SPECIFICATION NO. 26-06

CONTRACT NO. C51695
BID, CONTRACT AND SPECIFICATIONS

2026 LEVEE REPAIRS

COLUSA BASIN DRAIN AND SACRAMENTO RIVER

State Plan of Flood Control Facilities
Division of Flood Operations
Colusa and Yolo Counties
California

INFORMATION COPY ONLY

2026

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE OF CALIFORNIA

DIVISION 00

PROCUREMENT AND CONTRACTING REQUIREMENTS

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SEALS PAGE

2026 LEVEE REPAIRS
COLUSA BASIN DRAIN AND SACRAMENTO RIVER
STATE PLAN OF FLOOD CONTROL FACILITIES
DIVISION OF FLOOD OPERATIONS
COLUSA AND YOLO COUNTIES
CALIFORNIA
SPECIFICATION NO. 26-06
CONTRACT NO. C51695

The technical information of the specifications has been prepared by or under the direction of the following professionals.

Civil

Richard Millet 6/9/2026

Registered Civil Engineer Date



DOCUMENT 00 01 10

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INTRODUCTORY INFORMATION

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END OF DOCUMENT

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NOTICE TO CONTRACTORS

STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

Sealed bids for

2026 LEVEE REPAIRS
COLUSA BASIN DRAIN AND SACRAMENTO RIVER
STATE PLAN OF FLOOD CONTROL FACILITIES
DIVISION OF FLOOD OPERATIONS
COLUSA AND YOLO COUNTIES
CALIFORNIA
SPECIFICATION NO. 26-06
CONTRACT NO. C51695

will be received by the Department of Water Resources at the California Natural Resources Agency Headquarters, 715 P Street, Sacramento, California 95814, between **12 P.M. and not later than 2:00 P.M. on WEDNESDAY, JULY 1, 2026**, at which time they will be publicly opened and read at an announced location in the vicinity of such office and via webinar.

NOTE: Bidders/Visitors should allow sufficient time for checking in with Security upon entering the main floor of the California Natural Resources Agency Headquarters. Bids will be accepted and timestamped in the main lobby of the California Natural Resources Headquarters.

Please refer to Document 00 21 13 – Instructions to Bidders, for additional information.

Bid forms for this work are provided in a separate booklet titled BID FORM.

Bids will be considered only if submitted for all the work required for the above project. The work is defined in Section 01 11 00 – Summary of Work, and includes the following principal features:

1. Levee repairs at Sites 23-078 and 97:

    a. Mobilization and demobilization.

    b. Developing staging and laydown areas as needed.

    c. Installing temporary fencing or giant garter snake fencing around all work sites and staging areas.

    d. Installing turbidity curtains for sites requiring in-water construction.

    e. Installing exclusionary fencing around trees or box protection around trees and other vegetation.

    f. Traffic control and flagging for public safety.

    g. Installing and maintaining traffic detours in accordance with detour plans as required.

    h. Tree removal from the site, including removing stump and roots, and providing certified arborist for tree trimming and branch removal.

    i. Clearing and grubbing.

    j. Excavation and backfilling, and disposal of excavated material.

    k. Installing geotextile fabric

    l. Installing launch rock

    m. Installing earthfill.

    n. Installing agricultural soil on finished slopes and in voids in launch rock to form soil-filled rockfill.

    o. Applying surface treatment which includes seeding, agricultural soil, native topsoil, aggregate chinking, and erosion control fabric placement.

    p. Aggregate base resurfacing of the levee crown road.

    q. Installing and establishing pole cuttings.

    r. Establishing seeding.

    s. Installing and maintaining an irrigation system.

Quantities of work, materials, and equipment required for completion of the work are specified in Document 00 41 01 – Bid Schedule.

1. LICENSING

   Bidders shall be licensed for the work as required by the Business and Professions Code. Contractor's license classification(s) for this work: _A_ .

2. BIDDING

   Submit requests for drawings and specifications for the project by e-mail to doe_specs@water.ca.gov.

   Submit questions or requests for clarification by email to doe_specs@water.ca.gov. at least 5 days before the scheduled opening of bids. Responses, if appropriate, will be sent to all prospective bidders.

3. PREQUALIFICATION

   All bidders shall be prequalified by the Department. Bid forms will be furnished only to prequalified bidders who meet the requirements of the State Contract Act and Document 00 11 40 – Prequalification.

4. SITE INSPECTION TRIP

   An inspection trip for prospective bidders will be conducted at the work site, as per Document 00 11 02 – Notice of Inspection Trip.

5. DVBE AND SMALL BUSINESS PARTICIPATION

   Participation by Disabled Veteran Business Enterprises (DVBE) and qualification for Small Business Preference shall be as provided by Document 00 21 26 – Instructions for DVBE Goal and Incentive and Document 00 21 21 – Instructions for Small Business Preference. A DVBE incentive will be applied during bid evaluation in accordance with Document 00 21 26, Paragraph 2 – DVBE Incentive.

   In addition, the Department has set a 25 percent Small Business Enterprise (SBE) participation goal in its contracting and is tracking Small Business participation in its contracts. The Department encourages bidders to explore certification as a Small Business and/or Disabled Veteran Business Enterprise and to utilize certified Small Business and Disabled Veteran Business Enterprises during the contract term.

The Department of General Services, Procurement Division, Office of Small Business and DVBE Services:

Certification information:
https://caleprocure.ca.gov/pages/sbdvbe-index.aspx

Database of certified SB/DVBE Firms:
https://caleprocure.ca.gov/pages/PublicSearch/supplier-search.aspx

6. PREBID BRAND AND TRADE NAME REQUESTS

Pursuant to Public Contract Code section 10129, alternatives to a designated material, product, thing, or service by specific brand or trade name that are of equal quality and of required characteristics for the purpose intended may be proposed during the bidding period, provided the bidder complies with the following:

A. Proposals for alternatives to a designated material, product, thing, or service, requested during the bidding period, shall be furnished in writing to the Department's contract coordinator, not later than 14 days prior to the date and time of the bid opening. Proposals requested after issuance of the Notice to Begin Work, shall be submitted pursuant to Document 00 72 46 – Control of Work, Paragraph 4 and Section 01 33 00 – Submittal Procedures.

B. Proposals shall be accompanied by complete information and descriptive data necessary to determine equality of the material, product, thing or service. Samples shall be provided when requested by the Department. Burden of proof as to availability, comparative quality, suitability, and performance of the material, product, thing, or service shall be upon the bidder. The Department will be the sole judge as to such matters. If the proposal is accepted, bidders will be notified by information letter or addenda pursuant to Document 00 21 13 – Instructions to Bidders, Paragraphs 3 and 4 respectively.

C. Refer to Document 00 72 46 – Control of Work, Paragraph 6, for substitution requests after issuance of Notice to Begin Work.

7. SUBSTITUTION OF SECURITIES

Pursuant to Public Contract Code section 10263, the successful bidder will be permitted to substitute securities for any money withheld by the Department as provided by Public Contract Code section 10261.

8. DEPARTMENT OF INDUSTRIAL RELATIONS REGISTRATION AND PREVAILING WAGE MONITORING AND ENFORCEMENT

A. Department of Industrial Relations (DIR) registration and prevailing wage monitoring and enforcement shall comply with Document 00 72 43 – Compliance with Applicable Laws and Regulations.

B. Prevailing Wage Rate Determination rates are on file for inspection at the office of the Department of Water Resources, Contract Coordination Section, 715 P Street, Room 4-407, Sacramento, California 95814 and posted on the website listed on Document 00 30 00 – Available Information.

KARLA A. NEMETH
Director of Water Resources

Dated: June 10, 2026
(Advertisement)

DOCUMENT 00 11 02

NOTICE OF INSPECTION TRIP

2026 LEVEE REPAIRS
COLUSA BASIN DRAIN AND SACRAMENTO RIVER
STATE PLAN OF FLOOD CONTROL FACILITIES
DIVISION OF FLOOD OPERATIONS
COLUSA AND YOLO COUNTIES
CALIFORNIA
SPECIFICATION NO. 26-06
CONTRACT NO. C51695

An inspection trip for prospective bidders will be conducted at the work sites of Site 23-078 and Site 97. The inspection trip is expected to take about 3 hours. Interested parties are requested to schedule their time so as to make the inspection of all sites on the same day.

Interested parties are requested to meet **THURSDAY, JUNE 18, 2026,** at **10:00 A.M.** on Levee Road, Knights Landing, CA 95645.

Meeting Location 1 – Site 97:

From Sacramento, take northbound Interstate 5 to exit 536 toward County Road 102/County Route East 8. Turn right onto County Road 102/County Route East 8 and continue for 18.1 miles. Continue onto California 113 North for 0.7 miles. Turn left onto California 45/4th street and continue to follow California 45 for 6.4 miles. Turn right onto Levee Road and continue for 1.3 miles. The meeting point will be on Levee Road next to the Sacramento River.

Meeting Location 2 – Site 23-078:

After the inspection of Site 97, interested parties will meet at on the Colusa Basin Drainage Canal in Colusa County, California for Site 23-078. Directions to the second meeting location are as follows:

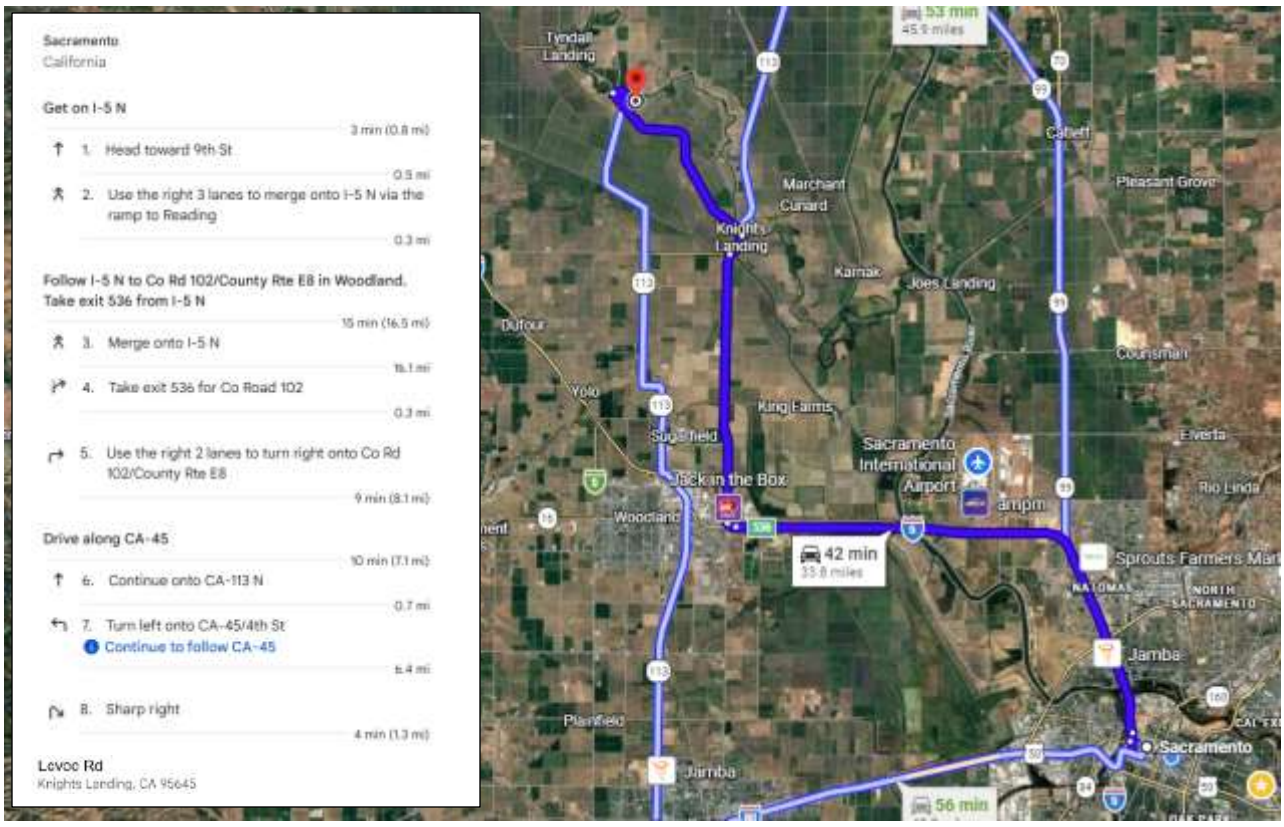
For access to the meeting location 2 from Site 97, head towards California 45 on Levee Road for 1.3 miles. Turn right onto California 45 and continue for 10.6 miles. Turn left onto White Road and continue for 3.3 miles. The meeting point will be the intersection of White Road and the levee road, next to the Colusa Basin Drain.

The coordinates for the meeting locations are listed below in decimal degrees.

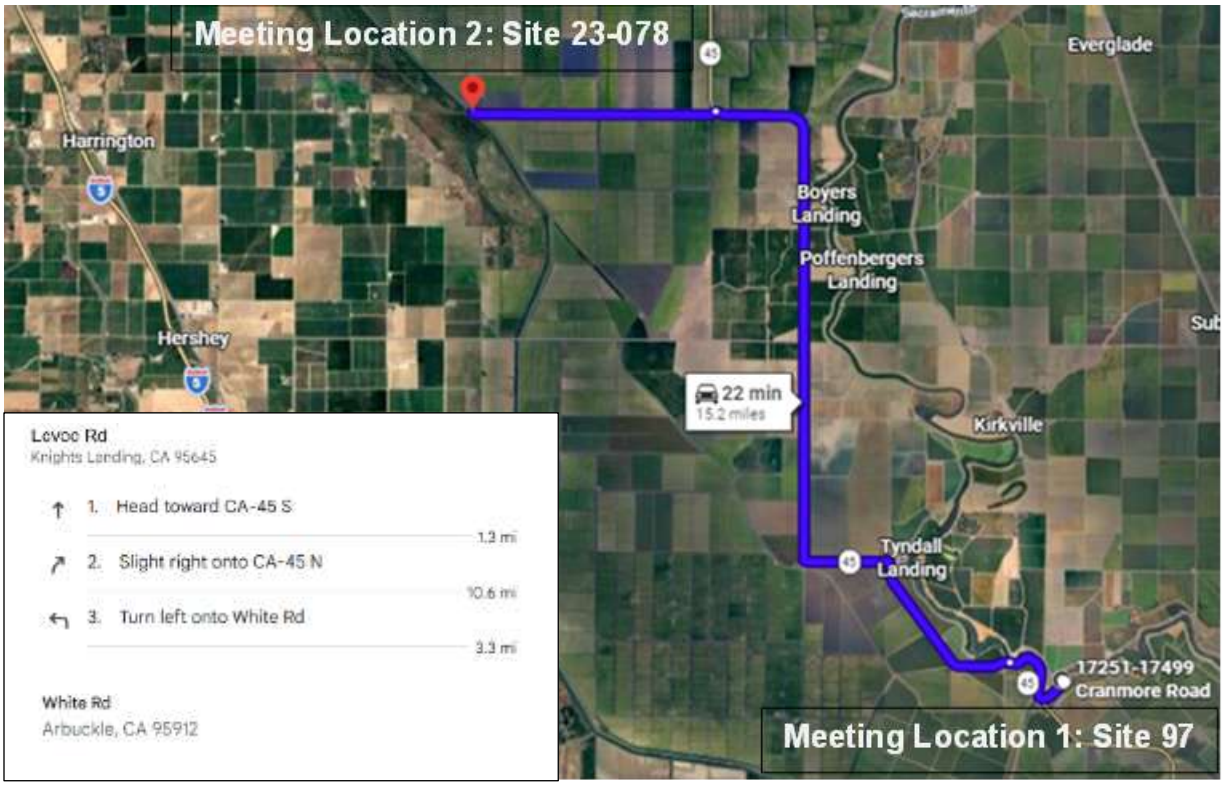
Meeting Location	Site	Latitude	Longitude
1	97	38.859174°	-121.779514°
2	23-078	38.969156°	-121.926071°

Please contact the Department of Water Resources at doe_specs@water.ca.gov two days before the inspection trip if you plan to attend or have questions.

Directions to the meeting site follow (see maps on the following pages).



MEETING LOCATION 1
Levee Road, Knights Landing, CA 95645



MEETING LOCATION 1 and 2

Safety Requirements

All attendees are required to provide their own Personal Protective Equipment (PPE).

Required PPE:

- Hard Hats
- Safety Vests
- Work Boots

Optional PPE:

- Safety Glasses.
- Hearing Protection.

END OF DOCUMENT

DOCUMENT 00 11 40

PREQUALIFICATION

1. DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION REQUIREMENTS

   A. Prime Contractor: In order to be deemed “qualified” to submit a bid or to be awarded the contract, the Contractor must be a DIR registered contractor at the time of bid and if awarded the contract, must be a DIR registered contractor at all times during the performance of the work.

   B. Subcontractors: All subcontractors of any tier must be DIR registered contractors at the time of bid, subject to Labor Code Section 1771.1, and at all times during the performance of the work.

2. SAFETY PREQUALIFICATION

   A. Safety prequalification is required. Each bidder shall:

      1) Submit to the Department not less than five days prior to the date and time of bid opening, the completed Safety Prequalification Questionnaire (SPQ) on forms furnished by the Department.

      2) Be prequalified by the Department at least one day prior to the date and time of the bid opening.

3. JOINT VENTURE BIDDING REQUIREMENTS: Two or more entities may bid jointly on the work as a legally constituted and licensed joint venture.

   A. Each member of the joint venture is prequalified and it has submitted a statement of joint venture in a form approved by the Department, which will be valid only for the contract for which it is submitted.

END OF DOCUMENT

BIDDING REQUIREMENTS

DOCUMENT 00 21 13

INSTRUCTIONS TO BIDDERS

1. BID FORM

   A. Submit the using the Bid Form and addenda furnished by the Department.

   B. The Bid Form is numbered serially and is transferable only upon written approval of the Department. Return the Bid Form and cover page of each addendum within a sealed envelope plainly marked as a bid, and identified as the project to which the bid relates. Bids will be rejected if submitted on other forms or on forms transferred without written approval. Bidding document pages revised or added by addendum must be included in the place of any superseded pages enclosed with the submitted Bid Form. Bids may be rejected if the bidder has failed to sign an addendum and enclose it with the Bid Form, and will be rejected if the omitted addendum could have materially changed the prices bid. Bids will be received at the address specified in Document 00 11 01 - Notice to Contractors.

   C. In addition to other requirements in the contract relating to bidder qualifications, in order to be deemed “qualified” to submit a bid, the bidder must be a DIR registered contractor at the time of bid.

2. EXAMINATION OF THE WORK

   A. Carefully examine the contract, including but not limited to, Bid Documents, General Conditions, Supplementary Conditions, drawings, specifications, addenda, Document 00 30 00 – Available Information, and all related information and data referenced or otherwise available.

   B. Carefully examine and become fully informed of the nature and location of the work, the quantities of work, equipment to be required, and conditions expected to be encountered in performing the work. Conditions to be examined at the work site include but are not limited to: the character and quality of surface and subsurface conditions and obstacles; the availability of labor, materials and equipment, construction equipment, water, electricity, and access to the work; the uncertainties of weather, river stages, tides and similar natural phenomena; and conditions bearing upon the availability, transportation, handling, storage, and disposal of materials and equipment.

3. NOTIFICATION REQUIREMENT

   A. If a bidder discovers any ambiguities, conflicts, discrepancies, omissions, differing site conditions, or errors in the contract, immediately notify the Department in writing and request modification or clarification. Modifications will be made by addenda. Clarifications will be given by information letter. Oral clarifications are not binding on the Department.

   B. If the bidder who is awarded the contract has failed to notify the Department of any discrepancy known prior to the date and time of the bid opening, no additional compensation or time will be allowed by reason of the discrepancy or its later correction.

4. ADDENDA: The Department may modify the contract by issuance of an addendum to all parties who have been furnished the documents for bidding purposes. Sign the cover page of each addendum and enclose with the bid documents.

5. SUBMISSION OF BIDS

   A. Completion of Bid Schedule: The total of the bid will be the sum of the total prices of all items in Document 00 41 01 – Bid Schedule. The total price of unit price items will be the product of the unit price and the estimated quantity of the item. In case of discrepancy between the unit price and total price of an item, the unit price governs, provided, that if the unit price is ambiguous, unintelligible, or uncertain for any cause, or is omitted, it is the amount obtained by dividing the amount set forth as the total price by the estimated quantity of the item. Bids must include for each item in Document 00 41 01 – Bid Schedule, a unit price and a total price, and for each lump sum price item, a total price, all in legible figures.

   B. Completion of Bid: A bid may be rejected if conditional or incomplete, or if it contains any alterations of form, additions not called for, or other irregularities of any kind, and will be rejected if any such defect or irregularity could have materially changed the prices bid. Bids in which prices are grossly unbalanced with respect to costs may be rejected.

   C. Signature by Agents: Agents signing bids must be one of the following:

      1) An officer of a corporate bidder authorized to sign contracts on its behalf.

      2) A member of a partnership bidder.

      3) A person authorized by a power of attorney submitted to the Department prior to the date and time of the bid opening.

D. Submission of Bid:

1) In-Person Drop Off: Bids will be accepted in person only between the hours specified in Document 00 11 01 – Notice to Contractors.

a. Bids will be time stamped at the time of submission.

2) Overnight Carrier Delivery:

a. Bids submitted via Overnight Carrier Delivery are acceptable, but it is the responsibility of the bidder to ensure Bids are received no later than no later than time and date of the bid opening.

b. Send bids sent via overnight carrier service shall be sent to the following address:

Department of Water Resources
Traditional Delivery Section
C/O Spec 26-06 Bid Opening
715 P Street, Room 4-407
Sacramento, California 95814

c. Definition of Overnight Carrier Service: Overnight Carrier Service is a commercial delivery service option that guarantees customers will receive their orders on the next business day, examples of commercial carriers that provide this service include, but are not limited to, Federal Express (FedEx), United Parcel Service (UPS), and General Logistics Systems (GLS).

d. Definition of received: Bids will be considered received by the Department on the date and time the Bid is accepted by the Department's mailroom. It is the contractor's responsibility to ensure the delivery will be made before the submission deadline.

e. Delivery Tracking Notification: Submit the Overnight Carrier Service provider tracking information for the submitted bid to doe_specs@water.ca.gov, prior to the date of the Public Bid Opening.

E. Public bid opening will be conducted in person and via webinar. Bidders that do not intend to stay for the public bid opening will be escorted out of the building.

F. Webinar Information: Microsoft Teams Meeting

1) https://www.microsoft.com/en-us/microsoft-teams/join-a-meeting?rtc=1

a. Meeting ID: 286 891 222 955 1
Passcode: wn23hE96

2) Or call in (audio only)

a. +1 916-573-2034 United States, Sacramento
Phone Conference ID: 228 618 634#

G. Multiple Bidding: If a bidder is a party to or submits more than one bid under the same or different names, such bids may be rejected.

H. Tie Bids: When tie bids are received the Department may award the contract by lot.

I. Bid Security:

1) The bid shall be accompanied by one of the following forms of bid security: cash, cashier's check, certified check, or bidder's bond; made payable to the Director of Water Resources. The security shall be at least 10 percent of the total amount of the bid. Bidder's bond shall conform to Document 00 44 30 – Bidder's Bond, furnished in the Bid Form and be properly filled out and executed by an admitted surety insurer authorized to transact business in California. Bids not accompanied by one of the above forms of bid security in the proper amount will be rejected.

2) Return of Bid Security: The securities of the three lowest responsible bidders in the form of cash, cashier's checks, and certified checks specified above, will be held by the Department until the contract has been signed by the successful bidder and returned with the required bonds.

Securities of all other bidders in the form of cash, cashier's checks, and certified checks will be returned to them within 10 days after award of the contract, and their bidder's bonds shall be of no further effect.

6. WITHDRAWAL OF BIDS: A bid may be withdrawn by submitting a written request to the Department, signed by the bidder, prior to the date and time of the bid opening. The bidder may submit a new bid prior to the date and time of the bid opening.

7. AWARD OF CONTRACT

   A. The Department may reject any or all bids, and may waive any immaterial defect in a bid. The Department may ascertain the intent of the bidder by application of rules expressed in the bid documents, drawings and specifications, or as provided by law. The Director's waiver of an immaterial defect shall not modify the contract, or excuse the bidder from full compliance with the contract.

   B. Award will be made within 30 days after the opening of bids to the lowest responsible bidder. If the lowest responsible bidder refuses or fails to execute the contract, the Department may award the contract to the second lowest responsible bidder. Such award will be made within 45 days after the bid opening. If the second lowest responsible bidder refuses or fails to execute the contract, the Director may award the contract to the third lowest responsible bidder. Such award will be made within 60 days after the bid opening. Such times shall be subject to extension by written agreement between the Department, the bidder and the bidder's surety.

8. BID PROTEST: Bidders shall submit any bid protest in writing to the Department prior to Award of Contract. Protests shall be sent to doe_specs@water.ca.gov

9. CONTRACT BONDS: The successful bidder shall, at its sole cost and expense, furnish on forms provided by the Department, Document 00 61 13 – Performance Bond, and Document 00 61 14 – Payment Bond, each equal to at least the total amount of the bid, executed in duplicate with acknowledgments by an admitted surety insurer authorized to transact business in California.

10. EXECUTION OF CONTRACT: The contract, to be executed in duplicate, shall be signed by the bidder and returned with the required bonds, within **seven** days after delivery to the bidder. The contract shall not be binding upon the State until it has been completely executed by the bidder and the Department.

11. FAILURE TO EXECUTE CONTRACT: If the bidder fails to return the contract and bonds within the time provided, the award may be annulled by the Department. If the award is annulled, the bidder shall forfeit the bid security. The bidder may furnish to the Department a written notice, signed by the bidder, stating that the bidder will refuse to execute the contract. The furnishing of such notice shall have the same effect as failure to execute the contract.

END OF DOCUMENT

DOCUMENT 00 21 21

INSTRUCTIONS FOR SMALL BUSINESS PREFERENCE

1. SMALL BUSINESS PREFERENCE

   A. Code Reference: Government Code section 14835 et seq. and section 1896.2 et seq., California Code of Regulations.

   B. Certification: Bidders who wish to be classified as a “Small Business” under the provisions of said laws and regulations, shall be certified as small business by the Department of General Services, Procurement Division, Office of Small Business and DVBE Services (OSDS), 707 Third Street, 1st Floor, Room 400, West Sacramento, California 95605, telephone (916) 375-4940, 24-hour recording (916) 327-9978, facsimile (916) 375-4950, Internet Address: http://www.dgs.ca.gov/pd/Programs/OSDS.aspx.

   C. Procedures To Request Small Business Preference:

      1) Bidders shall be certified and submit a copy of either the firm’s Department of General Services, Procurement Division small business certification approval letter, or a current copy of firm’s small business status from the Department of General Services, Procurement Division Internet homepage (if information from the homepage is provided, include the second page reflecting certification “From” and “To” dates).

      2) Bidders shall complete and sign Document 00 44 41 – Small Business Preference and Certification Request furnished in the Bid Form. The bidder’s signature on the Small Business Preference and Certification Request is a declaration, under penalty of perjury, that under the following conditions, at least 50 percent of the subcontractors to be utilized on the project are either certified small business, or will have a completed application on file with Department of General Services, Procurement Division for small business certification no later than five o’clock (5:00 p.m.) on the date the bid is opened and will be subsequently certified small business. The conditions requiring the 50 percent level of subcontracting by small business subcontractors apply if:

         a. The lowest responsible bid for the project exceeds $100,000.

         b. The work to be performed requires a Class A or a Class B contractor’s license.

         c. Two or more subcontractors will be used.

3) If the above conditions apply and Small Business Preference is granted in the award of the contract, the 50 percent small business subcontractor utilization level shall be maintained throughout the life of the contract.

D. Preference Application: The Small Business Preference will be a reduction in the bid submitted by the small business contractor, for bid comparison purposes, by an amount equal to 5 percent of the amount bid by the lowest responsive bidder, said amount not to exceed $50,000. If such reduction results in the small business contractor becoming the low bidder, then the contract will be awarded to said small business contractor on the basis of the actual bid of the small business contractor notwithstanding the reduced bid price used for bid comparison purposes.

END OF DOCUMENT

DOCUMENT 00 21 22

INSTRUCTIONS FOR NON-SMALL BUSINESS BID PREFERENCE

1. NON-SMALL BUSINESS BID PREFERENCE

A. Code Reference: Sections 1896.6 et seq. of Title 2, California Code of Regulations.

B. Non-small business bidders will be granted a five percent (5%) preference, for bid evaluation purposes only, for using small business subcontractors/suppliers when a responsible non-small business submitted the lowest-priced responsive bid, and when a non-small business bidder:

1) requested a non-small business bid preference; and

2) included in its bid a notification to the Department that it commits at least twenty-five percent (25%) of its net bid price to one or more small business subcontractors/suppliers; and

3) submitted a timely, responsive bid; and

4) was determined by the Department to be a responsible bidder; and

5) submitted with its bid a list of the small business(es) it commits to use. Each small business must perform a commercially useful function.

C. To request a non-small business bid preference, bidders shall complete and sign:

1) Document 00 44 44 – Request for Non-Small Business Bid Preference. The bidder’s signature on Document 00 44 44 is a declaration, under penalty of perjury, that at least 25 percent of the listed subcontractors/suppliers are either certified small businesses, or will have a completed application on file with Department of General Services, Procurement Division for small business certification no later than five o’clock (5:00 p.m.) on the date the bid is opened and will be subsequently certified as a small business.

2) Document 00 44 44-1 – California Certified Small Business Subcontractors and Suppliers. The bidder shall list for each small business subcontractor/supplier the following: name, address, phone numbers, and description, dollar amount, and percentage of the work to be performed.

3) Bidder is also strongly urged to ensure that each small business subcontractor/supplier has executed a certification of "commercially useful function," and to submit such certification with Documents 00 44 44 and 00 44 44-1. Document 00 44 44-2 – Small Business (SB): Certification of Commercially Useful Function may be used for this purpose.

D. If a non-small business is awarded the contract based on the preference, the contractor shall use the listed small businesses for the amounts listed.

E. Preference Application:

1) The Department will apply the Non-Small Business Bid Preference as follows:

a. The preference will be applied for bid comparison purposes only.

b. For such comparison, the bid submitted by a non-small business bidder will be reduced by an amount equal to 5 percent of the amount bid by the lowest responsive bidder. Any subsequent executed contract will be executed for the actual bid amount, notwithstanding the reduced price for bid comparison purposes.

c. Application of the preference shall not displace an award to a certified small business with a non-small business.

d. In the event of a precise tie between the bid of a small business and the bid of a disabled veteran business enterprise that is also a small business, the award shall go to the disabled veteran business enterprise.

e. The preference shall not exceed $50,000, and the combined amount of all incentives and preferences awarded pursuant to any other provision of law shall not exceed $100,000.

F. Substitution of a Small Business Subcontractor/Supplier:

1) After award of a contract based in part on the application of a Non-Small Business Bid Preference, the contractor must use the small business subcontractor(s) and/or suppliers(s) indicated in its bid unless a substitution is requested in writing to the Department and the Department approves the substitution in writing prior to the commencement of applicable work. The substitution request shall be in accordance with section 1896.10 of Title 2, California Code of Regulations.

END OF DOCUMENT

DOCUMENT 00 21 25

INSTRUCTIONS FOR CALIFORNIA COMPANY PREFERENCE

1. CODE REQUIREMENT: In accordance with the requirements of Public Contract Code section 6107, a “California company” will be granted a reciprocal preference for bid comparison purposes as against a nonresident contractor from any state that gives or requires a preference to be given contractors from that state on its public entity construction contracts.

2. DEFINITION OF CALIFORNIA COMPANY: A “California company” means a sole proprietorship, partnership, joint venture, corporation, or other business entity that was a licensed California contractor on the date when bids for the public contract were opened and meets one of the following:

   A. Has its principal place of business in California.

   B. Has its principal place of business in a state in which there is no local contractor preference on construction contracts.

   C. Has its principal place of business in a state in which there is a local contractor construction preference and the contractor has paid not less than $5,000 in sales or use taxes to California for construction related activity for each of the five years immediately preceding the submission of the bid.

3. REQUIREMENTS

   A. To carry out the “California company” reciprocal preference requirements of Public Contract Code section 6107, bidders shall refer to Document 00 44 27 – Bidder Declarations and Certifications, and to Document 00 44 43 – California Company Preference Form, for instructions about how to indicate their status. A nonresident contractor shall disclose to the Department any and all bid preferences provided to the nonresident contractor by the state or county in which the nonresident contractor has its principal place of business. In the event the bidder fails to certify its status, the bid may be rejected.

   B. Bid Documents without a completed and signed Document 00 44 43 – California Company Preference Form, may be rejected.

   C. The amount of the “California company” reciprocal preference shall be equal to the amount of the preference applied by the state of the nonresident contractor with the lowest responsive bid, except where the “California company” is eligible for a California Small Business Preference, in which case the preference applied shall be the greater of the two, but not both.

D. If the bidder submitting the lowest responsive bid is not a “California company” and with the benefit of the reciprocal preference, a “California company’s” responsive bid is equal to or less than the original lowest responsive bid, the “California company” will be awarded the contract at its submitted bid price.

END OF DOCUMENT

DOCUMENT 00 21 26

INSTRUCTIONS FOR DISABLED VETERAN BUSINESS ENTERPRISE (DVBE) GOAL AND INCENTIVE

1. DVBE GOAL

   A. The DVBE participation goal for this contract is zero percent (0%) of the total amount of the bid and is established pursuant to Public Contract Code Section 10115 et seq.

2. DVBE INCENTIVE

   A. To encourage bidders to include DVBE participation on this contract, the Department will apply a three percent (3%) DVBE incentive to bids that meet or exceed three percent (3%) DVBE participation.

   B. To qualify for the DVBE incentive, bidder must complete, sign and submit the following documents with its bid:

Document	Document Title
00 44 45	DVBE Participation
00 44 47 (if applicable)	DVBE: Broker or Agent. Each DVBE prime contractor listed on Document 00 44 45 who is a broker or agent must complete this form (Military and Veterans Code section 999.2 (f)).
00 44 48 (if applicable)	DVBE: Declarations – Equipment Rental. Each DVBE prime contractor listed on Document 00 44 45 who will rent equipment, including equipment and operator, to the Department, must complete this form (Military and Veterans Code section 999.2 (c)).
00 44 49 (if applicable)	DVBE: Declarations of Meeting and Maintaining Requirement of a DVBE – Equipment Rental. Each DVBE prime contractor listed on Document 00 44 45 who will rent equipment, including equipment and operator, to the Department, must complete this form (Military and Veterans Code section 999.2 (d)).

Document	Document Title
00 44 50	DVBE: Certification of Commercailly Useful Function. For each DVBE listed on Document 00 44 45, submit Document 00 44 50.

C. The Department will apply the DVBE incentive:

1) to responsive bids from responsible bidders

2) during the bid evaluation process, for bid evaluation purposes only,

3) by reducing the bid price by the amount of the incentive as computed from the lowest responsible and responsive bid price.

D. Application of the DVBE incentive shall not displace an award to a certified small business enterprise with non small business enterprise.

E. The combined amount of all incentives and preferences shall not exceed $100,000.

F. Applicable documents must be completed and signed as required on each document to qualify for the DVBE incentive.

G. Final determination of bidder's DVBE participation shall be at the Department's sole discretion. The Department will not accept rounding up of DVBE participation percentages.

H. DVBE Certification:

1) DVBEs listed by bidder on Document 00 44 45 – DVBE Participation must be certified by the date of bid opening by the State of California, Department of General Services (DGS), Procurement Division, Office of Small Business and DVBE Services. The Department reserves the right to verify DVBE certifications.

2) For a listing of certified DVBEs, contact:

a. The DGS Procurement Division's database of certified DVBEs at Internet address: https://caleprocure.ca.gov/pages/PublicSearch/supplier-search.aspx

1. For questions or comments regarding the DGS DVBE database, contact:

   CA DGS Procurement Division
   Office of Small Business and DVBE Services
   Phone No.: (916) 375-4940
   Toll Free: (800) 559-5529
   FAX No.: (916) 375-4950
   E-mail: OSDSHelp@dgs.ca.gov

   Physical Location
   Office of Small Business and DVBE Services
   707 Third Street, 1st Floor, Room 400
   West Sacramento, CA 95605

   Mailing Address
   Office of Small Business and DVBE Services
   Room 1-400, MS210
   P.O. Box 989052
   West Sacramento, CA 95798-9052

3) Bidder is encouraged to review each DVBE certification and to include a copy of each certification with Document 00 44 45 – DVBE Participation.

I. Commercially Useful Function: Bidder is strongly urged to have each DVBE execute a certification of "commercially useful function" prior to listing a DVBE on Document 00 44 45 – DVBE Participation.

1) Document 00 44 50 – DVBE: Certification of Commercially Useful Function may be used for this purpose. Submit this certification with the bid or by mail to the address listed below.

   CA Department of Water Resources
   Division of Engineering
   715 P Street, Room 2-303
   Sacramento, CA 95814
   Attention: DVBE Coordinator
   E-mail: DOE_Specs@water.ca.gov

J. Definitions are in Paragraph 8.

3. COUNTING DVBE PARTICIPATION

A. DVBE Subcontractors: Any DVBE performing subcontractor work in excess of one-half of one percent of the total amount of the bid, and as otherwise provided under Public Contract Code section 4100 et seq. and section 10115 et seq., must also be listed on Document 00 43 36 –

Subcontractors Form, in order to be counted toward the DVBE participation.

B. Dollar Value:

1) A certified DVBE prime bidder may apply toward the DVBE participation the value of the work which it will directly perform. The DVBE must perform a “commercially useful function” as defined in Paragraph 8 E. 1) and 2).

a. A disabled veteran business enterprise that rents equipment (including equipment plus operator) to the Department shall be deemed to be an equipment broker unless one or more disabled veterans has 51-percent ownership of the quantity and the value of each piece of equipment.

1. If the equipment is owned by one or more disabled veterans, each disabled veteran owner shall submit to the Department a declaration signed by the disabled veteran owner stating that the owner is a disabled veteran and providing the name, address, telephone number, and tax identification number of the disabled veteran owner. Refer to Document 00 44 48.

2. Each disabled veteran owner shall submit his or her federal income tax returns to the Department of General Services pursuant to Military and Veterans Code section 999.2, subdivision (g) as if he or she were a disabled veteran enterprise.

3. The disabled veteran business enterprise of a disabled veteran owner who fails to submit his or her tax returns will be deemed to be an equipment broker.

b. A disabled veteran business enterprise that rents equipment to the Department shall submit to the Department a declaration signed by each disabled veteran owner and manager of the enterprise stating that the enterprise obtained the contract by representing that the enterprise was a disabled veteran business enterprise meeting and maintaining all the requirements of a disabled veteran business enterprise. The declaration shall include the name, address, telephone number, and tax identification number of the owner of each piece of equipment identified in the contract. Refer to Document 00 44 49.

c. State funds expended for equipment (including equipment plus operator) rented from equipment brokers shall not be credited toward the DVBE participation.

d. A disabled veteran business enterprise that is a broker or agent and that obtains a contract pursuant to Military and Veterans Code section 999.2 (a) shall disclose to the Department that the business is a broker or agent. This disclosure shall be made in a declaration signed and executed by each disabled veteran owner and manager of the enterprise, declaring that the enterprise is a broker or agent, and identifying the name, address, and telephone number of the principal for whom the enterprise is acting as a broker or agent. Refer to Document 00 44 47.

2) If a bidder is a joint venture, bidder may count toward the DVBE participation the percentage equal to that of the ownership and control of the DVBE joint venturer. Each DVBE must perform a "commercially useful function" as defined in Paragraph 8 E. 1) and 2).

3) A bidder may apply the total dollar value of the work of a certified DVBE first or lower tier subcontractor/supplier toward the DVBE participation. Each DVBE must perform a "commercially useful function" as defined in Paragraph 8 E. 1) and 2).

4. CERTIFICATION OF COMPLIANCE WITH DVBE REQUIREMENTS

A. By signing Document 00 44 28 – Noncollusion Declaration, the bidder certifies that it acted in good faith to comply with the DVBE requirements specified herein.

5. SUBSTITUTION OF LISTED DVBE'S

A. The Contractor must use each DVBE listed on Document 00 44 45 for the amounts committed unless the Contractor requests written permission to substitute and the Department gives written permission for such substitution. Each request for substitution should include:

1) A written explanation of the reason for substitution, and

2) The name and address of the firm that will be used in lieu of the listed DVBE firm. Contractors are expected to make a diligent effort to substitute listed DVBEs with certified DVBEs.

B. This information is required for monitoring in accordance with Public Contract Code section 10115 et seq. and shall not be construed as altering any other provision of law, including the Subletting and

Subcontracting Fair Practices Act, including Public Contract Code sections 4100-4114, or contract requirements relating to substitution of subcontractors.

C. Failure of Contractor to adhere to at least the DVBE participation listed on Document 00 44 45 may be cause for contract termination and recovery of damages under the rights and remedies due to State under Document 00 72 45 – Prosecution of Work, Paragraph 10.

D. Additionally, the under/non-use of DVBEs listed on Document 00 44 45 may have other ramifications for Contractor including, but not limited to, possible violations of the California False Claims Act, Government Code section 12650 et seq.

6. DVBE MONITORING AND REPORTING

A. The Department encourages the Contractor to include DVBEs in this Contract throughout the Contract term.

B. The Contractor shall report the amounts it paid to each DVBE that participated in the performance of this Contract by submitting Document 00 21 26-1 – DVBE Quarterly and Final Report, to the Engineer as follows:

1) Quarterly (on January 1st, April 1st, July 1st, and October 1st) during the performance of the contract.

2) Upon the Contractor's certification of completion of the work pursuant to Document 00 72 46 – Control of Work, Paragraph 14.

3) In addition to any other potential remedies, the Engineer may withhold all or part of any payments due if the Contractor fails to furnish the required reports.

C. In accordance with Military and Veterans Code section 999.5(d), upon the Contractor's certification of completion of the work pursuant to Document 00 72 46 – Control of Work, Paragraph 14 on a Contract for which a commitment to achieve a DVBE goal was made, the Contractor shall certify the following using Document 00 21 26-2 – Certification of DVBE Participation:

1) The total amount the Contractor received under the Contract.

2) The name and address of the Disabled Veteran Business Enterprise(s) that participated in the performance of the Contract and the Contract number.

3) The amount and percentage of work the Contractor committed to provide to one or more Disabled Veteran Business Enterprises under the requirements of the Contract and the amount each

Disabled Veteran Business Enterprise received from the Contractor.

4) That all payments under the Contract have been made to the Disabled Veteran Business Enterprise. Upon request by the Department, the Contractor shall provide proof of payment for the work.

D. In accordance with Military and Veterans Code section 999.7(a), The Department shall withhold ten thousand dollars ($10,000) from the final payment, or the full final payment if less than ten thousand dollars ($10,000), until the Contractor complies with the certification requirements of subdivision (d) of Section 999.5. If the Contractor fails to comply with the certification requirement, it shall, after written notice, be allowed to cure the defect. Notwithstanding any other law, if, after at least 15 calendar days, but not more than 30 calendar days from the date of Department's written notice, the Contractor refuses to comply with the certification requirements, the Department shall permanently deduct ten thousand dollars ($10,000) from the final payment, or the full payment if less than ten thousand dollars ($10,000).

E. In accordance with Military and Veterans Code Section 999.5(d)(4), and Government Code Section 14841, after receipt of the final Contract payment, the Contractor shall report to the Engineer the actual percentage of DVBE participation and certify the total amount the Contractor received under the Contract using Document 00 21 26-3 – DVBE Percentage Achieved and Certification of Total Payments to Prime Contractor.

F. In addition to any other potential penalties or remedies, a person or entity that knowingly provides false information shall be subject to a civil penalty for each violation in the minimum amount of $2,500 and the maximum of $25,000 pursuant to Military and Veterans Code Section 995.5(f).

7. CONTRACT AUDITS

A. Contractor agrees that the Department or its delegate will have the right to review, obtain, and copy all records pertaining to performance of the contract as performance pertains to DVBE requirements. Contractor agrees to provide the Department or its delegate with any relevant information requested and shall permit the Department or its delegate access to its premises, upon reasonable notice, during normal business hours for the purpose of interviewing employees and inspecting and copying such books, records, accounts, and other material that may be relevant to a matter under investigation for the purpose of determining compliance with this requirement. Contractor further agrees to maintain such records for a period of three (3) years after final payment in

accordance with Document 00 72 43 – Compliance with Applicable Laws and Regulations, Paragraph 2.

8. DEFINITIONS, DVBE PROGRAM

A. Broker or Agent: Any individual or entity, or any combination thereof, that does not have title, possession, control, and risk of loss of materials, supplies, services, or equipment provided to the Department, unless one or more certified disabled veterans has 51-percent ownership of the quantity and value of the materials, supplies, services, and of each piece of equipment provided under the contract.

B. Contractor (for the purposes of this Document): Any person or persons, regardless of race, color creed, national origin, ancestry, sex, marital status, disability, religious or political affiliation, or age, or any sole proprietorship, firm, partnership, joint venture, corporation, or combination thereof who submits a bid and enters into a contract with a representative of a state agency, department, governmental entity, or other officer empowered by law to enter into contracts on behalf of the State of California.

C. Disabled Veteran: A veteran of the military, naval, or air service of the United States, including, but not limited to, the Philippine Commonwealth Army, the Regular Scouts (“Old Scouts”), and the Special Philippine Scouts (“New Scouts”), who has at least a 10 percent service-connected disability and who is domiciled in the State of California.

D. Disabled Veteran Business Enterprise: A business certified by the Department of General Services as meeting all of the requirements listed below. A disabled veteran business enterprise that fails to maintain the certification requirements set forth in Military and Veterans Code section 999 et seq. shall immediately notify the Department and the Department of General Services of that failure by filing a notice of failure that states with particularity each requirement the disabled veteran business enterprise has failed to maintain:

1) It is a sole proprietorship at least 51 percent owned by one or more disabled veterans or, in the case of a publicly owned business, at least 51 percent of its stock is owned by one or more disabled veterans; a subsidiary which is wholly owned by a parent corporation, but only if at least 51 percent of the voting stock of the parent corporation is owned by one or more disabled veterans; or a joint venture in which at least 51 percent of the joint venture’s management and control and earnings are held by one or more disabled veterans.

2) The management and control of the daily business operations are by one or more disabled veterans. The disabled veterans who exercise management and control are not required to be the disabled veterans as the owners of the business.

3) It is a sole proprietorship, corporation, or partnership with its home office located in the United States, which is not a branch or subsidiary of a foreign corporation, foreign firm, or other foreign-based business.

4) Notwithstanding Paragraph 8 D. 1) through 3), after the death or the certification of a permanent medical disability of a disabled veteran who is a majority owner of a business that qualified as a disabled veteran business enterprise prior to that death or certification of a permanent medical disability, and solely for the purposes of any contract entered into before that death or certification, that business shall be deemed to be a disabled veteran business enterprise for a period not to exceed three years after the date of that death or certification of a permanent medical disability, if the business is inherited or controlled by the spouse or child of that majority owner, or by both of those persons.

E. Disabled Veteran Business Enterprise Contractor, Subcontractor, or Supplier: Any person or entity that has been certified by the Department of General Services pursuant to Military and Veterans Code Section 999 et seq. and that performs a “commercially useful function,” as defined below, in providing services or goods that contribute to the fulfillment of the contract requirements:

1) A person or entity is deemed to perform a “commercially useful function” if a person or entity does all of the following:

a. Is responsible for the execution of a distinct element of the work of the contract.

b. Carries out the obligation by actually performing, managing, or supervising the work involved.

c. Performs work that is normal for its business services and functions.

d. Is not further subcontracting a portion of the work that is greater than that expected to be subcontracted by normal industry practices.

e. Is responsible, with respect to products, inventories, materials, and supplies required for the contract, for negotiating price,

determining quality and quantity, ordering, installing, if applicable, and making payment.

2) A contractor, subcontractor, or supplier will not be considered to perform a "commercially useful function" if the contractor's, subcontractor's, or supplier's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of disabled veteran business enterprise participation.

F. Equipment: Any piece of equipment that is used or provided for rental to any state agency, department, officer, or other state governmental entity, including equipment for which operators are provided.

G. Equipment Broker: Any broker or agent who rents equipment to an awarding department.

H. "Foreign corporation," "foreign firm," and "foreign-based business" means a business entity that is incorporated or has its principal headquarters located outside the United States of America.

I. Goal: A numerically expressed objective that awarding departments and contractors are required to make efforts to achieve.

J. Management and Control: Effective and demonstrable management of the business entity.

9. DVBE Coordinator:

A. For questions regarding the DVBE goal or incentive, contact:

CA Department of Water Resources
Division of Engineering
715 P Street
Sacramento, CA 95814
Attention: DVBE Coordinator
E-mail: doe_specs@water.ca.gov

DOCUMENT 00 21 26-1

DVBE QUARTERLY AND FINAL REPORT

Is This the Final Report?: _____ Date of This Report.: _____

Contractor: _____ Specification No.: _____

Phone No.: _____ Contract No.: _____

In accordance with Document 00 21 26, Paragraph 6.B., listed below are the amounts the Contractor paid to DVBEs for performance on this contract:

Signature of Authorized Contract Representative: _____

Printed Name: _____ Date: _____

DVBE Name, Address, Phone Number, and Certification No.	Item of Work or Services Provided	Dollars Committed on Document 00 44 45	Amount Paid to Date
Totals:			
Percent of Original Bid Amount (DWR will complete):			

1) If actual DVBE utilization is less than Contractor's commitment on Document 00 44 45, attach an explanation and supportive documentation. Refer to Document 00 21 26, Paragraph 5 A. through D.

2) Attach additional pages if needed.

3) Attach Department of General Services DVBE certification(s) for newly-added DVBEs.

4) In addition to any other potential remedies, the Engineer may withhold all or part of any payments due if the Contractor fails to furnish the required reports.

DOCUMENT 00 21 26-2

CERTIFICATION OF DVBE PARTICIPATION

Contractor: _____ Phone No.: _____

Specification No.: _____ Contract No.: _____

Total Amount of Payments Received under the Contract: _____

In accordance with Military and Veterans Code section 999.5 (d), I certify that all payments under the contract have been made to the DVBEs listed below:

Signature of Authorized Contract Representative: _____

Printed Name: _____ Date: _____

Names and Addresses of the DVBEs that Participated in the Performance of this Contract	Total Amount and Percentage of Work Paid to Each DVBE
Totals:	

1) In addition to any other potential penalties or remedies, a person or entity that knowingly provides false information shall be subject to a civil penalty for each violation in the minimum amount of $2,500 and the maximum of $25,000. Refer to Military and Veterans Code section 999.5 (d).

DOCUMENT 00 21 26-3

DVBE PERCENTAGE ACHIEVED AND CERTIFICATION OF TOTAL PAYMENTS TO PRIME CONTRACTOR

(Submit this information to the Engineer within 60 days from receipt of the final contract payment)

Contractor: _____ Phone No.: _____

Specification No.: _____ Contract No.: C_____

FEIN: _____ Address: _____

Department: _____ Date Contract Completed: _____

Date Final Payment Received: _____ Contract Award Amount: _____

Contract Received Amount: _____ DVBE Name: _____

DVBE Address: _____

DVBE Certification No.: _____ Total Contract Amount to DVBE: _____

Total Payment Amount to DVBE: _____ Variance: _____

1. In accordance with Government Code section 14841, the above-named contractor achieved the following **actual** percentage of DVBE participation on this contract:

   _____ Percent

   (Total Dollars Paid to DVBEs / Gross Earnings from Final Construction Estimate x 100). Round percentage to two decimal places.

2. In accordance with Military and Veterans Code section 999.5 (d) I certify that the above-named contractor has received the total amount listed below for participation on this contract:

   Total amount received: $_____

   a) In addition to any other potential penalties or remedies, a person or entity that knowingly provides false information shall be subject to a civil penalty for each violation in the minimum amount of $2,500 and the maximum of $25,000. Refer to Military and Veterans Code section 999.5 (d).

   b) Total amount received may exclude Department withholdings for liquidated or other damages, stop notices, or other demands to withhold.

Signature of Authorized Contract Representative: _____

Printed Name: _____ Date: _____

END OF DOCUMENT

DOCUMENT 00 21 27

INSTRUCTIONS FOR IN-USE OFF-ROAD DIESEL FUELED VEHICLE LIST

1. IN-USE OFF-ROAD DIESEL FUELED VEHICLE LIST

   A. Code Reference: Title 13, California Code of Regulations § 2449 et seq.

   B. Forms:

      1) Document 00 44 51 – In-Use Off-Road Diesel Fueled Vehicle List Form.

         a. Complete and submit with your bid the In-Use Off-Road Diesel Fueled Vehicle List form for each fleet used by you and your subcontractors to perform the Work pursuant to 13 CCR § 2449 et seq.

         b. Failure to list a fleet used by you or your subcontractors to perform the Work on the In-Use Off-Road Diesel Fueled Vehicle List form may result in a nonresponsive bid.

      2) Certificate of Reported Compliance (13 CCR § 2449, subdivision (n))

         a. For each fleet listed on Document 00 44 51 – In-Use Off-Road Diesel Fueled Vehicle List Form submit within 10 days of Bid Opening a valid Certificate of Reported Compliance.

         b. Failure to submit the Certificate of Compliance for a fleet listed on the In-Use Off-Road Diesel Fueled Vehicle List form may result in a nonresponsive bid.

END OF DOCUMENT

DOCUMENT 00 30 00

AVAILABLE INFORMATION

1. DATA AVAILABLE TO BE FURNISHED

A. The following data will be furnished electronically, for information purposes only, at this site:

https://cosmos.water.ca.gov/

1) Department of Industrial Relations General Prevailing Wage Determinations (from website):

a. General Prevailing Wage Determinations Basic Trades (Statewide) Index 2026-1.

b. General Prevailing Wage Determinations Basic Trades (Northern) Index 2026-1.

c. General Prevailing Wage Determinations Subtrades Index 2026-1 (1 of 2).

d. General Prevailing Wage Determinations Subtrades Index 2026-1 (2 of 2).

2) Site Inspection Reports:

a. Site No. 23-078 – RD0108 U01 LM 15.50.

b. Site No. 97 – NA0016 U01 LM 8.64.

3) Historical Documents:

a. https://ferix.water.ca.gov/lep/

4) Environmental Documents and Permits related to this project for Information purpose only:

a. Site 23-078

1) California Environmental Quality Act. Notice of Determination for Site 78 prepared by California Department of Water Resources. September 24, 2025. SCH#2025080059.

2) California Environmental Quality Act. Mitigated Negative Declaration for Site 78 prepared by California Department of Water Resources. September 2025. SCH#2025080059.

3) California Fish and Game Code 1602. Lake and Streambed Alteration Agreement issued by California Department of Fish and Wildlife. August 2025. NO. COL-61705-R2.

a) California Fish and Game Code 1602. Lake and Streambed Alteration Agreement issued by California Department of Fish and Wildlife. August 2025. NO. COL-61705-R2. CDFW-EPIMS Concurrence.

b. Site 97

1) California Environmental Quality Act. Notice of Determination for Site 97 prepared by California Department of Water Resources. May 5, 2023. SCH#2019049138.

2) California Environmental Quality Act. Mitigated Negative Declaration for Site 97 prepared by California Department of Water Resources. March 2023. SCH#2019049138.

a) California Environmental Quality Act. Mitigated Negative Declaration for Site 97 prepared by California Department of Water Resources. March 2023. Addendum SCH#2019049138.

3) California Endangered Species Act. Biological Opinion issued by the National Marine Fisheries Service. February 11, 2020. NMFS No: WCRO-2019-01675.

4) California Endangered Species Act. Biological Opinion issued by the United States Fish and Wildlife Service USFWS. December 18, 2025. Reference # 2022-0072368-S7-001.

5) Clean Water Act Section 404. Nationwide Permit 13 General Conditions. United States Army Corp of Engineers. February 25, 2022.

6) Clean Water Act Section 401. Water Quality Certification and Order issued by the Central Valley Regional Water Quality Control Board. July 7, 2023. USACE No.: SPK-2023-00392.

7) California Fish and Game Code 1602. 1600 Lake and Streambed Alteration Agreement issued by California

Department of Fish and Wildlife. August 2023. NO. YOL-43051-R2.

a) California Fish and Game Code 1602. 1600 Lake and Streambed Alteration Agreement issued by California Department of Fish and Wildlife. August 2023. NO. YOL-43051-R2. CDFW-EPIMS Concurrence.

8) Site 97 Figures 1-3 AECOM.

5) Geotechnical Investigation Report:

a. Deferred Maintenance Plan, Soil Sampling and Testing - 2026 Levee Construction Project; Colusa, Yolo, and Sacramento County, CA; Project Geology Report No. 94-00-98.

6) Specification 26-06, Job Walk Handout.

END OF DOCUMENT

DOCUMENT 00 41 01

BID SCHEDULE

CONTRACT TITLE: 2026 Levee Repairs, Colusa Basin Drain and Sacramento River

DWR SPECIFICATION NO.: 26-06

DWR CONTRACT NO.: C51695

BIDDER'S NAME:
(Name style as recorded on CA Contractor's License) **NOT TO BE USED FOR BIDDING PURPOSES**

BID SCHEDULE NO.1 – SITE NO. 23-078 – RD0108 U01 LM 15.50 (COLUSA BASIN)

Item No.	Section*	Item	Estimated Quantity	Unit	Unit Price (In Figures)	Total (In Figures)
1	01 55 26	Temporary Traffic Control	1	JOB	LUMP SUM	
2	01 56 26	Giant Garter Snake Fencing	1,440	LF		
3	01 71 13	Mobilization	1	JOB	LUMP SUM	
4	01 71 23	Construction Surveys	1	JOB	LUMP SUM	
5	31 00 00	Earthfill	1,279	CY		
6	31 00 00	Excavation	1,262	CY		
7	31 00 00	Agricultural Soil	49	CY		
8	31 00 00	Native Topsoil	99	CY		
9	31 11 00	Clearing and Grubbing	2,753	SY		
10	31 25 00	Erosion Control Fabric	1,781	SY		
11	32 11 23	Aggregate Base	192	TON		
12	32 80 00	Irrigation System	1	JOB	LUMP SUM	
13	32 90 20	Seeding Establishment	6	MO		
14	32 90 20	Irrigation System Maintenance	6	MO		
15	32 92 19	Seeding	3,530	SY		
					SUBTOTAL OF BID SCHEDULE NO. 1:	

*Section where contract item is defined

BID SCHEDULE NO. 2 – SITE NO. 97 – NA0016 U01 LM 8.64 (SACRAMENTO RIVER)

Item No.	Section*	Item	Estimated Quantity	Unit	Unit Price (In Figures)	Total (In Figures)
16	01 56 26	Temporary Fencing	1,589	LF		
17	01 56 39	Tree Protection	13	EA		
18	01 71 13	Mobilization	1	JOB	LUMP SUM	
19	01 71 23	Construction Surveys	1	JOB	LUMP SUM	
20	31 00 00	Excavation	1,757	CY		
21	31 00 00	Agricultural Soil	31	CY		
22	31 00 00	Native Topsoil	61	CY		
23	31 00 00	Aggregate Chinking	44	TON		
24	31 00 00	Turbidity Curtain	1	JOB	LUMP SUM	
25	31 05 19	Geotextile Fabric	1,253	SY		
26	31 11 00	Clearing and Grubbing	5,045	SY		
27	31 25 00	Erosion Control Fabric	1,101	SY		
28	32 11 23	Aggregate Base	121	TON		
29	32 80 00	Irrigation System	1	JOB	LUMP SUM	
30	32 90 00	Pole Cuttings	13	EA		
31	32 90 20	Pole Cuttings Establishment	6	MO		
32	32 90 20	Seeding Establishment	6	MO		
33	32 90 20	Irrigation System Maintenance	6	MO		
34	32 92 19	Seeding	8,253	SY		
35	35 42 38	Agricultural Soil for Soil-Filled Rockfill	422	CY		
36	35 42 38	Launch Rock	7,642	TON		
SUBTOTAL OF BID SCHEDULE NO. 2:						
TOTAL = SUM OF BID SCHEDULE NO. 1 + BID SCHEDULE NO. 2						

END OF DOCUMENT

*Section where contract item is defined

BID FORM

DOCUMENT 00 43 36

SUBCONTRACTORS FORM

SPECIFICATION NO.: 26-06

CONTRACTOR: _____

Name and Location of Subcontractor	CSLB License No.	DIR Registration No.	Items or Portions of Work to be Performed

Requirements:
In accordance with Public Contract Code section 4100 et seq., the bidder shall list, in the space provided on this form, the name, location of the place of business, California contractor license number, and DIR registration number of each subcontractor who will perform any portion of the work in an amount in excess of one-half of one percent of the total amount of the bid, and the portion of the work which each is to perform.

In accordance with Labor Code section 1725.5, all subcontractors identified must be DIR registered contractors at time of bid opening or become registered within 24 hours of bid opening pursuant to Labor Code section 1771.1.c(1) or (2). Contractors awarded the contract with a subcontractor not DIR registered must comply with section 1771.1(c)(3) without adjustment for contract time or contract price.

Additionally, in accordance with Public Contract Code section 4100 et seq. and section 10115.12, the bidder shall list, in the space provided on this form, the name, location of the place of business, and California contractor license number of each DVBE subcontractor who will be used by the bidder to fulfill DVBE participation and who will perform any portion of the work in an amount in excess of one-half of one percent of the total amount of the bid, and the portion of the work which each DVBE is to perform.

DOCUMENT 00 44 27

BIDDER DECLARATIONS AND CERTIFICATIONS

1. The bidder agrees, if this bid is accepted, to contract with the Department of Water Resources and furnish the required contract bonds and certificate of liability insurance in the manner and within the time specified. The bidder further agrees that the only parties participating in this bid as principals are those named herein; that this bid is made without collusion with any other party; and that the bidder is fully aware of the requirements and obligations pertaining to the following declarations and certifications. PCC refers to Public Contract Code.

2. Bidder Declarations:

   A. Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation? (PCC § 10162)

   a. ☐Yes ☐No

   If yes, please explain the circumstances.

   B. The bidder ☐has ☐has not been convicted within the preceding three years of any offenses referred to in PCC § 10285.1, including any charge of fraud,bribery, collusion, conspiracy, or any other act in violation of any state or federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in PCC § 1101, with any public entity, as defined in PCC § 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" includes any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in PCC § 10285.1. If the bidder has been convicted of an offense within the past 3 years, provide the conviction details including the date and ultimate resolution of each conviction in the space below. (PCC § 10285.1)

C. Bidder Responsibility (PCC § 1103):

i. Within the past 10 years, has the Bidder been found to be a nonresponsible bidder by any public entity, including federal, State, local, or regional entities?

a. ☐Yes ☐No

ii. Within the past 10 years, have any of the Bidder's officers or employees with a proprietary interest in the Bidder been determined to be a nonresponsible bidder by a public entity, including federal, State, local or regional entities?

a. ☐Yes ☐No

iii. Is there any officer or employee of the Bidder who now has or has had any proprietary interest in another company that bid or bids on public works projects whose company has been determined to be a nonresponsible bidder by any public entity, including federal, State, local, or regional entities?

a. ☐Yes ☐No

iv. If the answer to any of the 3 preceding questions is yes, disclose all pertinent details of the determination of nonresponsibility, including:

4.1 Date of each nonresponsibility determination

4.2 Name of each public agency issuing the nonresponsibility determination and a contact person at that agency who would have information about the determination

4.3 Contract number for each nonresponsibility determination

3. Bidder Certifications:

   A. Under PCC § 6101, the bidder certifies compliance with state and federal law respecting the employment of undocumented workers.

   B. Under PCC § 6109, the bidder certifies that the bidder and its subcontractors are currently registered and eligible to perform work on a public works project.

   C. Under PCC § 10164, the bidder certifies that it has a valid license in the appropriate classification for the work to be performed. Any bidder or contractor not so licensed shall be subject to all legal penalties imposed by law, including, but not limited to, any appropriate disciplinary action by the Contractors State License Board.

   D. Under PCC § 10186, unless specifically exempted, the bidder will not ask an applicant for onsite construction-related employment to disclose orally or in writing information concerning the conviction history of the applicant on or at the time of an initial employment.

   E. Under PCC § 10232, the bidder swears that no more than one final unappealable finding of contempt of court by a federal court has been issued against Contractor within the immediately preceding two year period because of Contractor's failure to comply with an order of a federal court which orders Contractor to comply with an order of the National Labor Relations Board.

   F. Under PCC §2010, the bidder certifies compliance with the following:

      1) CALIFORNIA CIVIL RIGHTS LAWS: For contracts over $100,000 executed or renewed after January 1, 2017, the Contractor certifies compliance with the Unruh Civil Rights Act (Section 51 of the Civil Code) and the Fair Employment and Housing Act (Section 12960 of the Government Code); and

      2) EMPLOYER DISCRIMINATORY POLICIES: For contracts over $100,000 executed or renewed after January 1, 2017, if a Contractor has an internal policy against a sovereign nation or peoples recognized by the United States government, the Contractor certifies that such policies are not used in violation of the Unruh Civil Rights Act (Section 51 of the Civil Code) or the Fair Employment and Housing Act (Section 12960 of the Government Code).

4. By signing below, the bidder swears that it is duly authorized to legally bind the bidder to the above described declarations and certifications and is fully aware that the certifications and declarations are made under penalty of perjury under the laws of the State of California.

CONTRACTOR'S NAME:_____
(as recorded on California Contractor's License)

DIR Registration No.:_____

California Contractor's License No.:_____
Expiration Date:_____

Contractor's Federal Employer I.D. No.:_____

If the contractor is a corporation, the legal name of the corporation shall be set forth above together with the signature of the officer or officers authorized to sign contracts on its behalf and the corporate seal; if the contractor is a partnership or joint venture, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts on its behalf; and if the contractor is an individual, the signature shall be placed below.

BUSINESS ADDRESS:

_____

_____

By:

_____ _____
SIGNATURE DATE

_____ _____
PRINTED NAME TITLE

_____
COMPANY

END OF DOCUMENT

DOCUMENT 00 44 28

NONCOLLUSION DECLARATION TO BE EXECUTED BY
BIDDER AND SUBMITTED WITH BID

The undersigned declares:

I am the _____ of _____,
the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ , at _____, _____ ."
(Date) (City) (State)

SIGN HERE ► _____
SIGNATURE

_____
PRINTED NAME

DOCUMENT 00 44 30

BIDDER'S BOND

STATE OF CALIFORNIA

DEPARTMENT OF WATER RESOURCES

We .....

.....

.....

..... as PRINCIPAL, and

.....

.....

.....,

as SURETY, are held and firmly bound unto the State of California in the penal sum of TEN PERCENT (10%) OF THE TOTAL AMOUNT OF THE BID of the Principal above named, submitted by said Principal to the State of California, acting by and through the Department of Water Resources, for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, to the Director of the Department to which said bid was submitted, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents. In no case shall the liability of the surety here-

under exceed the sum of $.....

THE CONDITION OF THIS OBLIGATION IS SUCH,

That whereas the Principal has submitted the above-mentioned bid to the State of California, as aforesaid, for certain construction specifically described as follows, for which bids are to be opened at

..... , California, on…….

(Insert only, name of city where bid will be opened) (Insert date of bid opening)

for .....

.....

.....

(Copy here the exact description of work, including location, as it appears on the proposal)

NOW, THEREFORE, If the aforesaid Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in accordance with the bid, and files two bonds with the Department, one to guarantee faithful performance and the other to guarantee payment for labor and materials, as required by law, then this obligation shall be null and void; otherwise, it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, We have hereunto set our hands and seals on this .....

day of……., A.D. 20…….

.....

.....

Contractor

.....

.....

Name of Surety

By .....

Attorney-in-Fact

[[Seal]]

Address. .....

Telephone No. .....

NOTE: Signatures of those executing for the surety must be properly acknowledged.

State of California

DOCUMENT 00 44 41

SMALL BUSINESS PREFERENCE AND CERTIFICATION REQUEST FOR CONSTRUCTION CONTRACTORS ONLY

(THIS FORM MUST REMAIN WITH THE BID PACKAGE)

THE UNDERSIGNED HEREBY REQUESTS PREFERENCE AS A "SMALL BUSINESS" AND FURTHER CERTIFIES UNDER PENALTY OF PERJURY, THAT THE FIRM STILL MEETS THE REQUIREMENTS OF SECTION 1896.12 OF TITLE 2, CALIFORNIA CODE OF REGULATIONS, AND HAS BEEN APPROVED BY THE DEPARTMENT OF GENERAL SERVICES, PROCUREMENT DIVISION, SMALL BUSINESS AND DVBE CERTIFICATION TO QUALIFY FOR THE SMALL BUSINESS PREFERENCE. THE UNDERSIGNED FURTHER DECLARES, UNDER PENALTY OF PERJURY, THAT IF THE LOWEST RESPONSIBLE BID EXCEEDS $100,000 AND THE WORK TO BE PERFORMED REQUIRES A **CLASS A** OR **CLASS B** CONTRACTOR'S LICENSE AND 2 OR MORE SUBCONTRACTORS WILL BE USED, THAT AT LEAST 50 PERCENT OF THE SUBCONTRACTORS TO BE UTILIZED ON THE PROJECT ARE EITHER CERTIFIED SMALL BUSINESS OR HAVE APPLIED FOR SMALL BUSINESS CERTIFICATION BY BID OPENING DATE AND ARE SUBSEQUENTLY GRANTED SMALL BUSINESS CERTIFICATION. AN APPROVED FORM STD. 812 MUST BE ON FILE IN THE SMALL BUSINESS AND DVBE CERTIFICATION OFFICE BY 5:00 P.M. OF THE BID OPENING DATE. FORM STD. 812 MAY BE OBTAINED FROM THE SMALL BUSINESS AND DVBE CERTIFICATION OFFICE, 707 THIRD STREET, 1ST FLOOR, ROOM 400, WEST SACRAMENTO, CA 95605, TELEPHONE: (916) 375-4940.

IMPORTANT NOTICE (Read before signing)

THE "SMALL BUSINESS PREFERENCE AND CERTIFICATION REQUEST" MUST BE SIGNED IN THE SAME NAME STYLE IN WHICH THE BIDDER IS LICENSED BY THE CONTRACTORS STATE LICENSE BOARD. BIDDERS BIDDING JOINTLY OR AS A COMBINATION OF SEVERAL BUSINESS ORGANIZATIONS ARE ESPECIALLY CAUTIONED THAT SUCH BIDDERS MUST BE JOINTLY LICENSED AND APPROVED IN THE SAME STYLE IN WHICH THE BID IS EXECUTED.

Legal Name Style of Bidder(s)

Signature of Bidder Date

IN THE EVENT THE BIDDER HAS RECEIVED ASSISTANCE IN OBTAINING BONDING FOR THIS PROJECT, BIDDER SHALL SET FORTH THE NAME AND NATURE OF THE FIRM PROVIDING SUCH ASSISTANCE. IF THE FIRM IS LISTED AS A SUBCONTRACTOR, BIDDER SHALL SET FORTH THE PERCENTAGE OF THE CONTRACT TO BE PERFORMED BY THE SUBCONTRACTOR.

Name of Firm

Subcontractor

❒ Yes ❒ No Percentage _____

SPECIAL ATTENTION IS DIRECTED TO SECTION 1896.18 OF TITLE 2, CALIFORNIA CODE OF REGULATIONS FOR PENALTIES FOR FURNISHING INCORRECT SUPPORTING INFORMATION IN OBTAINING PREFERENCE.

DOCUMENT 00 44 42

DEPARTMENT OF GENERAL SERVICES, PROCUREMENT DIVISION, SMALL BUSINESS CERTIFICATE

(This page is reserved for insertion of the required small business certification documentation.)

Notice to Bidder: In accordance with Document 00 21 21, Paragraph 1.C.1), bidder to submit a copy of either:

1. The firm's Department of General Services, Procurement Division small business certification approval letter; or

2. A current copy of firm's small business status from the Department of General Services Division Website.

Failure to provide the required certification may result in delayed processing or rejection of the submitted document.

DOCUMENT 00 44 43

CALIFORNIA COMPANY PREFERENCE FORM

For use on Construction Contracts for which a California Contractors License is required.

Failure to fill out and sign this form may be cause for rejection of your bid.

The undersigned hereby states that it is or is not as designated below a "California company" in accordance with Document 00 21 25 – Instructions for California Company Preference. (Check the appropriate box.)

I am a "California company". ❒

I am not a "California company". ❒

If "I am not a "California company" was checked, indicate your state of residence, and the amount of preference given to local contractors in your state of residency on its public entity construction contracts.

State of _____
Preference
percent _____
Maximum dollar
Amount_____

Please explain if neither percent nor dollars is used to determine amount of preference.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date:_____ _____
(Signature of Bidder)

State of California

DOCUMENT 00 44 44
REQUEST FOR
NON-SMALL BUSINESS BID PREFERENCE

(THIS FORM MUST REMAIN WITH THE BID PACKAGE)

THE UNDERSIGNED HEREBY REQUESTS A FIVE PERCENT (5%) BID PREFERENCE BY DOING ALL OF THE FOLLOWING:

1) COMMITTING TO AT LEAST 25 PERCENT CALIFORNIA CERTIFIED SMALL BUSINESS SUBCONTRACTOR/SUPPLIER PARTICIPATION ON THIS CONTRACT; AND

2) COMPLETING AND SIGNING THIS FORM (DOCUMENT 00 44 44) IN THE SAME NAME STYLE IN WHICH THE BIDDER IS LICENSED BY THE CONTRACTORS STATE LICENSE BOARD. BIDDERS BIDDING JOINTLY OR AS A COMBINATION OF SEVERAL BUSINESS ORGANIZATIONS ARE CAUTIONED THAT SUCH BIDDERS MUST BE JOINTLY LICENSED AND APPROVED IN THE SAME STYLE IN WHICH THE BID IS EXECUTED; AND

3) COMPLETING AND SUBMITTING DOCUMENT 00 44 44-1 – CALIFORNIA CERTIFIED SMALL BUSINESS SUBCONTRACTORS AND SUPPLIERS WITH THE BID.

EACH CERTIFIED SMALL BUSINESS MUST PERFORM A ”COMMERCIALLY USEFUL FUNCTION” IN THE PERFORMANCE OF THE CONTRACT AS DEFINED IN GOVERNMENT CODE SECTION 14837(D)(4). SMALL BUSINESS BIDS CANNOT BE DISPLACED BY NON-SMALL BUSINESS BIDS WHEN APPLYING ANY APPLICABLE LAWFUL PREFERENCES.

_____

Legal Name Style of Bidder(s)

_____

Signature of Bidder Date

ATTACH: DOCUMENT 00 44 44-1.

BIDDER IS ALSO CAUTIONED TO ENSURE THAT EACH SMALL BUSINESS SUBCONTRACTOR/SUPPLIER HAS EXECUTED A COPY OF DOCUMENT 00 44 44-2 – SMALL BUSINESS (SB): CERTIFICATION OF COMMERCIALLY USEFUL FUNCTION AND TO ATTACH SUCH CERTIFICATIONS TO THIS FORM.

SPECIAL ATTENTION IS DIRECTED TO SECTION 1896.18 OF TITLE 2, CALIFORNIA CODE OF REGULATIONS FOR PENALTIES FOR FURNISHING INCORRECT SUPPORTING INFORMATION IN OBTAINING PREFERENCE.

State of California

DOCUMENT 00 44 44-1

CALIFORNIA CERTIFIED SMALL BUSINESS SUBCONTRACTORS AND SUPPLIERS

Company Name	Company Address	Phone No.	Description of Work to be Performed	$ Amount or Percentage of Work

Attach additional pages if necessary

State of California

DOCUMENT 00 44 44-2

SMALL BUSINESS (SB): CERTIFICATION OF COMMERCIALLY USEFUL FUNCTION

Notice to Bidder: In accordance with Document 00 21 22, Paragraph 1.B.5), bidder is strongly urged to insure that, prior to listing a SB on Document 00 44 44-1, each SB execute a certification of "commercially useful function," and to submit such certification with bidder's documentation of goal attainment. This document may be used for such purpose.

Make additional copies of the blank form as needed.

In accordance with Government Code 14387, and implementation of Senate Bill 1510 (Wright) Commercially Useful Function effective January 1, 2013, a certified small business or micro business is deemed to perform a "commercially useful function," as defined below, in providing services or goods that contribute to the fulfillment of the contract requirements:

1) A person or entity is deemed to perform a commercially useful function if a person or entity does all of the following:

    a. Is responsible for the execution of a distinct element of the work of the contract.

    b. Carries out the obligation by actually performing, managing, or supervising the work involved.

    c. Performs work that is normal for its business services and functions.

    d. Is not further subcontracting a portion of the work that is greater than that expected to be subcontracted by normal industry practices.

    e. Is responsible, with respect to products, inventories, materials, and supplies required for the contract, for negotiating price, determining quality and quantity, ordering, installing, if applicable, and making payment.

2) A contractor, subcontractor, or supplier will not be considered to perform a commercially useful function if the contractor's, subcontractor's, or supplier's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of SB participation.

(continued on next page)

State of California

DOCUMENT 00 44 44-2

SMALL BUSINESS (SB): CERTIFICATION OF COMMERCIALLY USEFUL FUNCTION

Specification No.:_____

Title:_____

The undersigned SB owner or officer certifies that the SB listed below will perform a commercially useful function as defined in Government Code 14387 and implementation of Senate Bill 1510 (Wright) Commercially Useful Function effective January 1, 2013.

_____
Name of SB

_____
Work to be Performed

_____
Signature of SB Owner or Officer

_____
Title

_____
Date Signed

Department of General Services
SB Certification Number: _____

Department of General Services
SB Certification Date: _____

Department of General Services
Certification Expiration Date: _____

DOCUMENT 00 44 45
DVBE PARTICIPATION

Bidder must complete the table below and sign to qualify for DVBE goal attainment or DVBE incentive and must list, on Document 00 43 36 – Subcontractors Form, subcontractors performing greater than one-half of one percent of the work

Spec. No. & Title: _____ Bidder: _____

_____ Phone: _____

DVBE Name, Address, Phone Number (Identify Second and Lower Tiers)	Description of Work or Services to be Subcontracted or Materials to be Provided	Bid Item No.	DGS DVBE Cert. #	Dollars Committed	Percent of Bid	Listed as Subcontractor on Doc. 00 43 36?	Expected DVBE Start-Work Date

				DWR Check
TOTALS	DVBE	$	%	

_____ _____ _____

Bidder's Signature | Bidder's Printed Name | Date

Attach Additional Sheets as Needed – Sign and Date Each Sheet

DOCUMENT 00 44 47

DVBE: BROKER OR AGENT

Specification No.:_____

Title:_____

Note to Bidder: This form must be completed and signed by each DVBE prime contractor who is a broker or agent. Make additional copies of the blank form as needed.

A DVBE that is a broker or agent and that obtains a contract by the Department pursuant to Military and Veterans Code section 999.2 (a) shall disclose to the Department that the business is a broker or agent. This disclosure shall be signed and executed by each DVBE owner and manager of the enterprise. Reference: Military and Veterans Code section 999.2 (f).

I declare that the following DVBE is a broker or agent:

_____
Name of DVBE Broker or Agent

Principal for whom the DVBE is acting as a broker or agent:

_____
Principal Name

_____
Principal Address

_____
Principal Telephone Number

_____
Signature of DVBE Owner(s)

Executed: _____
Date

_____
Signature of DVBE Manager

Executed: _____
Date

DOCUMENT 00 44 48 (Page 1 of 2)

DVBE: DECLARATIONS – EQUIPMENT RENTAL

Specification No.:_____

Title:_____

Notice to Bidder: This two-page form must be completed and signed by each DVBE prime contractor that rents equipment (including equipment plus operator) to the Department.

Such DVBE shall be deemed to be an equipment broker unless one or more disabled veterans has 51-percent ownership of the quantity and the value of each piece of equipment. If the equipment is owned by one or more disabled veterans, each disabled veteran owner shall submit the following declaration. Reference: Military and Veterans Code section 999.2 (c).

Equipment (including equipment plus operator) which the Department rents from an equipment broker cannot be credited toward DVBE participation. Reference: Military and Veterans Code section 999.2 (e).

Make additional copies of the blank form as needed.

Equipment to be used in this contact:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(continued on next page)

DOCUMENT 00 44 48 (Page 2 of 2)

DVBE: DECLARATIONS – EQUIPMENT RENTAL

Specification No.:_____

Title:_____

I declare the following:

1) that I am a disabled veteran owner of the following equipment:

Equipment	Percent Ownership
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

_____
Address

_____
Telephone Number

_____
Tax ID #

Have you submitted your federal income tax returns to the Department of General Services pursuant to Military and Veterans Code section 999.2 (g)?

_____Yes _____No

_____
Signature of Disabled Veteran Owner

_____
Date Signed

DOCUMENT 00 44 49

DVBE: DECLARATIONS OF MEETING AND MAINTAINING REQUIREMENT OF A DVBE – EQUIPMENT RENTAL

Specification No.:____

Title:____

Notice to Bidder: A DVBE prime contractor that rents equipment (including equipment plus operator) to the Department shall submit to the Department a declaration signed by each disabled veteran owner and manager of the enterprise stating that the enterprise obtained the contract by representing that the enterprise was a DVBE meeting and maintaining all of the requirements of a DVBE. Reference: Military and Veterans Code section 999.2 (d).

Equipment (including equipment plus operator) that the Department rents from an equipment broker cannot be credited toward DVBE participation. Reference: Military and Veterans Code section 999.2 (e).

Make additional copies of the blank form as needed for each DVBE owner and/or manager.

The declaration shall include the name, address, telephone number, and tax identification number of the owner of each piece of equipment identified in the contract.

– –

Piece of Equipment identified on Page 1, Document 00 44 48:

____

I declare that (DVBE Name)_____________________________________, obtained this contract by representing that the enterprise was a DVBE meeting and maintaining all of the requirements of a DVBE.

____
Address

________________________ ________________________
Telephone Number Tax ID #

______________________________ _________________
Signature of DVBE Owner Date Signed

______________________________ _________________
Signature of DVBE Manager Date Signed

DOCUMENT 00 44 50 (Page 1 of 2)

DVBE: CERTIFICATION OF COMMERCIALLY USEFUL FUNCTION

Notice to Bidder: In accordance with Document 00 21 26, Paragraph 2.I, bidder is strongly urged to insure that, prior to listing a DVBE on Document 00 44 45, each DVBE execute a certification of "commercially useful function," and to submit such certification to the Department. Document 00 44 50 may be used for such purpose.

Make additional copies of the blank form as needed.

In accordance with Document 00 21 26, Paragraph 8.E. 1) and 2) (reference Military and Veterans Code section 999 (b) (5) (B)), a DVBE contractor, subcontractor, or supplier is any person or entity that has been certified by the Department of General Services pursuant to Military and Veterans Code section 999 et seq. and that performs a "commercially useful function," as defined below, in providing services or goods that contribute to the fulfillment of the contract requirements:

1) A person or entity is deemed to perform a "commercially useful function" if a person or entity does all of the following:

    a. Is responsible for the execution of a distinct element of the work of the contract.

    b. Carries out the obligation by actually performing, managing, or supervising the work involved.

    c. Performs work that is normal for its business services and functions.

    d. Is not further subcontracting a portion of the work that is greater than that expected to be subcontracted by normal industry practices.

    e. Is responsible, with respect to products, inventories, materials, and supplies required for the contract, for negotiating price, determining quality and quantity, ordering, installing, if applicable, and making payment.

2) A contractor, subcontractor, or supplier will not be considered to perform a commercially useful function if the contractor's, subcontractor's, or supplier's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of disabled veteran business enterprise participation.

(continued on next page)

DOCUMENT 00 44 50 (Page 2 of 2)

DVBE: CERTIFICATION OF COMMERCIALLY USEFUL FUNCTION

Specification No.:_____

Title:_____

The undersigned DVBE owner or officer certifies that the DVBE listed below will perform a commercially useful function as defined in Document 00 21 26, Paragraph 8.E. 1) and 2). Reference: Military and Veterans Code section 999 (b) (5) (B).

_____
Name of DVBE

_____
Work to be Performed

_____
Signature of DVBE Owner or Officer

_____
Title

_____
Date Signed

Department of General Services
DVBE Certification Number: _____

Department of General Services
DVBE Certification Date: _____

Department of General Services
Certification Expiration Date: _____

DOCUMENT 00 44 51

IN-USE OFF-ROAD DIESEL FUELED VEHICLE LIST

Specification No.:_____

Title:_____

Bidder:_____

Under 13 CCR § 2449 et seq., list the fleet name and Off-Road Diesel Fleet Identification (DOORS ID) number for every fleet used by you or you subcontractor to perform the work below.

☐Check here if all fleets used to perform work are not subject to 13 CCR § 2449 et seq. Submit the blank form as part of the bid.

Fleet Name	DOORS ID Number

For each fleet listed in the above table, submit a valid Certificate of Reported Compliance within 10 days of Bid Opening.

END OF DOCUMENT

CONTRACTING REQUIREMENTS

DOCUMENT 00 52 00

CONTRACT FORM

2026 LEVEE REPAIRS
COLUSA BASIN DRAIN AND SACRAMENTO RIVER
STATE PLAN OF FLOOD CONTROL FACILITIES
DIVISION OF FLOOD OPERATIONS
COLUSA AND YOLO COUNTIES
CALIFORNIA
SPECIFICATION NO. 26-06
CONTRACT NO. C51695

THIS CONTRACT, made in accordance with the provisions of the State Contract Act and other applicable laws of the State of California, is entered into between the State of California, acting by and through its Department of Water Resources (Department), and _____ (Contractor).

WITNESSETH, That the Department and the Contractor mutually agree as follows:

ARTICLE I. – This contract includes and incorporates by this reference the notice to contractors and Contractor's bid for the above-named project, the contract bonds and any affiliate agreement entered into for the purpose of bidding on the project, the drawings and specifications for such project, all addenda to the above documents, and all authorized changes therein. All definitions stated in the General Conditions shall apply herein.

ARTICLE II. – The Contractor shall provide and furnish, except as otherwise expressly provided in the specifications, all materials, equipment, labor, services, methods, processes, construction materials and equipment, tools, plants, supplies, power, water, transportation and other things necessary to complete in a skillful, workmanlike and orderly manner, in accordance with the drawings, specifications and all other parts of this contract, and to the satisfaction of the Engineer, all of the facilities specified, indicated, shown, or contemplated by the drawings, specifications and other parts of this contract as comprising and necessary for completion of the above-named project, and shall perform all other obligations imposed by this contract.

ARTICLE III. – The Department shall pay to the Contractor, and the Contractor shall accept, as full compensation for performance of obligations under ARTICLE II and for all risks and liabilities in connection therewith, the prices set forth in the Contractor's bid, all in accordance with and subject to the express terms and conditions of the specifications, the Contractor's bid, and other parts of this contract, and the Department shall perform all other obligations imposed upon it by this contract.

ARTICLE IV. – This contract shall apply to and bind the successors and assigns to the parties hereto.

IN WITNESS WHEREOF, this contract has been executed by the parties hereto.

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

KARLA A. NEMETH
Director of Water Resources

By _____

Title Dale Brown
Manager, Division of Engineering

Date Signed _____

_____
Name of Contractor

License No. _____

By _____

Title _____

Date Signed _____

Approved as to Funds:

_____
Manager, Division of Fiscal Services

I hereby certify that I have examined the contract and find it to be in accordance with the provisions of the State Contract Act.

_____
Assistant General Counsel

INFORMATION COPY FOR ESTIMATING PURPOSES ONLY

DOCUMENT 00 61 13

State of California
California Natural Resources Agency
DEPARTMENT OF WATER RESOURCES

PERFORMANCE BOND

WHEREAS, The State of California acting by and through the

..... , has awarded
(insert name of the Department awarding the contract)

to ..... ,
as principal hereinafter designated as the "Contractor," a contract for

AND WHEREAS, The Contractor is required to furnish a bond in connection with said contract guaranteeing the faithful performance thereof;

NOW, THEREFORE, We the undersigned Contractor and surety are held and firmly bound unto the State of California in the sum of .....
.....
..... dollars
($.....), to be paid to the said State or its certain attorney, its successors and assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH,

That if the Contractor, his or its heirs, executors administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the foregoing contract and any alteration thereof made as therein provided, on his or its part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the State of California, its officers and agents, as therein stipulated, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and effect.

IN WITNESS WHEREOF, We have hereto set our hands and seals on this .....

day of ....., 20.....

.....

.....
Contractor

.....

.....
Name of Surety

By .....
Attorney-in-Fact

[[Seal]]

NOTE: Signatures of those executing for the surety must be properly acknowledged.

DOCUMENT 00 61 14

State of California
California Natural Resources Agency
DEPARTMENT OF WATER RESOURCES

PAYMENT BOND

WHEREAS, The State of California acting by and through the

..... , has awarded
(insert name of the Department awarding the contract)

to ..... ,
as Contractor, a contract for the work described as follows:

AND WHEREAS, Said Contractor is required to furnish a bond in connection with said contract, to secure the payment of claims of laborers, mechanics, materialmen, and other persons as provided by law;

NOW, THEREFORE, We the undersigned Contractor and surety are held and firmly bound unto the State of California in the amount required by law, the sum of .....

..... dollars
($.....), for which payment well and truly to be made we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH,

That if said Contractor, it or its heirs, executors, administrators, successors or assigns, or subcontractors, shall fail to pay any of the persons named in Civil Code Section 9100, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by any such claimant, or amounts required to be deducted, withheld and paid over to the Employment Development Department from the wages of employees of the Contractor and subcontractors under Section 13020 of the Unemployment Insurance Code with respect to the work and labor, that the surety or sureties herein will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, the said surety will pay a reasonable attorney's fee to be fixed by the court.

This bond shall inure to the benefit of any of the persons named in Civil Code Section 9100 as to give a right of action to such persons or their assigns in any suit brought upon this bond.

IN WITNESS WHEREOF, We have hereto set our hands and seals on this .....

day of ....., 20.....

.....

.....
Contractor

.....

.....
Name of Surety

By .....
Attorney-in-Fact

[[Seal]]

Address .....

Telephone No. .....

NOTE: Signatures of those executing for the surety must be properly acknowledged.

GENERAL CONDITIONS

APRIL 2020

DOCUMENT 00 71 00

ABBREVIATIONS AND DEFINITIONS

GENERAL CONDITIONS
April 2020

1. ABBREVIATIONS: Wherever the following abbreviations are used in the contract the meaning shall be as indicated:

Abbreviation	Standards Bodies/Organizations
AAMA	Architectural Aluminum Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
AFBMA	Anti-Friction Bearing Manufacturers Association
AGMA	American Gear Manufacturers Association
AISC	American Institute of Steel Construction
AISE	Association of Iron and Steel Engineers
AISI	American Iron and Steel Institute
AMCA	Air Moving and Conditioning Association
ANSI	American National Standards Institute
APA	American Plywood Association
API	American Petroleum Institute
AREA	American Railway Engineering Association
ARI	Air Conditioning and Refrigeration Institute
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.
ASME	American Society of Mechanical Engineers
ASNT	American Society for Nondestructive Testing, Inc.
ASTM	American Society for Testing and Materials or ASTM International
AWG	American Wire Gage
AWPA	American Wood-Preservers' Association
AWS	American Welding Society, Inc.
AWWA	American Water Works Association
BMP	Best Management Practices
Cal/OSHA	California Department of Industrial Relations Division of Occupational Safety and Health

Abbreviation	Standards Bodies/Organizations
CBC	California Building Code
CFC	California Fire Code
CMAA	Crane Manufacturer Association of America
CMC	California Mechanical Code
CPC	California Plumbing Code
CPMB	Concrete Plant Manufacturer’s Bureau
CRD	Department of the Army, Corps of Engineers, Handbook for Concrete and Cement
CSFM	California State Fire Marshal
CSI	The Construction Specification Institute
DIR	California Department of Industrial Relations
EIA	Electronic Industries Association
FM	Factory Mutual Testing Lab
ICEA	Insulated Cable Engineers Association
ICC	Interstate Commerce Commission
IEEE	Institute of Electrical and Electronics Engineers
ISO	International Organization for Standardization
MSS	Manufacturer’s Standardization Society of Valve and Fittings Industry, Inc.
NACE	National Association of Corrosion Engineers
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
NIST	National Institute of Standards and Technology
NFPA	National Fire Protection Association
NRCA	National Roofing Contractors Association
NSF	National Sanitation Foundation or NSF International
SAE	Society of Automotive Engineers
SDS	Safety Data Sheets
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association, Inc.
SSPC	Steel Structures Painting Council
UL	Underwriters' Laboratories Inc.
USBR	United States Bureau of Reclamation
WCLB	West Coast Lumber Inspection Bureau
WWPA	Western Wood Products Association

2. DEFINITIONS: Wherever the following terms are used in the contract the meaning shall be as indicated:

Term	Definition
Acceptance	The formal written acceptance of the Work by the Director or their authorized representative.
Approved, Directed, or Ordered	Approved, directed, or ordered by the Engineer, unless otherwise indicated.
Bid	The offer of a bidder to perform the Work in accordance with the Contract.
Bid Documents	The Notice to Contractors, Bid Form, and Bidder's Agreement and all documents attached thereto or described therein and any affiliate agreement entered into for the purpose of bidding on the project.
Caltrans Specifications	The Standard Specifications of the State of California Department of Transportation (Caltrans) in effect as of the date of award of the Contract.
Change	A modification to the Work ordered in writing by the Engineer.
Change Order	A written order issued by the Engineer used to determine adjustments in the Contract based on a Change or an adjustment in compensation or time.
Construction Equipment	Equipment used for performance of the Work, but not incorporated into the Project.
Contract	The written agreement between the Contractor and the Department that includes and incorporates by reference, the Notice to Contractors, Introductory Information, Bidding Requirements, Bid Form, Bid Documents, the Contract Bonds, and any affiliate agreement entered into for the purpose of bidding on the project, the Drawings, Contracting Requirements, General Conditions, Division 1 (General Requirements) through Division 49, and all Appendices, Addenda, Information Letters, and Change Orders.
Contractor	The entity which has entered into the Contract with the Department.
Contract Prices	The prices for the Work set forth in the Contract.

Term	Definition
Critical Path	The longest path of activities associated with each specified time of completion listed in the Contract and any adjustments thereof, where the total float is less than or equal to zero.
Days	Calendar days, unless otherwise indicated.
Department	California Department of Water Resources (DWR).
Deputy Director	The Department's Deputy Director who is delegated the responsibility for coordinating and directing the activities and functions under the Contract.
Department-owned Float	Time saved on the Critical Path by actions of the Department.
Director	Director of the Department
Drawings	Drawings shown on the list of drawings; or included in 00 01 15 - List of Drawing Sheets; and addenda; supplemental drawings; and revised drawings.
Engineer	The Department’s Division Manager delegated by the Deputy Director acting either directly or through authorized representatives within the scope of delegated authority.
Equipment	Equipment incorporated or to be incorporated into the Project.
Float	The amount of time that an activity in the project schedule can be delayed without causing a delay to the Critical Path.
Materials	Materials incorporated or to be incorporated into the project.
Project	All Work to be accomplished under the Contract.
Shown	Shown on the Drawings, unless otherwise indicated.
Specifications	The instructions and requirements complemented by the Drawings, provided by the Department, as found in Division 1 (General Requirements) through Division 49, including all Appendices and Addenda thereto, which describe the work to be performed, standards of workmanship, and the quantities, qualities and types of materials to be furnished.
State	The State of California.
State Contract Act	Public Contract Code Sections 10100 through 10285.5.

Term	Definition
Subcontractor	An entity that contracts with the Contractor or another subcontractor to perform work.
Supplier	An entity that contracts with the Contractor, a subcontractor, or another supplier to furnish materials or equipment for the Project.
Work	Everything required to fulfill the obligations of the Contract or any portion thereof including, but not limited to, all field work including labor, materials, equipment, services, plant establishment, and maintenance; submittals; schedules; reports; information; data; spare parts; guarantees; warranties; and all other deliverables and obligations required under the Contract to the satisfaction of the Engineer.
Working Drawings	Drawings prepared by the Contractor to complete the Project.
Work Site	The area to be occupied by the Project and areas occupied or used by the Contractor, subcontractors, or suppliers for performance of the Work.

END OF DOCUMENT

DOCUMENT 00 72 41

HEALTH AND SAFETY REQUIREMENTS

1. SAFETY VISION: Safety is integrated into the Department’s culture. The Department is committed to the safety of our employees, partners, and the public. The Department’s goal is to eliminate occupational injuries and illnesses.

2. SAFETY PREQUALIFICATIONS: If the specified pre-bid safety prequalification thresholds were not met, provide a competent, full-time person or representative responsible for safety throughout performance of the Work. You are not relieved of this requirement based on the results of any subsequent pre-bid safety pre-qualification that may occur during the performance of the Work under this Contract. Submit to the Engineer the name, qualifications, and contact information for the responsible safety person prior to the start of sitework.

3. APPLICABLE LAWS AND REGULATIONS: Keep informed of and comply with all ordinances, rules, regulations and laws applicable to performance of the Work including, but not limited to, California Code of Regulations (CCR) Title 8, Industrial Relations.

4. CONTROLLING EMPLOYER: You are the controlling employer and must ensure hazardous conditions are corrected in accordance with Labor Code Section 6400. The Department is not responsible for the health and safety of the Contractor's, Subcontractors, or Suppliers personnel or any other persons present at the job site at the request of the Contractor or its Subcontractors.

5. FAILURE TO COMPLY WITH SAFETY REQUIREMENTS: The Engineer may order immediate action, including a Stop Work Order, to correct conditions which endanger any person or property, or any cultural, paleontological, environmental, or biological resource including plants and animals. Such order may be verbal or written. If you fail to immediately comply with such order, the Engineer may take any action necessary to prevent or mitigate injury, loss, or damage. Your failure to comply with specified safety requirements, laws, or regulations will be considered Defective Work under Document 00 72 45, Paragraph 9.

6. INJURY AND ILLNESS PREVENTION

   A. Injury and Illness Prevention Plan (IIPP): Prepare and submit to the Engineer a written Cal/OSHA compliant IIPP 15 days prior to the start of sitework Designate a single point of contact for all safety related communications in the IIPP. Keep the IIPP available at the Work Site.

B. Written Safety Program and Code of Safe Practices: Submit a copy of your Written Safety Program and the Code of Safe Practices 15 days prior to the start of sitework. Keep the Code of Safe Practices made available at the Work Site.

C. Incident Reports:

1) Submit reports of injury and illness at the Work Site which result in death, injury, hospitalization, damage to property, or cases of occupational disease. Submit an initial report within 24 hours of the incident followed by a detailed report that addresses causation and measures implemented to prevent future occurrences.

2) Report near miss incidents within 8 hours of the incident. A near miss incident is a close call that has the potential for injury or property loss.

3) Reports will be considered confidential to the extent permitted by law and will be used solely to develop information for use in prevention of future injury and illness.

D. Monthly Summary Reports:

1) Submit by the 20th of each month on Department-furnished forms for you and your Subcontractors, a summary report showing:

a. Number of employees;

b. Employee-hours of work exposure;

c. Number of OSHA recordable incidents;

d. Number of lost-time injuries; and

e. Work days lost.

E. Training/Safety Instructions for Employees: Provide effective training to workers and meet Cal/OSHA training requirements that apply to the Work activities being performed. Submit copies of any and all training records within 48 hours of the Department’s request.

7. PRE-WORK SAFETY PLAN (PWSP): Fifteen days prior to beginning sitework, submit a site-specific PWSP that includes a site description, scope of Work, sequence of events, identification of potential risks and hazards, discussion of mitigation or risk reduction methods, and a list of actionable measures. A sample PWSP form in located in Appendix I. Keep the PWSP available at the Work Site.

8. SITE-SPECIFIC EMERGENCY RESPONSE PLAN

   A. Fifteen days after receipt of the Notice to Begin Work, submit a site-specific Emergency Response Plan (ERP).

   B. Include in the ERP a description of the procedures to be followed in case of any emergency, injury, or illness.

   C. Include the identification and telephone numbers of:

      1) Emergency medical, police and fire services;

      2) Personnel trained in First Aid/CPR/AED and hazmat spill response; and

      3) Emergency response representative.

   D. Include the location of first aid supplies and hazardous material spill containment equipment and supplies.

   E. Keep the ERP available at the Work Site.

9. FIRE PREVENTION AND CONTROL PLAN

   A. Fifteen days prior to beginning sitework, submit a Fire Prevention and Control Plan (FPCP) in compliance with the California Fire Code (CFC) Chapter 33. Include in the FPCP measures, policies, and emergency procedures developed in consultation with state and local fire protection services for preventing and controlling any fire that may occur at the Work Site:

      1) Fire prevention procedures during the alteration or demolition of any structures, including underground locations.

      2) Current emergency telephone numbers, an area map, and access for firefighting and other fire prevention and control services.

      3) Procedures for maintaining contact with local firefighting services for updates on fire conditions, and how such fire conditions will be communicated to the Contractor’s employees and the Department during times of elevated fire danger.

      4) Include the following requirements or explain why they have not been included:

         a. Remove combustible debris, rubbish, and waste materials from buildings at the end of each work shift and do not dispose by burning.

b. Store flammable substances and materials susceptible to spontaneous ignition in an approved storage or disposal container.

c. No fires are allowed at the Work Site.

d. Allow smoking only in enclosed vehicles or in areas designated for smoking that have been cleared of vegetation.

e. Maintain appropriate fire suppression equipment at the Work Site, including an all-wheel drive water truck or fire truck with a water tank of at least 3,000-gallon capacity. Maintain the truck's water tank full and do not use as a source of construction water without prior written approval by the Engineer. Inventory fire extinguishers, shovels, and other firefighting equipment and make available at the Work Site and on construction equipment. Equip each vehicle on the right-of-way with a minimum 20-pound (or two 10-pound) fire extinguisher(s) and a minimum of 5 gallons of water in a firefighting apparatus (e.g., bladder bag).

f. Provide a sealed fire toolbox at area point accessible in the event of fire. Stock the fire toolbox with a minimum of one backpack pump-type fire extinguisher filled with water, two axes, two McLeod fire tools, and four shovels.

g. Equip internal combustion engines with spark arrestors. Place motorized construction equipment such that the exhausts do not discharge against combustible materials. Pipe exhausts to the outside of buildings. Fuel equipment while in non-operation and store fuel in an approved area.

h. Equip gasoline-powered construction equipment with catalytic converters with shielding or other acceptable fire prevention features.

i. Restrict vehicles to flagged right-of-way or temporary construction easement unless otherwise allowed in fire control procedures.

j. Keep disturbance to the terrestrial or aquatic environment through the use of heavy construction equipment to a minimum. If a fire should start, contact the appropriate fire protection agencies immediately, and utilize heavy construction equipment only as necessary to contain the fire or protect a structure from damage. Hand crews, firefighting water trucks, or other fire control measures may be used as a first defense.

B. Welding, Cutting and Other Hot Work: Have a Hot Work Program in place. Complete Hot Work permits and establish a fire watch established when welding, cutting, grinding, and other hot work is to be performed when fire hazards, sparks, and combustible exposures are present. Train fire watch personnel in the use of portable fire extinguishers. Welding sites and rigs are required to be equipped with fire prevention provisions, specifically a minimum 20 lb. (or two 10 lb.) fire extinguishers.

10. PUBLIC SAFETY: Protect the public from the hazards of the construction site including, but not limited to, staging and storage areas, vaults, tunnels, and open trenches. Include measures such as appropriate security (including the use of security guards), covering trenches, posting warning signs, installing temporary fencing, barricades, safety lights, and other measures as appropriate. Keep gates closed except when construction equipment and your employees are passing through. At the end of the work day, secure all Work areas to prevent unauthorized public access.

11. JOB HAZARD ANALYSIS (JHA): Before the start of each Work shift, Survey the jobsite for hazards and use necessary safeguards to ensure that the Work is performed safely. Such hazards and safeguards are to be recorded on a JHA form and communicated to all persons at the job site including laborers, visitors, Department staff and representatives. Keep a record of all JHA forms at the Worksite.

12. ENVIRONMENTAL HAZARDS

A. Heat Illness Prevention Plan (HIPP): Comply with the Cal/OSHA Heat Illness Prevention Standard, CCR, Title 8, Section 3395 to protect its workers against the effects of heat illness. This includes submitting an HIPP in compliance with the Cal/OSHA Heat Illness Prevention Standard. Submit a copy of your HIPP fifteen days prior to the start of sitework and keep a copy available at the Work Site. Submit copies of any and all HIPP training records within 48 hours of the Department’s request.

B. Valley Fever: Valley Fever is an infection caused by the fungus Coccidioides. Valley Fever fungus has been identified by the California Department of Public Health as endemic (consistently present) in the soil in many California Counties. Include in your Pre-Work Safety Plan an assessment of its Valley Fever risk at the job site and identify adequate protection measures to be implemented by your workers and Subcontractors. When working at Work Sites in counties where Valley Fever is highly endemic (the incidence rate is greater than 20 cases per 100,000 persons per year), the comply with Labor Code Section 6709, which includes provisions for providing effective Valley Fever awareness training to all of its employees. Keep training records

available at the Work Site. Additional information can be found at the California Department of Industrial Relations website at: https://www.dir.ca.gov/dosh/valley-fever-home.html.

13. EXPOSURE HAZARDS

A. Silica Dust: Where the risk of exposure to respirable Crystalline Silica has been associated with a particular product or material or a specific process task or activity, the develop a plan to minimize or eliminate worker exposure to airborne respirable crystalline silica that is in compliance with and implements the control methods specified in CCR, Title 8, Section 1532.3. Keep a copy of the your plan available at the Work Site.

B. Lead: Comply with the requirements of CCR, Title 8, Section 1532.1, for any construction activities that involve demolition, modification, or other disturbance of possible lead containing coatings and materials . For modification or demolition of structures, comply with the requirements of CCR, Title 17. Assume all existing paint or surface coating affixed to a component in or on a structure constructed prior to 1978 to contain lead, unless it can be determined otherwise.

C. Asbestos:

1) Comply with Labor Code Section 6501.5.

2) If asbestos-containing material is found, stop Work in this area and notify the Engineer immediately.

3) Comply with CCR, Title 8, Section 1529 when dealing with construction and other materials containing asbestos.

D. Safety Data Sheets (SDS): Provide workers information on the hazardous chemicals in their Work areas, access to SDS, and training on how to use hazardous chemicals safely. Submit to the Engineer an SDS for hazardous chemicals and products used in the course of the Work. Submit all training records within 48 hours of the Engineer’s request.

14. STRUCTURAL HAZARDS

A. Confined Spaces:

1) Fifteen days prior to entering any confined spaces, Submit your program for Confined Space Entry and Permit Required Confined Space Entry in compliance with CCR, Title 8, Sections 1950 through 1962 or Sections 5156 through 5157, as applicable.

2) Provide Confined Space Training to your workers and keep all training records on site. For Permit Required Confined Space Entry, provide rescue services.

B. Fall Hazards: If the Work involves fall hazards, submit your Fall Protection Plan 15 days prior to beginning sitework. Include detailed site-specific information concerning the fall protection system and equipment, including the location of anchors and use of guardrails, and the name of the Competent Person as defined in CCR, Title 8, Section 1504. Keep the Fall Protection Plan available at the Work Site.

C. Trenching and Excavation:

1) At least 48 hours prior to conducting excavation, obtain a ticket from the regional notification center pursuant to Government Code Section 4216, et seq. The telephone number for Underground Service Alert (USA) for Northern California is (800) 642-2444 or 811 and for Southern California is (800) 422-4133 or 811.

2) Prior to conducting excavation, obtain all necessary excavation permits. A Cal/OSHA permit is required for construction of trenches or excavations of 5-feet or deeper into which any person is required to descend. Keep all permits available at the Work Site.

3) Comply with Labor Code 6705 while excavating.

4) For an excavation 5 feet or more in depth, submit shop drawings for a protective system.

a. The drawings must show the design and details for providing worker protection from caving ground during excavation.

b. Drawings of protective systems for which the Construction Safety Orders require design by a registered professional engineer must be sealed and signed by an engineer who is registered as a civil engineer in the State.

c. Furnish drawings at least 5 days before the Contractor intends to begin trench Work.

5) Submit the name of the Competent Person responsible for inspections of the excavations, protective systems, and taking any prompt corrective actions.

D. Scaffolds: The design and construction of scaffolds must conform to applicable standards and requirements of CCR, Title 8. Scaffold erection and dismantlement must be supervised by a Qualified Person. Submit the name, qualifications, and contact information for the

qualified person. A Cal/OSHA permit is required for erecting and dismantling scaffolds that exceed three stories or 36 feet in height. Make permit available at the Work Site.

E. Formwork, Falsework, and Vertical Shoring: The design and construction of formwork, falsework, and vertical shoring must conform to applicable standards and requirements of CCR, Title 8, Section 1717. At least 30 days prior to their use, submit any formwork, falsework or vertical shoring system calculations and drawings and any certifications of such system required by the Safety Orders. Keep the formwork, falsework or shoring layout available at the Work Site.

15. MECHANICAL HAZARDS

A. Cranes: When cranes will be used in the performance of the Work, with CCR, Title 8, Sections 1610-1619. Perform a thorough site inspection to determine the proximity of powerlines and necessary safety measures to be implemented. Keep operator qualifications and certification and crane inspection records available at the Work Site. Have a pick plan prepared by a qualified person and discuss on site with all affected workers. Make the pick plan available at the Work Site.

B. Industrial Trucks, Lift Trucks, and Forklifts: When industrial trucks, lift trucks, and forklifts will be used in the performance of the Work, certify that each operator has been trained or evaluated, and post and enforce a set of operating rules for forklift use in compliance with CCR, Title 8, Sections 3664 and 3668. The driver must inspect the vehicle once during the shift. Submit all training and inspection records within 48 hours of the Engineer’s request.

END OF DOCUMENT

DOCUMENT 00 72 42

INTERPRETATION OF THE CONTRACT

1. CORRELATION: The specifications are written to the Bidder before award and the Contractor after. Before award, interpret sentences written in the imperative mood as starting with *'The Bidder must'* and interpret *'you'* as '*the Bidder*' and *'your'* as '*the Bidder's*'. After award, interpret sentences written in the imperative mood as starting with '*The Contractor must*' and interpret '*you'* as *'the Contractor'* and *'your'* as *'the Contractor's'*.

2. REFERENCES: Where the version of a referenced document (specifications, standards, codes, or test methods) is not specified, use the most recent version in effect on the date of the Notice to Contractors.

3. INTERPRETATION: The Engineer makes the final decisions on questions regarding the contract, including drawing and specification interpretation.

4. GOVERNING ORDER: Governing ranking of Contract parts in descending order is:

   A. Document 00 73 00 - Supplementary Conditions.

   B. Documents 00 71 00 through 00 72 49 – General Conditions.

   C. Division 1 – General Requirements.

   D. Division 2 – Existing Conditions through Division 48 – Electrical Power Generation.

   E. Detail Drawings govern over general Drawings.

   F. Numerals control over scaled measurements.

   G. If a discrepancy is found or confusion arises, submit a Request For Information (RFI).

5. MODIFICATIONS: The latest modifications supercede any prior provisions as to the same subject matter, in accordance with governing order specified above.

6. GOVERNING LAW: This Agreement is to be governed by and construed in accordance with the laws of the State of California applicable to contracts made and to be performed wholly within such State, and without regard to the conflicts of laws principles thereof.

END OF DOCUMENT

DOCUMENT 00 72 43

COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS

1. GENERAL: Comply with applicable federal, state, county and municipal laws, ordinances, rules, permits and regulations, including but not limited to those specifically cited herein.

2. STATE AUDITOR: Retain records that pertain to the performance of the Work for a period of three years after final payment for examination and audit by Department or its delegate, or by the California State Auditor under Government Code Section 8546.7.

3. PERMITS AND LICENSES: Obtain all necessary permits and licenses and pay charges and fees applicable to perform the Work, except as otherwise specified. Such permits and licenses shall be obtained in sufficient time to prevent delay to the project.

4. LABOR LAW REQUIREMENTS

   A. Prevailing Wage: Comply with prevailing wage requirements or be subject to restrictions and penalties in accordance with Sections 1770 et seq. of the Labor Code. Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations (DIR) pursuant to Labor Code Section 1776(h).

      1) Posting: Post a copy of DIR's prevailing wage rates in a conspicuous place at the Work Site.

      2) Prevailing Wage Monitoring and Enforcement:

         a. DIR Registration of the Contractor and Subcontractors: Be registered with the DIR pursuant to Labor Code Section 1725.5 (“DIR registered contractor”) at all times during the performance of the Work. Verify that all subcontractors of every tier are DIR registered at all times during the performance of the Work.

         b. Certified Payroll Records: Comply with the Certified Payroll Record (CPR) requirements of Labor Code Sections 1771.4 and 1776, including for subcontractors of every tier.

         c. Posting of Job Site Notices: Pursuant to Labor Code Section 1771.4(a)(2), Post any job site notices prescribed by the DIR.

         d. Penalty Assessment for Non-compliance with CPR Requests: Comply with all legal requirements regarding inspection and furnishing of CPRs. Among other requirements, CPRs must be

produced within ten (10) days of written request by the Department. Failure to do so shall result in a penalty forfeiture of one hundred dollars ($100) per calendar day or portion thereof, for each worker, until there is full compliance with this requirement. Upon request of the DIR, these penalties shall be withheld from progress payments then due to the Contractor. The Contractor is not subject to a penalty assessment for failure of a Subcontractor to comply with this requirement.

e. Per Diem Wages: Per diem wages shall be deemed to include employer payments to workers needed for performance of the Work in accordance with Labor Code Section 1773.1.

f. Apprentices: Prior to commencement of Work, the Contractor shall contact the Division of Apprenticeship Standards and shall comply with all applicable laws and regulations regarding compliance with apprenticeship requirements including those contained in Labor Code Sections 1777.5, 1777.6 and 1777.7 and California Code of Regulations Title 8, Sections 200 et seq.

g. Department DIR Certification Listing Requirements:

(1) Within 10 days of the Contractor's receipt of the Notice to Begin Work and prior to the first of every month thereafter, the Contractor shall update and furnish to the Engineer the Department of Industrial Relations (DIR) Registration Certification List (form at Appendix II) to include each and every Subcontractor, regardless of tier or amount, and any other service provider that requires a DIR registration that has or will be performing Work on the project. The Contractor shall furnish this list to the Engineer on a monthly basis even if there are no additional Subcontractors or service providers listed from the previous month.

(2) In addition to any other potential remedies, the Engineer may withhold all or part of any payment due if the Contractor fails to furnish the required updated monthly DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION CERTIFICATION LIST until compliance therewith.

h. Contractor Responsibilities: The Contractor shall be responsible for any and all costs and delays associated with compliance with Labor Code requirements including those contained in Sections 1725 et seq. and 1770 et seq. There will

be no compensation or time allowed for the Contractor to comply with such requirements.

i. Withhold Provision: The Engineer must withhold any final payment due the Contractor until at least 30 days after the required DIR registration information has been submitted to the DIR in compliance with Labor Code Section 1773.3(d).

B. Hours of Labor: The Contractor shall comply with Labor Code Sections 1810 through 1815, which pertain to the maximum hours of Work, records to be kept, penalties, and overtime.

C. Workers' Compensation: The Contractor shall secure the payment of workers' compensation in accordance with Labor Code Section 3700, and prior to performing Work, shall file with the Department the certification required by Labor Code Section 1861.

5. CHILD SUPPORT COMPLIANCE ACT: The Contractor acknowledges in accordance with Public Contract Code Section 7110, that: (a) the Contractor recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Chapter 8 (commencing with Section 5200) of Part 5 of Division 9 of the Family Code; and (b) the Contractor, to the best of its knowledge, is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.

6. NONDISCRIMINATION

A. The Contractor shall comply with California Code of Regulations Title 2, Section 11105 as follows:

1) *During the performance of this contract, the recipient, contractor, and its subcontractors shall not deny the contract's benefits to any person on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status. Contractor shall insure that the*

evaluation and treatment of employees and applicants for employment are free of such discrimination.

2) *Contractor shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code, § 12900 et seq.), the regulations promulgated thereunder (Cal. Code Regs., tit. 2, § 11000 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Gov. Code, §§ 11135-11139.5), and the regulations or standards adopted by the awarding state agency to implement such article.*

3) *Contractor or recipient shall permit access by representatives of the Department of Fair Employment and Housing and the awarding state agency upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours' notice, to such of its books, records, accounts, and all other sources of information and its facilities as said Department or Agency shall require to ascertain compliance with this clause.*

4) *Recipient, contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.*

5) *The contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.*

B. The Contractor shall comply with California Code of Regulations Title 2, Section 11122, which is entitled Standard California Nondiscrimination Construction Contract Specifications (Gov. Code Section 12990). These specifications are applicable to all state contractors and subcontractors having a construction contract or subcontract of $5,000 or more.

1) As used in the specifications:

a. *“Act” means the Fair Employment and Housing Act.*

b. *“Administrator” means Administrator, Office of Compliance Programs, California Department of Fair Employment and Housing, or any person to whom the Administrator delegates authority;*

2) *Whenever the contractor or any subcontractor subcontracts a portion of the work, it shall include in each subcontract of $5,000 or more the nondiscrimination clause in this contract directly or through incorporation by reference. Any subcontract for work involving a construction trade shall also include the Standard*

California Construction Contract Specifications, either directly or through incorporation by reference.

3) *The contractor shall implement the specific nondiscrimination standards provided in paragraphs 6(a) through (e) of these specifications.*

4) *Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the contractor has a collective bargaining agreement, to refer members of any group protected by the Act shall excuse the contractor's obligations under these specifications, Government Code section 12990, or the regulations promulgated pursuant thereto.*

5) *In order for the nonworking training hours of apprentices and trainees to be counted, such apprentices and trainees must be employed by the contractor during the training period, and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor or the California Department of Industrial Relations.*

6) *The contractor shall take specific actions to implement its nondiscrimination program. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor must be able to demonstrate fully its efforts under steps a. through e. below:*

    a. *Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and at all facilities at which the contractor's employees are assigned to work. The contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the contractor's obligations to maintain such a working environment.*

    b. *Provide written notification within seven days to the director of the DFEH when the referral process of the union or unions with which the contractor has a collective bargaining agreement has impeded the contractor's efforts to meet its obligations.*

    c. *Disseminate the contractor's equal employment opportunity policy by providing notice of the policy to unions and training, recruitment and outreach programs and requesting their*

cooperation in assisting the contractor to meet its obligations; and by posting the company policy on bulletin boards accessible to all employees at each location where construction work is performed.

d. *Ensure all personnel making management and employment decisions regarding hiring, assignment, layoff, termination, conditions of work, training, rates of pay or other employment decisions, including all supervisory personnel, superintendents, general foremen, on-site foremen, etc., are aware of the contractor's equal employment opportunity policy and obligations, and discharge their responsibilities accordingly.*

e. *Ensure that seniority practices, job classifications, work assignments, and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the equal employment opportunity policy and the contractor's obligations under these specifications are being carried out.*

7) *Contractors are encouraged to participate in voluntary associations that assist in fulfilling their equal employment opportunity obligations. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on equal employment opportunity in the industry, ensures that the concrete benefits of the program are reflected in the contractor's workforce participation, and can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's.*

8) *The contractor is required to provide equal employment opportunity for all persons. Consequently, the contractor may be in violation of the Fair Employment and Housing Act (Government Code section 12990 et seq.) if a particular group is employed in a substantially disparate manner.*

9) *The contractor shall not use the nondiscrimination standards to discriminate against any person because race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status.*

10) *The contractor shall not enter into any subcontract with any person or firm decertified from state contracts pursuant to Government Code section 12990.*

11) *The contractor shall carry out such sanctions and penalties for violation of these specifications and the nondiscrimination clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Government Code section 12990 and its implementing regulations by the awarding agency. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Government Code section 12990.*

12) *The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company equal employment opportunity policy is being carried out, to submit reports relating to the provisions hereof as may be required by OCP and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, status, (e.g., mechanic, apprentice trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in any easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.*

C. The Contractor shall also comply with all other applicable law relating to nondiscrimination, including Labor Code Section 1735, Public Contract Code Section 2010, and Civil Code Section 51.

7. SUBLETTING AND SUBCONTRACTING FAIR PRACTICES ACT: Contractor shall comply with the Subletting and Subcontracting Fair Practices Act commencing with Public Contract Code Section 4100. Violations shall subject Contractor to penalties described in this Act.

8. RETENTIONS FOR STOP PAYMENT NOTICES AND ASSESSMENTS

A. The Department will retain out of funds due or that become due to Contractor sums sufficient to cover stop payment notice claims filed pursuant to Civil Code Sections 9350 et seq.; tax demands filed in accordance with Government Code Section 12419.4; DIR Civil Wage and Penalty Assessments under Labor Code Section 1727; claims of State agencies offset under Government Code Section 12419.5; and other claims, penalties and forfeitures for which the Department is

authorized to retain money or for which the Department is ordered by a governmental agency to retain money.

B. The Contractor shall inform every Subcontractor and Supplier to inform each person who furnishes labor, service, equipment or materials for the Work that preliminary notices and stop notices submitted to the Department shall be sent to the following address:

State of California
Department of Water Resources
Payables Office
P.O. Box 942836
Sacramento, CA 94236-0001

9. UNFAIR BUSINESS PRACTICES: Pursuant to Public Contract Code Section 7103.5, the Contractor agrees and will require its Subcontractors and Suppliers to agree to assign to the State all rights, title, and interest in and to all causes of action they may have under Section 4 of the Clayton Act (15 U.S.C. Section 15), or under the Cartwright Act (commencing with Section 16700 of the Business and Professions Code), arising from the purchase of goods, services or materials, pursuant to the Contract or any subcontract thereunder. An assignment made by the Contractor, and additional assignments made by Subcontractors and Suppliers, shall be deemed to have been made and will become effective at the time the State tenders final payment to the Contractor, without further acknowledgment of the parties.

10. AIR POLLUTION CONTROL: Contractor shall comply with air pollution control rules, regulations, ordinances, and statutes applicable to performance of the Work including those specified in Government Code Section 11017.

11. USE OF DEPARTMENT'S PROPRIETARY INFORMATION: As set forth in California Business & Professions Code Section 17533.6, the Contractor shall not use any Department logo, image, symbol, photograph, video, or testimonials which could be construed as implying state endorsement of any product or service, without the Department's prior written consent consistent with this law.

12. BUY CLEAN CALIFORNIA ACT

A. Pursuant to Public Contract Code Sections 3500 through 3505, the Contractor shall submit a current facility-specific Environmental Product Declaration (EPD) for contracts requiring the use of one or more or the following eligible materials: carbon steel rebar, flat glass, mineral wool board insulation, or structural steel.

B. The EPD(s) shall be compliant with the International Organization for Standardization (ISO) standard 14025 and the appropriate Product Category Rules located on the Department of General Services (DGS) Buy Clean California Act website at: https://www.dgs.ca.gov/PD/Resources/Page-Content/Procurement-Division-Resources-List-Folder/Buy-Clean-California-Act.

C. The EPD(s) shall be submitted at least 15 days prior to installing the eligible material.

END OF DOCUMENT

DOCUMENT 00 72 44

CONTRACTUAL RELATIONSHIP OF PARTIES

1. AUTHORITY OF ENGINEER

   A. General: The Engineer decides questions as to interpretation and fulfillment of contract requirements, and the prosecution, progress, quality, and acceptability of the Work. The Engineer implements and enforce decisions by issuing written orders, directives, instructions and notices. Your failure to comply with such orders, directives, instructions and notices will be subject to the provisions of Document 00 72 45 - Prosecution of Work, Paragraphs 9 and 10.

   B. Delegations: The Engineer will advise you of current delegations of authority.

2. AUDIT AND INSPECTION RIGHTS: Keep and retain records that pertain to the project for a period of three years after Acceptance or until the final resolution of any and all claims and disputes. At all times during performance of the Work and for a period of three years after final payment, Provide electronic copies of all documents requested within 10 days of written notice, or if requested, provide access during normal business hours, and allow copies to be made, at the Department's expense, of the Contractor's books, documents, and project records. Provide adequate and acceptable facilities for the audit during normal business hours. Cooperate with the auditors.

   A. Records subject to audit in Paragraph 2 include, but are not limited to, bid documents (e.g., all take-offs, quantity evaluations, bid spreadsheets, bid schedule, internal bid documentation, subcontractor bids, cost proposals, notes and other related material), job budgeting information, job cost reports for all costs (direct and indirect), estimates and related back-up documentation, cost accounting data, accounting records, payroll records, time sheets, canceled checks, profit and loss statements, balance sheets, daily reports, purchase orders, subcontracts, project correspondence (electronic and non-electronic), daily logs/notes, photographs and video files, survey data, project files, original schedule files, schedule narratives and associated back-up documentation, and other project related writings, as defined in California Evidence Code Section 250. The purpose of such audit is to verify and evaluate the accuracy of Contractor submitted costs and credits, Contractor requests for additional time, and/or in relation to any dispute, Potential Claims under Document 00 72 49 - Potential Claims and Claims, Paragraph 1, or Claims under Document 00 72 49 - Potential Claims and Claims, Paragraph 2.

B. Failure to comply with Paragraph 2 constitutes a material breach of Contract.

3. CONTRACTOR'S RESPONSIBILITY FOR WORK AND PERSONS OR ENTITIES ENGAGED IN WORK: You are responsible for the Work and for persons or entities engaged in the Work, including but not limited to Subcontractors, Suppliers, and providers of services. The Department will not mediate disputes between the Contractor and any other person or entity concerning responsibility for performance of the Work.

4. INDEMNIFICATION

A. To the fullest extent permitted, t indemnify, hold harmless, protect and defend State and its officers, employees, agents and representatives from any and all loss, lawsuits, actions, demands, damages, costs, expenses, actual attorneys' fees, losses, liabilities, or claims in law or in equity, arising out of or in connection with the performance of this Contract for:

1) Bodily injury: Bodily injury includes but is not limited to, bodily injury, sickness or disease, emotional injury or death to persons, including, but not limited to the public, any employees or agents of the Contractor, the State, or any other contractor.

2) Property damage: Damage to property of anyone including loss of use thereof; caused or alleged to be caused in whole or in part by any negligent or otherwise legally actionable act or omission of the Contractor or anyone directly or indirectly employed by the Contractor or anyone for whose acts the Contractor may be liable.

3) Economic damage: Claims by any third party to have been harmed economically or financially by any act of the Contractor or any of its Subcontractors or Suppliers of any tier.

B. Except as otherwise provided by law, the requirements of Paragraph 4.A apply regardless of the existence or degree of fault of the State. The Contractor is not obligated to indemnify the State for claims arising from conduct delineated in Civil Code Section 2782. The Contractor's defense and indemnity obligation shall extend to claims arising after the Work is completed and accepted if the claims are directly related to alleged acts or omissions by the Contractor that occurred during the course of the Work. Any inspection of the Work by the State is not a waiver of full compliance with these requirements.

C. The Contractor's obligation to defend and indemnify is not excused because of the Contractor's inability to evaluate liability or because the Contractor evaluates liability and determines that the Contractor is not liable. The Contractor must respond within 30 days to the tender of any

claim by the State for defense and indemnity, unless this time has been extended by the State. If the Contractor fails to accept or reject a tender of defense and indemnity within 30 days, in addition to any other remedy authorized by law, the Department may withhold such funds the State reasonably considers necessary for its defense and indemnity until disposition has been made of the claim or until the Contractor accepts or rejects the tender of defense, whichever occurs first.

D. With respect to third-party claims against the Contractor, waive all rights of any type to express or implied indemnity against the State, its officers, employees, or agents (excluding agents who are design professionals).

E. Nothing in the Contract is intended to establish a standard of care owed to any member of the public or to extend to the public the status of a third-party beneficiary for any of these indemnification Specifications.

F. To the fullest extent allowed by law, tdefend and indemnify the State for any and all injury, illness, disease, or death arising out of or caused by an organism, including but not limited to animals, microscopic bacteria, fungi, plants and the like, to which persons, including but not limited to the public, any employees or agents of the Contractor, the State, or any other contractors that are exposed in connection with the Work on the project.

5. INSURANCE

A. Certificates of Insurance: Within 15 days after receipt of Notice to Begin Work, and thereafter throughout the performance of the Work, furnish to the Engineer certificates of insurance naming the State, its officers, employees, agents and representatives as additional insureds on any liability insurance, excess policy, and builder's risk insurance which cover operations under the contract. The Contractor shall furnish to the Engineer certificates of insurance showing all other required coverages.

B. The certificates of insurance shall provide that the coverage shall be primary, the State will not be responsible for premiums, assessments or other costs of the insurance, and coverage shall not be canceled or modified without 15 days’ prior written notice to the Engineer.

C. Except for completed operations coverage, t keep all insurance in full force and effect from the Notice to Begin Work through Contract Acceptance.

D. All insurance must be with an insurance company with a rating from A.M. Best Financial Strength Rating of A- or better and a Financial Size Category of VII or better.

E. Completed Operations Coverage: Maintain completed operations coverage through the expiration of the patent deficiency in construction statute of repose set forth in Civil Procedure Code Section 337.15.

F. Workers' Compensation: Secure the payment of workers' compensation under Labor Code Section 3700. If you use any form of self-insurance for workers' compensation in lieu of an insurance policy, submit a certificate of consent to self-insure under Labor Code Section 3700.

G. Employer's Liability: Provide Employer's Liability Insurance in amounts not less than $1,000,000 for each accident for bodily injury by accident and $1,000,000 for each employee for bodily injury by disease.

H. General Liability and Umbrella or Excess Liability Insurance: Maintain General Liability and Umbrella or Excess Liability Insurance covering all operations by or on the Contractor's behalf, for bodily injury liability and property damage liability, which includes: coverage for premises, operations and mobile equipment; products and completed operations; broad form property damage (including completed operations); explosion, collapse, and underground hazards; personal injury and contractual liability. The limits of liability must be at least the values shown in the General Liability Limits table below:

General Liability Limits		
Total bid	For each occurrence (a)	Aggregate for products/ completed operation
≤ $1,000,000	$1,000,000	$2,000,000
> $1,000,000 ≤ $10,000,000	$1,000,000	$2,000,000
> $10,000,000 ≤ $25,000,000	$2,000,000	$2,000,000
> $25,000,000	$2,000,000	$2,000,000

(a) Combined single limit for bodily injury and property damage.

(b) This limit must apply separately to Work under the Contract.

(c) The umbrella or excess policy must contain a clause stating that it takes effect (drops down) in the event the primary limits are impaired or exhausted.

I. Builder's Risk: The Contractor shall name the State, its officers, employees, agents and representatives as an additional insured on any builder's risk policy applicable to the Work.

J. Automobiles: The Contractor shall maintain automobile liability insurance, including coverage for all owned, hired, and non-owned automobiles. The primary limits of liability must be not less than $1,000,000 combined single limit for each accident for bodily injury and property damage. The umbrella or excess liability coverage required above also applies to automobile liability.

K. Additional Insurance: If directed, the Contractor shall provide additional insurance for the State. Limits of coverage and terms of such insurance shall be as directed. The Department will reimburse the Contractor for actual direct cost of such additional insurance, plus one percent.

6. PATENTS COPYRIGHTS, AND TRADEMARKS

A. The Contractor shall assume costs of, and agrees to indemnify, hold harmless, protect and defend the State, its officers, employees, agents and representatives from loss, lawsuits, actions, or claims arising from use of patented materials, equipment, devices, or processes on or in the Work.

7. GUARANTEE

A. Guarantee that the Work is in accordance with the Contract and fit for use as specified for a period of one year unless otherwise specified or a longer period is provided by law. Guarantee period start upon Acceptance, except guarantee period shall commence for that portion of the project upon use by the Department prior to Acceptance pursuant to Document 00 72 46 - Control of Work, Paragraph 13. Guarantee periods for corrective Work shall commence anew upon completion of corrections.

B. Corrective Work under guarantees shall be performed as specified in Document 00 72 45 - Prosecution of Work, Paragraph 9.

8. ASSIGNMENTS

A. Performance of the contract shall not be assigned in whole or in part without written consent of the Department. The Contractor may assign funds due or that become due to the Contractor, and assignment will be recognized by the Department if given notice thereof, in writing, to the extent permitted by law. Such assignments of funds earned by the Contractor shall be subject to proper retention in favor of the Department and to all deductions and withholds provided for in the Contract or as allowed by law.

B. Should the Department terminate the Contractor’s control over the Work under Document 00 72 45 - Prosecution of Work, Paragraph 10, the Department may elect to take legal assignment of subcontracts,

purchase orders, and other contractual rights. In such an event, the Contractor shall execute and deliver to the Department all papers and take all steps, including the legal assignment of its subcontracts, purchase orders, and other contractual rights of the Contractor, as the Department may require. This will be done to fully vest in the Department all rights and benefits of the Contractor under such subcontracts, purchase orders, or other contractual rights in order that the Department may proceed to finish the Project.

END OF DOCUMENT

DOCUMENT 00 72 45

PROSECUTION OF WORK

1. COMMENCEMENT OF WORK AND TIME OF COMPLETION

   A. Time is of the essence of the Contract. The Department will issue to the Contractor a Notice to Begin Work designating the starting date on which the Contractor shall begin Work. The Contractor shall diligently prosecute the Work from such date to completion within time specified or any adjustments thereof.

   B. Should the Contractor begin Work in advance of receiving Notice to Begin Work, such Work may be considered as having been done at the Contractor's sole risk as a volunteer.

   C. The Contractor shall comply with the scheduling requirements of the Contract. No requests for time extensions shall be allowed until an acceptable baseline schedule is submitted by the Contractor and then reviewed and determined by the Engineer to be in compliance with the Contract requirements.

2. LIQUIDATED DAMAGES: If Work is not completed, as determined by the Engineer within the time(s) specified or any adjustments thereof, damage will be sustained by the Department. It is and will be extremely difficult and impracticable to determine the actual damage which the Department will sustain by reason of such delay. Pursuant to Public Contact Code Section 10226, for each day after the specified completion date(s) that the Contractor has not completed the Work, the Contractor shall pay to the Department, as liquidated damages, and not as a penalty, the amount specified. The Department has reasonably evaluated the damages which may be sustained as a result of late completion and the liquidated damages set forth in the Contract reflect this evaluation.

   A. The Department will deduct liquidated damages from funds due or that become due to the Contractor.

   B. The Department may withhold liquidated damages before the accrual date if the Engineer determines that anticipated liquidated damages will exceed the value of the remaining Work.

3. PROSECUTION OF WORK

   A. The Contractor shall timely furnish schedules and schedule updates, as specified in the Contract. The Contractor may perform Work at a time earlier than shown in such schedules, provided such action is approved by the Engineer. No claim for extension of time or adjustment in

compensation will be allowed for delays to Work scheduled for completion earlier than and completed within the time specified in the Contract or any adjustments thereof.

B. The capacity of the Contractor's construction equipment and plants, the sequence and methods of operation, and the forces employed shall be such as to achieve completion of the Work within time specified in the Contract or any adjustments thereof. All such means and methods, and conduct, shall be the Contractor’s responsibility.

C. If the Engineer determines that the Contractor's progress is insufficient to achieve completion of the Work within the time specified or any adjustments thereof, the Engineer may order the Contractor to improve progress by doing any or all of the following:

1) Furnish a plan or schedule for improving progress.

2) Take steps as necessary to improve progress and advise the Engineer thereof in writing.

3) Increase the personnel employed, add overtime operations, increase the number of shifts, increase the capacity of construction equipment and plants, change the sequence of operations, change the methods of operation, or take other steps to improve progress.

D. An order to improve progress pursuant to Paragraph 3.C shall be at no additional cost to the Department and shall not be considered an order to accelerate under Paragraph 6 or a notice of default within the meaning of Public Contract Code Section 10253.

4. DELAY AND TIME EXTENSIONS

A. General:

1) If the Contractor believes an occurrence will delay the Work, the Engineer shall be notified, in writing, as soon as it comes to the Contractor's attention, and in any event not later than 15 days following its discovery.

2) If the occurrence may delay the Work beyond the time specified or any adjustments thereof, the Contractor shall furnish to the Engineer written documentation and analysis of the occurrence and extent of the delay in accordance with the scheduling provisions of the Contract. The Engineer will issue a time extension for that part of the occurrence that causes a delay to the Critical Path and is due to the causes specified in Paragraph 4.B. A time extension will be allowed only if the cause is beyond the control and without the fault

or negligence of the Contractor. The Contractor will be notified if the Engineer determines that a time extension is not justified.

B. Causes for Time Extension:

1) Changes ordered in writing by the Engineer.

2) Discovery of an unforeseen archaeological, historical, cultural, biological, or environmental resource as determined by the Engineer.

3) Failure of the Department to timely furnish necessary access, right of way, completed facilities of related projects, Drawings, materials, equipment, or services for which the Department is responsible.

4) Survey error by the Department.

5) Differing site conditions under Document 00 72 46 - Control of Work, Paragraphs 1.B and 1.C.

6) An increase in the quantity of a unit price item of Work above 125 percent of the quantity estimated in the bid schedule.

7) Force majeure occurrences of a severe and unusual nature, which may include, but are not limited to, earthquakes in excess of 3.5 on the Richter Scale, tidal wave, fire, flood, cloudburst, wildfire smoke, dust storms, cyclone, or inclement weather.

a. Force majeure occurrences will not be considered severe and unusual unless the occurrence prevents the Contractor from performing Work on the Critical Path for at least 50 percent of the scheduled work shift with at least 50 percent of the scheduled labor and equipment.

b. In addition, inclement weather resulting in precipitation at the Work Site must, either in amount, frequency, or duration, equal or exceed what has occurred at the location and during the time of year in question on an average of more than once in ten years, as determined by the Engineer.

8) Act of the public enemy, act of terrorism, unforeseeable act of another governmental entity, epidemic, quarantine restriction, freight embargo, strike or labor dispute.

9) Suspension of Work pursuant to Paragraph 8.A.1 or Paragraph 8.A.3.

5. APPORTIONMENT OF RESPONSIBILITY FOR DELAYS: Contractor-caused delays and Department-caused delays shall be apportioned throughout the duration of the Work. Owner-directed changes under Document 00 72 47 - Changes and Owner-caused delays under Paragraph 4.B that ultimately extend the time for performance of the Work beyond the Contract-specified completion date or that occur after the Contract-specified completion date, and any combination thereof, shall not relieve the Contractor of its responsibility for any Contractor-caused delays or liquidated damages.

6. ADJUSTMENTS IN COMPENSATION: Adjustments in compensation for delays or time extensions for the cause in Paragraph 4.B.1 will be determined by the Engineer in accordance with Document 00 72 47 - Changes, Paragraph 2.B. Adjustments in compensation for delays or time extensions for the causes in Paragraphs 4.B.2, 4.B.3, 4.B.4, 4.B.5 and 8.A.3 will be determined by the Engineer in accordance with Document 00 72 47 - Changes, Paragraph 2.J. There will be no adjustment in compensation for delays or time extensions for the causes specified in Paragraph 4.B.6, 4.B.7, 4.B.8, 8.A.1, or 8.A.2.

    A. Concurrent Delays: No adjustments in compensation will be allowed when Contractor-caused delays to the Critical Path and Department-caused delays to the Critical Path occur concurrently.

    B. Unabsorbed Home Office Overhead: Adjustments in compensation for costs associated with unabsorbed home office overhead will only be considered in relation to delays or time extensions for the cause in Paragraph 8.A.3 and then only when the Contractor sufficiently documents that the suspension of Work prevented the Contractor from seeking replacement work.

7. ACCELERATION: The Engineer may order the Contractor to accelerate the Work to decrease the time(s) of completion within the time specified or any adjustments thereof. Such orders shall be in writing. Adjustments in compensation for acceleration will be determined pursuant to Document 00 72 47 - Changes. Change orders for acceleration may include provisions for the assessment of liquidated damages if the accelerated completion date is not achieved.

8. SUSPENSION OF WORK: The Engineer may suspend Work by written order to the Contractor. The Contractor shall immediately comply with such order and shall resume the suspended Work only upon the Engineer's written order. No adjustment in compensation or time will be allowed due to the failure or refusal of the Engineer to order suspension.

A. Suspension may be for any of the following:

1) Conditions unfavorable for the proper prosecution of the Work as determined by the Engineer.

2) Failure of the Contractor to carry out orders or to perform any provision of the Contract.

3) The convenience and benefit of the Department.

9. DEFECTIVE WORK

A. Any Work not conforming with the Contract will be considered defective Work and may be rejected by the Engineer. Any failure by the Contractor to comply with any orders, directives, instructions or notices issued by the Engineer will also be considered defective Work. Defects may be waived by the Engineer. If a waiver will result in a cost savings to the Contractor in the opinion of the Engineer, it will be made only upon an equivalent adjustment in compensation determined pursuant to Document 00 72 47 - Changes, Paragraph 2.

B. The Contractor shall commence corrective Work when ordered and shall diligently perform such Work to its completion. The Department may defer commencement of corrective Work until working conditions are satisfactory to the Department. Such deferral will not be cause for a time extension or additional compensation.

C. The Contractor shall bear all costs and delays associated with the performance of the corrective Work, which shall include, but not be limited to, any necessary disassembly, transportation, reassembly, retesting, repair or replacement of the defective materials or equipment, and any necessary disassembly and reassembly of adjacent work. The Department reserves the right to disassemble and reassemble adjacent materials or equipment not furnished by the Contractor, where necessary to give access to the defective materials or equipment. The costs thereof shall be the responsibility of the Contractor and may be deducted from funds due or that become due to the Contractor. If such funds are not available, the Department will be entitled to recover such costs and all costs and expenses incurred in recovering such costs.

D. If the Contractor fails to comply promptly with an order regarding defective Work, the Engineer may cause the defective Work, materials or equipment to be corrected, removed or replaced. All resulting costs and delays shall be the responsibility of the Contractor. Costs incurred by the Department may be deducted from funds due or that become due to the Contractor. If such funds are not available, the Department will be entitled to recover such costs and all costs and expenses incurred in recovering such costs.

E. The rights and remedies of the Department as provided above are not exclusive, and do not preclude the exercise of any other rights or remedies provided by the Contract or by law.

10. TERMINATION OF CONTRACTOR'S CONTROL OVER THE WORK FOR DEFAULT

A. If the Contractor fails to comply with an order, diligently prosecute the Work, perform Work or furnish materials or equipment of the quality required by the Contract, prosecute orders for changes or in any other respect fails to fulfill the requirements of the Contract, the Director may, after a minimum of 5 days written notice to cure the deficiency, in addition to any other available legal remedy:

1) Provide labor, construction equipment, materials or equipment required for performance of Work and deduct the cost thereof from funds due or that become due to the Contractor; or

2) Assume responsibility for completion of the Work; or

3) Give written notice to the Contractor and the Contractor's sureties, that if the defaults are not remedied, the Contractor's control over the Work will be terminated.

B. If the defaults are not remedied within the time specified in the Director's notice, the Contractor's control over the Work shall terminate as of the expiration of that time.

C. In the event of such termination of the Contractor's control over the Work for default, the Contractor shall:

1) Preserve materials and equipment at the Work Site until notified of those items for which the Department will assume responsibility.

2) Remove from the Work Site materials and equipment not designated for use as directed by the Engineer in writing.

3) Assist the Engineer in making an inventory of materials and equipment in storage at the Work Site, enroute to the Work Site, in storage or manufacture at other locations and on order from Suppliers.

4) Assign to the Department or its designee construction equipment, subcontracts and supply contracts as designated by the Engineer.

D. In the event of termination of the Contractor's control over the Work for default, the Director may:

1) Permit the surety to complete;

2) Cause the contract Work to be completed; or

3) Direct that all or any part of the Work be completed by day's labor, or by employment of other contractors under informal contracts, or both.

E. The Contractor's liability to Department upon termination of the Contractor's control over the Work for default shall be as provided in Public Contract Code Sections 10253 et seq., and shall include, as part of those damages sustained or to be sustained by the Department, liquidated damages for delay through the time of completion of the Project.

F. If the Department subsequently determines that grounds for termination of the Contractor's control over the Work under Paragraph 10 do not exist, then the Department shall proceed to close-out the Contract for convenience under Paragraph 11.

11. CLOSE-OUT OF THE CONTRACT FOR CONVENIENCE

A. The Department reserves the right to close-out the Contract at any time if Department determines that to do so would be in its best interest or for conditions unfavorable for the proper prosecution of Work as determined by the Engineer, or as required by law.

B. The Department will issue to the Contractor a written notice that the contract is to be closed-out for convenience. Upon receipt of notice, except as otherwise directed, the Contractor shall:

1) Stop all Work.

2) Take action as necessary to protect materials and equipment and all Work from damage.

3) Notify all Subcontractors and Suppliers that the Contract is being closed-out and that their contracts or orders will be closed-out.

4) Provide the Engineer with a full accounting for itself, its Subcontractors and Suppliers including all respective schedules of value, the labor expended, an inventory of materials and equipment previously purchased (whether delivered or ordered, including the storage location), and such other information as the Engineer may require.

5) Dispose of materials and equipment as directed by the Engineer and provide the Department with title to all other materials and equipment purchased for Work hereunder, including materials and equipment for which progress payment has been made as provided in Document 00 72 48 - Payments and Retentions, Paragraph 2, and with documents of title for materials and equipment.

C. The Contractor's responsibility for damage to materials and equipment transferred to the Department will terminate when title and delivery of such materials and equipment have been accepted in writing by the Department.

D. When the Engineer determines that the Contractor has completed the Work necessary to secure the project for close-out, the Department will proceed with Acceptance of the Work.

E. The total compensation under the Contract to be paid to the Contractor shall be determined by the Engineer as follows:

1) The amount due for Work performed prior to receipt of the notice of Acceptance, adjusted for defective work as specified in Paragraph 9, actual quantities, and returned materials and equipment.

2) The necessary and reasonable cost of Work, determined in accordance with Document 00 72 47 - Changes, required for close-out and demobilization and for handling materials and equipment returned to the Supplier, delivered to the Department, or as otherwise directed.

3) An allowance of 4 percent of the portions of the Contract prices allocable to the Work not performed. However, such allowance shall not exceed 4 percent of the difference between the amount that would have been due for the quantity listed in the bid schedule and the amount due under Paragraph 11.E.1.

4) The total compensation to be provided in Paragraphs 11.E.1 through 11.E.3 is subject to withholding of liquidated damages or other amounts to be deducted or retained under the Contract or pursuant to law.

END OF DOCUMENT

DOCUMENT 00 72 46

CONTROL OF WORK

1. SITE CONDITIONS

A. The conditions expected to be encountered at the Work Site and inherent in the Work are defined by the information that would be obtained by careful examination of the Work as required by Document 00 21 13 - Instructions to Bidders, Paragraph 2 and all related information and data identified in Document 00 30 00 - Available Information, and throughout the Contract documents.

B. The Contractor shall immediately notify Engineer, in writing, before any of the conditions are disturbed:

1) Subsurface or latent physical conditions at the Work Site differing materially from those indicated by the bid documents provided by the Department about the site that are made available to bidders prior to the deadline for submitting bids.

2) Unknown physical conditions at the Work Site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the Work of the character provided for in the Contract.

C. The Engineer will promptly investigate such conditions. If the Engineer determines that such conditions are materially different and cause an increase or decrease in the Contractor’s cost or the time required for performance of the Work, an extension of time and adjustment in compensation will be made in accordance with Document 00 72 45 - Prosecution of Work, Paragraph 4 and Document 00 72 47 - Changes, Paragraph 2.

2. CONTRACTOR'S RESPONSIBILITY FOR THE PROJECT

A. The Contractor shall have charge and care of and bear risk of loss or damage to the project until its Acceptance, except as follows: Pursuant to Section 7105 of the Public Contract Code, Contractor shall not be responsible for cost of repairing or restoring damage to the Work, which damage is determined to have been proximately caused by an act of God, and which damage is in excess of five percent of the contracted amount, provided that the Work damaged is built in accordance with accepted and applicable building standards and the Contract documents. For the purposes of this paragraph only, an act of God shall include only earthquakes in excess of a magnitude of 3.5 on the Richter Scale and tidal waves.

B. The Contractor will be relieved of responsibility for loss or damage to any portion of the project solely caused by the Department's possession and negligent use prior to Acceptance.

C. Commercial uses on or of State property or facilities may only be made with written consent of the Engineer.

D. The Contractor shall not create or permit the continued existence of any nuisance in or about the Work Site.

E. Materials and equipment shall be furnished in sufficient quantities and at such times to ensure the orderly progress of the Work. Materials and equipment shall be stored and protected to guarantee preservation of quality, appearance, and suitability for the project, and stored in a location that facilitates inspection and avoids interfering with the work of others.

3. CONDUCT OF WORK

A. Contractor's Supervision of Work: The Contractor shall provide competent, full-time, efficient supervision of the Work. Performance of the Work shall be in a skillful and orderly manner.

B. Contractor's Representative: Before beginning Work, the Contractor shall designate in writing a representative (hereafter “Contractor’s Representative”) who shall:

1) Be of sufficient experience and possessing the qualifications necessary to properly manage the work in accordance with the Contract. The qualifications and experience of the Contractor’s Representative shall be submitted to the Department within 15 days of the Contractor’s receipt of the Notice to Begin Work.

2) Have authority to supervise Work.

3) Have authority to receive and implement orders from Engineer.

4) Normally be present full-time during performance of the Work. In the periodic absence of the Contractor’s Representative due to vacation, injury, or illness or isolated off-site activities, the Contractor shall have designated an alternate experienced and qualified person who shall serve in such a capacity at all times during performance of the Work.

5) Not be removed by the Contractor before another representative meeting all the foregoing requirements is designated.

C. Execution of Documents: Before beginning Work, the Contractor shall designate in writing a representative who shall have authority to execute and bind the Contractor to change orders, claims, releases and similar documents.

D. Removal of Contractor's Personnel: If ordered, the Contractor shall immediately remove from the Work Site any person or entity, including the Contractor's Representative, that fails to prosecute the Work in a manner satisfactory to the Department; or that lacks the requisite qualifications and experience; or that fails or refuses to carry out orders; or that is insubordinate, disorderly, unsafe, or incompetent. In such event, the Contractor shall immediately request the Department's approval of a replacement person or a substitution of the entity.

1) If the entity to be substituted is a Subcontractor listed under Public Contract Code Sections 4100 et. seq., the substitution shall be made in accordance with Public Contract Code Section 4107.

E. Cooperation with Others:

1) The Department reserves the right to engage in activities on or near the Project. The Contractor shall cooperate with others and conduct the Work so as to facilitate the activities by the Department or others and prevent delay, additional expense, or hindrance thereto. The Contractor shall request from, and exchange with others, drawings, data and information as necessary to ensure proper completion of the Project and the activities of the Department or others. The Contractor shall furnish to the Engineer copies of correspondence and drawings exchanged with other contractors working nearby.

2) The Contractor shall conduct, adjust, correct, and coordinate Work with the activities of the Department or others to minimize any impacts to the Project.

4. SUBMITTALS

A. The Contractor shall furnish timely submittals to the Engineer as specified or directed which may include, but not be limited to, Contractor schedules, injury and illness prevention program, quality control program, working drawings, calculations, reports, manuals, data on materials and equipment, samples and resubmittals.

B. Submittals will be subject to review by the Engineer for conformity with the Contract. The Contractor shall notify the Engineer in writing of any deviations from the Contract that are proposed by the Contractor. Should the Contractor fail to provide such notification, the Contractor shall be responsible for any Work, materials or equipment not in

conformance with the Contract under Document 00 72 45 - Prosecution of Work, Paragraph 9.

C. Any "Proprietary" or similar designation on submittals may be disregarded by the Department to the maximum extent provided by the law.

5. SUBSTITUTIONS

A. The Engineer may approve the use of substitute materials, equipment or methods if, as determined by the Engineer, the substitute is equal in quality, capacity and serviceability to the item or method specified and has the required characteristics for the purpose intended. The Contractor shall furnish data and information requested by the Engineer on any substitution. Requests by the Contractor and supporting data shall be furnished in sufficient time to permit decision on the proposed substitution without delaying Work.

B. The Department and the Contractor shall share equally cost and time decreases which result from approved substitutions. Adjustments in compensation and time will be determined pursuant to Document 00 72 47 - Changes, Paragraph 2.

C. Any substitution requested by the Contractor and agreed to by the Department shall be at no additional cost to the Department.

6. CONSTRUCTION EQUIPMENT AND PLANT: Construction equipment shall be identified by readily visible numbers. If ordered by the Engineer, the Contractor shall remove unsatisfactory construction equipment and discontinue the operation of unsatisfactory plants.

7. MATERIALS AND EQUIPMENT

A. Furnished by the Contractor:

1) The Contractor shall furnish materials and equipment as specified.

2) Only materials and equipment conforming to the requirements of the Contract shall be incorporated in the Project. Except as otherwise specified or approved, such materials and equipment shall be new and unused.

3) Sources of materials shall be subject to approval before delivery from those sources. Approval of a materials source will be withdrawn when such materials are found to be defective, and the Contractor shall stop deliveries from that source.

4) The Contractor shall assign and furnish to the Department all manufacturers' and Suppliers' warranties and guarantees.

B. Preparation of Equipment for Shipment:

1) The Contractor shall prepare equipment for shipment in such manner as to protect it from damage or loss in transit.

2) Each packing unit and major part shall include a packing list and be plainly marked for identification. Such identification shall include the name of the manufacturer, name and location of the manufacturer's plant, manufacturer's shop number, name of the part, package weight, title of the contract and specification number.

C. Furnished by the Department:

1) Materials and equipment to be furnished by the Department will be available to the Contractor as designated. The Contractor shall unload, remove and be responsible for such materials and equipment from the time of unloading and removal from the designated location. The Contractor shall bear any damage and storage charges arising from failure to timely remove such materials and equipment.

2) The Contractor shall promptly inventory such materials and equipment and notify the Engineer of any shortages or defects discovered. The Engineer may order the Contractor to return defective or unsuitable materials or equipment, or perform corrective Work thereon.

8. TESTING OF MATERIALS AND EQUIPMENT

A. Materials and equipment shall be tested by the Contractor during the progress of Work, unless otherwise designated. Tests shall be witnessed by the Engineer unless waived. The Contractor shall give Engineer 15 days advance written notice of all such tests unless otherwise specified or approved. The Engineer may perform tests of materials and equipment and the Contractor shall furnish samples as directed.

B. The Contractor shall test materials or equipment in accordance with designated test method or authority and shall furnish to the Engineer certified copies of the test results unless otherwise specified. Such materials or equipment shall not be incorporated into the Work until the test results indicate conformance with the Contract, unless waived by the Engineer in writing.

C. Materials or equipment found unacceptable will be rejected and retesting shall be at the Contractor's expense.

9. PROPERTY RIGHTS IN MATERIALS AND EQUIPMENT: Materials or equipment furnished shall, upon progress payment therefor, become the sole property of Department after being attached or affixed to State's property, or after delivery or storage subject to or under the control of Department. Until Acceptance, the Contractor shall continue to bear risk of loss or damage to such property unless such loss or damage arises from the causes for which the Contractor would be relieved of responsibility as specified in Paragraphs 2.A and 2.B.

10. INSPECTION

A. The Contractor at all times shall permit the Engineer to inspect Work. The Contractor shall provide at least 2 working days advance notice to the Engineer where and when Work is ready for inspection. Work shall be accessible until inspected by the Engineer. Should work become inaccessible without inspection, it shall be made accessible at the Contractor's expense.

B. When the Contractor intends to perform Work on Saturday, Sunday, a legal holiday, or other than the Contractor's regular Work period, the Contractor shall give notice to the Engineer of such intention at least two working days prior to the end of State's preceding Work period.

C. The Engineer will designate materials and equipment to be inspected at the place of production or manufacture. The Contractor shall provide 15 days advance written notice to the Engineer of the start of production or manufacture of such materials or equipment unless otherwise specified or approved. Failure to designate materials and equipment shall not limit the right to inspect them at the place of production or manufacture. The Contractor shall include notice of these requirements in all subcontracts and Supplier contracts.

D. Neither inspection nor lack of inspection of Work, nor presence or absence of the Engineer during performance of any Work shall waive any requirements of the Contract or relieve the Contractor of any obligation under the Contract. Defective Work, materials, and equipment may be rejected notwithstanding prior inspection or lack of inspection by the Engineer.

11. CLEANING: The Contractor shall keep project and nearby property clean and free from nuisance and accumulation of construction debris, dust, liquid and trash. The Contractor shall remove construction equipment and waste materials, and thoroughly clean the Work Site before requesting the final inspection.

12. PROTECTION OF PROPERTY AND FACILITIES: The Contractor shall protect the Work, materials, equipment, property, and facilities from damage and shall immediately report damage to the Engineer.

13. USE PRIOR TO ACCEPTANCE: Upon written notice, the Department may take possession of, use, and maintain all or a part of the Project prior to Acceptance. Except as provided in Paragraph 2.B, such action does not relieve the Contractor of any of its obligations under the Contract, including but not limited to, completion of the Work within the time specified or any adjustments thereof, or responsibility for liquidated damages.

14. FINAL INSPECTION AND ACCEPTANCE: When work is completed, including the correction of all deficiencies to the satisfaction of the Engineer, the Contractor shall certify in writing and shall request a final inspection. Within 30 days of receipt of certification, the Engineer will make a final inspection. If the Engineer determines that the work has been completed, the Engineer will recommend that the work be accepted. The Contractor will be notified in writing of Acceptance of the Work. If Engineer determines that the work is not complete, the Contractor will be notified of the deficiencies and shall correct any such deficiencies. Thereafter, the Contractor shall promptly initiate procedures for another final inspection. Acceptance shall not affect the Contractor’s obligations under the Contract, the bonds, and the law, including but not limited to, latent defects, cooperation with Department audits, indemnification, and warranties.

END OF DOCUMENT

DOCUMENT 00 72 47

CHANGES

1. GENERAL

   A. The Engineer may order Changes, including revisions to the Drawings and Specifications, performance of extra Work, and the deletion of Work. Such orders will be in writing. Changes shall not affect the obligations of the sureties on the contract bonds nor require their consent. The Contractor shall notify the Engineer as soon as it comes to the Contractor's attention whenever it appears a Change is necessary, and when ordered, shall stop Work in the areas that may be affected. Adjustments in time and compensation for ordered Changes will be made in accordance with Paragraph 2.

   B. The Contractor when ordered shall proceed with Changes before agreement is reached on adjustments in compensation or time for performance. In such instances, the Contractor shall keep detailed hourly records for that day signed and furnished on a daily basis by the Contractor on Department form titled Daily Extra Work Report of labor and construction equipment, and itemized records of materials, equipment and services used in performance of the Changes.

      1) If the Daily Extra Work Report furnished by the Contractor differs from the Department's records, the Engineer shall notify the Contractor in writing of the discrepancy. It is the Contractor's responsibility to present information sufficient to show that the Contractor's records are accurate. Such information must be furnished within 7 days of the Engineer's notice to the Contractor of the discrepancy. Should the Contractor fail to produce such information or if the information provided by the Contractor is not sufficient to establish that the Contractor's records are accurate, the adjustment in compensation will be determined by the Engineer based on the information shown on the Department's records.

2. ADJUSTMENTS IN COMPENSATION AND TIME

   A. For Variations in Quantities: Adjustments in compensation for unit price items for variations in estimated quantities not covered by a Change will be made as determined by the Engineer in accordance with Paragraphs 2.A.1 and 2.A.2 and Paragraphs 2.D through 2.H. Adjustments in time will be determined in accordance with Document 00 72 45 - Prosecution of Work, Paragraph 6.

1) Quantities in excess of 125 percent of the estimated quantity will be paid by an adjusted unit price as determined by the Engineer. The adjustment to the unit price will be the difference between the Contract unit price and the actual unit cost for the total quantity for the item. Fixed costs will be deemed to be recovered by payments made for 125 percent of the estimated quantity and will not be included in determining the adjustment. Fixed costs are necessary labor, materials, equipment and services, and construction equipment costs which remain constant regardless of the quantity of the item.

2) For Work greater than zero but less than 75 percent of the estimated quantity, the adjustment, upon the Contractor's written request, will be the difference between the unit price and the actual unit cost of the total quantity of the item, including fixed costs. In no case will payment exceed that which would have been made for 75 percent of the estimated quantity at the contract unit price.

B. For Changes, Delays and Time Extensions: Adjustments in compensation for Changes, delays, and time extensions will be made as determined by the Engineer in accordance with Paragraphs 2.B.1, 2.B.2, 2.B.3, or combinations thereof, as follows:

1) By agreement on the basis of estimates of increases or decreases in costs.

2) Unilaterally by the Engineer.

3) For actual necessary costs as determined by the Engineer in accordance with Paragraphs 2.D through 2.J.

C. Supporting Documentation: Department may request any additional records from the Contractor in connection with the adjustment in compensation or time for extra or deleted Work to allow the Department to verify all or a portion of the adjustment in compensation, and the Contractor shall provide such records within 30 days of notice of the request.

1) Supporting documentation shall conform to generally accepted auditing standards and may include, but not be limited to, detailed estimates of increases or decreases in costs, itemized cost breakdowns, job cost records, and other supporting data whether or not such Work is performed in whole or in part by a Subcontractor (regardless of tier), certified payrolls, labor classifications, material invoices and requisitions, receipts, cancelled checks, equipment records (list of company equipment including make and model, rates, etc.), equipment rental invoices, Subcontractor and Supplier

quotes (proposals, invoices, payment requests billing records, etc.), accounts payable ledgers, job cost pre-bid records and estimates, accounting data, cancelled checks profit and loss statements, schedules, fragnets, photos, videos and other such data.

2) If the Contractor fails to furnish the supporting documentation in compliance with these requirements, the adjustment in compensation or time will be determined by the Engineer based on information shown on the Department's records.

D. Labor: Compensation for labor shall include the necessary cost for labor, including first level supervision (the appropriate classification of foreman for the Work being performed), directly engaged in performance of the Changes. Wages shall not exceed current prevailing wage rates in the locality for performance of the Changes. Use of a classification which would increase labor cost will not be permitted. Exceptions to the above will be permitted only where the Contractor establishes to the satisfaction of the Engineer, the necessity for payment at higher rates or classifications. The necessary cost of labor shall be computed as follows:

1) Wages: The hourly rate paid shall include any employer payments to or on the behalf of the workers for the basic hourly prevailing wage, health and welfare, pension, vacation, and training as recognized by California General Prevailing Wage requirements, and other state and federally recognized fringe benefit payments.

2) Labor Surcharge Rate: The labor surcharge rate shall be the surcharge rate for the type of Work performed, published in the Caltrans Labor Surcharge and Equipment Rental Rates User's Guide in effect during the time of performance of the changed Work. The surcharge rate shall provide full compensation for all costs for worker's compensation insurance, liability insurance, federal unemployment insurance, state unemployment insurance, Medicare, Social Security (FICA), and state training taxes.

3) Subsistence: The necessary and allowable cost for subsistence and travel allowances paid to such workers.

4) Markup: A 35 percent markup will be added to the sum of the costs described in Paragraphs 2.D.1 through 2.D.3. The 35 percent markup shall provide payment for all overhead costs related to labor (but not designated as costs of the labor used in the direct performance of the Work), including home office overhead, field office overhead, bond costs, insurance, other fixed or administrative costs that are not costs of the labor used in the direct performance of the Work, and profit.

5) Subcontractor Markup: If a Subcontractor performs the Work directed by the Change (regardless of the number of tiers), a 5 percent markup will be added to the markup provided in Paragraph 2.D.4, as reimbursement for the Contractor's additional administrative costs.

6) Deleted Labor: For a deduction in compensation due to the deletion of labor, the Engineer will determine the deduction based on the costs described in Paragraphs 2.D.1 through 2.D.3. There will be an additional deduction of 30 percent of the total costs if the labor would have been provided by the Contractor, and 35 percent if the labor would have been provided by a Subcontractor.

E. Materials: Compensation for materials includes full compensation for materials the Contractor purchases and uses in the Work and shall be computed as follows:

1) Purchase Price: The Engineer determines the cost based on the material purchase price, including delivery charges, as reflected in an invoice, purchase order, receipt, or other evidence of the actual cost.

2) Markup: A 15 percent markup will be added to the Purchase Price to provide payment for all overhead costs related to materials but not designated as costs of the material used in the direct performance of the Work including home office overhead, field office overhead, bond costs, insurance, and other fixed or administrative costs, and shall provide full compensation for all delay costs (including loss of productivity, disruption, and cumulative impacts), and profit related to materials.

3) Subcontractor and Supplier Furnished Materials: If the materials are furnished by a Subcontractor or Supplier (regardless of the number of tiers), a 5 percent markup will be added to the markup provided in Paragraph 2.E.2 as reimbursement for the Contractor's additional administrative costs.

4) Deleted materials: For a deduction in compensation due to the deletion of materials, the Engineer will determine the deduction based on the costs described in Paragraph 2.E.1. There will be an additional deduction of 10 percent of the total costs if the materials would have been provided by the Contractor and 15 percent if the materials would have been provided by a Subcontractor.

5) Excessive Material Price: If the Engineer determines the price furnished by the Contractor for materials is excessive or if the Contractor fails to furnish satisfactory evidence of the price within

30 days of billing, the cost shall be the lowest current wholesale price available in the quantities required, or an equivalent to such wholesale price as determined by the Engineer.

6) Contractor-Owned Materials: If the Contractor procured the materials from a source that the Contractor, its Subcontractor, or its Supplier wholly or partially owns, payment will be determined based on the lower of the following:

   a. The price paid by the Contractor for similar materials from that source for original contract items (items not furnished for performance of the extra Work);

   b. The current wholesale price for those materials.

7) Department Furnished Materials: The Department reserves the right to furnish materials and equipment required for performance of Changes and the Contractor shall have no claim for costs or mark-ups for such materials and equipment.

F. Construction Equipment:

1) Compensation for construction equipment shall include the necessary cost for use of construction equipment directly required for performance of the Changes and includes full compensation for the cost of fuel, power, oil, lubrication, supplies, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor (except for construction equipment operators), and any and all costs incidental to the use of such construction equipment.

2) Any use of equipment for less than 30 minutes shall be considered one-half hour. No costs will be allowed for time while construction equipment is inoperative, idle, or on standby, for any reason, unless such times have been approved by the Engineer. Rental time for construction equipment moved by its own power shall include time required to move construction equipment to Work Site from the nearest available source for rental of such construction equipment, and to return it to the source. If construction equipment is not moved by its own power, loading and transportation costs will be paid in lieu of such rental time therefor. Neither moving time nor loading and transportation costs will be allowed if the construction equipment is used for any Work other than the Changes. No allowance will be made for individual pieces of construction equipment having a replacement value of $500 or less.

3) No construction equipment cost will be recognized in excess of rental rates established by distributors or equipment rental

agencies in the locality for performance of the Changes or Equipment Rental Rates published by Caltrans, whichever is less.

a. If the equipment invoice cost is not the Equipment Rental Rate established by Caltrans and if the equipment is rented from an equipment business the Contractor does not own (including affiliated companies), a 5 percent markup will be added to the rental cost to provide full compensation for the cost of fuel, power, oil, lubrication, supplies, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor (except for construction equipment operators), and any and all costs incidental to the use of such construction equipment.

4) Markup: A 15 percent markup will be added to the rental cost to provide payment for all overhead costs related to Equipment but not designated as costs of the Equipment used in the direct performance of the Work, including home office overhead, field office overhead, bond costs, insurance, and other fixed or administrative costs, and shall provide full compensation for all delay costs (including loss of productivity disruption and cumulative impacts), and profit related to Equipment.

a. Subcontractor Furnished Markup: If the equipment is furnished by a Subcontractor or Supplier (regardless of the number of tiers), a 5 percent markup will be added to the markup provided in Paragraph 2.F.4 as reimbursement for the Contractor's additional administrative costs.

5) Deleted Equipment: For a deduction in compensation due to the deletion of equipment, the Engineer will determine the deduction in accordance with Paragraphs 2.F.1 through 2.F.3. There will be an additional deduction of 10 percent of the total costs if the equipment would have been provided by the Contractor and 15 percent if the equipment would have been provided by a Subcontractor.

G. Services: Compensation for services shall include the necessary cost for technical and professional services approved by the Engineer in advance and directly required for performance of the Changes. No compensation will be allowed under this paragraph for any person or entity that is used to perform any Work other than the Changes. Invoices for services shall be based on current market prices and itemized in accordance with the established practice of the applicable service.

1) A 5 percent markup will be added to the invoice cost of services as reimbursement for the Contractor's additional administrative costs.

H. General Limitations: No payment will be made to the Contractor which exceeds market values prevailing at time and locality of the Change unless the Contractor establishes that all reasonable means for performance of the Changes at prevailing market values have been investigated and excess cost could not be avoided.

I. Deletion of Bid Item: When an entire bid item is deleted, the Contractor will be paid 4 percent of the total price in the bid schedule for the item as full compensation for such deletion.

J. Adjustment in Compensation for Delays or Time Extensions: If a delay or time extension is cause for an adjustment in compensation as provided in Document 00 72 45 - Prosecution of Work, Paragraph 6, the Contractor shall furnish supporting data to the Engineer of the effect of the delay on the costs of performing Work and of the amount of additional compensation that may be due. Supporting data shall include a Time Impact Evaluation (TIE) which includes both a written narrative and a fragmentary network (fragnet) depicting how the changed Work or delay impacts the critical path. The TIE shall also include an electronic copy of the schedule in the required format, including a layout to illustrate the fragnet. All additional supporting data shall conform to generally accepted auditing standards and include, but not be limited to, pre-bid records and estimates, job cost reports, and certified cost records for Work performed and for additional costs correlated with the elements of the delay or time extension.

    1) The TIE and supporting documentation must be submitted within 30 days after notice of the occurrence. If the Contractor does not submit a TIE within 30 days after notice of the occurrence, the Contractor waives all rights for a time extension for that occurrence.

    2) The Engineer will determine the effect of such delay or time extension and, if necessary, issue a Change Order for any adjustment in compensation found due, as provided in Paragraphs 2.D through 2.G for the costs of Work performed as a result of the delay or time extension.

    3) The Engineer may also issue a Change Order for any additional compensation found due for the effects of such delay or time extension to cover costs not provided for under Paragraphs 2.D through 2.G.

K. Adjustment in Time for the Deletion of Work: If the deletion of Work is cause for an adjustment in time as determined by the Engineer, upon the Department’s written request, the Contractor shall furnish supporting data to the Engineer to determine how the deleted Work impacts the Critical Path. Supporting data shall include a Time Impact

Evaluation (TIE) which includes both a written narrative and a fragmentary network (fragnet) depicting how the deleted Work impacts the Critical Path. The TIE shall also include an electronic copy of the schedule in the required format, including a layout to illustrate the fragnet.

1) The TIE and supporting documentation must be submitted within 30 days after the Department's request. If the Contractor does not submit a TIE within 30 days after notice by the Department, the Engineer will determine the effect of the deletion of Work based on the Department's records.

2) The Engineer will determine the effect of the deletion of Work and may issue a Change Order for a decrease in the time to the Contract specified completion of the Work, or any adjustments thereof, or apply the reduction in time as Department-owned Float for the Department's use in the event of Department-caused delays.

    a. The Engineer may also accrue Department-owned Float by early review completion of any submittal or by any other action if such action saves time on the Critical Path.

    b. Department-owned Float is a resource for the exclusive use of the Department.

3. EXECUTION OF CHANGE ORDERS: The Contractor's acceptance, in writing, of a Change Order shall constitute final and binding agreement to the provisions thereof and a waiver of all claims, including all losses and damages, in connection therewith, whether direct, indirect, or consequential in nature.

END OF DOCUMENT

DOCUMENT 00 72 48

PAYMENTS AND RETENTIONS

1. CONTRACT PRICES

   A. Unless otherwise specified, items of Work to be paid for at Contract price per unit of measurement will be measured by the Engineer in accordance with United States standard measures.

   B. The Contract prices shall include full compensation for all costs incurred for completion of the Work, including but not limited to taxes, fees, and duties attributable to the Work whether imposed by foreign, federal, state, or local governments. No tax-exempt certification will be furnished by the Department.

2. ESTIMATES AND PROGRESS PAYMENTS

   A. Schedule of Values: For lump sum bid price items, the Contractor shall submit a detailed Schedule of Values consistent with bid pricing within 14 days prior to the first scheduled progress payment, which is subject to review and acceptance by the Engineer. The detailed Schedule of Values shall provide a sufficient breakdown of all lump sum items (excluding mobilization and demobilization) of Work by monthly values to allow appropriate monthly progress payments to be determined. Monthly values shall sum to the total Contract price for each lump sum item. At the Engineer’s discretion, progress payments may not include any allocation for lump sum items absent an accepted detailed Schedule of Values. There will be no separate price allocation of preliminary or incidental activities including, but not limited to, administration and overhead, design, formwork, and similar items, but these may be distributed over the appropriate components of Work.

   B. Estimates:

      1) The Engineer, once each month, will estimate the value of Work done to the time of such estimate, including Work done under an executed change order, as follows:

         a. Under unit price items.

         b. For an allocation of a lump sum bid price item in accordance with Paragraph 2.A.

         c. If requested by the Contractor and at the discretion of the Engineer, unused materials and equipment furnished and either paid for in full or for which the Contractor has title in writing and

that are subject to or under the control of Department at the time of such estimate. The Contractor shall furnish copies of paid vendors' invoices or other documentation of ownership, satisfactory to the Engineer, that such materials and equipment are stored subject to or under the control of Department.

2) Such estimate may include Work done under an order for Change. Estimate for such Work will be actual necessary costs based on records furnished pursuant to Document 00 72 47 - Changes, Paragraph 1.B.

3) At the Engineer's request, the Contractor shall furnish an itemized listing of the amounts and values of Work done or materials and equipment furnished to be included in each estimate, consistent with the Contractor's Schedule of Values.

C. Progress Payments:

1) Upon completion of each monthly estimate of Work done and materials and equipment furnished, Department, subject to the provisions of Paragraphs 2.A through 2.F, will make progress payments to the Contractor. Each progress payment will be the estimated value of such Work, materials and equipment, less the amount of prior progress payments, liquidated damages, and other amounts to be deducted or retained under the Contract or pursuant to law.

2) An estimate or progress payment shall not be considered acceptance of the Work, materials, or equipment. Estimated amounts and values to the Work performed and materials and equipment furnished will be adjusted to the actual amounts and values, as they become available, in subsequent estimates and the final estimate. Progress payments will be subject to correction in subsequent estimates and the final estimate.

3) The Engineer may withhold all or part of a progress payment when required or requested by the Engineer, Contractor or Subcontractor certified payroll records are delinquent or inadequate or if Contractor is not in compliance with any requirements of the Contract or the law.

4) Progress payments for mobilization shall not exceed that authorized in Public Contract Code Section 10264.

D. No Progress Payments:

1) No progress payment need be made when the Engineer determines that the Contractor is not prosecuting the Work in

accordance with the Contract, if there may be cause for termination for default or for other causes specified in the contract, or when the payment would be less than $1,000.

2) In addition to any other remedy provided by Contract or by law, the Engineer may withhold or deduct all or part of a progress payment when the Contractor has failed to furnish submittals specified in Document 00 72 46 - Control of Work, Paragraph 4; Defective Work specified in Document 00 72 45 - Prosecution of Work, Paragraph 9; or for other causes or deliverables specified in the Contract. The amount of any such withholding shall be identified to the Contractor in writing and may be based on the estimated value of such submittal or other withholding as provided for in the Contract.

E. Contractor Payments to Subcontractors: The Contractor shall pay Subcontractors within 7 days of receipt of each progress payment, as provided in Public Contract Code Section 10262.

F. Retention from Progress Payments: The Department will retain from each progress payment, 5 percent of the estimated value of Work done and materials and equipment furnished, as approved by the Engineer pursuant to Paragraph 2.C.

G. Release of Retention Pursuant to Public Contract Code Section 7107:

1) Within 60 days after the date of completion of the Work of improvement performed under the Contract, the retention withheld by the Department shall be released. In the event of a dispute between the Department and the Contractor, the Department may withhold from the final payment an amount not to exceed 150 percent of the disputed amount. For purposes of Paragraph 2.G.1 only, “completion” means any of the following:

a. The occupation, beneficial use, and enjoyment of a work of improvement, excluding any operation only for the testing, startup, or commissioning by the Department, accompanied by cessation of labor on the work of improvement.

b. The Acceptance by the Department of the Work pursuant to Document , Paragraph 14.

c. After the commencement of a work of improvement, a cessation of labor on the work of improvement for a continuous period of 100 days or more, due to factors beyond the control of the Contractor.

d. After the commencement of a work of improvement, a cessation of labor on the work of improvement for a continuous

period of 30 days or more, if the Department files for record a notice of cessation or a notice of completion.

H. Subject to Paragraph 3, within 7 days from the time that all or any portion of the retention proceeds are received by the Contractor, the Contractor shall pay each of its Subcontractors from whom retention has been withheld, each Subcontractor's share of the retention received. However, if a retention payment received by the Contractor is specifically designated for a particular Subcontractor, payment of the retention shall be made to the designated Subcontractor, if the payment is consistent with the terms of the subcontract.

1) The Contractor may withhold from a Subcontractor its portion of the retention proceeds if a bona fide dispute exists between the Subcontractor and the Contractor. The amount withheld from the retention payment shall not exceed 150 percent of the estimated value of the disputed amount.

2) In the event that retention payments are not made within the time periods required by this section, the Department or the Contractor withholding the unpaid amounts shall be subject to a charge of 2 percent per month on the improperly withheld amount, in lieu of any interest otherwise due. Additionally, in any action for the collection of funds wrongfully withheld, the prevailing party shall be entitled to attorney's fees and costs.

3) If the Department retains an amount greater than 125 percent of the estimated value of the Work yet to be completed pursuant to Public Contract Code Section 10261, the Department shall distribute undisputed retention proceeds in accordance with Paragraph 2.G.1. However, notwithstanding Paragraph 2.G.1, if the Department retains an amount equal to or less than 125 percent of the estimated value of the Work yet to be completed, the Department shall have 90 days in which to release undisputed retentions.

3. FINAL PAYMENT AND EXCEPTIONS

A. Within 45 days following Acceptance under Document 00 72 46 - Control of Work, Paragraph 14, or within a longer period of time as may be required due to causes within the control or due to the fault or negligence of Contractor, the Engineer will prepare and furnish to Contractor a draft final estimate and Release on Contract. Such draft final estimate will itemize the actual quantities of materials and equipment incorporated into the Work, amounts earned, prior payments and amounts deducted and retained.

B. If the Contractor wishes to pursue any Potential Claim(s) noticed in accordance with Document 00 72 49 - Potential Claims and Claims, Paragraph 1, the Contractor must state such Claim as an exception in executing the Release on Contract in a definite amount.

1) Not later than 30 days after the return of Release on Contract, the Contractor may furnish a Claim(s) for monetary compensation for any Claim stated as an exception in the Release on Contract. The submission of such Claim(s) must be made in accordance with Document 00 72 49 - Potential Claims and Claims, Paragraph 2.

2) Failure to comply with the requirements stated in Document00 72 49 - Potential Claims and Claims, shall constitute a waiver of the Contractor’s right to assert or pursue any such Potential Claim or Claim.

C. If the Contractor concurs with the amount due as stated on the Release on Contract, the Contractor shall insert the words NO EXCEPTIONS on the Release on Contract, execute and return a copy to the Engineer.

D. Failure of the Contractor to execute and return the Release on Contract within 30 days after receiving the draft final estimate will constitute agreement by the Contractor that the draft final estimate represents the total amount due.

E. Within 30 days after the Contractor returns the executed Release on Contract without exceptions, the Department will issue a final estimate and payment to the Contractor in the amount determined to be due under the contract.

F. Within 45 days after claims excepted from the Contractor's Release on Contract have been decided by the Engineer, or a settlement is reached, or final adjudication is obtained, a final estimate will be furnished to the Contractor stating the amount, if any, found due; and the Department will pay the stated amount to the Contractor.

G. For a period of three years after final payment, or until the final resolution of any and all claims and disputes, the foregoing final estimate and payment will be subject to audit and inspection as provided in Document 00 72 44 - Contractual Relationship of Parties, Paragraph 2 and corrected for accounting or clerical errors in the calculations. One party shall pay to the other any amount found due as a result of such corrections.

4. SUBSTITUTION OF SECURITIES: Pursuant to Public Contract Code Section 10263, the Contractor may request substitution of eligible securities for moneys withheld by the Department and shall receive interest on the securities posted.

5. INTEREST: Interest at the stipulated rate of seven percent per annum will be allowed as required by law. A lower interest rate may be applied where permitted by law.

END OF DOCUMENT

DOCUMENT 00 72 49

POTENTIAL CLAIMS AND CLAIMS

1. POTENTIAL CLAIMS

A. Notice of Potential Claims: If the Contractor objects to any decision, determination, order, directive, instruction, notice, action, or omission of the Engineer, the Contractor shall, within 15 days after receipt or occurrence of the same, furnish to the Engineer a written Notice of Potential Claim stating such objections.

1) The Contractor shall furnish at the end of each Work day detailed hourly records for that day of labor, construction equipment and itemized records of materials, equipment and services used in performance of Work related to the Potential Claim. Records shall be kept on Department form, Daily Disputed Work Report.

2) Failure by the Contractor to furnish either the notice required in Paragraph 1.A, or the records required in Paragraph 1.A.1, or both, shall constitute a waiver of the Contractor's right to file a claim or to pursue any identified Potential Claim under Paragraph 1.A

3) Upon filing a Notice of Potential Claim, the Contractor shall, as applicable, preserve all information, including electronically stored information, that may be relevant to the potential claim. The Contractor shall concurrently notify its affected Subcontractors and Suppliers to do the same.

4) Requests for equitable adjustments or relief are not allowed and will not be considered a valid basis for obtaining an adjustment to the contract whether for time, money or both.

B. Documentation of Potential Claims: Within 30 days of submitting the documentation required under Paragraph 1.A.1, the Contractor shall furnish all documentation that relates to each and every Potential Claim together with all documents that support the cost and time components, as applicable, for items of the Potential Claim, including, but not limited to, the labor, certified payrolls, benefits, insurance, materials, equipment, and all documentation that establishes the time period, individuals involved, the hours for the individuals, and shall include all relevant Subcontractor and Supplier documentation, and any and all additional relevant documentation required to be produced under the Contract, or requested by the Department pursuant to Paragraph 2.C.

C. Additional Documentation Requested by the Department: The Department may request in writing, any additional records from the

Contractor in connection with the Potential Claim sufficient to allow the Department to verify all or a portion of the Potential Claim. The Contractor shall provide such records within 30 days of the Department's request. Documents requested by the Department shall conform to generally accepted auditing standards and may include, but not be limited to, the following:

1) Job cost reports, cost distribution worksheets, earnings records, general ledgers, cash disbursements journals, and canceled checks;

2) Pre-bid records, estimates, and takeoffs;

3) Daily time sheets and supervisor's daily reports, recurring reports, and logs;

4) Schedules, including Subcontractor schedules;

5) Email, letters, and correspondence;

6) Insurance, welfare, benefits, subsistence, and travel records;

7) Payroll tax forms, job payroll ledgers, and union agreements;

8) Subcontracts, material invoices, purchase orders, and requisitions;

9) Equipment records (list of company and equipment rental rates, invoices, etc.);

10) Any other documents specifically described in the Department's written request.

D. Certification of Potential Claims: All Potential Claims submitted by the Contractor, shall include the following certification, exactly as stated below:

I, _____, BEING THE _____ (MUST BE AN OFFICER OR AUTHORIZED REPRESENTATIVE IDENTIFIED PURSUANT TO DOCUMENT 00 72 46, PARAGRAPH 3.C) OF _____ (CONTRACTOR), DECLARE UNDER PENALTY OF PERJURY AND ATTEST THAT: I HAVE THOROUGHLY REVIEWED THE ATTACHED POTENTIAL CLAIM FOR ADDITIONAL COMPENSATION AND/OR EXTENSION OF TIME, AND KNOW ITS CONTENTS, AND SAID POTENTIAL CLAIM IS TRUTHFUL AND ACCURATE; THAT ALL SUPPORTING DOCUMENTATION IS COMPLETE AND ACCURATE; AND THAT THE AMOUNT REQUESTED ACCURATELY REFLECTS THE CONTRACT ADJUSTMENT FOR WHICH THE DEPARTMENT IS

RESPONSIBLE; AND, FURTHER, THAT I AM FAMILIAR WITH CALIFORNIA PENAL CODE SECTION 72 AND CALIFORNIA GOVERNMENT CODE SECTIONS 12650 ET SEQ. PERTAINING TO FALSE CLAIMS, AND FURTHER KNOW AND UNDERSTAND THAT SUBMISSION OR CERTIFICATION OF A FALSE CLAIM MAY LEAD TO FINES, IMPRISONMENT, AND/OR OTHER SEVERE LEGAL CONSEQUENCES.

SIGNATURE: _____ DATE: _____

E. Waiver of Right to Pursue a Potential Claim:

1) Each of the requirements stated herein for filing, supporting, certifying, and verifying each Potential Claim are material obligations of this Contract and are intended to enable the Department to evaluate the Potential Claim without the need to resort to formal dispute resolution procedures or legal proceedings.

2) The failure of the Contractor to comply with these requirements or to permit the Department access to the books and records of the Contractor, shall constitute a waiver of the Potential Claim and the Contractor's right to pursue any action to recover costs or damages associated with such Potential Claim.

2. CLAIMS

A. Submission of Claims:

1) If the Contractor wishes to pursue any claim(s) that it previously submitted as a Potential Claim(s) noticed in accordance with Paragraph 1, the Contractor must state such Claim as an exception when executing the Release on Contract pursuant to Document 00 72 48 - Payments and Retentions, Paragraph 3.B.

2) Not later than 30 days after the return of Release on Contract, the Contractor may furnish a Claim for monetary compensation for any Claim stated as an exception in the Release on Contract.

B. Certification of Claims: All Claims submitted by the Contractor, shall include the following certification, exactly as stated below:

I, _____, BEING THE _____ (MUST BE AN OFFICER OR AUTHORIZED REPRESENTATIVE IDENTIFIED PURSUANT TO DOCUMENT 00 72 46, PARAGRAPH 3.C) OF _____ (CONTRACTOR), DECLARE UNDER PENALTY OF PERJURY AND ATTEST THAT: I HAVE THOROUGHLY REVIEWED THE ATTACHED CLAIM FOR ADDITIONAL COMPENSATION AND/OR EXTENSION OF TIME, AND

KNOW ITS CONTENTS, AND SAID CLAIM IS TRUTHFUL AND ACCURATE; THAT ALL SUPPORTING DOCUMENTATION IS COMPLETE AND ACCURATE; AND THAT THE AMOUNT REQUESTED ACCURATELY REFLECTS THE CONTRACT ADJUSTMENT FOR WHICH THE DEPARTMENT IS RESPONSIBLE; AND, FURTHER, THAT I AM FAMILIAR WITH CALIFORNIA PENAL CODE SECTION 72 AND CALIFORNIA GOVERNMENT CODE SECTIONS 12650 ET SEQ. PERTAINING TO FALSE CLAIMS, AND FURTHER KNOW AND UNDERSTAND THAT SUBMISSION OR CERTIFICATION OF A FALSE CLAIM MAY LEAD TO FINES, IMPRISONMENT, AND/OR OTHER SEVERE LEGAL CONSEQUENCES.

SIGNATURE: _____ DATE: _____

C. Additional Documentation Requested by the Department: The Department reserves the right to request any additional documentation, not previously submitted by the Contractor, that is necessary to fully evaluate the Claim. The Contractor shall submit the documentation requested by the Department within 30 days of the Department's written request. All documentation submitted by the Contractor will be covered under the Contractor's Certification of Claims.

D. Waiver of Right to File a Claim: The Contractor's failure to comply with the requirements of Paragraph 2.A through 2.B shall constitute a full and final waiver of the Contractor's right to file a Claim and to pursue any action or arbitration to recover costs or damages associated therewith.

E. Decision on Claims: Claims of the Contractor arising under and by virtue of the Contract will be decided by Engineer who will furnish the decision to the Contractor, in writing. Such decision(s) need not be furnished until after Acceptance.

3. FALSE CLAIMS ACT: Should the Contractor be unable to support any part of its Claim(s) and it is determined that there is falsity of such certification or misrepresentation of fact or fraud on the part of the Contractor then, in addition to any other action or remedy including recoupment of damages or reimbursement of Department's costs, the Contractor shall be subject to the False Claims Act (Sections 12650 et seq. of the Government Code).

4. CUMULATIVE IMPACTS: Notices of Potential Claims or Claims for additional compensation and/or an extension of time due to the cumulative impact of change orders are not allowed and will be rejected by the Engineer.

5. AUDITS OF POTENTIAL CLAIMS AND CLAIMS: All Potential Claims filed under Paragraph 1 and Claims filed under Paragraph 2, against Department shall be subject to audit pursuant to Document 00 72 44, Paragraph 2 at any time following the filing of the Potential Claim or Claim.

6. ARBITRATION

   A. Public Code Sections 10240 et seq., and applicable regulations of the California Code of Regulations Title 1, Sections 1300 through 1393 provide for the resolution of unresolved contract claims. Arbitration shall be initiated by filing a Complaint in Arbitration in accordance with said law and regulations.

   B. The venue of any arbitration proceedings shall be located in Sacramento, California. Each party hereby agrees that any arbitration proceeding or such court shall have personal jurisdiction over it and consents to service of process in any manner authorized by California law.

   C. The Arbitration decision will be decided under and in accordance with California law supported by substantial evidence. The decision will be in writing, and will contain the basis for the decision, findings of fact, and conclusions of law.

   D. If the Contractor files a Complaint in Arbitration prior to the issuance of all Engineer’s decisions, the Department may, after notice to the Contractor, seek and be entitled to receive a stay of proceedings until all such decisions are issued, or, alternatively, elect to treat the actions of the Contractor as a waiver of any Engineer’s requirement to issue a decision on Claim(s). The Engineer shall have the discretion to elect which alternative will be applied.

END OF DOCUMENT

DOCUMENT 00 73 00

SUPPLEMENTARY CONDITIONS

(CHANGES TO DOCUMENTS 00 71 00 THROUGH 00 72 49)

1. CHANGES TO GENERAL CONDITIONS

A. In Document 00 72 43, replace Paragraph 4.A.1) with the following:

"1) Posting: The Department will electronically furnish the Contractor a copy of DIR's prevailing wage rates which the Contractor shall post in a conspicuous place at the Work Site."

B. In Document 00 72 43 , add the following items to Paragraph 4.B:

"1) Eight hours is a legal day's work, in accordance with Labor Code section 1810.

2) The Department shall deduct $25 as a penalty for each worker employed in the execution of the contract for each calendar day during which the worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week without overtime pay, in violation of the provisions of Labor Code section 1813."

C. In Document 00 72 43, replace Paragraph 12.C with the following subparagraphs:

"C. Unless otherwise specified, the EPD(s) shall be submitted at least 15 days from the date of receipt of the Notice to Begin Work.

D. The Contractor shall not install any eligible materials on the project until the Contractor submits a compliant facility-specific EPD for that material which does not exceed the DGS established Maximum Acceptable Global Warming Potential (GWP) limits published on the DGS website referenced in Paragraph 12.B."

D. In Document 00 72 43 add the following paragraph:

"13. EXECUTIVE ORDER N-6-22 (EO):

A. On March 4, 2022, Governor Gavin Newsom issued Executive Order N-6-22 (EO) regarding sanctions in response to Russia's actions in Ukraine. The EO is located at https://www.gov.ca.gov/wp-content/uploads/2022/03/3.4.22-Russia-Ukraine-Executive-Order.pdf

B. Under the EO, the Contractor is required to comply with economic sanctions imposed in response to Russia's actions in Ukraine including, but not limited to, the federal executive orders identified in the EO and the sanctions identified on the U.S. Department of the Treasury website (https://home.treasury.gov/policy-issues/financial-sanctions/sanctions-programs-and-country-information/ukraine-russia-related-sanctions). Failure of the Contractor to comply with these sanctions may result in termination of this contract.

C. In addition, for contracts valued at $5 million or more, the EO requires that the contractor report to the Department regarding its compliance with economic sanctions, and to report on steps it has taken in response to Russia's actions in Ukraine, including, but not limited to, desisting from making new investments in, or engaging in financial transactions with Russian entities, not transferring technology to Russia or Russian entities, and directly providing support to the government and people of Ukraine."

E. In Document 00 72 44, add the following items after Paragraph 5.K:

"L. Watercraft Liability: If Contractor uses watercraft of any type, Contractor shall maintain limits of liability not less than $1,000,000 combined single limit per accident, each watercraft. Such insurance shall cover liability arising out of a watercraft accident including owned, hired, and non-owned watercraft.

M. Marine General Liability: The Contractor shall maintain Marine Liability Insurance for bodily injury liability and property damage liability arising out of the insured's marine activities in limits not less than $5,000,000 combined single limit for any one occurrence.

N. Contractors' Equipment Insurance: Contractors' equipment insurance sufficient to protect against the loss of owned, borrowed or rented capital equipment and tools, including any tools owned by employees, and any tools or equipment, staging towers, and forms owned, borrowed or rented by the Contractor.

O. The Contractor and its insurers providing the insurance required shall waive any rights of subrogation they may have against the Department and the Department's indemnitees."

F. In Document 00 72 45, replace Paragraph 6 with the following:

"6. ADJUSTMENTS IN COMPENSATION: Adjustments in compensation for delays or time extensions for the cause in Paragraph 4.B.1 will be determined by the Engineer in accordance with Document 00 72 47 - Changes, Paragraph 2.B. Adjustments in compensation for

delays or time extensions for the causes in Paragraphs 4.B.2, 4.B.3, 4.B.4, 4.B.5, 4.B.6, and 8.A.3 will be determined by the Engineer in accordance with Document 00 72 47 - Changes, Paragraph 2.J. There will be no adjustment in compensation for delays or time extensions for the causes specified in Paragraph 4.B.7, 4.B.8, 8.A.1, or 8.A.2.

A. Concurrent Delays: No adjustments in compensation will be allowed when Contractor-caused delays to the Critical Path and Department- caused delays to the Critical Path occur concurrently.

B. Unabsorbed Home Office Overhead: Adjustments in compensation for costs associated with unabsorbed home office overhead will only be considered in relation to delays or time extensions for the cause in Paragraph 8.A.3 and then only when the Contractor sufficiently documents that the suspension of Work prevented the Contractor from seeking replacement work."

G. In Document 00 72 47, replace Paragraph 2.D.2) with the following:

"2) Labor Surcharge Rate: The labor surcharge rate shall be the surcharge rate for the type of Work performed, published in the Caltrans Labor Surcharge and Equipment Rental Rates User's Guide in effect during the time of performance of the changed Work. The surcharge rate shall provide full compensation for all costs for worker's compensation insurance, federal unemployment insurance, state unemployment insurance, Medicare, Social Security (FICA), and state training taxes."

H. In Document 00 72 47, replace Paragraph 2.F.3) a. with the following:

"a. If the equipment invoice cost is not the Equipment Rental Rate established by Caltrans and if the equipment is rented from an equipment business the Contractor does not own (including affiliated companies), a 25 percent markup will be added to the rental cost to provide full compensation for the cost of fuel, power, oil, lubrication, supplies, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, labor (except for construction equipment operators), and any and all costs incidental to the use of such construction equipment."

END OF DOCUMENT

ADDENDA AND INFORMATION LETTERS

DOCUMENT 00 91 13

ADDENDA

1. GENERAL

   A. Pursuant to Document 00 21 13 – Instructions to Bidders, the Department may modify the bid documents, drawings and specifications by issuance of an addendum.

2. COVER PAGES TO ADDENDA

   A. Any addenda cover page issued will be placed in this document for record keeping purposes.

END OF DOCUMENT

DOCUMENT 00 93 15

INFORMATION LETTERS

1. GENERAL

   A. Pursuant to Document 00 21 13 – Instructions to Bidders, the Department may make clarifications by issuance of an information letter.

2. INFORMATION LETTERS

   A. Any information letters issued will be placed in this document for record keeping purposes.

END OF DOCUMENT

DIVISION 01

GENERAL REQUIREMENTS

SECTION 01 11 00

SUMMARY OF WORK

PART 1 GENERAL

1.01 DESCRIPTION

A. The term project is defined in Document 00 71 00 – Abbreviations and Definitions. This project includes the following features:

1. Levee repairs at Sites 23-078 and 97:

a. Mobilization and demobilization.

b. Developing staging and laydown areas as needed.

c. Installing temporary fencing or giant garter snake fencing around all work sites and staging areas.

d. Installing turbidity curtains for sites requiring in-water construction.

e. Installing exclusionary fencing or box protection around trees and other vegetation.

f. Traffic control and flagging for public safety.

g. Installing and maintaining traffic detours in accordance with detour plans as required.

h. Tree removal from the site, including removing stump and roots, and providing certified arborist for tree trimming and branch removal.

i. Clearing and grubbing.

j. Excavation and backfilling, and disposal of excavated material.

k. Installing geotextile fabric.

l. Installing launch rock.

m. Installing earthfill.

n. Installing agricultural soil on finished slopes and in voids in launch rock to form soil-filled rockfill.

o. Applying surface treatment which includes seeding, agricultural soil, native topsoil, aggregate chinking, and erosion control fabric placement.

p. Aggregate base resurfacing of the levee crown road.

q. Installing and establishing pole cuttings.

r. Establishing seeding.

s. Installing and maintaining an irrigation system.

2. The full scope of work is provided on the Drawings and in the Specifications. Site access routes are also described and shown on the Drawings. The Contractor shall not deviate from the designated access routes without prior written approval of the Engineer. Summary of the major work required at each levee repair site follows.

   a. Site No. 23-078 – RD0108 U01 LM 15.50 is a landside slope repair with limits of work of 0.71 acres, that includes, but is not limited to, implementation of temporary traffic control, installation of giant garter snake fencing, clearing and grubbing of the work area, excavation and disposal of soil and rock material above and below the water level, placement and compaction of imported earthfill, and surface treatment of the finished grade as shown on the Drawings. A laydown area for the work has been identified as shown on the Drawings.

   b. Site No. 97 – NA0016 U01 LM 8.64 is a waterside slope repair with limits of work of 1.78 acres, that includes, but is not limited to, implementation of temporary traffic control, installation of temporary fencing, installation of turbidity curtain, clearing and grubbing of the work area, protection of designated trees, removal of identified trees with associated trunk and roots from the slope by the Contractor before construction, excavation and disposal of soil and rock material above and below the water level, placement of geotextile fabric on the excavated grade and between layers of dissimilar placed materials, importing and placement of soil-filled rockfill and launch rock as shown on the Drawings, installation of willow pole cuttings, and surface treatment of the finished grade as shown on the Drawings. A laydown area for the work has been identified as shown on the Drawings.

3. The Contractor shall be responsible for any grading, rut removal, or other surface improvements required on levee crown roads or farm roads required to facilitate its hauling operation. The Contractor

shall restore the site and associated access roads, fencing, and gates to original condition or better, as determined by the Engineer.

1.02 RELATED SECTIONS

A. General Conditions, Supplementary Conditions, other Division 1 sections, and Drawings apply to this section.

1.03 SITE LOCATIONS AND ACCESS

A. Site No. 23-078 – RD0108 U01 LM 15.50:

The site is located on the Colusa Basin Drainage Canal in Colusa County, California. To access the site, travel I-5 North from Sacramento, take Exit 559 to Yolo County Line Road. Continue onto Yolo County Line Road for 1.5 miles. Turn left onto Johns School Road. Travel north on Johns School Road for 3.0 miles. Turn right onto White Road. After 2.3 miles, turn a sharp left and travel for approximately 0.8 miles to reach the site.

B. Site No. 97 – NA0016 U01 LM 8.64:

The site is located on the Sacramento River in Yolo County near Woodland, California. To access the site, travel I-5 North from Sacramento, take Exit 536 to Co Hwy E8/Co Rd 102 and continue straight. Turn left onto CA-45 N and continue straight for 6.3 miles. Turn right onto the levee crown road and continue east for 1.2 miles to reach the site.

1.04 TIME OF COMPLETION

A. Pursuant to Document 00 72 45 – Prosecution of Work, the Contractor shall begin work within

7 DAYS

from date of receipt of Notice to Begin Work.

B. The Contractor shall complete all work, excluding the work specified in Section 32 90 20 – Plant and Seed Establishment before the expiration of

November 30, 2026.

C. The Contractor shall complete the balance of the work specified in Section 32 90 20 – Plant and Seed Establishment, before the expiration of

May 31, 2027.

D. The above completion dates are based on the Contractor receiving the notice to begin work within 40 days from the date of the bid opening. The Department will extend the completion dates by the number of days after the 40 days specified above that the Contractor receives the notice to begin work, except to the extent that the delay in issuance of the notice to begin work results from the failure of the Contractor to perform obligations specified in Document 00 21 13 – Instructions to Bidders. Notwithstanding the provisions of Document 00 72 45 – Prosecution of Work, the Contractor shall not be entitled to adjustment in compensation for such extension of the completion dates.

1.05 LIQUIDATED DAMAGES

A. Pursuant to Document 00 72 45 – Prosecution of Work:

1. Liquidated damages for failure to complete the work specified in Paragraph 1.04 B within the time specified will be $2,400 per day.

2. Liquidated damages for failure to complete the work specified in Paragraph 1.04 C within the time specified will be $ 1,000 per day.

1.06 PROSECUTION OF WORK

A. Pursuant to Document 00 72 45 – Prosecution of Work, the time of completion specified in Paragraph 1.04 is considered insufficient to complete the project working a normal number of hours per day or week on a single-shift basis. It is expected that overtime operations and/or additional shifts will be necessary to achieve completion of work within the time specified. The contract prices shall include full compensation for costs incurred for compliance with time of completion specified.

1.07 CONSTRUCTION WATER

A. The Contractor shall be responsible for providing suitable water for construction for each site. This includes obtaining all permits and paying all fees needed to utilize the water source(s), and providing all facilities needed to pump, convey, store, and distribute the water. Water may not be sourced from rivers unless otherwise approved in writing by the Engineer.

1.08 PERMITS AND LICENSES

A. Pursuant to Document 00 72 43 – Compliance with Applicable Laws and Regulations, Contractor shall obtain necessary permits and licenses.

B. The Contractor shall obtain such permits and licenses and pay charges and fees, except as specified in Section 01 57 19 – Temporary Environmental Controls. Permits and licenses shall be obtained in sufficient time to prevent delays to the project. Such permits shall become a part of these specifications by reference.

C. Contractor-obtained permits shall include Caltrans and County Department of Transportation encroachment permits required for moving material and equipment on and off public roads, for installing and maintaining detours shown on the Drawings, and as required to complete all work shown on the Drawings. Such permits shall become a part of these specifications by reference. Contractor shall comply with all permit requirements.

D. Specific encroachment permits requirements from local levee maintaining entities, State or County entities (other than Transportation Departments) shall be identified by the Contractor and resolution shall be coordinated with the Engineer prior to commencement of construction.

1.09 RESTRICTIONS

A. All the work restrictions will be accordance with section 01 14 00 - Work Restrictions.

1.10 PROJECT CONDITIONS

A. Borrow Areas:

1. The Contractor shall be responsible for identifying commercial sources for earthfill, agricultural soil, bedding material and launch rock conforming to the specifications, including royalty payments for the material. The Contractor shall be responsible for all loading, hauling, and unloading of borrow material for each site.

B. Utilities:

1. Contactor shall notify Underground Service Alert (USA) two days minimum prior to construction. Any utility discoveries by the Contractor during construction and related activities shall notify the Engineer.

2. Known overhead and underground utilities within site areas are limited and are shown on the Drawings based on field observations. The Contractor shall be responsible for locating all above ground and underground utilities before beginning excavations in any area, and for coordinating its work with the appropriate utility owner if utilities are present.

3. Irrigation pump stations with buried pipelines through the levees may be located along some haul routes located on the levee crowns. The Contractor shall identify such crossings, determine depth of cover over pipelines, and if depth of cover is less than three (3) feet, provide steel plates or wood mats acceptable to the Engineer to protect the piping while hauling.

1.11 VERIFICATION OF EXISTING FACILITIES

A. The Contractor shall verify the applicable structural dimensions, the location, elevations, and dimensions of existing facilities, and other dimensions and data required to complete the project.

B. Contractor shall document the before and after conditions of all access routes on levees and across private roads and submit for Department review.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

PART 4 PAYMENT

4.01 PAYMENT

A. The contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 14 00

WORK RESTRICTIONS

PART 1 GENERAL

1.01 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section.

1.02 RIGHT OF WAY

A. The Department will furnish right of way for the project as shown on the Drawings. Limits of the right of way will be flagged by the Contractor during construction operations. If the Contractor disturbs such flagging, it shall be replaced by the Contractor as directed at no additional expense of the Department.

B. The Contractor will be allowed to use right of way obtained by the Department as shown for roads and for construction laydown areas. The Department may allow the use of the right of way by others.

1.03 ACCESS RESTRICTIONS

A. Access to the work site is restricted for security purposes. The Contractor shall plan and schedule access to the work site during normal working hours of 6:00 a.m. to 8:00 p.m., Monday through Friday inclusive, excluding legal holidays. If the Contractor requests access to the work site during the hours outside the hours specified above, the Contractor shall request such exception from the Engineer at least 24 hours in advance, and shall proceed only upon approval.

B. Access to the project from the levee crown within the work site shall be provided by the Contractor. Where applicable, the Contractor shall request in writing from the Engineer approval prior to constructing ramps to the repair site and/or laydown area. Ramps shall not be constructed by excavating into the levee slope and shall be no steeper than 2H:1V within 15 feet of either levee toe.

1.04 LOCKED GATES

A. The Contractor shall make arrangements with the Engineer for installing padlocks on the existing gates where applicable. The Contractor shall attach temporary padlocks to the gates in such a manner that all other padlocks will remain operable. The gates shall be kept closed and locked during periods when no site work is being performed.

1.05 WORK PERIODS

A. In-water work shall take place from August 1 to October 31. No in-water work is permitted prior to or after this period. No temporary staging, stockpile of materials, temporary buildings, or equipment shall remain on the levee or in the floodway during flood season.

B. Repair activities in terrestrial habitats that support garter snakes will be completed between May 1 and October 1. This work may continue past October 1 with agency approval to be obtained by the Department, provided earthwork has begun by September 16, ambient air temperatures exceed approximately 75 degrees F during work, and maximum daily air temperatures have exceeded approximately 75 degrees F for at least three consecutive days immediately preceding work.

C. Work within the channels and associated riparian corridors shall be restricted to periods of dry weather and low rainfall (less than 1/4-inch per hour period). The periods of dry weather are when the chance of rain is less than a 30% chance for Site 23-078 and less than a 50% chance for Site 97 as determined by the National Weather Service at the link below. Precipitation forecasts and potential increases of channel flow shall be considered when planning activities. Construction activities shall cease, all equipment and materials removed from the channel, and all associated erosion control measures shall be in place at least 12 hours prior to the onset of precipitation. No work shall occur during a precipitation event. Construction activities halted due to precipitation may resume when precipitation ceases, the National Weather Service's 72-hour weather forecast indicates a 30% chance or less chance of precipitation, and after a dry-out period of 24 hours for rain events. The National Weather Service forecast can be found at: http://www.nws.noaa.gov

1.06 SPEED LIMIT

A. All posted speed limits shall be adhered to. For dirt roads, the speed limit is 10 mph.

1.07 STORAGE OF CONTRACTOR EQUIPMENT AND FUEL

A. Contractor equipment shall be stored at staging areas as shown when not in operation.

B. Contractor fuel trucks and fueling equipment shall be parked at approved storage locations and fueling should only occur in approved staging areas.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

PART 4 PAYMENT

4.01 PAYMENT

A. The contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 22 14

UNIT PRICE MEASUREMENT BY TON

PART 1 GENERAL

1.01 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Materials to be paid for by the ton shall be weighed on sealed scales furnished by the Contractor or on other sealed scales regularly inspected by the State Division of Measurement Standards. Scales shall be suitable for the purpose intended and shall conform to the tolerances and specifications of the State Division of Measurement Standards.

B. The Contractor shall have scales inspected and sealed by the State Division of Measurement Standards or its authorized representatives, as often as the Engineer may determine necessary to ascertain the accuracy of such scales.

C. Platform scales shall be of sufficient size to permit the entire vehicle or combination of vehicles to rest on the scale platform while being weighed. Combinations of vehicles may be weighed as separate units provided they are disconnected while being weighed.

D. Scales shall be operated by a weighmaster licensed in accordance with the provisions of the California Business and Professions Code, Division 5, Chapter 7. The form of a weighmaster certificate shall be as prescribed by Sections 12714, 12714.5, and 12715.

E. The Engineer may be present to witness the weighing. If the weighing is not witnessed by the Engineer, the Contractor shall furnish a Public Weighmaster's certificate, or a certified daily summary weigh sheet.

F. The operator of each vehicle weighed shall obtain a weight slip or load slip from the weigher and deliver the slip to the Engineer at the point of delivery of the material or as directed.

G. Vehicles used for hauling materials shall be weighed empty daily and at such additional times as directed.

H. If material is shipped by rail, the car weights will be accepted, provided that the actual weight of material only will be paid for and not minimum car weights used for assessing freight tariff. Car weights will not be acceptable for material passed through mixing plants.

I. If material is delivered by barge, Contractor shall propose a measurement procedure for approval by the Engineer.

4.02 WEIGHT MEASUREMENT

A. The weight of Aggregate Base to be paid for by the ton will be determined by deducting from scale weights the weight of water in excess of one percentage point more than the optimum moisture content required for compaction. The Engineer will take samples at the point of placement.

B. The weights of Launch Rock, Aggregate Chinking, or similar materials, where no compaction is required, to be paid for by the ton will be determined by deducting from scale weights, the weight of water in the material in excess of three percent of the dry weight of the material.

4.03 PAYMENT

A. The contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 31 19

PROJECT MEETINGS

PART 1 GENERAL

1.01 PRECONSTRUCTION MEETING

A. The Contractor shall attend a preconstruction meeting at Sacramento Project Headquarters as scheduled by the Engineer within seven days from the date of receipt of Notice to Begin Work.

B. Agenda: The meeting agenda will include the following:

1. Construction schedules.
2. Submittal schedules.
3. Certified small business/micro business participation.
4. Discussion of specification requirements.
5. Environmental protection.
6. Progress pay estimates.
7. Inspectors.
8. Quality control/quality assurance plan.
9. Safety.
10. Listing of subcontractors and suppliers.
11. Addressing of letters.
12. Weekly progress meetings.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, other Division 1 sections, and Drawings apply to this section.

1.03 WEEKLY PROGRESS MEETINGS

A. Weekly progress meetings will be held with the Contractor by one or more of the following as determined by the Engineer:

1. Via teleconference.

2. At the work site.

3. At the Sacramento Project Headquarters.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

PART 4 PAYMENT

4.01 PAYMENT

A. The contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 32 16

CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.01 CONTRACTOR'S SCHEDULE

A. Related Sections: General Conditions, Supplementary Conditions, other Division 1 sections, and Drawings apply to this section.

B. Time of Completion: Contractor's time of completion shall adhere to the time of completion specified in Section 01 11 00 – Summary of Work, unless revised as provided in Document 00 72 45 – Prosecution of Work. Any such revisions will be formalized by change order.

C. Schedule General Requirements:

1. The Contractor shall submit to the Engineer a comprehensive, realistic and orderly schedule. The schedule shall present a logical sequence of activities in sufficient detail to show completion of the components of the work within the time specified or any adjustments thereof. The number of activities shall be sufficient to show thorough planning of the work, and to monitor progress.

2. The schedules shall conform to industry standard Critical Path Method (CPM) scheduling in precedence diagram format utilizing Primavera P6 software or equal.

    a. Software equal to Primavera P6 must be capable of:

        1) Generating files that can be imported into Primavera P6.

        2) Comparing two schedules and providing reports of modifications in activity ID, activity description, constraints, calendar assignments, durations, and logic ties.

3. The schedule must utilize the Work Breakdown Structure (WBS) hierarchy to breakdown project deliverables. Project deliverables shall be organized in a manner that clearly identifies the various activities needed to produce the deliverables.

4. Activity codes shall be setup at the project level and, at a minimum, be used to identify responsibility. Activity codes may also be used to identify other reporting needs such as area, locations, work shifts, and memorandum directives.

5. Errors or omissions in the schedule including failure of the schedule to include any element of the work, shall not relieve the Contractor from responsibility for accomplishing the work in accordance with the contract requirements.

6. The project calendar(s) shall be a normal workweek that excludes weekends, and state and union observed holidays. Special calendars for overtime, additional shifts, or access restrictions may also be defined at the Contractor's option. All calendars shall be project specific (not global), and the calendar name shall begin with the project specification number.

7. Constraints shall only be used for the activities specified in Section 01 11 00 – Summary of Work. Mandatory constraints are not allowed within the schedule.

8. All activities shall have a minimum of one predecessor and one successor, except for the Notice to Begin Work and complete balance of work date, as specified in Section 01 11 00 – Summary of Work. The predecessors and successors must be related to the work and be part of the sequential string of activities that are required to complete a task.

9. The critical path is defined as the longest path of activities associated with each time of completion listed in Section 01 11 00 – Summary of Work and any adjustments thereof, where the total float is less than or equal to zero.

10. Each activity shall include a description of the work, work location, calendar ID, and responsibility code to identify who will perform the work.

11. Each on-site activity shall not have a duration of over 20 working days. Activities such as submittals, submittal reviews, procurement, and delivery of materials or equipment may have a duration of over 20 working days.

12. Show Department-owned float as the predecessor activity to complete the balance of work date as specified in Section 01 11 00 – Summary of Work.

D. Float:

1. Contractor may show early completion time on any schedule if the schedule is in conformance with contract requirements. A Baseline Schedule showing work completing in less time than date specified in the Contract, and accepted by the Department, will be considered to have Project Float.

2. Project Float is not for the exclusive use of either the Department or the Contractor but is an expiring resource available to both parties on a nondiscriminatory basis.

3. The Contractor may increase early completion time by improving production, reallocating resources to be more efficient, performing sequential activities concurrently, or by completing activities earlier than planned. This time is a resource for the exclusive use of the Contractor.

4. A request for an extension of time or contract adjustment will be based on the time of completion dates set forth by Section 01 11 00 – Summary of Work. No claim for extension of time or contract adjustment in compensation will be allowed for delays to work scheduled for completion earlier than and completed within the time specified or any adjustments thereof as specified in Document 00 72 45 – Prosecution of Work.

5. The Engineer may accrue Department-owned float by early review completion of any submittal and/or by any other means and methods if such acts save time on the critical path.

6. Department-owned float is a resource for the exclusive use of the Department.

7. The Engineer may request the Contractor to prepare a Time Impact Evaluation (TIE) to determine the effect of Department-owned float. The Engineer documents the Department-owned float by directing the Contractor to update the Department-owned float activity on the next Monthly Updated Schedule.

E. Baseline Schedule:

1. The Contractor shall submit to the Engineer a resource loaded Baseline Schedule within 20 days after the receipt of the Notice to Begin Work.

    a. The Baseline Schedule shall show:

        1) Notice to Begin Work and time of completion dates as designated zero duration (milestone) activities.

        2) On-site activities with planned dates of duration.

        3) Off-site activities including design, procurement, fabrication, and delivery of equipment and materials.

4) The submittals of working drawings, data, and samples as activities, showing date of submittal and review by the Engineer.

5) The sequences for performing the work, including the logical link between time-scaled work activities.

6) Mobilization and demobilization of equipment.

7) Phases of construction.

8) Testing, inspection, hold-points, and notice to the Department for Department-related work.

9) Approvals and permits required by regulatory agencies or other third parties.

10) Time-related access restrictions to, and limitations on availability of, work area.

2. The Contractor shall submit a Baseline Schedule Narrative as part of the schedule submittal explaining the general approach to the schedule preparation. The narrative shall include:

   a. General work plan.

   b. Basis and assumptions used for preparing the schedule.

   c. Contractor’s schedule structure.

   d. Critical path summary.

   e. Sequencing and other constraints.

   f. Work hours, holidays, and nonworking days.

3. The Contractor shall submit with the Baseline Schedule an estimate of earnings/cash flow by month.

4. Acceptance of the Baseline Schedule or any updates by the Engineer does not relieve the Contractor of responsibility for scheduling, sequencing, and prosecuting the work to comply with the requirements of the contract.

5. The Engineer can, at any time, require the Contractor to adjust, revise, or clarify any portion of the schedule deemed insufficient for monitoring of the work.

6. Submittal of the Baseline Schedule and subsequent updated schedules will be considered the Contractor's representation that the submitted schedule meets all the requirements of the Contract and that work will be executed in the sequence indicated on the submitted schedule.

7. The Baseline Schedule and each revision thereof shall conform to the requirements in Paragraphs 1.01.C and 1.01.J, Schedule General Requirements, and Schedule Deliverables and Section 01 33 00 – Submittal Procedures.

8. The Baseline Schedule shall show the activities that define the critical path. Use of multiple critical paths and near-critical paths shall be kept to a minimum.

9. The Baseline Schedule shall not extend beyond the number of original working days or time of completion specified in Section 01 11 00 – Summary of Work.

10. The Baseline Schedule shall start with the Notice to Begin Work.

11. A Baseline Schedule showing negative float will be rejected.

12. The resources (craft type and hours) must be clearly identified for each activity in the Baseline Schedule.

13. No payment beyond the first progress payment will be made without an accepted Baseline Schedule.

F. Monthly Updated Schedule:

1. The Contractor shall submit to the Engineer a Monthly Updated Schedule on the 21st of the month or a date determined by the Engineer.

2. Each Monthly Updated Schedule shall be the same format as and extracted from the accepted Baseline Schedule.

3. Each Monthly Updated Schedule shall only reflect the status of the work for the previous month showing:

   a. Actual start dates.

   b. Actual finish dates.

   c. Estimated duration and finish date for all activities in progress.

   d. Physical percent complete for activities in progress.

e. Nonworking days if granted by the Engineer.

f. The current critical path for the remainder of the project from the data date to the last activity of the project.

g. Preparation and review cycle time for any resubmittal.

4. Any proposed modifications to the schedule shall be submitted or if directed by the Department in the form of a:

   a. Fragnet.

   b. Time Impact Evaluation (TIE).

   c. Executed Change Order.

   d. Recovery Schedule.

   e. Revision Schedule.

5. As part of the Monthly Updated Schedule, the Contractor must prepare a Schedule Progress Narrative with all applicable documents including the modifications between the previous Monthly Updated Schedule and current Monthly Updated Schedule. The review period does not start until the previous month's required Monthly Updated Schedule is accepted. The narrative shall describe:

   a. Modifications in schedule logic, work sequence, and activity duration.

   b. The physical progress and work completed during the report period.

   c. Description of the current critical path.

   d. Modifications to the critical path and scheduled completion date since the last Monthly Updated Schedule submittal.

   e. Contractor's plans for continuing the work during the forthcoming report period, and actions planned to correct work that is behind schedule.

   f. Discussion of potential delays and problems and their impact on performance and time of completion dates.

   g. Reasons for early or late scheduled completion dates in comparison to the specified contract completion dates.

G. Final Updated Schedule:

1. A Final Updated As-built Schedule with actual start and finish dates for all activities and time of completion dates must be submitted prior to certification of completion of the work under Document 00 72 46 – Control of Work.

2. The Contractor shall certify that the Final Updated As-built Schedule reflects the actual start and finish dates of all the activities for the project.

H. The Engineer will review and return the Baseline Schedule within 15 days and the Monthly Updated Schedules within 10 days after receipt of all information required under this section. A schedule designated “REJECTED” or “DEFECTS NOTED” shall be revised or corrected and resubmitted to the Engineer within seven days after its receipt by the Contractor.

I. Weekly Two-Week Look-Ahead Schedule:

1. Each week the Contractor shall update the Weekly Two-Week Look-Ahead Schedule and email to the Engineer an electronic copy two days prior to the Weekly Progress Meeting. The Weekly Two-Week Look-Ahead Schedules shall be extracted from and show a greater level of detail than the latest Monthly Updated Schedule.

2. The Weekly Two-Week Look-Ahead Schedules shall include activities in progress and activities that are scheduled to start two weeks from the Monthly Updated Schedule.

J. Schedule Deliverables:

1. The following shall be loaded onto the designated secure server with the Baseline Schedule and Monthly Updated Schedules. All submitted schedules must be identified by the designated Department submittal number:

a. Computer files of the schedule which shall be in Primavera P6 (.xer file) or equal as required in Paragraph 1.01.C.2.

b. Schedule Narrative or Schedule Progress Narrative as described in Paragraph 1.01.E.2 and Paragraph 1.01.F.4.

c. Electronic copy of the Primavera schedule layout(s) (.plf file).

2. The Engineer may withhold all or part of a progress payment under Document 00 72 48 – Payments and Retentions, when the

Contractor has failed to provide schedules as specified here and in Paragraphs 1.01.E.1, 1.01.F.1, 1.01.H and 1.03.A.

1.02 RECOVERY SCHEDULE AND SCHEDULE REVISION

A. If the Monthly Updated Schedule is projecting a delay of more than five working days to the critical path or completion date considering all granted time extensions, the Engineer may order the Contractor to submit a Recovery Schedule. The Recovery Schedule shall illustrate the impacts or delay on the current scheduled time of completion dates. The Recovery Schedule shall show a detailed and realistic plan to complete the project on time. The approval process, contents, and deliverables shall be the same as for the Baseline Schedule.

B. The Engineer can, at any time, request a Revised Schedule due to modifications to contract specifications and/or drawings. The approval process, contents, and deliverables shall be the same as for the Baseline Schedule.

1.03 TIME IMPACT EVALUATION AND TIME EXTENSION

A. Any written documentation or analysis submitted in accordance with Document 00 72 45 – Prosecution of Work shall include a Time Impact Evaluation (TIE) which includes both a written narrative and a fragmentary network (fragnet) depicting how the changed work or delay affects the critical path. An electronic copy of the schedule in the required format, including a layout to illustrate the fragnet, shall be provided with the TIE.

B. The TIE must be submitted within 30 days after a notice of the occurrence is provided in accordance with Document 00 72 45 – Prosecution of Work. If the Contractor does not submit a TIE within 30 days after notice of the occurrence, the Contractor waives all rights for a time extension for that occurrence under Document 00 72 45 – Prosecution of Work.

C. The TIE must use the accepted schedule that has a data date closest to and before the date the delay occurred. If the Engineer determines that the accepted schedule used does not appropriately represent the conditions before the delay, the accepted schedule must be updated to the day before the delay being analyzed.

D. The fragnet shall identify the predecessors to the new activities and demonstrate the impacts to successor activities. If the fragnet shows that incorporating the event modifies the critical path and the contract completion date(s) of the accepted schedule, the difference between the scheduled completion dates of the two schedules will be used as the basis for determining the time extension to the contract.

E. Show only actual as-built work, not unauthorized modifications related to subsequent updated schedules.

F. Schedule modifications authorized by a change order shall be shown on the next Monthly Updated Schedule.

G. The controlling cause of delay will be determined by using the critical path defined in Paragraph 1.01.C.9.

H. The Department will not be liable to the Contractor for any constructive acceleration or other impacts from failure to grant time extensions if caused in whole or in part by the failure of the Contractor to comply with the submission requirements for time extension requests.

I. Allow 30 days for review of submitted TIE. Accepted TIE schedule modifications shall be shown on the next Updated Schedule. The contents and deliverables shall adhere to Paragraph 1.01 J.1.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

PART 4 PAYMENT

4.01 PAYMENT

A. The contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.01 SUBMITTAL REQUIREMENTS

A. Description:

1. This section covers the submittal requirements. The Contractor shall provide submittals as described in this section. The types of submittals are listed in the Submittal Register in Paragraph 3.01.

2. Supplementary Conditions, General Conditions, other Division 1 sections, and Drawings apply to this section.

B. General:

1. Pursuant to Document 00 72 44 – Contractual Relationship of Parties, and Document 00 72 46 – Control of Work, the Contractor shall furnish submittals as are required for control of the work.

2. Neither the review nor lack of review of submittals shall waive the requirements of the contract or relieve the Contractor of any obligations thereunder.

3. The Contractor shall check, correct, and sign submittals prior to submission, whether they are prepared by the Contractor or others.

4. The Department will provide a descriptive name for certain Submittals that is defined in the Submittals Paragraph or elsewhere within the Specification Document or Section that requires the Submittal. The descriptive names provided by the Department will also appear in the Submittal Register under the column heading, “Description of Submittal”.

5. Submittals that have not been given a descriptive name by the Department and do not appear in the Submittal Register will be referred to as Ad Hoc and shall be named by the Contractor at time of Submission.

6. Each Submittal shall be designated by a Submittal Title which includes the following:

1) Specification Document or Section Number.

2) Paragraph Number.

3) Descriptive name defined in the Submittals Paragraph or elsewhere within the Specification Document or Section that requires the Submittal, unless the submittal is considered Ad Hoc.

7. All items listed below the descriptive name within the Specification Document or Section that requires the Submittal are to be incorporated into a single Submittal.

C. Identification of Submittals:

1. The Department (DWR) File Number is defined as follows:

a. The DWR File Number consists of a prefix followed by a hyphen and then a sequential number beginning with "101".The prefix for this project is "P135". Thus, the first submittal would be identified by DWR File Number "P135-101"; the second submittal would be "P135-102", and so on.

2. Submittals, including each drawing, shall be clearly identified by the DWR File Number, Submittal Title, the Contractor's name, Contract Number, project name and location, Specification Number, and description and location of applicable portions of the project.Submittals shall be in English language and units shall be in the English system of units, as used in the United States.

3. Resubmittals shall be identified by the DWR File Number under which they were initially submitted, plus an alphabetical suffix beginning with the letter "A".Thus, resubmittal of the first submittal would be identified by DWR File Number "P135-101A"; the second resubmittal of this same package would be "P135-101B"; and so on until the submittal is approved.

4. Where applicable, Submittals shall reference the Specification Document or Section Number, Bid Item Number(s) and Contract Drawing Sheet Number(s).

D. Time of Submission:

1. The Contractor shall furnish submittals as specified and in such manner and sequence that they may be inspected in an orderly manner prior to performance of the work.

2. The Contractor shall submit all related information necessary for such inspection.

E. Method of Transmittal:

1. Submittals shall be sent to the Engineer electronically by uploading to the Department's designated secure server location, except for samples and operation and maintenance (O&M) instructions, which shall be sent in hard copy by certified mail or approved delivery service.

2. The Engineer will return submittals to the Department's designated secure server location and will notify the Contractor by e-mail when the returned submittal is uploaded. The Engineer will return hard copy samples and O&M instructions by certified mail or approved delivery service.

F. Definition of Received and Returned:

1. Submittals and resubmittals will be considered received by the Engineer on the date the Department receives an e-mail notification that the submittal has been uploaded to the Department's designated server location, provided the submittal has been properly uploaded as determined by the Engineer. If the e-mail is sent after 15:30 California local time or on a weekend or State holiday, the official date received will be the next business day. Submittals and resubmittals of hard copy samples and O&M instructions will be considered received by the Engineer on the date the Department receives them by certified mail or approved delivery service.

2. Submittals will be considered returned to the Contractor on the date the Engineer sends the Contractor an e-mail that the returned submittal has been uploaded to the Department's designated server location, provided the submittal has been properly uploaded.Submittals of hard copy samples and O&M instructions will be considered returned to the Contractor on the date the Engineer mails or dispatches them to the Contractor.

3. Submittals will be considered received by the Contractor on the date the Engineer sends an e-mail notification that the submittal has been uploaded to the Department's electronic server location, provided the submittal has been properly uploaded. Submittals of hard copy samples or O&M instructions will be considered received by the Contractor on the date the Contractor receives them by mail or delivery service.

1.02 CERTIFIED SMALL BUSINESS/MICRO BUSINESS (SB/MB) PARTICIPATION

A. It is the Department's intent to promote the participation of certified Small Business/Micro Business (SB/MB) enterprises in construction projects and to achieve the Department's SB/MB Enterprises goal of 25 percent.

B. Information that pertains to work expected to be done by certified SB/MB subcontractors or suppliers will be required from the awarded Contractor only. This information is not required as part of the bid package.

C. The information shall be submitted within 15 days from the date of receipt of the notice to begin work. The information includes the following:

1. Where applicable, the Contractor shall include all certified SB/MB subcontractors or suppliers that contribute to contract performance and may include proportionate share of products and services that are normally allocated as indirect costs.

2. Names and addresses of the certified SB/MB subcontractors or suppliers.

3. The amounts estimated to be paid to the certified SB/MB subcontractors or suppliers.

4. Description of the work to be done by the certified SB/MB subcontractors or suppliers.

D. The information provided is intended to be a best estimate of certified SB/MB participation for the contract. Submittal of this information will not obligate Contractor to provide these amounts or percentages to certified SB/MB Businesses except as would otherwise be required by law.

E. The Contractor, upon completion of work, shall report to the Department the actual percentage of Small Business/Micro Business (SB/MB) participation that was achieved.

F. Submit the information as specified in Paragraph 1.01 E.

1.03 SUBMITTALS

A. The Contractor shall submit the following:

1. Certified Small Business/Micro Business (SB/MB) Participation:

a. Incorporating the requirements of Paragraph 1.02 C of this section.

2. SB/MB Participation:

a. Incorporating the requirements of Paragraph 1.02 E of this section.

3. Submittal Schedule:

a. Incorporating the requirements of Paragraph 1.04 C of this section.

4. Quality Control Procedures:

a. Incorporating the requirements of Paragraph 1.05 A of this section.

5. End of Construction Summary Report:

a. Incorporating the requirements of Paragraph 1.05 D of this section.

1.04 WORKING DRAWINGS AND DATA

A. General:

1. Each submittal of working drawings and data in the form of reproducible prints and optional electronic media shall be accompanied by a letter containing a list of titles and numbers of the drawings and data submitted as specified in Paragraph 1.01 C, Identification of Submittals. A title shall be included on each working drawing and data sheet identifying the feature or features shown on the working drawing or data sheet.

2. Working Drawings:

a. General: Working drawings shall conform to ANSI Standard Y14.1, Engineering Drawing Sheet Size D (22 inch by 34 inch), or larger unless otherwise approved. Working drawings may include, without limitation, equipment assembly drawings, shop drawings, electrical schematics, wiring diagrams, pipe layouts and similar working drawings. The working drawings shall

contain required plan views, cross sections, details, and other information necessary for the work. Working drawings shall be drawn to scale.

3. Data:

   a. Data on materials and equipment may include, without limitation, materials and equipment lists, parts list, instruction sheets, catalog data sheets, performance curves, diagrams, samples and similar descriptive material. Data on materials and equipment shall contain the name and location of the supplier or manufacturer, telephone number, trade name, catalog reference, model number and all other pertinent data.

4. The Contractor shall submit:

   a. Samples in triplicate.

   b. One copy of each Computer-Aided Drafting (CAD) drawing file on separate electronic file:

      1) The files shall be labeled with the specification number, contract number, project name, and location as specified in Paragraph 1.01 C, Identification of Submittals.

      2) The CAD drawing files and other data shall be submitted in Adobe PDF format and AutoCAD 2022. Each file shall contain only one drawing. Other formats of the files will be considered acceptable provided the Department has the proper software to read the files.

      3) The following information shall be submitted with the electronic files:

         a) Name of software used to create the drawings and files.

         b) An index correlating drawing titles and file names for each electronic submittal package.

B. Inspection and Revision:

1. The Engineer will inspect and return working drawings and data within 7 days after receipt thereof, or within 7 days after receipt of all related information necessary for such inspection, whichever is later. After review, electronic copies of each working drawing and two copies of data will be returned, marked “NO APPARENT DEFECTS”, “DEFECTS NOTED”, “DEFECTS NOTED,

RESUBMITTAL WAIVED", or "REJECTED".Defects discovered on inspection will be indicated on the working drawing or data, or otherwise communicated to the Contractor in writing.

2. Samples to be incorporated in project will be returned, together with a written notice designating the sample:

   a. "NO APPARENT DEFECTS",

   b. "DEFECTS NOTED, RESUBMITTAL WAIVED",

   c. "DEFECTS NOTED",

   d. "REJECTED" and indicating defects discovered on inspection, or

   e. "NO ACTION TAKEN" for information only.

   f. Other samples not going to be incorporated in project will not be returned, but the same notice will be given with respect thereto, and such notice shall be considered a return of the sample.

3. A working drawing or data designated "REJECTED" or "DEFECTS NOTED" shall be revised or corrected and resubmitted in its entirety to the Engineer within 7 days after its receipt by the Contractor, unless revision or correction is waived by the Engineer.Resubmittal of just the corrections and not the entire submittal will not be accepted unless directed.

   a. Such resubmittals will be reinspected and returned in the same manner as original drawings and data within 7 days after receipt thereof, or within 7 days after receipt of all related information necessary for such reinspection, whichever is later.

   b. Any revised drawing or data designated "DEFECTS NOTED" or "REJECTED" and any corrected sample so designated shall be further reinspected or corrected in accordance with the foregoing procedures.

4. The Contractor may proceed with any work covered by a working drawing or data designated "NO APPARENT DEFECTS" or "DEFECTS NOTED, RESUBMITTAL WAIVED" provided the Contractor complies with the comments noted. The Contractor may also proceed with the unaffected portions of the work covered by a working drawing or data designated "DEFECTS NOTED"; and, if resubmittal is expressly waived in writing, may proceed with any work covered by such working drawing or data, provided that the

Contractor proceeds in accordance with the Engineer's notes and comments.

5. The Contractor shall not begin any work covered by a working drawing or data designated "REJECTED", or any portion of work noted as defective on a working drawing or data designated "DEFECTS NOTED" if resubmittal is not expressly waived in writing.

C. Submittal Schedule:

1. The Contractor shall submit to the Engineer a Submittal Schedule for submission of working drawings and data within 20 days after receipt of notice to begin work. Such schedule shall list working drawings and data and the number of days after the receipt of notice to begin work that working drawings and data shall be submitted.

2. Working drawings and data shall be in such manner and sequence that they may be inspected in an orderly manner before the subject portions of the work are performed.

3. The Submittal Schedule will be inspected by the Engineer and the Contractor shall correct any defects noted.

a. The Submittal Schedule shall present a complete and current plan for orderly submission of such drawings and data.

b. The Contractor shall promptly notify the Engineer of any occurrence requiring substantial revision of the Submittal Schedule and shall furnish a revised schedule within 15 days of such occurrence.

c. The Contractor shall also provide the Submittal Schedule in the i-Calendar format.

d. Revised schedules will be inspected and corrected in the same manner as the original schedule.

1.05 QUALITY CONTROL PROGRAM

A. In addition to Document 00 72 46 – Control of Work, the Contractor shall provide and maintain a quality control program to ensure compliance with quality standards of the contract. Within 7 days after receipt of notice to begin work, the Contractor shall submit to the Engineer for approval a copy of the quality control procedures to be used on the contract. The Contractor's quality control procedures shall, at a minimum, include the following items:

1. Methods and procedures that will be taken to ensure that all materials and completed construction required by this contract conform to contract plans, specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.

2. Testing Plan: The testing plan shall include the minimum tests and test frequencies required by each technical specification item, as well as any additional quality control tests that the Contractor deems necessary to adequately control production and/or construction processes. The testing plan can be developed in a spreadsheet fashion and shall, at a minimum, include the following:

    a. Specification item number.

    b. Test type (e.g., gradation, compaction).

    c. Test standard (e.g., ASTM test number, as applicable).

    d. Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated).

    e. Responsibility (e.g., field or lab technician).

    f. Control requirements (e.g., target test result, permissible deviations).

    g. Testing schedule.

B. The Contractor shall provide sufficient qualified quality control personnel to monitor each work activity at all times. If a construction activity is found to have an unacceptable level of quality control technicians or inspectors, the activity may be suspended by the Engineer until an approved level of quality control direction is provided

C. The Contractor shall maintain quality control records of all inspections and tests performed. These records shall include documentation that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken. All quality reports shall be provided to the Engineer no later than 24 hours after completion of each test.

D. An End of Construction Summary Report shall be prepared and submitted within 15 days of the Contractor’s certification that the work is completed under Document 00 72 46 – Control of Work. The Final

Construction Summary Report shall include, but is not limited to the following:

1. Statement signed by the Contractor certifying that the project was constructed in accordance with the plans and specifications.
2. Final Quality Control Plan with all accepted changes approved by the Engineer
3. Test result summaries (both passing and failing with retest results).
4. List of construction deficiencies and corrective actions.
5. Summary of frequency of testing, distribution of soil and rock testing results, and laboratory and field test results.
6. Daily Quality Control Documentation.
7. Summary of punch list and final inspection results.

E. The Engineer will monitor the Contractor's methods, procedures and processes for compliance with the quality control program and the quality standards of the contract. Failure of the Contractor to maintain the quality control program throughout all phases of the work will be considered a failure to prosecute the work with the diligence specified by the contract.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 SUBMITTAL REGISTER

A. The Contractor shall coordinate the Submittal Register with the requirements of the specification, and the listing of the submittals in the Submittal Register shall not relieve the Contractor from providing additional submittals specified.

SUBMITTAL REGISTER

DIVISION NO.	SPECFICATIONNO.	PARAGRAPH NO.	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL						CONTRACTOR SCHEDULED DATES
				WORKING DRAWINGS	SAMPLE	MFR' S DATA	CERT.	TEST REPORT	OTHER AS SPECIFIED	SUBMIT BY 01 33 00, 1.04 C, No. of days(1), or as specified
00	00 21 26 – INSTRUCTIONS FOR DVBE GOAL AND INCENTIVE									
	00 21 26	6.B	Document 00 21 26-1 DVBE Quarterly and Final Report						X	Quarterly and after completion (prior to acceptance)
		6.C	Document 00 21 26-2 Certification of DVBE Participation Upon Contract Acceptance						X	Upon acceptance of the contract
		6.E	Document 00 21 26-3 DVBE Percentage Achieved and Certification of Total Payment to Prime Contractor						X	After receipt of final contract payment
	00 72 41 – HEALTH AND SAFETY REQUIREMENTS									
	00 72 41	2	Safety Prequalifications						X	Prior to start of on-site work
		6.A	Injury and Illness Prevention Program (IIPP)						X	15 days prior to start of on-site work
		6.B	Written Safety Program and Code of Safe Practices						X	15 days prior to start of on-site work
		7	Pre-Work Safety Plan (PWSP)						X	15 days prior to start of on-site work
		8	Site Specific Emergency Response Plan (ERP)						X	15 days prior to NTBW
		9.A	Fire Prevention and Control Plan						X	15 days prior to start of on-site work
		12.A	Heat Illness Prevention Plan (HIPP)						X	15 days prior to start of on-site work
		13.D	Safety Data Sheets (SDS)						X	
		14.A.1	Program for Confined Space Entry and Permit Required Confined Space Entry						X	15 days prior to entering confined space
		14.B	Fall Protection Plan						X	If work involves fall hazards, 15 days prior to start of on-site work
		14.C.4	Trenching and Excavation: Competent Person						X	
		14.D	Scaffolds: Qualified Person						X	
		14.E	Formwork, Falsework, and Vertical Shoring	X					X	30 days prior to use
	00 72 43 – COMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS									
	00 72 43	12.A	Environmental Product Declaration (EPD)						X	15
	00 72 44 – CONTRACTUAL RELATIONSHIP OF PARTIES									
	00 72 44	5.A	Certificates of Insurance						X	15
	00 72 46 – CONTROL OF WORK									
	00 72 46	3.B.1	Qualifications and experience of the Contractor's Representative				X			15

(1) Number of days from receipt of Notice to Begin Work or time scheduled by Contractor in 01 33 00, 1.04 C, Submittal Schedule.

SUBMITTAL REGISTER

DIVISION NO.	SPECFICATIONNO.	PARAGRAPH NO.	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL						CONTRACTOR SCHEDULED DATES
				WORKING DRAWINGS	SAMPLE	MFR' S DATA	CERT.	TEST REPORT	OTHER AS SPECIFIED	SUBMIT BY 01 33 00, 1.04 C, No. of days(1), or as specified
01	01 22 14 – UNIT PRICE MEASUREMENT BY TON									
	01 22 14	4.01 E	Public Weighmaster's certificate				X			At time of weighing
		4.01 F	Weight slips						X	At time of delivery
	01 32 16 – CONSTRUCTION PROGRESS SCHEDULE									
	01 32 16	1.01 E	Baseline Schedule						X	20
		1.01 F	Monthly Updated Schedule						X	Monthly
		1.01 G	Final Updated Schedule						X	At Completion
		1.01 I	Weekly Two-Week Look-Ahead Schedule						X	2 days prior to each weekly progress meeting
		1.03 B	Time Impact Evaluation						X	Within 30 days after notice of the occurrence
	01 33 00 – SUBMITTAL PROCEDURES									
	01 33 00	1.03 A.1	Certified Small Business/Micro Business (SB/MB) Participation						X	15
		1.03 A.2	SB/MB Participation						X	At completion
		1.03 A.3	Submittal Schedule						X	20
		1.03 A.4	Quality Control Procedures						X	7
		1.03 A.5	End of Construction Summary Report						X	Within 15 days of Contractor's certification that the work is completed
	01 55 26 – TEMPORARY TRAFFIC CONTROL									
	01 55 26	1.04 A	Traffic Control and Work Site Safety Plan	X					X	15 days prior to start of on-site work
		1.04 B	Encroachment Permits						X	Prior to any work requiring the permit
		1.04 C	Approved Traffic Control Plan						X	
	01 56 26 – TEMPORARY FENCING									
	01 56 26	1.03 A	Fencing Plan						X	Prior to installing Temporary Fencing and Giant Garter Snake Fencing
	01 56 39 – TEMPORARY TREE AND PLANT PROTECTION									
	01 56 39	1.04 A	Tree Protection Plan						X	14
		1.04 B	Material Sample		X				X	
	01 57 23 – TEMPORARY STORM WATER POLLUTION CONTROL									
	01 57 23	1.04 A.1	Water Pollution Control Program (WPCP)	X					X	Within 14 days of NTBW and 14 days prior to mobilization

(1) Number of days from receipt of Notice to Begin Work or time scheduled by Contractor in 01 33 00, 1.04 C, Submittal Schedule.

SUBMITTAL REGISTER

DIVISION NO.	SPECFICATIONNO.	PARAGRAPH NO.	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL						CONTRACTOR SCHEDULED DATES
				WORKING DRAWINGS	SAMPLE	MFR' S DATA	CERT.	TEST REPORT	OTHER AS SPECIFIED	SUBMIT BY 01 33 00, 1.04 C, No. of days(1), or as specified
01	01 57 23	1.04 A.2	Stormwater Pollution Prevention Plan (SWPPP)	X					X	Within 14 days of NTBW and 14 days prior to mobilization
	01 71 13 – MOBILIZATION									
	01 71 13	1.03 A	Equipment List						X	
		1.03 B	Mobilization and Demobilization Work Plan						X	
	01 71 23 – CONSTRUCTION SURVEYING									
	01 71 23	1.04 A.1	Pre-Construction surface data in Civil 3D and land XML	X					X	Prior to beginning any ground disturbing activity
		1.04 A.2	Post-Excavation surface data in Civil 3D and land XML	X					X	Prior to placement of any fill material(s)
		1.04 A.3	Launch Rock spot elevation data in Civil 3D and Shapefile	X					X	
		1.04 A.4	Post-Backfill surface data in Civil 3D and land XML	X					X	
		1.04 A.5	Post-Construction surface data in Civil 3D and land XML	X					X	
		1.04 A.6	Survey data volumes used for quantity measurements in PDF						X	
		1.04 B.1	Stamped and signed full size as-constructed Drawings	X					X	
		1.04 C	License Verification				X			5 days prior to beginning survey services
		1.04 D	Corner Records or Record of Survey						X	5 days prior to any soil disturbance
		1.04 E	Professions Code 8771 Documentation Compliance						X	5 days prior to construction work
	01 74 19 – CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL									
	01 74 19	1.04 A	Solid Waste Disposal and Recycling Quarterly Reports					X	X	
		1.04 B	Solid Waste Disposal and Recycling Final Report					X	X	
31	31 00 00 – EARTHWORK									
	31 00 00	1.04 A	Material Sources						X	
		1.04 B	Soil Characterization Test Results					X	X	
		1.04 C	Earthwork Plan						X	Prior to beginning earthwork
		1.04 D	Earthfill Laboratory Tests					X		
		1.04 E	Earthfill Field Tests					X		
		1.04 F	Turbidity Control Measures						X	

(1) Number of days from receipt of Notice to Begin Work or time scheduled by Contractor in 01 33 00, 1.04 C, Submittal Schedule.

SUBMITTAL REGISTER

DIVISION NO.	SPECFICATIONNO.	PARAGRAPH NO.	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL						CONTRACTOR SCHEDULED DATES
				WORKING DRAWINGS	SAMPLE	MFR' S DATA	CERT.	TEST REPORT	OTHER AS SPECIFIED	SUBMIT BY 01 33 00, 1.04 C, No. of days(1), or as specified
31	31 05 19 – GEOSYNTHETICS FOR EARTHWORK									
	31 05 19	1.03 A	Manufacturer's Data			X			X	
		1.03 B	Equipment List						X	
		1.03 C	Work Plan						X	
	31 11 00 – CLEARING AND GRUBBING									
	31 11 00	1.04 A	Clearing and Grubbing Plan						X	
		1.04 B	Tree Trimming Request				X		X	5 days prior to trimming trees
	31 25 00 – EROSION AND SEDIMENTATION CONTROLS									
	31 25 00	1.03 A	Manufacturer's Data and Sample		X	X			X	
32	32 11 23 – AGGREGATE BASE COURSES									
	32 11 23	1.04 A	Supplier's Certification				X		X	
		1.04 B	Aggregate Base Source						X	
		1.04 C	Aggregate Base Tests					X	X	
	32 80 00 – IRRIGATION									
	32 80 00	1.03 A	Irrigation System Installation Plan						X	
	32 90 00 – PLANTING									
	32 90 00	1.04 A	Pole Cuttings Material Source			X			X	
		1.04 B	Pole Cuttings Installation Plan						X	7 days prior to installation
	32 90 20 – PLANT AND SEED ESTABLISHMENT									
	32 90 20	1.04 A	Irrigation and Maintenance Plan						X	
		1.04 B	Monthly Establishment Log						X	Within 5 working days following the end of each month
		1.04 C	Final Establishment Report						X	
	32 92 19 – SEEDING									
	32 92 19	1.04 A	Landscape Contractor Qualifications				X		X	Within 30 days of NTBW
		1.04 B	Soil Testing Agency Qualifications				X		X	Within 30 days of NTBW
		1.04 C	Seeding Implementation Schedule and Placement Plan	X					X	
		1.04 D	Equipment List						X	
		1.04 E	Existing Soil Test Reports					X		
		1.04 F	Material List				X		X	
		1.04 G	Installation Maintenance Log						X	
		1.04 H	Post-Construction Seeding Extents	X						

(1) Number of days from receipt of Notice to Begin Work or time scheduled by Contractor in 01 33 00, 1.04 C, Submittal Schedule.

SUBMITTAL REGISTER

DIVISION NO.	SPECFICATIONNO.	PARAGRAPH NO.	DESCRIPTION OF SUBMITTAL	TYPE OF SUBMITTAL						CONTRACTOR SCHEDULED DATES
				WORKING DRAWINGS	SAMPLE	MFR' S DATA	CERT.	TEST REPORT	OTHER AS SPECIFIED	SUBMIT BY 01 33 00, 1.04 C, No. of days(1), or as specified
35	35 42 38 – ROCK SLOPE PROTECTION									
	35 42 38	1.04 A	Material Certification				X		X	
		1.04 B	Borrow Source						X	
		1.04 C	Quarry Certification				X		X	
		1.04 D	Borrow Source and Test Results					X	X	
		1.04 E	Transport, Stockpile, and Placement Plan						X	

(1) Number of days from receipt of Notice to Begin Work or time scheduled by Contractor in 01 33 00, 1.04 C, Submittal Schedule.

PART 4 PAYMENT

4.01 PAYMENT

A. The contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 55 26

TEMPORARY TRAFFIC CONTROL

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Temporary Traffic Control, which includes providing temporary barricades, traffic control, flagging, and other safety measures needed to control ingress and egress of vehicular traffic accessing the work sites.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section.

1.03 REFERENCES

A. The following publications form a part of this specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 – Interpretation of the Contract:

1. California Department of Transportation (Caltrans) Standard Specifications, 2025.

    a. Section 7-1.03 – Public Convenience.

    b. Section 7-1.04 – Public Safety.

    c. Section 12 – Temporary Traffic Control.

2. California Manual on Uniform Traffic Control Devices, 2026.

    a. Part 6 – Temporary Traffic Control.

1.04 SUBMITTALS

A. Traffic Control and Work Site Safety Plan. The plan shall be prepared in consultation with applicable agencies and including the following features:

1. Description of required barricades, warning signs, warning lights, construction area signs, flag persons, and/or temporary fencing.

2. Drawings of the work site showing proposed traffic control devices and locations of the safety features.

3. Description of traffic control measures.

4. Description and images of the locations of staging areas, construction parking, and where construction traffic will be entering and exiting public roadways.

5. Description and images of the travel path at the worksite that construction traffic will follow.

B. Encroachment permits obtained from applicable agencies prior to performing any work requiring the permit.

C. Approval of the Traffic Control Plan obtained from applicable agencies.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 TRAFFIC CONTROL

A. Obtain encroachment permits from applicable agencies for transporting any materials to and from the worksite including the following:

1. County roadway encroachment permits from applicable County as required for work on county roads.

B. Traffic control measures shall conform to the California Manual on Uniform Traffic Control Devices 2026 Edition, Part 6: Temporary Traffic Control.

C. Furnish, install, operate, maintain, and remove when no longer required, traffic control and protective devices required by the approved Traffic Control and Work Site Safety Plan.

D. Public access to the work site and staging areas shall be prohibited by signs and barriers until final acceptance.

E. Construction activity shall not interfere with vehicular traffic. The Contractor shall comply with Caltrans Standard Specifications, Section 7.1.03, Section 7.1.04, and Section 12.

F. Traffic control and protective devices shall include temporary directional warning signs and danger signals; temporary barricades and guard rails; crash cushions; temporary lighting and flashing lights.

G. Temporary Traffic Control measures may include installation of temporary pavement markings, removal of permanent and temporary

pavement marking, and the service of qualified flag persons as required.

H. Permanent pavement markings that are removed shall be replaced prior to final acceptance.

I. Minimize traffic impacts as follows:

1. Provide traffic control signs as required where construction traffic uses or impacts public roads and highways.

2. Provide flag persons as required to assist in maintaining traffic flow to and from the worksite during construction hours.

3. Construction equipment and materials shall not be stored within public road travel lanes or road shoulders.

4. Configure construction parking to minimize interferences with local traffic.

3.02 PUBLIC SAFETY/PUBLIC SERVICE

A. Police, fire, transit, public works, and other public agencies that may be impacted by construction traffic shall be advised prior to initiating construction.

B. Provide adequate barriers and protection measures to prevent pedestrians from entering an active construction area or open trenches.

C. At the end of each workday secure the work area to prevent pedestrians from walking into potentially dangerous environments. Measures shall include installing temporary fencing as specified in Section 01 56 26 – Temporary Fencing, warning lights, and other protection measures as required.

3.03 SPECIFIC REQUIREMENT

A. The protection of the limits of work from traffic and/or other sources is the Contractor’s responsibility. Any damage to pavement during placement or removal of traffic control and protective devices shall be repaired at the Contractor’s expense.

PART 4 PAYMENT

4.01 PAYMENT

A. The contract price will be paid for TEMPORARY TRAFFIC CONTROL; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 56 26

TEMPORARY FENCING

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract items Temporary Fencing and Giant Garter Snake Fencing.

1. The contract item Temporary Fencing includes:

a. Furnishing and installing Temporary Fencing around the perimeter of Site 97, including staging, laydown and spoils areas, prior to starting construction activities.

b. Furnishing and installing Temporary Fencing around trees, shrubs, and bushes to be protected as designated on the Drawings or in the permits obtained to perform the work.

c. Maintaining fencing during construction and removing the Temporary Fencing from the work site as the Contractor's property after the construction work is completed.

2. The contract item Giant Garter Snake Fencing includes:

a. Furnishing and installing Giant Garter Snake Fencing and equipment access gates at Site 23-078 prior to starting construction activities.

b. Maintaining fencing and equipment access gates during construction and removing the Giant Garter Snake Fencing and equipment access gates from the work site as the Contractor’s property after the construction work is completed.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section.

1.03 SUBMITTALS

A. Fencing Plan:

1. Prior to installing Temporary Fencing and Giant Garter Snake Fencing, provide a fencing plan which includes the following features:

a. Material type and properties.

b. Methods, sequence, and schedule of material installation.

c. Layout of material placement which shows the avoidance of trees.

d. Methods of stockpiling materials.

PART 2 PRODUCTS

2.01 TEMPORARY FENCING MATERIALS

A. The fencing posts shall be studded steel T-posts with a minimum height of six feet and fitted with safety caps.

B. The Temporary Fencing material shall be 4 feet high orange safety fencing with UV protection.

2.02 GIANT GARTER SNAKE FENCING MATERIALS

A. The fencing posts shall be studded steel T-posts with a minimum height of six feet and fitted with safety caps.

B. The Giant Garter Snake Fencing material shall be Animex AMX 60, ERTEC E-Fence, or equal.

C. Equipment access gate frame shall be of 2-inch PVC pipe.

PART 3 EXECUTION

3.01 TEMPORARY FENCING

A. Notify the Engineer 5 days prior to beginning the installation of the Temporary Fencing.

B. Construct Temporary Fencing around the perimeter of the limits of work shown on the Drawings.

1. The fencing posts shall be installed at a maximum of 20 feet on center or as directed.

2. The temporary fencing material shall be attached and secured to the fence posts to keep the fence upright and taut.

3. On Site 23-078, omit Temporary Fencing around the perimeter of the limits of work.

4. The Contractor may fence smaller areas with the approval of the Engineer depending on the actual area needed for construction.

C. Construct Temporary Fencing around trees, shrubs, and bushes to be protected as shown on the Drawings.

1. The fencing shall be installed a minimum of 5 feet outside of the drip line for trees smaller than 18 inches diameter at breast height.

2. The fencing shall be installed at a minimum of 10 feet outside of the drip line for trees greater than 18 inches diameter at breast height.

3. The Contractor may fence smaller areas with the approval of the Engineer depending on the area needed for construction.

4. If approved by the Department, adjacent trees may share a fenced protection area.

D. The Engineer and the Contractor shall agree on the area determined necessary within the designated laydown areas shown in the Drawings. Temporary Fencing shall be installed around this area.

E. Where the designated limits of work drop into standing or flowing water install Temporary Fencing five feet back from the shoreline.

F. The Temporary Fencing shall be inspected and maintained as necessary during construction and removed once construction at the site is completed.

1. Orange barrier fencing shall be maintained in a sufficient and functional condition throughout the entire duration of construction activities.

2. The fence shall not have tears, gaps, excessive strain or elongation, rips, sags, overturn, or other damage or failure.

3. Damage to Temporary Fencing resulting from weather, vandalism, construction site vehicles, equipment, or operations shall be repaired immediately.

4. Rills, gullies, and other evidence of concentrated runoff which has undercut the orange barrier fence shall be corrected.

5. Repairs shall be conducted at the Contractor's expense at no additional cost to the Department.

6. After construction work is completed, materials shall be removed from the project site as Contractor’s property.

3.02 GIANT GARTER SNAKE FENCING

A. Install Giant Garter Snake Fencing on Site 23-078.

B. Notify the Engineer 5 days prior to beginning the installation of the Giant Garter Snake Fencing.

C. Construct Giant Garter Snake Fencing as shown on the Drawings.

1. Install fencing around the staging and laydown areas and within 3 feet of the limits of work shown on the Drawings.

2. The fencing material shall be attached and secured to the fence posts according to the manufacturer’s specifications to keep the fence upright and taut.

D. Construct equipment access gate as shown on the Drawings.

1. Equipment access gates shall be installed perpendicular to the levee crown road.

2. The fencing material shall be attached and secured to the fence posts according to the manufacturer’s specifications to keep the fence upright and taut.

3. Access gates shall have a maximum gap of 0.5” from the ground.

E. The Giant Garter Snake Fencing shall be inspected and maintained as necessary during construction.

1. Fencing shall be maintained in functional condition throughout the entire duration of construction activities.

2. The fence shall not have holes, gaps, excessive strain or elongation, rips, sags, overturn, or other damage or failure.

3. Damage to Giant Garter Snake Fencing resulting from weather, vandalism, construction site vehicles, equipment, or operations shall be repaired immediately.

4. Rills, gullies, and other evidence of concentrated runoff which has undercut the animal exclusion fence shall be corrected.

5. Repairs shall be conducted at the Contractor's expense at no additional cost to the Department.

6. After construction work is completed, materials shall be removed from the project site as Contractor’s property.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Temporary Fencing will be by the linear foot and will be the number of linear feet of Temporary Fencing Placed within the limits of work.

B. Measurement for payment for the contract item Giant Garter Snake Fencing will be by the linear foot and will be the number of linear feet of Giant Garter Snake Fencing placed within the limits of work, which does not include adjustment for seams and overlaps.

4.02 PAYMENT

A. The contract prices will be paid for TEMPORARY FENCING; and GIANT GARTER SNAKE FENCING; which prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 56 39

TEMPORARY TREE AND PLANT PROTECTION

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Tree Protection. Tree protection includes installing wraps, placing burlap bags filled with pea gravel, placing bedding material, and constructing boxed protection around trees, tree roots, and shrubs. Items that require protection are shown on the Drawings or will be identified by the Department.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section.

1.03 FIELD IDENTIFICATION

A. Items that require protection will be identified by the Department. The Contractor shall verify the Department’s identified locations for tree and shrub protection prior to construction.

1.04 SUBMITTALS

A. Tree Protection Plan:

1. Submit a tree protection plan within 14 days from the date of receipt of the notice to begin work, that includes location of trees and shrubs to be protected, a schedule of work, a construction plan where applicable, and a list of equipment required to conduct Tree Protection operations.

B. Material Sample:

1. Submit a 1-foot by 1-foot section of coir erosion control fabric, 1-foot of jute twine, a segment of non-pressure treated wood, and 1 burlap bag.

PART 2 PRODUCTS

2.01 MATERIALS

A. Tree Wrap:

1. Coir Erosion Control Fabric: The fabric shall be biodegradable.

2. Jute Twine: The twine shall be biodegradable.

3. Non Pressure Treated Wood: The wood segments used shall be cut from non-pressure treated Douglas fir or other approved wood.

B. Box Protection:

1. Non Pressure Treated Wood: The braces, posts, and plywood shall be cut from non-pressure treated Douglas fir or other approved wood.

C. Bedding Material:

1. Materials shall be free of lumps, roots, and other debris larger than one inch and shall conform to the following gradation:

Sieve size	% Passing
6”	100
3”	70 - 95
3/4"	20 - 45
No. 4	0 - 15

D. Pea Gravel:

1. Materials shall be free of lumps, roots, and other debris larger than one inch.

E. Biodegradable Bags:

1. Biodegradable bags shall be made of burlap or other material approved by the Engineer. Bags shall be a minimum of 14 inches wide and 30 inches deep. Bags shall be filled one-third to one-half of their capacity. The openings of the bag shall be tied with jute twine. Fill material for bags shall be pea gravel such that 100 percent passes the 1/2-inch sieve, and a maximum of five percent passes the no. 16 sieve.

PART 3 EXECUTION

3.01 TREE PROTECTION

A. The type of protection for each tree and the locations of the trees shall be as shown on the Drawings. The Contractor shall notify the Engineer

at least five days prior to protection or removal of trees, shrubs, or bushes.

B. The Contractor shall install all tree protection measures prior to any earthwork.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment of the contract item Tree Protection will be by the unit and will be the number of trees, shrubs, and bushes boxed or wrapped in the work.

4.02 PAYMENT

A. The contract prices will be paid for TREE PROTECTION; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 57 19

TEMPORARY ENVIRONMENTAL CONTROLS

PART 1 GENERAL

1.01 DESCRIPTION

A. This section specifies the requirements for conservation and protection of environmental resources during performance of the Work.

1.02 RELATED SECTIONS

A. All Supplementary Conditions, General Conditions, other Division 1 sections, and Drawings are applicable to this Section.

1.03 REFERENCE STANDARDS

A. The following publications form a part of this specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 - Interpretation of the Contract, Paragraph 2.

1. National Marine Fisheries Service, January 1997, Fish Screening Criteria for Anadromous Salmonids.

2. California Department of Fish and Wildlife, October 2022, Aquatic Invasive Species Decontamination Protocols.

1.04 LAWS, REGULATIONS, AND PROJECT SPECIFIC ENVIRONMENTAL DOCUMENTS

A. Applicable Law:

1. Follow all Applicable Law and project specific environmental documents related to the Work.

2. The Department has identified the following Applicable Laws that may apply to the Work. Reference to Applicable Law is included in the Contract for convenience only. The following list is not necessarily a comprehensive list of all laws and regulations that may apply to the Work.

a. Federal:

1) Clean Air Act, USC Title 42, The Public Health and Welfare. Chapter 85, Air Pollution Prevention and Control. Clean Air Act, 42 USC § 7401 et seq.

2) Clean Air Act and General Conformity Rule, 40 CFR pt. 93, subpt. B.

3) Clean Water Act § 401, 33 USC § 1341

4) Clean Water Act § 402, 33 USC § 1342

5) Clean Water Act § 404, as Amended, 33 USC §§ 1251-1389

6) Endangered Species Act of 1973, as Amended 16 USC §§ 1531-1544

7) Magnuson-Stevens Fishery Conservation and Management Act of 1976, as Amended, 16 USC §§ 1801-1891d

8) Migratory Bird Treaty Act of 1918, as Amended, 16 USC §§ 703-712

9) National Environmental Policy Act of 1969, as Amended, 42 USC §§ 4321-4370m-12

10) National Historic Preservation Act of 1969, as Amended, 54 USC §§ 300101-320303

b. State:

1) California Environmental Quality Act of 1970, California Public Resources Code §§ 21000 et seq.

2) California Fish and Game Code, §§ 1600-1616 (Streambed Alteration)

3) Fish & Game Code, §§ 2300-2302 (Aquatic Invasive Species, Prohibitions relating to dreissenid mussels)

4) Dreissenid Mussel Control and Prevention. 14 California Code of Regulations (CCR) § 672.1

B. Project Specific Environmental Documents

1. Environmental documents, permits, licenses, and agreements prepared, adopted, and acquired by the Department related to the Work are available in Document 00 30 00 – Information Available.

2. Comply with the terms and conditions of all environmental documents, permits, licenses, and agreements prepared, adopted, and acquired for the project, including any general or regional permits the project is working under (e.g., 404 Regional General Permit).

3. Appendix III (Permit Responsibility Clarifications) sets forth specific clarifications of the responsibilities regarding certain environmental commitments. The purpose of such clarifications is to facilitate orderly compliance with environmental commitments. Except where a responsibility is expressly indicated to be that of the Department, nothing in Appendix III should be construed as limiting any responsibilities or obligations of the Contractor otherwise provided for in the Contract. Where there is a conflict or inconsistency between environmental requirements, the most stringent measure apply.

4. Environmental documents obtained for the project include the following

    a. Site 23-078

        1) California Environmental Quality Act. Notice of Determination for Site 78 prepared by California Department of Water Resources. September 24, 2025. SCH#2025080059.

        2) California Environmental Quality Act. Mitigated Negative Declaration for Site 78 prepared by California Department of Water Resources. September 2025. SCH#2025080059.

        3) California Fish and Game Code 1602. Lake and Streambed Alteration Agreement issued by California Department of Fish and Wildlife. August 2025. NO. COL-61705-R2.

    b. Site 97

        1) California Environmental Quality Act. Notice of Determination for Site 97 prepared by California Department of Water Resources. May 5, 2023. SCH#2019049138.

        2) California Environmental Quality Act. Mitigated Negative Declaration for Site 97 prepared by California Department of Water Resources. March 2023. SCH#2019049138.

        3) California Endangered Species Act. Biological Opinion issued by the National Marine Fisheries Service. February 11, 2020. NMFS No: WCRO-2019-01675.

        4) California Endangered Species Act. Biological Opinion issued by the United States Fish and Wildlife Service USFWS. December 18, 2025. Reference # 2022-0072368-S7-001.

        5) Clean Water Act Section 404. Nationwide Permit 13 General Conditions. United States Army Corp of Engineers. February 25, 2022.

6) Clean Water Act Section 401. Water Quality Certification and Order issued by the Central Valley Regional Water Quality Control Board. July 7, 2023. USACE No.: SPK-2023-00392.

7) California Fish and Game Code 1602. 1600 Lake and Streambed Alteration Agreement issued by California Department of Fish and Wildlife. August 2023. NO. YOL-43051-R2.

5. Ensure that persons and entities engaged in the Work conduct themselves in such a way to minimize disturbances to biological, paleontological, Tribal Cultural, and archaeological resources. Immediately halt project activities within a radius of 100 feet of the discovery or incident.

6. Failure to comply with the terms and conditions of any environmental or regulatory permits, laws, rules, or regulations applicable to the Project, the Engineer may take corrective action, including but not limited to, issuing a Stop Work Order under Document 00 72 41 – Health and Safety Requirements, Paragraph 5; or suspending Work under Document 00 72 45 – Prosecution of Work, Paragraph 8.A.1. Such noncompliance will be considered Defective Work under Document 00 72 45 – Prosecution of Work, Paragraph 9. The Contractor is responsible for all delays and costs associated with such noncompliance, including fines and penalties.

1.05 DEFINITIONS

A. Archaeological resources: Remains of past human activity, including historic and prehistoric material such as tools and tool fragments, hearth and food remains, structural remains, and human remains.

B. Applicable Law: (1) Any federal, State or local law, statute, code, or regulation; (2) Any formally adopted and generally applicable rule, requirement, determination, standard, policy, implementation, schedule, or other order of any governmental body having appropriate jurisdiction; and (3) Any environmental documents (including the environmental commitments, permits, licenses, agreements, conditions, or other approvals).

C. Environmental document: Any permits, licenses, agreements, conditions, or other approvals applicable to the project.

D. Tribal Cultural Resource: Tribal spaces and resources that are centrally important to Tribal culture and tradition.

E. Environmental Monitor: Subject matter experts tasked with conducting surveying and monitoring project activities that have the potential to impact environmental resources.

F. Environmentally Sensitive Area (ESA): Area within or near construction limits where access or work is prohibited or limited in some way to protect environmental resources.

G. Paleontological resources: Paleontological resources include fossils, and similar evidence of past animal or vegetal life. Paleontological resources will be identified by the Engineer and subject matter experts in their respective field of study.

1.06 WORK NOTICES

A. Pre-Activity Notices:

1. Notify the Engineer, in writing, a minimum of 5 days prior to the following activities, every time there is an occurrence.

a. Tree trimming or the removal of vegetation

b. Commencement of dewatering activities.

c. Arrival of all equipment (marine or terrestrial) or vessels to the Work Site.

2. Include the following information:

a. Description of the proposed activity.

b. State date and time of the activity requiring notification.

c. Specific location(s) in which the activity will take place.

d. Name of the entity responsible for conducting the activity.

e. End date and time of the activity requiring notification, as applicable.

B. Conditional Notification:

1. Notify the Engineer immediately, verbally and in writing, if:

a. Wildlife is harmed, or killed at the Work Site;

b. If previously unknown potential paleontological, Tribal Cultural, or archaeological resources are discovered at the Work Site;

c. If human remains are identified.

2. The conditional notices should include the following information.

a. Purpose of the notification.

b. Date and time of occurrence.

c. Location(s) of the event that triggered the conditional notification.

d. Additional information requested by the Engineer.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 GENERAL

A. Comply with all applicable environmental federal, state, and local laws, regulations, permits, policies, and other requirements.

3.02 INSPECTION AND DECONTAMINATION FOR INVASIVE SPECIES

A. Decontamination and Cleanliness:

1. Clean all construction equipment and equipment offsite, in accordance with the following.

a. Federal, State, and local laws and regulations.

b. California Department of Fish and Wildlife, October 2022, Aquatic Invasive Species Decontamination Protocols.

2. Construction equipment and equipment arriving at the Work Site should be clean, drained, dry and free from mud, residuals, detritus, and plant and animal propagules or eggs.

3. Decontaminate all construction equipment and equipment of invasive species (animal or vegetative) prior to placement in any water body pursuant to requirements.

4. Decontaminate construction equipment and equipment if water or potential water cannot be thoroughly inspected due to restricted or no access. Ballast, I/O engines, and Inboard engines may all carry unverifiable water.

5. Comply with additional environmental commitment permit responsibility clarifications in Appendix III.

B. Mobilization and Notification:

1. New construction equipment and equipment may not be used on Work Site until it has been inspected by the Engineer and determined to be clean. New construction equipment and equipment includes construction equipment and equipment that is arriving at the Work Site for the first time and construction equipment and equipment that has been removed from the Work Site and is being returned.

2. Notify the Engineer a minimum of five days prior to all new construction equipment and equipment arriving at the Work Site so that the Department can schedule an Environmental Monitor to conduct inspections.

3. Comply with additional environmental commitment permit responsibility clarifications in Appendix III.

C. Inspection:

1. A Department Environmental Monitor will inspect all construction equipment and equipment prior to their use at the Work Site or placement in any waterbody to ensure they are clean, drained, dry and free from mud, residuals, detritus, and plant and animal propagules or eggs.

2. Remove from the Work Site immediately any construction equipment and equipment that does not pass inspection for cleanliness.

3.03 ENVIRONMENTAL TRAINING MEETINGS

A. Prior to beginning any site Work, all Contractor and subcontractor personnel who will be at the Work Site during Work must attend a Worker Environmental Awareness Program (WEAP) training provided by the Department.

B. The training will be given at or near the Work Site and will consist of briefing sessions developed by biologists, archaeologists and others familiar with environmental resources at the Work Site.

C. The WEAP training will be an ongoing process, and new personnel are required to attend the training prior to beginning site Work. Additional training may be required to present additional topics pertaining to the above subjects or to address a specific compliance issue.

D. Annual refresher trainings are required for all workers.

3.04 WILDLIFE SPECIFIC WORK WINDOWS

A. Migratory bird nesting season is from February 1 through September 30 at the Work Site. Nesting may also occur outside of the migratory bird nesting season.

B. Giant Garter Snake (GGS):

1. No work in terrestrial GGS habitats between May 1 and October 1. Work may occur between October 2 and November 1 and April 1 and April 30 if ambient air temperatures are between 75 degrees Fahrenheit and maximum daily air temperatures have exceeded 75 degrees Fahrenheit for at least three consecutive days immediately preceding the work.

C. Periods of Low Rainfall:

1. Only conduct work during periods of low rainfall (less than 1/4 inch per 24-hour period) and periods of dry weather (with less than 50 percent chance of rain). Monitor the National Weather Service 72-hour forecast for the Work Site. Do not perform work during a dry-out period of 24 hours after the referenced wet weather. Provide weather forecasts upon request to the Engineer.

3.05 ENVIRONMENTALLY SENSITIVE AREAS

A. Environmentally Sensitive Areas within the Work Site are as shown on the drawings.

3.06 BIOLOGICAL RESOURCES

A. General Wildlife Protection:

1. Protect animal and plant species in accordance with federal and State laws and regulations.

2. Do not harm, move, handle, or harass wildlife at the Work Site.

3. In the event wildlife is harmed or killed, assist the Department with collecting all pertinent information associated with the incident.

a. The Contractor is responsible for harm or injury to wildlife, including any fines or penalties, due to actions within the control of the Contractor or pursuant to its obligations under the Contract, laws, rules, regulations, or permit requirements.

4. Do not use traps or apply any rodenticide, insecticide, fungicide or herbicide, without prior written approval of the Engineer.

5. Holes and Trenches:

a. Cover all excavated, steep-walled holes or trenches with appropriate covers (thick metal sheets or plywood) at the end of each workday. Install covers to ensure that trench edges are fully sealed with rock bags or sand. Alternatively, furnish trenches with escape ramps

constructed of earth fill or wooden planks to provide escape ramps for wildlife. Set ramps at an angle no greater than 30 degrees. The Engineer determines the number of escape ramps necessary based on the size of the hole or trench.

b. Inspect holes or trenches prior to filling, sealing, or collapsing them. Allow any wildlife discovered to escape voluntarily.

6. Speed Limit:

a. Construction related vehicles at the Work Site must not exceed 15 miles per hour on straight and level roads, and 10 miles per hour in areas with curves or steep grades.

b. Vehicle speeds may be required to be further reduced by the Engineer in the event of reduced visibility conditions including, but not limited to, fog, rain, snow, mud, or twilight or dark conditions.

c. Construction vehicles and equipment are restricted to existing roads and haul routes designated in the Contract Documents.

d. No off-road parking or vehicle or equipment staging is allowed in Work Site areas not previously approved in writing by the Engineer.

7. Bird Protection:

a. Protect migratory and nongame birds, their occupied nests, and their eggs.

b. The Migratory Bird Treaty Act, 16 USC Section 703-711, 50 CFR 10, and Fish and Game Code 3513, and 3800 protect migratory and nongame birds, their occupied nests, and their eggs.

c. The Federal Endangered Species Act, 16 USC Section 1531 and 1543, and the California Endangered Species Act, Fish and Game Code Section 2050-211.5.5, prohibit the take of listed species and protect occupied and unoccupied nests of threatened and endangered bird species.

d. The Bald and Golden Eagle Protection Act, 19 USC Section 668, prohibits the destruction of bald and golden eagles and their occupied and unoccupied nests.

e. If you find an injured or dead bird or discover migratory or nongame bird nests that may be adversely affected by construction activities, or that has been abandoned, immediately:

1) Stop all work within 100 feet of the discovery.

2) Notify the Engineer.

3) Do not resume work within the radius of the discovery until authorized.

8. Comply with additional environmental commitment permit responsibility clarifications in Appendix III.

3.07 DUST CONTROL

A. Control all dust at the Work Site. The Contractor assumes all responsibility for dust control and shall furnish all labor, equipment, and means required, and shall carry out proper and efficient measures wherever and as often necessary to prevent the generation of dust at the Work Site. The Contractor is responsible for all bodily injury and property damage, including injury to biological resources, caused by dust.

B. Where there is a conflict or inconsistency between local air district requirements and project-specific environmental documents, the most stringent shall apply.

C. Implement the following measures to control dust emissions:

1. Control dust emissions from the Work by applying water, presoaking, or other means, as approved by the Engineer.

2. Minimize areas cleared to facilitate the Work, such as storage areas, staging areas, stockpile areas and vehicle parking to the extent practicable.

3. Apply measures to prevent airborne emission of dust when materials are transported off the Work Site.

4. Limit or expeditiously remove (at least once per day, or more often as necessary) the Work-caused accumulation of mud or dirt from adjacent public streets, or paved roadways within the Work Site, when operations are occurring. Clean streets using a commercial/municipal style wet power vacuum street sweeper. The street sweeper shall wet the sweeping brooms during all cleaning activities. The use of rotary brushes (power brooms) on standard equipment is not allowed.

5. Do not wash debris into streets, highways, or roadway shoulders, or into the storm drain system.

6. Remove vacuumed material from the Work Site as the Contractor’s property.

7. Coordinate all transfer processes involving a free fall of soil or other particulate matter to minimize the free-fall distance and dust emissions.

8. Effectively dust-stabilize all inactive areas at the Work Site, including unpaved roads, staging areas, and employee parking areas, to control fugitive dust emissions using water or other means approved by the Engineer.

9. Erosion control seeding and/or soil stabilization shall be implemented as soon as practicable to stabilize disturbed areas.

10. Water all haul roads or apply dust palliatives or other control binders to control dust. Dust palliatives or other non-water, dust control binders must be approved by the Engineer prior to application.

11. Excavation and grading operations shall be limited to the extent of the Contractor's ability to adequately control dust.

12. Comply with additional environmental commitment permit responsibility clarifications in Appendix III.

3.08 EMISSIONS CONTROL

A. Control and minimize construction-related vehicle emissions resulting from the Work. Emissions reduction measures include, but are not limited to:

1. Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure [13 CCR Section 2485]). Provide clear signage that posts this requirement for workers at the entrances to the Work Site and provide a plan for the enforcement of this requirement.

2. Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer's recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition.

3. Implement a tire-inflation program on the Work Site to ensure equipment tires are correctly inflated. Include checking tire inflation when equipment arrives on the Work Site and every two weeks for equipment that remains on the Work Site. Check vehicles used for hauling materials off the Work Site at least weekly for correct tire inflation.

4. Develop, to the extent practicable, a project-specific ride-share program to encourage workers to utilize carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.

5. Reduce electricity use in temporary construction offices by using high-efficiency lighting and requiring that heating and cooling units be Energy

Star compliant. Develop and implement procedures for turning off computers, lights, air conditioners, heaters, and other equipment each day at close of business when possible.

6. When feasible, schedule trips to reduce peak emissions, limit the length of the construction workday, and phase construction activities to minimize the amount of construction equipment operating during any given time period.

7. When feasible, for deliveries to Work Sites where the haul distance exceeds 100 miles and a heavy-duty Class 7 or Class 8 semi-truck or 53-foot or longer box type trailer is used for hauling, use a U.S. Environmental Protection Agency SmartWay (http://www.epa.gov/smartway) certified truck.

8. Implement Best Available Control Technology (BACT), including, but not limited to:

    a. Installing high-pressure injectors.

    b. Using ultra-low-sulfur diesel fuel in all stationary and mobile equipment, or renewable diesel fuel.

    c. Substituting gas or diesel-powered equipment for electric equipment.

    d. Substituting fossil fuel-powered equipment with ones using catalytic converters.

9. Comply with additional environmental commitment permit responsibility clarifications in Appendix III.

PART 4 PAYMENT

4.01 PAYMENT

A. The Contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 57 23

TEMPORARY STORM WATER POLLUTION CONTROL

PART 1 GENERAL

1.01 DESCRIPTION

A. Section Includes:

1. Requirements to prepare, implement, and document stormwater protection compliance with a Water Pollution Control Program (WPCP) or a Stormwater Pollution Prevention Plan (SWPPP).

2. Determine requirements based on the applicability of the Construction General Permit. Applicability of the Construction General Permit is dependent on the Contractor's work plan, site specific details, and regulatory requirements.

1.02 RELATED SECTIONS

A. All Supplementary Conditions, General Conditions, Division 1 (General Requirements) and Drawings apply to this Section.

1.03 REFERENCE STANDARDS

A. References:

1. The following publications form a part of this specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 – Interpretation of the Contract:

a. CASQA Handbook: 2023 California Stormwater Best Management Practice Handbook for Construction.

B. Definitions:

1. Common Plan of Development: References Construction General Permit coverage, a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one common plan. The "common plan" of development is any announcement or piece of documentation (including a public notice or hearing, advertisement, drawing, permit application, etc.) or physical demarcation indicating construction activities may occur on a specific plot. Projects within a larger common development plan may be regulated as a separate

construction project if the project sites are located at least one-quarter mile apart and land for the interconnecting road, pipeline, or utilities that is part of the same common plan, is not concurrently being disturbed.

1.04 SUBMITTALS

A. Preconstruction Stormwater Submittal:

1. Submit one of the following:

a. Water Pollution Control Program (WPCP)

1) Sites under 1 acre: WPCP

2) Sites between 1 and 5 acres, with a R factor less than 5: WPCP, and Erosivity Waiver, Erosivity Waiver calculations, State Water Resources Control Board's Storm Water Multiple Application and Report Tracking System (SMARTS), username information of the QSP/D(s) who will enter data into the SMARTS website, as applicable.

3) Submit name of Contractor's representative responsible for implementing the WPCP.

b. Stormwater Pollution Prevention Plan (SWPPP):

1) SWPPP, SMARTS username information of the QSP and QSD) who will enter data into the SMARTS website, as applicable.

1.05 CONSTRUCTION GENERAL PERMIT

A. The Work may be subject to the Construction General Permit (CGP), also known as the California State Water Resources Control Board's (SWRCB's) National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ. CGP, can be found at: NPDES 2022 Construction Stormwater General Permit | California State Water Resources Control Board (https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction/general_permit_reissuance.html)

B. Apply for CGP permit coverage.

C. Ensure all Work is in accordance with the CGP. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA)

and the Porter-Cologne Water Quality Control Act and is grounds for enforcement action and/or removal from General Permit coverage.

D. A Department staff person will be designated as the LRP as defined in the CGP.

E. The CGP does not preempt or supersede the authority of local storm water management agencies to prohibit, restrict, or control stormwater discharges to municipal separate stormwater system (MS4) or other watercourses within their jurisdictions.

F. The CGP does not authorize discharges of fill or dredged material regulated by the U.S. Army Corps of Engineers under CWA Section 404 and does not constitute a waiver of water quality certification under CWA Section 401.

G. Risk Level:

1. CGP established three levels of risk possible for a construction site. The Department anticipates this project site's sediment and receiving water risk will fall under Risk Level 1 requirements:

a. A Qualified SWPPP Developer (QSD) must independently calculate a Risk Level for the project. Inform the Department if results other than Risk Level 1 are calculated, including waiver, or coverage not needed. If the work qualifies for a waiver to the CGP, then prepare a Water Pollution Control Program.

b. Implement all Risk Level 1 requirements, including planning, procuring, installing, maintaining, and removing all minimum BMPs required by the CGP.

c. Inspect, document, and report compliance with the CGP to SWRCB and the Department.

d. When Risk Level 1 requirements conflict with requirements within this specification, the more stringent requirement must be followed.

H. Permit Registration Documents:

1. Prepare standard Permit Registration Documents (PRDs) including a Stormwater Pollution Prevention Plan (SWPPP) for construction projects disturbing one acre or more, or less than one acre if part of a larger Common Plan of Development, and linear projects per requirements of the CGP.

2. See Water Pollution Control Program for applicable waiver requirements.

3. PRDs include the Notice of Intent, Risk Assessment (Standard or Site-Specific), Site Map, SWPPP, and Annual Fee.

4. Additional Permit Registration Documents related to Construction Type: Active Treatment System Plan and certification proof, and alternate Risk Justification Particle Size Analysis.

I. Preparation, Review, and Acceptance:

1. Prepare PRDs in accordance with the CGP.

2. The SWPPP must be written, certified, and amended by a Qualified SWPPP Developer (QSD) as defined in the CGP.

3. For projects requiring coverage under the CGP or eligible for an Erosivity Waiver, do not mobilize equipment or begin Work onsite until the SWRCB issues a Waste Discharge Identification Number (WDID) for the project.

J. Submit all Permit Registration Documents (PRDs) and Notice of Termination (NOT) to the State Water Resources Control Board (SWRCB) via the Stormwater Multiple Application and Report Tracking System (SMARTS).

1.06 WATER POLLUTION CONTROL PROGRAM

A. If determined that the project is not subject to the Construction General Permit, or the project is confirmed by the SWRCB to be eligible for a Waiver, then prepare a Water Quality Control Program meeting the requirements of this section.

B. The Water Pollution Control Program (WPCP) must contain the following, as applicable:

1. A map showing:

a. Location of soil stockpiles and solid waste containers.

b. Vehicle and equipment fueling, servicing, cleaning, and storage areas.

c. Material storage areas.

d. Locations of erosion and sediment control BMPs.

e. Site drainage during execution of the Work.

f. Stabilized vehicle entrances.

g. Concrete cleanout areas.

2. List of chemicals, potential pollutants, and hazardous materials to be used.

3. Methods for (include copies of drawings, details, and/or descriptions):

a. Dewatering.

b. Street cleaning.

c. Managing run-on and run off.

d. Spill prevention and control.

e. Handling and disposal of solid waste.

f. Safekeeping and secondary containment of chemicals, potential pollutants, and hazardous materials.

g. Storage and dispensing of fuel and lubricants.

h. Clean out and disposal of concrete.

i. Construction BMP maintenance, inspection, and repair.

j. Sanitation provisions.

k. Site protection to be installed prior to rain events.

4. Description of all areas disturbed by the project activities shall be protected from washout or erosion.

5. Description of site stabilization methods for inactive disturbed areas and after completion of the work.

6. Construction BMP implementation and removal schedule.

1.07 QUALIFICATIONS

A. Qualified Stormwater Pollution Prevention Plan (SWPPP) Developer (QSD): A QSD shall possess required certifications and or registrations specified in the Construction General Permit.

B. Qualified SWPPP Practitioner (QSP): A QSP shall possess required certifications and registrations specified in the Construction General Permit.

1.08 REQUIRED STORMWATER MEETINGS

A. Meet with Engineer no more than 1 week after issuance of the NTBW to discuss required stormwater submittals. At minimum, the following individuals must be present.

1. Contractor's Project Manager, or appropriate technical person.

2. Contractor's Qualified SWPPP (QSD).

B. This meeting is a preparatory meeting for the SWPPP or WPCP submittal. The QSD and QSP shall present the proposed stormwater management plan for this project, including whether a WPCP or SWPPP will be prepared, CGP risk level, if applicable, proposed BMPs, sampling locations, etc. This meeting is required prior to the Department’s response to the SWPPP or WPCP submittal.

C. Additional meetings may be scheduled to aid in the completion of the SWPPP or WPCP, or other required information, as needed.

PART 2 PRODUCTS

2.01 EROSION CONTROL MATERIALS

A. Ensure erosion control measures are the appropriate type for the site conditions and will not harm or entrap wildlife.

B. Fiber rolls or erosion control fabric shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves.

C. Do not use erosion control products (such as straw wattles, fiber rolls, or erosion control blankets) with plastic monofilament or cross-joints in the netting that are bound/stitched.

D. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the project site shall be certified weed-free.

PART 3 EXECUTION

3.01 GENERAL

A. Implement stormwater pollution prevention measures to prevent pollutants and sediments from construction activities or construction

sites from exiting the construction sites into non-project areas, nearby water courses, or storm drain systems.

B. Schedule operations such that temporary or permanent erosion control features are installed concurrently with or immediately following grading operations.

C. It may be necessary to perform the Work in small or multiple units, on an out-of-phase schedule, and/or with modified construction procedures. Coordinate water pollution and sediment control work with all other Contract work.

3.02 INSTALLATION

A. Install and maintain BMPs as required by the SWPPP or WPCP and in accordance with applicable CASQA fact sheet.

B. Perform inspections.

C. Immediately correct or replace a BMP deemed ineffective by the Contractor or Engineer.

D. Remove BMPs after completion of construction activities.

3.03 QUALITY CONTROL

A. Documentation:

1. Prepare documentation required by the SWPPP or WPCP applicable to the Work.

2. Prepare and maintain inspection and monitoring records. Include records in the SWPPP or WPCP.

3. Submit to the Department and make available to the Department upon request.

4. Submit Stormwater Sampling Reports and inspection reports, as required.

B. Non-Conforming Work:

1. Non-compliance with the CGP, SWPPP, or WPCP will be considered Defective Work under Document 00 72 45 – Prosecution of Work.

2. In the event of non-compliance, the Engineer may take the following corrective actions:

a. Issue a Stop Work Order under Document 00 72 41 –Health and Safety Requirements and suspend Work under Document 00 72 45 – Prosecution of Work.

b. Direct the Contractor to:

   1) Install erosion, sediment, and water pollution control measures.

   2) Revise the organization and schedule of the Work.

   3) Prepare and submit required reports and documentation.

   4) Perform other work necessary to achieve compliance.

c. All delays and costs associated with such non-compliance, including fines, third-party claims and penalties are the responsibility of the Contractor.

d. The Department reserves the right to withhold costs for corrective action from progress payments, or final payment in accordance with Section 00 72 48 – Payments and Retentions, of these Specifications.

PART 4 PAYMENT

4.01 PAYMENT

A. The contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 71 13

MOBILIZATION

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Mobilization which includes:

1. Transporting equipment to the work site and preparing equipment for use.

2. Removing equipment from the worksite when the work is completed.

3. Final site cleanup, including removing all signs and markings, and the repair of all existing fencing and gates to preconstruction conditions.

B. The contract item Mobilization does not include:

1. Staff support vehicles, service trucks, fuel trucks, and transport trucks.

1.02 RELATED SECTIONS

A. General Conditions, Supplementary Conditions, Division 1 sections, and the Drawings apply to this section.

1.03 SUBMITTALS

A. Equipment List:

1. Submit a list of equipment to be included in the Mobilization and Demobilization process for each site.

B. Mobilization and Demobilization Work Plan including the following features:

1. Description of mobilization and demobilization sequence and schedule at each site.

2. Drawings of each work site showing staging, laydown, parking, access, and temporary facilities layout.

3. Outline for communication and coordination with utility providers.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 GENERAL

A. Notify the Engineer in writing five days prior to the Mobilization and Demobilization for each site.

B. The equipment shall be complete with accessories and support materials. The equipment shall be completely functional, in sufficient working condition, and in compliance with applicable air quality standards and requirements. When feasible, use biodegradable lubricants and hydraulic fluid in construction machinery.

C. Any additional damage to the levee outside of the repairs shown on the Drawings shall be repaired by the contractor to preconstruction conditions at no additional cost to the Department prior to demobilization.

D. Construction vehicles and equipment shall be checked daily for leaks and will be properly maintained to prevent contamination of soil or water from external grease and oil, or from leaking hydraulic fluid, fuel, oil, and grease.

E. Existing staging sites, maintenance toe roads, and levee crown roads will be used to the extent practicable for staging and access, to avoid affecting previously undisturbed areas. The number of access routes and the size of staging and work areas will be limited to the minimum necessary to conduct the repair activity.

F. The mobilization portion of the contract item will be 80 percent of the total item for the purposes of payment calculation.

G. The demobilization portion of the contract item will not be paid until the contract work has been completed and equipment has been removed from the work site. The demobilization portion of the contract item will be 20 percent of the total item for the purposes of payment calculation.

PART 4 PAYMENT

4.01 PAYMENT

A. The contract price will be paid for MOBILIZATION; which price shall include full compensation for all costs incurred under this contract.

END OF SECTION

SECTION 01 71 23

CONSTRUCTION SURVEYING

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Construction Surveys which includes performing topographical and bathymetric surveys and providing the Engineer the corresponding surface data.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, other Division 1 sections and Drawings apply to this section.

1.03 SURVEYS

A. The Contractor shall perform a pre-construction topographical and bathymetric survey of original ground conditions of the entire limits of work, with cross sections at 10-foot intervals and where significant changes in topography occur. Submit to the Engineer prior to beginning any ground disturbing activity. The Contractor shall also install staking at 50-foot intervals along the length of the site for reference by the Department's field staff.

B. The Contractor shall perform a post-excavation topographical and bathymetric survey of the entire area within the final excavation limits including excavation in excess of the design, with cross sections at 20-foot intervals and where significant changes in topography occur. If excavation in tidal areas cannot be surveyed, spot elevations with associated coordinates shall be provided. Submit to the Engineer prior to placement of any fill material(s).

C. Where Soil-Filled Rockfill is to be placed over Launch Rock, collect spot elevations after completing placement of all Launch Rock and Soil-Filled Rockfill. Spot elevations shall be collected along the top surface of the placed Launch Rock at 100-foot intervals along the length of the repair and at the beginning and end of the repair limits.

D. The Contractor shall perform a post-backfill topographical and bathymetric survey of the entire area within the limits of repair, with cross sections at 20-foot intervals and where significant changes in topography occur. The survey shall be performed after all Launch Rock, Soil-Filled Rockfill, and Earthfill have been placed, and prior to placement of Native Topsoil and Agricultural Soil.

E. The Contractor shall perform a post-construction topographical and bathymetric survey of the entire limits of work, with cross sections at 20-foot intervals and where significant changes in topography occur.

F. All surveys performed by the Contractor shall be submitted to the Engineer based on the alignment stationing shown on the Drawings.

G. All surveys performed by the Contractor shall at minimum cover the limits of work as defined on the Drawings unless otherwise specified.

H. The pre-construction, post-excavation, launch rock spot elevations, and post-construction topographical surveys shall be approved by the Engineer and shall be the basis of determining material quantities for payment unless otherwise specified.

I. The Contractor shall perform surveys and filing documents for compliance with California Business and Professions Code Section 8771 pre and post construction.

J. The Contractor shall perform all necessary research and field surveys to identify existing survey control and monuments for each site. The Contractor shall perform this task prior to any construction activities and after construction in order to comply with Business and Professions Code 8771.

1.04 SUBMITTALS

A. Survey Data:

1. Provide the pre-construction surface data prior to beginning any ground disturbing activity, in a Civil 3D 2022 format or equal and a copy of the surface in a landxml format. The Civil 3D file shall include points, breaklines, and any other components necessary to recreate the surface as surveyed. The surface data provided in the Civil 3D format shall be geo-referenced and include the date the survey was completed, the horizontal and vertical datums, projection, units, and name of agency that completed the survey.

2. Provide the post-excavation surface data prior to placement of any fill material(s), in a Civil 3D 2022 format, or equal and a copy of the surface in a landxml format. The Civil 3D file shall include points, breaklines, and any other components necessary to recreate the surface as surveyed. The surface data provided in the Civil 3D format shall be geo-referenced and include the date the survey was completed, the horizontal and vertical datums, projection, units, and name of agency that completed the survey.

3. Provide the Launch Rock spot elevations in a Civil 3D 2022 format or equal and a copy of the points as a shape file. The Civil 3D file and shape file shall be georeferenced and include the date the point information was taken, the horizontal and vertical datums, projection, units, and name of agency that collected the spot elevations.

4. Provide the post-backfill surface data in a Civil 3D 2022 format or equal and a copy of the surface in a landxml format. The Civil 3D file shall include points, breaklines, and any other components necessary to recreate the surface as surveyed. The surface data provided in the Civil 3D format shall be geo-referenced and include the date the survey was completed, the horizontal and vertical datums, projection, units, and name of agency that completed the survey.

5. Provide the post-construction surface data in a Civil 3D 2022 format or equal and a copy of the surface in a landxml format. The Civil 3D file shall include points, breaklines, and any other components necessary to recreate the surface as surveyed. The surface data provided in the Civil 3D format shall be geo-referenced and include the date the survey was completed, the horizontal and vertical datums, projection, units, and name of agency that completed the survey.

6. Provide survey data volumes used for quantity measurements in a PDF file and include reference to any surface names used to establish the reported volumes.

B. Drawings:

1. Provide stamped and signed full size (22”X34”) as-constructed drawings.

C. License Verification:

1. The Contractor shall furnish verification of the California licensed Professional Land Surveyor or registered Professional Engineer responsible for survey services performed under this contract five days prior to beginning survey services.

D. Corner Records or Record of Survey:

1. The Contractor shall submit proof of pre-construction Corner Records or Records of Survey in compliance with Business and Professions Code 8771 at least 5 days prior to any soil disturbance. Additionally, the Contract shall provide proof of post-construction Corner Records or Records of Survey prior to final invoice.

E. Professions Code 8771 Documentation Compliance:

1. The Contractor shall submit Documentation of compliance with Business and Professions Code 8771 at least 5 days prior to beginning construction work and prior to final payment.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 RECORDS

A. The Contractor shall record the surveys in duplicate page field notebooks. The original pages of such records shall be furnished to the Engineer.

3.02 PRE-CONSTRUCTION SURVEY

A. The Contractor shall perform the pre-construction topographical and bathymetric survey in the presence of the Engineer prior to the start of any construction.

3.03 EQUIPMENT AND PERSONNEL

A. The Contractor's instruments and other survey equipment shall be accurate, suitable for the surveys required, and in proper working condition and adjustment at all times. Surveys shall be performed under the direct supervision of either a California State licensed Professional Land Surveyor or a registered Professional Engineer qualified to perform survey work. The Contractor shall furnish verification of registration to the Engineer five days prior to beginning any survey work.

3.04 USE OF SURVEYS BY ENGINEER

A. The Engineer may at any time use line and grade points and markers established by the Contractor.

3.05 CHECKING BY ENGINEER

A. The Contractor's surveys are a part of the work and may be checked by the Engineer. The Contractor shall be responsible for correction of lines, grades, or measurements which do not comply with specified or proper tolerances, or which are otherwise defective, and for any resultant defects in the work or unauthorized work.

3.06 ENGINEER'S SURVEY SERVICES

A. The Contractor shall notify the Engineer of requirements for survey services at least five days prior to needing such services, unless otherwise directed.

B. The Engineer's survey marks shall be preserved by the Contractor unless authorized to remove them.

PART 4 PAYMENT

4.01 PAYMENT

A. The contract price will be paid for CONSTRUCTION SURVEYS; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 01 74 19

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.01 DESCRIPTION

A. This section specifies the requirements for construction waste diversion.

1.02 RELATED SECTIONS

A. General Conditions, Supplementary Conditions, Division 1 sections, and Drawings apply to this section.

1.03 DEFINITIONS

A. Construction waste: Waste generated by construction activities, such as scrap materials, damaged or spoiled materials, temporary and expendable construction materials, and other waste generated during construction activities.

B. Demolition debris/waste: Waste generated from demolition activities, including minor incidental demolition waste materials resulting from the intentional dismantling of all or portions of buildings, structures, roads, or any other facilities, to include clearing of building contents that have been destroyed or damaged.

C. Disposal: Depositing waste in a solid waste disposal facility, usually a managed landfill or incinerator, regulated in the US under the Resource Conservation and Recovery Act (RCRA).

D. Diversion: The practice of diverting waste from disposal in a landfill or incinerator, by means of eliminating or minimizing waste, recycling, or reuse of materials.

E. Recycling: The series of activities, including collection, separation, and processing, by which products or other materials are diverted from the solid waste stream for use in the form of raw materials in the manufacture of new products sold or distributed in commerce, or the reuse of such materials as substitutes for goods made of virgin materials, other than fuel.

F. Reuse: The use of a product of materials again for the same purpose, in its original form or with little enhancement or change.

G. Salvage: Usable, salable items derived from buildings undergoing demolition or deconstruction, parts from vehicles, machinery, other equipment, or other components.

1.04 SUBMITTALS

A. Solid Waste Disposal and Recycling Quarterly Reports

B. Solid Waste Disposal and Recycling Final Report

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

3.01 DIVERSION REQUIREMENTS

A. Recycle or salvage for reuse a minimum of 65 percent nonhazardous construction and demolition waste.

B. Reuse or recycle 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting primarily from clearing and grubbing.

C. Hazardous waste disposal shall be in accordance with Section 13280.

3.02 MANAGEMENT

A. Dispose of or recycle solid waste from the job site.

B. Do not allow litter, trash or debris to accumulate anywhere on the site.

C. Keep the Work Site clean and trash-free and ensure that all trash, such as wrappers, cans, bottles, and food scraps, are collected in animal-proof containers with lids. Remove from the construction site and dispose of as the Contractor’s property at an appropriate off-site location.

D. Furnish closed-lid dumpsters and trash cans of sufficient size and quantities to contain the solid waste generated by work activities.

E. Dumpsters should be emptied when waste reaches the fill line.

F. Do not wash out dumpsters and trash cans on the job site.

G. Furnish and place trash containers in the job-site yard, field trailers, and locations where workers gather for lunch and breaks.

H. Comply with additional environmental commitment permit responsibility clarifications in Appendix III.

3.03 SOLID WASTE DISPOSAL AND RECYCLING REPORTING

A. Quarterly Report:

1. Submit quarterly waste disposal and recycling reports to the Engineer pursuant to the table below for any work performed under the Contract during the previous reporting period.

2. Include in the report the types and amounts of project-generated solid waste taken to or diverted from landfills or reused on the project during each reporting period. Use Solid Waste Form to submit report. See Appendix III for copy of Solid Waste Form.

Reporting Period	**Submittal Date**
October 1 – December 31	January 15
January 1 – March 31	April 15
April 1 – June 30	July 15
July 1 – September 30	October 15

B. Final Report:

1. Submit a final solid waste disposal and recycling report within 15 business days upon completion of site work for any work performed during the current reporting period identified in the table above.

C. In the event of non-compliance, the Engineer may take corrective action, including but not limited to, issuing a Stop Work Order under Document 00701 – Safety, Paragraph 5; and/or suspending Work under Document 00705 – Prosecution of Work, Paragraph 8.A.1. Noncompliance shall be considered Defective Work under Document 00705 – Prosecution of Work, Paragraph 9. All delays and costs associated with such noncompliance, including fines and penalties are the responsibility of the Contractor.

PART 4 PAYMENT

4.01 PAYMENT

A. The Contract prices shall include full compensation for all costs incurred under this section.

END OF SECTION

DIVISION 31

EARTHWORK

SECTION 31 00 00

EARTHWORK

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract items Excavation, Earthfill, Agricultural Soil, Aggregate Chinking, Native Topsoil, and Turbidity Curtain required to construct the levee repairs.

1. The contract item Excavation includes:

a. Excavating the repair sites to the lines and grades shown on the drawings, or as otherwise directed by the Engineer.

b. Leveling, scarifying, and compacting subgrade prior to placing initial lifts of Earthfill.

c. Leveling subgrade prior to placing initial lifts of Launch Rock.

d. Loading, transporting and stockpiling excavated materials in laydown area.

e. Providing excavated materials for observation to the Tribal Monitor or trained consultant.

f. Loading, transporting, and disposing of excavated materials off-site in accordance with applicable federal, State, and local requirements.

2. The contract item Earthfill includes:

a. Importing Earthfill materials from Contractor-selected off-site borrow areas to the work sites. Borrow/materials must be from permitted (or commercial) sources and determined through sampling and analytical laboratory testing, or certified by the vendor, to be free of harmful substances.

b. Transporting, stockpiling, handling, placing, moisture conditioning, and compacting imported Earthfill to construct levee repairs to the lines and grades shown on the Drawings.

3. The contract item Agricultural Soil includes:

    a. Importing Agricultural Soil materials from Contractor-selected off-site borrow areas to the work sites. Borrow/materials must be from permitted (or commercial) sources and determined through sampling and analytical laboratory testing, or certified by the vendor, to be free of harmful substances.

    b. Transporting, stockpiling, handling, and placing Agricultural Soil (excluding Agricultural Soil for Soil-Filled Rockfill) to construct the levee repairs to the lines and grades shown on the Drawings. Note that Agricultural Soil for Soil-Filled Rockfill is addressed in Section 35 42 38 – Rock Slope Protection.

4. The contract item Aggregate Chinking includes:

    a. Transporting, stockpiling, handling, and placing Aggregate Chinking to construct levee repairs to the lines and grades shown on the Drawings.

5. The contract item Native Topsoil includes:

    a. Stockpiling, handling, and placing Native Topsoil to construct levee repairs to the lines and grades shown on Drawings.

6. The contract item Turbidity Curtain includes:

    a. Furnishing, installing, maintaining, and removing turbidity curtains, including supports and anchors, in advance of any required in-water earthwork.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following sections of the contract:

1. Section 01 55 26 – Temporary Traffic Control.

2. Section 01 57 19 – Temporary Environmental Controls.

3. Section 31 05 19 – Geosynthetics for Earthwork.

4. Section 31 11 00 – Clearing and Grubbing.

5. Section 35 42 38 – Rock Slope Protection.

1.03 REFERENCES

A. The following publications form a part of this specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 – Interpretation of the Contract:

1. ASTM International (ASTM):

a. ASTM D 698 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 feet-pound force per cubic feet).

b. ASTM D 1140 – Standard Test Methods for Determining the Amount of Material Finer than Number 200 Sieve in Soils by Washing.

c. ASTM D 1556/D 1556M – Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method.

d. ASTM D 2216 – Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass.

e. ASTM D 2487– Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System.

f. ASTM D 3740 – Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.

g. ASTM D 4318 – Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

h. ASTM D 4643 – Standard Test Method for Determination of Water Content of Soil and Rock by Microwave Oven Heating.

i. ASTM D 5080 – Standard Test Method for Rapid Determination of Percent Compaction.

j. ASTM D 6913 – Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis.

k. ASTM D 6938 – Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

B. California Code of Regulations (CCR): Title 23, Section 120

C. USACE ER 1110-1-261, April 28, 1999 – Quality Assurance of Laboratory Testing Procedures.

1.04 SUBMITTALS

A. Material Sources:

1. Submit the identified sources of the proposed materials and any vendor-provided borrow chemical and geotechnical characterization data.

B. Soil Characterization Test Results:

1. Submit the vendor provided certifications demonstrating that the proposed Earthfill, Aggregate Chinking, and Agricultural Soil materials are in compliance with the Specifications.

a. Certifications shall include a written report describing the sampling methods used, analytical test methods used, and test results.

b. Tests must have been conducted within 6 months prior to the bid date.

c. The borrow characterization report shall include, as applicable, analytical laboratory report(s), tabulated test data, and diagrams or drawings showing the sample collection locations.

d. If the vendor does not provide chemical and geotechnical characterization data, the Contractor shall submit a Soil Characterization Plan prepared by a California Professional Engineer or Professional Geologist. The Soil Characterization Plan shall include a description of the sampling and testing methods to be used, a description of sample handling and preservation procedures, a site diagram showing where samples will be collected, and an explanation of why the proposed sampling is representative of the borrow proposed for use.

2. Submit contractor conducted characterization test results of proposed Native Topsoil materials. Tests shall be for the presence of hydrocarbons, biphenyls, pesticides, heavy metals, herbicides, organic compounds, and other deleterious substances identified in the Borrow Material Chemical Acceptance Criteria.

3. If additives were utilized to comply with Agricultural Soil Criteria, the Contractor shall submit a work plan including the following features:

    a. List of necessary equipment.

    b. List of additives and quantity of each in pounds.

    c. A detailed description of the application method and application rate.

C. Earthwork Plan:

1. Prior to beginning earthwork operations, provide an earthwork plan which includes the following features:

    a. A description of the sequence and manner in which the material will be handled.

    b. Methods of transport and routes to be used.

    c. Drawings showing proposed haul roads, staging areas, and stockpile locations.

    d. Methods of stockpiling materials.

    e. Methods and equipment for excavation, moisture conditioning, material placement, compaction, and quality control testing, as well as the method used to establish the compaction curve(s) for determining percent compaction in compliance with ASTM D698, Method A.

D. Earthfill Laboratory Tests:

1. Submit all quality control testing on Earthfill characteristics: gradation, atterberg limits, moisture-density relationship curves, maximum dry density, optimum moisture content, and percent compaction.

2. Submit test results within the time frames detailed in Paragraph 1.06 D.

3. Submit the Testing Laboratory Certification as detailed in Paragraph 1.06 E.

E. Earthfill Field Tests:

1. Submit test data summaries for each field test including test locations, elevations, moisture content, wet density, and dry density.

2. For in situ density of Earthfill tests:

    a. Submit test results within 24 hours after completing the test.

    b. Provide a summary sheet incorporating the requirements of Paragraph 3.13 D.2 of this section.

    c. The applicable compaction curve for determining maximum density and optimum water content shall be documented in all test results.

F. Turbidity Control Measures:

1. Submit turbidity control measure details pertaining to the conditions at each site. This will include a list of sites where a turbidity curtain will be used, a turbidity curtain installation plan and anchoring scheme, working drawings and manufacturer technical specifications, which shall be in accordance with any approved storm water pollution prevention plan (SWPPP) or other water quality control for the site.

1.05 DEFINITIONS

A. Percent Compaction: The percent compaction required is expressed as a percentage of the maximum density obtained by the test procedures presented in ASTM D 698, comparing the field dry density to the maximum density. Percent Compaction is abbreviated as a percent of laboratory maximum dry density.

B. Non-Free Draining Soil: Includes most soil types; represents soils that generally contain more than 15-percent fines, by weight, passing the Number 200 sieve.

C. Free Draining Soil: Includes granular soils that generally contain less than 15-percent fines, by weight, passing the Number 200 sieve.

1.06 TESTING

A. The Engineer may take periodic samples during placement of materials and test for moisture content, gradation, plasticity, compaction, density, and classification to verify compliance with the Specifications. The Contractor shall provide material as directed and shall provide necessary assistance for sampling and testing. Testing by the Engineer shall govern in determining the Contractor’s compliance with the requirements of this Specification Section.

B. The Contractor shall perform its quality control tests in accordance with the following standards and procedures and in accordance with Contractor's Quality Control Plan:

1. Gradation using ASTM D 1140 or ASTM D 6913.

2. Atterberg limits using ASTM D 4318.

3. Classification using ASTM D 2487.

4. Field dry density of non-free draining soils using either ASTM D 1556 or ASTM D 6938. In case of differing results, ASTM D 1556 will govern.

5. Field dry density of free draining soils using ASTM D 6938.

6. Moisture content using ASTM D 2216, ASTM D 6938, or ASTM D 4643. In case of differing results, ASTM D 2216 will govern.

7. Maximum dry density of non-free draining soils and free draining soils using ASTM D 698.

8. Optimum water content of non-free draining soils and free draining soils using ASTM D 698.

C. Testing for compliance by the Engineer will follow the same standards and procedures specified in Paragraph 1.06 B.

D. Testing laboratories shall conform to ASTM D 3740 and USACE ER 110-1-261. Supervision of tests and report preparation must be by a professional civil or geotechnical engineer licensed in the State of California. All reports must bear said professional engineer's signature and stamp. Distribution of the copies to the Engineer must be within 24 hours after sampling or initiating the test, except for test requirements that exceed 24 hours. For tests exceeding 24 hours, distribution must be within 24 hours after completion of the test.

E. Testing shall be performed by a professional civil engineer validated commercial laboratory or the Contractor's validated testing facility. If the Contractor elects to establish testing facilities, no work requiring testing will be permitted until the Contractor's facilities have been inspected and validated by a professional civil engineer licensed in the State of California. A Testing Laboratory Certification for the Contractor's proposed testing laboratory or facility must be submitted for review documenting it has been validated by a professional civil engineer licensed in the State of California.

PART 2 PRODUCTS

2.01 MATERIALS

A. Earthfill:

1. Materials for Earthfill shall be natural or processed material which are free from construction debris, organic matter, petroleum hydrocarbons, asbestos, pesticides, excessive heavy metals and other deleterious substances and shall conform to 23 CCR 120:

a. Standard Sieve Size 3-inch: 100 Percent Passing (ASTM D 6913).

b. Standard Sieve Size Number 200: Minimum of 20 Percent Passing (ASTM D 1140).

c. Liquid Limit: Less than 50 (ASTM D 4318).

d. Plasticity Index: Minimum of 8 (ASTM D 4318).

e. Earthfill materials shall also meet the requirements found in the Department of Water Resources Draft Borrow Material Chemical Acceptance Criteria, as listed in Appendix III, for chemical contaminants and other deleterious substances. In cases where the proposed earthfill borrow is found to exceed the concentrations listed in the DWR Draft Borrow Acceptance Criteria, the Contractor shall demonstrate that the respective exceedance(s) is/are within natural background concentrations and will not result in a net adverse impact to human health, water quality, or the environment.

B. Agricultural Soil:

1. Materials for Agricultural Soil shall meet the following soil characteristics and chemistry:

a. Agricultural Soil shall be free of stones, lumps, roots, and other debris larger than 1 inch and shall contain limited amounts of salts, or other chemical compounds toxic to plant growth, aquatic flora and fauna or humans.

b. Agricultural Soil shall be loam, sandy clay loam, clay loam, or silty clay loam.

c. Soil Organic Matter Content: 0.0 to 15 percent.

d. Soil Chemical Reaction: 6.0 to 7.8 pH.

e. Soil Electrical Conductivity (Saturation Extract): Less than 3.0 decisiemens per meter.

f. Soil Sodium Adsorption Ratio (SAR): Less than 12.

g. Soil Boron Concentration (AB-DTPA Extractable): Less than 1 milligram per kilogram.

h. Soil Calcium-Magnesium Ratio: 0.35 to 11.0

i. Materials shall also meet the requirements found in the Department of Water Resources Draft Borrow Material Chemical Acceptance Criteria, as listed in Appendix III, for chemical contaminants and other deleterious substances. In cases where the proposed borrow is found to exceed the concentrations listed in the DWR Draft Borrow Acceptance Criteria the Contractor shall demonstrate that the respective exceedance(s) is/are within natural background concentrations and will not result in a net adverse impact to human health, water quality, or the environment.

2. The Contractor may utilize soil additives to achieve compliance with the criteria for Agricultural Soil characteristics and chemistry.

C. Aggregate Chinking:

1. Materials shall be 1.5-inch uniform crushed rock.

D. Native Topsoil:

1. The top-most 10 inches of excavated native material shall be partially reused as native topsoil material. Reuse of additional native material shall require approval from the Engineer. Materials used for Native Topsoil shall be free of roots and other debris larger than 2 inches.

2. Materials shall also meet the requirements found in the Department of Water Resources Draft Borrow Material Chemical Acceptance Criteria, as listed in Appendix III, for chemical contaminants and other deleterious substances. In cases where the proposed borrow is found to exceed the concentrations listed in the DWR Draft Borrow Acceptance Criteria the Contractor shall demonstrate that the respective exceedance(s) is/are within natural background concentrations and will not result in a net adverse impact to human health, water quality, or the environment.

3. Agricultural Soil can be used in place of Native Topsoil under the following conditions:

    a. Excavated materials do not meet the criteria of Native Topsoil soil characteristics and chemistry.

    b. The Department's discretion.

E. Turbidity Curtain:

1. All in-water work will require the use of a turbidity curtain to limit the downstream transport of sediment from the work areas. Turbidity Curtains shall be Type II suitable for currents, waves, and wind. Minimum requirements include:

    a. Fabric: 18 ounce/sq yard nylon reinforced PVC fabric (300 psi test).

    b. Floatation: 8-inch diameter (equivalent) foam floatation.

    c. Top tension: 5/16-inch vinyl sheathed cable (9,800 pounds breaking strength).

    d. Bottom Tension and Ballast: 5/16-inch steel chain (7,600 pounds breaking strength).

2. Curtain depth shall be as required for the work areas. Curtain installation shall be in accordance with the manufacturer's specifications. Turbidity curtains shall be maintained by the Contractor for the duration of the in-water work.

PART 3 EXECUTION

3.01 EXCAVATION

A. Clearing and grubbing shall be completed prior to excavation, stockpiling, or placement operations in accordance with Section 31 11 00 – Clearing and Grubbing.

B. The Contractor shall provide access to the excavated material to allow opportunity for observation and monitoring of excavated materials by Tribal monitors or a consultant trained to recognize the cultural resources in accordance with Section 01 57 19 – Temporary Environmental Controls. Excavated material shall be stockpiled in a maximum of 3-foot-high lifts.

C. Once the observations by the monitors have been completed, excavated materials that are not used as Native Topsoil or Earthfill shall

become the property of the Contractor and shall be legally disposed of off-site.

D. Excavating Beyond Established Lines: Necessary precautions shall be taken to preserve, in an undisturbed condition, material beyond the excavated limits shown on the plans, except for unsuitable material ordered to be removed. Material loosened beyond the excavation limits as a result of either natural processes or excavation operations shall be removed to expose firm unyielding soil as determined by the Engineer, and at no additional cost to the Department.

E. A qualified biologist shall be onsite during all grading activities and will monitor all locations where emergency repairs will alter snake hibernacula or refugia.

3.02 PREPARATION

A. Foundation Preparation: Excavated surfaces above water, cleared ground surfaces, and sloped surfaces equal to or flatter than 3H to 1V over or against which Earthfill is to be placed shall be scarified to a depth of 6 inches, moisture conditioned and compacted to not less than 95 percent compaction determined in accordance with ASTM D 698. Slopes steeper than 3H to 1V will be prepared in accordance with the drawings.

B. Prior to Geotextile Fabric Placement, scarify and fill depressions caused by excavation or clearing and grubbing with Earthfill. The Earthfill shall be placed in layers, moisture conditioned and compacted in accordance with the applicable requirements of this Specification.

3.03 BENCHING

A. Benching into side slopes of existing material is required to place and compact the Earthfill material in horizontal layers. The vertical face cut into the existing surface resulting from the benching shall be a minimum of 4 inches in height but must not exceed 6 inches in height. The horizontal cut into the side slope shall be proportional to the excavated slope and the benching shall be no steeper than 1H:1V. Plow, step, bench, or break up sloped surfaces of existing material steeper than 4H:1V so that the Earthfill material will bond with the existing material. When sloped surfaces are equal to or milder than 4H:1V benching is not needed.

3.04 PROOF ROLLING

A. The proof rolling of the existing subgrade shall consist of at least 4 passes of a minimum ten-ton pad foot or smooth drum heavy duty vibratory roller. Proof rolling shall be performed in static mode only,

unless otherwise directed. Unstable areas identified shall receive additional moisture conditioning and compaction or be over excavated and filled as directed. Discovered organic materials and materials not in accordance with the requirements of Earthfill or Native Topsoil shall become the property of the Contractor and shall be legally disposed of off-site.

3.05 MOISTURE CONTROL

A. The moisture content of Earthfill after compaction shall be within the limits of 2 percentage points above optimum to 2 percentage point below optimum moisture content as determined by ASTM D6938. These moisture requirements shall also apply for subgrade to receive Earthfill. Material that is not within the specified moisture content limits after compaction shall be reworked to obtain the specified moisture content, regardless of density.

B. Insufficient moisture for suitable bond:

1. If the top or contact surfaces of partially filled sections do not meet the specified moisture range, the Contractor shall loosen the dried materials by scarifying or disking to a minimum depth of six inches, dampen the loosened material to an acceptable moisture range, and compact this layer in accordance with the applicable requirements of this Specification.

C. Excessive moisture for suitable bond:

1. If the top or contact surfaces of partially filled sections do not meet the specified moisture range, the wet material shall be scarified and permitted to dry, assisted by disking or harrowing, if necessary, to a minimum depth of six inches. The material shall be dried to an acceptable moisture range and compacted in accordance with the applicable requirements of this Specification.

D. Drying wet material:

1. Material that is too wet shall be substantially dried in the staging/stockpile area or borrow area prior to bringing to the levee embankment or placing in fill lifts. Drying shall be assisted by disking or harrowing, if necessary, until the moisture content is reduced to an amount that will require minimal processing once the material is placed.

E. Increasing moisture in dry material:

1. The moisture content of material that is too dry shall be adjusted in the staging/stockpile area or the borrow area prior to bringing to the

levee embankment or placing in fill lifts. The Contractor shall add water to the fill material and by harrowing, or other approved methods, work the moisture into the material until a uniform distribution of moisture is obtained that will require minimal processing once the material is placed. Water applied on a layer of fill shall be accurately controlled in amount so that free water will not appear on the surface during or subsequent to rolling. Should too much water be added to any part of the embankment, the rolling on that section of the embankment shall be delayed until the moisture content of the materials is reduced to an amount within the specified moisture content limits.

3.06 EQUIPMENT TRAFFIC

A. Equipment traffic shall be maintained in accordance with Section 01 55 26 – Temporary Traffic Control and routed to minimize rutting of placed Earthfill. Ruts formed in the surface of Earthfill shall be filled before the material is compacted. If the compacted surface of Earthfill is too smooth to bond properly with the succeeding layer, the surface shall be loosened by scarifying or other reviewed methods before material for the succeeding layer is placed.

3.07 GEOTEXTILE FABRIC PLACEMENT

A. Prior to placement of Geotextile Fabric, subgrade shall be inspected by the Engineer.

B. Install Geotextile Fabric in accordance with Section 31 05 19 – Geosynthetics for Earthwork, where shown on the Drawings.

3.08 EARTHFILL PLACEMENT

A. Material for Earthfill shall be moisture conditioned at the borrow source or in laydown areas to ensure thorough penetration and uniform distribution of moisture in the materials before the material is transported to the placement site.

B. Prior to placement, the previous compacted layer of Earthfill shall be scarified.

C. Earthfill material shall be placed uniformly in horizontal layers not to exceed 6 inches loose thickness before compaction, except within 5 feet of structures, where the uncompacted layer thickness shall be reduced to 4 inches unless otherwise indicated on the Drawings. Where fill narrows to less than equipment width, embankments shall be overbuilt to equipment width and trimmed to the design slopes shown on the Drawings.

D. Earthfill lifts shall be placed and worked so that each lift is free from lenses, pockets, streaks, and layers of materials differing substantially in texture and gradation to reach a homogeneous layer of fill.

E. After the layer is placed, the Earthfill shall be moisture conditioned, harrowed and compacted in accordance with the Specification.

F. The moisture content at the time of compaction shall be within range of the optimum moisture content determined in accordance with Paragraph 3.05.

G. The Earthfill lifts shall be harrowed with a minimum of four passes to the full depth of the layer to obtain uniform moisture distribution.

H. Each layer of Earthfill material shall be compacted to not less than 97 percent relative compaction as determined by ASTM D 698.

I. Within 4 feet of structures, spread and place Earthfill in 4-inch thick loose lifts and compact with hand-operated equipment.

3.09 NATIVE TOPSOIL PLACEMENT

A. Native Topsoil shall be placed as indicated on the Drawings and shall be placed and spread but not compacted.

3.10 AGRICULTURAL SOIL PLACEMENT

A. Agricultural Soil shall be placed as indicated on the Drawings and shall be placed and spread but not compacted.

B. Refer to Section 35 42 38 – Rock Slope Protection for requirements of placing Agricultural Soil into the voids in Rockfill.

3.11 AGGREGATE CHINKING

A. Aggregate Chinking shall be placed as indicated on the Drawings to fill voids in the finished grade surface of Launch Rock.

3.12 TURBIDITY CURTAIN

A. The turbidity curtain shall be placed according to locations shown on the approved turbidity curtain installation plan. Turbidity curtain installation shall be according to the manufacturer's published installation guidelines or as directed by the Engineer. In streams, the curtain shall be placed parallel to flow. The turbidity system shall be selected to handle site-specific drainage or flow patterns.

B. All in-water work will require the installation of a turbidity curtain to separate the work area from the river channel. The purpose of the turbidity curtain is to confine sedimentation within the construction area. Any visible plume of cloudy water outside the protected construction area shall constitute inadequate performance of the turbidity curtain and shall require the Contractor immediately stop work contributing to the plume. The Contractor shall modify, adjust or repair any portion of the turbidity curtain to correct inadequate performance and eliminate any sediment plume unless otherwise directed by the Department.

C. Turbidity curtain shall be installed before any in-water excavation or backfill work begins. Turbidity curtain shall be maintained by the Contractor for the duration of all site work. Maintenance shall include keeping a tight alignment around the work area or shoreline and sediment removal as necessary.

D. Turbidity curtain and all supports shall be removed and disposed of offsite by the Contractor when the work is completed, and the turbidity is reduced to acceptable levels and approved by the Engineer. The Contractor shall be responsible to provide and maintain sufficient anchors, tie-downs, or other mechanisms to ensure proper position and performance of the curtain.

E. Extra depth of curtain should be included in designs to allow for tidal water level fluctuations.

3.13 QUALITY CONTROL AND TESTING

A. Fill Material Testing:

1. The Contractor shall perform material testing of its work to evaluate conformance with these Specifications. Where such testing demonstrates nonconformance with the specifications at the borrow source, the Contractor shall not import the material. If in place, Contractor shall remove and replace the material, or rework the material as required to conform to the specifications. Testing of the work for compliance by the Engineer shall not relieve the Contractor of its testing responsibilities.

B. Moisture Density Relationships:

1. The moisture-density relationships must be determined in accordance with ASTM D 698, Method A (a minimum of five (5) moisture-density relationship tests for each type of fill material used with five-points per test.) The moisture-density curves will be compiled to form a family of curves representing the range of materials available for use which will be utilized to estimate

optimum properties (maximum dry density and optimum moisture content) to be used with field density tests.

Test Method	Frequency
Moisture Density Relationship (ASTM D 698)	Minimum of five (5) moisture-density relationship tests on representative samples of Earthfill with five points per test. One five-point test for every 5,000 cubic yards of Earthfill placed with a minimum of one test per shift.
Soil Gradation (ASTM D 6913) Percent Fines (ASTM D 1140) Atterberg Limits (ASTM D 4318) Soil Classification (ASTM D 2487)	One test for each moisture density relationship.

C. Water (Moisture) Content Tests:

1. Determination of water content must be performed in accordance with ASTM D 2216. ASTM D 4643 may be used when rapid moisture content results are needed. If ASTM D 4643 test method is used, a correlation between this method and ASTM D 2216 test method must be established and reviewed by the Contracting Officer. One water content test must be performed for each in-place density test with material from the location of the in-place density test. Earthfill not meeting the required specifications for water content must be retested after corrective measures have been applied.

D. In-Place Density Testing:

1. The horizontal locations of tests must be randomly staggered in the Earthfill materials. At each field density test location, soil samples must be obtained for three-point compaction test, moisture content, grain size analysis, percent fines, and Atterberg limits testing. For three-point compaction tests, one moisture content must be at the in situ moisture content the other two moisture contents must be above and below the in situ moisture content, provided at least one point must be on the dry side of optimum, in accordance with ASTM

D 5080. Earthfill not meeting the required specifications for in-place density must be retested after the fill has been reworked.

Test Method	Frequency
Nuclear Method (ASTM D 6938) or Sand Cone (ASTM D 1556/D 1556M), Moisture Content (ASTM D 2216)	One (1) In-Place Density Test for every 300 cubic yards of completed Earthfill unless otherwise specified. One in-place density test for every 2,500 square feet of subgrade to receive Earthfill. Additionally, at least one (1) test for each lift of Earthfill placed.
Sand Cone (ASTM D 1556/ D 1556M), Moisture Content (ASTM D 2216)	One test for every ten (10) nuclear method tests and a minimum of one (1) test per shift and material type.
Three-Point Compaction Tests (ASTM D 5080), Soil Gradation (ASTM D 6913), Percent Fines (ASTM D 1140), Atterberg Limits (ASTM D 4318) by wet preparation method, and Soil Classification (ASTM D 2487)	At the location of each In-Place Density Test.

2. When the nuclear method is used for in-place density testing, the first test and every tenth test thereafter for each material type must include a sand cone correlation test in accordance with ASTM D 1556/D 1556M. Sand cone correlation tests must be performed adjacent to the location of the nuclear test, must include a nominal 6 inch diameter sand cone, and must include a minimum wet soil weight of 6 pounds extracted from the hole. Nuclear density testing equipment must not be used during rain. The density correlations must be submitted with test results within 24 hours after completing the test. Each transmittal including density test data must include a summary of all density correlations for the job neatly prepared on a summary sheet including at a minimum:

    a. Meter serial number and operator's initials.

    b. Standard count for each test.

c. Material type.

d. Probe depth.

e. Moisture content by each test method and the deviation.

f. Wet density by each test method and the deviation.

g. Density sand calibration.

h. Percent compaction in accordance with ASTM D 698.

3. If soil appears to contain organics based on color or smell, the Contracting Officer will require the Contractor to test the material in accordance with ASTM D 2487 to classify organic clay or organic silt (OH or OL). Organic clay or organic silt (OH or OL) are not suitable for Earthfill and must be removed at the Contractor's expense.

3.14 QUALITY ASSURANCE TESTING

A. At the discretion of the Engineer, samples will be collected during placement of materials and will be tested for gradation, plasticity, atterberg limits, classification, moisture content, in-place density, and percent relative compaction to ensure compliance with the Specifications.

B. The Contractor shall provide material as directed and shall provide necessary assistance for sampling and testing.

3.15 USE AND DISPOSAL OF EXCAVATED MATERIALS

A. Unless otherwise approved by the Engineer and compliant with the requirements of Paragraph 2.01, all excavated material not used as Native Topsoil or Earthfill, including materials beyond the excavation limits or any imported material, shall not be reused. Once observations by the monitors have been completed, such material and all excavation materials not used as Native Topsoil or Earthfill shall become the property of the Contractor and shall be removed from the site and legally disposed.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Excavation will be by the cubic yard and measured to the lines and grades shown after excavation and will be the number of cubic yards excavated for the

work to the lines and grades shown as calculated by comparing the pre-construction and post-excavation surveys.

B. Measurement for payment for the contract item Earthfill will be by the cubic yard and will be the number of cubic yards of Earthfill measured in place after compaction as confirmed by the post-excavation survey and post-backfill survey to the lines and grades shown on the Drawings.

C. Measurement for payment for the contract item Agricultural Soil will be by the cubic yard and will be one-third of the number of cubic yards measured in place as confirmed by the post-backfill and post-construction survey to the lines and grades shown on the Drawings.

D. Measurement for payment for the contract item Aggregate Chinking will be by the ton and will be the number of tons placed in the limits of work.

E. Measurement for payment for the contract item Native Topsoil will be by the cubic yard and will be two-thirds of the number of cubic yards measured in place as confirmed by the post-backfill and post-construction survey to the lines and grades shown on the Drawings.

4.02 PAYMENT

A. The contract prices will be paid for EXCAVATION; EARTHFILL; AGRICULTURAL SOIL; AGGREGATE CHINKING; NATIVE TOPSOIL; and TURBIDITY CURTAIN; which prices shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 31 05 19

GEOSYNTHETICS FOR EARTHWORK

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Geotextile Fabric. The contract item includes Geotextile Fabric to be used as a separator between dissimilar materials.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following sections of the contract:

1. Section 31 00 00 – Earthwork.

1.03 SUBMITTALS

A. Manufacturer’s Data:

1. Submit catalog cuts and manufacturer’s data for Geotextile Fabric.

B. Equipment List:

1. Submit a list of equipment used in performing the work.

C. Work Plan:

1. Submit a work plan for placing the Geotextile Fabric.

PART 2 PRODUCTS

2.01 MATERIALS

A. Geotextile Fabric Type 1:

1. The Geotextile Fabric shall be woven and have an apparent opening size (AOS) of 40.

2. Geotextile Fabric Type 1 shall be GEOTEX, 111F; Mirafi, FW 402; or equal.

B. Geotextile Fabric Type 2:

1. The Geotextile Fabric shall be woven and have an apparent opening size (AOS) of 40.

2. Geotextile Fabric Type 2 shall be GEOTEX, 102F; Mirafi, FW 404; or equal.

PART 3 EXECUTION

3.01 SUBGRADE PREPARATION

A. Where Geotextile Fabric is shown on the subgrade, the slope shall be graded to provide a smooth, uniform surface following the requirements of Section 31 00 00 – Earthwork. The slope shall be cleared of loose or unstable soil, and of debris or sharp objects that may tear or damage the Geotextile Fabric during installation. Holes and depressions shall be filled so that the Geotextile Fabric does not bridge the holes.

3.02 PLACEMENT

A. Geotextile Fabric:

1. Geotextile Fabric shall be installed in accordance with the manufacturer's recommendations and the Drawings.

2. Geotextile Fabric shall be placed loosely upon the surface to prevent damage to the fabric when placing any type of rockfill. Equipment or vehicles shall not be driven or operated directly on the Geotextile Fabric.

3. Geotextile Fabric placed above the water surface shall be covered with material as shown on the Drawings within 72 hours of placement.

4. Adjacent strips of Geotextile Fabric shall overlap with a minimum of one foot when placed above the water surface, or a minimum of four feet when placed underwater. Alternately, the adjacent strips may be sewn in accordance with the manufacturer's instructions.

5. If Geotextile Fabric is damaged during placement, the damaged section shall be repaired by fastening a piece of fabric over the damaged area in accordance with the manufacturer's recommendations. The patch shall extend a minimum of 3 feet beyond the perimeter of the damage.

6. Install Geotextile Fabric such that upstream fabric overlaps the downstream fabric at the adjacent edge.

7. Install Geotextile Fabric Type 2 horizontally over Launch Rock. Where Geotextile Fabric Type 2 meets Geotextile Fabric Type 1 at the excavated slope, overlap Geotextile Fabric Type 2 above Geotextile Fabric Type 1 with a minimum of one foot along the upslope.

8. The Engineer shall be notified by the Contractor a minimum of 48 hours prior to placement of Geotextile Fabric. The Engineer will conduct a survey for burrows within 24 hours of the placement of the Geotextile Fabric. At the direction of the Engineer, the Contractor shall hand excavate any burrows within the area that the Geotextile Fabric will be placed to ensure there are no snakes within the burrows. If the Geotextile Fabric is not covered with Launch Rock and Soil-Filled Rockfill within 24 hours, then the Engineer will resurvey the area to inspect for any snakes that may be underneath the Geotextile Fabric.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Geotextile Fabric will be by the square yard and will be the number of square yards of geotextile fabric type 1 and geotextile fabric type 2 placed in the limits of work, which does not include adjustment for seams, overlaps or edge treatments.

4.02 PAYMENT

A. The contract price will be paid for GEOTEXTILE FABRIC; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 31 11 00

CLEARING AND GRUBBING

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Clearing and Grubbing which includes clearing and grubbing the area above the native ground surface, tree trimming required for construction operations, and the requirements for supervision from a certified arborist.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following sections of the contract:

1. Section 31 00 00 – Earthwork.

1.03 DEFINITIONS

A. Clearing: Clearing consists of removing approved trees, shrubs, brush, grass, weeds, vegetation, refuse vegetation, debris, downed timber, branches, rubbish, and other obstructions on or above the ground surface or underwater within the limits of work.

B. Grubbing: Within the limits of clearing, the areas below the natural ground surface shall be grubbed up to a depth of three feet to remove all stumps, tap roots and lateral roots larger than 1.5 inches in diameter, buried logs, and all other objectionable material, including, debris, rubbish, concrete, pipes, and organic material.

1.04 SUBMITTALS

A. Clearing and Grubbing Plan:

1. Submit a Clearing and Grubbing General Plan that includes the following information:

a. Schedule of work.

b. Equipment list and methods for removal.

c. Identification of vegetation and trees to remain or be protected.

d. Location of stockpile areas.

e. A debris and excess material removal/reuse plan.

f. A description of chipping and grinding operations.

B. Tree Trimming Request:

1. Submit a Tree Trimming Request at least 5 days prior to trimming trees and including the following information:

a. The length along the levee road or area in linear feet, within a work site where trees are to be trimmed.

b. Type and species of the tree to be trimmed.

c. Measures to protect adjacent trees or vegetation.

d. Documentation of the trimming action, including photos before and after the trimming activity.

e. Name and credentials of

f. directly supervising this work.

g. Name and credentials of biologist to document this work.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 GENERAL

A. Notify the Engineer at least five working days prior to the start of clearing operations.

B. Do not begin Clearing until the Engineer has given clearance.

C. Do not begin Clearing until temporary fencing has been installed.

D. Perform Clearing and Grubbing prior to grading operations.

E. All Clearing and Tree Trimming shall be performed under the direct supervision of a certified arborist, to be provided by the Contractor unless otherwise directed by the Department.

F. The Contractor shall ensure no trees are removed or disturbed unless specifically designated for removal on the Drawings or by the Engineer.

G. The Contractor shall notify the Engineer if any construction operations may cause damage to any existing trees or vegetation designated to be preserved.

H. The Contractor shall ensure minimal disturbance to the natural ground within the dripline of protected trees as indicated on the plans.

I. No vehicles, construction equipment, temporary or mobile buildings, supplies, materials, or facilities shall be driven, parked, stockpiled, or located within the dripline of protected trees.

3.02 CLEARING

A. Clear ground surface within the limits of work as shown in the Drawings.

B. Cut approved trees, shrubs, and brush flush with the ground surface.

C. The trees that need to be saved will be identified by the Department. Tree protection measures shall be constructed as specified in Section 01 56 39 – Temporary Tree and Plant Protection, as shown on the Drawings, and/or as directed by the Department.

3.03 TREE TRIMMING

A. Where pruning of tree canopies is required for construction equipment access to prevent damage to trees during construction activities, the minimum space required for equipment clearance shall be pruned only with the approval of the Engineer. All branches shall be cut cleanly without peeling, tearing, splitting, or damage to the branch collar. All cuts shall be thinning cuts (i.e. removal at the point of attachment or to a node). No covering, chemical, or liquid treatments of pruning cuts shall be used. No single tree shall be subjected to the removal of greater than 20 percent of the tree canopy. Trimming of trees will only be allowed for vehicle access or to provide clearance for construction equipment operations that would otherwise damage limbs or branches.

3.04 GRUBBING

A. Grub the work site by removing stumps, roots, rubbish and vegetative matter up to a depth of three feet.

B. Backfill voids from removed rocks, concrete debris, stumps, and roots with approved Earthfill as specified in Section 31 00 00 – Earthwork.

C. Unless specified otherwise, do not remove stumps, roots, or vegetation beyond the limits needed for access or to perform the work.

D. Perform grubbing prior to grading operations.

E. Where tree roots are encountered within the scope of grading operations, roots shall be cut cleanly by hand to expose minimum tree tissue surface area.

F. Damaged roots shall be traced back and cleanly cut behind any split, crack, or other damage.

G. Exposed roots shall be immediately backfilled with soil to prevent drying. If, due to construction, the roots are or will be unearthed for more than two hours, they must be kept moist and covered with wet burlap, or an approved material of equal qualities, until they are backfilled with moist soil.

H. Supporting structural buttress roots that provide stability to the tree or keep it from toppling, shall be protected and kept in place.

I. The Contractor shall take adequate care to prevent root damage while digging around the dripline of the trees. A Certified Arborist must be present to supervise when digging in and around the dripline of trees occurs.

J. Roots greater than two inches in diameter shall be cut only under the direction of a Certified Arborist and with the approval of the Engineer.

K. Root pruning of more than 20 percent of the area beneath the dripline shall only be done under the direction of a Certified Arborist and with the approval of the Engineer.

3.05 DISPOSAL

A. Trees, stumps, other materials not directed to be salvaged or reused in the work, and surplus materials shall be removed from the work site as the Contractor’s property.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for the payment for the contract item Clearing and Grubbing will be by the square yard and will be the number of square yards cleared and grubbed within the limits of work.

4.02 PAYMENT

A. The contract price will be paid for CLEARING AND GRUBBING; which shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 31 25 00

EROSION AND SEDIMENTATION CONTROLS

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Erosion Control Fabric which includes the placement and installation of protective matting over the hydroseeded areas as shown on the Drawings.

1.02 RELATED SECTIONS

A. General Conditions, Supplementary Conditions, Division 1 sections, and Drawings apply to this section.

1.03 SUBMITTALS

A. Manufacturer’s Data and Sample:

1. Submit the Erosion Control Fabric manufacturer’s data and samples (two 1-foot by 1-foot squares), 1 wood stake, and 1 biodegradable bag.

PART 2 PRODUCTS

2.01 EROSION CONTROL FABRIC

A. The Erosion Control Fabric shall be woven from machine spun bristle coir twines. The fibers shall be 100 percent biodegradable coconut fiber. The fabric shall have a consistent thickness evenly distributed over the entire area of the mat with a 12-foot minimum width.

B. Products shall not be used with plastic monofilament or cross-joints in the netting that are bound/stitched.

C. Erosion Control Fabric shall be Earth Saver Coir Mat 400 Gram, Nedia KoirMat 400, or equal.

2.02 STAKES

A. Stakes shall be non-pressure treated Douglas Fir or other wood, as approved by the Engineer.

2.03 FIBER ROLLS

A. Fiber rolls shall be a minimum of 8 inches in diameter and consist of straw, flax, or similar materials inserted into tubular nets of biodegradable jute.

2.04 BIODEGRADEABLE BAGS

A. Biodegradable bags shall be made of burlap or other material approved by the Engineer. Bags shall be a minimum of 14 inches wide and 30 inches deep. Bags shall be filled one-third to one-half of their capacity. The openings of the bag shall be tied with jute twine. Fill material for bags shall be pea gravel such that 100 percent passes the 1/2-inch sieve, and a maximum of five percent passes the no. 16 sieve.

PART 3 EXECUTION

3.01 INSTALLATION TYPE 1

A. Erosion Control Fabric shall be installed within 48 hours of hydroseeding.

B. Erosion Control Fabric shall be installed according to the manufacturer's specifications and the following instructions:

1. Begin at the downstream end of the installation area and work upstream. Bury the top-of-the-slope and downstream edges of the Erosion Control Fabric in a trench, fold Erosion Control Fabric twice in the trench and anchor with stakes, as indicated on the Drawings. Backfill trenches with soil and compact thoroughly. Place Erosion Control Fabric neatly by rolling down the slope. Lay fabric without excessive stretching so that it conforms closely to the soil or is in direct contact with the soil. Any air gaps between the soil and Erosion Control Fabric exceeding 1 inch shall be removed by placement of additional biodegradable bags to achieve direct contact between the Erosion Control Fabric and soil. Erosion Control Fabric will be anchored at the downslope end (at the interface of soil filled rockfill and launch rock) using wood stakes through fiber rolls on a 1-foot bench as shown on the Drawings.

2. Wood stakes shall be installed through the fiber rolls and penetrate a minimum of 12 inches into the launch rock and aggregate chinking. The stakes shall be firmly wedged into the stretched Erosion Control Fabric openings and holding the Erosion Control Fabric tightly down to the soil.

3. The Erosion Control Fabric shall not be cut to install stakes. Stakes shall project 2 to 4 inches above fiber rolls and shall be installed firmly enough that they cannot be moved or pulled out by hand.

4. Wood stakes shall be installed in the peripheral anchor trenches as shown on the Drawings.

5. Overlap upstream Erosion Control Fabric over the in-place lower downstream Erosion Control Fabric and anchor with biodegradable bags as shown on Drawings. Do not leave soil cover exposed.

6. The upstream and downstream Erosion Control Fabric edges shall be folded twice and placed in a backfilled trench with soil compacted as indicated on the Drawings.

7. Biodegradable bags shall be filled one-third to one-half of their capacity. The openings of the bags shall be tied with jute twine and placed as shown on the Drawings or as otherwise directed by the Engineer.

8. Damaged Erosion Control Fabric shall be repaired in accordance with the manufacturer's recommendations.

3.02 INSTALLATION TYPE II

A. Erosion Control Fabric shall be installed within 48 hours of hydroseeding.

B. Erosion Control Fabric shall be installed according to the manufacturer's specifications and the following instructions:

1. Begin at the downstream end of the installation area and work upstream. Bury the top-of-the-slope, downslope and downstream edges of the Erosion Control Fabric in a trench, fold Erosion Control Fabric twice in the trench and anchor with stakes, as indicated on the Drawings. Place Erosion Control Fabric neatly by rolling down the slope. Backfill trench with soil and compact thoroughly. Lay fabric without excessive stretching so that it conforms closely to the soil or is in direct contact with the soil. Any gaps between the soil and Erosion Control Fabric exceeding 1 inch shall be removed with additional staking to achieve direct contact of Erosion Control Fabric with soil.

2. Wood stakes shall be installed through manually stretched openings in the Erosion Control Fabric, penetrate a minimum of 6 inches into the agricultural soil and native topsoil, and shall be firmly wedged into the stretched Erosion Control Fabric openings, holding the Erosion Control Fabric tightly down to the soil. The

Erosion Control Fabric shall not be cut to install stakes. Stakes shall project 2 to 4 inches above the erosion control fabric and shall be installed firmly enough that they cannot be moved or pulled out by hand.

3. The upstream and downstream Erosion Control Fabric edges shall be folded twice and placed in a backfilled trench with soil compacted as indicated on the Drawings.

4. Damaged Erosion Control Fabric shall be repaired in accordance with the manufacturer's recommendations.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Erosion Control Fabric will be by the square yard and will be the number of square yards of fabric placed in the limits of work not including adjustment for seams, overlaps, or edge treatments.

4.02 PAYMENT

A. The contract price will be paid for EROSION CONTROL FABRIC; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 31 35 00

ROCK SLOPE PROTECTION

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract items Launch Rock and Agricultural Soil for Soil-Filled Rockfill.

1. The contract item Launch Rock includes:

a. Importing suitable materials from Contractor selected off-site borrow areas to the work site.

b. Transporting, stockpiling, handling, and placing the Launch Rock to the lines and grades shown on the Drawings.

2. The contract item Agricultural Soil for Soil-Filled Rockfill includes:

a. Importing suitable materials from Contractor selected off-site borrow areas to the work site.

b. Transporting, stockpiling, handling, and placing the Agricultural Soil for Soil-Filled Rockfill to the lines and grades shown on the Drawings.

1.02 RELATED SECTIONS

A. Supplementary General Conditions, General Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following sections of the contract:

1. Section 31 00 00 – Earthwork.

2. Section 31 05 19 – Geosynthetics for Earthwork

1.03 REFERENCES

A. The following publications form a part of this Specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 – Interpretation of the Contract:

1. American Society for Testing and Materials (ASTM):

a. ASTM C 127 – Standard Test Method for Relative Density (Specific Gravity) and Absorption of Coarse Aggregate.

1.04 SUBMITTALS

A. Material Certification:

1. Submit supplier’s certification that rock materials meet specified requirements. Certification must be dated within 6 months prior to the bid date.

B. Borrow Source:

1. Submit borrow source (name and location of quarry) and gradations of rock material.

C. Quarry Certification:

1. Submit certification that the quarry has the operational capacity and dedication to produce the quantity of material required by the Contract within the times specified in the Contractor's approved baseline schedule.

D. Borrow Source and Test Results:

1. Submit borrow source (name and location) and test results of Agricultural Soil for Soil-Filled Rockfill. The tests should have been conducted within 6 months prior to the bid date. The tests shall indicate that the soil is free of organic matter, petroleum hydrocarbons, asbestos, pesticides, excessive heavy metals, stones, lumps, roots and other debris larger than 1 inch or any other chemical compounds toxic to plant growth, aquatic flora and fauna or humans.

E. Transport, Stockpile, and Placement Plan:

1. Provide a plan for transport, stockpile, and placement for Launch Rock and Agricultural Soil for Soil-Filled Rockfill including:

a. Methods of transport (truck or barge) and routes to be used. This shall be part of the traffic plan required in Section 01 57 19 – Temporary Environmental Controls.

b. Stockpile locations.

c. Equipment and methods to be used for rock placement.

d. Procedures to be used for verification of line and grade of placements below water level.

e. Equipment and methods to be used for Agricultural Soil placement in Soil-Filled Rockfill.

PART 2 PRODUCTS

2.01 ROCK MATERIALS

A. All rock material shall be clean, sound, hard, angular fragments of rock with no appreciable fines, and shall be free of cracks, seams, or other defects. Rock material shall have a specific gravity of not less than 2.6, saturated surface-dry basis, when tested in accordance with ASTM C 127.

B. The shape of rock shall be such that the minimum dimension of a rock is not less than one third of the maximum dimension and shall be angular.

C. All rock shall be free of dirt or mud, loose concrete or mortar, trash and organic matter.

D. The points on each individual grading curve shall be between the boundary limits as defined by a smooth curve drawn through specified grading limits plotted on a mechanical analysis diagram. The individual grading curves shall not exhibit abrupt change in slope denoting skip grading or scalping of certain sizes. Specified grading of the material shall be met at both the source and as delivered to the project. In addition, material not meeting the required grading due to segregation or degradation during placement will be rejected. If rock does not meet the required grading, the hauling operation shall be stopped immediately and will not resume until rock processing procedures are adjusted and a gradation test is completed showing gradation requirements are met.

E. The percentage composition by weight of Launch Rock shall conform to the following:

Weight (pounds)	Percent Larger
400	0
300	0-15
70	50-85
15	95-100
5	100

F. Soil for Soil-Filled Rockfill shall be Agricultural Soil as specified in Section 31 00 00 – Earthwork. Launch Rock for Soil-Filled Rockfill shall conform to the gradation requirements for Launch Rock specified herein.

G. Materials shall not contain petroleum hydrocarbons, pesticides, heavy metals, or other deleterious substances in excess of the Department of Water Resources Draft Borrow Material Chemical Acceptance Criteria listed in Appendix III.

PART 3 EXECUTION

3.01 FOUNDATION PREPARATION

A. Launch Rock shall be placed above or below water on foundation surfaces shaped and prepared in accordance with Section 31 00 00 – Earthwork, Section 31 05 19 – Geosynthetics for Earthwork, and as shown on the Drawings. Areas above the water surface on which Launch Rock is to be placed shall be trimmed and dressed to form an even plane.

B. Launch Rock shall be placed starting at the base of the geotextile fabric and proceed up the slope unless otherwise shown on the Drawings.

3.02 PLACEMENT

A. General:

1. The intent of these Specifications is to produce a well-keyed and stable buttress of Soil-Filled Rockfill using Launch Rock with a uniform surface true to the lines and grades as shown.

2. Launch Rock shall not be dumped directly from haul equipment onto excavated and/or geotextile fabric covered surface(s), or onto existing levee surface for stockpiling prior to placement. The height of drop for the initial placement of Launch Rock onto the fabric shall be limited to 2 feet or less, and the Launch Rock shall not be allowed to roll down the slope. Subsequent placements shall be limited to 5 feet or less, and the Launch Rock shall not be allowed to roll down the slope.

3. Unloading of haul equipment shall be with excavators, cranes equipped with skip or clamshell, or similar equipment.

4. The Launch Rock shall be properly graded and shall be placed in a smooth curve along the natural bank alignment. The Launch Rock shall not project out into the channel beyond the limits of the natural bank and shall not include "barbs," "groins," or other features that will deflect the

flow against the opposite bank, or cause the formation of downstream eddies.

5. A qualified biologist shall be onsite during all grading activities and will monitor all locations where emergency repairs will alter snake hibernacula or refugia.

B. Launch Rock placement below water:

1. Where standing or flowing water is present, Launch Rock shall be placed as shown on the Drawings unless otherwise shown or directed by the Engineer.

2. Launch Rock shall be placed and worked in a manner that will produce a stable fill that contains no large unfilled spaces caused by bridging of the larger fraction.

C. Launch Rock placement above water:

1. Launch Rock located above water shall be placed and spread into position in approximately horizontal layers not to exceed 2 feet in thickness. Launch Rock shall be placed and tamped in a manner that will produce a stable fill that contains no large unfilled spaces caused by bridging of the larger fraction and no segregation of the material.

2. During placement of Launch Rock, the Contractor shall perform rearrangement of loose rock fragments, chinking of void spaces, or hand placement to comply with the requirement of a well-keyed and stable layer of rock.

D. Soil-Filled Rockfill:

1. Launch Rock for Soil-Filled Rockfill shall be placed in accordance with the placement requirements for Launch Rock located above standing or flowing water.

2. Soil for Soil-Filled Rockfill shall be Agricultural Soil as specified in Section 31 00 00 – Earthwork.

3. After the placement of each lift of Launch Rock to be filled with Agricultural Soil, the Agricultural Soil shall be thoroughly filled into the rock voids within each lift. The Contractor shall select the method of filling, which may include injecting or otherwise working in a premixed slurry without disturbing the rock-to-rock contact within the lift. Following soil filling, the lift surface shall be cleaned of Agricultural Soil prior to the installation of the next lift of Launch Rock to ensure positive, rock-to-rock

contact between lifts. Premixing Agricultural Soil and rock before placing the rock shall not be permitted.

4. At the sites requiring the placement of Soil-Filled Rockfill, the initial lifts of the fill shall serve as a test section for the Engineer to verify the suitability of the Contractor's soil filling method. If found unsuitable, the Contractor shall refine or modify its method so that acceptable filling of voids is achieved.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Launch Rock will be by the ton and will be the number of tons of each placed within the limits of work.

B. Measurement for payment for the contract item Agricultural Soil for Soil-Filled Rockfill will be by the cubic yard and will be one-fourth of the number of cubic yards measured in place as confirmed by the post-excavation survey, the Launch Rock spot elevations, and the post-backfill survey to the lines and grades shown on the drawings.

4.02 PAYMENT

A. The contract prices will be paid for LAUNCH ROCK; and AGRICULTURAL SOIL FOR SOIL-FILLED ROCKFILL; which prices shall include full compensation for all costs incurred under this section.

END OF SECTION

DIVISION 32

EXTERIOR IMPROVEMENTS

SECTION 32 11 23

AGGREGATE BASE COURSES

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Aggregate Base which includes furnishing, spreading, compacting, and testing as specified, to the lines and grades shown on the Drawings.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following section of the contract:

1. Section 31 00 00 – Earthwork.

1.03 REFERENCES

A. The following publications form a part of this specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 – Interpretation of the Contract:

1. American Society for Testing and Materials (ASTM):

a. ASTM C 117 – Standard Test Method for Materials Finer Than 75-Micrometers (No. 200) Sieve in Mineral Aggregates by Washing.

b. ASTM C 127 – Standard Test Method for Density (specific gravity).

c. ASTM C 131 – Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate (LA Rattler).

d. ASTM C 136 – Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.

e. ASTM D 1557 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort.

f. ASTM D 6938 – Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

2. California Department of Transportation (Caltrans) 2025 Standard Specifications:

a. Section 26-1.02B.

1.04 SUBMITTALS

A. Supplier's Certification:

1. Submit the supplier's certification that Aggregate Base meets specified requirements.

B. Aggregate Base Source:

1. Submit the source (name and location of quarry) and the gradation of Aggregate Base.

C. Aggregate Base Tests:

1. Submit testing on Aggregate Base specific gravity.

2. Submit testing on Aggregate Base quality characteristics: resistance, sand equivalent, and durability index.

3. Submit testing on Aggregate Base abrasion testing characteristics: LA rattler 100 revolutions and LA rattler 500 revolutions.

1.05 DEFINITIONS

A. Percent compaction is the ratio of the field dry density to the maximum dry density expressed as a percent.

1.06 TESTING

A. Testing will be performed in accordance with the requirements of Section 31 00 00 – Earthwork, except as follows:

1. For gradation, comply with ASTM C 117 and ASTM C 136.

2. Field dry density of free draining soils using ASTM D 6938.

3. For specific gravity, comply with ASTM C 127

4. For durability, comply with ASTM C 131.

5. Maximum dry density of non-free draining soils and free draining soils using ASTM D 1557.

6. Optimum water content of non-free draining soils and free draining soils using ASTM D 1557.

PART 2 PRODUCTS

2.01 MATERIALS

A. Requirements:

1. The Aggregate Base shall conform to Caltrans 2025 Standard Specifications Section 26-1.02B, Class 2, 3/4-inch maximum grading.

2. The Aggregate Base shall conform to Caltrans 2025 Standard Specifications Section 26-1.02B, Aggregate quality characteristics.

3. The Aggregate Base's specific gravity shall be no less than 2.60.

4. The LA Rattler results shall be less than 10 percent loss after 100 revolutions and less than 25 percent loss after 500 revolutions.

PART 3 EXECUTION

3.01 PREPARATION

A. Subgrade:

1. The subgrade shall be prepared in accordance with Section 31 00 00 – Earthwork and compaction shall be equal to or greater than 95 percent when tested as specified in that section.

B. Moisture Conditioning:

1. Aggregate Base shall be uniformly mixed, moisture conditioned sufficiently in advance of placement to ensure thorough penetration, and have a uniform distribution of moisture. Minor corrections to moisture content may be made during placement as approved by the Engineer.

3.02 SPREADING

A. The Aggregate Base shall be deposited and spread to the compacted thickness of a minimum of six inches, within the limits of work. Aggregate Base shall be spread and compacted uniformly in horizontal layers not to exceed a maximum loose lift thickness of six inches.

B. Aggregate Base shall be spread to maintain uniform distribution. Non-uniformly spread Aggregate Base shall be reworked in place and redistributed prior to compaction.

3.03 COMPACTION

A. The relative compaction of each layer of compacted Aggregate Base shall not be less than 95 percent as determined by ASTM D 1557.

B. The surface of the finished Aggregate Base at any point shall not vary more than 0.025 feet above or 0.05 feet below the grade established by the Engineer.

C. The Aggregate Base which does not conform to the above requirements shall be reshaped or reworked, watered, and thoroughly re-compacted to conform to the specified requirements.

3.04 FIELD QUALITY CONTROL

A. While in the presence of the Engineer, the Contractor shall take samples during the placement of Aggregate Base, and perform tests for moisture content, gradation, percent compaction, and density in accordance with Paragraph 1.06.

B. The Contractor shall provide the samples and necessary assistance for testing as directed.

C. Frequency:

1. For each proposed source, the Contractor shall submit laboratory test results identified in Paragraph 1.04 prior to the delivery of Aggregate Base to the work site. Test results are required for each increment of 500 tons of Aggregate Base delivered.

2. On-site density tests on Aggregate Base shall be performed as specified in Paragraph 1.06 for each 100 tons placed with a minimum of at least one test per site.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Aggregate Base will be by the ton and will be the number of tons placed in the limits of work.

4.02 PAYMENT

A. The contract price will be paid for AGGREGATE BASE; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 32 80 00

IRRIGATION

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Irrigation System which includes the installation of temporary irrigation systems, equipment, and materials.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following sections of the contract:

1. Section 32 90 00 – Planting.

2. Section 32 90 20 – Plant and Seed Establishment.

3. Section 32 92 19 – Seeding.

1.03 SUBMITTALS

A. Irrigation System Installation Plan:

1. The Contractor shall submit an irrigation system installation plan describing the means and methods proposed for each work site. The irrigation system installation plan shall include, but not be limited to:

a. Descriptions of the proposed irrigation systems, and the means and methods used to install the Irrigation System at each work site.

b. Water source.

c. A list of irrigation system components, products, and equipment required at each site.

1.04 TIMES AND CONDITIONS

A. Irrigation System installation shall be performed only during periods when the components can be installed without damaging the completed repair and endangering workers' health and safety.

B. Approval of the irrigation system installation plan shall be obtained prior to seeding or planting of any pole cuttings at each work site.

PART 2 PRODUCTS

2.01 IRRIGATION PRODUCTS AND EQUIPMENT

A. The Contractor is responsible for providing all products and equipment identified in the approved irrigation system installation plan.

PART 3 EXECUTION

3.01 IRRIGATION SYSTEM INSTALLATION

A. The Contractor shall install an Irrigation System to provide consistent and even irrigation coverage to all vegetated project areas, in accordance with the approved irrigation system installation plan.

B. If a temporary irrigation system is used, it shall be installed to operate without leaks or excessive runoff that would cause damage to the work site.

C. At no point shall there be runoff, pooling, rilling, erosion, or sliding of surface soil material caused by irrigation water during the Irrigation System installation. Irrigation System installation shall not damage the seeding materials installed as directed in Section 32 92 19 – Seeding or Pole Cuttings installed as directed in Section 32 90 00 – Planting.

D. The Contractor shall be responsible for damage to any property or work caused by erosion, runoff, leaks, or installation method of the Irrigation System. The Contractor shall repair any damage caused by Irrigation System installation as directed by the Engineer at no additional cost to the Department.

E. The Contractor shall provide all power and water necessary for their Irrigation System installation. The Contractor shall coordinate with the appropriate utilities or agencies to secure required permits and pay all associated fees and costs for the duration of the Pole Cuttings and Seeding installation periods defined in Section 32 90 00 – Planting and Section 32 92 19 – Seeding. The Contractor shall secure the source of irrigation water. The Contractor shall furnish and install all Irrigation System equipment necessary to deliver irrigation water to the work site to establish plant cover in compliance with the performance standards prescribed within Section 32 90 00 – Planting, and Section 32 90 20 – Plant and Seed Establishment, and Section 32 92 19 – Seeding.

3.02 CLEANUP

A. Excess wires, PVC pipe, equipment, and any other materials not used for the installation of the Irrigation System shall be removed by the Contractor in an approved disposal site. The Contractor is responsible for obtaining all permits required for disposal.

PART 4 PAYMENT

4.01 PAYMENT

A. The contract price will be paid for IRRIGATION SYSTEM; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 32 90 00

PLANTING

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Pole Cuttings. The contract item includes identifying, harvesting, and planting the Pole Cuttings as necessary to complete this project in conformance with the Drawings and Specifications.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following section of the contract:

1. Section 32 90 20 – Plant and Seed Establishment.

1.03 REFERENCES

A. All plant names shall be true to botanical name, common name, and variety as indicated in the following:

1. Calflora online database, accessible at www.calflora.org.

1.04 DEFINITIONS

A. Landscape Installation Period: The time between the start of landscape work (including Erosion and Sedimentation Controls, Irrigation, Planting, and Seeding) and the issuance of the Landscape Installation Notice is provided by the Engineer.

B. Landscape Installation Notice: A written notice issued by the Engineer upon satisfactory fulfillment of the Final Landscape Installation Inspection of all project landscape components (Erosion and Sedimentation Controls, Irrigation, Planting, and Seeding). This notice will be issued in writing by the Engineer only after all landscape installation items have been satisfactorily fulfilled. The date of the notice shall constitute the beginning of the Landscape Establishment Period.

1.05 SUBMITTALS

A. Pole Cuttings Material Source:

1. Submit information describing the source of material to be used for live pole cuttings. Include a description of methods and measures for the acquisition of Pole Cuttings. Include the location, species, property owner, and a letter indicating permission has been granted from the property owner to harvest plant material.

B. Pole Cuttings Installation Plan:

1. Submit a pole cuttings installation plan 7 days prior to Pole Cuttings installation unless otherwise approved by the Engineer. The pole cuttings installation plan shall include:

a. A description of methods and measures for the installation of Pole Cuttings.

b. A schedule for delivery and placement of Pole Cuttings.

1.06 PERFORMANCE STANDARDS

A. Any deficiencies or damages caused to the work site by installation efforts of Pole Cuttings shall be corrected by the Contractor during the Landscape Installation Period.

PART 2 PRODUCTS

2.01 CUTTINGS

A. General:

1. Provide cuttings of willow species described below in amounts indicated on drawings and as needed to complete the project.

B. Species:

1. Where willow pole cuttings are shown on the Drawings, the Contractor shall furnish and install cuttings of the following willow species and percentages unless otherwise noted on the Drawings: A minimum of 30 percent black willow and 30 percent sandbar willow, with the remainder consisting of at least two other willow species with a minimum of 5 percent of the total (such as red willow, arroyo willow, shining willow, or any other willow species growing in the vicinity of the project). Willow species shall be identified according to the Calflora online database.

C. Size and Shape:

1. Provide Pole Cuttings with a minimum diameter of 0.75 inches or larger, up to 1.5 inches, depending on the species. Provide Pole

Cuttings with a length of 9.5 feet. Rhizomatous and spreading willow types (Salix lasiolepis) can be up to 0.5 inches in diameter.

D. Quality:

1. Cuttings shall be vigorous stock and free of insects and disease.

2.02 FERTILIZER

A. The use of fertilizer or other amendments is not allowed.

2.03 ROOT STIMULANT

A. The use of root stimulant is not allowed.

2.04 FORM TUBE

A. Form tubes shall be biodegradable and have a minimum inside diameter of 18 inches. The form tubes shall be Sonoco Builder's Tube, Sakrete Form Tube or equal.

2.05 BEAVER SHIELD

A. Beaver shields shall be 48 inches in length as shown in the Drawings. The beaver shields shall be SunFlex Greenhouse Grow Tubes, Max Grow Tube Tree Shelters, or equal.

2.06 BIRD EXCLUSION MESH TOP

A. Bird exclusion mesh tops shall be Plantra Bird Exclusion Mesh Tops, Tree Pro Mesh Bird Nets, or equal.

PART 3 EXECUTION

3.01 PLANTING OF CUTTINGS

A. Pole Cuttings shall be planted as per the approved pole cuttings installation plan during the Landscape Installation Period.

B. Form tubes, beaver shields, and bird exclusion mesh tops shall be placed as shown and where indicated on the Drawings and as per the approved pole cuttings installation plan.

C. Planting Depths:

1. Pole Cuttings shall be planted to the elevations shown in the Drawings.

3.02 POLE CUTTINGS ESTABLISHMENT

A. Installed Pole Cuttings shall be watered and maintained in accordance with Section 32 90 20 – Plant and Seed Establishment.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Pole Cuttings will be by the unit and will be the number of pole cuttings installed in the limits of work.

4.02 PAYMENT

A. The contract price will be paid for POLE CUTTINGS; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 32 90 20

PLANT AND SEED ESTABLISHMENT

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract items Pole Cuttings Establishment, Seeding Establishment and Irrigation System Maintenance, and includes all labor, materials, water, tools, and equipment necessary to maintain the Seeding and Pole Cuttings to the prescribed establishment levels at each site in conformance with the Drawings and Specifications.

1.02 RELATED SECTIONS

A. General Conditions, Supplementary Conditions, Division 1 sections, and Drawings apply to this section.

1. Section 31 25 00 – Erosion and Sedimentation Controls.

2. Section 32 80 00 – Irrigation.

3. Section 32 90 00 – Planting.

4. Section 32 92 19 – Seeding.

1.03 REFERENCE STANDARDS

A. References:

1. The following publications form a part of this Specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 – Interpretation of the contract:

a. Association of Official Seed Analysts Seed Sampler's References https://www.analyzeseeds.com/seed-samplers-references.

b. California Native Plant Society: "Phase 3 Field Guide, Vegetation Diversity and Structure." October 2010.

B. Definitions:

1. Landscape Installation Period: The time between the start of landscape work (including Erosion and Sedimentation Controls,

Irrigation, Planting, and Seeding) and the issuance of the Landscape Installation Notice is provided by the Engineer.

2. Landscape Installation Notice: A written notice issued by the Engineer upon fulfillment of the Final Landscape Installation Inspection of all project landscape components (Erosion and Sedimentation Controls, Irrigation, Planting, and Seeding). This notice will be issued in writing by the Engineer only after all landscape installation items have been satisfactorily fulfilled. The date of the notice shall constitute the beginning of the Landscape Establishment Period.

3. Landscape Establishment Period: The time during which the Project landscape components (Erosion and Sedimentation Controls, Irrigation, Planting/Pole Cuttings and Seeding) are maintained after all landscape work has been installed and approved by the Engineer. The Landscape Establishment period shall begin on the date the Landscape Installation Notice is signed by the Engineer and continues for six (6) months or until the Landscape Establishment Notice is provided by the Engineer.

4. Percent Cover: Percent area with vegetation covers as determined in accordance with “Phase 3 Field Guide, Vegetation Diversity and Structure,” by California Native Plant Society.

1.04 SUBMITTALS

A. Irrigation and Maintenance Plan:

1. Submit an irrigation and maintenance plan for each work site including:

a. A description of methods, measures, equipment, and a schedule for the irrigation and maintenance of Seeding and Pole Cuttings.

b. A description of irrigation methods and a schedule for maintenance of Irrigation Systems.

c. A description of weed control measures.

d. The water source and watering schedule shall be provided following Seeding and Planting. The water schedule shall contain the frequency, rate, and duration illustrating compliance with this Specification.

B. Monthly Establishment Log:

1. Submit a monthly establishment log within 5 working days following the end of each month including:

    a. A description of any maintenance, Pole Cuttings Establishment activities, and Seeding Establishment activities performed.

    b. Observations of the sites, including descriptions of the Pole Cuttings conditions and relative vegetation coverage of the Seeding Establishment.

C. Final Establishment Report:

1. Submit a final establishment report for each work site prior to the final inspection including:

    a. Documentation of the status of plant survivorship, growth, seeded area cover, and any corrective measures taken to support establishment of target vegetative communities throughout the Landscape Establishment Period for all areas.

    b. A description of any variations from the Specifications and Drawings to the Pole Cuttings, Seeding, and Irrigation System.

    c. A description of any variations from the Specifications and Drawings to the Pole Cuttings Establishment, Seeding Establishment, and Irrigation System Maintenance.

1.05 PERFORMANCE STANDARDS

A. The installed Pole Cuttings and Seeding shall be evaluated against the following performance standards:

1. Seeding shall achieve and maintain 80 percent relative vegetation coverage of the total application area at the end of the Landscape Establishment Period.

2. Pole Cuttings shall have a minimum 80 percent survival rate at the end of the Landscape Establishment Period.

3. Any deficiencies or damage caused to each work site by maintenance efforts of Pole Cuttings and Seeding shall be corrected by the Contractor.

B. Irrigation Systems maintained under this Contract shall be guaranteed against inferior workmanship. Any deficiencies or damages caused to the work site by maintenance efforts shall be corrected by the Contractor at no additional cost to the Department.

C. Seeded areas larger than 100 square feet not producing required native herbaceous vegetation cover within 3 months of the Landscape Installation Notice shall be prepared, reseeded, and maintained with the same seed mix in compliance with Section 32 92 19 – Seeding at no additional expense to the Department.

1.06 TIMES AND CONDITIONS

A. Seeding and Pole Cuttings shall be maintained for the duration of the landscape establishment period.

B. Irrigation and maintenance of Pole Cuttings and Seeding shall be performed only during a period when the work can be performed without damaging the repair and endangering workers' health and safety. Consideration shall be given during periods of potential flooding, when irrigation may not be needed or may need to be reduced.

C. Approval of the irrigation and maintenance plan shall be obtained prior to Seeding or planting of any Pole Cuttings at each work site.

PART 2 PRODUCTS

2.01 MATERIALS

A. The Contractor is responsible for providing all products and equipment identified in the irrigation and maintenance plan.

PART 3 EXECUTION

3.01 SUPPLEMENTAL PROTECTION MEASURES

A. Protect all seeded areas and planted Pole Cuttings against herbivores, traffic, excessive sunlight, or other intrusions by installing temporary fencing in accordance with Section 01 56 26 – Temporary Fencing as needed and as approved by the Engineer.

B. These temporary protection measures shall supplement plant protection installed in compliance with the Drawings and Section 32 90 00 – Planting.

C. Maintain and repair all temporary protection measures for all seeded areas and planted Pole Cuttings throughout the Landscape Establishment Period.

3.02 POLE CUTTINGS ESTABLISHMENT

A. Reset Pole Cuttings that become dislodged or otherwise unseated in its natural growing condition.

B. Repair, provide, and replace Pole Cuttings products damaged from wind, wildlife, or water in compliance with Section 32 90 00 – Planting.

C. Pole Cuttings not meeting the performance standards listed in this section shall be replaced at the Contractor's expense. Replacement Pole Cuttings shall be the same species, size, and shape as the Pole Cuttings installed in compliance with Section 32 90 00 - Planting. The replacement shall be performed between November 1 and March 31, unless otherwise directed by the Engineer.

D. Pole Cuttings that have been replanted at least once and continue to exhibit minimal growth or mortality may be reported to the Engineer when the Contractor determines the replanted areas have physical characteristics that limit germination or growth. The Engineer may waive the requirement to continue replanting.

E. Following rain events, the Contractor shall uncover any Pole Cuttings or root crowns buried by sediment deposition.

F. Pole Cuttings maintenance shall be in accordance with the approved irrigation and maintenance plan.

3.03 SEEDING ESTABLISHMENT

A. Maintenance of the seeded areas shall occur immediately after receiving the Landscape Installation Notice and for the duration of the Landscape Establishment Period. Maintenance of the seeded areas shall include regular observations of the sites, watering, and repair of any damaged seeded areas until the Landscape Establishment Notice is given as described herein.

B. Invasive exotic vegetation and weeds shall be removed before they start blooming or competing with seeded and installed native vegetation. Remove weeds by hand or careful hoeing. Herbicides shall not be used. Any non-native invasive plants rated by the California Department of Food and Agriculture as A, B or C noxious weeds, or highly invasive by Cal-IPC, and any other plants designated by the Engineer as weeds shall be removed and disposed of off-site.

C. Reseed areas that do not meet the performance standards listed in this section. Reseeding shall use the seed mixes, soil preparation, application methods, and locations specified in Section 32 92 19 – Seeding and shown in the Drawings. Reseeding shall occur between November 1 and March 31, or as approved by the Engineer.

D. The Contractor shall place and maintain Temporary Fencing in accordance with Section 01 56 26 – Temporary Fencing around the seeded area to protect it from vehicle or pedestrian traffic.

E. Seeding maintenance shall be in accordance with the approved irrigation and maintenance plan.

3.04 IRRIGATION SYSTEM OPERATION

A. The Contractor shall provide all power and water necessary for their irrigation operations. The Contractor shall coordinate with the appropriate utilities or agencies to secure required permits and pay all associated fees and costs for the duration of the Landscape Establishment Period. The Contractor shall secure the source of irrigation water.

B. At no point shall there be runoff, pooling, rilling, erosion, or sliding of surface soil material caused by irrigation water. Irrigation shall be performed without causing damage to installed seeding materials. The Contractor shall be responsible for damage and repairs to any property or work caused by erosion, runoff, or leaks of the irrigation system and method. Repairs to damaged property or work shall be approved by the Engineer.

C. The irrigation system shall be operated in a manner that results in the plants being self-sustained at the end of the Landscape Establishment Period. Revise the irrigation schedule throughout the Landscape Establishment Period as needed to taper off watering rates.

D. The Contractor shall adjust the application rate and schedule as needed based on site conditions (solar exposure, topography and soil conditions), weather conditions (temperature, evapotranspiration and precipitation), and plant survival rate.

E. Where not detrimental to seeded areas and planted Pole Cuttings, watering shall be conducted over long durations at low application rates with a lower frequency to promote deep root growth.

F. The irrigation system shall be operated without leaks or excessive runoff that would cause damage to the work site.

3.05 IRRIGATION SYSTEM MAINTENANCE

A. The Contractor shall be responsible for the regular maintenance and repair of the irrigation system, including replacement of components, adjustments, and other actions necessary. The irrigation system shall deliver the required amount of water to all seeded areas and planted Pole Cuttings to establish relative vegetation cover to the performance standards listed within this section.

B. Irrigation system inspections shall be conducted no less than weekly for the first month after installation to ensure the system is functioning

correctly, and monthly thereafter, except during periods when the irrigation system is not in operation.

C. For the duration of the Landscape Establishment Period, poorly functioning or nonfunctioning components shall be replaced immediately without causing damage to the seeded areas and planted Pole Cuttings.

D. Drip irrigation systems shall be routinely inspected for clogged drip emitters and periodically flushed with water to remove potential build-up of sediment. Clogged emitters shall be cleaned free of debris or replaced with new emitters.

E. Repairs and replacements of the irrigation system materials shall be installed identical to the original irrigation system in compliance with Section 32 80 00 – Irrigation unless otherwise approved by the Engineer.

3.06 EROSION CONTROL MAINTENANCE

A. The contractor shall regularly inspect, maintain, and repair the erosion control fabric and other temporary erosion control measures throughout the Landscape Establishment Period in accordance with Section 31 25 00 – Erosion and Sedimentation Controls.

B. Inspect all erosion control measures when rain is forecast and immediately following rainfall events. Inspect the sites after storm events and monthly at a minimum.

C. Following each event, remove accumulated sediment, repair any damage, and replace and/or install temporary erosion control measures as needed. Notify the Engineer prior to proceeding with corrective work.

3.07 INSPECTIONS

A. Monthly Inspections After Seeding:

1. Once per month during the Landscape Establishment Period the Contractor and the Engineer shall jointly make periodic inspections to the work site(s) to evaluate whether seeded areas and planted Pole Cuttings are in a healthy condition in compliance with the performance standards.

2. The Contractor shall examine site conditions of seeded areas and planted Pole Cuttings, including:

a. Plant condition, including growth stage, stand height, plant vigor, insect and herbivore damage, herbicide burn, etc.

b. Absolute percent cover and relative percent cover of native species, non-native species, weeds, seeded plants, and Pole Cuttings within the seeded areas and areas of planted Pole Cuttings.

c. Percent survival of Pole Cuttings.

d. Weed competition, weed growth stage, and efficacy of weed control measures.

e. Components and conditions of plant protection and irrigation systems.

3. Monthly inspections shall coincide with the times listed within this section.

4. All observations shall be recorded on the Establishment Record Data Sheets (see Document 00 30 00 – Available Information). Observations shall be compiled to generate the monthly establishment log in compliance with this section.

5. Any installed work determined to be deficient shall be repaired or replaced as soon as practicable by the Contractor, but no longer than 14 calendar days from the inspection. Watering deficiencies shall be corrected within 3 calendar days of the inspection.

B. Punch List Inspection:

1. A punch list inspection shall be conducted 30 days prior to the final inspection. The Engineer will review the condition and acceptability of the installed plants and all seeded areas. The Engineer will prepare a written punch list of items of any work found not meeting the requirements stated herein to be corrected by the Contractor prior to the final inspection.

C. Final Inspection:

1. The final inspection will be conducted in accordance with Section 00 72 46 – Control of Work, Paragraph 14.

2. During the final inspection, the Engineer will evaluate whether deficiencies noted during the punch list inspection have been corrected. Any punch list items and potential new deficiencies not addressed shall be corrected, and another final inspection shall be conducted.

D. The Engineer may inspect work without notification at any time. During an inspection, the Engineer reserves the right to take and analyze

samples of any and all materials for conformity to the Specifications. Seed samples shall be drawn in accordance with procedures outlined in the Association of Official Seed Analysts Seed Sampler's References (https://www.analyzeseeds.com/seed-samplers-references).

E. The Contractor is responsible for the removal of all materials rejected by the Engineer. The Contractor shall immediately remove rejected material from the site as the Contractor's property and replace with material that meets the requirements in Section 32 80 00 – Irrigation, Section 32 90 00 - Planting, and Section 32 92 19 - Seeding.

3.08 MONTHLY ESTABLISHMENT LOG

A. Prepare a monthly establishment log that includes, at a minimum, pole cuttings and seeded area conditions, irrigation system conditions, site conditions including erosion and weed conditions, work activities performed, and dates of work performed.

B. The monthly establishment log shall be recorded on Establishment Record Data Sheets (Document 00 30 00 – Available Information) and shall include:

1. Pole Cuttings Establishment: For each planted area, record the date of observation, location, and description of growth stage; percent survival and vigor by species; areas of exceptional growth; areas of poor growth or low survival; and probable causes of survival/growth status. For replanted areas, note replanting dates, locations, quantities, and species replaced.

2. Seeding Establishment: For seeded areas, record date of observation, location, description of growth stage, dominant species, percent cover, and note areas of exceptional establishment and of poor establishment.

3. Reseeding: For all reseeded areas, record date, location, aerial extents of reseeded areas, seed mix, quantities, and potential conditions contributing to the need for reseeding.

4. Photos: Take color photographs of site conditions from one fixed station point for each seeding area capturing the planted Seeding and Pole Cuttings. Photo documentation shall commence within the first month following the planting of Pole Cuttings and Seeding. Photo documentation shall be conducted every 3 months thereafter until the end of the Landscape Establishment Period.

5. Watering: The dates and locations of all irrigation activities per irrigation schedule, including the type of activity undertaken, method, and rates.

6. Weeds: General description of weed populations within areas of planted Pole Cuttings and seeded areas. Species, locations, and current growth stage of persistent weed populations shall be indicated.

7. Weed Management: Date, location, type of activity undertaken, equipment used, pre-activity site conditions, and post-activity results. For herbicide applications, record target weeds, herbicide names, concentrations, and application rates and methods.

3.09 CLEANUP

A. Cleanup shall occur throughout the Landscape Establishment Period at a frequency determined by the Engineer. The Contractor shall be responsible for the removal of trash and debris within the area of planted Pole Cuttings and seeded areas. Removed materials shall be disposed of off the site by the Contractor in an approved disposal site at the Contractor's expense. All waste material shall be removed and disposed of off the site as Contractor's property. The Contractor shall obtain permits required for such disposal.

B. Upon confirmation by the Department that no deficiencies were noted in the final inspection, the Contractor shall remove and dispose of all debris and temporary items offsite, including but not limited to:

1. Temporary irrigation systems equipment and materials.

2. Plant protection materials and Temporary Fencing installed by the Contractor.

3. Plant location and identification flags.

4. Any non-biodegradable temporary erosion control measures.

C. Items may be left in place if directed in writing by the Engineer.

3.10 FINAL ESTABLISHMENT REPORT

A. Prepare a final establishment report after the final inspection.

B. The final establishment report shall document site conditions at the end of the Landscape Establishment Period. Provide summary tables for the seeded areas and planted Pole Cuttings of each work site, that lists plants installed, plant mortality, plants alive, plant survival percentage, replacement plants, percent cover of seeded areas, and pertinent observations.

C. The final report shall include:

1. Title Sheet.

2. Table of Contents.

3. Summary tables that contain the documented site conditions listed above.

4. Corrective measures and variations from the Specifications and Drawings.

5. Photographic documentation of all planted Pole Cuttings and seeded areas.

3.11 VALIDATION STANDARDS

A. The Engineer shall issue the Establishment Period Notice, which shall constitute fulfillment of the work under this section, once the following requirements have been met:

1. All performance standards are met.

2. All punch list inspection items are have been addressed.

3. The final establishment report is submitted and reviewed by the Engineer.

4. The final inspection has been conducted.

5. Site Cleanup is performed.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Pole Cuttings Establishment will be by the month and will be the number of months that maintenance is performed until the end of the Pole Cuttings Landscape Establishment Period.

B. Measurement for payment for the contract item Seeding Establishment will be by the month and will be the number of months that maintenance is performed until the end of the Seeding’s Landscape Establishment Period.

C. Measurement for payment for the contract item Irrigation System Maintenance will be by the month and will be the number of months that maintenance is performed until the end of the Seeding and Pole Cuttings Landscape Establishment Period.

4.02 PAYMENT

A. The contract price will be paid for POLE CUTTINGS ESTABLISHMENT; SEEDING ESTABLISHMENT; and IRRIGATION SYSTEM MAINTENANCE; which price shall include full compensation for all costs incurred under this section.

END OF SECTION

SECTION 32 92 19

SEEDING

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract item Seeding at the various sites.

1. The contract item Seeding includes:

a. Labor, material, water, tools and equipment necessary to install seed to complete this project in conformance with the Drawings and Specifications.

b. The seeding application method shall be hydroseeding. In some areas, alternative seeding methods such as controlled broadcast seeding may be directed or approved by the Engineer.

c. The irrigation and maintenance of Seeding prior to the issuance of a Landscape Installation Notice by the Engineer.

1.02 RELATED SECTIONS

A. Supplementary Conditions, General Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following sections of the contract:

1. Section 31 25 00 – Erosion and Sedimentation Controls.

2. Section 32 80 00 – Irrigation.

3. Section 32 90 00 – Planting.

4. Section 32 90 20 – Plant and Seed Establishment.

1.03 REFERENCE STANDARDS

A. References:

1. The following publications form a part of this specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 – Interpretation of the contract:

a. Agricultural Marketing Service: AMS-01 (Amended through: August 1988) Federal Seed Act Regulations (Part 201-202).

b. Association of Official Seed Analysts Seed Sampler's References https://www.analyzeseeds.com/seed-samplers-references.

c. Soil Science Society of America (SSSA) "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods":

d. Caltrans Standard Specifications, 2025.

e. California Food and Agricultural Code ARTICLE 8 - Labeling of Seeds

2. All plant names shall be true to botanical name, common name, and variety as indicated in the following:

a. Calflora online database, accessible at www.calflora.org.

B. Definitions:

1. Landscape Installation Period: The time between the start of landscape work (including Erosion and Sedimentation Controls, Irrigation, Planting and Seeding) and the issuance of the Landscape Installation Notice by the Engineer.

2. Landscape Installation Notice: A written notice issued by the Engineer upon satisfactory fulfillment of the Final Landscape Installation Inspection of all project landscape components (Erosion and Sedimentation Controls, Irrigation, Planting and Seeding). This notice will be issued in writing by the Engineer only after all landscape installation items have been satisfactorily fulfilled. The date of the notice shall constitute the beginning of the Landscape Establishment Period.

3. Landscape Establishment Period: The time during which the project landscape components (Erosion and Sedimentation Controls, Irrigation, Planting/Pole Cuttings and Seeding) are maintained after all landscape installation work is fulfilled and accepted by the Engineer. The Landscape Establishment Period shall begin on the date the Landscape Installation Notice is signed by the Engineer, and continue in accordance with Section 32 90 20 – Plant and Seed Establishment.

4. Cal-IPC: California Invasive Plant Council.

5. Compost: The product resulting from the controlled biological decomposition of organic material that has been sanitized through the generation of heat and stabilized to the point that it is beneficial to plant growth.

1.04 SUBMITTALS

A. Landscape Contractor Qualifications: Submit qualifications listed in Quality Assurance for each Landscape Contractor employed in the Project within 30 days of Notice to Begin Work.

B. Soil Testing Agency Qualifications: Submit qualifications listed in Quality Assurance for each Soil Testing Agency employed in the Project within 30 days of Notice to Begin Work.

C. Seeding Implementation Schedule and Placement Plan:

1. Submit Seeding Implementation Schedule and Placement Plan including:

a. Drawings and total acreage of each seeding area including any areas impacted by construction that the Engineer determines require repair and re-seeding.

b. Methods, sequence, and schedule of material placement.

c. Weeding and watering methods, plan, and schedule for the Landscape Installation Period.

D. Equipment List:

1. Contractor shall provide a list of equipment that will be used for each task. A list of proposed site preparation, seeding, relocation, construction, and mulching equipment to be used in performance of seeding operations, including descriptive data and calibration tests.

E. Existing Soil Test Reports:

1. Submit soil fertility test results and report with soil improvement recommendations for soil in each area to be seeded as described in this Specification.

F. Material List:

1. Submit a list of seeding materials proposed for seeding, including, but not limited to:

a. Seed vendor’s statement certifying that each container of seed delivered to each work site meets the requirements listed within this section.

b. Inspection, inventory, and receiving records of the condition of the seed at time of delivery.

c. Soil fertilizers and amendments. Analysis of fertilizers by a qualified testing agency, made according to the Association of American Plant Food Control Officials (AAPFCO).

d. Compost analysis for quality, microflora and fauna, and weed content.

e. Binders/tackifiers.

f. Native grass straw (weight receipts from scales shall be required). Include harvest date, location, species, and weed content.

g. Mycorrhizal inoculant, including the mycorrhizal inoculum live propagule test results.

h. Wood cellulose fiber mulch.

G. Installation Maintenance Log:

1. Submit an installation maintenance log including a description of weeding and watering activities conducted after seeding until the Landscape Installation Notice is provided by the Engineer.

a. The description of weeding activities shall include but is not limited to the species type, location, and date the weeds were removed.

b. The description of watering activities shall include but is not limited to the applied water's location, date, amount in gallons, and duration of application.

H. Post-Construction Seeding Extents:

1. Provide the extents of the seeded areas in a Civil 3D 2022 format or equal, reflecting the extents of each type of seed mix applied. The extents provided in the Civil 3D format shall be geo-referenced and include the date the seed was applied, the horizontal and vertical datums, projection, units, and name of agency that completed the survey.

1.05 INSPECTIONS

A. Notify the Engineer at least 5 working days prior to each inspection. The Contractor shall initiate, schedule and coordinate all inspections. The Contractor or Contractor's authorized representative shall be present and participate in each inspection. The following inspections are required under this section:

1. Pre-Installation Conference and Site Review: Conduct an inspection at the Project site to verify site conditions and soil preparation for seeding before seeding work starts. Verify that areas to be seeded have had agricultural soil placed; fertilizer and soil amendments incorporated where applicable; final grading finished; are free of weeds, rocks, and any other non-soil items 2 inches and larger in any dimension; and have soil that is scarified. Do not proceed with seeding until approval is provided by the Engineer.

2. Seed Application Inspection: The Engineer will perform this inspection at the time of seed application. Seeding shall not be accepted without this inspection. Prior to seeding operations, the Contractor shall adjust and calibrate equipment in accordance with manufacturer's specifications and field test in the presence of the Engineer. Seeding equipment shall be thoroughly clean and not contain remnants of seed mixes from Contractor's previous jobs. Stage seed and other seeding materials such as mycorrhizal inoculant, wood fiber, soil amendments and fertilizers in unopened bags at the job site immediately before seeding for Engineer's review. Retain, and submit to the Engineer all seed tags for seed products used. Seed shall be inspected for conformity to species and quality. Other seeding materials shall be inspected for meeting specification requirements. The Department reserves the right to take and analyze samples of seed and seeding materials for conformity to the specifications at any time. Seed samples shall be drawn in accordance with procedures outlined in AOSA (Association of Official Seed Analysts). Contractor shall remove any seed or other seeding materials rejected by the Engineer immediately from the site and replace them with approved seed or seeding materials. The Engineer will observe the seeding operations during equipment calibration, material loading, and seed application. The Engineer will verify seeding coverage, and clean-up of adjacent areas after seeding. The Engineer will summarize any deficiencies in a seed application punch list that will be forwarded to the Contractor for corrective action. Corrections shall be integrated within 5 business days.

3. Monthly Planting, Seeding and Erosion Control Inspection: The Contractor shall make periodic monthly inspections to the site(s). Any landscape work determined to be deficient shall be corrected as soon as practicable by the Contractor but no longer than 14 calendar days from the inspection. Watering deficiencies shall be corrected within 3 calendar days of the inspection

4. Punch List Landscape Installation Inspection: A punch list inspection will be held by the Engineer. Any work found not meeting

the requirements stated herein, will be provided in writing to the Contractor.

5. Final Landscape Installation Inspection: The inspection will be conducted in accordance with Document 00 72 46 – Control of Work, Section 14. The time for this inspection shall be at least 60 days, but not more than 75 days after the seeding application. The Engineer will evaluate seed growth, seed coverage, and remediation of deficiencies noted in the punch list landscape installation inspection. A Landscape Installation Notice will be provided after all erosion control, irrigation, planting and seeding requirements have been fulfilled, and the installation maintenance logs and post-construction seeding extents have been submitted. A written Landscape Installation Notice issued by the Engineer shall constitute the beginning of the Landscape Establishment Period.

B. The Engineer may inspect work without notification at any time. During an inspection, the Engineer reserves the right to take and analyze samples of any and all materials for conformity to the specifications. Seed samples shall be drawn in accordance with procedures outlined in the Association of Official Seed Analysts Seed Sampler's References (https://www.analyzeseeds.com/seed-samplers-references/).

C. Rejected Materials: The Contractor is responsible for the removal of all materials rejected by the Engineer. The Contractor shall immediately remove rejected material from the site as the Contractor's property and replace with material that meets specification.

1.06 QUALITY ASSURANCE

A. Landscape Contractor Qualifications:

1. Current California Landscape Contractor License (C-27)

2. Evidence of a minimum of 4 years of applicable job experience.

3. Evidence of successful fulfillment of one restoration project in California that included a minimum of 0.5 acres of riparian habitat restoration. For these minimum qualifications, a habitat restoration project can be defined as any habitat establishment, mitigation, creation, or enhancement project using site-appropriate native plant species including at a minimum: planting, seeding, irrigation system installation, operation and maintenance, and successful plant establishment.

B. Soil Fertility Testing Agency Qualifications:

1. An independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in the types of tests to be performed.

2. At the Contractor's option, Work may be divided among qualified testing laboratories specializing in physical testing, chemical testing, and fertility testing.

3. Subject to compliance with requirements, soil testing can be performed by one of the following agencies, or as approved by the Engineer:

a. Wallace Laboratories, 365 Coral Circle El Segundo, CA 90245

b. Waypoint Analytical California, Inc., 4741 E. Hunter Avenue, Suite A., Anaheim, CA

c. Or equal

1.07 PRE-INSTALLATION SOIL TESTING

A. Pre-Installation Testing Service: Engage a qualified soil testing agency to perform soil analyses of existing unamended soil samples taken before seeding begins.

B. Laboratory Sample Collection Timing: Collect soil samples from prepared pre-seeded areas as determined by Engineer after the Pre-Installation Conference and Site Review.

1. Notify the Engineer at least 5 working days in advance of the dates and times when laboratory samples will be taken.

C. Preconstruction Soil Analyses: For each area to be seeded, collect soil samples, engage a qualified testing agency to perform testing of soil samples and furnish the soil test results and a written report containing soil-amendment and fertilizer recommendations for soil fertility improvement. Soil sample collection and testing shall be performed according to Paragraph 1.09 Soil Sampling Requirements and Paragraph 1.10 Testing Requirements of this Section.

1.08 SOIL SAMPLING REQUIREMENTS

A. General: Extract soil samples according to the requirements of Paragraph 1.10 Soil Testing Requirements of this Section.

B. Sample Collection and Labeling: Soil samples shall be collected and labeled by the Contractor in the presence of the Engineer.

1. Number and Location of Samples: Collect compound soil samples consisting of a minimum of six representative subsamples each. Subsample collection sites shall be at least 150 feet apart. At a minimum, compound soil samples shall be collected within each distinct seeding area, and if applicable within each different type of soil.

2. Procedures and Depth of Samples: According to USDA-NRCS's Field Book for Describing and Sampling Soils.

3. Labeling: Label each sample with the date, location name based on the Drawings, visible soil condition, and sampling depth.

1.09 SOIL TESTING REQUIREMENTS

A. General: Perform tests on soil samples according to requirements listed below. Test results and reports shall be labeled with the same location name as the soil sample tested.

B. Physical Testing:

1. Soil Texture: Soil-particle, size-distribution analysis shall be done by one of the following methods according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods":

a. Sieving Method: Report sand-gradation percentages for very coarse, coarse, medium, fine, and very fine sand; and fragment-gradation (gravel) percentages for fine, medium, and coarse fragments, according to USDA sand and fragment sizes.

b. Hydrometer Method: Report percentages of sand, silt, and clay.

2. Total Porosity: Calculate using particle density and bulk density according to the SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."

3. Water Retention: Analyze according to the SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."

4. Saturated Hydraulic Conductivity: Analyze according to the SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods," at 85% compaction according to ASTM D698 (Standard Proctor).

C. Chemical Testing:

1. CEC: Analyze by sodium saturation at pH 7 according to the SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."

2. Phytotoxicity: Test for plant-available concentrations of phytotoxic minerals, including aluminum, arsenic, barium, cadmium, chlorides, chromium, cobalt, copper, lead, lithium, mercury, nickel, selenium, silver, sodium, strontium, tin, titanium, vanadium, and zinc.

D. Fertility Testing: Soil-fertility analysis shall be performed according to standard laboratory protocols,

E. Soil Fertility Improvement Recommendations: Shall be included in soil test report and consist of recommended actions to improve existing soil fertility so it is suitable to support healthy, viable plants.

1. Fertilizers and Soil Amendment Rates: State recommendations in weight per 1,000 sq. ft. (100 sq. m) for a 6-inch (150-mm) depth of soil.

2. Soil Reaction: State the recommended liming rates for raising pH or sulfur for lowering pH according to the buffered acidity or buffered alkalinity in weight per 1,000 sq. ft. (100 sq. m) for a 6-inch (150-mm) depth of soil.

1.10 DELIVERY, STORAGE AND HANDLING

A. Delivery:

1. The Contractor shall load, transport, offload, and protect materials from the point of pickup to points of installation in a manner acceptable to the Engineer.

B. Storage:

1. Store materials in areas approved by the Engineer.

2. Store seed, fertilizer, and mycorrhizal inoculum in cool, dry locations away from contaminants.

3. Store chemical materials in a spillage-contained area and away from other landscape materials.

4. Keep mulch covered with tarp to protect it from wind, rain, or other damage.

5. Seed shall not be stored where temperatures exceed 80 degrees Fahrenheit.

C. Handling:

1. The Contractor shall handle all materials to ensure that they are not damaged at any time. Handling and storage of materials if delivered to the site by others shall become the responsibility of the Contractor. All materials shall be new, unblemished, and installed in accordance with the Drawings and these Specifications.

1.11 TIMES AND CONDITIONS

A. Seeding Times:

1. Seeding in any area shall not start prior to fulfillment, inspection and approval of the finished grade, soil preparation, decompaction, weed removal, and planting.

2. Seeding shall begin within 48 hours of soil decompaction in areas to be seeded.

3. The Contractor is responsible for obtaining specified seed materials in advance. Seeds of native species must be procured and acquired in advance or collected to ensure availability at the time of Seeding.

4. Seeding shall be performed between October 24 and February 25 (4-month window). No variance to the start date will be allowed unless provided in writing by the Engineer. When special conditions warrant a variance to the seeding start date, the Contractor shall submit a proposed revised seeding schedule in writing to the Engineer. The Contractor shall be prepared to seed at the first available opportunity when all conditions (weather, moisture, temperature, etc.) are acceptable. If a seeding time variance (outside of the 4-month seeding window) is granted by the Engineer, and seeding performance, coverage or germination rate are unsatisfactory, Contractor shall be responsible for re-seeding of all unsatisfactory areas as determined by the Engineer, per this Seeding Specification at no additional cost to the Department.

B. Seeding Conditions:

1. Prior to any work, the Contractor shall be familiar with the Project site conditions, environmentally sensitive areas, improvements, utilities and facilities related to the Project, so that proper precautions may be taken to not damage such environmental areas, improvements and utilities. In the event of conflicts, promptly

notify the Engineer to provide clarification. The Contractor shall make any and all repairs for damage resulting from failure to follow this procedure at no additional cost to the Department.

2. Seeding operations shall be performed only during periods when beneficial results can be obtained. When excessive moisture, winds, heat, cold or other detrimental conditions to seeding materials prevail, the work shall be stopped as directed by the Engineer.

3. If the seeding schedule requires seeding on days the temperature is expected to reach or exceed 90 degrees Fahrenheit (32 degrees Centigrade), the Contractor shall schedule seeding in the morning hours before the 90 degree temperature is reached.

C. Construction Impacted Area Treatment:

1. Impacted areas in need of repair, as determined by the Engineer, shall be scarified, dressed and leveled with agricultural soil, and seeded only after they are no longer in use for construction or staging purposes and all construction equipment has left the impacted area.

1.12 PERFORMANCE STANDARDS

A. Seeded areas larger than 400 square feet that are bare, not producing native herbaceous vegetation cover, or have less than 80% vegetation cover, as determined by the Engineer at the time of the Final Landscape Installation Inspection, shall be prepared, re-seeded, weeded and irrigated with any recommended revisions approved by the Engineer, until the Landscape Installation Notice is provided by Engineer. Corrective work shall be performed at no additional expense to Department.

PART 2 PRODUCTS

2.01 SEED

A. Native Grass and Herbaceous Plant Mix for Repair Areas: Seed species and seeding rates shall be as identified below.

Common Name	**Botanical Name**	**lbs PLS/ac**
yarrow	*Achillea millefolium*	0.25
Spanish lotus	*Acmispon americanus* var. *a.*	2.00
California mugwort	*Artemisia douglasiana*	1.00
California brome	*Bromus sitchensis* var. *carinatus*	10.00
slender wheatgrass	*Elymus trachycaulus* ssp. *t.*	5.00
beardless wild rye	*Elymus triticoides*	5.00
small fescue	*Festuca microstachys*	5.00
meadow barley	*Hordeum brachyantherum* ssp. *c.*	10.00
alkali barley	*Hordeum depressum*	10.00
miniature lupine	*Lupinus bicolor*	2.00
deergrass	*Muhlenbergia rigens*	1.00
tansy leafed phacelia	*Phacelia tanacetifolia*	3.00
one-sided blue grass	*Poa secunda* ssp. *secunda*	5.00
purple needle grass	*Stipa (Nassella) pulchra*	5.00
tomcat clover	*Trifolium willdenovii*	0.75
	TOTAL:	**65.00**

B. Construction Impacted Areas Seed Mix: Erosion control seed mix and seeding rates for construction staging, laydown, storage, parking, and other impacted areas not to receive the repair area seed mix shall be as shown in the table below.

Common Name	**Botanical Name**	**Percentage PLS**
California Brome	*Bromus carinatus*	62%
small fescue	*Festuca microstachys*	26%
foothill clover	*Trifolium ciliolatum*	12%
	TOTAL:	**25.00**

C. Seed Mixing and Quality: Seed shall be pre-mixed by seed supplier. Seeds shall be in conformance with the California State Seed Law of the Department of Agriculture. Each seed bag shall be sealed and labeled with the following: species name, percent purity, percent germination, dealer's guarantee, dates of test, and amount of Pure Live Seed (PLS) contained.

D. Seed weed content shall not exceed 0.5 percent of the aggregate of seed and other material. Seed mixes shall be provided by the Contractor and shall genetically originate from the California Central Valley Region. Where applicable, grow out locations shall be within the same area. Contractor shall use seed from a seed vendor that can certify seed origin. Any proposed variations from seed specifications must be approved by the Engineer in writing prior to use.

E. The Contractor shall furnish seed that is tagged and labeled in accordance with the California Food and Agricultural Code.

F. The Contractor shall provide all seed, including replacement seed required for re-seeding. Seed mixes herein shall be measured in pure live seed (PLS). PLS is the percentage of viable seed that has the potential to germinate within a measured one-pound weight of a seed lot. PLS is calculated by multiplying the percent purity and percent germination and expressing the result as a percentage.

2.02 FERTILIZER

A. Fertilizers shall be pelleted, granular or soluble form.

B. Ammonium Sulfate: Commercial, ammonium sulfate, soluble; a minimum of 50% available nitrogen.

C. Potassium Sulfate: Commercial, potassium sulfate, soluble; a minimum of 50% available potassium.

D. Triple Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 50% available phosphoric acid.

E. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20% iron and 10% sulfur.

F. Chelated Iron: Commercial-grade FeEDDHA for dicots and woody plants, and commercial-grade FeDTPA for grasses and other monocots.

G. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50% derived from natural organic sources of urea formaldehyde, phosphorous, and

potassium in amounts recommended by soil testing agency in soil report.

2.03 INORGANIC SOIL AMENDMENTS

A. Agricultural Gypsum: Minimum 90% calcium sulfate, finely ground with 90% passing through a No. 50 (0.30-mm) sieve.

2.04 COMPOST

A. Compost shall be derived from salvaged grubbed vegetation material consisting of chipped, shredded, or ground vegetation.

B. Compost shall be free of paint, petroleum products, herbicides, fungicides, heavy metals, or other chemical residues that would be harmful to plant or animal life. Other deleterious materials such as plastic, glass, metal or rocks shall not exceed 0.1 percent by weight or volume.

C. Compost shall be processed or completed to reduce weed seeds, pathogens and deleterious material. During the composting process, a minimum internal temperature of 57.2 degrees Celsius shall be maintained for at least 15 continuous days. The compost shall be thoroughly turned a minimum of five times during the composting process and shall go through a minimum 90-day curing period after fulfillment of the 15-day thermophilic composting process.

D. Compost shall be screened through a minimum 5.0-millimeter screen prior to placement.

E. Compost shall not contain more than 5% redwood material and not more than 2% peat.

F. The carbon to nitrogen ratio (C:N) of the compost shall be approximately 20:1.

2.05 PESTICIDES

A. Pesticides shall not be used.

2.06 WOOD CELLULOSE FIBER MULCH

A. Paper Mulch shall not be used.

B. General: Mulch shall be free from noxious weeds and seeds, mold, and other deleterious materials. Mulch shall not contain any growth or germination inhibiting substances.

C. Type: Mulch shall be commercially available and produced from virgin wood fiber. Fiber shall be of such character that it will disperse into uniform homogeneous slurry when mixed with water and shall be capable of being sprayed to form a porous mat.

D. Water Content: The water content of the fiber before mixing into the slurry shall not exceed 15 percent of the dry weight of the fiber. The moisture content of the fiber shall be clearly marked on the package.

E. Ash Content: Fiber shall not contain more than 1 percent ash, and shall be nontoxic to plant or animal life.

F. Water-holding Capacity: Fiber shall have a water-holding capacity by weight of not less than 1,200 percent (1,200 grams of water per 100 grams of fiber). Water-holding capacity of the fiber shall be marked on the package.

G. pH: Fiber shall have a pH in the range between 6.0 and 7.5 at 3 percent consistency.

H. Coloring: Fiber shall be dyed green to contrast the area on which the fiber is to be applied. The material used as dye shall be biodegradable, shall not inhibit plant growth, and shall be nontoxic to plant and animal life.

I. Packaging: Hydromulch fiber shall be packaged in wet-strength kraft paper or plastic bags, which shall not exceed 100 pounds in weight. The package shall contain current labels, the manufacturer’s name, and the weight.

2.07 STRAW

A. Quality: Straw shall be air-dry stalks of irrigated native grasses, wheat or barley at a consistency compatible with commercial mulch-blowing equipment. Straw shall be free of weed seeds, plastic, glass, metal, rocks, refuse or other deleterious material.

B. Substitutions: Substitutions may be requested in writing and shall be approved by the Engineer. Rice straw substitutions are prohibited for applications in wetland or riparian areas.

C. Agricultural Commissioner Clearance: Provide evidence that clearance has been obtained from the County Agricultural Commissioner, as required by law, before straw from outside of the county in which it is to be used is delivered to the work site.

D. Bedding straw shall not be used.

2.08 TACKIFIER

A. Quality: Tackifier shall be a concentrated, biodegradable, organic derivative of guar, psyllium or corn. Provide tackifier in powder form in clearly marked bags stating the contents of each package. Tackifier shall be non-toxic to plant and animal life, non-corrosive, non-crystalline and non-staining to concrete or painted surfaces.

B. Certification: Tackifier shall be certified by the California Department of Agriculture as “Auxiliary Soil Chemical” and shall conform to Sections 21-2.02E of the 2025 Caltrans Standard Specifications for “Tackifier”.

2.09 WATER

A. The Contractor shall provide water for all seeding operations. The Contractor shall install an irrigation system in accordance with Section 32 80 00 – Irrigation, to irrigate seed as needed for optimal germination and growth.

B. Quality: Water shall not contain elements toxic to plant life or wildlife.

2.10 COLORING AGENT

A. Coloring agent shall be biodegradable, non-toxic material free from copper, mercury, and arsenic.

2.11 MYCORRHIZAL INOCULUM

A. Quality: Endomycorrhizal inoculum shall consist of spores, mycelium, and mycorrhizal root fragments of arbuscular fungi in a solid carrier suitable for handling by hydroseeding or dry seeding equipment. The carrier shall be the material in which the inoculum was originally produced, and may include organic materials, vermiculite, perlite, calcined clay, or other approved materials consistent with mechanical application and with good plant growth. The rate of application of endomycorrhizal inoculum shall be based on the guarantee of the supplier or the analysis returned by an independent laboratory and shall be at a minimum of 3,600,000 propagules per acre (8,900,000 propagules per hectare).

B. Guarantee: Each endomycorrhizal inoculum shall carry a supplier’s guarantee of number of propagules per unit weight or volume of bulk material. If more than one fungal species is claimed by the supplier, the label shall include a guarantee for each species of mycorrhizal fungus claimed.

C. Type: Mycorrhizal inoculum shall be EndoNet, AM-120, or equal.

D. Handling: Endomycorrhizal inoculum is live material. Transport and store in vehicles, containers and application equipment with a temperature of less than 90 degrees Fahrenheit (32 degrees Celsius) and more than 50 degrees Fahrenheit (10 degrees Celsius).

E. Testing: Prior to application, obtain results of mycorrhizal inoculum live propagule test. Testing shall be performed by an independent laboratory specializing in fungal testing.

PART 3 EXECUTION

3.01 GENERAL

A. Work under this section shall be performed within the Landscape Installation Period.

B. The seeding application method shall be hydroseeding. In some areas, alternative seeding methods such as controlled broadcast seeding may be directed or approved by the Engineer.

3.02 PREPARATION

A. Before applying seed, repair areas shall be dressed with 2 inches of native topsoil and 1 inch of agricultural soil.

B. Remove and dispose of trash, debris, and weeds in all areas to receive seed.

C. Remove and dispose of loose rocks or any other non-soil materials larger than 2 inches in all areas to be seeded.

D. Protect the traveled ways and existing vegetation from overspray of hydraulically-applied material.

3.03 SOIL SCARIFICATION

A. Repair Areas: Repair areas shall be. The scarification furrows shall be parallel with the contours.

B. Construction Impacted Areas: Construction impacted areas such as construction staging, laydown, access, storage or parking in need of re-seeding, as determined by the Engineer shall be cross-ripped to a depth of 12", and shall have their surface leveled prior to seeding as specified in this document.

C. Areas Around Existing Trees: Areas within a radius around tree trunks equal to 1 foot per inch of DBH, not to exceed 15 feet, shall remain undisturbed and no scarification shall occur within this zone.

3.04 SOIL FERTILIZER AND AMENDMENT APPLICATION

A. Incorporate fertilizers and soil amendments into the top 3 inches of planting/seeding soil prior to seeding, per soil testing agency recommendations and subject to Engineer approval. In areas determined by the Engineer as not feasible for incorporation, apply fertilizers and amendments by hydro-applying with the seed.

3.05 SEEDING

A. Manual Seeding: With Engineer approval, the Contractor may seed all mixes manually. Seed shall be incorporated into the soil to a maximum depth of ¼ inch by raking or dragging. All requirements of this specification including mulch, mycorrhizal inoculant, fertilizers, amendments, compost, straw, and tackifier shall apply. Seeding shall be performed using hand-operated cyclone-type seeders or rotary broadcast equipment mounted on construction or revegetation machinery, with metering devices on all equipment. Multiple passes shall be made over each area to achieve uniform seed distribution.

B. Hydroseeding: The Contractor shall employ the following four-step hydroseeding process:

1. Step 1:

a. Apply the first step as a complete mixture within 60 minutes of adding the seed to the mixture as follows:

1) Virgin Wood Cellulose Fiber Mulch, at a rate of 500 pounds per acre.

2) Endomycorrhizal Inoculum, at a rate of 60 pounds per acre.

3) Fertilizers and amendments as applicable.

4) Seed Mix, of species and rates as shown in this Specification. Seed shall be added in the hydroseeder tank last and shall be discharged within 90 minutes. Loads held over 90 minutes shall be recharged with one half of the original seed rate. If the mixture remains in tank for more than 8 hours, it shall be removed from the job site and replaced at the Contractor's expense. Once fully loaded, the slurry shall be agitated for 5 minutes to allow for uniform and thorough mixing.

2. Step 2:

a. Apply the second step as a complete mixture as follows:

1) Virgin wood cellulose fiber, at a rate of 1,500 pounds per acre.

2) Compost, at a rate of 13,700 pounds per acre (1/8" compost depth, 17 cubic yards/acre, 6.75 tons/acre).

3. Step 3:

a. Distribute straw with straw blower or by hand. Straw shall be thoroughly dispersed so that there are no dense clumps or piles present that might prevent seed germination and growth. The straw shall be distributed as follows:

1) Straw, at a rate of 4,000 pounds per acre.

4. Step 4:

a. Apply the fourth step as a complete mixture on the same working day when straw work is done as follows:

1) Virgin wood cellulose fiber, at a rate of 500 pounds per acre.

2) Tackifier, at a rate of 120 pounds per acre.

C. APPLICATION: The slurry shall have the proper consistency to adhere to the slopes without lumping or running. The slurry shall be uniformly applied in a sweeping motion under pressure over the entire designated area to form a mat. The hydroseeded area shall not be rolled.

3.06 EROSION CONTROL FABRIC

A. As shown on the Drawings, seeded areas shall have erosion control fabric installed within 48 hours after seeding operations. Steps 3 and 4 of the hydroseeding process (straw and tackifier) shall be omitted in areas where erosion control fabric is to be installed.

B. Erosion control fabric shall be applied to seeded areas upon fulfillment and approval of the seeding application by the Engineer. Application of erosion control fabric shall conform to Section 31 25 00 - Erosion and Sedimentation Controls.

3.07 LANDSCAPE INSTALLATION PERIOD SEEDING MAINTENANCE

A. Seeded areas maintenance shall begin immediately after seeding is fulfilled and continue until the end of Landscape Installation Period. Maintenance of seeded areas shall include weekly observations of the seeded areas, watering, weeding, and repair of any damage until the

Landscape Installation Notice is provided by Engineer. Vegetation vigor, density and percent cover as well as any erosional damage, such as rilling, soil slippage, headcut formation or any other observations related to soil erosion shall be recorded and reported in an installation maintenance log which shall be submitted to the Engineer every month.

B. The Contractor shall provide irrigation in accordance with Section 32 80 00 - Irrigation. Irrigation to maintain seeded areas in a healthy and thriving condition shall continue through the entire Landscape Installation Period. The top three inches of soil in the seeded areas shall be maintained moist during the entire Landscape Installation Period. Moisture level shall be monitored daily the first week after seeding and weekly thereafter. Should soil dry up or vegetation wilt, supplemental irrigation shall be provided as soon as possible within 24 hours of the observation. Watering shall be performed in multiple short repeated applications to allow water to infiltrate in the soil and to prevent any damage to seeded areas, soil erosion or runoff.

C. As a minimum, the Contractor, shall irrigate:

1. Daily the first week after seeding.

2. November 1 – March 30: Irrigate only if soil dries up, plants show signs of drought stress, or less than 0.5 inches of natural precipitation fell in the area in the past 4 weeks as documented by the nearest California Irrigation Management Information System (CIMIS) station records. One event every 7 days. Approx. 6,000 gal/acre/event.

3. April, May: One event every 4 days. Approx. 10,000 gal/acre/event.

4. June: One event every 3 days. Approx. 9,300 gal/acre/event.

5. July, August: One event every 2 days. 6,000 gal/acre/event.

6. September: One event every 3 days. Approx. 6,900 gal/acre/event.

7. October: One event every 4 days. Approx. 6,000 gal/acre/event.

D. Control noxious weeds before they become 12 inches high or before they set seed, whichever occurs sooner. Remove weeds by hand or careful hoeing. Herbicides shall not be used. Any non-native invasive plants rated by the CDFA as A, B or C noxious weeds, or highly invasive by Cal-IPC, and any other plants designated by the Engineer as weeds shall be removed and disposed of off-site.

E. Hydroseeded areas 400 sq. ft. or larger that are bare or without substantial seed growth, and any areas with less than 80% vegetation

cover at the time of Landscape Installation Inspection shall be re-seeded by the Contractor with the same seed mix as originally specified and maintained until the Landscape Installation Notice is provided by the Engineer at no additional cost to the Department. A minimum 80% vegetation cover shall be achieved in each seeded area by the time of Landscape Installation Inspection.

F. Areas exhibiting erosional damage as determined by the Engineer shall be repaired to their original condition and reseeded within 7 working days at no additional expense to the Department.

G. Protect seeded areas from vehicular or pedestrian traffic.

H. Maintenance of seeded areas after the Landscape Installation Period shall continue immediately in accordance with Section 32 90 20 – Plant and Seed Establishment.

3.08 CLEANUP

A. Excess and waste material from the seeded and staging areas shall be removed and disposed of off the site as Contractor's property. The Contractor shall obtain permits required for such disposal.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Seeding will be by the square yard and will be the number of square yards of seeding placed in the limits of work, laydown areas, and staging areas.

4.02 PAYMENT

A. The contract price will be paid for SEEDING at the various sites; which shall include full compensation for all costs incurred under this section.

END OF SECTION

DIVISION 35

WATERWAY AND MARINE CONSTRUCTION

SECTION 35 42 38

ROCK SLOPE PROTECTION

PART 1 GENERAL

1.01 DESCRIPTION

A. This section covers the contract items Launch Rock and Agricultural Soil for Soil-Filled Rockfill.

1. The contract item Launch Rock includes:

a. Importing suitable materials from Contractor selected off-site borrow areas to the work site.

b. Transporting, stockpiling, handling, and placing the Launch Rock to the lines and grades shown on the Drawings.

2. The contract item Agricultural Soil for Soil-Filled Rockfill includes:

a. Importing suitable materials from Contractor selected off-site borrow areas to the work site.

b. Transporting, stockpiling, handling, and placing the Agricultural Soil for Soil-Filled Rockfill to the lines and grades shown on the Drawings.

1.02 RELATED SECTIONS

A. General Conditions, Supplementary Conditions, Division 1 sections, and Drawings apply to this section. This section may require direct correlation with the following sections of the contract:

1. Section 31 00 00 – Earthwork.

2. Section 31 05 19 – Geosynthetics for Earthwork

1.03 REFERENCES

A. The following publications form a part of this Specification to the extent referenced. Application of these publications shall conform to Document 00 72 42 – Interpretation of the Contract:

1. American Society for Testing and Materials (ASTM):

a. ASTM C 127 – Standard Test Method for Relative Density (Specific Gravity) and Absorption of Coarse Aggregate.

1.04 SUBMITTALS

A. Material Certification:

1. Submit supplier’s certification that rock materials meet specified requirements. Certification must be dated within 6 months prior to the bid date.

B. Borrow Source:

1. Submit borrow source (name and location of quarry) and gradations of rock material.

C. Quarry Certification:

1. Submit certification that the quarry has the operational capacity and dedication to produce the quantity of material required by the Contract within the times specified in the Contractor's approved baseline schedule.

D. Borrow Source and Test Results:

1. Submit borrow source (name and location) and test results of Agricultural Soil for Soil-Filled Rockfill. The tests should have been conducted within 6 months prior to the bid date. The tests shall indicate that the soil is free of organic matter, petroleum hydrocarbons, asbestos, pesticides, excessive heavy metals, stones, lumps, roots and other debris larger than 1 inch or any other chemical compounds toxic to plant growth, aquatic flora and fauna or humans.

E. Transport, Stockpile, and Placement Plan:

1. Provide a plan for transport, stockpile, and placement for Launch Rock and Agricultural Soil for Soil-Filled Rockfill including:

a. Methods of transport (truck or barge) and routes to be used. This shall be part of the traffic plan required in Section 01 57 19 – Temporary Environmental Controls.

b. Stockpile locations.

c. Equipment and methods to be used for rock placement.

d. Procedures to be used for verification of line and grade of placements below water level.

e. Equipment and methods to be used for Agricultural Soil placement in Soil-Filled Rockfill.

PART 2 PRODUCTS

2.01 ROCK MATERIALS

A. All rock material shall be clean, sound, hard, angular fragments of rock with no appreciable fines, and shall be free of cracks, seams, or other defects. Rock material shall have a specific gravity of not less than 2.6, saturated surface-dry basis, when tested in accordance with ASTM C 127.

B. The shape of rock shall be such that the minimum dimension of a rock is not less than one third of the maximum dimension and shall be angular.

C. All rock shall be free of dirt or mud, loose concrete or mortar, trash and organic matter.

D. The points on each individual grading curve shall be between the boundary limits as defined by a smooth curve drawn through specified grading limits plotted on a mechanical analysis diagram. The individual grading curves shall not exhibit abrupt change in slope denoting skip grading or scalping of certain sizes. Specified grading of the material shall be met at both the source and as delivered to the project. In addition, material not meeting the required grading due to segregation or degradation during placement will be rejected. If rock does not meet the required grading, the hauling operation shall be stopped immediately and will not resume until rock processing procedures are adjusted and a gradation test is completed showing gradation requirements are met.

E. The percentage composition by weight of Launch Rock shall conform to the following:

Weight (pounds)	Percent Larger
400	0
300	0-15
70	50-85
15	95-100
5	100

F. Soil for Soil-Filled Rockfill shall be Agricultural Soil as specified in Section 31 00 00 – Earthwork. Launch Rock for Soil-Filled Rockfill shall conform to the gradation requirements for Launch Rock specified herein.

G. Materials shall not contain petroleum hydrocarbons, pesticides, heavy metals, or other deleterious substances in excess of the Department of Water Resources Draft Borrow Material Chemical Acceptance Criteria listed in Appendix III.

PART 3 EXECUTION

3.01 FOUNDATION PREPARATION

A. Launch Rock shall be placed above or below water on foundation surfaces shaped and prepared in accordance with Section 31 00 00 – Earthwork, Section 31 05 19 – Geosynthetics for Earthwork, and as shown on the Drawings. Areas above the water surface on which Launch Rock is to be placed shall be trimmed and dressed to form an even plane.

B. Launch Rock shall be placed starting at the base of the geotextile fabric and proceed up the slope unless otherwise shown on the Drawings.

3.02 PLACEMENT

A. General:

1. The intent of these Specifications is to produce a well-keyed and stable buttress of Soil-Filled Rockfill using Launch Rock with a uniform surface true to the lines and grades as shown.

2. Launch Rock shall not be dumped directly from haul equipment onto excavated and/or geotextile fabric covered surface(s), or onto existing levee surface for stockpiling prior to placement. The height of drop for the initial placement of Launch Rock onto the fabric shall be limited to 2 feet or less, and the Launch Rock shall not be allowed to roll down the slope. Subsequent placements shall be limited to 5 feet or less, and the Launch Rock shall not be allowed to roll down the slope.

3. Unloading of haul equipment shall be with excavators, cranes equipped with skip or clamshell, or similar equipment.

4. The Launch Rock shall be properly graded and shall be placed in a smooth curve along the natural bank alignment. The Launch Rock shall not project out into the channel beyond the limits of the natural bank and shall not include "barbs," "groins," or other features that will deflect the

flow against the opposite bank, or cause the formation of downstream eddies.

5. A qualified biologist shall be onsite during all grading activities and will monitor all locations where emergency repairs will alter snake hibernacula or refugia.

B. Launch Rock placement below water:

1. Where standing or flowing water is present, Launch Rock shall be placed as shown on the Drawings unless otherwise shown or directed by the Engineer.

2. Launch Rock shall be placed and worked in a manner that will produce a stable fill that contains no large unfilled spaces caused by bridging of the larger fraction.

C. Launch Rock placement above water:

1. Launch Rock located above water shall be placed and spread into position in approximately horizontal layers not to exceed 2 feet in thickness. Launch Rock shall be placed and tamped in a manner that will produce a stable fill that contains no large unfilled spaces caused by bridging of the larger fraction and no segregation of the material.

2. During placement of Launch Rock, the Contractor shall perform rearrangement of loose rock fragments, chinking of void spaces, or hand placement to comply with the requirement of a well-keyed and stable layer of rock.

D. Soil-Filled Rockfill:

1. Launch Rock for Soil-Filled Rockfill shall be placed in accordance with the placement requirements for Launch Rock located above standing or flowing water.

2. Soil for Soil-Filled Rockfill shall be Agricultural Soil as specified in Section 31 00 00 – Earthwork.

3. After the placement of each lift of Launch Rock to be filled with Agricultural Soil, the Agricultural Soil shall be thoroughly filled into the rock voids within each lift. The Contractor shall select the method of filling, which may include injecting or otherwise working in a premixed slurry without disturbing the rock-to-rock contact within the lift. Following soil filling, the lift surface shall be cleaned of Agricultural Soil prior to the installation of the next lift of Launch Rock to ensure positive, rock-to-rock

contact between lifts. Premixing Agricultural Soil and rock before placing the rock shall not be permitted.

4. At the sites requiring the placement of Soil-Filled Rockfill, the initial lifts of the fill shall serve as a test section for the Engineer to verify the suitability of the Contractor's soil filling method. If found unsuitable, the Contractor shall refine or modify its method so that acceptable filling of voids is achieved.

PART 4 MEASUREMENT AND PAYMENT

4.01 MEASUREMENT

A. Measurement for payment for the contract item Launch Rock will be by the ton and will be the number of tons of each placed within the limits of work.

B. Measurement for payment for the contract item Agricultural Soil for Soil-Filled Rockfill will be by the cubic yard and will be one-fourth of the number of cubic yards measured in place as confirmed by the post-excavation survey, the Launch Rock spot elevations, and the post-backfill survey to the lines and grades shown on the drawings.

4.02 PAYMENT

A. The contract prices will be paid for LAUNCH ROCK; and AGRICULTURAL SOIL FOR SOIL-FILLED ROCKFILL; which prices shall include full compensation for all costs incurred under this section.

END OF SECTION

APPENDICES

PRE-WORK SAFETY PLAN

Section A: General Information

Org Involved:			
Location:			
Prepared By:	**Date:**	**Reviewed By:**	**Date:**
Project Manager:	**Phone:**	**Approved By:**	**Date:**
Scope of Work:			

PRE-WORK SAFETY PLAN

Section B: Job Tasks

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

PRE-WORK SAFETY PLAN

Section B: Job Tasks (cont.)

Sequence of Tasks	Potential Hazards	Proposed Mitigations	References

Section C: Addition/Changes

Notes:

Section D: Pre-Work Safety Plan Review

Org Unit	Print Name	Initial	Date

HAZARD IDENTIFICATION

The hazard assessment wheel is a tool to help identify hazards associated with a project, task or job step. Thinking about hazards in a structured manner reduces the possibility of missing a hazard. Start at any point on the wheel and work your way around thinking about each category of hazards.



Gravity	Falling object, elevated work, or a body tripping or falling
Temperature	Open flame, ignition sources, hot or cold surfaces, liquids, or gases, steam, friction and general environmental and weather conditions
Pressure	Pressure piping, compressed gas cylinders, control lines, pressure vessels, tanks, hoses and pneumatic and hydraulic equipment
Motion	Vehicle, vessel, or equipment movement, flowing water; wind; and body position when lifting, straining, or bending
Mechanical	Rotating equipment, compressed springs, drive belts, conveyors, and motors
Chemical	Lead, asbestos, flammable vapors, reactive hazards, carcinogens or other toxic compounds, corrosives, pyrophoric substances, combustibles, oxygen deficient atmospheres, welding fumes and dusts
Electrical	Power lines, transformers, static charges, lighting, energized equipment, wiring and batteries
Water	Aqueduct banks, reservoirs, dams, weirs, levees, in-water or underwater activity, flood response, boating
Sound	Equipment noise, impact noise, vibration, high pressure release sounds and the impact of noise levels on communication
Biological	Animals, bacteria, viruses, insects, blood-borne pathogens, improperly handled food, contaminated water
Radiation	Lighting issues, welding, arcs, solar rays, microwaves, lasers, x-rays

DEPARTMENT OF INDUSTRIAL RELATIONS (DIR) REGISTRATION CERTIFICATION LIST

(This form shall be submitted prior to the first of every month.)

Contract Title: 2026 Levee Repairs, Colusa Basin Drain and Sacramento River

Specification No.: 26-06

As required by Labor Code Section 1725.5, all Contractors and Subcontractors, regardless of tier or amount, who are subject to prevailing wage laws, listed below performing work are registered with DIR as public works contractors. In addition to any other potential remedies, the Engineer may withhold all or part of any payment due if the Contractor fails to furnish this form on a monthly basis.

Contractor/Subcontractor Name	Contractor License Number	DIR Registration Number	Mailing Address	Email Address

(If more space is needed, attach additional sheets.)

By signing below, the Contractor certifies that the above list is current, accurate, and complete.

Signature
Authorized Contractor's Representative

Print Name

Date

Contractor's License Number

DIR Registration Number

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
CDFW 1600 LSAA, COL-61705-R2	1.1	Documentation at Project Site. Permittee shall make this Agreement, any extensions and amendments to this Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.	N/A	N/A	DWR	
CDFW 1600 LSAA, COL-61705-R2	1.2	Providing Agreement to Persons at Project Site. Permittee shall provide copies of this Agreement and any extensions and amendments to this Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.	N/A	N/A	DWR, Contractor	
CDFW 1600 LSAA, COL-61705-R2	1.3	Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in this Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall work with the Permittee to resolve any conflict.	N/A	N/A	DWR	
CDFW 1600 LSAA, COL-61705-R2	1.4	Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with this Agreement.	N/A	N/A	DWR, Contractor	DWR will handle agency coordination. Contractor may be asked to participate in site inspections.
CDFW 1600 LSAA, COL-61705-R2	1.5	No Trespass. To the extent that any provisions of this Agreement provide for activities that require Permittee to traverse another owner's property, such provisions are agreed to with the understanding that the Permittee possesses the legal right to so traverse. In the absence of such right, any such provision is void.	N/A	N/A	N/A	
CDFW 1600 LSAA, COL-61705-R2	1.6	Notification of Project Modification. Permittee agrees to notify CDFW of any modifications made to the project plans submitted to CDFW.	DWR	N/A	DWR	
CDFW 1600 LSAA, COL-61705-R2	1.7	Change of Conditions and Need to Cease Operations. If conditions arise, or change, in such a manner as to be considered deleterious to the stream or wildlife, operations shall cease until corrective measures approved by CDFW are taken.	DWR	N/A	DWR, Contractor	Contractor is responsible to notify DWR if they become aware of any change of conditions that could be considered deleterious to the stream or wildlife.
CDFW 1600 LSAA, COL-61705-R2	1.8	Does Not Authorize “Take.” This Agreement does not authorize “take” of any California Endangered Species Act (CESA) listed species. Take is defined in Fish and Game Code section 86, as hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture, or kill. If there is potential for take of any listed species to occur, Permittee shall consult with CDFW and demonstrate compliance with CESA.	N/A	N/A	N/A	
CDFW 1600 LSAA, COL-61705-R2	1.9	CEQA Compliance. Permittee shall implement and adhere to the mitigation measures in the Mitigated Negative Declaration (MND) (SCH No. 2025080059), and all associated documents adopted by the Department of Water Resources (DWR) as lead agency for the project pursuant to the CEQA (Pub. Resources Code, § 21000 et seq.). If the results of focused or pre-commencement surveys indicate that additional impacts may result from project activities that were not analyzed in the CEQA document, then Permittee should comply with CEQA before the project commences.	DWR	N/A	DWR	
CDFW 1600 LSAA, COL-61705-R2	1.10	Limitations on Authorization of Water Use. This Agreement does not authorize any diversion, use, or storage of water unless already permitted by law. Permittee is responsible for obtaining all necessary water rights and maintaining compliance with the State Water Code and Title 23 California Code of Regulations as appropriate. Permittee shall divert, store, and use water in accordance with a valid water right, including any limitations on when water may be diverted, stored, and used; the purpose for which it may be stored and used; and the location(s) where water may be stored and used. Information regarding water right registrations can be found at https://www.waterboards.ca.gov/waterrights/water_issues/programs/registrations. Information about water right permits and applications which is accessible at the following link: https://www.waterboards.ca.gov/waterrights/water_issues/programs/applications.	N/A	N/A	N/A	
CDFW 1600 LSAA, COL-61705-R2	2.1	Work Period. Project activities covered under this Agreement shall be confined to the period between May 1 and October 1 during the term of this Agreement. Revegetation, restoration, and erosion control work located outside of flowing water is not confined to this time period.	N/A	N/A	DWR, Contractor	

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CDFW 1600 LSAA, COL-61705-R2	2.2	Work Period Modification. If Permittee needs more time to complete the project activity, the work may be permitted outside of the work period and extended on a day-to-day basis (or for some other set period of time) by CDFW (see Contact Information). Permittee shall submit a written request for a work period modification to CDFW. The work period modification request shall: 1) describe the extent of work already completed; 2) provide a schedule for activities to be conducted within the requested modification period; 3) detail the time required to complete each activity; and 4) provide photographs of current site conditions. Work period modifications are issued at the discretion of CDFW. CDFW will review the written request to work outside of the established work period. CDFW will have ten (10) business days to review the proposed work period variance. CDFW reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the modification.	DWR	DWR	DWR, Contractor	Contractor shall notify DWR by September 10 if additional time is needed beyond October 1 to complete the project activity. DWR shall prepare the written request and coordinate with CDFW. Request for additional time does not gaurantee that request will be approved by CDFW.
CDFW 1600 LSAA, COL-61705-R2	2.3	Work Period in Low Rainfall / Dry Weather Only. The work period within the unnamed tributary shall be restricted to periods of low rainfall (less than ¼-inch per 24-hour period) or periods of dry weather (with less than a 50% chance of rain). Permittee shall monitor the National Weather Service (NWS) 72-hour forecast for the project area. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be provided upon request by CDFW. All erosion control measures shall be initiated prior to all storm events. Revegetation, restoration, and erosion control work outside of flowing water is not confined to this work period.	DWR	DWR	Contractor	Restriction applies to in-water work. DWR will monitor and save weather forecasts.
CDFW 1600 LSAA, COL-61705-R2	2.4	Vegetation Removal. Disturbance or removal of vegetation shall be kept to the minimum necessary to complete project related activities. No native trees with a trunk diameter at breast height (DBH) in excess of four (4) inches shall be removed or damaged without prior consultation and approval of a CDFW representative. Where native trees or woody riparian vegetation split into several trunks close to ground level, the DBH shall be measured for each trunk and calculated as one tree. Vegetation that will not be removed by the project shall be marked for protection and may only be trimmed with hand tools to the extent necessary to gain access to the work sites.	DWR	N/A	Contractor	Trees to be protected are identified in the project plans and DWR will mark them in the field prior to site work.
CDFW 1600 LSAA, COL-61705-R2	2.5	Vegetation Removal Methods. Hand tools (e.g., trimmer, chain saw, etc.) shall be used to trim vegetation to the extent necessary to gain access to the work site(s); larger equipment shall not be used for vegetation removal unless already described in the project description.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.6	Leave Wildlife Unharmed. Wildlife shall be allowed to leave the project area unharmed.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.7	Special-Status Species Encountered During Work. If Permittee encounters any special-status species during project activities, work shall be suspended, CDFW notified, and conservation measures shall be developed in agreement with CDFW prior to re-initiating the activity. If during project activities, Permittee encounters any species listed pursuant to the CESA, work shall be suspended, and CDFW notified. Work may not re-initiate until the Permittee has consulted with CDFW and can demonstrate compliance with CESA.	N/A	N/A	DWR, Contractor	Contractor shall notify DWR of any wildlife encountered on site. DWR will conduct any necessary agency coordination.
CDFW 1600 LSAA, COL-61705-R2	2.8	Designated Biologist. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of the Designated Biologist and Biological Monitor using the Biologist Resume Form (Exhibit F) including a description of the Designated Biologist and Biological Monitor duties at least 30 calendar days prior to initiating project activities. Permittee shall obtain CDFW's written approval of the Designated Biologist prior to the initiation of project activities. Permittee shall notify CDFW in writing if a substitute Designated Biologist is selected or identified at any time during the term of this Agreement. The Designated Biologist shall be knowledgeable and experienced in the biology and natural history of local fish, wildlife, and plant resources present at the project site. Permittee shall not enter into any agreement or contract of any kind, including but not limited to non-disclosure agreements and confidentiality agreements, with the Designated Biologist(s) or Biological Monitor(s) that prohibit or impede open communication with CDFW, including but not limited to providing CDFW staff with the results of any surveys, reports, or studies or notifying CDFW of any non compliance or take.	DWR	DWR	DWR	

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CDFW 1600 LSAA, COL-61705-R2	2.8.1	Designated Biologist Responsibilities. Permittee shall ensure that a Designated Biologist or Biological Monitor be present daily in order to monitor compliance with the measures in this Agreement; notify CDFW of non-compliance with any measures; monitor all activities subject to this Agreement, including, but not limited to any ground- or vegetation-disturbing activities; monitor bird activity including any new and existing active nests; monitor water quality; document project-related monitoring and determinations related to re-initiation of project activities. The Designated Biologist shall be responsible for the submission of all required reports including survey results and monitoring logs to CDFW.	DWR	DWR	DWR	
CDFW 1600 LSAA, COL-61705-R2	2.8.2	Biological Monitor Responsibilities. Biological Monitors may assist in compliance monitoring efforts under the direct supervision of the Designated Biologist. The Designated Biologist is responsible for assuring that any Biological Monitors working under their direct supervision are knowledgeable and experienced in the biology and natural history of special status species, the Measures within this Agreement, the definition of “take” in CESA, and in implementation of standard measures used on construction projects.	DWR	DWR	DWR	
CDFW 1600 LSAA, COL-61705-R2	2.8.3	Stop Work Authorization. The Designated Biologist and Biological Monitors shall be authorized to stop project activities, if necessary, to protect fish, wildlife, and plant resources. If directed by the Designated Biologist or Biological Monitor, Permittee shall take appropriate actions to ensure project activities are safely suspended. The Designated Biologist shall notify CDFW of any non-compliance issues related to the stop work authorization. Neither the Designated Biologist, Biological Monitor, nor CDFW shall be liable for any costs incurred as a result of compliance with this measure. This includes stop work orders issued by the CDFW.	DWR	DWR	DWR	
CDFW 1600 LSAA, COL-61705-R2	2.9	Nesting Bird Survey. If project-related activities are scheduled between February 1 to August 31 (the typical nesting season), a focused survey for nests shall be conducted by a Designated Biologist within three (3) business prior to the beginning of project-related activities. The Designated Biologist shall survey a minimum radius of 500-feet for migratory birds and 1/2-mile for raptors around the project area that can be accessed by Permittee. The results of the survey shall be provided to CDFW upon completion. If no active nests are found, project activities may proceed as scheduled.	DWR	DWR	DWR	
CDFW 1600 LSAA, COL-61705-R2	2.9.1	Active Nests. If an active nest is found, active nests should be avoided, and a no disturbance or destruction buffer shall be determined and established by a Designated Biologist. The buffer shall be kept in place until after the breeding nesting season or the Designated Biologist confirms the young have fledged, are foraging independently, and the nest is no longer active for the season. The extent of these buffers shall be determined by the Designated Biologist and will depend on the species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.	DWR	DWR	Contractor	DWR will notify the Contractor of the location and avoidance buffer for any active nests found during the nest survey.
CDFW 1600 LSAA, COL-61705-R2	2.9.2	Project Delay. If a lapse in project-related work of fourteen (14) calendar days or longer occurs, the Designated Biologist shall complete another focused survey before Project work can be reinitiated.	DWR	DWR	DWR	
CDFW 1600 LSAA, COL-61705-R2	2.9.3	Permittee Responsibility. It is the Permittee’s responsibility to comply with Fish and Game Code Sections 3503, 3503.5, and 3513, regardless of the time of year. This Agreement does not authorize take of birds, their nests, or their eggs.	DWR	DWR	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.10	Swainson’s hawk Survey. If Project construction work is scheduled during the Swainson’s hawk nesting season (March 1 to September 15), a Designated Biologist shall conduct a focused survey for active Swainson’s hawk nests prior to beginning construction. The biologist shall follow the Swainson’s hawk Technical Advisory Committee’s Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley.	DWR	DWR	DWR	

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CDFW 1600 LSAA, COL-61705-R2	2.11	Giant Garter Snake Surveys. The Designated Biologist shall conduct pre construction surveys no more than twenty-four (24) hours prior to the start of vegetation clearing or construction activities at each site within the project area, including the repair site and staging site. The Designated Biologist will conduct a new survey at any construction site where there has been a lapse in construction activities of seven (7) or more consecutive days prior to any renewed activities Equipment shall be inspected daily prior to beginning work if it has been parked overnight in a construction area adjacent to giant garter snake habitat. If GGS are encountered at any point during the life of the Project, work shall be suspended, and CDFW notified. Work may not re-initiate until the Permittee has consulted with CDFW and can demonstrate compliance with CESA.	DWR	DWR	DWR	
CDFW 1600 LSAA, COL-61705-R2	2.12	Western Pond Turtle Surveys. The Designated Biologist shall survey the project area where suitable habitat occurs for western pond turtle (Actinemys marmorata), including nest sites. Surveys shall be performed at least thirty (30) days prior to starting project activities and shall be performed within 500 feet upstream and downstream of the project activity. If detected during surveys, a site-specific avoidance, minimization, and/or relocation plan shall be prepared for review and approval by CDFW. This plan shall be submitted no sooner than fourteen (14) days prior to starting project activities within the areas where species were discovered. All the measures included in the approved plan shall be implemented during project activities.	DWR	DWR	DWR	Additional enviornmental commitments may be added to the contract if Western Pond Turtles are detected during surveys.
CDFW 1600 LSAA, COL-61705-R2	2.13	Check for Wildlife in Pipes / Construction Materials. Permittee shall visually check all sections of pipe / construction materials for the presence of sheltering wildlife prior to the pipe sections being placed in the trench. Alternatively, pipe ends shall be capped while stored on site to prevent wildlife from entering. After attachment of the pipe sections to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during construction to prevent wildlife from entering and being trapped within the pipeline.	N/A	N/A	DWR, Contractor	DWR environmental monitor will conduct inspections. Contractor is responsible to ensure site does not pose a wildlife entrapment risk by implementing these measures.
CDFW 1600 LSAA, COL-61705-R2	2.14	Fence and Signpost Considerations. Permittee shall cap the top opening or fill the three (3) holes on the top (e.g., with a bolt and nut), of any of u-channel posts, signs, or hollow vertical poles installed temporarily or permanently throughout the project to prevent the entrapment of wildlife.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.15	Avoid Wildlife Entrapment. All excavated locations, steep-walled holes, or trenches more than six (6) inches deep will be provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday or thirty (30) minutes prior to sunset, whichever occurs first. All steep-walled holes or trenches will be inspected by the Designated Biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight will be inspected for wildlife by the Designated Biologist.	N/A	N/A	DWR, Contractor	DWR environmental monitor will conduct inspections. Contractor shall ensure site does not pose a wildlife entrapment risk by implementing these measures.
CDFW 1600 LSAA, COL-61705-R2	2.16	Invasive Species. Permittee shall conduct project activities in a manner that prevents the introduction, transfer, and spread of aquatic, riparian, and terrestrial invasive species such as New Zealand mud snail (Potamopyrgus antipodarum), zebra mussel (Dreissena polymorpha), quagga mussel (Dreissena rostriformis), golden mussel (Limnoperna fortunei), Asian clam (Corbicula fluminea), Eurasian watermilfoil (Myriophyllum spicatum), or curly-leaf pondweed (Potamogeton crispus) from one work site and/or water body to another. Prior to entering the project area, Permittee shall inspect equipment for invasive species and, if any signs of invasive species are found, the equipment shall be cleaned to remove those species in accordance with CDFW's 2022 Aquatic Invasive Species Decontamination Protocol, which is accessible at the following link: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=43333. All visible soil/mud debris, plant materials, and animal remnants on equipment shall be removed prior to entering and exiting the work site, within each work site, and/or each use in different watercourses. Permittee shall notify CDFW immediately if an invasive species not previously known to occur within the work site is discovered during work activities by contacting CDFW's Invasive Species Program by email at Invasives@wildlife.ca.gov or by phone at (866) 440-9530. Permittee shall immediately notify the North Central Region's Aquatic Invasive Species Coordinator by email at R2LSA@wildlife.ca.gov for any new aquatic invasive species detections (i.e., quagga and zebra mussel, golden mussel, Asian clam, New Zealand mud snail, didymo, milfoil, and Hydrilla) that are observed within the project area	N/A	DWR	DWR, Contractor	Additional detail can be found in 01 57 19.

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CDFW 1600 LSAA, COL-61705-R2	2.17	Decontamination Sites. Permittee shall perform decontamination of vehicles (including tires and mud flaps), watercraft, trailers, large machinery, barges, flexi floats, containers, and other project gear and equipment in a designated location where runoff can be contained and not allowed to pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat	N/A	DWR	Contractor	Additional detail can be found in 01 57 19.
CDFW 1600 LSAA, COL-61705-R2	2.18	Decontamination of Project Equipment. Permittee shall decontaminate all tools, waders and boots, and other equipment that will enter the water prior to entering and exiting the project site to avoid the introduction and transfer of organisms. Permittee shall decontaminate project gear and equipment that will enter the water by utilizing one of three methods in accordance with CDFW's 2022 Aquatic Invasive Species Decontamination Protocol: drying, using a hot water soak, or freezing, as appropriate to the type of gear or equipment. For all methods, Permittee shall begin the decontamination process by thoroughly scrubbing personal equipment, paying close attention to small crevices such as boot laces, seams, net corners, etc., with a stiff-bristled brush to remove all organisms. To decontaminate by drying, Permittee shall allow larger equipment to dry thoroughly (i.e., until there is a complete absence of water), preferably in the sun, for a minimum of 48 hours. To decontaminate using a hot water soak, Permittee shall immerse equipment in 140 degrees Fahrenheit or hotter water and soak for a minimum of 5 minutes. To decontaminate by freezing, Permittee shall place equipment in a freezer 32 degrees Fahrenheit or colder for a minimum of eight (8) hours. Repeat decontamination is required only if the equipment/clothing is removed from the site, used within a different waterbody, and returned to the project site.	N/A	DWR	Contractor	Additional detail can be found in 01 57 19.
CDFW 1600 LSAA, COL-61705-R2	2.19	Stream Materials. Rock, gravel, and/or other materials shall not be imported to, taken from or moved between watercourses except as otherwise addressed in this Agreement.	N/A	N/A	N/A	
CDFW 1600 LSAA, COL-61705-R2	2.20	Seeding. Permittee shall restore all exposed/disturbed areas and access points within the project area, by seeding with a native seed mix of known genetic origin whose original stock seed was collected from the Great Central Valley, unless otherwise agreed upon with CDFW. Revegetation shall be completed in the fall before the start of the rainy season and as soon as possible after project activities. Seeded areas shall be covered with broadcast straw, mulch, and/or erosion control blankets.	N/A	N/A	Contractor	Additional detail can be found in 32 92 19.
CDFW 1600 LSAA, COL-61705-R2	2.21	Native Plant Materials. Revegetation shall include only local plant materials native to the project area, unless otherwise approved by CDFW in writing.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.22	Prohibited Plant Species. Permittee shall not plant, seed or otherwise introduce invasive non-native plant species. Prohibited invasive non-native plant species include those identified in the California Invasive Plant Council's database, which is accessible at: http://www.cal-ipc.org.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.23	Stream Materials. Rock, gravel, and/or other materials shall not be imported to, taken from or moved between watercourses except as otherwise addressed in this Agreement.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.24	Erosion Control. Permittee shall actively implement best management practices (BMPs) to minimize turbidity and siltation and prevent erosion and the discharge of sediment where it may pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat during project activities. Precautions shall include, but are not limited to: pre-project planning to identify site specific turbidity and siltation minimization measures; best management erosion control practices during project activity; and settling, filtering, or otherwise treating silty and turbid water prior to discharge into a stream or storm drain. This may require the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
CDFW 1600 LSAA, COL-61705-R2	2.24.1	Monitoring. BMPs shall be monitored daily and repaired if necessary to ensure maximum erosion and sediment control.	N/A	N/A	Contractor	

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CDFW 1600 LSAA, COL-61705-R2	2.24.2	Materials. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the project site shall be free of non-native plant materials. Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves. Products with plastic monofilament or cross joints in the netting that are bound/stitched (such as found in straw wattles/fiber rolls and some erosion control blankets), which may cause entrapment of wildlife, shall not be allowed. Permittee shall remove and dispose of all temporary BMPs and any related material upon completion of project activities.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.24.3	Implementation. Passage of sediment beyond the sediment barrier(s) is prohibited. If any sediment barrier fails to retain sediment, corrective measures shall be taken. The sediment barrier(s) shall be maintained in good operating condition throughout the construction period and the following rainy season. Maintenance includes, but is not limited to, removal of accumulated silt and/or replacement of damaged silt fencing, coir logs, coir rolls, and/or straw bale dikes. Upon CDFW's determination that turbidity/siltation levels resulting from project-related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective CDFW-approved control devices are installed or abatement procedures are initiated.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.25	Prohibition Against Use of Plastic Netting in Erosion Control Measures. Permittee shall not use temporary or permanent erosion control devices containing plastic netting, including photo- or bio-degradable plastic netting. These items are commonly found in straw wattles (fiber rolls) and erosion control blankets.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.26	Post Storm Event Inspection. After any storm event, Permittee shall inspect all sites scheduled to begin or continue construction within the next 72 hours. Corrective action for erosion and sedimentation shall be taken as needed. National Weather Service 72-hour weather forecasts shall be reviewed prior to the start of any phase of the project that may result in sediment runoff to the stream, and construction plans adjusted to meet this requirement. The National Weather Service forecast can be found at: http://www.nws.noaa.gov.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.27	Heavy Equipment. No heavy equipment shall operate, or any excavation take place, in waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.28	Heavy Equipment Maintenance and Fueling. Any equipment or vehicles driven and/or operated shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat. If maintenance or fueling of vehicles or equipment must occur on-site, Permittee shall use a designated area and/or a secondary containment, located away from watercourses to prevent the runoff of storm water and the runoff of spills. Permittee shall place drip pans or absorbent materials under vehicles and equipment when not in use. Equipment shall be stored in areas that any possible contamination from the equipment, petroleum products, or other pollutants would not pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.29	Minimize Vehicle Parking. Vehicles may enter and exit the work area as necessary for project activities, but shall not be parked overnight within ten (10) feet of the drip line of any trees; nor shall vehicles be parked where mechanical fluid leaks may potentially pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.30	Staging and Storage Areas. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located more than 100 feet from or where it may not pass into the waters of the state, the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	DWR, Contractor	Staging Areas, Laydown Areas and access routes are identified on the project plans.
CDFW 1600 LSAA, COL-61705-R2	2.31	Building Material Storage. Project building material and/or project equipment shall not be placed where materials could pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat, or where they may cover aquatic or riparian vegetation.	N/A	N/A	Contractor	

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CDFW 1600 LSAA, COL-61705-R2	2.32	Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders shall be positioned over drip pans and secondary containment, as necessary. Stationary equipment shall have suitable containment to handle any spill/leak. Equipment shall be stored in areas that any possible contamination from the equipment would not pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.33	Remove Structures. Project-related structures and associated materials not designed to withstand high water flows or placed in seasonally dry portions of a stream or lake that could be washed downstream or could be deleterious to aquatic life, wildlife, or riparian habitat shall be moved to areas outside the floodplain before such flows occur.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.34	No Dumping. Permittee and all contractors, subcontractors, and employees shall not dump any litter or project debris on the project site.	N/A	N/A	DWR, Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.35	Remove Temporary Flagging, Fencing, and Barriers. Permittee shall remove all temporary flagging, fencing, and/or barriers from the project area and vicinity immediately upon completion of project activities.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.36	Wash Water. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter sensitive areas, or placed in locations where it may pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.37	Hazardous Materials. Debris, soil, silt, sand, rubbish, project waste, cement or concrete or washings thereof, asphalt, paint, oil or other petroleum products or any other substances which could be hazardous to aquatic life, or other organic or earthen material from project activities shall not be stored where it may pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, or channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat. Permittee shall ensure that all project areas have proper spill clean-up materials (absorbent pads, sealed containers, booms, etc.) to contain the movement of any spilled substances. All debris shall be disposed of properly. BMPs shall be employed to accomplish these requirements. CDFW shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	2.38	Removal of Debris, Materials and Rubbish. Permittee shall remove all project generated debris, building materials and rubbish from the project area following completion of project activities.	N/A	N/A	Contractor	
CDFW 1600 LSAA, COL-61705-R2	3.1	Notification of Project Initiation. The Permittee shall notify CDFW two (2) business days prior to beginning work for each construction season. Notification shall be submitted as instructed in Contact Information section below. Email submittal is preferred.	DWR	DWR	N/A	
CDFW 1600 LSAA, COL-61705-R2	3.2	Notification of Project Completion. Upon completion of the project activities described in this Agreement, the project activities shall be photographed. Photographs shall be submitted to CDFW within fifteen (15) business days of project completion. Photographs and project completion notification shall be submitted as instructed in Contact Information section below. Email submittal is preferred.	DWR	DWR	N/A	
CDFW 1600 LSAA, COL-61705-R2	3.3	Annual Monitoring Reports. After completion of the restoration activities described in Measure 2.21 of this Agreement, the area of restoration shall be monitored for a minimum of two (2) years or until CDFW determines the success criteria have been met. Each year for two (2) years after restoration, a monitoring report shall be submitted to CDFW for review and approval. The report shall discuss the revegetation performance as it relates to the success criteria. The report shall include the success of natural revegetation establishment, survival, and percent cover, the number by species of plants replaced, an overview of the revegetation effort, and the method used to assess these parameters shall also be included. The report shall include photos from designated photo stations and other relevant information such as: a summary of invasive species control, methods used to remove non-native plants, and a list of wildlife observed on site.	DWR	DWR	N/A	

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CDFW 1600 LSAA, COL-61705-R2	3.4	Notification to the California Natural Diversity Database. If any special-status species are observed during project implementation, the Permittee shall submit the California Natural Diversity Data Base (CNDDB) Online Field Survey Form electronically at https://www.wildlife.ca.gov/data/CNDDB/submitting-data within five (5) business days of the sightings, and provide a copy of the form, survey map and/or report to CDFW's Regional office as instructed in Contact Information section below.	DWR	DWR	N/A	
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-01	Approved Biologist. Resumes of biologist(s) qualifications (qualified biologist) will be submitted to DWR for approval before starting repairs. DWR will ensure that the qualified biologist is knowledgeable and experienced in the biology and natural history of all special status species potentially occurring in the repair area. The qualified biologist will be responsible for monitoring repairs, to help minimize and fully mitigate or avoid the incidental take of individual species, and to minimize disturbance of species' habitats.	DWR	DWR	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-02	Preconstruction Biological Surveys. Before the start of repair activities, a qualified biologist will conduct a preconstruction survey to identify special-status species and associated habitats. Surveys will be conducted within the project footprint, laydown area, and adjacent haul route. If required, species and/or buffers will be marked in the field by a qualified biologist, using temporary fencing, high-visibility flagging, or other means that are equally effective. The preconstruction surveys will include surveys for northwestern pond turtles during the nesting season (roughly May through July), a qualified biologist will survey the work site no more than 48 hours before the onset of activities for signs of northwestern pond turtles and/or northwestern pond turtle nesting activity (i.e., recently excavated nests, nest plugs) or nest depredation (partially to fully excavated nest chambers, nest plugs, scattered egg shell remains, egg shell fragments). Preconstruction surveys to detect northwestern pond turtle nesting activity will be concentrated within 1,319 feet of suitable aquatic habitat and will focus on areas along south- or west-facing slopes with bare hard-packed clay or silt soils or sparse vegetation of short grasses or forbs.	DWR	DWR	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-03	Worker Environmental Awareness Training. DWR will provide environmental awareness training by a qualified biologist to the DWR construction lead, construction foreman, crew leader, and any contractor personnel working on the construction site. Environmental awareness training will include descriptions of all special-status species known from or potentially occurring in the repair area, their habitats, and methods of identification, including visual aids as appropriate. The training will also describe activity-specific measures that will be followed to avoid impacts. Hard copies of environmental permits and training materials will be provided to the DWR construction lead, construction foreman, crew leader, and any contractors participating in repair work.	DWR	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes.
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-04	Staging and Access. Existing staging sites, maintenance toe roads, and levee crown roads will be used to the extent practicable for staging and access, to avoid affecting previously undisturbed areas. The number of access routes and the size of staging and work areas will be limited to the minimum necessary to conduct the repair activity.	DWR	DWR	DWR	Staging Areas, Laydown Areas and access routes are identified on the project plans.
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-05	Construction Area Limit Delineation. Where feasible and practicable (e.g., based on the size of the repair area and repair to be performed), work area limits will be clearly marked (e.g., with flagging or fencing), including access roads; staging and equipment storage areas; stockpile areas for spoil disposal, soil, and materials; fueling and concrete washout areas; and equipment exclusion zones. Work will occur only within the marked limits. This measure is intended to apply to repair activities occurring in discrete areas as opposed to activities occurring over an extensive area where flagging work limits will be infeasible.	DWR	DWR	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-06	Equipment Inspection. Inspections will be conducted under all vehicles and heavy equipment for the presence of wildlife before the start of each workday when equipment is staged overnight. In addition, a search for wildlife will be conducted in equipment or materials that have been stored on site for one or more nights before they are moved	N/A	N/A	DWR, Contractor	DWR environmental monitor will conduct daily inspections. Contractor shall inspect beneath vehicles before moving them around the site.
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-07	Open Excavation Covering. All excavated, steep-walled holes or trenches will be covered with appropriate covers (thick metal sheets or plywood) at the end of each workday. Covers will be placed to ensure that trench edges are fully sealed. Alternatively, such trenches may be furnished with one or more escape ramps, constructed of earth fill or wooden planks, to provide an escape for wildlife.	N/A	N/A	DWR, Contractor	DWR environmental monitor will conduct inspections. Contractor shall ensure site does not pose a wildlife entrapment risk by implementing these measures.

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CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-08	Construction Site Best Management. All project-related trash items, such as wrappers, cans, bottles, and food scraps, will be collected in closed containers that are removed from the rehabilitation site each day and disposed at an appropriate off-site location, to minimize attracting wildlife to work areas.	N/A	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-09	Clearing and Grubbing Best Management. Clearing of vegetation will be kept to the minimum necessary, especially the clearing of native riparian vegetation. Grubbing for temporary vehicle access will be minimized to the extent practicable.	Contractor	DWR	Contractor	Contractor shall prepare a Clearing and Grubbing Plan per 31 11 00 for review by DWR prior to conducting clearing and grubbing work.
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-10	Erosion Control Materials. ECFs will not be used with plastic monofilament or cross joints in the netting that are bound/stitched (e.g., straw wattles, fiber rolls, or erosion control blankets), which could trap wildlife.	N/A	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-11	Site Restoration. Temporary fill, construction debris, and refuse will be removed and properly disposed, following completion of any repair activities.	N/A	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-12	On-site Habitat Restoration. Habitats will be restored to pre-project conditions wherever feasible. Restoration may include recontouring by grading and disking, revegetating with native seeds and plants reflective of the target plant community, decompacting soil, and installing appropriate erosion control measures to return the disturbed on-site habitat to pre activity conditions.	N/A	N/A	DWR, Contractor	Required on-site habitat restoration work is identified in the project plans and specifications, to be completed by the Contractor.
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-13	Invasive Plant Species Control. For invasive plant species control, DWR will implement measures to minimize the potential for invasive plants to be introduced or spread during repair activities. Measures to avoid contamination and spread of invasive species will be created for the site, as deemed necessary by a qualified biologist, and will be approved by a qualified biologist before implementation.	N/A	N/A	Contractor	Invasive Plant Species Control measures can be found elsewhere in this table as well as in 01 57 19.
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-14	Resource Agency Access. DWR will provide all natural resource agency staff with reasonable access to the repair site and otherwise will fully cooperate with the natural resource agencies' efforts to verify compliance with, or effectiveness of, conservation measures.	DWR	DWR	DWR	DWR will handle agency coordination. Contractor may be asked to participate in site inspections.
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-15	Stop Work Authority. A qualified biologist will be authorized to stop repair activities that, in the biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on special-status species or habitat. If repair activities are stopped, the qualified biologist will consult with USFWS or CDFW, as appropriate, to determine measures that DWR will implement to avoid adverse effects. Buffers will be maintained until a threat of disturbance to the sensitive biological resource no longer exists, as determined by a qualified biologist.	DWR	DWR	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	GM-16	Listed Species Take Reporting. A qualified biologist will immediately notify DWR if a species is taken or injured by a repair-related activity, or if a species is otherwise found dead or injured in the repair site vicinity. DWR will provide initial notification to CDFW and/or USFWS and other appropriate agencies. The initial notification will include information regarding the location, species, number of animals taken or injured, and site number. Following initial notification, DWR will submit a written report within two calendar days. The report will include the date and time of the finding or incident, location of the animal or carcass, and if possible, will provide a photograph, explanation as to cause of take or injury, and any other pertinent information.	DWR	DWR	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-1	Monarch Butterfly Protection. If repair activities may adversely affect the monarch butterfly (Danaus plexippus), DWR would implement the following measures:	DWR	DWR	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-1-a	Preconstruction Surveys: If vegetation clearing is scheduled between May and October, a qualified biologist will survey the site for monarch butterfly larval host plants, specifically milkweed (Asclepias spp.), in suitable habitats. If host plants are found, the biologist will either conduct surveys to determine the presence or absence of adult monarch butterflies and inspect milkweed for monarch eggs, larvae, and pupae, or assume their presence.	DWR	DWR	DWR	Additional enviornmental commitments may be added to the contract if monarch butterflies or their host plants are detected during surveys.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-1-b	Wildlife Exclusion Fencing: If butterfly eggs, larvae, or pupae are confirmed, or assumed to be present, host plants will be clearly marked with fencing or signage, and construction personnel will be trained to avoid these zones. No equipment or personnel will be allowed within these designated no-work zones during the flight season to prevent accidental damage.	N/A	N/A	N/A	Additional enviornmental commitments may be added to the contract if monarch butterflies or their host plants are detected during surveys, but this exclusion fencing work is not included in the bid set.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-1-c	Milkweed removal: If the absence of butterfly eggs, larvae, and pupae is confirmed by a qualified biologist, the host plants may be removed to minimize the potential for take.	N/A	N/A	N/A	Additional enviornmental commitments may be added to the contract if monarch butterflies or their host plants are detected during surveys, but this milkweed removal work is not included in the bid set.

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CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-1-d	Restoration and Revegetation Plan: If butterfly larval host plants are identified within the project site during preconstruction surveys, the project biologist would prepare a restoration and revegetation plan prior to completion of ground-disturbing activities to address impacts to monarch butterfly habitat. Restoration activities may include, but not be limited to: grading landform contours to approximate pre-disturbance conditions, revegetating disturbed areas with native plant species, and using certified weed-free straw and mulch. To support monarch butterfly populations, the proposed project's revegetation plan will include host and nectar plants for monarch butterflies. The selected species must be appropriate for the region's climate and soil conditions. Milkweed and nectar plants (as listed below) will be planted in all disturbed areas with suitable habitat areas to enhance monarch butterfly breeding and foraging opportunities. Host Plants (Include at least 2 of the following species at a rate of 20 seeds/square foot) • Narrow leaf milkweed (Asclepias fascicularis) • Indian milkweed (Asclepias eriocarpa) • Showy Milkweed (Asclepias speciosa) Nectar Plants (Include at least 2 of the following species) • Yarrow (Achillea millefolium) • Indian hemp (Apocynum cannabinum) • common sunflower (Helianthus annuus) • sneezeweed (Helenium amarum) • coyote mint (Monardella villosa) • chia sage (Salvia columbariae) • Canada goldenrod (Solidago altissima) • California goldenrod (Solidago californica)	N/A	N/A	N/A	Additional enviornmental commitments may be added to the contract if monarch butterflies or their host plants are detected during surveys, but this restoration and revegetation work is not included in the bid set.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2	Giant Gartersnake. When repair activities occur within 200 feet of potentially suitable aquatic habitat which could adversely affect giant gartersnake (Thamnophis gigas), DWR would implement the following measures as determined to be necessary by a qualified biologist.	N/A	N/A	N/A	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-a	Seasonal Work Restrictions: DWR will restrict repair activities in terrestrial habitats that potentially support giant gartersnake between May 1 and October 1. This is the active period for giant gartersnake, and direct mortality will be avoided because giant gartersnake are expected to actively move and avoid danger. Use of heavy equipment may continue between October 1 and November 1 in areas where construction was initiated during the giant gartersnake active season and remained continuous thereafter and if maximum ambient air temperatures exceed approximately 75 degrees Fahrenheit (°F) during work and maximum daily air temperatures have exceeded approximately 75°F for at least 3 consecutive days immediately preceding work. During these periods, giant gartersnake are more likely to be active in aquatic habitats and less likely to be found in upland habitats. DWR will notify USFWS and CDFW of work in these locations. DWR will include a justification for the request and any additional information USFWS or CDFW deem necessary. USFWS and CDFW may require DWR to apply additional appropriate measures.	DWR	DWR	Contractor	Contractor shall notify DWR by September 10 if additional time is needed beyond October 1 to complete the project activity. DWR shall prepare the written request and coordinate with agencies. Request for additional time does not gaurantee that request will be approved by agencies.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-b	Preconstruction Surveys: The qualified biologist will survey areas of planned ground disturbance and the laydown/staging area for burrows, soil cracks, and crevices that may be suitable for use by giant gartersnakes when those areas are within suitable terrestrial habitat. Surveys will be completed no more than 3 days before conducting any ground-disturbing activities in terrestrial habitat potentially supporting giant garter snakes. Any identified burrows, soil cracks, crevices, or other habitat features will be flagged or marked by the qualified biologist. If project activities temporarily stop for more than 7 days, surveys for soil cracks and similar features will be repeated by a qualified biologist, as described above.	N/A	N/A	DWR	DWR will notify the Contractor of the location and avoidance buffer for any burrows found during the GGS survey.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2c	Small Burrows and Exclusion Fencing: All burrows or cracks flagged or marked during the preconstruction surveys will be hand excavated prior to exclusion fencing installation to determine if snakes could be hiding along the planned fence perimeter or within the work limits or laydown/staging area. The hand excavation will have the effect of locating snakes still using the planned work area and allowing them to leave unharmed, which will avoid harassment, injury, or killing of giant gartersnakes during repair activities. Following hand excavation, all holes or burrows which appear to extend under the exclusion fencing will be blocked to prevent giant gartersnake movement into the project site. All hand excavation and blocking of burrows will be monitored or performed by a qualified biologist. Exclusion fencing will be installed surrounding the limits of work and the laydown/staging area. Exclusion fencing will be installed pursuant to manufacturer specifications. The following criteria for the exclusion fencing system will be met:	N/A	N/A	DWR, Contractor	Additional enviornmental commitments may be added to the contract if GGS burrows are detected during surveys, but this hand excavation work is not included in the bid set.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-c-i	The exclusion fencing will consist of material appropriate for exclusion of giant gartersnake and will not include materials or cross joints that may cause entrapment.	N/A	DWR	Contractor	Exclusion fencing is specified in the contract. Contractor shall submit a temporary fencing plan and after approval, shall install temporary fencing.

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CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-c-ii	The exclusion fencing will either measure at least 36 inches tall above the soil surface or be of appropriate height for exclusion of giant gartersnake.	N/A	DWR	Contractor	Exclusion fencing is specified in the contract. Contractor shall submit a temporary fencing plan and after approval, shall install temporary fencing.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-c-iii	The bottom of the exclusion fencing will not allow wildlife to pass through gaps or holes.	N/A	DWR	Contractor	Exclusion fencing is specified in the contract. Contractor shall submit a temporary fencing plan and after approval, shall install temporary fencing.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-c-iv	The exclusion fencing shall be taut between the supporting stakes and shall have the supporting stakes oriented on the inside edge of the project site.	N/A	DWR	Contractor	Exclusion fencing is specified in the contract. Contractor shall submit a temporary fencing plan and after approval, shall install temporary fencing.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-c-v	The exclusion fencing will feature one-way escape doors or an appropriate design for preventing giant gartersnake and other wildlife from being trapped within the project sites.	N/A	DWR	Contractor	Exclusion fencing is specified in the contract. Contractor shall submit a temporary fencing plan and after approval, shall install temporary fencing.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-c-vi	Fencing system entry/exit for vehicular and pedestrian traffic will be constructed so wildlife cannot access the project site during non-work hours.	N/A	DWR	Contractor	Exclusion fencing is specified in the contract. Contractor shall submit a temporary fencing plan and after approval, shall install temporary fencing.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-c-vii	The exclusion fencing system will remain in place until all project activities have been completed. All components of the exclusion fencing will be removed for storage or disposal off-site immediately upon completion of project-related activities. Exclusion fencing will be inspected daily by the qualified biologist and repaired as necessary.	N/A	DWR	Contractor	After all site work is complete, the Contractor will remove the exclusion fencing and dispose of it as their property. The DWR environmental monitor will conduct daily inspections. The Contractor will conduct maintenance on the fencing to ensure function.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-d	Avoidance Buffers: Potentially suitable aquatic habitat for the giant gartersnake will be identified and flagged by a qualified biologist within 200 feet of the limits of work and the laydown/staging area. This suitable aquatic habitat will be avoided by workers and project activities.	DWR	DWR	Contractor	DWR will notify the Contractor of the location and avoidance buffer for suitable aquatic habitat for GGS found during the survey. Contractor shall avoid working in flagged areas.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-e	Qualified Biologist: A qualified biologist will be onsite during all grading activities, vegetation removal activities, and trenching activities within the project site. A qualified biologist will be on site to monitor access routes and the laydown/staging area for snake activity and presence. The qualified biologist will be responsible for checking the exclusion fencing daily and, if required, ensuring it is properly repaired with the assistance of the contractor. A qualified biologist will be onsite and monitor all locations where repair activities will alter giant garter snake hibernacula/refugia (rip rap, burrows, vegetation, etc.).	N/A	N/A	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-f	Stop Work Authority: If snakes are observed within the project site, including the limits of work, the staging/laydown area, or the haul routes, work will stop in the immediate area until the snake is out of the repair area and a qualified biologist will be notified immediately. The snake will be allowed to leave on its own, and the qualified biologist will remain in the area until the biologist deems their presence no longer necessary to ensure that the snake is not harmed.	N/A	N/A	DWR, Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-g	Speed Limits: Project related vehicles will observe a 15-mile-per-hour speed limit within the project area.	N/A	N/A	DWR, Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-h	Spoil Placement: Spoils will be placed in areas that do not provide suitable snake upland habitat (e.g., compacted or gravel roadbeds, orchards, and recently disked agricultural fields) or areas that have been previously surveyed by a qualified biologist and hand excavated to confirm absence of giant gartersnakes.	N/A	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-2-i	Restoration to Pre-Project Conditions: Upland habitat will be restored following construction of the proposed project. Landform contours will be graded to approximate pre-disturbance conditions using earthfill materials, disturbed areas will be revegetated with upland native plant species, and straw and mulch will be certified weed-free.	DWR	N/A	Contractor	Contractor will follow DWR designs for final site condition.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-3	Nesting Bird Surveys. If repair activities could adversely affect nesting Swainson's hawk (Buteo swainsoni) or other bird species and their habitat, DWR would implement the following measures: (next two rows)	N/A	N/A	N/A	

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CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-3-a	If repair activities occur during the nesting period for birds (February 1 to September 15), DWR will complete pre-activity surveys for nesting birds (including, but not limited to, Swainson's hawk, raptor, and passerine nest surveys, and heron and egret rookeries). Surveys will be conducted by a qualified biologist not more than 5 days prior to the start of activities. Surveys will be conducted within suitable nesting habitat that could be affected by repair activities (e.g., staging areas, spoils areas, access routes) and will include a 500-foot buffer area (or larger area if required by established survey protocol) surrounding these areas. Where appropriate, pre-activity surveys will follow established survey protocols or guidelines.	DWR	N/A	DWR	DWR will conduct pre-activity nesting bird surveys.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BIO-3-b	If active nests are found, DWR will establish an avoidance buffer as indicated below for activities that would potentially affect the nesting birds. The temporary disturbance buffer will be established until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by the activities. Alternatively, a qualified biologist, in coordination with the appropriate natural resource agency, may determine that a buffer is not required to avoid adverse effects on nesting birds, based on the specific activities to be conducted and species present. • Passerines: 100-foot buffer • Herons/Egrets: 200-foot buffer • Raptors: 300-foot buffer • Swainson's hawk: 0.25-mile buffer	DWR	N/A	DWR	If an avoidance buffer is required, DWR will establish the buffer in the field and the Contractor will avoid working within the buffer or disturbing any flagging or other demarkations of the avoidance buffer.
CEQA Mitigated Negative Declaration, SCH# 2025080059	1	DWR will conduct environmental awareness training to train the contractor on the proper use of BMPs and applicable permit requirements to protect receiving water quality.	DWR	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes.
CEQA Mitigated Negative Declaration, SCH# 2025080059	2	DWR will install erosion control measures, such as use of straw bales, silt fences, fiber rolls, or equally effective measures, at project locations adjacent to stream channels, drainage canals and wetlands, as needed. During active construction activities, erosion control measures will be monitored during and after each storm event for effectiveness. Modifications, repairs, and improvements to erosion control measures will be made as needed to protect water quality.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
CEQA Mitigated Negative Declaration, SCH# 2025080059	3	DWR will install turbidity curtains or similar methods during in-channel work to control silts and sediments, if needed.	N/A	N/A	N/A	No in-water work will occur at Site 23-078.
CEQA Mitigated Negative Declaration, SCH# 2025080059	4	DWR will restrict work to periods of low rainfall (less than ¼-inch per 24-hour period) and periods of dry weather (with less than a 50% chance of rain). DWR will monitor the National Weather Service (NWS) 72-hour forecast for the project area. No work will occur during a dry-out period of 24 hours after the above-referenced wet weather.	Contractor	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	5	DWR will minimize ground and vegetation disturbance by establishing designated equipment staging areas, access routes, spoils and soil stockpile areas, and equipment exclusion zones prior to the commencement of activity.	DWR	N/A	Contractor	Contractor will follow DWR plans and specifications for site layout and access.
CEQA Mitigated Negative Declaration, SCH# 2025080059	6	DWR will prepare and implement a hazardous materials management and spill response plan. DWR will ensure any hazardous materials are stored at the staging areas and with an impermeable membrane between the ground and hazardous material, and that it is bermed to prevent the discharge of pollutants to groundwater and runoff water. DWR will immediately stop, and pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so, according to the prepared spill response plan. DWR will notify USFWS and CDFW within 24 hours of any leaks or spills. DWR will properly contain and dispose of any unused or leftover hazardous products off-site. DWR will use and store hazardous materials, such as vehicle fuels and lubricants, in designated staging areas located away from stream channels and wetlands according to local, state, and federal regulations, as applicable.	Contractor	DWR	Contractor	Contractor will prepare a hazardous materials management and spill response plan and submit for DWR review. Contractor will implement the plan in the field. DWR will be responsible for all agency communication, such as in the event of a spill notification.
CEQA Mitigated Negative Declaration, SCH# 2025080059	7	Construction vehicles and equipment will be checked daily for leaks and will be properly maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease.	N/A	N/A	Contractor	

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CEQA Mitigated Negative Declaration, SCH# 2025080059	CUL-1	Preconstruction Training. Prior to construction, a qualified archaeologist with expertise in California archaeology will develop an archaeological resources training program in consultation with interested Tribes and present to all construction and field personnel. Only personnel who have received the training will be allowed to access the APE. Topics may include the potential presence and type of Native American and non-Native American resources that might be found during construction, and necessary reporting protocols in the event of an inadvertent discovery (see Mitigation Measure CUL-3 and CUL-4). Written materials will be provided to personnel as appropriate.	DWR, interested Tribes	N/A	DWR, Contractor	DWR and interested Tribes will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes.
CEQA Mitigated Negative Declaration, SCH# 2025080059	CUL-2	Conduct Monitoring at Locations Identified by Native Americans as Sensitive. Native American monitoring may be conducted at sensitive locations under agreements between DWR and culturally affiliated Native American Tribes. DWR may include qualified tribal monitors during certain construction activities. The decision to do so is based on the nature of the activity and the cultural sensitivity of the specific location. Tribal monitors would be required to submit reports, and the results be maintained by DWR to determine the need for additional surveys related to future activities in the area. If cultural materials are encountered during construction, Mitigation Measure CUL-2 will be implemented.	N/A	N/A	DWR	DWR will coordinate Native American monitoring with interested Tribes.
CEQA Mitigated Negative Declaration, SCH# 2025080059	CUL-3	Archaeological Monitoring and a Plan for Inadvertent Discovery of Archaeological Resources. Archaeological monitoring will occur when ground-disturbing activities occur at the proposed project repair site given the high potential for unknown archaeological resources. Monitoring shall be conducted by or supervised by a qualified archaeologist who meets the Secretary of the Interior's Professional Qualification Standards(SOIPQS). A Monitoring Plan shall be developed that includes the following components: • Person(s) responsible for conducting monitoring activities; • Person(s) responsible for overseeing and directing the monitors; • How the monitoring shall be conducted at the repair site and the required format and content of monitoring reports; • Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports; • Protocol for notifications in the event inadvertent discoveries are encountered (e.g., collection, identification, curation); • Methods to ensure security and protection of cultural resources; • A protocol for notifying local authorities (i.e., Sheriff, Police) should site looting or other illegal activities occur during project implementation. • The archaeologist in collaboration with the Tribal monitor, if present, may adjust the frequency of monitoring (e.g. from continuous to intermittent) based on the conditions and professional judgment regarding the potential to impact cultural resources. • Contact information for all responsible personnel identified in the Plan	DWR	N/A	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	CUL-3	If Native American or historic-period resources are encountered, all activity within 100 feet of the find shall immediately halt until it can be evaluated by a SOIPQS archaeologist (and a Native American representative if the artifacts are precontact). DWR will be notified, and a SOIPQS archaeologist will inspect the findings within 24 hours of discovery. If it is determined that project activities could damage a significant cultural resource, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed Archaeological Resources Management Plan in consultation with the State Historic Preservation Officer and, for Native American resources, the appropriate Native American Tribal representative.In considering any suggested mitigation proposed by the archaeologist and Native American representative, DWR shall determine whether avoidance is feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is not feasible, other appropriate measures (e.g., data recovery as agreed upon between DWR, the archaeological consultant, and Native American representatives) shall be instituted. DWR may re-instate work in other parts of the project site outside of designated culturally sensitive areas, while identifying appropriate management of resources.	N/A	N/A	DWR, Contractor	Contractor will stop work within 100 feet of a discovery of Native American or historic-period resources. DWR will conduct archeological work and agency coordination.

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CEQA Mitigated Negative Declaration, SCH# 2025080059	CUL-4	If an inadvertent discovery of human remains is made during project-related construction activities or project planning, DWR will implement the procedures listed below. Should human remains be identified in the project APE, the following performance standards shall be met prior to implementing or continuing actions such as construction, that may result in damage to or destruction of human remains. Avoiding or substantially lessening potential significant impacts to human remains or implementation of the procedures described below maybe considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less than significant may be reached: • In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, all work will halt within 100 feet of the maximum extent of the find. The Construction Lead or on-site inspector will immediately notify DWR. DWR notify the Yolo County Coroner and a professional archaeologist to determine the nature of the remains. • The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American in ancestry, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). • After the Coroner's findings have been made, a qualified archaeologist who meets the SOIQS and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains.	N/A	N/A	DWR, Contractor	Contractor will stop work within 100 feet of a discovery of human remains. DWR will conduct archeological work and coordination with the coroner.
CEQA Mitigated Negative Declaration, SCH# 2025080059	CUL-4	The responsibilities of DWR for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq. Upon the discovery of Native American human remains, DWR will require that all construction work must stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD will have 48 hours to complete a site inspection and make recommendations to the landowner after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. Site-protection measures that DWR will employ are as follows: • Record the site with the Native American Heritage Commission (NAHC) or the appropriate Information Center; and Record a document with the County in which the property is located; • If agreed to by the MLD and the landowner, DWR or DWR's authorized representative will work with the landowner and MLD to rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify an MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. DWR or DWR's authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to DWR. Mitigation may still be needed if impacts occur to those burials; DWR will consult with the MLD to identify appropriate mitigation. • If the human remains are of historic age and are determined to be not of Native American origin, DWR will follow the provisions of the California Health and Safety Code Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.	N/A	N/A	DWR	Contractor will stop work within 100 feet of a discovery of Native American human remains. DWR will conduct archeological work and coordination with the MLD (most likely descendant) and landowner.
CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-1	Evaluate project characteristics, including location, project workflow, site conditions, and equipment performance requirements, to determine whether specifications of the use of equipment with repowered engines, electric drive trains, or other high efficiency technologies are appropriate and feasible for the project or specific elements of the project.	N/A	N/A	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-2	Evaluate the feasibility and efficacy of performing on-site material hauling with trucks equipped with on-road engines.	N/A	N/A	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-3	Ensure that all feasible avenues have been explored for providing an electrical service drop to the construction site for temporary construction power. When generators must be used, use alternative fuels, such as propane or solar, to power generators to the maximum extent feasible.	DWR	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-6	Limit deliveries of materials and equipment to the site to off peak traffic congestion hours.	N/A	N/A	Contractor	

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CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-8	Evaluate the feasibility of restricting all material hauling on public roadways to off-peak traffic congestion hours. During construction scheduling and execution minimize, to the extent possible, uses of public roadways that would increase traffic congestion	DWR	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-9	Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement.	N/A	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-10	Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer's recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition. Maintenance schedules shall be detailed as required by Air Quality Control Plans.	N/A	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-11	Implement tire inflation program on jobsite to ensure that equipment tires are correctly inflated. Check tire inflation when equiment arrives on site and every two weeks for equipment that remains on site. Check vehicles used for haulting materials off site weekly for correct tire inflation. Procedures for the tire inflation program shall be documented as required in Air Quality Control Plans.	N/A	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	BMP-14	For deliveries to project sites where the haul distance exceeds 100 miles and a heavy-duty class 7 or class 8 semi-truck or 53-foot or longer box type trailer is used for hauling, a SmartWay1 certified truck will be used to the maximum extent feasible.	N/A	N/A	Contractor	
CEQA Mitigated Negative Declaration, SCH# 2025080059	TCR-1	Implement Procedures for Inadvertent Discovery of Cultural Material and Implement an Inadvertent Discovery Plan Project-related activities associated with the project will require ground-disturbance, including excavation, grading, and use of staging and borrow areas. These ground disturbing activities could result in damage to or destruction of previously unidentified TCRs, which could be present within the project sites. In the event that archaeological resources that are considered TCRs are discovered during construction, Mitigation Measure TCR-2, described below, shall be implemented. • If an inadvertent discovery of archaeological cultural materials (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, building remains) is made at any other time during project-related construction activities or project planning, DWR, in consultation with the appropriate tribe(s), and other interested parties, will develop and implement appropriate protection and avoidance measures where feasible.	DWR	N/A	DWR	
CEQA Mitigated Negative Declaration, SCH# 2025080059	TCR-2	In the Event that Tribal Cultural Resources or Traditional Cultural Properties are Discovered during Construction, Implement Procedures to Evaluate Tribal Cultural Resources/Traditional Cultural Properties and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects. California Native American Tribes traditionally and culturally affiliated with the geographic area of the APE for Site 23-078 may have expertise on the identification and management of TCRs (California PRC Section 21080.3.1). DWR considers Tribal coordination and consultation ongoing to support identification and protection of TCRs. If potential TCRs are identified during construction further consultation with culturally affiliated Tribes will be conducted and focus on measures to avoid or minimize effects. The following performance standards shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of TCRs: • DWR shall evaluate each identified TCR, prior to construction, for CRHR eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with interested Native American Tribes • If a TCR is determined to be eligible for listing on the CRHR, DWR will avoid damaging effects to the TCR in accordance with California PRC Section 21084.3, if feasible.	DWR, culturally affiliated Tribes	N/A	DWR, culturally affiliated Tribes	

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CEQA Mitigated Negative Declaration, SCH# 2025080059	TCR-2	If DWR determines that the proposed project may cause a substantial adverse change to a TCR, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a TCR or alternatives that would avoid significant impacts to a TCR. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached: o Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria. o Treat the resource with culturally appropriate dignity taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following: − Protect the cultural character and integrity of the resource. − Protect the traditional use of the resource. − Protect the confidentiality of the resource. − Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places. − Protect the resource.	DWR	N/A	DWR	

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CDFW 1600 LSAA, YOL-43051-R2	1.1	Documentation at Project Site. Permittee shall make this Agreement, any extensions and amendments to this Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.	N/A	N/A	DWR	
CDFW 1600 LSAA, YOL-43051-R2	1.2	Providing Agreement to Persons at Project Site. Permittee shall provide copies of this Agreement and any extensions and amendments to this Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.	N/A	N/A	DWR, Contractor	
CDFW 1600 LSAA, YOL-43051-R2	1.3	Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in this Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall work with the Permittee to resolve any conflict.	N/A	N/A	DWR	
CDFW 1600 LSAA, YOL-43051-R2	1.4	Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with this Agreement. Permittee acknowledges that CDFW law enforcement personnel, using lawful means, may enter the project site any time without notice to verify compliance with this Agreement. Permittee agrees that CDFW scientific personnel may enter the project site with 24-hour advance notice to verify compliance with this Agreement.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor may be asked to participate in site inspections.
CDFW 1600 LSAA, YOL-43051-R2	1.5	No Trespass. To the extent that any provisions of this Agreement provide for activities that require Permittee to traverse another owner's property, such provisions are agreed to with the understanding that the Permittee possesses the legal right to so traverse. In the absence of such right, any such provision is void.	N/A	N/A	N/A	
CDFW 1600 LSAA, YOL-43051-R2	1.6	Notification of Project Modification. Permittee agrees to notify CDFW of any modifications made to the project plans submitted to CDFW.	DWR	N/A	DWR	
CDFW 1600 LSAA, YOL-43051-R2	1.7	Change of Conditions and Need to Cease Operations. If conditions arise, or change, in such a manner as to be considered deleterious to the stream or wildlife, operations shall cease until corrective measures approved by CDFW are taken.	DWR	N/A	DWR, Contractor	Contractor is responsible to notify DWR if they become aware of any change of conditions that could be considered deleterious to the stream or wildlife.
CDFW 1600 LSAA, YOL-43051-R2	1.8	Does Not Authorize “Take.” This Agreement does not authorize “take” of any California Endangered Species Act (CESA) listed species. Take is defined in Fish and Game Code section 86, as hunt, pursue, catch, capture or kill or attempt to hunt, pursue, catch, capture, or kill. If there is potential for take of any listed species to occur, Permittee shall consult with CDFW and demonstrate compliance with CESA.	N/A	N/A	N/A	
CDFW 1600 LSAA, YOL-43051-R2	1.9	CEQA Compliance. Permittee shall implement and adhere to the mitigation measures in the Mitigated Negative Declaration (MND) (SCH No. 2019049138), adopted by the Department of Water Resources as lead agency for the project pursuant to the CEQA (Pub. Resources Code, § 21000 et seq.). If the results of focused or pre-commencement surveys indicate that additional impacts may result from project activities that were not analyzed in the CEQA document, then Permittee should comply with CEQA before the project commences.	DWR	N/A	DWR	
CDFW 1600 LSAA, YOL-43051-R2	1.10	Limitations on Authorization of Water Use. This Agreement does not authorize any diversion, use, or storage of water unless already permitted by law. Permittee is responsible for obtaining all necessary water rights and maintaining compliance with the State Water Code and Title 23 California Code of Regulations as appropriate. Permittee shall store and use water in accordance with a valid water right, including any limitations on when water may be stored and used, the purpose for which it may be stored and used, and the location(s) where water may be stored and used. Information regarding water right registrations can be found at https://www.waterboards.ca.gov/waterrights/water_issues/programs/registrations. Information about water right permits and applications can be found here: https://www.waterboards.ca.gov/waterrights/water_issues/programs/applications	N/A	N/A	N/A	
CDFW 1600 LSAA, YOL-43051-R2	2.1	Work Period. Project activities covered under this Agreement shall be confined to the period between August 1 and November 30 during the term of this Agreement. Revegetation, restoration, and erosion control work located outside of flowing water is not confined to this time period.	N/A	N/A	DWR, Contractor	

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CDFW 1600 LSAA, YOL-43051-R2	2.2	Work Period Modification. If Permittee needs more time to complete the project activity, the work may be permitted outside of the work period and extended on a day-to-day basis (or for some other set period of time) by CDFW (see Contact Information). Permittee shall submit a written request for a work period modification to CDFW. The work period modification request shall: 1) describe the extent of work already completed; 2) provide a schedule for activities to be conducted within the requested modification period; 3) detail the time required to complete each activity; and 4) provide photographs of current site conditions. Work period modifications are issued at the discretion of CDFW. CDFW will review the written request to work outside of the established work period. CDFW will have ten (10) business days to review the proposed work period variance. CDFW reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the modification.	DWR	DWR	DWR, Contractor	Contractor shall notify DWR by if additional time is needed beyond November 30 to complete the project activity. DWR shall prepare the written request and coordinate with CDFW. Request for additional time does not gaurantee that request will be approved by CDFW.
CDFW 1600 LSAA, YOL-43051-R2	2.3	Work Period in Low Rainfall / Dry Weather Only. The work period within site reference or name of waterway(s) shall be restricted to periods of low rainfall (less than ¼-inch per 24-hour period) or periods of dry weather (with less than a 50% chance of rain). Permittee shall monitor the National Weather Service (NWS) 72- hour forecast for the project area. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be provided upon request by the CDFW. All erosion control measures shall be initiated prior to all storm events. Revegetation, restoration, and erosion control work outside of flowing water is not confined to this work period.	DWR	DWR	Contractor	Restriction applies to in-water work. DWR will monitor and save weather forecasts.
CDFW 1600 LSAA, YOL-43051-R2	2.4	Vegetation Removal. Disturbance or removal of vegetation shall be kept to the minimum necessary to complete project related activities. Except for tree removal already described in this Agreement, no native trees with a trunk diameter at breast height (DBH) in excess of four (4) inches shall be removed or damaged without prior consultation and approval of a CDFW representative. Where native trees or woody riparian vegetation split into several trunks close to ground level, the DBH shall be measured for each trunk and calculated as one tree. Vegetation that will not be removed by the project shall be marked for protection and may only be trimmed with hand tools to the extent necessary to gain access to the work sites.	DWR	N/A	Contractor	Trees to be protected are identified in the project plans and DWR will mark them in the field prior to site work.
CDFW 1600 LSAA, YOL-43051-R2	2.4.1	Vegetation Removal Revision. If riparian vegetation removal not described in this Agreement is necessary to complete project related activities, Permittee shall document the number, species, and DBH of all woody stemmed plants four (4) inches DBH or greater that are removed during project activities. Documentation shall be provided to CDFW for review with the Notification of Project Completion, as described in Measure 4.2. CDFW may require additional mitigation for impacts greater than those described in this Agreement.	Contractor	DWR	N/A	If ripairian vegetation removal not described in this Agreement is necessary to complete project related activities, Contractor shall document the number, species, and DBH of all woody stemmed plants four (4) inches DBH or greater that need to be removed and submit to DWR for review and approval. DWR will conduct any neccessary agency coordination.
CDFW 1600 LSAA, YOL-43051-R2	2.5	Vegetation Removal Methods. Hand tools (e.g., trimmer, chain saw, etc.) shall be used to trim vegetation to the extent necessary to gain access to the work site(s); larger equipment shall not be used for vegetation removal unless already described in the project description.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.6	Leave Wildlife Unharmed. Wildlife shall be allowed to leave the project area unharmed.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.7	Special-Status Species Encountered During Work. If Permittee encounters any special-status wildlife species within the work area, work shall be suspended until the individual leaves of its own volition or CDFW will be notified. If the special status wildlife species does not leave, CDFW will be notified, and conservation measures shall be developed in agreement with CDFW prior to reinitiating the activity. Work may not re-initiate until the individual has left or the Permittee has consulted with CDFW and can demonstrate compliance with CESA, if applicable. If a special-status plant species are encountered, Permittee shall adhere to Measure 2.13 below.	N/A	N/A	DWR, Contractor	Contractor shall notify DWR of any wildlife encountered on site. DWR will conduct any necessary agency coordination.

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CDFW 1600 LSAA, YOL-43051-R2	2.8	Designated Biologist. At least thirty (30) business days before initiating ground- or vegetation-disturbing activities, Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information for a biological monitor (Designated Biologist). Permittee shall obtain CDFW's written approval of the Designated Biologist prior to the commencement of project activities. The Designated Biologist shall be knowledgeable and experienced in the biology and natural history of local fish and wildlife resources present at the project site and have the necessary handling permits. The Designated Biologist shall be responsible for monitoring all project activities, including construction and any ground- or vegetation-disturbing activities in areas subject to this Agreement. The Designated Biologist shall be responsible for observing bird activity and any newly active nests. Permittee shall not enter into any agreement or contract of any kind, including but not limited to non-disclosure agreements and confidentiality agreements, with the Designated Biologist that prohibit or impede open communication with CDFW, including but not limited to providing CDFW staff with the results of any surveys, reports, or studies or notifying CDFW of any non compliance or take. Permittee shall notify CDFW in writing if a substitute Designated Biologist is selected or identified at any time during the term of this Agreement.	DWR	DWR	DWR	
CDFW 1600 LSAA, YOL-43051-R2	2.9	Nesting Bird Survey. If project-related activities are scheduled between February 1 to August 31 (the typical nesting season), a focused survey for nests shall be conducted by a Designated Biologist within no greater than fifteen (15) business/calendar days prior to the beginning of Project-related activities. The Designated Biologist shall survey a minimum radius of 500-feet for migratory birds and 1/2-mile for raptors around the Project area that can be accessed by Permittee. The results of the survey shall be provided to CDFW upon completion. If no active nests are found, project activities may proceed as scheduled.	DWR	DWR	DWR	
CDFW 1600 LSAA, YOL-43051-R2	2.9.1	Active Nests. If an active nest is found, active nests should be avoided, and a no disturbance or destruction buffer shall be determined and established by a Designated Biologist. The buffer shall be kept in place until after the breeding nesting season or the Designated Biologist confirms the young have fledged, are foraging independently, and the nest is no longer active for the season. The extent of these buffers shall be determined by the Designated Biologist and will depend on the species present, the level of noise or construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers.	DWR	DWR	Contractor	DWR will notify the Contractor of the location and avoidance buffer for any active nests found during the nest survey. Contractor shall not enter into avoidance buffer areas.
CDFW 1600 LSAA, YOL-43051-R2	2.9.2	Project Delay. If a lapse in project-related work of fourteen (14) calendar days or longer occurs, the Designated Biologist shall complete another focused survey before Project work can be reinitiated.	DWR	DWR	DWR	
CDFW 1600 LSAA, YOL-43051-R2	2.9.3	Permittee Responsibility. It is the Permittee's responsibility to comply with Fish and Game Code Sections 3503, 3503.5, and 3513, regardless of the time of year. This Agreement does not authorize take of birds, their nests, or their eggs	DWR	DWR	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.10	Western Pond Turtle Surveys. Focused surveys shall be conducted for Western Pond Turtle (Actinemys marmorata; WPT) within 48 hours prior to the initiation of project construction. If WPT are discovered at any time they shall be relocated downstream in the appropriate habitat.	DWR	DWR	DWR	
CDFW 1600 LSAA, YOL-43051-R2	2.11	Burrowing Owl Survey. No more than 14 days prior to beginning vegetation- and ground-disturbing activities, the Permittee shall conduct at least two (2) BUOW surveys over all suitable habitat present within the project area. BUOW surveys shall be conducted by the Designated Biologist in accordance with the protocol described in the Staff Report on Burrowing Owl Mitigation (CDFW, March 7, 2012). If possible, surveys should be conducted during both the breeding (February 1- August 21) and non-breeding seasons (September 1- January 31) immediately preceding the planned start of construction activities to ascertain the seasonal residency. The presence of BUOW or their sign (e.g., molted feathers, cast pellets, prey remains, eggshell fragments, owl whitewash, nest burrow decoration materials, etc.), anywhere on the site or within a 1650-foot accessible radius around the project site shall be recorded and mapped. Surveys shall disclose all burrows and occurrence or sign of BUOW on the project site and within the 1650- foot radius. Results of the survey shall be submitted to CDFW. If at any time changes in BUOW presence are detected, the Designated Biologist shall contact CDFW within 24 hours of the observation, Permittee shall halt work that may result in take of BUOW and shall adhere to Measures 2.7 and 4.4 of this Agreement.	DWR	DWR	DWR	

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CDFW 1600 LSAA, YOL-43051-R2	2.12	Giant Garter Snake Survey. Permittee shall conduct a GGS survey over all suitable habitats present within the project area no more than 24 hours prior to the initiation of construction activity within 100 feet of suitable aquatic or upland habitat. The results of the survey and the survey methodology shall be provided to CDFW upon completion in a report due no later than fourteen (14) calendar days after the survey was conducted. The Qualified Biologist will conduct a new survey at any Work Area where there has been a lapse in construction activities of seven (7) or more consecutive calendar days prior to any renewed activities. If GGS is detected during surveys or at any time during Project Activities at or within 100 feet of the Work Area, Permittee shall halt work that may result in take of GGS until the EPIMS Notification No.YOL-43051-R2 Streambed Alteration Agreement Page 8 of 25 individual leaves of its own volition and shall adhere to Measures 2.7 and 4.4 of this Agreement	DWR	DWR	DWR	
CDFW 1600 LSAA, YOL-43051-R2	2.13	Special Status Plant Survey. A one-time pre-construction plant survey shall be performed during the appropriate blooming period for all special status plant species with potential to occur that will be impacts withing the project site. The results of the survey findings shall be submitted to CDFW. If the survey results are negative, no further action by Permittee is needed. If the survey finds that any special status plant species are present, Permittee shall consult with CDFW on the appropriate action and the inclusion of any additional measures.	DWR	DWR	DWR	
CDFW 1600 LSAA, YOL-43051-R2	2.14	Invasive Species. Permittee shall conduct project activities in a manner that prevents the introduction, transfer, and spread of aquatic, riparian, and terrestrial invasive species from one work site and/or water body to another. Prior to entering the project area, Permittee shall inspect equipment for invasive species and, if any signs of invasive species are found, the equipment shall be cleaned to remove those species. All visible soil/mud, plant materials, and animal remnants on equipment will be removed prior to entering and exiting the work site and/or between each use in different water bodies. Permittee shall notify CDFW immediately if an invasive species not previously known to occur within the work site is discovered during work activities by contacting CDFW's Invasive Species Program by email at Invasives@wildlife.ca.gov.	N/A	DWR	DWR, Contractor	Additional detail can be found in 01 57 19.
CDFW 1600 LSAA, YOL-43051-R2	2.15	Check for Wildlife in Pipes / Construction Materials. Permittee shall visually check all sections of pipe / construction materials for the presence of sheltering wildlife prior to the pipe sections being placed in the trench. Alternatively, pipe ends shall be capped while stored on site to prevent wildlife from entering. After attachment of the pipe sections to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during construction to prevent wildlife from entering and being trapped within the pipeline.	N/A	N/A	DWR, Contractor	DWR environmental monitor will conduct inspections. Contractor is responsible to ensure site does not pose a wildlife entrapment risk by implementing these measures.
CDFW 1600 LSAA, YOL-43051-R2	2.16	Fence and Signpost Consideration. Permittee shall cap the top opening or fill the three (3) holes on the top (e.g., with a bolt and nut), of any of u-channel posts, signs, or hollow vertical poles installed temporarily or permanently throughout the project to prevent the entrapment of wildlife.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.17	Avoid Wildlife Entrapment. All excavated locations, steep-walled holes, or trenches more than six (6) inches deep will be provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each workday or thirty (30) minutes prior to sunset, whichever occurs first. All steep-walled holes or trenches will be inspected by the Designated Biologist each morning to ensure no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight will be inspected for wildlife by the Designated Biologist.	N/A	N/A	DWR, Contractor	DWR environmental monitor will conduct inspections. Contractor shall ensure site does not pose a wildlife entrapment risk by implementing these measures.
CDFW 1600 LSAA, YOL-43051-R2	2.18	Open Trenches. Any open trenches, pits, or holes with a depth larger than one (1) foot shall be covered at the conclusion of work each day with a hard, non-heat conductive material (e.g., plywood). No netting, canvas, or material capable of trapping or ensnaring wildlife shall be used to cover open trenches. If use of a hard cover is not feasible, multiple wildlife escape ramps shall be installed, constructed of wood or installed as an earthen slope in each open trench, hole, or put that is capable of allowing large (e.g., deer) and small (e.g., snakes) wildlife to escape on their own accord. Prior to initiation of construction each day and prior to the covering of the trench at the conclusion of work each day, Designated Biologist shall inspect the open trench, pit, or hole for wildlife. If wildlife is discovered, it shall be allowed to leave on its own accord. If wildlife does not leave on its own accord, work shall be suspended, and CDFW notified. Work may not re-initiate until the Permittee has consulted with CDFW.	N/A	N/A	Contractor	

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CDFW 1600 LSAA, YOL-43051-R2	2.19	Seeding. Permittee shall restore all exposed/disturbed areas and access points within the project area, by seeding with a native seed mix of known genetic origin whose original stock seed was collected from the Great Central Valley unless otherwise agreed upon with CDFW. Revegetation shall be completed in the fall before the start of the rainy season and as soon as possible after project activities. Seeded areas shall be covered with broadcast straw, mulch, and/or erosion control blankets.	N/A	N/A	Contractor	Additional detail can be found in 32 92 19.
CDFW 1600 LSAA, YOL-43051-R2	2.20	Native Plant Materials. Revegetation shall include only local plant materials native to the project area, unless otherwise approved by CDFW in writing.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.21	Prohibited Plant Species. Permittee shall not plant, seed or otherwise introduce invasive non-native plant species. Prohibited invasive non-native plant species include those identified in the California Invasive Plant Council's database, which is accessible at: http://www.cal-ipc.org.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.22	Stream Materials. Rock, gravel, and/or other materials shall not be imported to, taken from or moved between watercourses except as otherwise addressed in this Agreement.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.23	Erosion Control. Permittee shall actively implement best management practices (BMPs) to minimize turbidity and siltation and prevent erosion and the discharge of sediment where it may pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat during project activities. Precautions shall include, but are not limited to: pre-project planning to identify site specific turbidity and siltation minimization measures; best management erosion control practices during project activity; and settling, filtering, or otherwise treating silty and turbid water prior to discharge into a stream or storm drain. This may require the placement of silt fencing, coir logs, coir rolls, straw bale dikes, or other EPIMS Notification No.YOL-43051-R2 Streambed Alteration Agreement Page 10 of 25 siltation barriers so that silt and/or other deleterious materials are not allowed to pass to downstream reaches.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
CDFW 1600 LSAA, YOL-43051-R2	2.23.1	Monitoring. BMPs shall be monitored daily and repaired if necessary to ensure maximum erosion and sediment control.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.23.2	Materials. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the project site shall be free of non-native plant materials. Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, or coconut (coir) fiber, or other products without welded weaves. Products with plastic monofilament or cross joints in the netting that are bound/stitched (such as found in straw wattles/fiber rolls and some erosion control blankets), which may cause entrapment of wildlife, shall not be allowed. Permittee shall remove and dispose of all temporary BMPs and any related material upon completion of project activities.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.23.3	Implementation. Passage of sediment beyond the sediment barrier(s) is prohibited. If any sediment barrier fails to retain sediment, corrective measures shall be taken. The sediment barrier(s) shall be maintained in good operating condition throughout the construction period and the following rainy season. Maintenance includes, but is not limited to, removal of accumulated silt and/or replacement of damaged silt fencing, coir logs, coir rolls, and/or straw bale dikes. Upon the CDFW's determination that turbidity/siltation levels resulting from project-related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective CDFW-approved control devices are installed or abatement procedures are initiated.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.24	Prohibition Against Use of Plastic Netting in Erosion Control Measures. Permittee shall not use temporary or permanent erosion control devices containing plastic netting, including photo- or bio-degradable plastic netting. These items are commonly found in straw wattles (fiber rolls) and erosion control blankets.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.25	Post Storm Event Inspection. After any storm event, Permittee shall inspect all sites scheduled to begin or continue construction within the next 72 hours. Corrective action for erosion and sedimentation shall be taken as needed. National Weather Service 72-hour weather forecasts shall be reviewed prior to the start of any phase of the project that may result in sediment runoff to the stream, and construction plans adjusted to meet this requirement. The National Weather Service forecast can be found at: http://www.nws.noaa.gov.	N/A	N/A	Contractor	

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CDFW 1600 LSAA, YOL-43051-R2	2.26	Heavy Equipment. No heavy equipment shall be stationed in waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat. Heavy equipment shall only be operated from upland areas outside of waters of the state (Fish & G. Code § 89.1).	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.27	Heavy Equipment Maintenance. Any equipment or vehicles driven and/or operated shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat. If maintenance or refueling of vehicles or equipment must occur on-site, Permittee shall use a designated area and/or a secondary containment, located away from drainage courses to prevent the runoff of storm water and the runoff of spills. Permittee shall place drip pans or absorbent materials under vehicles and equipment when not in use. Equipment shall be stored in areas that any possible contamination from the equipment would not pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.28	Equipment Maintenance and Fueling. No equipment maintenance or fueling shall take place where petroleum products or other pollutants from the equipment may pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.29	Minimize Vehicle Parking. Vehicles may enter and exit the work area as necessary for project activities, but shall not be parked overnight within ten (10) feet of the drip line of any trees; nor shall vehicles be parked where mechanical fluid leaks may potentially pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.30	Staging and Storage Areas. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located more than 150 feet from or where it may not pass into the waters of the state, the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	DWR, Contractor	Staging Areas, Laydown Areas and access routes are identified on the project plans.
CDFW 1600 LSAA, YOL-43051-R2	2.31	Building Material Storage. Project building material and/or project equipment shall not be placed where materials could pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat, or where they may cover aquatic or riparian vegetation.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.32	Decontamination of Project Equipment. Permittee shall decontaminate all tools, waders and boots, and other equipment that will enter the water prior to entering and exiting the project site to avoid the introduction and transfer of organisms. Permittee shall decontaminate project gear and equipment that will enter the water by utilizing one of three methods: drying, using a hot water soak, or freezing, as appropriate to the type of gear or equipment. For all methods, Permittee shall begin the decontamination process by thoroughly scrubbing personal equipment, paying close attention to small crevices such as boot laces, seams, net corners, etc., with a stiff-bristled brush to remove all organisms. To decontaminate by drying, Permittee shall allow larger equipment to dry thoroughly (i.e., until there is a complete absence of water), preferably in the sun, for a minimum of 48 hours. To decontaminate using a hot water soak, Permittee shall immerse equipment in 140 degrees Fahrenheit or hotter water and soak for a minimum of 5 minutes. To decontaminate by freezing, Permittee shall place equipment in a freezer 32 degrees Fahrenheit or colder for a minimum of eight (8) hours. Repeat decontamination is required only if the equipment/clothing is removed from the site, used within a different waterbody, and returned to the project site.	N/A	DWR	Contractor	Additional detail can be found in 01 57 19.
CDFW 1600 LSAA, YOL-43051-R2	2.33	Decontamination Sites. Permittee shall perform decontamination of vehicles, watercraft, and other project gear and equipment in a designated location where runoff can be contained and not allowed to pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	DWR	Contractor	Additional detail can be found in 01 57 19.

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CDFW 1600 LSAA, YOL-43051-R2	2.34	Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders shall be positioned over drip pans and secondary containment, as necessary. Stationary equipment shall have suitable containment to handle any spill/leak. Equipment shall be stored in areas that any possible contamination from the equipment would not pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.35	Remove Structures. Project-related structures and associated materials not designed to withstand high water flows or placed in seasonally dry portions of a stream or lake that could be washed downstream or could be deleterious to aquatic life, wildlife, or riparian habitat shall be moved to areas outside the floodplain before such flows occur.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.36	No Dumping. Permittee and all contractors, subcontractors, and employees shall not dump any litter or project debris on the project site.	N/A	N/A	DWR, Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.37	Remove Temporary Flagging, Fencing, and Barriers. Permittee shall remove all temporary flagging, fencing, and/or barriers from the project area and vicinity immediately upon completion of project activities.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.38	Wash Water. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter sensitive areas, or placed in locations where it may pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, or other sensitive habitat.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.39	Hazardous Materials. Debris, soil, silt, sand, rubbish, project waste, cement or concrete or washings thereof, asphalt, paint, oil or other petroleum products or any other substances which could be hazardous to aquatic life, or other organic or earthen material from project activities shall not be stored where it may pass into waters of the state (Fish & G. Code § 89.1), the stream bed, bank, or channel (including but not limited to dry, ponded, flowing, or wetland areas), drainages, lakes, other sensitive habitat. Permittee shall ensure that all project areas have proper spill clean-up materials (absorbent pads, sealed containers, booms, etc.) to contain the movement of any spilled substances. All debris shall be disposed of properly. BMPs shall be employed to accomplish these requirements. CDFW shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	2.40	Removal of Debris, Materials and Rubbish. Permittee shall remove all project generated debris, building materials and rubbish from the project area following completion of project activities.	N/A	N/A	Contractor	
CDFW 1600 LSAA, YOL-43051-R2	3	To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.	N/A	N/A	N/A	
CDFW 1600 LSAA, YOL-43051-R2	3.1	Compensatory Mitigation for Loss of Riparian Habitat. Thirty (30) days before to the start of project activities, Permittee shall provide to CDFW for review and approval a mitigation plan to compensate for the project's impacts. The mitigation plan shall outline how Permittee will mitigate for the permanent loss of 0.215 acres of riparian habitat and 0.284 acres of riverine habitat, with a minimum of 0.645 acres of riparian habitat and 0.852 acres of riverine habitat. Habitat creation or restoration must include the expansion of riparian areas with an established success criterion. Habitat enhancement activities may be used instead of restoration and creation activities at double the 0.645 riparian acreage and 0.852 riverine acreage value. Habitat enhancement may include removal of invasive species and replacement with native riparian plantings.	DWR	N/A	DWR	
CDFW 1600 LSAA, YOL-43051-R2	3.1.1	Purchase of Mitigation Credits. If on- or off-site creation, restoration, or enhancement is not a feasible method of mitigation, Permittee may mitigate permanent impacts by purchasing equivalent credits at a CDFW-approved mitigation bank. Permittee shall coordinate with the Mitigation Bank on credit types and availability and receive CDFW approval prior to purchasing credits. Permittee shall submit the Bill of Sale and Payment Receipt to CDFW.	DWR	N/A	DWR	
CDFW 1600 LSAA, YOL-43051-R2	4.1	Notification of Project Initiation. The Permittee shall notify the CDFW two (2) business days prior to beginning work for each construction season. Notification shall be submitted as instructed in Contact Information section below. Email submittal is preferred.	DWR	DWR	N/A	

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CDFW 1600 LSAA, YOL-43051-R2	4.2	Notification of Project Completion. Upon completion of the project activities described in this Agreement, the project activities shall be photographed. Photographs shall be submitted to CDFW within fifteen (15) business days of project completion. Photographs and project completion notification shall be submitted as instructed in Contact Information section below. Email submittal is preferred.	DWR	DWR	N/A	
CDFW 1600 LSAA, YOL-43051-R2	4.3	Annual Restoration Monitoring Reports. After completion of the project activities, the repaired project site and its planted riparian vegetation shall be monitored annually for five (5) years after construction to verify that the channel is stable, and the planted riparian vegetation have met the success criteria. Every year for five (5) years, a monitoring report shall be sent to CDFW for review and approval detailing the current year's river conditions, success of natural vegetation establishment, survival, percent cover, and height of both tree and shrub species. The number by species of plants replaced, an overview of the revegetation effort, and the method used to assess these parameters shall also be included. The report shall include photos from designated photo points and other relevant information such as: a summary of invasive species control, methods used to remove non-native plants, and a list of wildlife observed on site. Each annual monitoring report is due to CDFW by the end of February of the following year.	DWR	DWR	N/A	
CDFW 1600 LSAA, YOL-43051-R2	4.4	Notification to the California Natural Diversity Database. If any special-status species are observed during project implementation, the Permittee shall submit the California Natural Diversity Data Base (CNDDB) Online Field Survey Form electronically at https://www.wildlife.ca.gov/data/CNDDB/submitting-data within five (5) business days of the sightings, and provide a copy of the form, survey map and/or report to the CDFW's Regional office as instructed in Contact Information section below.	DWR	DWR	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	IX	The repair work limits and staging areas will be fenced with orange construction fencing to prevent vehicles and equipment from approaching the waterside edge of the existing bank (where applicable), protect sensitive habitat, and identify disturbance area limits	N/A	N/A	Contractor	Work limits fenced by the Contractor shall not exceed what is shown on the drawings.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	IX	DWR will conduct environmental awareness training to train the contractor on the proper use of BMPs and applicable permit requirements, to protect receiving water quality.	DWR	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	IX	DWR will install erosion control measures, such as use of straw bales, silt fences, fiber rolls, or equally effective measures, at project locations adjacent to stream channels, drainage canals, and wetlands, as needed. During repair activities, erosion control measures will be monitored during and after each storm event for effectiveness. Modifications, repairs, and improvements to erosion control measures will be made as needed to protect water quality.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	IX	DWR will install turbidity curtains or similar methods during in-channel work, to control silts and sediments, if needed.	Contractor	DWR	Contractor	Turbidity Curtains will be installed as required. Additional information can be found in Section 31 00 00.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	IX	DWR will minimize ground and vegetation disturbance by establishing designated equipment staging areas, access routes, spoils and soil stockpile areas, and equipment exclusion zones before the start of repair activity.	DWR	N/A	Contractor	This measure is addressed in DWR's project design.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	IX	DWR will prepare and implement hazardous materials management and a spill response plan. DWR will ensure that any hazardous materials are stored at the staging areas, with an impermeable membrane between the ground and hazardous material, and that it is bermed to prevent the discharge of pollutants to groundwater and runoff water. DWR immediately will stop and, pursuant to pertinent State and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so, according to the prepared spill response plan. DWR will notify USFWS, CDFW, and NMFS within 24 hours of any leaks or spills. DWR will properly contain and dispose of any unused or leftover hazardous products off-site. DWR will use and store hazardous materials, such as vehicle fuels and lubricants, in designated staging areas that are located away from stream channels and wetlands, according to local, State, and federal regulations, as applicable.	Contractor	DWR	Contractor	Contractor will prepare a hazardous materials management and spill response plan and submit for DWR review. Contractor will implement the plan in the field. DWR will be responsible for all agency communication, such as in the event of a spill notification.

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Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	IX	Construction vehicles and equipment will be checked daily for leaks and will be properly maintained to prevent contamination of soil or water from external grease and oil, or from leaking hydraulic fluid, fuel, oil, and grease.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV A	Impacts to waters of the state shall not exceed quantities shown in Table 1.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B	The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in Attachment D, including specifications for photo and map documentation during the Project. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment D, which must be signed by the Permittee or an authorized representative.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 1a	Monthly Reporting: The Permittee must submit a Monthly Report to the Central Valley Water Board on the 1st day of each month beginning the month after the submittal of the Commencement of Construction Notification. Monthly reporting shall continue until the Central Valley Water Board issues a Notice of Project Complete Letter to the Permittee	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 1b	Annual Reporting: The Permittee shall submit an Annual Report each year on the 1st day of August beginning one year after the effective date of the Order. Annual reporting shall continue until the Central Valley Water Board issues a Notice of Project Complete Letter to the Permittee.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 2a	Commencement of Construction: The Permittee shall submit a Commencement of Construction Report at least seven (7) days prior to start of initial ground disturbance activities and corresponding Waste Discharge Identification Number (WDID No.) issued under the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002).	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 2b	Request for Notice of Completion of Discharges Letter: The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Central Valley Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, Central Valley Water Board staff shall issue a Notice of Completion of Discharges Letter to the Permittee which will end the active discharge period.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 2c	Request for Notice of Project Complete Letter: The Permittee shall submit a Request for Notice of Project Complete Letter when construction and/or any post-construction monitoring is complete, and no further Project activities will occur. Completion of post-construction monitoring shall be determined by Central Valley Water Board staff and shall be contingent on successful attainment of restoration and mitigation performance criteria. This request shall be submitted to Central ValleyWater Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the Central Valley Water Board staff shall issue a Notice of Project Complete Letter to the Permittee which will end the post discharge monitoring period	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 3a	Accidental Discharges of Hazardous Materials: Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Water Code, Section 13271): i. As soon as (A) Permittee has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures then: • first call – 911 (to notify local response agency) • then call – Office of Emergency Services (OES) State Warning Center at:(800) 852-7550 or (916) 845-8911 • Lastly, follow the required OES, procedures as set forth in the Office of Emergency Services' Accidental Discharge Notification Web page (http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES Spill_Booklet_Feb2014_FINAL_BW_Acc.pdf). ii. Following notification to OES, the Permittee shall notify Central Valley Water Board, as soon as practicable (ideally within 24 hours). Notification may be delivered via written notice, email, or other verifiable means. iii. Within five (5) working days of notification to the Central Valley Water Board, the Permittee must submit an Accidental Discharge of Hazardous Material Report	DWR, Contractor	DWR	DWR, Contractor	In the event of an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the Contractor shall notify DWR immediately and provide DWR information about the discharge. DWR will be responsible for all reporting and agency communication.

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Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 3b	Violation of Compliance with Water Quality Standards: The Permittee shall notify the Central Valley Water Board of any event causing a violation of compliance with water quality standards. Notification may be delivered via written notice, email, or other verifiable means. i. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.	DWR, Contractor	DWR	DWR, Contractor	In the event of a violation of compliance with water quality standards, the Contractor shall notify DWR immediately and provide DWR information about the discharge. DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 3c	In-Water Work and Diversions: i. The Permittee shall notify the Central Valley Water Board at least forty eight (48) hours prior to initiating work in water or stream diversions. Notification may be delivered via written notice, email, or other verifiable means. ii. Within three (3) working days following completion of work in water or stream diversions, an In-Water Work/Diversions Water Quality Monitoring Report must be submitted to Central Valley Water Board staff.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 3d	Modifications to Project: Project modifications may require an amendment of this Order. The Permittee shall give advance notice to Central Valley Water Board staff if Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. The Permittee shall inform Central Valley Water Board staff of any Project modifications that will interfere with the Permittee's compliance with this Order. Notification may be made in accordance with conditions in the certification deviation section of this Order.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 3e	Transfer of Property Ownership: This Order is not transferable in its entirety or in part to any person or organization except after notice to the Central Valley Water Board in accordance with the following terms: i. The Permittee must notify the Central Valley Water Board of any change in ownership or interest in ownership of the Project area by submitting a Transfer of Property Ownership Report. The Permittee and purchaser must sign and date the notification and provide such notification to the Central Valley Water Board at least 10 days prior to the transfer of ownership. ii. Until such time as this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV B 3f	Transfer of Long Term BMP Maintenance: If maintenance responsibility for post-construction BMPs is legally transferred, the Permittee must submit to the Central Valley Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer or designer specifications. The Permittee must provide such notification to the Central Valley Water Board with a Transfer of Long-Term BMP Maintenance Report at least 10 days prior to the transfer of BMP maintenance responsibility.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV C1	General: If surface water is present continuous visual surface water monitoring shall be conducted during active construction periods to detect accidental discharge of construction related pollutants (e.g. oil and grease, turbidity plume, or uncured concrete). Sampling is not required in a wetland where the entire wetland is being permanently filled, provided there is no outflow connecting the wetland to surface waters. The Permittee shall perform surface water sampling: a. when performing any in-water work; b. during the entire duration of temporary surface water diversions; c. in the event that the Project activities result in any materials reaching surface waters; or d. when any activities result in the creation of a visible plume in surface waters.	N/A	N/A	DWR	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV C2	Accidental Discharges/Noncompliance: Upon occurrence of an accidental discharge of hazardous materials or a violation of compliance with a water quality standard, Central Valley Water Board staff may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV C3	In-Water Work or Diversions: During planned in-water work, dewatering activities, or during the installation of removal of temporary water diversions, any discharge(s) to waters of the state shall conform to the following water quality standards:	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV C3a	Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV C3b	Activities shall not cause dissolved oxygen to be reduced below 5.0 mg/L for waters designated with the WARM beneficial use, and 7.0 mg/L for waters designated with the COLD or SPWN beneficial uses, in surface water.	N/A	N/A	Contractor	

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Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV C3c	Activities shall not cause turbidity increases in surface water to exceed: i. where natural turbidity is less than 1 Nephelometric Turbidity Units (NTUs), controllable factors shall not cause downstream turbidity to exceed 2 NTU; ii. where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU; iii. where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent; iv. where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs; v. where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent. In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected. Averaging periods may only be used with prior permission of the Central Valley Water Board Executive Officer. For Delta waters, the general objectives for turbidity apply subject to the following: except for periods of storm runoff, the turbidity of Delta waters shall not exceed 50 NTUs in the waters of the Central Delta and 150 NTUs in other Delta waters.	N/A	N/A	DWR, Contractor	DWR will conduct turbidity monitoring and report results to the Contractor in the field. If turbidity limits are exceeded, Contractor will stop work until turbidity is reduced below permit limits.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV C3d	Activities shall not cause temperature in surface waters to increase more than 5°F above natural receiving water temperature for waters with designated COLD or WARM beneficial uses.	N/A	N/A	DWR, Contractor	DWR will conduct temperature monitoring and report results to the Contractor in the field. If turbidity limits are exceeded, Contractor will stop work until turbidity is reduced below permit limits.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV C4	Post-Construction: Visually inspect the Project site during the rainy season for one year following completion of active Project construction activities to ensure excessive erosion, stream instability, or other water quality pollution is not occurring in or downstream of the Project site. If water quality pollution is occurring, contact the Central Valley Water Board staff member overseeing the Project within three (3) working days. The Central Valley Water Board may require the submission of a Violation of Compliance with Water Quality Standards Report. Additional permits may be required to carry out any necessary site remediation.	N/A	N/A	DWR	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV E1	Failure to comply with any condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. The Permittee and/or discharger may then be subject to administrative and/or civil liability pursuant to Water Code section 13385	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV E2	Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plans by any applicable Regional Water Board or any applicable State Water Board (collectively Water Boards) water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV E3	In response to a suspected violation of any condition of this Order, the Central Valley Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV E4	The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV E5	This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act, section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV E6	The Permittee shall adhere to all requirements in the mitigation monitoring and reporting program (MMRP) (include title and date of MMRP) which is incorporated herein by reference and any additional measures as outlined in Attachment C, CEQA Findings of Fact.	N/A	N/A	Contractor	

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Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV E7	Construction General Permit Requirement: The Permittee shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; NPDES No. CAS000002), as amended, for discharges to surface waters comprised of storm water associated with construction activity, including, but not limited to, demolition, clearing, grading, excavation, and other land disturbance activities of one or more acres, or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV F1	Signatory requirements for all document submittals required by this Order are presented in Attachment E of this Order	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV F2	This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & Wildlife Code, sections 2050-2097) or the federal Endangered Species Act (16 U.S.C. sections 1531-1544). If a “take” will result from any act authorized under this Order held by the Permittee, the Permittee must comply with the California Endangered Species Act and federal Endangers Species Act prior to any construction or operation of the portion of the Project that may result in a take. The Permittee is responsible for meeting all requirements of the applicable endangered species act for the Project authorized under this Order.	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV F3	The Permittee shall grant Central Valley Water Board staff, or an authorized representative (including an authorized contractor acting as a Water Board representative), upon presentation of credentials and other documents as may be required by law, permission to: a. Enter upon the Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept. b. Have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order. c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order. d. Sample or monitor for the purposes of assuring Order compliance.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor may be asked to participate in site inspections.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV F4	A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.	N/A	N/A	DWR, Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV F5	A copy of this Order must be available at the Project site(s) during construction for review by site personnel and agencies. All personnel performing work on the Project shall be familiar with the content of this Order and its posted location at the Project site.	N/A	N/A	DWR, Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV F6	Lake or Streambed Alteration Agreement: The Permittee shall submit a signed copy of the California Department of Fish and Wildlife’s Lake or Streambed Alteration Agreement to the Central Valley Water Board immediately upon execution and prior to any discharge to waters of the state.	N/A	N/A	DWR	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G1	Dewatering a. No dewatering will occur within the Project area. b. This Order does not allow permanent water diversion of flow from the receiving water. This Order is invalid if any water is permanently diverted as a part of the project.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G4	Fugitive Dust: Dust abatement activities can cause discharges of sediment to streams and uplands through application of water or other fluids. Dust abatement chemicals added to water can be hazardous to wildlife and, if allowed to enter streams, detrimental to water quality. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state. Dust abatement products or additives that are known to be detrimental to water quality or wildlife shall not be used, unless specific management needs are documented, and product-specific application plans are approved by Central Valley Water Board staff.	N/A	DWR	Contractor	Contractor shall not use any dust abatement chemicals without prior written approval of DWR. More information can be found in Section 01 57 19.

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Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G5a	The Permittee shall develop and maintain onsite a project-specific Spill Prevention, Containment and Cleanup Plan outlining the practices to prevent, minimize, and/or clean up potential spills during construction of the Project. The Plan must detail the Project elements, construction equipment types and location, access and staging and construction sequence. The Plan must be made available to the Central Valley Water Board staff upon request.	Contractor	DWR	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G5b	Refueling of equipment within the floodplain or within 300 feet of the waterway is prohibited. If critical equipment must be refueled within 300 feet of the waterway, spill prevention and countermeasures must be implemented to avoid spills. Refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material. No hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, or other construction-related potentially hazardous substances should be stored within a floodplain or within 300 feet of a waterway. The Permittee must perform frequent inspections of construction equipment prior to utilizing it near surface waters to ensure leaks from the equipment are not occurring and are not a threat to water quality.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G5c	All materials resulting from the Project shall be removed from the site and disposed of properly.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G6a	The discharge of petroleum products, any construction materials, hazardous materials, pesticides, fuels, lubricants, oils, hydraulic fluids, raw cement, concrete or the washing thereof, asphalt, paint, coating material, drilling fluids, or other substances potentially hazardous to fish and wildlife resulting from or disturbed by project-related activities is prohibited and shall be prevented from contaminating the soil and/or entering waters of the state. In the event of a prohibited discharge, the Permittee shall comply with notification requirements in sections XIV.B.3.a and XIV.B.3.b.	N/A	N/A	DWR, Contractor	Contractor shall prevent discharge of prohibited substances. In the event of a discharge of prohibited substances, the Contractor shall notify DWR immediately and provide DWR information about the discharge. DWR will be responsible for all reporting and agency communication.
	XIV G6b	No wet concrete will be placed into stream channel habitat.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G7	Invasive Species and Soil Borne Pathogens Prior to arrival at the project site and prior to leaving the project site, construction equipment that may contain invasive plants and/or seeds shall be cleaned to reduce the spread of noxious weeds.	N/A	DWR	DWR, Contractor	Additional detail can be found in 01 57 19.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G9	a. The number of access routes, number and size of staging areas, and the total area of the activity must be limited to the minimum necessary to achieve the project goal. Routes and work area boundaries must be clearly demarcated. b. Bridges, culverts, dip crossings, or other structures must be installed so that water and in-stream sediment flow is not impeded. Appropriate design criteria, practices and materials must be used in areas where access roads intersect waters of the state. c. Temporary materials placed in any water of the state must be removed as soon as construction is completed at that location, and all temporary roads must be removed or re-contoured and restored according to approved re vegetation and restoration plans.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G9	d. Any structure, including but not limited to, culverts, pipes, piers, and coffer dams, placed within a stream where fish (as defined in California Fish and Game Code section 45) exist or may exist, must be designed, constructed, and maintained such that it does not constitute a barrier to upstream or downstream movement of aquatic life, or cause an avoidance reaction by fish due to impedance of their upstream or downstream movement. This includes, but is not limited to, maintaining the supply of water and maintaining flows at an appropriate depth, temperature, and velocity to facilitate upstream and downstream fish migration. If any structure results in a long-term reduction in fish movement, the discharger shall be responsible for restoration of conditions as necessary (as determined by the Water Board) to secure passage of fish across the structure. e. A method of containment must be used below any temporary bridge, trestle, boardwalk, and/or other stream crossing structure to prevent any debris or spills from falling into the waters of the state. Containment must be maintained and kept clean for the life of the temporary stream crossing structure.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G10a	Except for activities permitted by the United States Army Corps of Engineers under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act, soil, silt, or other organic materials shall not be placed where such materials could pass into surface water or surface water drainage courses.	N/A	N/A	Contractor	

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Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G10b	Silt fencing, straw wattles, or other effective management practices must be used along the construction zone to minimize soil or sediment along the embankments from migrating into the waters of the state through the entire duration of the Project.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G10c	The use of netting material (e.g., monofilament-based erosion blankets) that could trap aquatic dependent wildlife is prohibited within the Project area.	N/A	N/A	Contractor	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G11	The following Special Status Species may be present within the Project work area: valley elderberry longhorn beetle, giant garter snake, Swainson's Hawk, Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, California Central Valley steelhead, North American green sturgeon.	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G12a	All areas disturbed by Project activities shall be protected from washout and erosion.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G12b	Hydroseeding shall be performed with California native seed mix.	Contractor	DWR	Contractor	Additional detail can be found in Section 32 92 19.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV G13	Storm Water a. During the construction phase, the Permittee must employ strategies to minimize erosion and the introduction of pollutants into storm water runoff. These strategies must include the following: i. An effective combination of erosion and sediment control Best Management Practices (BMPs) must be implemented and adequately working prior to the rainy season and during all phases of construction.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV J1	The Permittee shall restore all areas of temporary impacts, including Project site upland areas, which could result in a discharge to waters of the state to pre-construction contours and conditions upon completion of construction activities in accordance with the Restoration plan dated March 2023 and incorporated herein by reference.	DWR	DWR	Contractor	This measure is addressed in DWR's project design.
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV J2	The Central Valley Water Board may extend the monitoring period beyond requirements of the restoration plan upon a determination by Executive Officer that the performance standards have not been met or are not likely to be met within the monitoring period.	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV J3	If restoration of temporary impacts to waters of the state is not completed within 60 days of the impacts, compensatory mitigation may be required to offset temporal loss of waters of the state.	N/A	N/A	N/A	
Clean Water Act Section 401 Water Quality Certification and Order, WDID: 5A51CR00136	XIV J4	Total required Project compensatory mitigation information for temporary impacts is summarized in Table 3. [Establishment (Est.), Re-establishment (Re-est.), Rehabilitation (Reh.), Enhancement (Enh.), Preservation (Pres.), Unknown].	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	Notification	The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: 1. Involves discharges of dredged or fill material into special aquatic sites; or 2. is in excess of 500 feet in length; or 3. will involve the discharge of dredged or fill material of greater than an average of one cubic yard per running foot as measured along the length of the treated bank, below the plane of the ordinary high water mark or the high tide line. (See general condition 32.)	DWR	N/A	DWR	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	1a.	No activity may cause more than a minimal adverse effect on navigation.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	1b.	Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.	N/A	N/A	Contractor	

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	1c.	The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	2	No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	3	Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	4	Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	5	No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	6	No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act)	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	7	No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	8	If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	9	To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	10	The activity must comply with applicable FEMA-approved state or local floodplain management requirements.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	11	Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.	N/A	N/A	Contractor	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	12	Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.	N/A	N/A	Contractor	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	13	Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.	N/A	N/A	N/A	This measure is addressed in DWR's project design.

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	14	Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.	N/A	N/A	DWR	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	15	The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	16a	No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	16b	If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	16c	Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: https://www.rivers.gov/.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	17	No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	18a	No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of “effects of the action” for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding “activities that are reasonably certain to occur” and “consequences caused by the proposed action.”	N/A	N/A	DWR	ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed by DWR/ACOE.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	18b	Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.	N/A	N/A	N/A	

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	18c	Non-federal permittees must submit a pre construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation)might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre construction notification. For activities where the non Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.	DWR	N/A	DWR	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	18d	As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.	N/A	N/A	N/A	See FWS and NMFS Biological Opinions.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	18e	Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	18f	If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	18g	Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at https://www.fws.gov/or https://www.fws.gov/ipac/ and https://www.fisheries.noaa.gov/topic/endangered-species conservation respectively.	N/A	N/A	N/A	

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	19	The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.	DWR	N/A	DWR	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	20a	No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	20b	Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	20c	Non-federal permittees must submit a pre construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.	DWR	N/A	DWR	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	20d	Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.	N/A	N/A	N/A	

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	20e	Prospective permittees should be aware that section 110(k) of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	21	Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places	N/A	N/A	DWR, Contractor	Contractor shall notify DWR of any historic, cultural or archeological remains and artifacts encountered on site. DWR will conduct any necessary agency coordination.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	22	Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	22a	Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	22b	For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23	The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23a	The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23b	Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23c	Compensatory mitigation at a minimum one-for one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10- acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects	N/A	N/A	N/A	This measure is addressed in DWR's project design.

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23d	Compensatory mitigation at a minimum one-for one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult to-replace resources (see 33 CFR 332.3(e)(3)).	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23e	Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23f	Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23f.1	The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23f.2	The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23f.3	Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.	N/A	N/A	N/A	This measure is addressed in DWR's project design.

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23f.4	If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23f.5	If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23f.6	Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).	DWR	N/A	DWR	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23g	Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23h	Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management	DWR	N/A	DWR	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	23i	Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	24	To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	25a	Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.	N/A	N/A	N/A	

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	25b	If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	25c	The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	26	In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	27	The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.	N/A	N/A	N/A	Additional detail can be found in the Final 2021 Nationwide Permit (NWP) Regional Conditions for the State of California.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	30	Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	30a	A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	30b	A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	30c	The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	31	If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a “USACE project”), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.	N/A	N/A	N/A	This measure is addressed in DWR's project design.

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32a	Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either: (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2)	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b	Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.1	Name, address and telephone numbers of the prospective permittee;	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.2	Location of the proposed activity	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.3	Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.4.i	(i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.4.ii	For linear projects where one or more single and complete crossings require pre construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.4.iii	Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.5	The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.6	If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.7	For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.8	For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.9	For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32b.10	For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.	N/A	N/A	N/A	

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Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32c	Form of Pre-Construction Notification: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32d.1	The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32d.2	Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2- acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32d.3	When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32d.4	In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021) (Authorized under SPK-2023-00392)	32d.5	Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.	N/A	N/A	N/A	
Nationwide Permit 13, Bank Stabilization (2021), Regional Conditions for the State of California (Authorized under SPK-2023-00392)	Regional Conditions for the State of California A1	1. The permittee shall submit a pre-construction notification (PCN), in accordance with General Condition 32, in the following circumstances: a. Activities involving new bank stabilization that do not incorporate bioengineering techniques. Bioengineering techniques include using live plants alone or in combination with dead or inorganic materials, including rock, sand, or gravel; b. Activities resulting in a discharge of dredged or fill material in waters of the U.S. on Tribal lands 1; c. Activities involving the permanent channelization, realignment, or relocation of streams; and, d. Activities that have the potential to adversely affect Essential Fish Habitat (EFH), as designated by the Pacific Fishery Management Council. The PCN shall include an EFH assessment and analysis of effects of the action on EFH, in accordance with 50 C.F.R. § 600.920 (e). For Federal permittees, if a PCN is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with the Magnuson-Stevens Fishery Conservation and Management Act.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.

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Nationwide Permit 13, Bank Stabilization (2021), Regional Conditions for the State of California (Authorized under SPK-2023-00392)	Regional Conditions for the State of California A2	In the Sacramento District, the use of any NWP (except NWPs 3, 6, 16, 20, 24, 27, 37, 38, 52, 53, and 59) authorizing the discharge of dredged or fill material in peatlands2 containing histosols, including bogs and fens, is prohibited.	N/A	N/A	N/A	
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 1	A qualified and Department-approved biologist will be responsible for monitoring repairs, helping to minimize and fully mitigate or avoid impacts to listed species, and minimizing disturbance of species' habitats.	N/A	N/A	DWR	
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 2	Before the start of repair activities, a qualified biologist will conduct a pre-construction survey to identify special-status species and associated habitats. Surveys will be conducted within the project footprint, laydown areas, and adjacent haul routes. If required, species and/or buffers will be marked in the field by a qualified biologist, using temporary fencing, high-visibility flagging, or other means that are equally effective.	N/A	N/A	DWR	
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 3	Environmental awareness training will be provided by a qualified biologist to the construction lead, construction foreman, crew leader, and any contractor personnel working on construction sites. Environmental awareness training will include descriptions of all special-status fish and wildlife species potentially occurring in the repair area for activity-specific training, species' habitats, and methods of identification, including visual aids as appropriate. The training also will describe activity specific measures that will be followed to avoid impacts. Hardcopies of environmental permits and training materials will be provided to the construction lead, construction foreman, crew leader, and any contractors participating in the repair work.	N/A	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes. DWR will provide electronic copies of environmental permits and training materials to the Contractor. Contractor will distribute hardcopies of same to the construction lead, construction foreman, crew leader, and any contractors participating in the repair work.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 4	Existing staging sites, maintenance toe roads, and levee crown roads will be used to the extent practicable for staging and access, to avoid affecting previously undisturbed areas. The number of access routes and the size of staging and work areas will be limited to the minimum necessary to conduct the repair activity.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 5	Where feasible and practicable (e.g., based on the size of the repair area and repair to be performed), work area limits will be clearly marked (e.g., with flagging or fencing), including access roads; staging and equipment storage areas; stockpile areas for spoil disposal, soil, and materials; fueling and concrete washout areas; and equipment exclusion zones. Work will occur only within the marked limits. This measure is intended to apply to repair activities occurring in discrete areas as opposed to activities occurring over an extensive area where flagging work limits will be infeasible.	N/A	N/A	DWR	DWR will mark the limits of work where feasible.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 6	Inspections will be conducted under all vehicles and heavy equipment for the presence of wildlife before the start of each workday, when equipment is staged overnight. In addition, a search for wildlife will be conducted in all pipes, culverts, and similar structures that have been stored on site for one or more nights, before they are buried, capped, or moved.	N/A	N/A	DWR	A DWR Environmental Monitor will be present on site and will conduct inspections for the presence of wildlife before the start of each workday.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 7	All excavated, steep-walled holes or trenches will be covered with appropriate covers (thick metal sheets or plywood) at the end of each workday. Covers will be placed to ensure that trench edges are fully sealed. Alternatively, such trenches may be furnished with one or more escape ramps, constructed of earth fill or wooden planks, to provide an escape for wildlife	N/A	N/A	Contractor	
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 8	All project-related trash items, such as wrappers, cans, bottles, and food scraps, will be collected in closed containers that are removed from repair sites each day and disposed at an appropriate off-site location, to minimize attracting wildlife to work areas.	N/A	N/A	Contractor	
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 9	Clearing and grubbing of vegetation will be kept to the minimum necessary, especially the clearing of native riparian vegetation and native oaks. Grubbing for temporary vehicle access will be minimized to the extent practicable. Ground and vegetation disturbance will be minimized by establishing designated equipment staging areas, access routes, spoils and soil stockpile areas, and equipment exclusion zones before the start of repair activity.	N/A	N/A	Contractor	The clearing of native riparian trees is addressed in DWR's project design. The Contractor shall keep clearing of other vegetation to the minimum necessary.

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USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 10	Where feasible, removal of native trees with a trunk greater than 4 inches in diameter at breast height (4.5 feet above the ground) will be avoided. Work will be done in a manner to ensure that, to the extent feasible, living native riparian vegetation within the vegetation-clearing zones will be avoided and left undisturbed, where this can reasonably be accomplished without compromising repair requirements. Trees that are designated to be protected in place will be protected using box or tree-wrap protection or other techniques, as designated by a qualified biologist	N/A	N/A	DWR, Contractor	DWR will flag trees to be removed/protected. Contractor will conduct tree removals and vegetation clearing.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 11	Before the start of repair activities, the qualified biologist will identify potential riparian habitat, wetlands, shallow water habitat, shaded riverine aquatic cover, and native oaks. Where feasible, the boundaries of these areas will be marked using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the boundaries. When feasible, repair activities will be excluded from these areas. Where feasible, equipment will be operated to avoid disturbing isolated riparian trees or low height riparian scrub habitat.	N/A	N/A	DWR	This measure is addressed in DWR's project design. DWR will flag areas to be avoided.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 12	Trees within the repair area that are identified for protection and outside the work limit may require trimming or removal for equipment clearance, excavation, or because of severely undermined tree health. Trees that require trimming or removal will be under the guidance of a certified arborist. A qualified biologist will document all tree and sensitive plant trimming or removal and results will be provided to the Service and the Department	N/A	N/A	DWR, Contractor	DWR will provide a qualified biologist. Contractor will provide arborist.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 13	Where erosion control fabrics are used, products will not be used with plastic monofilament or cross-joints in the netting that are bound/stitched (e.g., straw wattles, fiber rolls, or erosion control blankets), which could trap wildlife.	N/A	N/A	Contractor	
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 14	Erosion control materials will be installed that minimize soil or sediment from entering waterways and wetlands. The erosion control materials will be monitored for effectiveness, and maintained throughout the repairs and monitoring. Any erosion control barrier that is not functioning effectively will be immediately repaired or replaced.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 15	The amount of revetment and similar materials used for bank protection and other repair activities will be limited to the amount necessary to ensure proper flood protection system integrity and function.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 16	Temporary fill, construction debris, and refuse will be removed and properly disposed, following completion of any repair activities. Habitats, including sensitive natural communities, will be restored to pre-project conditions wherever feasible. Restoration may include recontouring by grading and disking, revegetating with native seeds and plants reflective of the target plant community, decompacting soil, and installing appropriate erosion control measures to return the disturbed on-site habitat to pre-activity conditions.	N/A	N/A	Contractor	Contractor is responsible for removing temporary fill, construction debris, and refuse from the project site following the completion of any repair activities. Habitat restoration activities are addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 17	For invasive plant species removal, measures to minimize the potential for invasive plants to be introduced or spread during repair activities will be implemented. Measures to avoid contamination and spread of invasive species will be created for each site, as deemed necessary by a qualified biologist, and will be approved by a qualified biologist before implementation.	DWR	N/A	Contractor	Additional detail regarding equipment cleaning and minizing the spread of invasive species can be found in 01 57 19.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 18	Service and Department staff will be provided with reasonable access to all sites and otherwise will fully cooperate with natural resource agency efforts to verify compliance with, or effectiveness of, conservation measures.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor may be asked to participate in site inspections.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 19	A qualified biologist will be authorized to stop repair activities that, in the biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on special status wildlife. If repair activities are stopped, the qualified biologist will consult with the Service and the Department as appropriate to determine appropriate measures that will be implemented to avoid adverse effects. Buffers will be maintained until a threat of disturbance to the sensitive biological resource no longer exists, as determined by a qualified biologist.	N/A	N/A	N/A	

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USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 20	The qualified biologist will immediately notify the Applicant if a species is taken or injured by a repair-related activity, or if a species is otherwise found dead or injured in the repair site vicinity. The Applicant will notify the Service, the Department, and other appropriate agencies and provide information regarding the permit number of the biologist, location, species, number of animals taken or injured, and site number. Following notification, a written report will be sent within two calendar days. The report will include the date and time of the finding or incident, location of the animal or carcass, and if possible, a photograph, explanation as to cause of take or injury, and any other pertinent information.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor shall immediately notify the Engineer if wildlife is killed or injured in or adjacent to the work site.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 21	Potential discharges into receiving waters will be reduced through implementation of best management practices (BMPs) and compliance with applicable permits. BMPs may include the following measures:	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 21a	Environmental awareness training will be conducted to train the contractor on the proper use of BMPs and applicable permit requirements, to protect receiving water quality.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 21b	Erosion control measures, such as use of straw bales, silt fences, fiber rolls, or equally effective measures, will be installed at project locations adjacent to stream channels, drainage canals, and wetlands, as needed. During repair activities, erosion control measures will be monitored during and after each storm event for effectiveness. Modifications, repairs, and improvements to erosion control measures will be made as needed to protect water quality.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 21c	Turbidity curtains or similar methods will be installed during in-channel work, to control silts and sediments, if needed. The turbidity curtain will be maintained throughout construction and removed at the completion of project activities.	Contractor	DWR	Contractor	Turbidity Curtains will be installed as required. Additional information can be found in Section 31 00 00.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 21d	Ground and vegetation disturbance will be minimized by establishing designated equipment staging areas, access routes, spoils and soil stockpile areas, and equipment exclusion zones before the start of repair activity	N/A	N/A	N/A	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 21e	A hazardous materials management and a spill response plan will be prepared and implemented. Any hazardous materials will be stored at the staging areas, with an impermeable membrane between the ground and hazardous material and a berm to prevent the discharge of pollutants to groundwater and runoff water. The Applicant will immediately stop and, pursuant to pertinent State and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so, according to the prepared spill response plan. The Service, the Department, and National Marine Fisheries Service will be notified within 24 hours of any leaks or spills. Any unused or leftover hazardous products will be contained and disposed off-site. All hazardous materials, such as vehicle fuels and lubricants, will be used and stored in designated staging areas that are located away from stream channels and wetlands, according to local, State, and federal regulations, as applicable.	Contractor	DWR	DWR, Contractor	Contractor will prepare a hazardous materials management and spill response plan and submit for DWR review. Contractor will implement the plan in the field. DWR will be responsible for all agency communication, such as in the event of a spill notification.
USFWS Biological Opinion, 2022-0072368-S7-001	General Conservation Measures 21f	Construction vehicles and equipment will be checked daily for leaks and will be properly maintained to prevent contamination of soil or water from external grease and oil, or from leaking hydraulic fluid, fuel, oil, and grease.	N/A	N/A	Contractor	
USFWS Biological Opinion, 2022-0072368-S7-001	Valley Elderberry Longhorn Beetle Measures 22	All suitable elderberry shrubs (i.e., shrubs with stem diameters of at least 1 inch when measured at ground level) will be avoided if not designated for trimming. A 20-foot avoidance buffer will be established from the dripline of any elderberry shrubs. These avoidance buffers will be avoided by all personnel and repair activities. Shrubs will be flagged or temporarily fenced, as needed, with guidance from the qualified biologist and designated as biologically sensitive areas (BSAs) where feasible. When feasible, temporary fencing will be placed around the buffer.	N/A	N/A	DWR, Contractor	DWR will flag elderberry shrubs in the field. Contractor shall avoid or trim elderberries in coordination with DWR.

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USFWS Biological Opinion, 2022-0072368-S7-001	Valley Elderberry Longhorn Beetle Measures 23	Every attempt will be made to place box protection or tree wrap around the shrubs that can be left on the slope.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	Valley Elderberry Longhorn Beetle Measures 24	If trimming is required, trimming will be limited to stem diameters of less than one inch.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 25	Project related vehicles will observe a 15-mile-per-hour speed limit within the project areas.	N/A	N/A	DWR, Contractor	
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 26	If potentially suitable aquatic habitat for the snake has been identified in or within 200 feet of the work area by a qualified biologist, a 200-foot buffer will be established around the aquatic habitat. Buffers will be marked in the field with guidance from a qualified biologist, using temporary fencing, high-visibility flagging, or other means that is equally effective in clearly delineating the buffers. Repair activities will not occur within the buffer, and workers will avoid entering the buffer at all times.	N/A	N/A	DWR, Contractor	DWR will flag suitable aquatic habitat in the field, if present. Contractor shall avoid flagged suitable habitat in coordination with DWR.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 27	Maintenance areas that may provide aquatic habitat for snakes will be dewatered to encourage snakes to leave the site on their own. Dewatered habitat will remain dry, with no water puddles remaining, for at least 15 consecutive days prior to conducting maintenance activities unless additional consultation with the Service and the Department about the dewatered site conditions allows for activities to begin earlier. If dewatering cannot remove all water, potential prey items will be netted and salvaged to discourage use by snakes.	N/A	N/A	N/A	
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 28	If snakes are observed in a repair area, work will stop in the immediate area and within 200 feet of the snake until the snake is out of the repair area and a qualified biologist will be notified immediately. If possible, the snake will be allowed to leave on its own, and the qualified biologist will remain in the area until they deem their presence no longer necessary to ensure that the snake is not harmed. If the snake does not leave on its own volition, the snake may be relocated to suitable habitat by a biologist with federal and state permits that allow handling (i.e., a permitted biologist).	N/A	N/A	DWR, Contractor	Contractor shall notify DWR of any snakes observed in the repair areas. DWR will conduct any necessary agency notification/coordination.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 28a	The permitted biologist will notify the Service and the Department immediately by telephone or email of any snakes observed. They will also provide the Service and the Department written reports documenting any snake observations or relocation efforts within 24 hours of the observation or relocation activities. The notification will include the date, time, location, and circumstances of the incident.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 28b	A Capture and Relocation Plan will be developed and submitted for approval to the Service and the Department no later than 40 days after beginning project activities and before handling any snakes. Written approval will be provided to the Applicant within 7 days of submittal. The Capture and Relocation Plan will describe the methods that will be used to capture and relocate individuals and a map of planned release locations. It will also quantify the amount, relative location, and quality of suitable aquatic and upland habitats in relocation areas, including invasive and non-native species present, available upland burrows, suitable prey items, and potential barriers for movement.	DWR	N/A	DWR	
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 28c	Any snake injured as a result of project-related activities will be taken immediately by the permitted biologist to a wildlife rehabilitation or veterinary care facility that was approved by the Service and the Department prior to the start of project activities.	N/A	N/A	DWR	
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 28d	The Applicant will bear any costs associated with the veterinary treatment of injured snakes and will notify the Service and the Department of the injury immediately by telephone and email, and subsequently through the incident report. Notification will include the name of the facility to which the injured snake was taken.	N/A	N/A	DWR	

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USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 29	The qualified biologist will survey areas of planned ground disturbance for burrows, soil cracks, and crevices that may be suitable for use by snakes when within suitable terrestrial habitat. Surveys will be completed no more than 3 days before conducting any ground-disturbing activities in terrestrial habitat potentially supporting snakes. Any identified burrows, soil cracks, crevices, or other habitat features will be flagged or marked by the qualified biologist or otherwise identified as BSAs. These BSAs will be avoided to the maximum extent feasible. If activities temporarily stop for more than 14 days, surveys for soil cracks and similar features will be repeated by a qualified biologist, as described above.	N/A	N/A	DWR, Contractor	DWR will flag any burrows, soil cracks, crevices, or other habitat features in the field, if present. Contractor shall avoid flagged suitable habitat in coordination with DWR.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 30	A qualified biologist shall be onsite during all grading activities, vegetation removal activities, and trenching activities. A qualified biologist will be on-site and monitor all locations where emergency repairs will alter snake hibernacula or refugia (rip rap, burrows, vegetation, etc.).	N/A	N/A	DWR	DWR will provide a qualified biologist.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 31	No later than 45 days after completion of all project activities, the Applicant will provide the Service and the Department via email with a final report, which will include, at a minimum: (1) a summary of all daily compliance reports; (2) notes showing when each of the mitigation measures was implemented; (3) all available information about project related incidental take of the snake; (4) information about other project impacts on the snake; (5) beginning and ending dates of project activities for each period they occurred; (6) an assessment of the effectiveness of the measures in minimizing and fully mitigating project impacts that result in take of snake; (7) recommendations on how conservation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the snake; and (8) any other pertinent information.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 32	When possible, repair activities in terrestrial habitats that potentially support the snake will be completed between May 1 and October 1. If it is not possible to complete the work by October 1, work may continue past October 1 provided earthwork has begun by September 16, ambient air temperatures exceed approximately 75°F during work, and maximum daily air temperatures have exceeded approximately 75°F for at least three consecutive days immediately preceding work. During these periods, snakes are more likely to be active in aquatic habitats and less likely to be found in upland habitats. The Applicant will notify the Service and the Department of work in these locations. A justification for the request will be included along with any additional information deemed to be necessary.	DWR, Contractor	DWR	DWR	Contractor shall notify DWR by if additional time is needed working in suitable Giant Garter Snake habitat beyond October 1 to complete the project activity. DWR shall prepare the written request and coordinate with USFWS. Request for additional time does not gaurantee that request will be approved by USFWS.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 33	Temporarily affected snake aquatic habitat will be restored to pre-existing conditions and monitored for five years. The Applicant will report annually on the condition of the restored snake habitat.	N/A	N/A	N/A	This measure is addressed in DWR's project design. DWR will be responsible for all reporting and agency communication.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 34	When feasible, spoils will be placed in areas that do not provide suitable snake upland habitat (e.g., compacted or gravel roadbeds, orchards, and recently disked agricultural fields).	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 35	Excavated spoils will be placed to avoid any BSAs in the repair areas, as feasible	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 36	The Applicant will obtain an incidental take permit or consistency determination from the Department to cover those areas and activities where there is the potential for incidental take of the snake (Site 91).	N/A	N/A	N/A	Site 91 is not part of this 26-06 contract.

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USFWS Biological Opinion, 2022-0072368-S7-001	Giant Garter Snake Measures 37a	Impacts to 0.23 acre aquatic and 0.70 acre upland snake habitat will be offset through purchase of credits at a Service- and Department-approved conservation or mitigation bank at a ratio of 1:1 for repair sites using only earthen fill within 200 feet of aquatic habitat (site 91). The Applicant will provide the final credit sale agreement, bill of sale, and payment receipt to the Service and the Department for proof of purchase of snake credits prior to beginning ground-disturbing activities. If snake credits cannot be secured before the start of work, the applicant will provide financial security in the amount of the bank credit cost utilizing a Service- and Department-approved financial mechanism prior to commencement of earthmoving, and will purchase the conservation credits within 18 months of implementation of the proposed project. a. If the Applicant opts instead to offset impacts to snake habitat through acquiring and preserving aquatic and upland habitat that supports the snake, the Applicant will prepare a land management plan that outlines all management activities for the snake. The management plan will further include a Property Analysis Record or similar analysis to establish the annual monitoring and maintenance costs, including a contingency of a minimum of 10 percent, adaptive management costs, and changed circumstances costs. The land management plan will be reviewed and approved by the Service and the Department. The Applicant will establish an endowment to ensure that the land management activities will be fully carried out in perpetuity by a land management entity approved by the Service and the Department. A conservation easement, approved in advance by the Service and the Department, will be recorded over all mitigation properties naming an entity authorized to hold conservation easements pursuant to Civil Code section 815.3 as grantee. The Service and the Department will be named third-party beneficiaries to the conservation easement(s). The proposed grantee and land manager will be approved through the Department's due diligence process. The Applicant will provide performance security for snake habitat land acquisition and management. The performance security will be a form and amount determined and approved in advance by the Service and the Department. The Applicant will fully complete all compensatory mitigation obligations for anticipated impacts to snake (i.e., fully mitigate for 0.93 acre of impacts to snake habitat) within 18 months of issuance of the biological opinion or otherwise risk forfeiture of the principal performance security sum to the Service and the Department.	N/A	N/A	N/A	Site 91 is not part of this 26-06 contract.
USFWS Biological Opinion, 2022-0072368-S7-001	Delta Smelt and Longfin Smelt Measures 38	Areas of suitable habitat will be surveyed, avoided (whenever possible), or mitigated when avoidance is not possible.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	Delta Smelt and Longfin Smelt Measures 39	In-water work will occur during the standard work window of August 1 to November 30.	N/A	N/A	Contractor	
USFWS Biological Opinion, 2022-0072368-S7-001	Delta Smelt and Longfin Smelt Measures 40	In areas where rock is placed to provide slope protection, clean soil will be placed to fill voids that potentially may provide favorable habitat for nonnative predatory fish species.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
USFWS Biological Opinion, 2022-0072368-S7-001	Delta Smelt and Longfin Smelt Measures 41	Permanent impacts to shallow water delta smelt habitat and critical habitat totaling 0.084 acre will be offset through purchase of shallow water habitat (delta and longfin smelt) credits at a Service- and Department-approved conservation or mitigation bank at a ratio of 3:1. A total of 0.252 acre will be purchased.	N/A	N/A	N/A	
USFWS Biological Opinion, 2022-0072368-S7-001	Reasonable and Prudent Measures 1	All conservation measures, as described in the biological assessment and restated here in the Description of the Proposed Action section of this biological opinion, shall be fully implemented and adhered to. Further, this reasonable and prudent measure shall be supplemented by the terms and conditions below	N/A	N/A	DWR, Contractor	
USFWS Biological Opinion, 2022-0072368-S7-001	Terms and Conditions 1	The Corps and the Applicant shall include full implementation and adherence to the conservation measures as a condition of any permit or contract issued for the proposed project.	N/A	N/A	N/A	

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USFWS Biological Opinion, 2022-0072368-S7-001	Terms and Conditions 2	In order to monitor whether the amount or extent of incidental take anticipated from implementation of the proposed project is approached or exceeded, the Corps shall adhere to the following reporting requirements. Should this anticipated amount or extent of incidental take be exceeded, the Corps must immediately reinitiate formal consultation as per 50 CFR 402.16.	N/A	N/A	N/A	ACOE internal measure
USFWS Biological Opinion, 2022-0072368-S7-001	Terms and Conditions 2a	For those components of the action that will result in habitat degradation or modification whereby incidental take in the form of harm is anticipated, the Corps shall provide a precise accounting of the total acreage of habitat impacted to the Service after completion of construction. This report shall also include any information about changes in project implementation that result in habitat disturbance not described in the Description of the Proposed Action and not analyzed in this biological opinion.	N/A	N/A	N/A	ACOE internal measure
USFWS Biological Opinion, 2022-0072368-S7-001	Terms and Conditions 2b	The Corps or the Applicant shall immediately contact the Service's Sacramento Fish and Wildlife Office (SFWO) at (916) 414-6675 to report direct encounters between listed species and project workers and their equipment whereby incidental take in the form of, harm, injury, or death occurs. If the encounter occurs after normal working hours, the Corps or the Applicant shall contact the SFWO at the earliest possible opportunity the next working day. When injured or killed individuals of the listed species are found, the Corps or the applicant shall follow the steps outlined in the Salvage and Disposition of Individuals section below.	DWR	N/A	DWR, Contractor	Contractor shall immediately report all encounters will wildlife to DWR. Additional information can be found in Section 01 57 19. DWR will be responsible for all reporting and agency communication.
USFWS Biological Opinion, 2022-0072368-S7-001	Conservation Recommendations 1	The Corps and the Applicant should work with the Service to implement recovery actions from the beetle, snake, and delta smelt recovery plans	N/A	N/A	N/A	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 1a	Designated Biologist(s). DWR proposes to submit in writing to NMFS the name, qualifications, business address, and contact information of a biologist(s) (Designated Biologist) at least 30 days before starting project activities. DWR will ensure that the Designated Biologist is knowledgeable and experienced in the biology and natural history of the covered species. The Designated Biologist will be responsible for monitoring project activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of covered species' habitat. DWR will obtain NMFS, USFWS, and California Department of Fish and Wildlife (CDFW) approval of the Designated Biologist in writing before starting project activities, and will also obtain approval in advance in writing if the Designated Biologist must be changed. NMFS, USFWS, and CDFW will provide written response within 21 days of submittal.	DWR	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 1b	Biological Monitors. The Designated Biologist may authorize Biological Monitors to assist in ESA compliance efforts, under the direct supervision of the Designated Biologist. The Designated Biologist is responsible for assuring that any Biological Monitors working under his or her direct supervision is knowledgeable and experienced in the biology and natural history of the covered species, the regulatory documents conditions of approval, the definition of "take" in FESA, and in implementation of standard avoidance and minimization measures used on construction projects in covered species' habitat. DWR proposes to provide a description of the Biological Monitor duties, for CDFW approval, prior to the start of project activities.	DWR	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 2	Prior to initiation of repair activities (72 hours or less), Designated Biologists will conduct a pre-construction survey to identify special status species and associated habitat. Surveys will be conducted within the project footprint, laydown area, and adjacent haul route. If required, species and/or buffers will be marked in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective.	DWR	N/A	DWR	

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NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 3	DWR will provide environmental awareness training by a Designated Biologist to DWR construction lead, construction foreman, crew leader, and any contractor personnel working on construction sites. Environmental awareness training will include descriptions of all special-status fish and wildlife species potentially occurring in the repair area for activity-specific training, their habitats, and methods of identification, including visual aids as appropriate. The training will also describe activity-specific measures that will be followed to avoid impacts. Hard copies of environmental permits and training materials will be provided to the DWR construction lead, construction foreman, crew leader, and any contractors participating in repair work.	N/A	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes. DWR will provide electronic copies of environmental permits and training materials to the Contractor. Contractor will distribute hardcopies of same to the construction lead, construction foreman, crew leader, and any contractors participating in the repair work.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 4	Use existing staging sites, maintenance toe roads, and levee crown roads to the extent practicable for staging and access to avoid affecting previously undisturbed areas.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 5	Limit the number of access routes and the size of staging and work areas to the minimum necessary to conduct the activity.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 6	Where feasible and practicable (e.g., based on the size of the repair area and repair to be performed), clearly mark work area limits (e.g., with flagging or fencing). These include access roads, staging and equipment storage areas, stockpile areas for spoil disposal, soil, and materials, fueling and concrete washout areas, and equipment exclusion zones. Work will occur only within the marked limits. This measure is intended to apply to repair activities occurring in discrete areas as opposed to activities occurring over an extensive area where flagging work limits would be infeasible.	N/A	N/A	DWR	DWR will mark the limits of work where feasible.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 7	Inspect under all vehicles and heavy equipment for the presence of wildlife before the start of each workday when equipment is staged overnight. Additionally, look for wildlife in all pipes, culverts, and similar structures that have been stored on-site for one or more nights before being buried, capped, or moved.	N/A	N/A	DWR	A DWR Environmental Monitor will be present on site and will conduct inspections for the presence of wildlife before the start of each workday.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 8	All excavated, steep-walled holes or trenches will be covered with appropriate covers (thick metal sheets or plywood) at the end of each workday. Covers will be placed to ensure that trench edges are fully sealed. Alternatively, such trenches may be furnished with one or more escape ramps constructed of earth fill or wooden planks to provide escape ramps for wildlife.	N/A	N/A	Contractor	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 9	Ensure that all project related trash items, such as wrappers, cans, bottles, and food scraps, are collected in closed containers, removed from repair sites each day, and disposed of at an appropriate off-site location to minimize attracting wildlife to work areas.	N/A	N/A	Contractor	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 9a	DWR (or its contactor) proposes to initiate a trash abatement program before starting construction activities and will continue the program for the duration of the project activities. DWR (or contractor) will ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic animals such as ravens, raccoons, coyotes, bears, and feral pigs. DWR (or contractor) will provide trash receptacles that are equipped with latching or locking lids.	N/A	N/A	Contractor	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 10	Keep the clearing of vegetation to the minimum necessary; especially minimize the clearing of native riparian vegetation and native oaks, and grubbing for temporary vehicle access to the extent practicable	N/A	N/A	Contractor	The clearing of native riparian trees is addressed in DWR's project design. The Contractor shall keep clearing of other vegetation to the minimum necessary.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 11	Where feasible, avoid removal of native trees with a trunk greater than (>) 4 inches diameter at breast height (4.5 feet above the ground). Work will be done in a manner that ensures, to the extent feasible, that living native riparian vegetation within the vegetation clearing zones is avoided and left undisturbed, where this can reasonably be accomplished without compromising repair requirements.	N/A	N/A	Contractor	The clearing of native riparian trees is addressed in DWR's project design. The Contractor shall keep clearing of other vegetation to the minimum necessary.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 12	Trees within the repair area identified for protection and outside the work limit may require trimming or removal for equipment clearance, excavation, or due to severely undermined tree health. Trees that require trimming or removal will be under the guidance of a certified arborist. A qualified biologist will document all tree and sensitive plant trimming or removal.	N/A	N/A	DWR, Contractor	DWR will provide a qualified biologist. Contractor will provide arborist.

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 13	If erosion control fabrics are used, products will not be used with plastic monofilament or cross-joints in the netting that are bound/stitched (such as straw wattles, fiber rolls, or erosion control blankets), which could trap giant garter snakes and other wildlife.	N/A	N/A	Contractor	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 14	DWR will install erosion control materials that minimize soil or sediment from entering waterways and wetlands. DWR will monitor the erosion control materials for effectiveness and maintain them throughout the repairs and monitoring. DWR will immediately repair or replace any erosion control barrier that is not functioning effectively.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 15	The amount of revetment and similar materials used for bank protection and other repair activities will be limited to the amount necessary to ensure proper flood protection system integrity and function.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 16	Remove temporary fill, construction debris, and refuse, and properly dispose of these materials following completion of any repair activities.	N/A	N/A	Contractor	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 17	Habitats, including sensitive natural communities, will be restored to pre-project conditions wherever feasible. Restoration could include re-contouring by grading and disking, revegetating with native seeds and plants reflective of the target plant community, decompacting soil, and installing appropriate erosion control measures to return the disturbed on-site habitat to pre-activity conditions.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 18	For invasive plant species removal, DWR will implement measures to minimize the potential for invasive plants to be introduced or spread during activities. Measures to avoid contamination and spread of invasive species will be created for each site as deemed necessary by a qualified biologist and will be approved by a qualified biologist prior to implementation	DWR	N/A	Contractor	Additional detail regarding equipment cleaning and minizing the spread of invasive species can be found in 01 57 19.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 19	DWR will provide USFWS, NMFS, and/or CDFW (natural resource agencies) staff with reasonable access to all repair sites and will otherwise fully cooperate with the natural resource agencies' efforts to verify compliance with, or effectiveness of, conservation measures.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor may be asked to participate in site inspections.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 20	The Designated Biologists and Biological Monitors will be authorized to stop repair activities that, in the biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on special-status wildlife. If repair activities are stopped, the qualified biologist will consult with CDFW, USFWS and/or NMFS as appropriate to determine appropriate measures that DWR will implement to avoid adverse effects. Buffers, determined by the Designated Biologists and Biological Monitors in conjunction with USFWS and CDFW, will be maintained until there is no longer a threat of disturbance to the sensitive biological resource, as determined by the Designated Biologists and Biological Monitors.	N/A	N/A	N/A	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 21	DWR will immediately notify the Designated Biologist if a species is taken or injured by a project-related activity, or if a species is otherwise found dead or injured within the vicinity of the project. The Designated Biologist will provide initial notification to USFWS, NMFS and/or CDFW by contacting the appropriate agencies within 24 hours. The initial notification will include information regarding the location, species, and number of animals taken or injured, and site number. Following initial notification, DWR will send a written report within two calendar days. The report will include the date and time of the finding or incident, location of the animal or carcass, and if possible provide a photograph, explanation as to cause of take or injury, and any other pertinent information.	N/A	N/A	DWR	DWR will be responsible for all reporting and agency communication.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 22	After repair is completed, any temporary fill and construction debris will be removed, and temporarily disturbed areas will be restored to pre-project conditions or better conditions. Before restoration, all non-biodegradable materials will be removed. Restoration may include re-contouring disturbed areas to their original configurations.	N/A	N/A	Contractor	Contractor is responsible for removing temporary fill, construction debris, and refuse from the project site following the completion of any repair activities. Habitat restoration activities are addressed in DWR's project design.

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 23	No later than 45 days after completion of the repair, DWR will provide NMFS, USFWS, and CDFW with a Final Mitigation Report. The qualified biologist will prepare the Final Mitigation Report which will include, at a minimum: (1) a summary of all Weekly Compliance Reports; (2) notes showing when each of the minimization measures was implemented; (3) all available information about project-related incidental take of species; (4) information about other project impacts on the species; (5) beginning and ending dates of the repair; (6) an assessment of the effectiveness of conservation measures in minimizing and fully mitigating project impacts to species; (7) recommendations on how minimization measures might be changed to more effectively minimize effects and mitigate the impacts of future project on the species; and (8) any other pertinent information.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Measures 24	The Biological Monitors will be responsible for maintaining daily records of compliance related activities, and for communicating to NMFS, USFWS, and CDFW when any aspect of the project is out of compliance.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
NMFS Biological Opinion, WCRO-2019-01675	Special Status Fish Measures 1	Areas of suitable habitat should be surveyed, avoided (whenever possible), or mitigated when avoidance is not possible.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Special Status Fish Measures 2	In-water work should occur during standard in-water work windows: a. Delta and Longfin smelt: August through November b. Salmon and steelhead: July through October	N/A	N/A	Contractor	
NMFS Biological Opinion, WCRO-2019-01675	Special Status Fish Measures 3	In areas where rock is placed to provide slope protection, place clean soil to fill voids, which could potentially provide favorable habitat for nonnative predatory fish species, as feasible.	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Special Status Fish Measures 4	Install willow pole cuttings beyond vegetation free zone (USACE Engineering Technical Letter, 2014), where possible, to provide aquatic cover and shade, and habitat complexity favorable for native fish species at feasible locations (see Table 3-2 of SDDR 2019 BA).	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Sensitive Habitats Measures 1	Prior to initiation of repair activities, a Designated Biologist will identify potential riparian habitat, wetlands, shallow water habitat, SRA cover, and native oak trees. Where feasible, DWR will mark the boundaries of these areas using temporary fencing, high visibility flagging, or other means that are equally effective in clearly delineating the boundaries. When feasible, repair activities will be excluded from these areas. In many situations, equipment can be operated to avoid disturbing isolated riparian trees or low height riparian scrub habitat.	N/A	N/A	DWR, Contractor	DWR will mark the boundaries of sensitive habitat areas such as those with potential riparian habitat, wetlands, shallow water habitat, SRA cover, and native oak trees where feasible. Contractor shall avoid working in these areas.
NMFS Biological Opinion, WCRO-2019-01675	Sensitive Habitats Measures 2	Trees that are designated to be protected in place will be protected using box or tree wrap protection or other techniques as chosen by the Designated Biologist.	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Water Quality Measures 1	Conduct environmental awareness training to train the contractor on the proper use of BMPs and applicable permit requirements to protect receiving water quality.	N/A	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes.
NMFS Biological Opinion, WCRO-2019-01675	Water Quality Measures 2	DWR will install erosion control materials, such as straw bales, silt fences, fiber rolls, or equally effective measures, at repair areas adjacent to stream channels, drainage canals, and wetlands, as needed. Erosion control measures will be monitored during and after each storm event for effectiveness. Modifications, repairs, and improvements to erosion control measures will be made as needed to protect water quality. a. No erosion control products will be used with plastic monofilament or cross-joints in the netting that are bound/stitched (such as straw wattles, fiber rolls, or erosion control blankets).	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
NMFS Biological Opinion, WCRO-2019-01675	Water Quality Measures 3	Install turbidity curtains or similar methods during in channel work to control silt and sediment, where needed.	Contractor	DWR	Contractor	Turbidity Curtains will be installed as required. Additional information can be found in Section 31 00 00.
NMFS Biological Opinion, WCRO-2019-01675	Water Quality Measures 4	DWR will minimize ground and vegetation disturbance by establishing designated equipment staging areas, access routes, spoils and soil stockpile areas, and equipment exclusion zones prior to the commencement of activity.	N/A	N/A	N/A	This measure is addressed in DWR's project design.

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
NMFS Biological Opinion, WCRO-2019-01675	Water Quality Measures 5	DWR will prepare and implement hazardous materials management and spill response plan. DWR will ensure any hazardous materials are stored at the staging areas and with an impermeable membrane between the ground and hazardous material and that it is bermed to prevent the discharge of pollutants to groundwater and runoff water. DWR will immediately stop and, pursuant to pertinent state and Federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so, according to the spill response plan. DWR will notify NMFS, USFWS, and CDFW within 24 hours of any leaks or spills. DWR will properly contain and dispose of any unused or leftover hazardous products off-site. DWR will use and store hazardous materials, such as vehicle fuels and lubricants, in designated staging areas located away from stream channels and wetlands according to local, state, and Federal regulations, as applicable.	Contractor	DWR	DWR, Contractor	Contractor will prepare a hazardous materials management and spill response plan and submit for DWR review. The plan will be in alignment with Contractor's SWPPP or WPCP. Contractor will implement the plan in the field. DWR will be responsible for all agency communication, such as in the event of a spill notification.
NMFS Biological Opinion, WCRO-2019-01675	Water Quality Measures 6	Construction vehicles and equipment will be checked daily for leaks and will be properly maintained to prevent contamination of soil or water from leaking hydraulic fluid, fuel, oil, and grease.	N/A	N/A	Contractor	
NMFS Biological Opinion, WCRO-2019-01675	Reasonable and Prudent Measures 1	Measures shall be taken to minimize the impacts of bank protection on the growth and survival of listed fish by implementing integrated onsite conservation measures.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Reasonable and Prudent Measures 2	Measures shall be taken to monitor incidental take of listed fish and the survival of on site plantings, reporting of annual repair status and purchase of mitigation credits, and submissions of site-specific designs for Phase 6 sites.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Terms and Conditions a	DWR shall minimize the removal of existing riparian vegetation and IWM to the maximum extent practicable, and where appropriate, removed IWM shall be anchored back into place from the location from which it was removed. IWM shall, when practicable be placed to ensure coverage of 80 percent of the shoreline at each erosion repair site and this should persist for at least 50 years (or an alternative duration based on the size of the project and the professional expertise of DWR's staff and knowledge or the duration of expected potential impacts).	N/A	N/A	N/A	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Terms and Conditions b	DWR shall incorporate measures, to the extent practicable, to minimize the placement of rock revetment below the OHWM of freshwater rearing and migratory corridors. DWR shall consider using alternative methods to traditional riprap for levee repairs. For instance, bioengineered products and strategic plantings of small trees and brush are consistent with project goals to resist erosive forces and wave wash along shorelines and are good alternatives to using riprap.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Terms and Conditions c	DWR shall avoid the use of filter fabric or geotextile fabrics to the extent practicable, as they often are unnecessary. Erosion can occur behind the filter fabric causing the bank to fail, or the fabric can create a slip-face and cause the riprap to slip, exposing the fabric. Gravel "blankets" shall be considered first, which can accomplish similar goals to geotextile fabrics to minimize adverse effects described.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Terms and Conditions d	DWR/USACE shall provide to NMFS a detailed re-vegetation plan prior to the initiation of replanting and shall include a list of species and designs depicting the proposed location for each species and their density. The plan shall also include the success criteria for the re-vegetation effort to meet the project's conservation goals. Where appropriate, the vegetation plan shall also include proposed irrigation and vegetation monitoring schedules, which will likely be needed for several years to obtain conservation goals.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
NMFS Biological Opinion, WCRO-2019-01675	Terms and Conditions e	DWR/USACE shall provide NMFS with a final Site Specific project description similar to those provided in the 2019 BA prior to construction of any sites for Phase 6. The project description shall include proposed mitigation ratios for the site using the same justifications as used for Phases 4 and 5. NMFS must provide written approval that the site is consistent with this opinion prior to construction.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
NMFS Biological Opinion, WCRO-2019-01675	Terms and Conditions f	DWR/USACE shall provide to NMFS (at the address below) a vegetation monitoring report at years 1, 2, and 3 post-construction no later than December 31st of each reporting cycle. This report shall provide information as to the success of the revegetation program and whether the conservation goals are being met at each site. If goals are not being met, then the report shall indicate what actions are being implemented to meet those goals.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.

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NMFS Biological Opinion, WCRO-2019-01675	Terms and Conditions g	DWR/USACE shall submit a report to NMFS of any incidental take that occurs as part of the project. This report shall be submitted no later than December 31, of each reporting cycle.	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
NMFS Biological Opinion, WCRO-2019-01675	Terms and Conditions h	All reports for NMFS shall be sent to: Maria Rea California Central Valley Office National Marine Fisheries Service 650 Capitol Mall, Suite 5-100 Sacramento California 95814 FAX: (916) 930-3629 Phone: (916) 930-3600	DWR	N/A	DWR	DWR will be responsible for all reporting and agency communication.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Recommendations 1	DWR should minimize risk of incidental take whenever possible, and implement practices that avoid or minimize negative impacts to salmon, steelhead, and sturgeon and their designated critical habitat.	N/A	N/A	DWR	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Conservation Recommendations 2	USACE/DWR should support and promote aquatic and riparian habitat restoration within the Delta and other watersheds, especially those with listed aquatic species. Practices that avoid or minimize adverse effects to listed species should be encouraged.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Recommendations 3	USACE/DWR should continue to work cooperatively with State and Federal agencies, private landowners, governments, and local watershed groups to identify opportunities for cooperative analysis and funding to support salmonid habitat restoration projects.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Recommendations 4	USACE should make setback levees integral components of their authorized bank protection or ecosystem restoration efforts.	N/A	N/A	N/A	
NMFS Biological Opinion, WCRO-2019-01675	Conservation Recommendations 5	USACE/DWR should conduct or fund studies to identify setback levee opportunities, at locations where the existing levees are in need of repair or not, where setback levees could be built now. Removal of the existing riprap from the abandoned levee should be investigated in restored sites and anywhere removal does not compromise flood safety.	N/A	N/A	N/A	
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Minimize the loss of riparian habitats as much as possible.	N/A	N/A	DWR	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Bank erosion control should use vegetation methods or “soft” approaches (such as beach nourishment, vegetative plantings, and placement of IWM) to shoreline modifications whenever feasible. Hard bank protection should be a last resort and the following options should be explored (tree revetments, stream flow deflectors, and vegetative riprap).	N/A	N/A	DWR	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Re-vegetate sites to resemble the natural ecosystem community.	N/A	N/A	DWR	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Replace in-stream fish habitat by providing root wads, deflector logs, boulders, rock weirs and by planting shaded riverine aquatic cover vegetation.	N/A	N/A	DWR	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Use an adaptive management plan with ecological indicators to oversee monitoring and ensure mitigation objectives are met. Take corrective action as needed.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Implement term and conditions 1(a-d), from the section 7 Opinion for this project.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Minimize alteration of floodplains and wetlands in areas of salmon EFH.	N/A	N/A	DWR	This measure is addressed in DWR's project design.

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NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Determine cumulative effects of all past and current floodplain and wetland alterations before planning activities that further alter wetlands and floodplains.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Promote awareness and use of the United States Department of Agriculture (USDA)'s wetland and conservation reserve programs to conserve and restore wetland and floodplain habitat.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Essential Fish Habitat Conservation Recommendations	Promote restoration of degraded floodplains and wetlands, including in part reconnecting rivers with their associated floodplains and wetlands and invasive species management.	N/A	N/A	DWR	
NMFS Biological Opinion, WCRO-2019-01675	Flood Control Maintenance	Retain trees and other shaded vegetation along earthen levees and outside levee toe.	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
NMFS Biological Opinion, WCRO-2019-01675	Flood Control Maintenance	Ensure adequate inundation time for floodplain habitat that activates and enhances near-shore habitat for juvenile salmon.	N/A	N/A	N/A	
NMFS Biological Opinion, WCRO-2019-01675	Flood Control Maintenance	Reconnect wetlands and floodplains to channel/tides.	N/A	N/A	N/A	
NMFS Biological Opinion, WCRO-2019-01675	Fish and Wildlife Coordination Act recommendation	DWR should recommend that contractors use biodegradable lubricants and hydraulic fluid in construction machinery. The use of petroleum alternatives can greatly reduce the risk of contaminants such as polycyclic aromatic hydrocarbons (PAHs) or heavy metals directly or indirectly entering the aquatic ecosystem.	N/A	N/A	Contractor	Contractor shall use biodegradable lubricants and hydraulic fluid in construction machinery where feasible.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 1	DWR will submit to the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the National Marine Fisheries Service (NMFS) in writing the name, qualifications, business address, and contact information of a biologist(s) (qualified biologist), and obtain approval of the biologist(s) before starting repairs. DWR will ensure that the qualified biologist is knowledgeable and experienced in the biology and natural history of the fish or wildlife species. The qualified biologist will be responsible for monitoring repairs to help minimize and fully mitigate or avoid the incidental take of individual species, and to minimize disturbance of species' habitat.	DWR	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.1 - 2	Prior to initiation of repair activities, a qualified biologist will conduct a pre-construction survey to identify special-status species and associated habitat. Surveys will be conducted in the project footprint, laydown area, and adjacent haul route. If required, species and/or buffers will be marked in the field by a qualified biologist using temporary fencing, high-visibility flagging, or other means that are equally effective.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.1 - 3	DWR will provide environmental awareness training by a qualified biologist to the DWR construction lead, construction foreman, crew leader, and any contractor personnel working on construction sites. Environmental awareness training will include descriptions of all special-status fish, wildlife, or plant species known from or potentially occurring in the repair area, their habitats, and methods of identification, including visual aids as appropriate. The training will also describe activity-specific measures that will be followed to avoid impacts. Hard copies of environmental permits and training materials will be provided to the DWR construction lead, construction foreman, crew leader, and any contractors participating in repair work.	N/A	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes. DWR will provide electronic copies of environmental permits and training materials to the Contractor. Contractor will distribute hardcopies of same to the construction lead, construction foreman, crew leader, and any contractors participating in the repair work.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 4	Use existing staging sites, maintenance toe roads, and levee crown roads to the extent practicable for staging and access to avoid affecting previously undisturbed areas.	N/A	N/A	Contractor	This measure is addressed in DWR's project design.

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
CEQA IS/MND, SCH# 2019049138	2.4.1 - 5	Limit the number of access routes and the size of staging and work areas to the minimum necessary to conduct the activity.	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 6	Where feasible and practicable (e.g., based on the size of the repair area and repair to be performed), clearly mark work area limits (e.g., with flagging or fencing), including access roads; staging and equipment storage areas; stockpile areas for spoil disposal, soil, and materials; fueling and concrete washout areas; and equipment exclusion zones. Work will occur only within the marked limits. This measure is intended to apply to repair activities occurring in discrete areas, as opposed to activities occurring over an extensive area where flagging work limits would be infeasible.	N/A	N/A	DWR	DWR will mark the limits of work where feasible.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 7	Inspect under all vehicles and heavy equipment for the presence of wildlife before the start of each workday when equipment is staged overnight. Additionally, look for wildlife in all pipes, culverts, and similar structures that have been stored on-site for one or more nights before being buried, capped, or moved. If wildlife are observed, allow them to leave the site on their own before starting construction.	N/A	N/A	DWR, Contractor	DWR environmental monitor will conduct inspections. Contractor is responsible to ensure site does not pose a wildlife entrapment risk by implementing these measures.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 8	All excavated, steep-walled holes or trenches will be covered with appropriate covers (thick metal sheets or plywood) at the end of each workday. Covers will be placed to ensure that trench edges are fully sealed. Alternatively, such trenches may be furnished with one or more escape ramps constructed of earth fill or wooden planks to provide escape ramps for wildlife.	N/A	N/A	DWR, Contractor	DWR environmental monitor will conduct inspections. Contractor shall ensure site does not pose a wildlife entrapment risk by implementing these measures.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 9	Ensure that all project-related trash items, such as wrappers, cans, bottles, and food scraps, are collected in closed containers, removed from sites each day, and disposed of at an appropriate off-site location to minimize attracting wildlife to work areas.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	2.4.1 - 10	Keep the clearing of vegetation to the minimum necessary; especially minimize the clearing of native riparian vegetation and native oaks, and grubbing for temporary vehicle access to the extent practicable.	N/A	N/A	Contractor	The clearing of native riparian trees is addressed in DWR's project design. DWR will flag trees to be removed/protected. The Contractor shall keep clearing of other vegetation to the minimum necessary.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 11	Where feasible, avoid removal of native trees with a trunk DBH of 4 inches or greater (4.5 feet above the ground). Work will be done in a manner that ensures, to the extent feasible, that living native riparian vegetation in the vegetation-clearing zones is avoided and left undisturbed, where this can reasonably be accomplished without compromising repair requirements.	N/A	N/A	DWR, Contractor	The clearing of native riparian trees is addressed in DWR's project design. DWR will flag trees to be removed/protected. Contractor will conduct tree removals and vegetation clearing.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 12	To the extent feasible, DWR will comply with applicable adopted city and county ordinances protecting native and heritage trees. If native or heritage trees need to be removed for public safety, or to meet other objectives, DWR, to the extent feasible, will implement the mitigation measures required by the ordinance that applies to the affected tree.	N/A	N/A	DWR, Contractor	The clearing of native riparian trees is addressed in DWR's project design. DWR will flag trees to be removed/protected. Contractor will conduct tree removals and vegetation clearing.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 13	Trees in the repair area identified for protection, and outside the work limit, may require trimming or removal for equipment clearance, excavation, or due to severely undermined tree health. For trees that require trimming or removal, the work will be under the guidance of a certified arborist or qualified biologist. A qualified biologist will document all tree and sensitive plant trimming or removal.	N/A	N/A	DWR, Contractor	DWR will provide a qualified biologist. Contractor will provide arborist.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 14	If erosion control fabrics are used, they shall not include plastic monofilament or cross-joints in the netting that are bound/stitched (such as straw wattles, fiber rolls, or erosion control blankets), which could trap giant garter snakes (GGS) and other wildlife.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	2.4.1 - 15	DWR will install erosion control materials that minimize soil or sediment from entering waterways and wetlands. DWR will monitor the erosion control materials for effectiveness and maintain them throughout the repairs and monitoring. DWR will immediately repair or replace any erosion control barrier that is not functioning effectively.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 16	The amount of revetment and similar materials used for bank protection and other repair activities will be limited to the amount necessary to ensure proper flood protection system integrity and function.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 17	Remove temporary fill, construction debris, and refuse, and properly dispose of these materials following completion of any repair activities.	N/A	N/A	Contractor	Contractor is responsible for removing temporary fill, construction debris, and refuse from the project site following the completion of any repair activities.

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
CEQA IS/MND, SCH# 2019049138	2.4.1 - 18	Habitats, including sensitive natural communities, will be restored to pre-project conditions wherever feasible. Restoration could include recontouring by grading and disking, revegetating with native seeds and plants reflective of the target plant community, decompacting soil, and installing appropriate erosion control measures to return the disturbed on-site habitat to pre-activity conditions.	DWR	N/A	Contractor	Habitat restoration activities are addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 19	For invasive plant species control, DWR will implement measures to minimize the potential for invasive plants to be introduced or spread during activities. Measures to avoid contamination and spread of invasive species will be determined and approved for each site as necessary by a qualified biologist prior to implementation.	DWR	N/A	Contractor	Additional detail regarding equipment cleaning and minizing the spread of invasive species can be found in 01 57 19.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 20	DWR will provide USFWS, NMFS, the Regional Water Quality Control Board (RWQCB), and/or CDFW (natural resource agencies) staff with reasonable access to all sites, and shall otherwise fully cooperate with the natural resource agencies' efforts to verify compliance with, or effectiveness of, conservation measures.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor may be asked to participate in site inspections.
CEQA IS/MND, SCH# 2019049138	2.4.1 - 21	The qualified biologist will be authorized to stop repair activities that, in the biologist's opinion, threaten to cause unanticipated and/or unpermitted adverse effects on special-status wildlife. If repair activities are stopped, the qualified biologist will consult with CDFW, USFWS, and/or NMFS as appropriate to determine appropriate measures that DWR will implement to avoid adverse effects. Buffers will be maintained until there is no longer a threat of disturbance to the sensitive biological resource, as determined by a qualified biologist.	N/A	N/A	N/A	
CEQA IS/MND, SCH# 2019049138	2.4.1 - 22	DWR will immediately notify the qualified biologist if a species is taken or injured by a project related activity, or if a species is otherwise found dead or injured in the vicinity of the project. The qualified biologist shall provide initial notification to USFWS, NMFS, and/or CDFW by contacting the appropriate agencies. The initial notification shall include information regarding the location, species, and number of animals taken or injured, and site number. Following initial notification, DWR will send a written report within 2 calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible a photograph, explanation as to cause of take or injury, and any other pertinent information.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor shall immediately notify the Engineer if wildlife is killed or injured in or adjacent to the work site.
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1	If potentially suitable aquatic habitat for GGS has been identified in or within 200 feet of work area by a qualified biologist, DWR will establish a 200-foot buffer around the aquatic habitat. Buffers will be marked in the field with guidance from a qualified biologist using temporary fencing, high-visibility flagging, or other method that is equally effective in clearly delineating the buffers. Project activities will not occur within the buffer, and workers will avoid entering the buffer at all times. If avoidance buffers are observed, no other measures for impacts to GGS will be required, unless otherwise stated in applicable permits by natural resource agencies. If work must occur within 200 feet of potentially suitable aquatic habitat, DWR will implement the following measures as determined to be necessary by a qualified biologist.	N/A	N/A	DWR, Contractor	DWR will flag suitable aquatic habitat in the field, if present. Contractor shall avoid flagged suitable habitat in coordination with DWR.
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1a	If GGS are observed in a repair area, DWR will stop work in the immediate area until the snake is out of the repair area and will notify a qualified biologist immediately. If possible, the snake will be allowed to leave on its own, and the qualified biologist will remain in the area until the biologist deems his or her presence no longer necessary to ensure that the snake is not harmed. If the snake does not leave the work area on its own volition, CDFW and USFWS will be consulted to identify next steps. This may include the capture and relocation of the snake unharmed to suitable habitat at least 200 feet from the repair area by a qualified biologist with a USFWS GGS recovery permit. DWR will notify CDFW and USFWS by telephone or email within 24 hours of a GGS observation during work activities.	N/A	N/A	DWR, Contractor	Contractor shall notify DWR of any snakes observed in the repair areas. DWR will conduct any necessary agency notification/coordination, as well as all environmental monitoring.
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1b	DWR will ensure that a qualified biologist surveys areas of planned ground disturbance and/or materials placement for burrows, soil cracks, and crevices that may be suitable for use by GGS when within suitable terrestrial habitat. Surveys will be completed no more than 3 days before conducting any ground-disturbing activities in terrestrial habitat potentially supporting GGS. Any identified burrows, soil cracks, crevices, or other habitat features will be flagged or marked by the qualified biologist or otherwise identified as biologically sensitive areas (BSAs). DWR will avoid these BSAs in proposed staging and interim laydown areas to the maximum extent feasible. If activities temporarily stop for more than 14 days, surveys for soil cracks and similar features will be repeated by a qualified biologist, as described above.	N/A	N/A	DWR, Contractor	DWR will flag any burrows, soil cracks, crevices, or other habitat features in the field, if present. Contractor shall avoid flagged suitable habitat in coordination with DWR.

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1c	When ground disturbance will occur in areas of suitable GGS habitat, a qualified biologist will monitor the work and walk the site prior to the beginning of construction.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1d	A qualified biologist shall be on site during all grading activities, vegetation removal activities, and trenching activities. A qualified biologist shall be onsite and monitor all locations where repairs will alter GGS hibernacula/refugia (riprap, burrows, vegetation, etc.).	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1e	When possible, DWR will complete work activities in terrestrial habitats that are potentially supporting GGS between May 1 and October 1. If it is not possible to complete the work by October 1, work in GGS upland habitat may also occur between October 2 and November 1, provided ambient air temperatures exceed approximately 75 degrees Fahrenheit (°F) during work and maximum daily air temperatures have exceeded approximately 75°F for at least 3 consecutive days immediately preceding work. During these periods, GGS are more likely to be active in aquatic habitats and less likely to be found in upland habitats. DWR will notify USFWS and CDFW of work in these locations. DWR will include a justification for the request and any additional information USFWS or CDFW deem necessary. USFWS and CDFW may require DWR to apply additional appropriate measures.	DWR, Contractor	DWR	DWR	Contractor shall notify DWR by if additional time is needed working in suitable Giant Garter Snake habitat beyond October 1 to complete the project activity. DWR shall prepare the written request and coordinate with USFWS. Request for additional time does not gaurantee that request will be approved by USFWS.
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1f	Temporarily affected GGS aquatic habitat will be restored in accordance with criteria listed in the USFWS Mitigation Criteria for Restoration and/or Replacement of Giant Gartersnake Habitat (Appendix A to Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Gartersnake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter, and Yolo Counties, California [USFWS 1997]), or the most current criteria provided by USFWS and/or CDFW.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1g	When feasible, spoils will be placed in areas that do not provide suitable GGS upland habitat (for example: compacted or gravel roadbeds, orchards, and recently disked agricultural fields).	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1h	If BSAs exist in the repair area, excavated spoils will be placed to avoid these BSAs, as feasible.	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.2 – 1i	DWR will obtain incidental take authorization under federal Endangered Species Act (FESA), and an incidental take permit(s) or Consistency Determination from CDFW to cover those areas and activities where there is the potential incidental take of GGS. Incidental take authorization from CDFW require DWR to fully mitigate for impacts. DWR would implement measures and mitigation associated with the authorization and permit(s).	N/A	N/A	N/A	Measure does not apply to Site 97.
CEQA IS/MND, SCH# 2019049138	2.4.3 – 1	If the project occurs during the nesting period for birds (February 1 to September 15), DWR will complete pre-activity surveys for nesting birds (including, but not limited to, bank swallow, raptor and passerine nest surveys and heron and egret rookeries). Surveys will be conducted by a qualified biologist not more than 5 days prior to the start of activities. Surveys will be conducted within suitable nesting habitat that could be affected by repair activities (e.g., staging areas, spoils areas, access routes) and will include a 500-foot buffer area (or larger area if required by established survey protocol) surrounding these areas. Where appropriate, pre-activity surveys will follow established survey protocols or guidelines.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.3 – 2	If active nests are found, DWR will establish an avoidance buffer as indicated in Table 2-1 for activities that would potentially affect the nesting birds. The temporary disturbance buffer will be established until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by the activities. Alternatively, a qualified biologist, in coordination with CDFW, may determine that a buffer is not required to avoid adverse effects on nesting birds, based on the specific activities to be conducted and species present.	N/A	N/A	DWR, Contractor	DWR will conduct surveys and establish and flag avoidance buffers as needed. Contractor shall not enter into avoidance areas.
CEQA IS/MND, SCH# 2019049138	2.4.3 – 3	If project construction work is scheduled during the Swainson's hawk nesting season (typically March 1 to September 30), a qualified biologist shall conduct a focused survey for active Swainson's hawk nests prior to beginning construction. The biologist shall follow Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000), or with the most recent scientifically based survey methods and protocols, where appropriate.	N/A	N/A	DWR	

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
CEQA IS/MND, SCH# 2019049138	2.4.3 – 4	If it is determined that any repair activity would potentially result in the incidental take of any bird protected under the FESA, CESA (e.g., western yellow-billed cuckoo, bank swallow, least Bell's vireo, Swainson's hawk, and tricolored blackbird), despite implementation of the measures above, DWR will obtain take authorization from USFWS and/or CDFW (as appropriate). All measures developed through consultation with USFWS and/or CDFW will be implemented by DWR to mitigate for authorized take. As part of the take authorization, if on-site compensatory mitigation is proposed, an appropriate and feasible mitigation plan will be developed by a qualified biologist and provided to USFWS and/or CDFW for approval. The mitigation plan will include methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures to be implemented if the initial mitigation fails. Alternatively, if required by permits, purchasing credits at a USFWS and/or CDFW-approved conservation bank may be identified as appropriate mitigation (see Section 2.5 below). Take of a California Fully Protected species (e.g., white-tailed kite and California black rail) is not authorized.	DWR	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.4 – 1	Areas of suitable (special status fish) habitat should be surveyed, avoided (whenever possible), or mitigated (through on-site restoration or credit purchase; see Section 2.5 below) when avoidance is not possible.	DWR	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.4 – 2	Whenever possible, in-water work would occur during standard in-water work windows: a. Salmon and steelhead: July through October	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	2.4.4 – 2	In areas where rock is placed to provide slope protection, place clean soil to fill voids, which could potentially provide favorable habitat for nonnative predatory fish species, as feasible.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.4 – 3	Install willow pole cuttings beyond vegetation free zone to provide aquatic cover and shade, and habitat complexity favorable for native fish species at feasible locations.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.5 - 1	Areas of suitable habitat should be identified, quantified, avoided (whenever possible), or mitigated when avoidance is not possible, where applicable.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.5 - 2	Before commencing the repair activity, the qualified biologist would survey suitable habitat (if present) in the disturbance footprint of the activity for the targeted special-status plant species.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.5 - 3	If special-status plants are identified in the repair sites, the individuals or populations would be mapped, quantified, and reported to the California Natural Diversity Database (CNDDB), and the DWR project manager would be notified so that potential impacts to these known occurrences would be avoided, when feasible. Coordination with CDFW and/or USFWS staff may also be necessary for developing appropriate avoidance and minimization measures if the species is federally or state listed. Avoidance and minimization measures may include:	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.5 - 3a	No-disturbance buffers.	N/A	N/A	DWR, Contractor	DWR will conduct surveys and establish and flag no-disturbance buffers as needed. Contractor shall not enter into no-disturbance buffer areas.
CEQA IS/MND, SCH# 2019049138	2.4.5 - 3b	Silt fencing or construction fencing to prevent vehicles, equipment, and personnel from accessing the occupied habitat.	Contractor	DWR	Contractor	Exclusion fencing is specified in the contract. Contractor shall submit a temporary fencing plan and after approval, shall install temporary fencing.
CEQA IS/MND, SCH# 2019049138	2.4.5 - 3c	Erosion control BMPs such as straw wattles made of rice straw, erosion control blankets, or hydroseeding with a native plant seed mix to prevent sedimentation from upslope repair activities.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
CEQA IS/MND, SCH# 2019049138	2.4.5 - 3d	Before the repair activity commences, special-status plant occurrences would be marked with pin flags or stakes in the field, and all personnel would be instructed as to the location and extent of the special-status plants or populations and the importance of avoiding impacts to the species and its habitat.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.5 - 3e	If needed a biological monitor would be present or on-call during repair activities to provide guidance on avoiding special-status plants, ensure that other avoidance measures (buffers, fencing, etc.) are observed, and to document the total impact of the repair activity, particularly if it is greater or less than anticipated.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.5 - 3f	In consultation with CDFW or USFWS, the qualified biologist may collect and spread seeds or relocate plants to appropriate locations.	N/A	N/A	DWR	

DOCUMENT	MEASURE NO.	MEASURE TEXT	PREPARE	REVIEW	IMPLEMENT	CLARIFYING NOTES
CEQA IS/MND, SCH# 2019049138	2.4.6 – 1	All suitable elderberry shrubs (i.e., shrubs with stem diameters of at least 1 inch when measured at ground level) would be avoided if not designated for removal or trimming. A 5-foot avoidance buffer would be established from the dripline of any elderberry shrubs. These avoidance buffers would be avoided by all personnel and repair activities. Shrubs would be flagged or temporarily fenced, as needed, with guidance from the qualified biologist and designated as BSAs where feasible. When feasible, fencing would be placed at the buffer.	N/A	N/A	DWR, Contractor	DWR will conduct surveys and establish and flag avoidance buffers as needed. Contractor shall not enter into avoidance buffer areas.
CEQA IS/MND, SCH# 2019049138	2.4.6 – 2	Every attempt would be made to place box protection or tree wrap around the shrubs that can be left on the slope. Some trimming would occur.	N/A	N/A	N/A	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.6 – 3	If trimming is required within the drip line, no more than 1/3 of canopy cover or stems would be removed prior to implementing avoidance measures to ensure shrub survival.	N/A	N/A	DWR, Contractor	DWR's qualified biologist will direct trimming. Contractor staff will conduct trimming.
CEQA IS/MND, SCH# 2019049138	2.4.6 – 4	If elderberry shrubs, which provide suitable habitat for VELB, cannot be feasibly avoided, and the work would result in potential take of VELB, then project impacts will be compensated for in accordance with criteria listed in the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) [USFWS 2017]) (see Section 2.5).	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.7 - 1	Within 3 days prior to entering or working near stream/riparian habitat within the foothill yellow-legged frog range, a qualified biologist shall conduct a survey in aquatic habitat and adjacent riparian habitat within the repair area and a 500-foot buffer upstream and downstream of the repair area.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.7 - 2	If foothill yellow-legged frogs are observed in the repair area, DWR will stop work in the immediate area until the frog is out of the area and will notify a qualified biologist immediately. If possible, the frog will be allowed to leave on its own, and the qualified biologist will remain in the area until the biologist deems his or her presence is no longer necessary to ensure that the frog is not harmed. If the frog does not leave the work area on its own volition, CDFW would be consulted to identify next steps.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor shall immediately notify the Engineer if frogs are observed in the work site.
CEQA IS/MND, SCH# 2019049138	2.4.7- 3	A qualified biologist will be onsite to monitor all locations where repairs will occur within aquatic habitat where the frog has the potential to occur or was observed during the preconstruction survey.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.4.8 - 1	Prior to initiation of repair activities, the qualified biologist would identify riparian habitat, wetlands, shallow water habitat, shaded riverine aquatic (SRA) cover, and native oaks in the project area. Where feasible, DWR would mark the boundaries of sensitive habitat areas using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the boundaries. When feasible, repair activities would be excluded from these areas. In many situations, equipment can be operated to avoid disturbing isolated riparian trees or low-height riparian scrub habitat.	N/A	N/A	DWR, Contractor	DWR will mark the boundaries of sensitive habitat areas such as those with riparian habitat, wetlands, shallow water habitat, shaded riverine aquatic (SRA) cover, and native oaks in the project area where feasible. Contractor shall avoid working in these areas.
CEQA IS/MND, SCH# 2019049138	2.4.8 - 2	Trees that are designated to be protected in place would be protected using box or tree-wrap protection or other techniques as designated by the qualified biologist.	N/A	N/A	Contractor	This measure is addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.4.9 - 1	Conduct environmental awareness training to train the contractor on the proper use of BMPs and applicable permit requirements to protect receiving water quality.	N/A	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes.
CEQA IS/MND, SCH# 2019049138	2.4.9 - 2	DWR will install erosion control measures, such as use of straw bales, silt fences, fiber rolls, or equally effective measures, at project locations adjacent to stream channels, drainage canals and wetlands, as needed. During active construction activities, erosion control measures shall be monitored during and after each storm event for effectiveness. Modifications, repairs, and improvements to erosion control measures shall be made as needed to protect water quality.	Contractor	DWR	Contractor	This measure will be addressed by the Contractor's SWPPP or WPCP as required in Section 01 57 23. The Contractor will prepare a plan which will be reviewed by DWR. The Contractor will implement BMPs as outlined in the plan.
CEQA IS/MND, SCH# 2019049138	2.4.9 - 3	DWR will install turbidity curtains or similar methods during in channel work to control silts and sediments, if needed.	Contractor	DWR	Contractor	Turbidity Curtains will be installed as required. Additional information can be found in Section 31 00 00.
CEQA IS/MND, SCH# 2019049138	2.4.9 - 4	DWR will minimize ground and vegetation disturbance by establishing designated equipment staging areas, access routes, spoils and soil stockpile areas, and equipment exclusion zones prior to the commencement of activity.	N/A	N/A	N/A	This measure is addressed in DWR's project design.

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CEQA IS/MND, SCH# 2019049138	2.4.9 - 5	DWR will prepare and implement a hazardous materials management and spill response plan. DWR will ensure any hazardous materials are stored at the staging areas and with an impermeable membrane between the ground and hazardous material, and that it is bermed to prevent the discharge of pollutants to groundwater and runoff water. DWR will immediately stop, and pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so, according to the prepared spill response plan. DWR will notify USFWS, CDFW, and NMFS within 24 hours of any leaks or spills. DWR will properly contain and dispose of any unused or leftover hazardous products off-site. DWR will use and store hazardous materials, such as vehicle fuels and lubricants, in designated staging areas located away from stream channels and wetlands according to local, state, and federal regulations, as applicable.	Contractor	DWR	DWR, Contractor	Contractor will prepare a hazardous materials management and spill response plan and submit for DWR review. The plan will be in alignment with Contractor's SWPPP or WPCP. Contractor will implement the plan in the field. DWR will be responsible for all agency communication, such as in the event of a spill notification.
CEQA IS/MND, SCH# 2019049138	2.4.9 - 6	Construction vehicles and equipment will be checked daily for leaks, and will be properly maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	2.5 - 1	If impacts to wetlands or waters of the U.S. cannot be feasibly avoided, then DWR would implement one of the following:	N/A	N/A	N/A	
CEQA IS/MND, SCH# 2019049138	2.5 - 1a	DWR may opt to pay in-lieu fees for wetlands or waters of the U.S. permanent impacts authorized by the USACE through the in-lieu fee program of the Sacramento District of the USACE and administered by the National Fish and Wildlife Foundation, at a ratio determined in consultation with USACE.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.5 - 1b	DWR may opt to secure wetlands or waters of the U.S. credits at a USACE-approved mitigation bank for permanent impacts at the repair sites, at a ratio determined in consultation with USACE.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.5 - 2	Where impacts to GGS cannot be feasibly avoided, DWR will implement the following measures:	N/A	N/A	N/A	
CEQA IS/MND, SCH# 2019049138	2.5 - 2a	All impacts to GGS aquatic and adjacent upland habitat will be restored in accordance with criteria listed in the USFWS Mitigation Criteria for Restoration and/or Replacement of Giant Garter Snake Habitat (Appendix A to Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter, and Yolo Counties, California [USFWS, 1997]), or the most current criteria provided by USFWS and/or CDFW. Any areas that cannot be restored, would be compensated for through the purchase of compensatory mitigation credits from a USFWS- and CDFW approved bank at a ratio determined in consultation with USFWS and CDFW	DWR	N/A	Contractor	Habitat restoration activities are addressed in DWR's project design.
CEQA IS/MND, SCH# 2019049138	2.5 - 2b	DWR will obtain incidental take authorization under FESA, and an incidental take permit(s) or Consistency Determination from CDFW to cover those areas and activities where there is the potential incidental take of GGS. Incidental take permits from CDFW require DWR to fully mitigate for impacts. DWR would implement measures associated with the authorization and permit(s).	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.5 - 3	If elderberry shrubs, which provide suitable habitat for VELB, cannot be feasibly avoided, then DWR would implement the following measure:	N/A	N/A	N/A	
CEQA IS/MND, SCH# 2019049138	2.5 - 3a	If any shrubs are proposed for removal, impacts will be compensated for in accordance with criteria listed in the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) [USFWS 2017]).	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.5 - 4	If impacts to riparian habitat (and/or SRA habitat) cannot be feasibly avoided, then DWR will implement one of the following measures:	N/A	N/A	N/A	
CEQA IS/MND, SCH# 2019049138	2.5 - 4a	Restore riparian habitat (and/or SRA habitat) at an adjacent off-site or on-site location by planting native tree and shrub species of according to a plan developed in coordination with the appropriate agencies, CDFW, NMFS, and/or USFWS.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.5 - 4b	Secure native riparian (and SRA) habitat credits or acres at a mitigation bank approved by CDFW (NMFS for SRA) for impacts to native riparian habitat on streams within the project area that support special status species at a ratio determined in consultation with CDFW and/or NMFS.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	2.5 - 5	If shallow water habitat cannot be feasibly avoided and is filled or otherwise impacted, then DWR will implement the following measure:	N/A	N/A	N/A	

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CEQA IS/MND, SCH# 2019049138	2.5 - 5a	To offset the permanent loss of tidally influence riverine habitat (shallow water habitat) due to site repairs, DWR shall compensate for the loss at a ration determined in consultation with USFWS and CDFW. Credits shall be purchased at a mitigation bank approved by the resource agencies (e.g., USFWS and CDFW) for selling shallow water habitat credits.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	AQ-1	Implement DWR Best Management Practices (BMPs) for Construction. The following measures identified in DWR's Climate Action Plan will reduce construction related emissions of NOx and are applicable to repair sites in Sacramento County and Tehama County: BMP 7. Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement. BMP 12. For deliveries to project sites where the haul distance exceeds 100 miles and a heavy duty class 7 or class 8 semi-truck or 53-foot or longer box type trailer is used for hauling, a SmartWay certified truck will be used to the maximum extent feasible.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	AQ-2	Truck Hauling requirements for Repair Sites 46 and 58. Material hauling for Repair Sites 46 and 58 shall be conducted using trucks and not barges to reduce daily emission of NOx to below SMAQMD significant thresholds.	N/A	N/A	N/A	Measure does not apply to Site 97.
CEQA IS/MND, SCH# 2019049138	AQ-3	Avoid Concurrent Activities of Repair Sites in Sacramento County. This measure applies to all repair sites in Sacramento County. DWR shall schedule work to avoid concurrent activities of repair sites 46, 47, 58, and 59 with any other repair site such that daily NOx emissions would not cumulatively exceed 85 pounds per day on the same day.	N/A	N/A	N/A	Measure does not apply to Site 97.
CEQA IS/MND, SCH# 2019049138	AQ-4	Limit Concurrent Activities of Repair Sites in YSAQMD Jurisdiction. This measure applies to all repair sites in YSAQMD jurisdiction. DWR shall schedule work to restrict concurrent activities of repair sites to no more than six at any one time to ensure that daily PM10 emissions would not cumulatively exceed 80 pounds per day.	DWR	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	AQ-5	Implement Construction BMPs for Tehama County. The following measures identified in TCAPCD's CEQA Guidelines will reduce construction-related emissions of NOx and are applicable to construction equipment for the repair site in Tehama County: • Maintain all construction equipment in proper tune according to manufacturer's specifications. • Maximize to the extent feasible, the use of diesel construction equipment meeting current CARB certification standards for off road heavy-duty diesel engines. • Registration of off-road equipment in the California Air Resources Board's DOORS program and meeting all applicable standards for replacement and/or retrofit. • All portable equipment, including generators and air compressors rated over 50 brake horse power, shall be registered in the Portable Equipment Registration Program (PERP), or permitted through the District as a stationary source. • Water shall be applied by means of truck(s), hoses and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emission. • Haul vehicles transporting soil into or out of the property shall be covered to reduce track out. • Water shall be applied to disturbed areas a minimum of 2 times per day or more as necessary to reduce fugitive dust emissions.	N/A	N/A	N/A	Measure does not apply to Site 97.
CEQA IS/MND, SCH# 2019049138	BIO-1	Burrowing Owl: If the biologist observes an occupied burrow during the preconstruction survey (as identified under Section 2.4.5), a minimum 600- foot buffer shall be established during work between April 1 and October 15 and a 150-foot buffer shall be established during work between October 15 and March 31	N/A	N/A	DWR, Contractor	DWR will notify the Contractor of the location and avoidance buffer for any occupied burrows found during the nest survey. Contractor shall not enter into avoidance buffer areas.
CEQA IS/MND, SCH# 2019049138	BIO-2	Special-Status Bats including Pallid Bat, Western Mastiff Bat, and Western Red Bat: Within 24 hours prior to tree removal, a qualified biologist shall conduct a survey of all trees proposed for removal. If no special-status bats are observed within the trees, no additional mitigation is required for bats so long as the trees are removed within 24 hours of the survey. If the tree removal lapses for more than 24 hours, an additional survey is required.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	BIO-3	Special-Status Bats including Pallid Bat, Western Mastiff Bat, and Western Red Bat: If a bat is observed within a tree proposed for removal, the removal shall be halted and a minimum 20-foot buffer would be established around the tree. Through coordination with the CDFW, methods shall be established and implemented to exclude the bats from roosting in the tree. No tree removal would occur until the biologist determines that the tree is no longer occupied by the bats.	N/A	N/A	DWR	

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CEQA IS/MND, SCH# 2019049138	BIO-4	American Badger: A qualified biologist shall conduct a preconstruction survey for active dens within 3 days prior to the start of vegetation clearing and grading activities in repair sites containing agricultural land, annual grassland, and ruderal/disturbed sites. If no active dens are observed, no additional measures are required so long as construction activities commence within 3 days of the survey. If construction activities lapse for more than 3 days, an additional survey would be required.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	BIO-5	American Badger: If active American badger dens are found, the biologist shall establish a minimum 20-foot buffer using flagging and shall be onsite to monitor all vegetation clearing and grading activities for the purpose of temporarily halting construction activities until the biologist determines that the badger has left the construction footprint on its own accord.	N/A	N/A	DWR, Contractor	DWR will notify the Contractor of the location and avoidance buffer for any occupied dens found during the nest survey. Contractor shall not enter into avoidance buffer areas.
CEQA IS/MND, SCH# 2019049138	BIO-6	Foothill Yellow-Legged Frog: : Within 3 days prior to entering or working near stream/riparian habitat within the foothill yellow-legged frog range, a qualified biologist shall conduct a survey in aquatic habitat and adjacent riparian habitat within the repair area and a 500-foot buffer upstream and downstream of the repair area.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	BIO-7	Foothill Yellow-Legged Frog: If foothill yellow-legged frogs are observed in the repair area, DWR will stop work in the immediate area until the frog is out of the area and will notify a qualified biologist immediately. If possible, the frog will be allowed to leave on its own, and the qualified biologist will remain in the area until the biologist deems his or her presence is no longer necessary to ensure that the frog is not harmed. If the frog does not leave the work area on its own volition, CDFW would be consulted to identify next steps	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	BIO-8	Foothill Yellow-Legged Frog: A qualified biologist will be onsite to monitor all locations where repairs will occur within aquatic habitat where the frog has the potential to occur or was observed during the preconstruction survey.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	CUL-1	Preconstruction Training and a Plan for Inadvertent Discovery of Archaeological Resources. Prior to construction, a qualified archaeologist with expertise in California archaeology will develop an archaeological resources training program for all construction and field workers involved in ground disturbing activities. Only personnel who have received cultural resource awareness and sensitivity training will be allowed to enter areas potentially containing archaeological resources. Training will include a presentation developed in coordination with affiliated tribal representatives. Topics may include the potential presence and type of Native American and non-Native American resources that might be found during operations associated with the individual flood control projects, and necessary reporting protocols. Written materials will be provided to personnel as appropriate. While unlikely, the accidental discovery of archaeological resources or human remains at these locations cannot be entirely discounted. If prehistoric or historic-era archaeological resources are encountered, all construction activities within 100 feet will halt. DWR will be notified, and a Secretary of the Interior-qualified archaeologist will inspect the findings within 24 hours of discovery. If it is determined that the proposed project could damage a significant archaeological resource, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed Archaeological Resources Management Plan in consultation with the State Historic Preservation Officer and, for prehistoric resources, the appropriate Native American representative.	DWR	N/A	DWR, Contractor	DWR will prepare a Worker Environmental Awareness Program training that can be delivered at the work site. Contractor's staff (excluding delivery drivers) will be required to complete this training prior to working on site. Duration of all combined Worker Environmental Awareness Program trainings will not exceed 30 minutes. DWR will prepare Archaeological Resources Management Plan if required. Contractor will avoid work within 100 feet of a discovery of prehistoric or historic-era achaeological resources.
CEQA IS/MND, SCH# 2019049138	CUL-2	Conduct Monitoring at Locations Identified by Native Americans as Sensitive. Native American monitoring may be conducted at sensitive locations under agreements between DWR and culturally affiliated Native American Tribes. DWR may include qualified tribal monitors during certain construction activities. The decision to do so is based on the nature of the activity and the cultural sensitivity of the specific location. Tribal monitors would be required to submit reports, and the results be maintained by DWR to determine the need for additional surveys related to future activities in the area. If cultural materials are encountered during construction, Mitigation Measure CUL-2 will be implemented.	N/A	N/A	DWR	Native American Tribal monitors may be present on site.

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CEQA IS/MND, SCH# 2019049138	CUL-3	Archaeological Monitoring and a Plan for Inadvertent Discovery of Archaeological Resources. Project related activities would require ground-disturbance, including excavation, trenching, grading, and use of staging areas. Ground disturbing activities could result in damage to or destruction of known archaeological sites, if present in the construction area. However, based on the archaeological studies on file at the CHRIS that have been conducted, there are no known prehistoric or historic-era (other than the Clarksburg Ferry, addressed in CUL-6) archaeological sites on the project site. Archaeological monitoring is necessary when ground-disturbing activities occur at the proposed project repair sites 44, 60, 61, 63, 65, 67 and 69. Monitoring shall be conducted by or supervised by a qualified archaeologist who meets the Secretary of the Interior's Qualification Standards. A Monitoring Plan shall be developed that includes (but not be limited to) the following components:	N/A	N/A	N/A	
CEQA IS/MND, SCH# 2019049138	CUL-3	• Person(s) responsible for conducting monitoring activities; • Person(s) responsible for overseeing and directing the monitors; • How the monitoring shall be conducted and the required format and content of monitoring reports; • Schedule for submittal of monitoring reports and person(s) responsible for review and approval of monitoring reports; • Protocol for notifications in case of encountering cultural resources, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation); • Methods to ensure security of cultural resources sites; • A protocol for notifying local authorities (i.e., Sheriff, Police) should site looting and other illegal activities occur during construction. • During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources. • Contact information for all responsible personnel identified in the Plan.	N/A	N/A	DWR	DWR will prepare Plan for Inadvertent Discovery of Archaeological Resources if required.
CEQA IS/MND, SCH# 2019049138	CUL-3	If an archaeological resource is encountered, all activity within 100 feet of the find shall immediately halt until it can be evaluated by a qualified archaeologist (and a Native American representative if the artifacts are prehistoric). If it is determined that project activities could damage a significant archaeological resource, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed Archaeological Resources Management Plan in consultation with the State Historic Preservation Officer and, for prehistoric resources, the appropriate Native American representative. In considering any suggested mitigation proposed by the archaeologist and Native American representative, DWR shall determine whether avoidance is feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is not feasible, other appropriate measures (e.g., data recovery as agreed upon between DWR, the archaeological consultant, and Native American representatives) shall be instituted. Work may proceed in other parts of the project site while mitigation for archaeological resources is being carried out. Because no known prehistoric or historic-era (other than the Clarksburg Ferry, (addressed in CUL-7) archaeological sites are on file with the CHRIS are present within the project sites, there would be no damage to or destruction of known archaeological resource locations during project construction. Therefore, there would be no impact on known prehistoric archaeological resources	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor will avoid work within 100 feet of a discovery of any achaeological resources.
CEQA IS/MND, SCH# 2019049138	CUL-4	Inadvertent Discovery of Human Remains: If potential human remains are encountered, all work will halt within 100 feet of the find and the on-site construction crew will immediately contact DWR. DWR will contact the appropriate County coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission (NAHC). As provided in PRC Section 5097.98, the NAHC will identify the person or persons believed most likely to be descended from the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in PRC Section 5097.98.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor will avoid work within 100 feet of a discovery of any potential human remains.

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CEQA IS/MND, SCH# 2019049138	CUL-5	In the Event that Tribal Cultural Resources or Traditional Cultural Properties are Discovered during Construction, Implement Procedures to Evaluate Tribal Cultural Resources/Traditional Cultural Properties and Implement Avoidance and Minimization Measures to Avoid Significant Adverse Effects. California Native American Tribes that are traditionally and culturally affiliated with the geographic area in which the project is located may have expertise concerning their TCRs (California PRC Section 21080.3.1). As was done during preparation of this IS/MND, culturally affiliated Tribes will be further consulted concerning TCRs and TCPs that may be impacted. If these types of resources are discovered during construction. Further consultation with culturally affiliated Tribes will focus on identification of measures to avoid or minimize impacts on any such resources discovered during construction. Should TCRs or TCPs be identified in the project APE during construction, the following performance standards shall me met prior to continuance of construction and associated activities that may result in damage to or destruction of TCRs or TCPs: • Each identified TCR/TCP will be evaluated for CRHR and NRHP eligibility through application of established eligibility criteria (California Code of Regulations 15064.636 and CFR Part 63 respectively), in consultation with interested Native American Tribes.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	CUL-5	• If a TCR is determined to be eligible for listing on the NRHP, DWR will avoid damaging effects to the TCR/TCP in accordance with California PRC Section 21084.3, if feasible. If DWR determines that the project may cause a substantial adverse change to a TCR/TCP, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a TCR/TCP or alternatives that would avoid significant impacts to a TCR/TCP. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached: • Treat the resource with culturally appropriate dignity taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following: o Protect the cultural character and integrity of the resource. o Protect the traditional use of the resource. o Protect the confidentiality of the resource. o Protect the resource. If a TCP is determined to be eligible for listing in the NRHP, then the procedures for determination of effect and, if adverse, treatment of the resource to resolve adverse effect will be conducted in accordance with the procedures required for compliance with Section 106 of the NHPA (36 CFR Parts 800.5–800.6).	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	CUL-6	Mitigation of Effects to Submerged Shipwrecks or Maritime Features. There is one known shipwreck within a project repair site on the water-side toe of the levee subject to repair, P-57-000609. Water-side levee work conducted from a barge is expected in the vicinity of P-57-000609. The resources should be avoided to avoid adverse effects. If it is determined that project activities could damage P-57-000609, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, DWR will follow an existing an Historic Property Treatment Plan, prepared by the USACE for this resource, that will reduce the effects of the project to less than significant. While unlikely, the accidental discovery of additional submerged shipwrecks or maritime features cannot be entirely discounted. If additional submerged shipwrecks or maritime features are encountered, all construction activities within 100 feet will halt. DWR will be notified, and a Secretary of the Interior-qualified archaeologist will inspect the findings within 24 hours of discovery. The shipwreck or maritime feature will be evaluated for CRHR and NRHP eligibility through application of established eligibility criteria (California Code of Regulations 15064.636 and CFR Part 63 respectively). If it is determined that the proposed project could damage a significant archaeological resource, DWR shall re-design the proposed project to avoid any adverse effects. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed Archaeological Resources Management Plan in consultation with the State Historic Preservation Officer.	N/A	N/A	N/A	Measure does not apply to Site 97.
CEQA IS/MND, SCH# 2019049138	GHG-1	Implement DWR BMP's for Construction Practices. The following GGERP Plan BMP's shall be implemented as part of construction activities associated with the proposed project:	N/A	N/A	N/A	

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CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 1	Evaluate project characteristics, including location, project work flow, site conditions, and equipment performance requirements, to determine whether specifications of the use of equipment with repowered engines, electric drive trains, or other high efficiency technologies are appropriate and feasible for the project or specific elements of the project.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 2	Evaluate the feasibility and efficacy of performing on-site material hauling with trucks equipped with on-road engines. This BMP has been implemented by consideration of barge transport	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 3	Ensure that all feasible avenues have been explored for providing an electrical service drop to the construction site for temporary construction power. When generators must be used, use alternative fuels, such as propane or solar, to power generators to the maximum extent feasible.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 6	Limit deliveries of materials and equipment to the site to off peak traffic congestion hours.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 7	Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 8	Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer's recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition. Maintenance schedules shall be detailed in an Air Quality Control Plan prior to commencement of construction.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 9	Implement tire inflation program on jobsite to ensure that equipment tires are correctly inflated. Check tire inflation when equipment arrives on-site and every two weeks for equipment that remains on-site. Check vehicles used for hauling materials off-site weekly for correct tire inflation. Procedures for the tire inflation program shall be documented in an Air Quality Management Plan prior to commencement of construction.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 10	Develop a project specific ride share program to encourage carpools and shuttle vans for construction worker commutes.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 12	For deliveries to project sites where the haul distance exceeds 100 miles and a heavy-duty class 7 or class 8 semi-truck or 53-foot or longer box type trailer is used for hauling, a SmartWay certified truck will be used to the maximum extent feasible.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 14	Develop a project specific construction debris recycling and diversion program to achieve a documented 50% diversion of construction waste.	N/A	N/A	Contractor	Additional detail regarding construction debris and recycling can be found in Section 01 74 19.
CEQA IS/MND, SCH# 2019049138	GHG-1 - BMP 15	Evaluate the feasibility of restricting all material hauling on public roadways to off-peak traffic congestion hours. During construction scheduling and execution minimize, to the extent possible, uses of public roadways that would increase traffic congestion.	N/A	N/A	Contractor	
CEQA IS/MND, SCH# 2019049138	NOI-1	Work Hour Restriction for Repair Site 44. To ensure consistency with the restrictions of the Colusa County Code, work hours at repair site 44 shall be restricted to between 7 a.m. and 7 p.m.	N/A	N/A	N/A	Measure does not apply to Site 97.
CEQA IS/MND, SCH# 2019049138	NOI-2	Noise control Measures for Repair Site 79. To ensure consistency with the restrictions of Policy HS-P1.9 of the County General Plan Noise Element, DWR and its contractors shall implement the following construction-related noise control measures at repair site 79: • Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area; and • Utilize quiet air compressors and other stationary noise generating equipment where appropriate technology exists and is feasible.	N/A	N/A	N/A	Measure does not apply to Site 97.

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CEQA IS/MND, SCH# 2019049138	TCR-1	In the event that archaeological resources that are considered TCRs are discovered during construction, Mitigation Measure TCR-1, described below, shall be implemented. • If an inadvertent discovery of archaeological cultural materials (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, building remains) is made at any other time during project-related construction activities or project planning, DWR, in consultation with the appropriate tribe(s), USACE, and other interested parties, will develop and implement appropriate protection and avoidance measures where feasible. • These procedures will be developed in accordance with 36CFR 800.13 which specifies procedures for post-review discoveries. Additional measures, such as development of a Memorandum of Agreement and a Historic Property Treatment Plan, may be necessary if avoidance or protection is not possible. All the steps identified above will be detailed in an accidental-discovery plan developed before construction so that all parties are aware of the process that must be implemented should buried archaeological resources be uncovered during construction.	N/A	N/A	DWR	
CEQA IS/MND, SCH# 2019049138	TCR-2	If an inadvertent discovery of human remains is made at any other time during project-related construction activities or project planning, DWR will implement the procedures listed below. Should human remains be identified in the project APE, the following performance standards shall me met prior to implementing or continuing actions such as construction, that may result in damage to or destruction of human remains. Avoiding or substantially lessening potential significant impacts to human remains or implementation of the procedures described below maybe considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less than significant may be reached: • In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, DWR will immediately halt potentially damaging excavation in the area of the burial and notify the Yolo County Coroner and a professional archaeologist to determine the nature of the remains. • The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). • After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting, agency and Tribal communication. Contractor will avoid work within 100 feet of a discovery of any potential human remains.
CEQA IS/MND, SCH# 2019049138	TCR-2	• The responsibilities of DWR for acting upon notification of a discovery of Native American human remains are identified in California PRC Section 5097.9 et seq. Upon the discovery of Native American human remains, DWR will require that all construction work must stop within 100 feet of the discovery until consultation with the MLD has taken place. The MLD will have 48 hours to complete a site inspection and make recommendations to the landowner after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. California PRC Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. Site-protection measures that DWR will employ are as follows: • Record the site with the NAHC or the appropriate Information Center; and • Record a document with the County in which the property is located;	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting, agency and Tribal communication. Contractor will avoid work within 100 feet of a discovery of any potential human remains.

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CEQA IS/MND, SCH# 2019049138	TCR-2	• If agreed to by the MLD and the landowner, DWR or DWR's authorized representative will work with the landowner and MLD to rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance if the NAHC is unable to identify an MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access to the site. DWR or DWR's authorized representative may also reinter the remains in a location not subject to further disturbance if he or she rejects the recommendation of the MLD and mediation by the NAHC fails to provide measures acceptable to DWR. Mitigation may still be needed if impacts occur to those burials; DWR will consult with the MLD to identify appropriate mitigation. • If the human remains are of historic age and are determined to be not of Native American origin, DWR will follow the provisions of the California Health and Safety Code Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting, agency and Tribal communication. Contractor will avoid work within 100 feet of a discovery of any potential human remains.
CEQA IS/MND, SCH# 2019049138	TCR-3	Should TCRs or TCPs be identified in the project APE during construction, the following performance standards shall me met prior to continuance of construction and associated activities that may result in damage to or destruction of TCRs or TCPs: • DWR shall evaluate each identified TCR/TCP, prior to construction, for CRHR and NRHP eligibility through application of established eligibility criteria (California Code of Regulations 15064.636 and CFR Part 63 respectively), in consultation with interested Native American Tribes. • If a TCR is determined to be eligible for listing on the NRHP, DWR will avoid damaging effects to the TCR/TCP in accordance with California PRC Section 21084.3, if feasible. If DWR determines that the project may cause a substantial adverse change to a TCR/TCP, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a TCR/TCP or alternatives that would avoid significant impacts to a TCR/TCP. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached: • Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor will avoid work within 100 feet of a discovery of any achaeological resources.
CEQA IS/MND, SCH# 2019049138	TCR-3	• Treat the resource with culturally appropriate dignity taking into account the Tribal cultural values and meaning of the resource, including, but not limited to, the following: o Protect the cultural character and integrity of the resource. o Protect the traditional use of the resource. o Protect the confidentiality of the resource. o Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places. o Protect the resource.	N/A	N/A	DWR, Contractor	DWR will be responsible for all reporting and agency communication. Contractor will avoid work within 100 feet of a discovery of any achaeological resources.