>Work Area BMP</td>
</tr>
<tr>
<td>Described in Section 2.1.4 and 2.3</td>
<td>Drainage areas</td>
</tr>
<tr>
<td>Appendix B, Figure 2</td>
<td>Areas of soil disturbance (temporary or permanent)</td>
</tr>
<tr>
<td>Appendix B, Figures 2</td>
<td>Active areas of soil disturbance (cut or fill)</td>
</tr>
<tr>
<td>Appendix B, Figures 2</td>
<td>Locations of runoff management BMPs</td>
</tr>
<tr>
<td>Appendix B, Figures 2</td>
<td>Locations of erosion control BMPs</td>
</tr>
<tr>
<td>Appendix B, Figures 2</td>
<td>Locations of sediment control BMPs</td>
</tr>
<tr>
<td>Appendix B, Figures 2</td>
<td>Delineated wetland or waterbody/waterway</td>
</tr>
<tr>
<td>Appendix B, Figures 2</td>
<td>Entrances and exits</td>
</tr>
</tbody>
</table>
Section 3  Best Management Practices

3.1 SCHEDULE FOR BMP IMPLEMENTATION

BMPs for erosion and sediment control will be implemented early in the project, recognizing their importance during initial grading operations. As evidenced in the construction schedule details listed in Appendix F, perimeter control installation is among the earliest activities, and will be implemented before any significant site clearing or grading activities. Vehicle fuel and equipment storage are added in parallel with development of construction support facilities in the contractor’s yard/staging areas. Table 3.1 provides the schedule for implementation of all project BMPs.

Table 3.1  BMP Implementation Schedule

<table>
<thead>
<tr>
<th>BMP</th>
<th>Initial Implementation Timing</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC-1, Scheduling</td>
<td>Prior to Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>EC-2, Preservation of Existing Vegetation</td>
<td>Start of Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>EC-3, Hydraulic Mulch</td>
<td>After Grading</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>EC-4, Hydroseeding</td>
<td>After Grading</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>EC-5, Soil Binders</td>
<td>After Grading</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>EC-6, Straw Mulch</td>
<td>After Grading</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>EC-10, Velocity Dissipation Devices</td>
<td>n/a</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>EC-15, Soil Preparation/Roughening</td>
<td>After Finish Grading</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>EC-16, Non-Vegetative Soil Stabilization</td>
<td>After Finish Grading</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>SE-1, Silt Fence</td>
<td>Start of Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>SE-5, Fiber Rolls/ Caltrans SC-5</td>
<td>Start of Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>SE-6, Gravel Bag Berm</td>
<td>n/a</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>SE-7, Street Sweeping and Vacuuming</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>SE-10, Storm Drain Inlet Protection</td>
<td>n/a</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>TC-1, Stabilized Construction Entrance/Exit</td>
<td>Start of Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>TC-2, Stabilized Construction Roadway</td>
<td>Start of Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WE-1, Wind Erosion Control</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-1, Material Delivery and Storage</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-2, Material Use</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-3, Stockpile Management</td>
<td>During Grading</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-4, Spill Preservation and Control</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-5, Solid Waste Management</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-6, Hazardous Waste Management</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-7, Contaminated Soil Management</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-8, Concrete Waste Management</td>
<td>During Culvert Installation</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-9, Sanitary-Septic Waste Management</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>WM-10, Liquid Waste Management</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>NS-1, Water Conservation Practices</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
</tbody>
</table>
## 3.2 EROSION AND SEDIMENT CONTROL

Erosion and sediment control measures are required by the General Permit to provide effective reduction or elimination of sediment-related pollutants in stormwater discharges and authorized non-stormwater discharges from the site. Applicable BMPs are identified in this section for erosion control, sediment control, tracking control, and wind erosion control.

Sufficient quantities of temporary erosion and sediment control materials (e.g., fiber rolls, straw, bags to prepare gravel bags, plastic sheeting) will be maintained onsite throughout the duration of the project, to allow implementation of temporary sediment controls in the event of predicted rain, and for rapid response to failures or emergencies, in conformance with other General Permit requirements and as described in this SWPPP. This includes implementation requirements for active areas and non-active areas before the onset of rain.

### 3.2.1 Erosion Control

Erosion control, also referred to as soil stabilization, consists of source control measures that are designed to prevent soil particles from detaching and becoming transported in stormwater runoff. Erosion control BMPs protect the soil surface by covering and/or binding soil particles.

To reduce erosion, project construction will minimize land disturbance by limiting construction activities only to areas that are essential to the installation and operation of the project.

Clearing and grubbing and site grading will be conducted as needed. Excavated soils will be reused during construction at the site. All excess soils or unsuitable materials will be hauled and disposed offsite by the contractor.

BMPs will be implemented to follow the progress of grading and construction. As the locations of soil disturbances change, erosion and sedimentation controls will be adjusted accordingly to control stormwater runoff at the project sites. BMPs will be in place throughout the entire construction period.

Inactive areas will be stabilized or otherwise protected from rainfall as soon as feasible after construction in a given area is complete and no later than 14 days after construction in that part of the site has temporarily or permanently ceased.

<table>
<thead>
<tr>
<th>BMP</th>
<th>Initial Implementation Timing</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS-2, Dewatering Operations</td>
<td>During Dewatering</td>
<td>When Required</td>
</tr>
<tr>
<td>NS-3, Paving and Grinding Operations</td>
<td>n/a</td>
<td>When Required</td>
</tr>
<tr>
<td>NS-5, Clear Water Diversion</td>
<td>During Construction</td>
<td>When Required</td>
</tr>
<tr>
<td>NS-6, Illicit Connection/ Discharge</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>NS-9, Vehicle and Equipment Disposal</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>NS-10, Vehicle and Equipment Maintenance</td>
<td>During Construction</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>NS-11, Pile Driving Operations</td>
<td>During Grading</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>NS-15, Demolition Adjacent to Water</td>
<td>During Demolition</td>
<td>Entirety of Project</td>
</tr>
<tr>
<td>NS-16, Temporary Batch Plants</td>
<td>During Batch Plant Use</td>
<td>Entirety of Batch Plant Use</td>
</tr>
</tbody>
</table>
Maintenance of erosion control BMPs will be according to measures outlined in the applicable BMP fact sheets provided in Appendix H.

Site specific BMPs are described in this section and are shown in Figures 3a-i of Appendix B. Fact Sheets for erosion control BMPs are provided in Appendix H.

The following approaches will be to provide effective temporary and final erosion control during construction:

1. The area of soil disturbing operations will be controlled such that the contractor is able to implement erosion control BMPs quickly and effectively.
2. Stabilize inactive areas within 14 days of cessation of construction activities or sooner if stipulated by local requirements.
3. Control erosion in concentrated flow paths by applying erosion control blankets, gravel bag berm, fiber roll or alternate methods.
4. Prior to the completion of construction, apply permanent erosion control to remaining disturbed soil areas.

The following erosion control BMP selection table (Table 3.2) indicates the BMPs that will be implemented to control erosion on the construction site.

<table>
<thead>
<tr>
<th>CASQA Fact Sheet</th>
<th>BMP Name</th>
<th>Meets a Minimum Requirement(1)</th>
<th>BMP Used (YES)</th>
<th>If Not Used, State Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC-1</td>
<td>Scheduling</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>EC-2</td>
<td>Preservation of Existing Vegetation</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>EC-3</td>
<td>Hydraulic Mulch</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>EC-4</td>
<td>Hydroseeding</td>
<td>✓</td>
<td>✓</td>
<td>Site is stabilized by planting</td>
</tr>
<tr>
<td>EC-5</td>
<td>Soil Binders</td>
<td>✓</td>
<td>✓</td>
<td>Site is stabilized by planting</td>
</tr>
<tr>
<td>EC-6</td>
<td>Straw Mulch</td>
<td>✓</td>
<td>✓</td>
<td>Site is stabilized by planting</td>
</tr>
<tr>
<td>EC-7</td>
<td>Geotextiles and Mats</td>
<td>✓</td>
<td>✓</td>
<td>Erosion control achieved through permanent site planting</td>
</tr>
<tr>
<td>EC-8</td>
<td>Wood Mulching</td>
<td>✓</td>
<td>✓</td>
<td>Site to be planted in grasses</td>
</tr>
<tr>
<td>EC-9</td>
<td>Earth Dike and Drainage Swales</td>
<td>✓</td>
<td>✓</td>
<td>Not applicable to site characteristics.</td>
</tr>
<tr>
<td>EC-10</td>
<td>Velocity Dissipation Devices</td>
<td>✓</td>
<td></td>
<td>Not applicable to site characteristics.</td>
</tr>
<tr>
<td>EC-11</td>
<td>Slope Drains</td>
<td>✓</td>
<td></td>
<td>Not required for project.</td>
</tr>
<tr>
<td>EC-12</td>
<td>Stream Bank and Slope Stabilization</td>
<td>✓</td>
<td></td>
<td>No stream banks disturbed.</td>
</tr>
<tr>
<td>EC-14</td>
<td>Compost Blankets</td>
<td>✓</td>
<td>✓</td>
<td>Not appropriate for the project site.</td>
</tr>
<tr>
<td>EC-15</td>
<td>Soil Preparation-Roughening</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC-16</td>
<td>Non-Vegetated Soil Stabilization</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WE-1</td>
<td>Wind Erosion Control</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Alternate BMPs Used: If used, state reason:

(1) Applicability to a specific project activity will be determined by the QSD.
(2) The QSD will ensure implementation of one of the minimum measures listed or a combination thereof to achieve and maintain the Risk Level requirements.
(3) Run-on from offsite will be directed away from all disturbed areas. Diversion of offsite flows may require design/analysis by a licensed civil engineer and/or additional environmental permitting.
These erosion control BMPs will be implemented in conformance with the following guidelines and as outlined in the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, BMP map (Figure 2) in Appendix B will prevail over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. Site specific details in the BMP maps will prevail over standard details included in the BMP maps. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

3.2.1.1 Scheduling

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 soil preparation and planting. The construction schedule will be arranged as much as practical to leave existing vegetation undisturbed until immediately prior to grading.

3.2.1.2 Preservation of Existing Vegetation

Existing vegetation will be preserved to the greatest extent possible; contractor will replace or restore inadvertently damaged vegetation that is outside the work area.

3.2.1.3 Hydraulic Mulch

Hydraulic mulch will be applied, if necessary.

3.2.1.4 Hydroseeding

Hydroseeding will not be used. Project plantings cover this requirement.

3.2.1.5 Soil Binders

As stated in the General Permit, effective soil cover shall be provided for inactive areas and all finished slopes and utility backfill areas. Inactive areas are defined as areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days. Soil binders are one way to stabilize rough-graded soils and soil stockpiles that will be inactive for a short period of time.

3.2.1.6 Straw Mulch

Straw Mulch will not be used. Project plantings cover this requirement.

3.2.1.7 Velocity Dissipation Devices

Not applicable to project conditions.

3.2.1.8 Soil Preparation/Roughening

After the initial soil preparation operations, soil will be graded to facilitate plant growth.


3.2.1.9 **Non-Vegetative Soil Stabilization**

Not applicable to project conditions.

3.2.1.10 **Wind Erosion Control**

The contractor will apply water as necessary to prevent or alleviate nuisance dust generated by construction activities. Water and/or soil binders are suitable for use in wind erosion control along unpaved roads, soil/debris storage piles, and areas with unstabilized soil. Water or soil binders (as appropriate) will be applied to unpaved areas periodically throughout the day on an as-needed basis. The method of stabilization will be selected based on the discretion of the contractor and the QSP.

3.2.2 **Sediment Control**

Sediment control measures are temporary or permanent structural measures that are intended to complement the selected erosion control measures and reduce sediment movement within and discharges from active construction areas. Sediment control measures are designed to intercept and settle out soil particles that have been detached and transported by the force of water.

BMPs will be deployed in a sequence to follow the progress of soil preparation and planting. As the locations of soil disturbance change, sedimentation controls will be adjusted accordingly to control stormwater runoff at the project site.

Maintenance of sediment control BMPs will be according to measures outlined in the applicable CASQA Handbook BMP Fact Sheets (2009).

Site specific BMPs are described in this section and are shown in Figure 2 of Appendix B. The following general sediment control measures may be used during various phases of the project:

The following sediment control BMP selection table (Table 3.3) indicates the BMPs that will be implemented to control sediment on the construction site. Fact Sheets for temporary sediment control BMPs are provided in Appendix H.

<table>
<thead>
<tr>
<th>CASQA Fact Sheet</th>
<th>BMP Name</th>
<th>Meets a Minimum Requirement(1)</th>
<th>BMP Used</th>
<th>If Not Used, State Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE-1</td>
<td>Silt Fence</td>
<td></td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>SE-2</td>
<td>Sediment Basin</td>
<td></td>
<td>YES</td>
<td>Not appropriate to the project.</td>
</tr>
<tr>
<td>SE-3</td>
<td>Sediment Trap</td>
<td></td>
<td>YES</td>
<td>Not appropriate to the project.</td>
</tr>
<tr>
<td>SE-4</td>
<td>Check Dams</td>
<td></td>
<td>YES</td>
<td>There are no streams or channels onsite to necessitate check dams.</td>
</tr>
<tr>
<td>SE-5</td>
<td>Fiber Rolls</td>
<td>✓(2)(3)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>SE-6</td>
<td>Gravel Bag Berm</td>
<td>✓(3)</td>
<td>✓</td>
<td>Not appropriate to the project</td>
</tr>
<tr>
<td>SE-7</td>
<td>Street Sweeping and Vacuuming</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>SE-8</td>
<td>Sandbag Barrier</td>
<td></td>
<td>YES</td>
<td>Temporary fiber rolls used.</td>
</tr>
<tr>
<td>SE-9</td>
<td>Straw Bale Barrier</td>
<td></td>
<td>YES</td>
<td>Temporary fiber rolls used.</td>
</tr>
</tbody>
</table>
### CASQA Fact Sheet BMP Name | Meets a Minimum Requirement | BMP Used | If Not Used, State Reason
---|---|---|---
SE-10 | Storm Drain Inlet Protection | ✓ | ✓ | Not applicable to Project
SE-11 | ATS | ✓ | | Not required for the project.
SE-12 | Temporary Silt Dike | ✓ | ✓ | Temporary fiber rolls used.
SE-13 | Compost Sock and Berm | ✓(3) | ✓ | Fiber rolls used.
SE-14 | Biofilter Bags | ✓(3) | ✓ | Storm Drain Inlet Protection used
TC-1 | Stabilized Construction Entrance and Exit | ✓ | ✓ |  
TC-2 | Stabilized Construction Roadway | ✓ | | Not appropriate to the project.
TC-3 | Entrance Outlet Tire Wash | ✓ | | Construction vehicles will be stationed onsite and will not require tire wash.

Alternate BMPs Used:

If used, state reason:

---

(1) Applicability to a specific project will be determined by the QSD.
(2) The QSD will ensure implementation of one of the minimum measures listed or a combination thereof to achieve and maintain the Risk Level requirements.
(3) Risk Levels 2 & 3 will provide linear sediment control measures along toe of slope, face of slope, and at the grade breaks of exposed slopes.

These temporary sediment control BMPs will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, Figure 2 will prevail over the narrative in the body of the SWPPP and guidance in the BMP Fact Sheets. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

#### 3.2.2.1 Silt Fence

Silt fencing will be installed where shown in the SWPPP. Silt fencing should be repaired or replaced as required to maintain its function. Accumulated sediment behind the silt fence should be removed and properly disposed of when the sediment reaches two-thirds the height of the fencing fabric. At the direction of the QSP, the contractor will remove the silt fencing from any given area in which the area upslope of the silt fence has met the General Permit site stabilization criteria. Removal of the silt fencing will involve removal of stakes and all fabric material, including the material within the trench. Once the fabric has been removed, the contractor should tamp loosened soil back into the trench.

#### 3.2.2.2 Fiber Rolls

Fiber rolls will be installed where shown in the SWPPP

Fiber rolls should be repaired or replaced as required to maintain their function. Accumulated sediment behind fiber rolls should be removed and properly disposed of when the sediment reaches two-thirds the height of the barrier.
3.2.2.3  Gravel Bag Berms
Not applicable.

3.2.2.4  Street Sweeping and Vacuuming
Road sweeping and vacuuming will be conducted as necessary to keep paved streets clear of
tracked material and debris from the project site. This BMP applies to paved roads used to access
the site by construction personnel. Washing of sediment tracked onto streets into ditches is
prohibited.

3.2.2.5  Storm Drain Inlet Protection
Not applicable.

3.2.2.6  Stabilized Construction Entrance and Exit
Stabilized construction entrances/exits will be installed reduce tracking of sediment as a result of
construction traffic. At the exit, a rocked area approximately 20’ wide x 100’ long will be placed
for soil and debris to be collected from vehicles leaving the project site. Alternative
configurations may be proposed by the contractor and approved by the QSP.

The entrance/exit will be designed and graded to prevent runoff from leaving the site. The
entrance will be flared where it meets access roads to provide adequate turning radius.

3.2.2.7  Stabilized Construction Roadway
A stabilized construction roadway may be installed, and existing roads will be maintained to
reduce tracking of sediment as a result of construction traffic. This BMP will be used in
conjunction with Street Sweeping and Vacuuming, and Stabilized Construction Entrance/Exits as
necessary to prevent tracking onto paved roads.

3.2.3  Non-Stormwater Control Measures
Non-stormwater discharges into storm drainage systems or waterways, which are not authorized
under the General Permit, are prohibited. Non-stormwater discharges for which a separate
NPDES permit is required by the local Regional Water Board are prohibited unless coverage
under the separate NPDES permit has been obtained for the discharge. The selection of non-
stormwater BMPs is based on the list of construction activities with a potential for non-
stormwater discharges identified in Section 2.7 of this SWPPP.

The project will use some hazardous materials during construction, such as vehicle fluids,
including oil, grease, petroleum, and coolants, paints, solvents and curing compounds. The
project will comply with good engineering practices, applicable laws and regulations for the
storage and use of these materials to minimize the potential for a release of hazardous materials,
and will conduct emergency response planning to address public health concerns regarding
hazardous materials use and storage.

Vehicle and equipment fueling will occur wherever necessary within the project site. Fueling
areas will be contained to prevent from spilling or leaking. Drip pans or plastic sheeting will be
placed under all vehicles and equipment which will be idle for more than one hour. Fuel trucks
will be used for all onsite fueling. Drip pans will also be used during fueling. Each fuel truck will be equipped with absorbent spill cleanup materials and a spill containment boom at all times. All highway-legal equipment will be refueled offsite at gas stations.

Drip pans or absorbent pads will be used for vehicle and equipment maintenance activities that involve grease, oil, solvents, or other vehicle fluids. Vehicles and equipment will be inspected daily and before coming onsite for signs of leaks and be on a regular maintenance schedule.

Site specific BMPs are described in this section and are shown in Figure 2 of Appendix B. Appendix H contains BMP Fact Sheets with applicable detailed descriptions of suitability, implementation, and inspection and maintenance measures.

The following non-stormwater control BMP selection table (Table 3.4) indicates the BMPs that will be implemented to control sediment on the construction sites.
<table>
<thead>
<tr>
<th>CASQA Fact Sheet</th>
<th>BMP Name</th>
<th>Meets a Minimum Requirement</th>
<th>BMP Used</th>
<th>If Not Used, State Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>YES</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>NS-1</td>
<td>Water Conservation Practices</td>
<td>![ ]</td>
<td>![ ]</td>
<td></td>
</tr>
<tr>
<td>NS-2</td>
<td>Dewatering Operations</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No dewatering expected</td>
</tr>
<tr>
<td>NS-3</td>
<td>Paving and Grinding Operation</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No Paving or Grinding</td>
</tr>
<tr>
<td>NS-4</td>
<td>Temporary Stream Crossing</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No stream crossing</td>
</tr>
<tr>
<td>NS-5</td>
<td>Clear Water Diversion</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No diversion expected</td>
</tr>
<tr>
<td>NS-6</td>
<td>Illicit Connection/Discharge</td>
<td>![ ]</td>
<td>![ ]</td>
<td></td>
</tr>
<tr>
<td>NS-7</td>
<td>Potable Water Irrigation Discharge Detection</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No irrigation system required.</td>
</tr>
<tr>
<td>NS-8</td>
<td>Vehicle and Equipment Cleaning</td>
<td>![ ]</td>
<td>![ ]</td>
<td>Vehicles will be taken offsite for cleaning</td>
</tr>
<tr>
<td>NS-9</td>
<td>Vehicle and Equipment Fueling</td>
<td>![ ]</td>
<td>![ ]</td>
<td></td>
</tr>
<tr>
<td>NS-10</td>
<td>Vehicle and Equipment Maintenance</td>
<td>![ ]</td>
<td>![ ]</td>
<td></td>
</tr>
<tr>
<td>NS-11</td>
<td>Pile Driving Operation</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No Pile Driving</td>
</tr>
<tr>
<td>NS-12</td>
<td>Concrete Curing</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No Concrete Curing</td>
</tr>
<tr>
<td>NS-13</td>
<td>Concrete Finishing</td>
<td>![ ]</td>
<td>![ ]</td>
<td>Not required on the project.</td>
</tr>
<tr>
<td>NS-14</td>
<td>Material and Equipment Use Over Water</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No over water activities.</td>
</tr>
<tr>
<td>NS-15</td>
<td>Demolition Adjacent to Water</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No Demo</td>
</tr>
<tr>
<td>NS-16</td>
<td>Temporary Batch Plants</td>
<td>![ ]</td>
<td>![ ]</td>
<td>No Batch Plants</td>
</tr>
</tbody>
</table>

Alternate BMPs Used: If used, state reason:

(1) Applicability to a specific project will be determined by the QSD

Non-stormwater BMPs will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, the BMP maps (Figure 2 in Appendix B) will prevail over the narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

### 3.2.3.1 Water Conservation Practices

Water application rates will be minimized as necessary to prevent runoff and ponding water. Water conservation practices are activities that use water during the construction of a project in a manner that avoids causing erosion and the transport of pollutants offsite.
3.2.3.2 Dewatering Operations

Dewatering of the construction area is not expected to be required during project construction. However, if it becomes necessary, it could result in the release of contaminants to surface or ground waters.

No water from dewatering operations will be discharged to directly to the Robla Creek, ditches, canals, wetlands, or other water bodies without first being treated to remove sediment.

3.2.3.3 Paving and Grinding Operations

No paving or grinding operations.

3.2.3.4 Clear Water Diversion

Clear water diversion consists of a system of structures and measures that intercept clear surface water runoff upstream of a work area, transport it around the work area, and discharge it downstream with minimal water quality degradation from either the project construction operations or the construction of the diversion. Clear water diversions should not be necessary.

3.2.3.5 Illicit Connection/Discharge

The contractor will implement BMP NS-6, Illicit Connection/Discharge throughout the duration of the project. Illicit connection/discharge and reporting is applicable any time an illicit connection or discharge is discovered or illegally dumped material is found on the construction site.

3.2.3.6 Vehicle and Equipment Fueling

Vehicle equipment fueling procedures and practices are intended to prevent fuel spills and leaks, and reduce or eliminate contamination of stormwater. This can be accomplished by fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors in proper fueling procedure. Drip pans or plastic sheeting will be placed under all vehicles and equipment which will be idle for more than one hour. The contractor will implement this BMP at all onsite locations where fueling is taking place. Any highway legal vehicle will be fueled offsite.

3.2.3.7 Vehicle and Equipment Maintenance

The contractor will prevent or reduce the contamination of stormwater resulting from vehicle and equipment maintenance by running a “dry and clean site.” Vehicle and equipment maintenance will be performed only in staging areas. During vehicle and equipment maintenance, contractor will provide cover for materials stored outside, check for leaks and spills, and contain and clean spills immediately.
3.2.4 Materials Management and Waste Management

Materials and waste management practices 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 depend upon the particular type of construction activity 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 soil binders for temporary stabilization.

The site specific BMPs described in this section will be implemented as shown in Figure 2 or as directed by the QSP. Fact Sheets for materials and waste management BMPs are provided in Appendix H.

Materials and waste management pollution control BMPs will be implemented to minimize stormwater contact with construction materials, wastes and service areas; and to prevent materials and wastes from being discharged off-site. The primary mechanisms for stormwater contact that will be addressed include:

- Direct contact with precipitation
- Contact with stormwater run-on and runoff
- Wind dispersion of loose materials
- 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, which can leach pollutants into stormwater.

A list of construction activities is provided in Section 2.6. Table 3.5 indicates the BMPs that will be implemented to handle materials and control construction site wastes associated with these construction activities.

Table 3.5  Temporary Materials Management BMPs

<table>
<thead>
<tr>
<th>CASQA Fact Sheet</th>
<th>BMP Name</th>
<th>Meets a Minimum Requirement(1)</th>
<th>BMP Used</th>
<th>If Not Used, State Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>WM-01</td>
<td>Material Delivery and Storage</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WM-02</td>
<td>Material Use</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WM-03</td>
<td>Stockpile Management</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WM-04</td>
<td>Spill Preservation and Control</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WM-05</td>
<td>Solid Waste Management</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WM-06</td>
<td>Hazardous Waste Management</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WM-07</td>
<td>Contaminated Soil Management</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>WM-08</td>
<td>Concrete Waste</td>
<td>✓</td>
<td>✓</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Material management BMPs will be implemented in conformance with the following guidelines and in accordance with the BMP Fact Sheets provided in Appendix H. If there is a conflict between documents, the BMP maps (Figure 2 in Appendix B) will prevail over narrative in the body of the SWPPP or guidance in the BMP Fact Sheets. The narrative in the body of the SWPPP prevails over guidance in the BMP Fact Sheets.

### 3.2.4.1 Material Delivery and Storage

Prevent, reduce, or eliminate the discharge of pollutants from material delivery and storage to the stormwater system or watercourses by minimizing the storage of hazardous materials onsite, storing materials in watertight containers and/or in completely enclosed designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors.

### 3.2.4.2 Material Use

Prevent or reduce the discharge of pollutants to the storm drain system or watercourses from material use by using alternative products, minimizing hazardous material use onsite, and training employees and subcontractors.

### 3.2.4.3 Stockpile Management

BMP WM-3 will be implemented to reduce or eliminate pollution of storm water from stockpiles of soil. Inactive stockpiles will be covered and/or stabilized to protect them from stormwater or wind transport. Stockpiles will also be covered prior to forecasted storm events. Stockpiles will be located a minimum of 50 feet away from concentrated flows of stormwater, drainage courses, and inlets.

### 3.2.4.4 Spill Preservation and Control

Spill Prevention and Control will be implemented to contain and clean-up spills and prevent material discharges to the storm drain system. The Spill Prevention, Control and Countermeasure Plan will be kept onsite.

### 3.2.4.5 Solid Waste Management

Solid wastes will be loaded directly into trucks for off-site disposal. When onsite storage is necessary, solid wastes will be stored in watertight dumpsters in the general area of the contractor’s yard. Solid waste should be removed and disposed off-site at least weekly.
3.2.4.6 **Hazardous Waste Management**

Hazardous wastes will be stored in shipping containers and with secondary containment in clearly marked containers and will be segregated from nonwaste materials. Hazardous waste materials will ultimately be shipped offsite to an authorized hazardous waste disposal facility.

3.2.4.7 **Contaminated Soil Management**

Contaminated soil has not been identified at the project site. BMP WM-7 will be implemented if previously unknown contaminated soil is encountered by the contractor.

3.2.4.8 **Concrete Waste Management**

No Concrete operations.

3.2.4.9 **Sanitary-Septic Waste Management**

The contractor will implement BMP WM-9, Sanitary and Septic Waste Management. Portable toilets will be maintained for the duration of the project. Weekly maintenance will be provided and wastes will be disposed of offsite. The toilets will be located away from concentrated flow paths, drainage inlets, and vehicle traffic. Secondary containment will be provided and the unit secured from tipping by the wind. Toilets will be positioned at least 50 feet from ditches, wetlands, drainage inlets, and concentrated flow paths.

3.2.4.10 **Liquid Waste Management**

Liquid wastes generated as part of an operational procedure should be contained and not allowed to flow into drainage channels prior to treatment. Liquid wastes should be contained in a controlled area such as a holding pit or potable tank.

3.3 **POST-CONSTRUCTION STORMWATER MANAGEMENT MEASURES**

Post-construction BMPs are permanent measures installed during construction, designed to reduce or eliminate pollutant discharges from the site after construction is completed.

The site is not located in a Phase I Municipal Separate Storm Sewer System (MS4) permit approved Stormwater Management Plan area.

The General Permit specifies runoff reduction requirements for all sites not covered by a Phase I or Phase II MS4 NPDES permit, to avoid, minimize and/or mitigate post-construction storm water runoff impacts. Therefore, the post-construction water balance calculator was completed for the project sites. (See Appendix A). As the project will not result in an increase in impervious area, will not introduce new potential pollutant sources, and will not result in an increase in post-construction runoff, no source control post-construction BMPs are currently proposed to comply with General Permit Section XIII.B.
Section 4  BMP Inspection, and Maintenance, and Rain Event Action Plans

4.1  BMP INSPECTION AND MAINTENANCE

The General Permit requires routine weekly inspections of BMPs, along with inspections before, during, and after qualifying rain events. A BMP inspection checklist must be filled out for inspections and maintained on-site with the SWPPP. The inspection checklist includes the necessary information covered in Section 7.6. A blank inspection checklist can be found in Appendix I. Completed checklists will be kept in CSMP Attachment 2 “Monitoring Records.”

BMPs will be maintained regularly to ensure proper and effective functionality. If necessary, corrective actions will be implemented within 72 hours of identified deficiencies and associated amendments to the SWPPP will be prepared by the QSD.

The Qualified SWPPP Practitioner (QSP) or designated representative will inspect the site prior to a forecast storm, after a rain event that cause runoff from the construction site, at 24-hour intervals during extended rain events, and as specified in the contract documents. SWPPP inspections may be conducted in conjunction with other facility inspections. The goals of these inspections are:

1) to identify areas contributing to a stormwater discharge;
2) to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate, properly installed and functioning in accordance with the terms of the General Permit; and
3) to determine whether additional control practices or corrective maintenance activities are needed.

The results of inspections and assessments will be documented. Copies of the completed inspection checklists will be maintained with the SWPPP; a copy will be provided to the project Manager within 24 hours of the inspection. Site inspections conducted for monitoring purposes will be performed using the inspection checklist shown in Appendix I. Specific details for maintenance, inspection, and repair of construction site BMPs can be found in the BMP Fact Sheets in Appendix H.

4.2  RAIN EVENT ACTION PLANS

The Rain Event Action Plan (REAP) is a written document designed to be used as a planning tool by the QSP to protect exposed portions of project site and to ensure that the discharger has adequate materials, staff, and time to implement erosion and sediment control measures. These measures are intended to reduce the amount of sediment and other pollutants that could be generated during the rain event. It is the responsibility of the QSP to be aware of precipitation forecast and to obtain and print copies of forecasted precipitation from NOAA’s National Weather Service Forecast Office described in Section 7.3.

As this project is a Risk Level 1, no REAP is required.
Section 5  Training

Appendix L identifies the QSP and those working under the QSP for the project. To promote stormwater management awareness specific for this project, periodic training of job-site personnel will be included as part of routine project meetings (e.g., daily/weekly tailgate safety meetings), or task specific trainings as needed.

As required by the General Permit (Section VII), all elements of the SWPPP have been developed and will be amended by a Qualified SWPPP Developer (QSD). All elements of the SWPPP will be implemented by a Qualified SWPPP Practitioner (QSP). The QSP may delegate BMP installation, inspection, maintenance and repair, recordkeeping activities to trained personnel who are provided adequate supervision and oversight.

The QSP will be responsible for providing this information at the meetings, and subsequently completing the training logs shown in Appendix K, which identifies the site-specific stormwater topics covered as well as the names of site personnel who attended the meeting. Tasks may be delegated to trained employees by the QSP provided adequate supervision and oversight is provided. Training will correspond to the specific task delegated including SWPPP implementation, BMP inspection and maintenance, and record keeping.

Documentation of training activities (formal and informal) is retained in Appendix K. Informal training will include tailgate site briefings to be conducted bi-weekly and will address proper installation methods and maintenance for the following topics:

- Erosion control BMPs
- Sediment control BMPs
- Tracking control BMPs
- Wind erosion control BMPs
- Non-stormwater BMPs
- Waste management and materials pollution control BMPs
- Stormwater sampling
Section 6 Responsible Parties and Operators

6.1 RESPONSIBLE PARTIES

All Approved Signatories who are responsible for SWPPP implementation and have authority to sign permit-related documents are listed below. Written authorizations from the LRP for these individuals are provided in Appendix L. Any Approved Signatories assigned to this project will be listed in Table 6.1 below:

Table 6.1 Approved Signatories Assigned to Project

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pete Ghelfi</td>
<td>Director of Engineering</td>
<td>(916)874-8733</td>
</tr>
</tbody>
</table>

The QSP identified for the project is identified in Appendix L. The QSP will have primary responsibility and significant authority for the implementation, maintenance and inspection/monitoring of SWPPP requirements. The QSP will be available at all times throughout the duration of the project. Duties of the QSP include but are not limited to:

- Implementing all elements of the General Permit and SWPPP, including but not limited to:
  - Ensuring all BMPs are implemented, inspected, and properly maintained;
  - Performing non-stormwater and stormwater visual observations and inspections;
  - Performing non-stormwater and storm sampling and analysis, as required;
  - Performing routine inspections and observations;
  - Implementing non-stormwater management, and materials and waste management activities such as: monitoring discharges; 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.;

- The QSP may delegate these inspections and activities to an appropriately trained employee, but will ensure adequacy and adequate deployment.

- Ensuring elimination of unauthorized discharges.

- The QSPs will be assigned authority by the LRP to mobilize crews in order to make immediate repairs to the control measures.

- Coordinate with the contractor(s) to assure all of the necessary corrections/repairs are made immediately and that the project complies with the SWPPP, the General Permit and approved plans at all times.

- Notifying the LRP or Authorized Signatory immediately of off-site discharges or other non-compliance events.
6.2 CONTRACTOR LIST

Contractor:

Name:
Title:
Company:
Address:
Phone Number:
Number (24/7):
Section 7  Construction Site Monitoring Program

7.1 PURPOSE

This Construction Site Monitoring Program was developed to address the following objectives:

1. To demonstrate that the site is in compliance with the Discharge Prohibitions and Numeric Action Levels (NALs) of the Construction General Permit;
2. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives;
3. To determine whether immediate corrective actions, additional BMP implementation, or SWPPP revisions are necessary to reduce pollutants in stormwater discharges and authorized non-stormwater discharges;
4. To determine whether BMPs included in the SWPPP and REAP are effective in preventing or reducing pollutants in stormwater discharges and authorized non-stormwater discharges.

7.2 APPLICABILITY OF PERMIT REQUIREMENTS

This project has been determined to be a Risk Level 1 project. Appendix D of the General Permit identifies the following types of monitoring as being applicable for a Risk Level 1 project:

- Visual inspections of BMPs;
- Visual monitoring of the site related to qualifying storm events;
- Visual monitoring of the site for non-stormwater discharges;
- Sampling and analysis of construction site runoff for non-visible pollutants when applicable; and
- Sampling and analysis of non-stormwater discharges when applicable.

7.3 WEATHER AND RAIN EVENT TRACKING

Visual monitoring, inspections, and sampling requirements of the General Permit are triggered by a qualifying rain event. The General Permit defines a qualifying rain event as any event that produces ½ inch or more of precipitation. A minimum of 48 hours of dry weather will be used to distinguish between separate qualifying storm events. The size of a rain event cannot always be predicted so an adequate trigger for a qualifying rain event would be 50 percent or greater probability of producing precipitation based on the National Oceanographic and Atmospheric Administration (NOAA) National Weather Service Forecast Office. No Visual monitoring, inspections, and sampling is required if a qualifying rain event occurs outside of working hours.
7.3.1 Weather Tracking

The QSP should daily consult the NOAA National Weather Service Forecast Office for the weather forecasts. These forecasts can be obtained at http://www.srh.noaa.gov/. Weather reports should be printed and maintained with the SWPPP in CSMP Attachment 1 “Weather Reports”.

7.3.2 Rain Gauges

The QSP will install an onsite rain gauge at the contractor’s primary laydown area or onsite office location. The gauge will be located in an open area away from obstructions such as trees or overhangs, and mounted on a post at a height of 3 to 5 feet with the gauge extending several inches beyond the post. The top of the gauge will be made level, and the post will not be located in an area where rainwater can indirectly splash from sheds, equipment, trailers, etc.

The rain gauge will be read daily during normal site scheduled hours. The rain gauge should be read at approximately the same time every day and the date and time of each reading recorded. Rain gauge readings will be logged in CSMP Attachment 1 “Weather Records”. The rain gauge instructions will be followed to obtain accurate measurements.

Once the rain gauge reading has been recorded, accumulated rain will be emptied and the gauge reset.

For comparison with the onsite rain gauge, the nearest appropriate governmental rain gauge is a NOAA site located at the Sacramento International Airport. Online weather information for this gauge can be found at: http://forecast.weather.gov.

7.4 MONITORING LOCATIONS

Monitoring locations are shown in Figure 2 of Appendix B. Monitoring locations are described in the Sections 7.6 and 7.7.

Whenever changes in the construction site might affect the appropriateness of sampling locations, the sampling locations will be revised accordingly. All such revisions will be implemented as soon as feasible and the SWPPP amended. Temporary changes that result in a one-time additional sampling location do not require a SWPPP amendment.

7.5 SAFETY AND MONITORING EXEMPTIONS

Safety practices for sample collection will be in accordance with the contractor’s health and safety plan. The QSP will ensure that all sampling and sample preservation are in accordance with the current edition of “Standard Methods for the Examination of Water and Wastewater” (American Public Health Association).

This project is not required to collect samples or conduct visual observations (inspections) under the following conditions:

- During dangerous weather conditions such as flooding and electrical storms.
- Outside of scheduled site business hours.

Construction is anticipated to occur in single 8-hour shifts, 5 days per week.
If monitoring (visual monitoring or sample collection) of the site is unsafe because of the dangerous conditions noted above then the QSP will document the conditions for why an exception to performing the monitoring was necessary. The exemption documentation will be filed in CSMP Attachment 2 “Monitoring Records”.

### 7.6 VISUAL MONITORING

Visual monitoring includes observations and inspections. Inspections of BMPs are required to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Visual observations of the site are required to observe storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. For each inspection, the QSP will complete an inspection checklist in CSMP Attachment 3.

Table 7.1 identifies the required frequency of visual observations and inspections. Inspections and observations will be conducted at the locations identified in Section 7.6.3.

<table>
<thead>
<tr>
<th>Type of Inspection</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Routine Inspections</strong></td>
<td></td>
</tr>
<tr>
<td>BMP Inspections</td>
<td>Weekly¹</td>
</tr>
<tr>
<td>BMP Inspections – Tracking Control</td>
<td>Weekly</td>
</tr>
<tr>
<td>BMP Inspections – Erosion Control</td>
<td>Weekly</td>
</tr>
<tr>
<td>BMP Inspections – Sediment Control</td>
<td>Weekly, Daily along immediate access roads</td>
</tr>
<tr>
<td>BMP Inspections – Wind Erosion Control</td>
<td>Weekly</td>
</tr>
<tr>
<td>BMP Inspection – Waste Management and Materials Pollution Control</td>
<td>Weekly</td>
</tr>
<tr>
<td>Non-Stormwater Discharge Observations</td>
<td>Quarterly (January–March, April–June, July–September, and October–December) during daylight hours</td>
</tr>
<tr>
<td><strong>Rain Event Triggered Inspections</strong></td>
<td></td>
</tr>
<tr>
<td>Site Inspections Prior to a Qualifying Event</td>
<td>Within 48 hours of a qualifying event²</td>
</tr>
<tr>
<td>BMP Inspections During an Extended Storm Event</td>
<td>Every 24-hour period of a rain event²</td>
</tr>
<tr>
<td>Site Inspections Following a Qualifying Event</td>
<td>Within 48 hours of a qualifying event²</td>
</tr>
</tbody>
</table>

¹ Most BMPs must be inspected weekly; unless identified in the table with greater frequency.  
² Inspections are only required during scheduled site operating hours. Note however, these inspections are required weekly regardless of the amount of precipitation.

### 7.6.1 Routine Observations and Inspections

Routine site inspections and visual monitoring are necessary to ensure that the project is in compliance with the requirements of the Construction General Permit.
7.6.1.1 **Routine BMP Inspections**

Inspections of BMPs are conducted to identify and record:

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

7.6.1.2 **Non-Stormwater Discharge Observations**

Each drainage area will be inspected for the presence of or indications of prior unauthorized and authorized non-stormwater discharges. Inspections will record:

- Presence or evidence of any non-stormwater discharge (authorized or unauthorized);
- Pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.); and
- Source of discharge.

7.6.2 **Rain-Event Triggered Observations and Inspections**

Visual observations of the site and inspections of BMPs are required prior to a qualifying rain event; following a qualifying rain event, and every 24-hour period during a qualifying rain event. Pre-rain inspections will be conducted after consulting NOAA and determining that a precipitation event with a 50% or greater probability of precipitation has been predicted.

7.6.2.1 **Visual Observations Prior to a Forecasted Qualifying Rain Event**

Within 48-hours prior to a qualifying event a stormwater visual monitoring site inspection will include observations of the following locations:

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

BMP inspections and visual monitoring will be triggered by a NOAA prediction of rain in the project site.

7.6.2.2 **BMP Inspections During an Extended Storm Event**

During an extended rain event BMP inspections will be conducted to identify and record:

- BMPs that are properly installed;
- BMPs that need maintenance to operate effectively;
- BMPs that have failed; or
- BMPs that could fail to operate as intended.
If the construction site is not accessible during the rain event, the visual inspections will be performed at all relevant outfalls, discharge points, downstream locations. The inspections should record any projected maintenance activities.

### 7.6.2.3 Visual Observations Following a Qualifying Rain Event

Within 48 hours following a qualifying rain event (0.5 inches of rain) a stormwater visual monitoring site inspection is required to observe:

- Stormwater drainage areas to identify any spills, leaks, or uncontrolled pollutant sources;
- BMPs to identify if they have been properly designed, implemented, and effective;
- Need for additional BMPs;
- Any stormwater storage and containment areas to detect leaks and ensure maintenance of adequate freeboard; and
- Discharge of stored or contained rain water.

### 7.6.3 Visual Monitoring Procedures

Visual monitoring will be conducted by the QSP or staff trained by and under the supervision of the QSP.

The name(s) and contact number(s) of the site visual monitoring personnel are listed below and their training qualifications are provided in Appendix K.

<table>
<thead>
<tr>
<th>Assigned inspector: TBD</th>
<th>Contact phone: TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate inspector: TBD</td>
<td>Contact phone: TBD</td>
</tr>
</tbody>
</table>

Stormwater observations will be documented on the *Visual Inspection Field Log Sheet* (see CSMP Attachment 3 “Example Forms”). BMP inspections will be documented on the site specific BMP inspection checklist. Any photographs used to document observations will be referenced on stormwater site inspection report and maintained with the Monitoring Records in Attachment 2.

The QSP will within three business days of the inspection submit copies of the completed inspection report to the LRP or Assigned Signatory.

The completed reports will be kept in CSMP Attachment 2 “Monitoring Records”.

### 7.6.4 Visual Monitoring Follow-Up and Reporting

Correction of deficiencies identified by the observations or inspections, including required repairs or maintenance of BMPs, will be initiated and completed as soon as possible.

If identified deficiencies require design changes, including additional BMPs, the implementation of changes will be initiated within 72 hours of identification and be completed as soon as possible. When design changes to BMPs are required, the SWPPP will be amended to reflect the changes.
Deficiencies identified in site inspection reports and correction of deficiencies will be tracked on the Inspection Field Log Sheet or BMP Inspection Report and will be submitted to the QSP and will be kept in CSMP Attachment 2 “Monitoring Records”.

The QSP will within three business days of the inspection submit copies of the completed Inspection Field Log Sheet or BMP Inspection Report with the corrective actions to the LRP or Approved Signatory.

Results of visual monitoring must be summarized and reported in the Annual Report.

### 7.6.5 Visual Monitoring Locations

The inspections and observations identified in Sections 7.6.1 and 7.6.2 will be conducted at the locations identified in this section.

BMP locations are shown on Figure 2 in Appendix B.

The visual monitoring locations are the same as the sampling locations shown on Figure 2 in Appendix B. Table 7.2 identifies each visual monitoring location.

<table>
<thead>
<tr>
<th>Location No.</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adjacent to Rio Linda Boulevard</td>
</tr>
</tbody>
</table>

### 7.7 WATER QUALITY SAMPLING AND ANALYSIS

#### 7.7.1 Sampling and Analysis Plan for Non-Visible Pollutants in Stormwater Runoff Discharges

This Sampling and Analysis Plan for Non-Visible Pollutants describes the sampling and analysis strategy and schedule for monitoring non-visible pollutants in stormwater runoff discharges from the project site.

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

The following construction materials, wastes, or activities, as identified in Section 2.6, are potential sources of non-visible pollutants to stormwater discharges from the project. Storage, use, and operational locations are shown on the BMP maps in Appendix B.

- Vehicle and equipment cleaning
- Vehicle and equipment maintenance
- Sanitary waste
- Liquid waste
The following existing site features, as identified in Section 2.6, are potential sources of non-visible pollutants to stormwater discharges from the project.

- **NONE**

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.

- **NONE**

The project does not have the potential to receive stormwater run-on with the potential to contribute non-visible pollutants to stormwater discharges from the project.

### 7.7.1.1 Sampling Schedule

Samples for the potential non-visible pollutant(s) and a sufficiently large unaffected background sample will be collected during the first two hours of discharge from rain events that result in a sufficient discharge for sample collection. Samples will be collected during the site’s scheduled hours and will be collected regardless of the time of year and phase of the construction.

Collection of discharge samples for non-visible pollutant monitoring will be triggered when any of the following conditions are observed during site inspections conducted prior to or during a rain event.

- 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 drain system.

- A construction activity, including but not limited to those in Section 2.6, with the potential to contribute non-visible pollutants (1) was occurring during or within 24 hours prior to the rain event, (2) 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 drain 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 drain 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 drain system.

### 7.7.1.2 Sampling Locations

Sampling locations are based on proximity to planned non-visible pollutant storage, occurrence or use; accessibility for sampling, and personnel safety. Planned non-visible pollutant sampling
locations are shown in Figure 2 of Appendix B and include the locations identified in Tables 7.3 and 7.4.

Sampling locations for non-visible pollutants will generally be at the staging areas; at these sites, samples of runoff from planned material and refueling areas and areas where non-visible pollutant producing construction activities will be conducted in the event of a known or suspected spill, leak, or discharge of a non-visible pollutant. Table 7.3 describes the non-visible pollutant sampling locations.

**Table 7.3 Non-Visible Pollutant Sample Locations**

<table>
<thead>
<tr>
<th>Sample Location Number</th>
<th>Sample Location Description</th>
<th>Sample Location Latitude and Longitude(^{(1)}) (Decimal Degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TBD by QSD after staging areas are identified</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>TBD by QSD after staging areas are identified</td>
<td></td>
</tr>
</tbody>
</table>

\(^{(1)}\) Approximate sampling location latitude and longitude coordinates were obtained using Google Earth. These data will be verified with more accuracy in the field by the QSD, and revised in the SWPPP if necessary, prior to construction.

Two sampling locations will be 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. These locations will be selected such that the samples will not have come in contact with the operations, activities, or areas identified in Section 7.7.1 or with disturbed soils areas. Table 7.4 describes the non-visible pollutant sampling locations used to represent background concentrations.

**Table 7.4 Non-Visible Pollutant Sample Locations – Background (Unaffected Sample)**

<table>
<thead>
<tr>
<th>Sample Location Number</th>
<th>Sample Location</th>
<th>Sample Location Latitude and Longitude(^{(1)}) (Decimal Degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>TBD by QSD after staging areas are identified</td>
<td></td>
</tr>
</tbody>
</table>

\(^{(1)}\) Approximate sampling location latitude and longitude coordinates were obtained using Google Earth. These data will be verified with more accuracy in the field by the QSD, and revised in the SWPPP if necessary, prior to construction.

The grading along the perimeter of the project make it such that there are no run-on contaminants to the project site.

**7.7.1.3 Monitoring Preparation**

Non-visible pollutant samples will be collected by the Contractor’s QSP.

Samples on the project site will be collected by the following sampling personnel, or their designees:
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 will be available to collect samples in accordance with the sampling schedule. Supplies maintained at the project site will include, but are not limited to, clean powder-free nitrile gloves, sample collection equipment, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, and Effluent Sampling Field Log Sheets and Chain of Custody (CoC) forms, which are provided in CSMP Attachment 3 “Example Forms”.

Samples on the project site will be collected by the following personnel, or their designees:

- Company Name: TBD
- Street Address: TBD
- City, State Zip: TBD
- Telephone Number: TBD
- Point of Contact: TBD
- Name of Sampler(s): TBD
- Name of Alternate(s): TBD

The QSP or his/her designee will contact a qualified analytical laboratory 24 hours prior to a predicted rain event or for an unpredicted event, as soon as a rain event begins if one of the triggering conditions is identified during an inspection to ensure that adequate sample collection personnel and supplies for monitoring non-visible pollutants are available and will be mobilized to collect samples on the project site in accordance with the sampling schedule.
7.7.1.4 **Analytical Constituents**

Table 7.5 lists the specific sources and types of potential non-visible pollutants on the project site and the water quality indicator constituent(s) for that pollutant.

<table>
<thead>
<tr>
<th>Pollutant Source</th>
<th>Pollutant</th>
<th>Water Quality Indicator Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grading / Earthwork</td>
<td>Contaminated Soil</td>
<td>pH, Constituents specific to known contaminants, check with Laboratory</td>
</tr>
<tr>
<td>Sanitary Waste</td>
<td>Portable Toilets</td>
<td>BOD, Total/Fecal coliform</td>
</tr>
<tr>
<td>Vegetation Management</td>
<td>Vegetation stockpiles</td>
<td>BOD</td>
</tr>
<tr>
<td>Liquid Waste</td>
<td></td>
<td>Constituents specific to materials, check with Laboratory</td>
</tr>
<tr>
<td>Vehicle and Equipment Use</td>
<td>Batteries</td>
<td>Sulfuric acid; Pb, pH</td>
</tr>
</tbody>
</table>

7.7.1.5 **Sample Collection**

Samples of discharge will be collected at the designated non-visible pollutant sampling locations shown in Figure 2 of Appendix B or in the locations determined by observed breaches, malfunctions, leakages, spills, operational areas, soil amendment application areas, and historical site usage areas that triggered the sampling event.

Grab samples will be collected and preserved in accordance with the methods identified in the Table, “Sample Collection, Preservation and Analysis for Monitoring Non-Visible Pollutants” provided in Section 7.7.1.6. Only the QSP, or personnel trained in water quality sampling under the direction of the QSP will collect samples.

Sample collection and handling requirements are described in Section 7.7.7.

7.7.1.6 **Sample Analysis**

Samples will be analyzed using the analytical methods identified in the Table 7.6.

Samples will be analyzed by:

- Laboratory Name: TBD
- Street Address: TBD
- City, State Zip: TBD
- Telephone Number: TBD
- Point of Contact: TBD
- ELAP Certification Number: TBD

Samples will be delivered to the laboratory by the Contractor’s QSP.

<table>
<thead>
<tr>
<th>Pollutant Source</th>
<th>Pollutant</th>
<th>Water Quality Indicator Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grading / Earthwork</td>
<td>Contaminated Soil</td>
<td>pH, Constituents specific to known contaminants, check with Laboratory</td>
</tr>
<tr>
<td>Sanitary Waste</td>
<td>Portable Toilets</td>
<td>BOD, Total/Fecal coliform</td>
</tr>
<tr>
<td>Vegetation Management</td>
<td>Vegetation stockpiles</td>
<td>BOD</td>
</tr>
<tr>
<td>Liquid Waste</td>
<td></td>
<td>Constituents specific to materials, check with Laboratory</td>
</tr>
<tr>
<td>Vehicle and Equipment Use</td>
<td>Batteries</td>
<td>Sulfuric acid; Pb, pH</td>
</tr>
<tr>
<td>Constituent</td>
<td>Analytical Method</td>
<td>Minimum Sample Volume</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>VOCs-Solvents</td>
<td>EPA 8260B</td>
<td>3 x 40 mL</td>
</tr>
<tr>
<td>SVOCs</td>
<td>EPA 8270C</td>
<td>1 x 1 L</td>
</tr>
<tr>
<td>Pesticides/PCBs</td>
<td>EPA 8081A/8082</td>
<td>1 x 1 L</td>
</tr>
<tr>
<td>Herbicides</td>
<td>EPA 8151A</td>
<td>1 x 1 L</td>
</tr>
<tr>
<td>BOD</td>
<td>EPA 405.1</td>
<td>1 x 500 mL</td>
</tr>
<tr>
<td>COD</td>
<td>EPA 410.4</td>
<td>1 x 250 mL</td>
</tr>
<tr>
<td>DO</td>
<td>SM 4500-O G</td>
<td>1 x 250 mL</td>
</tr>
<tr>
<td>pH</td>
<td>EPA 150.1</td>
<td>1 x 100 mL</td>
</tr>
<tr>
<td>Alkalinity</td>
<td>SM 2320B</td>
<td>1 x 250 mL</td>
</tr>
<tr>
<td>Metals (Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, Se, Na, Th, Va, Zn)</td>
<td>EPA 6010B/7470A</td>
<td>1 x 250 mL</td>
</tr>
<tr>
<td>Metals (Chromium VI)</td>
<td>EPA 7199</td>
<td>1 x 500 mL</td>
</tr>
</tbody>
</table>

Key:
°C: Degrees Celsius
BOD: Biological Oxygen Demand
COD: Chemical Oxygen Demand
DO: Dissolved Oxygen
EPA: Environmental Protection Agency
HCl: Hydrogen Chloride
H₂SO₄: Hydrogen Sulfide
HNO₃: Nitric Acid
L: Liter
mg/L: Milligrams per Liter
µg/L: Micrograms per Liter
mL: Milliliter
PCB: Polychlorinated Biphenyl
SVOC: Semi-Volatile Organic Compound
VOA: Volatile Organic Analysis
VOC: Volatile Organic Compound

### 7.7.1.7 Data Evaluation and Reporting

The QSP will complete an evaluation of the water quality sample analytical results.

Runoff/downgradient results will be compared with the associated upgradient/unaffected results and any associated run-on results. Should the runoff/downgradient sample show an increased level of the tested analyte relative to the unaffected background sample, which cannot be explained by run-on results, the BMPs, site conditions, and surrounding influences will be assessed to determine the probable cause for the increase.

As determined by the site and data evaluation, appropriate BMPs will be repaired or modified to mitigate discharges of non-visible pollutant concentrations. Any revisions to the BMPs will be recorded as an amendment to the SWPPP.

The General Permit prohibits the storm water discharges that contain hazardous substances equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4. The results
of any non-stormwater discharge results that indicate the presence of a hazardous substance in excess of established reportable quantities will be immediately reported to the Regional Water Board and other agencies as required by 40 C.F.R. §§ 117.3 and 302.4.

Results of non-visible pollutant monitoring will be reported in the Annual Report.

7.7.2 Sampling and Analysis Plan for Non-Stormwater Discharges

This Sampling and Analysis Plan for non-stormwater discharges describes the sampling and analysis strategy and schedule for monitoring pollutants in authorized and unauthorized non-stormwater discharges from the project site in accordance with the requirements of the Construction General Permit.

Sampling of non-stormwater discharges will be conducted when an authorized or unauthorized non-stormwater discharge is observed discharging from the project site. In the event that non-stormwater discharges run-on to the project site from offsite locations, and this run-on has the potential to contribute to a violation of a NAL, the run-on will also be sampled.

The following authorized non-stormwater discharges identified in Section 2.7, have the potential to be discharged from the project site.

- None

In addition to the above authorized stormwater discharges, some construction activities have the potential to result in an unplanned (unauthorized) non-stormwater discharge if BMPs fail. These activities include:

- Dust control
- Washing tools and equipment

7.7.2.1 Sampling Schedule

Samples of authorized or unauthorized non-stormwater discharges will be collected when they are observed.

7.7.2.2 Sampling Locations

Non-stormwater discharges are unlikely, but could result from broken irrigation pipes. These sampling discharge locations are identified in Table 7.11 below.

<table>
<thead>
<tr>
<th>Sample Location Number</th>
<th>Sample Location</th>
<th>Sample Location Latitude and Longitude (Decimal Degrees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Location of Incident</td>
<td>Varies - TBD</td>
</tr>
</tbody>
</table>
7.7.2.3 Monitoring Preparation

Non-stormwater discharge samples will be collected by the Contractor’s QSP.
Samples on the project site will be collected by the following sampling personnel:
Name/Telephone Number: TBD
Alternate(s)/Telephone Number:

An adequate stock of monitoring supplies and equipment for monitoring non-stormwater discharges will be available on the project site. Monitoring supplies and equipment will be stored in a cool temperature environment that will not come into contact with rain or direct sunlight. Personnel trained in sampling will be available to collect samples in accordance with the sampling schedule. Supplies maintained at the project site will include, but are not limited to, clean powder-free nitrile gloves, sample collection equipment, field meters, coolers, appropriate number and volume of sample bottles, identification labels, re-sealable storage bags, paper towels, personal rain gear, ice, and Effluent Sampling Field Log Sheets and CoC forms provided in CSMP Attachment 3 “Example Forms”.

The contractor will obtain and maintain the field testing instruments, as identified in Section 7.7.2, for analyzing samples in the field by sampling personnel.

Samples on the project site will be collected by the following (or their designees):

Company Name: TBD
Street Address:
City, State Zip:
Telephone Number:
Point of Contact:
Name of Sampler(s):
Name of Alternate(s):

The QSP or his/her designee will contact (laboratory TBD) 24 hours prior to a planned non-stormwater discharge or as soon as an unplanned non-stormwater discharge is observed to ensure that adequate sample collection personnel, supplies for non-stormwater discharge monitoring are available and will be mobilized to collect samples on the project site in accordance with the sampling schedule.

7.7.2.4 Analytical Constituents

All non-stormwater discharges that flow through a disturbed area will, at minimum, be monitored for turbidity.

All non-stormwater discharges that flow through an area where they are exposed to pH-altering materials will be monitored for pH.

The QSP will identify additional pollutants to be monitored for each non-stormwater discharge incident based on the source of the non-stormwater discharge. If the source of an unauthorized
non-stormwater discharge is not known, monitoring for pH, turbidity, MBAS, TOC, and residual chlorine or chloramines is recommended to help identify the source of the discharge.

If present, non-stormwater discharge run-on will be monitored, at minimum, for pH and turbidity. The QSP will identify additional pollutants to be monitored for each non-stormwater discharge incident based on the source of the non-stormwater discharge. If the source of an unauthorized non-stormwater discharge is not known, monitoring for pH, turbidity, MBAS, TOC, and residual chlorine or chloramines is recommended to help identify the source of the discharge.

Table 7.12 lists the specific sources and types of potential non-visible pollutants on the project site and the water quality indicator constituent(s) for that pollutant.

<table>
<thead>
<tr>
<th>Pollutant Source</th>
<th>Pollutant</th>
<th>Water Quality Indicator Constituent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbed Areas</td>
<td>Sediment</td>
<td>Suspended Sediment Concentration (SSC), Settleable Solids (SS), Total Suspended Solids (TSS), or Turbidity</td>
</tr>
<tr>
<td>Vehicle and equipment cleaning</td>
<td>Acids, Bleaches, TSP, Solvents, Detergents</td>
<td>pH, residual chlorine, phosphate, VOCs, SVOCs, MBAS</td>
</tr>
<tr>
<td>Vehicle and equipment use</td>
<td>Batteries</td>
<td>Sulfuric acid; Pb, pH</td>
</tr>
<tr>
<td>Solid waste</td>
<td>Solid waste</td>
<td>BOD</td>
</tr>
<tr>
<td>Vegetation management</td>
<td>Vegetation stockpiles</td>
<td>BOD</td>
</tr>
<tr>
<td>Sanitary waste</td>
<td>Portable toilets</td>
<td>BOD, total/fecal coliform</td>
</tr>
<tr>
<td>Dust control</td>
<td>Polymer/Co-polymers, Psyllium, Guar/Plant Gums</td>
<td>TKN, NO3, BOD, COD, DOC, DOC, Sulfate, Ni, TOC</td>
</tr>
</tbody>
</table>
Runoff results will also be evaluated for the constituents suspected in the non-stormwater discharge. Should the runoff sample indicate the discharge of a pollutant which cannot be explained by run-on results, the BMPs, site conditions, and surrounding influences will be assessed to determine the probable cause for the increase.

As determined by the site and data evaluation, appropriate BMPs will be repaired or modified to mitigate discharges of non-visible pollutant concentrations. Any revisions to the BMPs will be recorded as an amendment to the SWPPP.

Non-storm water discharge results will be submitted with the Annual Report.

Table 7.13  Sample Collection, Preservation and Analysis for Monitoring Pollutants in Non-Stormwater Discharges

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Analytical Method</th>
<th>Minimum Sample Volume(i)</th>
<th>Sample Bottle</th>
<th>Sample Preservation</th>
<th>Reporting Limit</th>
<th>Maximum Holding Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspended Sediment Concentration (SSC)</td>
<td>ASTM D3977-97</td>
<td>200 mL</td>
<td>Contact Laboratory</td>
<td>Store at 4˚ C (39.2˚ F)</td>
<td>Contact Laboratory</td>
<td>7 days</td>
</tr>
<tr>
<td>Settleable Solids (SS)</td>
<td>EPA 160.5 SM 2540(f)</td>
<td>1 L</td>
<td>Polypropylene</td>
<td>Store at 4˚ C (39.2˚ F)</td>
<td>0.1 mL/L/hr</td>
<td>48 hours</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>EPA 160.2 SM 2540(d)</td>
<td>100 mL</td>
<td>Polypropylene</td>
<td>Store at 4˚ C (39.2˚ F)</td>
<td>1 mg/L</td>
<td>7 days</td>
</tr>
<tr>
<td>Turbidity</td>
<td>EPA 180.1 Std Method 2130(b)</td>
<td>100 mL</td>
<td>Polypropylene or Glass</td>
<td>Store at 4˚ C (39.2˚ F)</td>
<td>1 NTU</td>
<td>48 hours</td>
</tr>
<tr>
<td>VOCs-Solvents</td>
<td>EPA 8260B</td>
<td>3 x 40 mL</td>
<td>VOA-glass</td>
<td>Store at 4˚ C, HCl to pH&lt;2</td>
<td>1 µg/L</td>
<td>14 days</td>
</tr>
<tr>
<td>SVOCs</td>
<td>EPA 8270C</td>
<td>1 x 1 L</td>
<td>Glass-Amber</td>
<td>Store at 4˚ C</td>
<td>10 µg/L</td>
<td>7 days</td>
</tr>
<tr>
<td>Pesticides/PCBs</td>
<td>EPA 8081A/8082</td>
<td>1 x 1 L</td>
<td>Glass-Amber</td>
<td>Store at 4˚ C</td>
<td>0.1 µg/L</td>
<td>7 days</td>
</tr>
<tr>
<td>Herbicides</td>
<td>EPA 8151A</td>
<td>1 x 1 L</td>
<td>Glass-Amber</td>
<td>Store at 4˚ C</td>
<td>Check Lab</td>
<td>7 days</td>
</tr>
<tr>
<td>BOD</td>
<td>EPA 405.1</td>
<td>1 x 500 mL</td>
<td>Polypropylene</td>
<td>Store at 4˚ C</td>
<td>1 mg/L</td>
<td>48 hours</td>
</tr>
<tr>
<td>COD</td>
<td>EPA 410.4</td>
<td>1 x 250 mL</td>
<td>Glass-Amber</td>
<td>Store at 4˚ C, H₂SO₄ to pH&lt;2</td>
<td>5 mg/L</td>
<td>28 days</td>
</tr>
<tr>
<td>DO</td>
<td>SM 4500-O G</td>
<td>1 x 250 mL</td>
<td>Glass-Amber</td>
<td>Store at 4˚ C</td>
<td>Check Lab</td>
<td>8 hours</td>
</tr>
<tr>
<td>pH</td>
<td>EPA 150.1</td>
<td>1 x 100 mL</td>
<td>Polypropylene</td>
<td>None</td>
<td>Unit less</td>
<td>Immediate</td>
</tr>
<tr>
<td>Alkalinity</td>
<td>SM 2320B</td>
<td>1 x 250 mL</td>
<td>Polypropylene</td>
<td>Store at 4˚ C</td>
<td>1 mg/L</td>
<td>14 days</td>
</tr>
<tr>
<td>Metals (Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, Se, Na, Th, Va, Zn)</td>
<td>EPA 6010B/7470A</td>
<td>1 x 250 mL</td>
<td>Polypropylene</td>
<td>Store at 4˚ C, HNO₃ to pH&lt;2</td>
<td>0.1 mg/L</td>
<td>6 months</td>
</tr>
<tr>
<td>Metals (Chromium VI)</td>
<td>EPA 7199</td>
<td>1 x 500 mL</td>
<td>Polypropylene</td>
<td>Store at 4˚ C</td>
<td>1.0 µg/L</td>
<td>24 hours</td>
</tr>
<tr>
<td>Constituent</td>
<td>Analytical Method</td>
<td>Minimum Sample Volume(1)</td>
<td>Sample Bottle</td>
<td>Sample Preservation</td>
<td>Reporting Limit</td>
<td>Maximum Holding Time</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------</td>
<td>--------------------------</td>
<td>---------------</td>
<td>---------------------</td>
<td>-----------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>°C: Degrees Celsius</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>°F: Degrees Fahrenheit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTM: American Society for Testing and Materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD: Biological Oxygen Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COD: Chemical Oxygen Demand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DO: Dissolved Oxygen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPA: Environmental Protection Agency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCl: Hydrogen Chloride</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2SO4: Hydrogen Sulfide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HNO3: Nitric Acid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
(1) Minimum sample volume recommended. Specific volume requirements will vary by laboratory; check with laboratory when setting up bottle orders.

The General Permit prohibits the non-storm water discharges that contain hazardous substances equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4. The results of any non-stormwater discharge results that indicate the presence of a hazardous substance in excess of established reportable quantities will be immediately reported to the Central Valley Regional Water Quality Control Board.

### 7.7.3 Training of Sampling Personnel

Sampling personnel will be trained to collect, maintain, and ship samples in accordance with the Surface Water Ambient Monitoring program (SWAMP) 2008 Quality Assurance Program Plan (QAPrP). Training records of designated sampling personnel are provided in Appendix K.

The stormwater sampler(s) and alternate(s) have received the following stormwater sampling training:

<table>
<thead>
<tr>
<th>Name</th>
<th>Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>

The stormwater sampler(s) and alternates have the following stormwater sampling experience:

<table>
<thead>
<tr>
<th>Name</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBD</td>
<td></td>
</tr>
</tbody>
</table>
7.7.4 Sample Collection and Handling

7.7.4.1 Sample Collection

Samples will be collected at the designated sampling locations shown in Figure 2 of Appendix B and listed in the preceding sections. Samples will be collected, maintained and shipped in accordance with the SWAMP 2008 Quality Assurance Program Plan (QAPrP).

Grab samples will be collected and preserved in accordance with the methods identified in preceding sections.

To maintain sample integrity and prevent cross-contamination, sample collection personnel will follow the protocols below.

- Collect samples (for laboratory analysis) only in analytical laboratory-provided sample containers;
- Wear clean, powder-free nitrile gloves when collecting samples;
- Change gloves whenever something not known to be clean has been touched;
- Change gloves between sites;
- Decontaminate all equipment (e.g., bucket, tubing) prior to sample collection using a trisodium phosphate water wash, distilled water rinse, and final rinse with distilled water. (Dispose of wash and rinse water appropriately, i.e., do not discharge to storm drain or receiving water). Do not decontaminate laboratory provided sample containers;
- Do not smoke during sampling events;
- Never sample near a running vehicle;
- Do not park vehicles in the immediate sample collection area (even non-running vehicles);
- Do not eat or drink during sample collection; and
- Do not breathe, sneeze, or cough in the direction of an open sample container.

The most important aspect of grab sampling is to collect a sample that represents the entire runoff stream. Typically, samples are collected by dipping the collection container in the runoff flow paths and streams as noted below.

i. For small streams and flow paths, simply dip the bottle facing upstream until full.

ii. For larger stream that can be safely accessed, collect a sample in the middle of the flow stream by directly dipping the mouth of the bottle. Once again making sure that the opening of the bottle is facing upstream as to avoid any contamination by the sampler.

iii. For larger streams that cannot be safely waded, pole samplers may be needed to safely access the representative flow.

iv. Avoid collecting samples from ponded, sluggish or stagnant water.

v. Avoid collecting samples directly downstream from a bridge as the samples can be affected by the bridge structure or runoff from the road surface.
Note, that depending upon the specific analytical test, some containers may contain preservatives. These containers should never be dipped into the stream, but filled indirectly from the collection container.

### 7.7.4.2 Sample Handling

Turbidity and pH measurements must be conducted immediately. Do not store turbidity or pH samples for later measurement.

Samples for laboratory analysis must be handled as follows. Immediately following sample collection:

- Cap sample containers;
- Complete sample container labels;
- Sealed containers in a re-sealable storage bag;
- Place sample containers into an ice-chilled cooler;
- Document sample information on the *Effluent Sampling Field Log Sheet*; and
- Complete the CoC.

All samples for laboratory analysis must be maintained between 0-6 degrees Celsius during delivery to the laboratory. Samples must be kept on ice, or refrigerated, from sample collection through delivery to the laboratory. Place samples to be shipped inside coolers with ice. Make sure the sample bottles are well packaged to prevent breakage and secure cooler lids with packaging tape.

Ship samples that will be laboratory analyzed to the analytical laboratory right away. Hold times are measured from the time the sample is collected to the time the sample is analyzed. The General Permit requires that samples be received by the analytical laboratory within 48 hours of the physical sampling (unless required sooner by the laboratory).

Laboratory Name: TBD
Address: TBD
City, State Zip: TBD
Telephone Number: TBD
Point of Contact: TBD

### 7.7.4.3 Sample Documentation Procedures

All original data documented on sample bottle identification labels, *Effluent Sampling Field Log Sheet*, and CoCs will be recorded using waterproof ink. These will be considered accountable documents. If an error is made on an accountable document, the individual will make corrections by lining through the error and entering the correct information. The erroneous information will not be obliterated. All corrections will be initialed and dated.
Duplicate samples will be identified consistent with the numbering system for other samples to prevent the laboratory from identifying duplicate samples. Duplicate samples will be identified in the Effluent Sampling Field Log Sheet.

Sample documentation procedures include the following:

**Sample Bottle Identification Labels:** Sampling personnel will attach an identification label to each sample bottle. Sample identification will uniquely identify each sample location.

**Field Log Sheets:** Sampling personnel will complete the *Effluent Sampling Field Log Sheet* and *Receiving Water Sampling Field Log Sheet* for each sampling event, as appropriate.

**Chain of Custody:** Sampling personnel will complete the Chain of Custody (CoC) for each sampling event for which samples are collected for laboratory analysis. The sampler will sign the CoC when the sample(s) is turned over to the testing laboratory or courier.

### 7.8 ACTIVE TREATMENT SYSTEM MONITORING

ATS is defined in the General Permit as “A treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation to aid in the reduction of turbidity caused by fine suspended sediment.”

An Active Treatment System (ATS) will be deployed on the site?

☐ Yes  ☒ No

This project does not require a project specific Sampling and Analysis Plan for an ATS because deployment of an ATS is not planned.

### 7.9 BIOASSESSMENT MONITORING

This project is not subject to bioassessment monitoring because it is not a Risk Level 3 project.

This project is not subject to bioassessment monitoring because it does not meet both of the permit specified trigger requirements.

### 7.10 WATERSHED MONITORING OPTION

This project is not participating in a watershed monitoring option.

### 7.11 QUALITY ASSURANCE AND QUALITY CONTROL

An effective Quality Assurance and Quality Control (QA/QC) plan will be implemented as part of the CSMP to ensure that analytical data can be used with confidence. QA/QC procedures to be initiated include the following:

- Field logs;
- Clean sampling techniques;
- CoCs;
- QA/QC Samples; and
- Data verification.
Each of these procedures is discussed in more detail in the following sections.

### 7.11.1 Field Logs

The purpose of field logs is to record sampling information and field observations during monitoring that may explain any uncharacteristic analytical results. Sampling information to be included in the field log include the date and time of water quality sample collection, sampling personnel, sample container identification numbers, and types of samples that were collected. Field observations should be noted in the field log for any abnormalities at the sampling location (color, odor, BMPs, etc.). Field measurements for pH and turbidity should also be recorded in the field log. A Visual Inspection Field Log, an Effluent Sampling Field Log Sheet, [and a Receiving Water Sampling Field Log Sheet] are included in CSMP Attachment 3 “Example Forms”.

### 7.11.2 Clean Sampling Techniques

Clean sampling techniques involve the use of certified clean containers for sample collection and clean powder-free nitrile gloves during sample collection and handling. As discussed in Section 7.7.7, adoption of a clean sampling approach will minimize the chance of field contamination and questionable data results.

### 7.11.3 Chain of Custody

The sample CoC is an important documentation step that tracks samples from collection through analysis to ensure the validity of the sample. Sample CoC procedures include the following:

- Proper labeling of samples;
- Use of CoC forms for all samples; and
- Prompt sample delivery to the analytical laboratory.

Analytical laboratories usually provide CoC forms to be filled out for sample containers. An example CoC is included in CSMP Attachment 3 “Example Forms”.

### 7.11.4 QA/QC Samples

QA/QC samples provide an indication of the accuracy and precision of the sample collection; sample handling; field measurements; and analytical laboratory methods. The following types of QA/QC will be conducted for this project:

- Field Duplicates at a frequency of 5 percent or 1 duplicate minimum per sampling event
- Equipment Blanks at a frequency of 5 percent or 1 duplicate minimum per sampling event
- Field Blanks (Only required if sampling method calls for field blanks)
- Travel Blanks (for VOC samples only) at a frequency of 5 percent or 1 duplicate minimum per sampling event.

#### 7.11.4.1 Field Duplicates

Field duplicates provide verification of laboratory or field analysis and sample collection. Duplicate samples will be collected, handled, and analyzed using the same protocols as primary
samples. The sample location where field duplicates are collected will be randomly selected from the discharge locations. Duplicate samples will be collected immediately after the primary sample has been collected. Duplicate samples must be collected in the same manner and as close in time as possible to the original sample. Duplicate samples will not influence any evaluations or conclusion.

7.11.4.2 Equipment Blanks

Equipment blanks provide verification that equipment has not introduced a pollutant into the sample. Equipment blanks are typically collected when:

- New equipment is used;
- Equipment that has been cleaned after use at a contaminated site;
- Equipment that is not dedicated for surface water sampling is used; or
- Whenever a new lot of filters are used when sampling metals.

7.11.4.3 Field Blanks

Field blanks assess potential sample contamination levels that occur during field sampling activities. De-ionized water field blanks are taken to the field, transferred to the appropriate container, and treated the same as the corresponding sample type during the course of a sampling event.

7.11.4.4 Travel Blanks

Travel blanks assess the potential for cross-contamination of volatile constituents between sample containers during shipment from the field to the laboratory. De-ionized water blanks are taken along for the trip and held unopened in the same cooler with the VOC samples.

7.11.5 Data Verification

After results are received from the analytical laboratory, the QSP will verify the data to ensure that it is complete, accurate, and the appropriate QA/QC requirements were met. Data must be verified as soon as the data reports are received. Data verification will include:

- Check the CoC and laboratory reports. *Make sure all requested analyses were performed and all samples are accounted for in the reports.*
- Check laboratory reports to make sure hold times were met and that the reporting levels meet or are lower than the reporting levels agreed to in the contract.
- Check data for outlier values and follow up with the laboratory. *Occasionally typographical errors, unit reporting errors, or incomplete results are reported and should be easily detected. These errors need to be identified, clarified, and corrected quickly by the laboratory. The QSP should especially note data that is an order of magnitude or more different than similar locations, or is inconsistent with previous data from the same location.*
Check laboratory QA/QC results. EPA establishes QA/QC checks and acceptable criteria for laboratory analyses. These data are typically reported along with the sample results. The QSP will evaluate the reported QA/QC data to check for contamination (method, field, and equipment blanks), precision (laboratory matrix spike duplicates), and accuracy (matrix spikes and laboratory control samples). When QA/QC checks are outside acceptable ranges, the laboratory must flag the data, and usually provides an explanation of the potential impact to the sample results.

Check the data set for outlier values and, accordingly, confirm results and re-analyze samples where appropriate. Sample re-analysis should only be undertaken when it appears that some part of the QA/QC resulted in a value out of the accepted range. Sample results may not be discounted unless the analytical laboratory identifies the required QA/QC criteria were not met and confirms this in writing.

Field data including inspections and observations must be verified as soon as the field logs are received, typically at the end of the sampling event. Field data verification will include:

- Check field logs to make sure all required measurements were completed and appropriately documented;
- Check reported values that appear out of the typical range or inconsistent; Follow-up immediately to identify potential reporting or equipment problems, if appropriate, recalibrate equipment after sampling;
- Verify equipment calibrations;
- Review observations noted on the field logs; and
- Review notations of any errors and actions taken to correct the equipment or recording errors.

**7.12 RECORDS RETENTION**

All records of stormwater monitoring information and copies of reports (including Annual Reports) will be retained for a period of at least three years from date of submittal or longer if required by the Central Valley Regional Water Quality Control Board. Results of visual monitoring, field measurements and laboratory analyses will be kept in the SWPPP along with CoCs, and other documentation related to the monitoring. Records will be kept onsite while construction is ongoing. Records to be retained include:

- The date, place, and time of inspections, sampling, visual observations, and/or measurements, including precipitation;
- The individual(s) who performed the inspections, sampling, visual observation, and/or field measurements;
- The date and approximate time of field measurements and laboratory analyses;
- The individual(s) who performed the laboratory analyses;
• A summary of all analytical results, the method detection limits and reporting limits, and the analytical techniques or methods used;

• Rain gauge readings from site inspections;

• QA/QC records and results;

• Calibration records;

• Visual observation and sample collection exemption records;

• The records of any corrective actions and follow-up activities that resulted from analytical results, visual observations, or inspections; [and]

• NAL Exceedance Reports
Section 8 References


This page intentionally left blank.
Construction Site Monitoring Plan Attachments
### Rain Gauge Log Sheet

**Construction Site Name:** North Area Streams Robla Creek Woodland Mitigation and Enhancement Project

<table>
<thead>
<tr>
<th>Date (mm/dd/yy)</th>
<th>Time (24-hr)</th>
<th>Initials</th>
<th>Rainfall Depth (Inches)</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Visual Inspection Field Log Sheet

**Date and Time of Inspection:**

**Report Date:**

**Inspection Type:**
- ☐ Weekly
- ☐ Before predicted rain
- ☐ During rain event
- ☐ Following qualifying rain event
- ☐ Contained stormwater release
- ☐ Quarterly non-stormwater

### Site Information

**Construction Site Name:** Feather River West Levee Project, Gap closure areas

**Construction stage and completed activities:**

**Approximate area of exposed site:**

### Weather and Observations

**Date Rain Predicted to Occur:**

**Predicted % chance of rain:**

**Estimate storm beginning:**

**Estimate storm duration:**

**Estimate time since last storm:**

**Rain gauge reading:**

**Observations:** If yes identify location

**Odors**
- Yes ☐ No ☐

**Floating material**
- Yes ☐ No ☐

**Suspended Material**
- Yes ☐ No ☐

**Sheen**
- Yes ☐ No ☐

**Discolorations**
- Yes ☐ No ☐

**Turbidity**
- Yes ☐ No ☐

### Site Inspections

**Outfalls or BMPs Evaluated**

**Deficiencies Noted**

(Add additional sheets or attached detailed BMP Inspection Checklists)

**Photos Taken:**
- Yes ☐ No ☐

**Photo Reference IDs:**

**Corrective Actions Identified (note if SWPPP/REAP change is needed)**
### Inspector Information

<table>
<thead>
<tr>
<th>Inspector Name:</th>
<th>Inspector Title:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature:</td>
<td>Date:</td>
</tr>
</tbody>
</table>

### Risk Level 2

**Effluent Sampling Field Log Sheets**

<table>
<thead>
<tr>
<th>Construction Site Name: Feather River West Levee Project, Gap closure areas</th>
<th>Date:</th>
<th>Time Start:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampler:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sampling Event Type:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Stormwater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Non-stormwater</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Non-visible pollutant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Field Meter Calibration

<table>
<thead>
<tr>
<th>pH Meter ID No./Desc.:</th>
<th>Turbidity Meter ID No./Desc.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calibration Date/Time:</td>
<td>Calibration Date/Time:</td>
</tr>
</tbody>
</table>

### Field pH and Turbidity Measurements

<table>
<thead>
<tr>
<th>Discharge Location Description</th>
<th>pH</th>
<th>Turbidity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Grab Samples Collected

<table>
<thead>
<tr>
<th>Discharge Location Description</th>
<th>Sample Type</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Additional Sampling Notes:

<p>| Time End: | |
|-----------|</p>
<table>
<thead>
<tr>
<th>NAL or NEL Exceedance Evaluation Summary Report</th>
<th>Page __ of __</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Name</strong></td>
<td>Feather River West Levee Project, Gap closure areas</td>
</tr>
<tr>
<td><strong>Project WDID</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Project Location</strong></td>
<td>Along Feather River West Levee, Yuba City</td>
</tr>
<tr>
<td><strong>Date of Exceedance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Type of Exceedance</strong></td>
<td>NAL Daily Average [ ] pH [ ] Turbidity</td>
</tr>
<tr>
<td></td>
<td>NEL Daily Average [ ] pH [ ] Turbidity</td>
</tr>
<tr>
<td></td>
<td>[ ] Other (specify) _</td>
</tr>
<tr>
<td><strong>Measurement or Analytical Method</strong></td>
<td>□ Field meter</td>
</tr>
<tr>
<td></td>
<td>(Sensitivity: __)</td>
</tr>
<tr>
<td></td>
<td>□ Lab method (specify) _</td>
</tr>
<tr>
<td></td>
<td>(Reporting Limit: __)</td>
</tr>
<tr>
<td></td>
<td>(MDL: ____ )</td>
</tr>
<tr>
<td><strong>Calculated Daily Average</strong></td>
<td>□ pH, pH units</td>
</tr>
<tr>
<td></td>
<td>□ Turbidity _ NTU</td>
</tr>
<tr>
<td><strong>Rain Gauge Measurement</strong></td>
<td>______ inches</td>
</tr>
<tr>
<td><strong>Compliance Storm Event</strong></td>
<td>______ inches (5-year, 24-hour event)</td>
</tr>
<tr>
<td><strong>Visual Observations on Day of Exceedance</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Description of BMPs in Place at Time of Event</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Initial Assessment of Cause</strong></td>
<td></td>
</tr>
<tr>
<td>NAL or NEL Exceedance Evaluation Summary Report</td>
<td>Page __ of __</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Corrective Actions Taken (deployed after exceedance)</td>
<td></td>
</tr>
<tr>
<td>Additional Corrective Actions Proposed</td>
<td></td>
</tr>
<tr>
<td>Report Completed By</td>
<td>____</td>
</tr>
<tr>
<td>(Print Name, Title)</td>
<td></td>
</tr>
<tr>
<td>Signature</td>
<td>____</td>
</tr>
</tbody>
</table>
# SWPPP for the Robla Creek Woodland Mitigation and Enhancement Project

## SWPPP for the Robla Creek Woodland Mitigation and Enhancement Project

### Attachment 3

#### June 2017

---

**CHAIN-OF-CUSTODY**

<table>
<thead>
<tr>
<th>Client Sample ID</th>
<th>Sample Date</th>
<th>Sample Time</th>
<th>Sample Matrix</th>
<th>Container</th>
<th>#</th>
<th>Type</th>
<th>Pres.</th>
<th>REQUESTED ANALYSIS</th>
<th>Notes</th>
</tr>
</thead>
</table>

**Project Name:** Feather River West Levee Project, Gap closure areas

---

**CLIENT CONTACTS**

- **ATTN:**
- **ADDRESS:**
- **Office Phone:**
- **Cell Phone:**
- **SAMPLED BY:**
- **Contact:**

---

**SENDER COMMENTS:**

---

**RELINQUISHED BY**

- **Signature:**
- **Print:**
- **Company:**
- **Date:**
- **TIME:**

---

**LABORATORY COMMENTS:**

---

**RECEIVED BY**

- **Signature:**
- **Print:**
- **Company:**
- **Date:**
- **TIME:**

---

**CHAIN-OF-CUSTODY**

- **DATE:**
- **Lab ID:**
Appendix A

Calculations
### Post-Construction Water Balance Calculator

**Project Information**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name</td>
<td>Roble Creek Mitigation Planning</td>
</tr>
<tr>
<td>Waste Discharge Identification (WQID)</td>
<td>Optional</td>
</tr>
<tr>
<td>Date</td>
<td>Optional</td>
</tr>
<tr>
<td>Sub Drainage Area Name (from map)</td>
<td>Optional</td>
</tr>
</tbody>
</table>

**Runoff Calculations**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Previous Runoff Curve Number</td>
<td>8</td>
</tr>
<tr>
<td>Proposed Development Previous Runoff Curve Number</td>
<td>9</td>
</tr>
<tr>
<td>Design Storm</td>
<td>Percent of total project: 100%</td>
</tr>
</tbody>
</table>

**Complete Either**

<table>
<thead>
<tr>
<th>Sub-watershed Area (acres)</th>
<th>Complete Either</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Roof Impervious Coverage</td>
<td></td>
</tr>
<tr>
<td>Existing Non-Roof Impervious Coverage</td>
<td></td>
</tr>
<tr>
<td>Proposed Roof Impervious Coverage</td>
<td></td>
</tr>
<tr>
<td>Proposed Non-Roof Impervious Coverage</td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
</tr>
<tr>
<td>Subtotal Runoff Volume Reduction Credit</td>
<td>0 Cu. Ft.</td>
</tr>
</tbody>
</table>

**Volume (cubic feet)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Runoff Volume Reduction Credit</td>
<td>156,489 Cu. Ft.</td>
</tr>
</tbody>
</table>

---

You have achieved your minimum requirements.
<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Version 8/17/2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Risk Determination Worksheet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Step 1</td>
<td>Determine Sediment Risk via one of the options listed:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1. GIS Map Method - EPA Rainfall Erosivity Calculator &amp; GIS map</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>2. Individual Method - EPA Rainfall Erosivity Calculator &amp; Individual Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Step 2</td>
<td>Determine Receiving Water Risk via one of the options listed:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>1. GIS map of Sediment Sensitive Watersheds provided</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>2. Site Specific Analysis (support documentation required)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Step 3</td>
<td>Determine Combined Risk Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td><strong>Sediment Risk Factor Worksheet</strong></td>
<td>Entry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>A) R Factor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Analyses of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy (E) times the maximum 30-min intensity (I30) (Wischmeier and Smith, 1958). The numerical value of R is the average annual sum of E*I30 for storm events during a rainfall record of at least 22 years. “Isoerodent” maps were developed based on R values calculated for more than 1000 locations in the Western U.S. Refer to the link below to determine the R factor for the project site.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td><strong>B) K Factor (weighted average, by area, for all site soils)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The soil-erodibility factor K represents: (1) susceptibility of soil or surface material to erosion, (2) transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff even though these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high rates and large volumes of runoff. Use Site-specific data must be submitted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><a href="#">Site-specific K factor guidance</a></td>
<td>K Factor Value</td>
<td>0.35</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><strong>C) LS Factor (weighted average, by area, for all slopes)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The effect of topography on erosion is accounted for by the LS factor, which combines the effects of a hillslope-length factor, L, and a hillslope-gradient factor, S. Generally speaking, as hillslope length and/or hillslope gradient increase, soil loss increases. As hillslope length increases, total soil loss and soil loss per unit area increase due to the progressive accumulation of runoff in the downslope direction. As the hillslope gradient increases, the velocity and erosivity of runoff increases. Use the LS table located in separate tab of this spreadsheet to determine LS factors. Estimate the weighted LS for the site prior to construction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>LS Table</td>
<td>LS Factor Value</td>
<td>0.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td><strong>Watershed Erosion Estimate (=RxKxLS) in tons/acre</strong></td>
<td></td>
<td>6.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td><strong>Site Sediment Risk Factor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Low Sediment Risk: &lt; 15 tons/acre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Medium Sediment Risk: &gt;=15 and &lt;75 tons/acre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>High Sediment Risk: &gt;= 75 tons/acre</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A. Watershed Characteristics

<table>
<thead>
<tr>
<th>Entry</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Low</td>
</tr>
</tbody>
</table>

A.1. Does the disturbed area discharge (either directly or indirectly) to a **303(d)-listed waterbody impaired by sediment** (For help with impaired waterbodies please visit the link below) or has a **USEPA approved TMDL implementation plan for sediment**?:


**OR**

A.2. Does the disturbed area discharge to a waterbody with designated beneficial uses of **SPAWN & COLD & MIGRATORY**? (For help please review the appropriate Regional Board Basin Plan)

http://www.waterboards.ca.gov/waterboards_map.shtml

- Region 1 Basin Plan
- Region 2 Basin Plan
- Region 3 Basin Plan
- Region 4 Basin Plan
- Region 5 Basin Plan
- Region 6 Basin Plan
- Region 7 Basin Plan
- Region 8 Basin Plan
- Region 9 Basin Plan
**Combined Risk Level Matrix**

<table>
<thead>
<tr>
<th>Receiving Water Risk</th>
<th>Sediment Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low Level 1</td>
</tr>
<tr>
<td>High</td>
<td>Level 3</td>
</tr>
<tr>
<td></td>
<td>Level 2</td>
</tr>
</tbody>
</table>

- Project Sediment Risk: Low
- Project RW Risk: Low
- Project Combined Risk: Level 1
The K factor can be determined by using the nomograph method, which requires that a particle size analysis (ASTM D 422) be done to determine the percentages of sand, very fine sand, silt, and clay. Use the figure below to determine appropriate K value.

Erickson triangular nomograph used to estimate soil erodibility (K) factor. The figure above is the USDA nomograph used to determine the K factor for a soil, based on its texture (% silt plus very fine sand, % sand, % organic matter, soil structure, and permeability). Nomograph from Erickson 1977 as referenced in Goldman et. al., 1986.
### Average Watershed Slope (%)

<table>
<thead>
<tr>
<th>Sheet Flow Length (ft)</th>
<th>0.2</th>
<th>0.5</th>
<th>1.0</th>
<th>2.0</th>
<th>3.0</th>
<th>4.0</th>
<th>5.0</th>
<th>6.0</th>
<th>8.0</th>
<th>10.0</th>
<th>12.0</th>
<th>14.0</th>
<th>16.0</th>
<th>20.0</th>
<th>25.0</th>
<th>30.0</th>
<th>40.0</th>
<th>50.0</th>
<th>60.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 3</td>
<td>0.05</td>
<td>0.07</td>
<td>0.09</td>
<td>0.13</td>
<td>0.17</td>
<td>0.20</td>
<td>0.23</td>
<td>0.26</td>
<td>0.32</td>
<td>0.36</td>
<td>0.38</td>
<td>0.41</td>
<td>0.45</td>
<td>0.48</td>
<td>0.53</td>
<td>0.58</td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.05</td>
<td>0.07</td>
<td>0.09</td>
<td>0.13</td>
<td>0.17</td>
<td>0.20</td>
<td>0.23</td>
<td>0.26</td>
<td>0.32</td>
<td>0.37</td>
<td>0.41</td>
<td>0.45</td>
<td>0.49</td>
<td>0.56</td>
<td>0.64</td>
<td>0.72</td>
<td>0.85</td>
<td>0.97</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0.05</td>
<td>0.07</td>
<td>0.09</td>
<td>0.13</td>
<td>0.17</td>
<td>0.20</td>
<td>0.23</td>
<td>0.26</td>
<td>0.32</td>
<td>0.38</td>
<td>0.45</td>
<td>0.51</td>
<td>0.56</td>
<td>0.67</td>
<td>0.80</td>
<td>0.91</td>
<td>1.13</td>
<td>1.31</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0.05</td>
<td>0.07</td>
<td>0.09</td>
<td>0.13</td>
<td>0.17</td>
<td>0.20</td>
<td>0.23</td>
<td>0.26</td>
<td>0.32</td>
<td>0.39</td>
<td>0.47</td>
<td>0.55</td>
<td>0.62</td>
<td>0.76</td>
<td>0.93</td>
<td>1.06</td>
<td>1.37</td>
<td>1.62</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>0.05</td>
<td>0.07</td>
<td>0.09</td>
<td>0.13</td>
<td>0.17</td>
<td>0.20</td>
<td>0.23</td>
<td>0.26</td>
<td>0.32</td>
<td>0.40</td>
<td>0.49</td>
<td>0.58</td>
<td>0.67</td>
<td>0.84</td>
<td>1.04</td>
<td>1.24</td>
<td>1.59</td>
<td>1.91</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>0.05</td>
<td>0.07</td>
<td>0.10</td>
<td>0.16</td>
<td>0.21</td>
<td>0.26</td>
<td>0.31</td>
<td>0.36</td>
<td>0.45</td>
<td>0.57</td>
<td>0.71</td>
<td>0.85</td>
<td>0.98</td>
<td>1.24</td>
<td>1.56</td>
<td>1.86</td>
<td>2.41</td>
<td>2.91</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>0.05</td>
<td>0.08</td>
<td>0.13</td>
<td>0.21</td>
<td>0.30</td>
<td>0.38</td>
<td>0.46</td>
<td>0.54</td>
<td>0.70</td>
<td>0.91</td>
<td>1.15</td>
<td>1.40</td>
<td>1.64</td>
<td>2.10</td>
<td>2.67</td>
<td>3.22</td>
<td>4.24</td>
<td>5.16</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>0.05</td>
<td>0.08</td>
<td>0.14</td>
<td>0.25</td>
<td>0.36</td>
<td>0.47</td>
<td>0.58</td>
<td>0.69</td>
<td>0.91</td>
<td>1.20</td>
<td>1.54</td>
<td>1.87</td>
<td>2.21</td>
<td>2.86</td>
<td>3.67</td>
<td>4.44</td>
<td>5.89</td>
<td>7.20</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>0.05</td>
<td>0.09</td>
<td>0.15</td>
<td>0.28</td>
<td>0.41</td>
<td>0.55</td>
<td>0.68</td>
<td>0.82</td>
<td>1.10</td>
<td>1.46</td>
<td>1.88</td>
<td>2.31</td>
<td>2.73</td>
<td>3.57</td>
<td>4.59</td>
<td>5.58</td>
<td>7.44</td>
<td>9.13</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>0.05</td>
<td>0.09</td>
<td>0.17</td>
<td>0.33</td>
<td>0.50</td>
<td>0.68</td>
<td>0.86</td>
<td>1.05</td>
<td>1.43</td>
<td>1.92</td>
<td>2.51</td>
<td>3.09</td>
<td>3.68</td>
<td>4.85</td>
<td>6.30</td>
<td>7.70</td>
<td>10.35</td>
<td>12.75</td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>0.06</td>
<td>0.10</td>
<td>0.18</td>
<td>0.37</td>
<td>0.57</td>
<td>0.79</td>
<td>1.02</td>
<td>1.25</td>
<td>1.72</td>
<td>2.34</td>
<td>3.07</td>
<td>3.81</td>
<td>4.56</td>
<td>6.04</td>
<td>7.88</td>
<td>9.67</td>
<td>13.07</td>
<td>16.16</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>0.06</td>
<td>0.10</td>
<td>0.19</td>
<td>0.40</td>
<td>0.64</td>
<td>0.89</td>
<td>1.16</td>
<td>1.43</td>
<td>1.99</td>
<td>2.72</td>
<td>3.60</td>
<td>4.48</td>
<td>5.37</td>
<td>7.16</td>
<td>9.38</td>
<td>11.55</td>
<td>15.67</td>
<td>19.42</td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>0.06</td>
<td>0.10</td>
<td>0.20</td>
<td>0.43</td>
<td>0.69</td>
<td>0.98</td>
<td>1.28</td>
<td>1.60</td>
<td>2.24</td>
<td>3.06</td>
<td>4.06</td>
<td>5.11</td>
<td>6.15</td>
<td>8.23</td>
<td>10.81</td>
<td>13.35</td>
<td>18.17</td>
<td>22.57</td>
<td></td>
</tr>
<tr>
<td>400</td>
<td>0.06</td>
<td>0.11</td>
<td>0.22</td>
<td>0.48</td>
<td>0.80</td>
<td>1.14</td>
<td>1.51</td>
<td>1.90</td>
<td>2.70</td>
<td>3.75</td>
<td>5.01</td>
<td>6.30</td>
<td>7.69</td>
<td>10.24</td>
<td>13.53</td>
<td>16.77</td>
<td>22.95</td>
<td>28.60</td>
<td></td>
</tr>
<tr>
<td>600</td>
<td>0.06</td>
<td>0.12</td>
<td>0.24</td>
<td>0.56</td>
<td>0.96</td>
<td>1.42</td>
<td>1.91</td>
<td>2.43</td>
<td>3.52</td>
<td>4.95</td>
<td>6.67</td>
<td>8.45</td>
<td>10.26</td>
<td>13.94</td>
<td>18.57</td>
<td>23.14</td>
<td>31.89</td>
<td>39.95</td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>0.06</td>
<td>0.12</td>
<td>0.26</td>
<td>0.63</td>
<td>1.10</td>
<td>1.65</td>
<td>2.25</td>
<td>2.89</td>
<td>4.24</td>
<td>6.03</td>
<td>8.17</td>
<td>10.40</td>
<td>12.69</td>
<td>17.35</td>
<td>23.24</td>
<td>29.07</td>
<td>40.29</td>
<td>50.63</td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td>0.06</td>
<td>0.13</td>
<td>0.27</td>
<td>0.69</td>
<td>1.23</td>
<td>1.86</td>
<td>2.55</td>
<td>3.30</td>
<td>4.91</td>
<td>7.02</td>
<td>9.57</td>
<td>12.23</td>
<td>14.98</td>
<td>20.57</td>
<td>27.66</td>
<td>34.71</td>
<td>48.29</td>
<td>60.84</td>
<td></td>
</tr>
</tbody>
</table>

LS Factors for Construction Sites. *Table from Renard et al., 1997.*
Appendix B

Site Maps

DRAFT SWPPP MAPS FOR BIDDING PURPOSE ONLY
Appendix F

Construction Schedule
## Appendix F - Preliminary Construction schedule

SAFCA Contract 4383 Robla Creek Woodland Mitigation and Enhancement Project

<table>
<thead>
<tr>
<th>Activity</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sept</td>
<td>Oct</td>
</tr>
<tr>
<td>Pre-Planting Weed Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation System Installation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Observations and Actions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seedbed Preparation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seeding of Native Perennial Grassland Mix</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix N

Construction General Permit, Attachment C – Risk Level 1 Requirements
ATTACHMENT C
RISK LEVEL 1 REQUIREMENTS

A. Effluent Standards

[These requirements are the same as those in the General Permit order.]

1. Narrative – Risk Level 1 dischargers shall comply with the narrative effluent standards listed below:

   a. Storm water discharges and authorized non-storm water discharges regulated by this General Permit shall not contain a hazardous substance equal to or in excess of reportable quantities established in 40 C.F.R. §§ 117.3 and 302.4, unless a separate NPDES Permit has been issued to regulate those discharges.

   b. Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures, and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants.

2. Numeric – Risk Level 1 dischargers are not subject to a numeric effluent standard.

B. Good Site Management "Housekeeping"

1. Risk Level 1 dischargers shall implement good site management (i.e., "housekeeping") measures for construction materials that could potentially be a threat to water quality if discharged. At a minimum, Risk Level 1 dischargers shall implement the following good housekeeping measures:

   a. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

   b. Cover and berm loose stockpiled construction materials that are not actively being used (i.e. soil, spoils, aggregate, fly-ash, stucco, hydrated lime, etc.).
c. Store chemicals in watertight containers (with appropriate secondary containment to prevent any spillage or leakage) or in a storage shed (completely enclosed).

d. Minimize exposure of construction materials to precipitation. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e. poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

e. Implement BMPs to prevent the off-site tracking of loose construction and landscape materials.

2. Risk Level 1 dischargers shall implement good housekeeping measures for waste management, which, at a minimum, shall consist of the following:

   a. Prevent disposal of any rinse or wash waters or materials on impervious or pervious site surfaces or into the storm drain system.

   b. Ensure the containment of sanitation facilities (e.g., portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water.

   c. Clean or replace sanitation facilities and inspecting them regularly for leaks and spills.

   d. Cover waste disposal containers at the end of every business day and during a rain event.

   e. Prevent discharges from waste disposal containers to the storm water drainage system or receiving water.

   f. Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.

   g. Implement procedures that effectively address hazardous and non-hazardous spills.

   h. Develop a spill response and implementation element of the SWPPP prior to commencement of construction activities. The SWPPP shall require that:

      i. Equipment and materials for cleanup of spills shall be available on site and that spills and leaks shall be cleaned up immediately and disposed of properly; and
ii. Appropriate spill response personnel are assigned and trained.

i. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

3. Risk Level 1 dischargers shall implement good housekeeping for vehicle storage and maintenance, which, at a minimum, shall consist of the following:

   a. Prevent oil, grease, or fuel to leak into the ground, storm drains or surface waters.

   b. Place all equipment or vehicles, which are to be fueled, maintained and stored in a designated area fitted with appropriate BMPs.

   c. Clean leaks immediately and disposing of leaked materials properly.

4. Risk Level 1 dischargers shall implement good housekeeping for landscape materials, which, at a minimum, shall consist of the following:

   a. Contain stockpiled materials such as mulches and topsoil when they are not actively being used.

   b. Contain fertilizers and other landscape materials when they are not actively being used.

   c. Discontinue the application of any erodible landscape material within 2 days before a forecasted rain event or during periods of precipitation.

   d. Apply erodible landscape material at quantities and application rates according to manufacturer recommendations or based on written specifications by knowledgeable and experienced field personnel.

   e. Stack erodible landscape material on pallets and covering or storing such materials when not being used or applied.

5. Risk Level 1 dischargers shall conduct an assessment and create a list of potential pollutant sources and identify any areas of the site where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant list shall be kept with the SWPPP and shall identify
all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, Risk Level 1 dischargers shall do the following:

a. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.

b. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.

c. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.

d. Ensure retention of sampling, visual observation, and inspection records.

e. Ensure effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

6. Risk Level 1 dischargers shall implement good housekeeping measures on the construction site to control the air deposition of site materials and from site operations. Such particulates can include, but are not limited to, sediment, nutrients, trash, metals, bacteria, oil and grease and organics.

C. Non-Storm Water Management

1. Risk Level 1 dischargers shall implement measures to control all non-storm water discharges during construction.

2. Risk Level 1 dischargers shall wash vehicles in such a manner as to prevent non-storm water discharges to surface waters or MS4 drainage systems.

3. Risk Level 1 dischargers shall clean streets in such a manner as to prevent unauthorized non-storm water discharges from reaching surface water or MS4 drainage systems.
D. Erosion Control

1. Risk Level 1 dischargers shall implement effective wind erosion control.

2. Risk Level 1 dischargers shall provide effective soil cover for inactive\(^1\) areas and all finished slopes, open space, utility backfill, and completed lots.

3. Risk Level 1 dischargers shall limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist. Where plastic materials are deemed necessary, the discharger shall consider the use of plastic materials resistant to solar degradation.

E. Sediment Controls

1. Risk Level 1 dischargers shall establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from the site.

2. On sites where sediment basins are to be used, Risk Level 1 dischargers shall, at minimum, design sediment basins according to the method provided in CASQA’s Construction BMP Guidance Handbook.

F. Run-on and Runoff Controls

Risk Level 1 dischargers shall effectively manage all run-on, all runoff within the site and all runoff that discharges off the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance with the effluent limitations in this General Permit.

G. Inspection, Maintenance and Repair

1. Risk Level 1 dischargers shall ensure that all inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the discharger. The QSP may delegate any or all of these activities to an employee trained to do the task(s) appropriately, but shall ensure adequate deployment.

2. Risk Level 1 dischargers shall perform weekly inspections and observations, and at least once each 24-hour period during extended

\(^1\) Inactive areas of construction are areas of construction activity that have been disturbed and are not scheduled to be re-disturbed for at least 14 days.
storm events, to identify and record BMPs that need maintenance to operate effectively, that have failed, or that could fail to operate as intended. Inspectors shall be the QSP or be trained by the QSP.

3. Upon identifying failures or other shortcomings, as directed by the QSP, Risk Level 1 dischargers shall begin implementing repairs or design changes to BMPs within 72 hours of identification and complete the changes as soon as possible.

4. For each inspection required, Risk Level 1 dischargers shall complete an inspection checklist, using a form provided by the State Water Board or Regional Water Board or in an alternative format.

5. Risk Level 1 dischargers shall ensure that checklists shall remain onsite with the SWPPP and at a minimum, shall include:

   a. Inspection date and date the inspection report was written.

   b. Weather information, including presence or absence of precipitation, estimate of beginning of qualifying storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall in inches.

   c. Site information, including stage of construction, activities completed, and approximate area of the site exposed.

   d. A description of any BMPs evaluated and any deficiencies noted.

   e. If the construction site is safely accessible during inclement weather, list the observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls. Otherwise, list the results of visual inspections at all relevant outfalls, discharge points, downstream locations and any projected maintenance activities.

   f. Report the presence of noticeable odors or of any visible sheen on the surface of any discharges.

   g. Any corrective actions required, including any necessary changes to the SWPPP and the associated implementation dates.

   h. Photographs taken during the inspection, if any.

   i. Inspector’s name, title, and signature.
H. Rain Event Action Plan
   Not required for Risk Level 1 dischargers.
I. Risk Level 1 Monitoring and Reporting Requirements

Table 1- Summary of Monitoring Requirements

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Visual Inspections</th>
<th>Sample Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quarterly Non-storm Water Discharge</td>
<td>Pre-storm Event (Baseline, REAP)</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

1. Construction Site Monitoring Program Requirements

a. Pursuant to Water Code Sections 13383 and 13267, all dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring Program (CSMP) in accordance with the requirements of this Section. The CSMP shall include all monitoring procedures and instructions, location maps, forms, and checklists as required in this section. The CSMP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMP shall be a part of the Storm Water Pollution Prevention Plan (SWPPP), included as an appendix or separate SWPPP chapter.

b. Existing dischargers registered under the State Water Board Order No. 99-08-DWQ shall make and implement necessary revisions to their Monitoring Programs to reflect the changes in this General Permit in a timely manner, but no later than July 1, 2010. Existing dischargers shall continue to implement their existing Monitoring Programs in compliance with State Water Board Order No. 99-08-DWQ until the necessary revisions are completed according to the schedule above.

c. When a change of ownership occurs for all or any portion of the construction site prior to completion or final stabilization, the new discharger shall comply with these requirements as of the date the ownership change occurs.

2. Objectives

The CSMP shall be developed and implemented to address the following objectives:

a. To demonstrate that the site is in compliance with the Discharge Prohibitions;
b. To determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives;

c. To determine whether immediate corrective actions, additional Best Management Practice (BMP) implementation, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges; and

d. To determine whether BMPs included in the SWPPP are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.

3. **Risk Level 1 - Visual Monitoring (Inspection) Requirements for Qualifying Rain Events**

a. Risk Level 1 dischargers shall visually observe (inspect) storm water discharges at all discharge locations within two business days (48 hours) after each qualifying rain event.

b. Risk Level 1 dischargers shall visually observe (inspect) the discharge of stored or contained storm water that is derived from and discharged subsequent to a qualifying rain event producing precipitation of ½ inch or more at the time of discharge. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation shall be observed prior to the discharge during operating hours.

c. Risk Level 1 dischargers shall conduct visual observations (inspections) during business hours only.

d. Risk Level 1 dischargers shall record the time, date and rain gauge reading of all qualifying rain events.

e. Within 2 business days (48 hours) prior to each qualifying rain event, Risk Level 1 dischargers shall visually observe (inspect):

   i. All storm water drainage areas to identify any spills, leaks, or uncontrolled pollutant sources. If needed, the discharger shall implement appropriate corrective actions.

   ii. All BMPs to identify whether they have been properly implemented in accordance with the SWPPP. If needed, the discharger shall implement appropriate corrective actions.
iii. Any storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.

d. For the visual observations (inspections) described in e.i and e.iii above, Risk Level 1 dischargers shall observe the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

g. Within two business days (48 hours) after each qualifying rain event, Risk Level 1 dischargers shall conduct post rain event visual observations (inspections) to (1) identify whether BMPs were adequately designed, implemented, and effective, and (2) identify additional BMPs and revise the SWPPP accordingly.

h. Risk Level 1 dischargers shall maintain on-site records of all visual observations (inspections), personnel performing the observations, observation dates, weather conditions, locations observed, and corrective actions taken in response to the observations.

4. Risk Level 1 – Visual Observation Exemptions

a. Risk Level 1 dischargers shall be prepared to conduct visual observation (inspections) until the minimum requirements of Section I.3 above are completed. Risk Level 1 dischargers are not required to conduct visual observation (inspections) under the following conditions:

i. During dangerous weather conditions such as flooding and electrical storms.

ii. Outside of scheduled site business hours.

b. If no required visual observations (inspections) are collected due to these exceptions, Risk Level 1 dischargers shall include an explanation in their SWPPP and in the Annual Report documenting why the visual observations (inspections) were not conducted.

5. Risk Level 1 – Monitoring Methods

Risk Level 1 dischargers shall include a description of the visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures in the CSMP.

6. Risk Level 1 – Non-Storm Water Discharge Monitoring Requirements
a. Visual Monitoring Requirements:

i. Risk Level 1 dischargers shall visually observe (inspect) each drainage area for the presence of (or indications of prior) unauthorized and authorized non-storm water discharges and their sources.

ii. Risk Level 1 dischargers shall conduct one visual observation (inspection) quarterly in each of the following periods: January-March, April-June, July-September, and October-December. Visual observation (inspections) are only required during daylight hours (sunrise to sunset).

iii. Risk Level 1 dischargers shall ensure that visual observations (inspections) document the presence or evidence of any non-storm water discharge (authorized or unauthorized), pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source. Risk Level 1 dischargers shall maintain on-site records indicating the personnel performing the visual observation (inspections), the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges.

7. **Risk Level 1 – Non-Visible Pollutant Monitoring Requirements**

a. Risk Level 1 dischargers shall collect one or more samples during any breach, malfunction, leakage, or spill observed during a visual inspection which could result in the discharge of pollutants to surface waters that would not be visually detectable in storm water.

b. Risk Level 1 dischargers shall ensure that water samples are large enough to characterize the site conditions.

c. Risk Level 1 dischargers shall collect samples at all discharge locations that can be safely accessed.

d. Risk Level 1 dischargers shall collect samples during the first two hours of discharge from rain events that occur during business hours and which generate runoff.

e. Risk Level 1 dischargers shall analyze samples for all non-visible pollutant parameters (if applicable) - parameters indicating the
presence of pollutants identified in the pollutant source assessment required (Risk Level 1 dischargers shall modify their CSMPs to address these additional parameters in accordance with any updated SWPPP pollutant source assessment).

f. Risk Level 1 dischargers shall collect a sample of storm water that has not come in contact with the disturbed soil or the materials stored or used on-site (uncontaminated sample) for comparison with the discharge sample.

g. Risk Level 1 dischargers shall compare the uncontaminated sample to the samples of discharge using field analysis or through laboratory analysis.²

h. Risk Level 1 dischargers shall keep all field/or analytical data in the SWPPP document.

8. **Risk Level 1 – Particle Size Analysis for Project Risk Justification**

Risk Level 1 dischargers justifying an alternative project risk shall report a soil particle size analysis used to determine the RUSLE K-Factor. ASTM D-422 (Standard Test Method for Particle-Size Analysis of Soils), as revised, shall be used to determine the percentages of sand, very fine sand, silt, and clay on the site.

9. **Risk Level 1 – Records**

Risk Level 1 dischargers shall retain records of all storm water monitoring information and copies of all reports (including Annual Reports) for a period of at least three years. Risk Level 1 dischargers shall retain all records on-site while construction is ongoing. These records include:

a. The date, place, time of facility inspections, sampling, visual observation (inspections), and/or measurements, including precipitation.

b. The individual(s) who performed the facility inspections, sampling, visual observation (inspections), and or measurements.

c. The date and approximate time of analyses.

d. The individual(s) who performed the analyses.

² For laboratory analysis, all sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136. Field discharge samples shall be collected and analyzed according to the specifications of the manufacturer of the sampling devices employed.
e. A summary of all analytical results from the last three years, the method detection limits and reporting units, and the analytical techniques or methods used.

f. Rain gauge readings from site inspections.

g. Quality assurance/quality control records and results.

h. Non-storm water discharge inspections and visual observation (inspections) and storm water discharge visual observation records (see Sections I.3 and I.6 above).

i. Visual observation and sample collection exception records (see Section I.4 above).

j. The records of any corrective actions and follow-up activities that resulted from analytical results, visual observation (inspections), or inspections.