

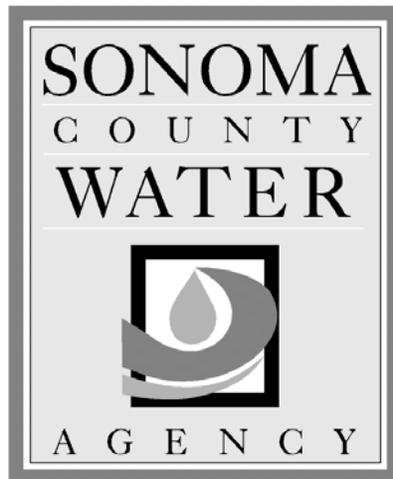
CONTRACT NO.  
45-6.1-7 #3

**PROJECT MANUAL**

**Volume 1 of 2**

FOR

**Dry Creek Habitat Enhancement Demonstration Project, Phase II**



**FEBRUARY 2013**



DOCUMENT 00001

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# PROJECT MANUAL

Volume 1 of 2

for

## DRY CREEK HABITAT ENHANCEMENT DEMONSTRATION PROJECT, PHASE II

### SONOMA COUNTY WATER AGENCY

#### BOARD OF DIRECTORS

*Susan Gorin*  
*Shirlee Zane*  
*Michael McGuire*  
*Efren Carrillo*  
*David Rabbitt, Chair*

Advertisement Date: February 2013

Bid Date: Tuesday, March 12, 2013

**Contract Number:** 45-6.1-7 #3

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DOCUMENT 00007

SEALS PAGE

Sonoma County Water Agency

Gregory Guensch, P. E.

Date: 01/22/13



Mike Burke, P.E.

Date: 01/22/13





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(Volume 1)

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END OF DOCUMENT

## **BIDDING REQUIREMENTS**



DOCUMENT 00100

**ADVERTISEMENT FOR BIDS**

1. **NOTICE.** The Sonoma County Water Agency (“Owner”), a public agency of the State of California, hereby gives notice that it will accept Bids for construction of the following public work:

**Contract Number 45-6.1-7 #3  
Dry Creek Habitat Enhancement Demonstration Project, Phase II**

2. **DESCRIPTION AND LOCATION OF THE WORK.** The Work consists of construction of habitat modifications within the Dry Creek Valley along Dry Creek from approximately ½ mile upstream of Lambert Bridge Rd to ½ mile downstream of Lambert Bridge Road, northwest of the City of Healdsburg in Sonoma County, California. The Work includes, but is not limited to, habitat modification including new side channels, ponds, alcoves, and rock weir riffles; enhancements to existing pools through selective grading, installation of woody debris, log jams, and large boulders as anchor material; vegetation planting; installation of erosion control measures; excavation; and dewatering. Bidding Documents contain the full description of the Work.
3. **ESTIMATED PROJECT COST RANGE:** \$3,800,000 to \$4,800,000.
4. **REQUIRED CONTRACTOR’S LICENSE(S).** A California “A” contractor’s license is required to Bid this Contract. Joint ventures must secure a joint venture license prior to award of this Contract.

5. **CONTACT INFORMATION.**

Mailing address:  
Sonoma County Water Agency  
404 Aviation Boulevard  
Santa Rosa, CA 95403-9019

Office:  
Sonoma County Water Agency  
404 Aviation Boulevard  
Santa Rosa, CA 95403-9019

Project Engineer:  
Greg Guensch, P.E.

Website address:  
[www.sonomacountywater.org](http://www.sonomacountywater.org)

Phone: 707-547-1900

Fax: 707-524-3782

Email: [BidderQuestions@scwa.ca.gov](mailto:BidderQuestions@scwa.ca.gov)

6. **PROCUREMENT OF BIDDING DOCUMENTS.** Bidders may examine Bidding Documents at Owner’s Office. Bidders may obtain hard copies of Bidding Documents upon registration as a Planholder through Owner’s office and payment of a non-refundable fee of \$20 for each copy. Owner will accept cash or checks payable to “Sonoma County Water Agency.” Bidding Documents need not be returned to Owner. Bidding Documents contain a reduced set of Drawings. Bidders may arrange to obtain full-size Drawings from Digital Prints & Imaging, 375 Tesconi Circle, Santa Rosa, CA 95401, 707-546-0401, for an additional charge to be paid directly

to Digital Prints & Imaging. Electronic Bidding Documents are available on Owner’s website: [www.sonomacountywater.org](http://www.sonomacountywater.org).

- 7. **RIGHTS-OF-WAY.** Owner is in the process of acquiring the rights-of-way indicated. In the event that Owner is unable to acquire the right-of-way by the Notice to Proceed, the Notice to Proceed may exclude certain portions of the Work.
- 8. **MANDATORY PRE-BID SITE VISIT.** Owner will conduct Pre-Bid Site Visits as follows:

Time	Day	Date	Location
10:00 a.m.	Tuesday	2/19/2013	Dry Creek Vineyards 3770 Lambert Bridge Rd. Healdsburg, CA
2:00 p.m.	Thursday	2/21/2013	Dry Creek Vineyards 3770 Lambert Bridge Rd. Healdsburg, CA

A map showing the meeting place for the Pre-Bid Site Visits is included in Document 00202 (Pre-Bid Site Visit Vicinity Map) and available on Owner’s website. Bidders must attend one of the Pre-Bid Site Visits and sign an attendance roster as a condition to bidding.

Bidders will be provided the opportunity to investigate conditions or otherwise conduct invasive investigations, explorations, tests, or studies at the Pre-Bid Site Visit, subject to delivering an executed Document 00210 (Indemnity and Release Agreement) and providing an insurance certificate as described therein by noon of the Day prior to the Pre-Bid Site Visit. This will be the Bidders’ only opportunity to investigate conditions at the Site. Bidders who intend only to observe Site conditions and not conduct such examinations are not required to provide an executed Document 00210 (Indemnity and Release Agreement) or an insurance certificate for the Pre-Bid Site Visit. The Pre-Bid Site Visit is merely a showing of the Site and existing conditions and will not provide an opportunity for Bidders to have questions answered. Bidders are encouraged, however, to submit written questions. Owner will transmit to all Registered Planholders (all parties recorded as having received Bidding Documents) such Addenda as Owner in its discretion considers necessary in response to written questions. Bidding Documents will not be available at the Pre-Bid Site Visit.

Bidders shall not rely on oral statements. Oral statements will not be binding or legally effective.

Other Pre-Bid Site Visits may be scheduled at Owner’s sole discretion, depending on staff availability.

- 9. **RESTRICTIONS ON SUBSTITUTIONS.** As a limitation on Bidder’s privilege to substitute “or equal” items, Owner has found that certain items are designated as Owner standards and certain items are designated to match existing items in use on a particular public improvement either completed or in the course of completion or are available from one source. As to such items, Owner will not permit substitution. Such items are: None.
- 10. **INSTRUCTIONS.** Bidders shall refer to Document 00200 (Instructions to Bidders) for required documents and items to be submitted in sealed envelopes for deposit into the Bid boxes, located at Owner’s Office, and applicable times for submission.

11. **STATEMENTS OF QUALIFICATIONS.** Each Bidder shall be required to submit, in accordance with Document 00200 (Instructions to Bidders) and Document 00450 (Statement of Qualifications for Construction Work), a Statement of Qualifications.
12. **BID SUBMISSION.** Sealed Bids will be received at Owner's Office (see paragraph 5) until 10:00 a.m., Tuesday, March 12, 2013. Owner's staff will determine official time and will call out the designated time in the Bid reception area of Owner's Office, stating that the period for accepting Bids is closed. The Bid opening will be in accordance with procedures set forth in Document 00200 (Instructions to Bidders).
13. **BID PREPARATION COST.** Bidders are solely responsible for the cost of preparing their Bids.
14. **CONTRACT TIME.** Work shall be completed within **159** Days from the date when Contract Time commences to run.
15. **PAYMENT BONDS.** In accordance with California Civil Code Section 9550, payment bonds as set forth in Document 00200 (Instructions to Bidders) will be required from the successful Bidder.
16. **PREVAILING WAGE LAWS.** The successful Bidder must comply with all prevailing wage laws applicable to the Project, and related requirements contained in the Contract Documents.
17. **SUBSTITUTION OF SECURITIES.** Owner will permit successful Bidder to substitute securities for retention monies withheld to ensure performance of Contract, as set forth in Document 00680 (Escrow Agreement for Security Deposits in Lieu of Retention), in accordance with California Public Contract Code, Section 22300. By this reference, Document 00680 (Escrow Agreement for Security Deposits in Lieu of Retention) is incorporated in full in this Document 00100.
18. **RESERVATION OF RIGHTS.** Owner specifically reserves the right, in its sole discretion, to reject any or all Bids, or re-bid, or to waive inconsequential deviations from Bid requirements not involving time, price, or quality of the Work.
19. **INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO).** Owner is currently pursuing certification for ISO 9001 and 14001. Bidding Documents and Contract Documents contain information and requirements related to ISO.

By order of the Sonoma County Water Agency's General Manager.

END OF DOCUMENT



## DOCUMENT 00200

**INSTRUCTIONS TO BIDDERS**

STANDARD EDITION

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## INSTRUCTIONS TO BIDDERS

Formal Bids are requested for a general construction contract, or work described in general, as follows:

### Dry Creek Habitat Enhancement Demonstration Project, Phase II

Bid submission: Tuesday, March 12, 2013. Bid submittal deadlines are listed in Document 00100 (Advertisement for Bids) and in paragraph 22 herein.

#### 1. DEFINITIONS

- A. All abbreviations and definitions of terms used in this Document 00200 are set forth in Document 00700 (General Conditions) and Section 01420 (References and Definitions).

#### 2. CONTACT INFORMATION

Mailing address:  
Sonoma County Water Agency  
404 Aviation Boulevard  
Santa Rosa, CA 95403-9019

Office:  
Sonoma County Water Agency  
404 Aviation Boulevard  
Santa Rosa, CA 95403-9019

Phone: 707-547-1900

Fax: 707-524-3782

Email: [BidderQuestions@scwa.ca.gov](mailto:BidderQuestions@scwa.ca.gov)

Website address:

[www.sonomacountywater.org](http://www.sonomacountywater.org)

#### 3. MINIMUM REQUIREMENTS TO BID

- A. Minimum requirements for Bidder:

- 1) Owner will accept Bids only from Bidders duly licensed in accordance with the California Business & Professions Code. A California "A" contractor's license is required to Bid this Contract. Joint ventures must secure a joint venture license prior to award of this Contract.
- 2) Bidders must attend one of the Pre-Bid Site Visits and sign an attendance roster as a condition to bidding.
- 3) The following are minimum requirements for the Bidder to be found responsible to perform the Work:
  - a. Seven years experience as a continuously operating entity engaged in the performance of similar work.
    - i. Within the past seven years completed three construction projects of a similar nature and complexity with a contract dollar amount of at least \$3,000,000 each. For a project to be considered of similar nature and complexity for this subparagraph 3.A.3)a.i, it must include grading of at least 10,000 cubic yards; control of water during construction (and specifically measures intended to be used for this Project), including 1) diverting flows of 50 cfs or greater around work areas using bypass pipelines and cofferdams, 2) isolation of work areas using sheet piling, cofferdams or other barriers, and 3) local dewatering of saturated conditions.
  - b. Sufficient financial strength, stability and resources as measured by Bidder's equity, debt-to-assets ratio, and capability to finance the Work to be performed.

- c. Ability to secure, in accordance with the Contract Documents, the required forms of Construction Performance Bond and Construction Labor and Material Payment Bond.
  - d. Ability to obtain required insurance with coverage values that meet minimum requirements.
  - e. Satisfactory experience on public works, including without limitation no history of default termination, excessively delayed completion, or excessive defective work.
- B. Minimum requirements for Bidder and its team:
- 1) Evidence that Bidder and its team, including without limitation its riparian restoration Subcontractor(s), or the Bidder to the extent Bidder performs such Work itself (hereafter "designated Subcontractor(s)"), have the human and physical resources of sufficient quantity and quality to perform the Work under Contract Documents in a timely and Specification-compliant manner, to include:
    - a. Evidence demonstrating Bidder's commitment to project safety and its ability to complete projects in a safe manner.
    - b. Construction and management organizations with sufficient personnel and requisite disciplines, licenses, skills, experience, and equipment for the Project.
    - c. Minimum licensing requirements including evidence of a valid California class "A" contractor's license for the Bidder and evidence of requisite licenses for Key Personnel of Bidder or any designated Subcontractor.
    - d. A field organization with skills, experience, and equipment sufficient to perform all on-Site Work and necessary scheduling.
  - 2) Expertise of Key Personnel to accomplish the duties and responsibilities required to perform the Work under Contract Documents. Minimum experience requirements of each Key Personnel include the completion of three projects of similar nature and complexity.
  - 3) Evidence that Bidder's named riparian restoration Subcontractor, or the Bidder to the extent Bidder performs such Work itself, has the human and physical resources of sufficient quantity and quality to perform those aspects of the Contract in a timely and Specification-compliant manner, to include:
    - a. Minimum experience requirements include the completion of three projects of a similar nature and complexity completed within the past five years. For a project to be considered of similar nature and complexity for this subparagraph 3.B.3.a, it must include:
      - i. Construction of at least 500 linear feet of stream channel habitat using typical aquatic habitat restoration techniques incorporating irregular natural materials such as boulders, alluvial streambed materials, logs, live cuttings and stakes, and biodegradable fabrics to conform with the channel design intent.
      - ii. Specific construction and restoration techniques including:
        - Precision handling and placement of large logs and boulders to construct habitat and channel stabilization structures
        - Installing biotechnical slope stabilization measures such as soil lifts, crib walls, vegetated rip-rap and erosion control fabrics.

**4. PROCUREMENT OF BIDDING DOCUMENTS**

- A. Bidders may examine and obtain Bidding Documents at Owner’s Office at the address listed in paragraph 2, Contact Information.
- B. Electronic Bidding Documents are available on Owner’s website: [www.sonomacountywater.org](http://www.sonomacountywater.org).
- C. Bidders may obtain hard copies of Bidding Documents upon registration as a Planholder through Owner’s office and payment of a non-refundable fee of \$20 for each copy. Owner will accept cash or checks payable to “Sonoma County Water Agency.” Bidding Documents need not be returned to Owner. Bidding Documents contain a reduced set of Drawings. Bidders may arrange to obtain full-size Drawings as described in Document 00100 (Advertisement for Bids).

**5. EXISTING DRAWINGS AND GEOTECHNICAL DATA**

- A. Bidders may examine any available existing conditions information (e.g., record documents, specifications, studies, drawings of previous work) and applicable environmental assessment information (if any) regarding the Project at the Owner’s Office by giving Owner reasonable advance notice. Documents may also be available at Owner’s website: ([www.sonomacountywater.org](http://www.sonomacountywater.org)). Document 00320 (Geotechnical Data and Existing Conditions) to all supplied existing conditions information and geotechnical reports and all other information supplied regarding existing conditions either above ground or below ground.

**6. BIDDERS’ OPPORTUNITY TO INVESTIGATE CONDITIONS**

- A. Bidders will be provided the opportunity to investigate conditions or otherwise conduct invasive investigations, explorations, tests, or studies at the Pre-Bid Site Visit, subject to delivering an executed Document 00210 (Indemnity and Release Agreement) and providing an insurance certificate as described therein by noon of the Day prior to the Pre-Bid Site Visit. This will be the Bidders’ only opportunity to investigate conditions at the Site. Bidders who intend only to observe Site conditions at the Pre-Bid Site Visit and not conduct such examinations are not required to provide an executed Document 00210 (Indemnity and Release Agreement) or an insurance certificate for the Pre-Bid Site Visit.

**7. MANDATORY PRE-BID SITE VISITS**

- A. Owner will conduct Pre-Bid Site Visits at the times and locations listed.

<b>Time</b>	<b>Day</b>	<b>Date</b>	<b>Location</b>
10:00 a.m.	Tuesday	2/19/2013	Dry Creek Vineyards 3770 Lambert Bridge Rd. Healdsburg, CA
2:00 p.m.	Thursday	2/21/2013	Dry Creek Vineyards 3770 Lambert Bridge Rd. Healdsburg, CA

- B. Pre-Bid Site Visits will occur at the Site on each day and time listed. Bidder is required to attend only one of the Pre-Bid Site Visits. A map showing the meeting place for the Pre-Bid Site Visit(s) is included in Document 00202 (Pre-Bid Site Visit Vicinity Map).

- C. Other Pre-Bid Site Visits may be scheduled at Owner's sole discretion, depending on staff availability.
- D. The Pre-Bid Site Visit is merely a showing of the Site and existing conditions and will not provide an opportunity for Bidders to have questions answered. Bidders are encouraged, however, to submit written questions. Bidding Documents will not be available at the Pre-Bid Site Visit. Attendees who would like copies of the Bidding Documents must register with Owner as a Planholder.
- E. Attendance at the Pre-Bid Site Visit does not guarantee receipt of Addenda. The only way to ensure receipt of Addenda is to register as a Planholder with Owner.
- F. Bidders shall not rely on oral statements. Oral statements will not be binding or legally effective.

## 8. SUBSTITUTIONS

- A. Bidders must base their Bids on products and systems specified in Contract Documents or listed by name in Addenda.
- B. Except as provided herein, Owner will consider substitution requests only for "or equal items." Bidders wanting to use "or equal" item(s) may submit Document 00660 (Substitution Request Form) no later than 14 Days prior to submitting their Bids. After that date, Owner will not accept "or equal" substitution requests. To assess "or equal" acceptability of product or system, submittals of substitutions shall contain the information required in Document 00660 (Substitution Request Form) and set forth in Section 01600 (Product Requirements). Insufficient information will be grounds for rejection of substitution. Owner shall, within a reasonable period of time after having received a Request for Substitution, issue in writing its decision as to whether the proposed substitute item is an Equal item. Owner's decision shall be conclusive on all Bidders.
- C. Approved substitutions shall be listed in Addenda and become part of the Contract Documents.
- D. As further limitation on Bidder's privilege to substitute items, Owner has found that:
  - 1) Certain items are designated as Owner standards and certain items are designated to match existing items in use on a particular public improvement, either completed or in the course of completion. Items that fall in this category include:
    - a. None.
  - 2) Certain items are designated in order that a field test or experiment may be made to determine the product's suitability for future use. Items that fall in this category include:
    - a. None.
  - 3) Certain necessary items are only available from one source. Items that fall in this category include:
    - a. None.
- E. As to such items listed above, Owner will not permit substitution.
- F. Substitutions may be requested after submitting Bids and Award of Contract only in accordance with requirements specified in Section 01600 (Product Requirements).

**9. BIDDER QUESTIONS**

- A. Bidders must direct all questions about the meaning or intent of Bidding Documents to Owner in writing (see paragraph 2, Contact Information). Inquiries must include the full name of the Project. Owner may not answer questions received less than fourteen Days prior to the date for opening Bids. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

Email: [BidderQuestions@scwa.ca.gov](mailto:BidderQuestions@scwa.ca.gov)

**10. ADDENDA**

- A. Owner will respond to questions and issue interpretations or clarifications as Owner, in its discretion, considers necessary, in the form of Addenda. Addenda may also be issued to modify the Bidding Documents as deemed advisable by Owner. Addenda will be written and will be issued to each Registered Planholder to the address, fax number, or email supplied to Owner by Bidder.
- B. Owner may, in its discretion, choose to delay issuance of addenda in order to address several issues at once. Owner will endeavor to issue addenda in a timely manner.
- C. Addenda shall be acknowledged by number with signature in Document 00400 (Bid Form) and shall be part of the Contract Documents. A complete listing of Addenda may be secured from Owner upon written request (see paragraph 2, Contact Information).

**11. WAGE RATES**

- A. State prevailing wage rates are applicable to the Project. Copies of the state's general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are on file at Owner's Office and are deemed included in the Bidding Documents. Upon request, Owner will make copies available to any interested party. Copies of state wage rates are also available at [www.dir.ca.gov/labor\\_law.html](http://www.dir.ca.gov/labor_law.html).
- B. Contractor shall post the applicable State prevailing wage rates at the Site.

**12. OTHER REQUIREMENTS PRIOR TO BIDDING**

- A. Submission of Bid signifies Bidder's careful examination of Bidding Documents and complete understanding of the nature, extent, and location of Work to be performed. As a condition to Bidding, Bidder must complete tasks listed in Document 00520 (Agreement), Article 5. Submission of Bid shall constitute Bidder's express representation to Owner that Bidder has fully completed these tasks.

**13. PREPARATION OF BIDS**

- A. Bidders must submit Bids in accordance with this Document 00200.
- B. All Bidders must submit Bids using, where applicable, documents supplied in these Bidding Documents, including without limitation Document 00400 (Bid Form), Document 00420 (Bidder Registration Form), Document 00430 (Subcontractors List), and Document 00450 (Statement of Qualifications for Construction Work). Bids must be full and complete. Bidders must complete all Bid items and supply all information required by Bidding Documents. Bidders may not modify the Bid Form or qualify their Bids. Bidders must submit clearly and distinctly written Bids. Bidders must clearly make any changes in their Bids by crossing out original entries, entering new entries, and initialing new entries.

- C. The submission of a Bid does not commit Owner to award a contract for the Project, to pay costs incurred in the preparation of a Bid, or to procure or contract for any goods or services.

**14. REQUIRED BID SECURITY**

- A. Bidders must submit with their Bids either cash, a cashier's check, or certified check from a responsible bank in the United States, or corporate surety bond furnished by a surety authorized to do business in the State of California, of not less than ten percent of amount of Total Bid price, payable to "Sonoma County Water Agency." All Bidders choosing to submit a surety bond must submit it on the required form, Document 00411 (Bond Accompanying Bid).

**15. REQUIRED SUBCONTRACTORS LIST**

- A. All Bidders must submit with their Bids the required information on all Subcontractors in Document 00430 (Subcontractors List) for those Subcontractors who will perform any portion of Work, including labor, rendering of service, or specially fabricating and installing a portion of the Work or improvement according to detailed drawings contained in the plans and specifications, in excess of one half of one percent of total Bid. Violation of this requirement may result in Bid being deemed non-responsive and not being considered.

**16. REQUIRED STATEMENT OF QUALIFICATIONS**

- A. In order for a Bidder to be eligible to Bid on this Contract, Bidder must submit a Statement of Qualifications responsive to the requirements identified in Document 00450 (Statement of Qualification for Construction Work) ("SOQ"), including without limitation qualification information for Subcontractors and schedulers, if any. Information in the SOQ shall be current.

**17. REQUIREMENT FOR SEPARATE SEALED ENVELOPES**

- A. Owner will receive Bids in two separate opaque sealed 10" x 13" envelopes, labeled Envelope "A" and Envelope "B," each containing the respective items described in paragraphs 18 and 19 of this Document 00200.

**18. CONTENTS OF ENVELOPE "A" - BID PRICE**

- A. Envelope "A" shall include:
  - 1) Document 00400 (Bid Form) completed in accordance with paragraph 13 of this Document 00200.
  - 2) Bid security completed in accordance with Document 00411 and with paragraph 14 of this Document 00200.
  - 3) Document 00430 (Subcontractors List) in accordance with paragraph 15 of this Document 00200 and Document 00430 (Subcontractors List).
  - 4) Document 00481 (Noncollusion Declaration).

**19. CONTENTS OF ENVELOPE "B" - BIDDER QUALIFICATIONS**

A. Envelope "B" shall include:

- 1) Statement of Qualifications including all necessary attachments and supporting documents submitted in accordance with paragraph 16 of this Document 00200 and Document 00450 (Statement of Qualifications for Construction Work).
- 2) Document 00420 (Bidder Registration Form). Bidder must complete this form and include comprehensive answers to all questions.

**20. LABELING OF BID ENVELOPES**

A. Bidder shall mark its Bid envelopes on the outside with Bidder's name and the following:

BID FOR THE SONOMA COUNTY WATER AGENCY,  
CONTRACT NUMBER 45-6.1-7 #3,  
DRY CREEK HABITAT ENHANCEMENT DEMONSTRATION PROJECT, PHASE II  
"Envelope A" or "Envelope B" (as appropriate)

**21. WITHDRAWAL OF BIDS PRIOR TO BID OPENING TIME**

A. Bidders may withdraw their Bids at any time prior to the Bid opening time fixed in this Document 00200, only by written request for the withdrawal of Bid filed with Owner. Bidder or its duly authorized representative shall execute request to withdraw Bid.

**22. SUBMITTAL OF BIDS**

- A. Sealed Bids will be received on Tuesday, March 12, 2013 at Owner's Office at the address listed in paragraph 2, Contact Information [and as shown in the map provided in Document 00203 (Bid Submittal Vicinity Map)].
- B. Owner's staff will determine official time and will call out the specified time in the Bid reception area of Owner's Office.
- C. Envelope "A" shall be due by **10:00 a.m.**
- D. Envelope "B" shall be due by **11:00 a.m.**
- E. All Bid envelopes will be time-stamped by Owner to reflect their submittal time.

**23. BID OPENING**

- A. Owner's staff will determine official time and will call out the specified time in the Bid reception area of Owner's Office.
- B. Owner will open all Bidders' Envelopes "A" at 10:00 a.m. on the date specified in paragraph 22 above, initially evaluate them for responsiveness, and determine an Apparent Low Bidder as specified herein. Owner will not open Envelopes "B" publicly and, except for the Apparent Low Bidder's Envelope "B" (or as otherwise provided in this Document 00200), they will remain unopened.

**24. BID EVALUATION**

A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, unit prices, and other data, as may be requested in Document 00400 (Bid Form) or prior to the Notice of Award. Owner will also consider Bidders' qualifications.

**25. DETERMINATION OF APPARENT LOW BIDDER (ENVELOPE "A")**

- A. Apparent Low Bid will be based solely on the total amount of all Bid items based on assumptions contained in Document 00400 (Bid Form). All Bidders are required to submit Bids on all Bid items.
- B. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between written words and figures will be resolved in favor of the words.
- C. Quantities stated in the Bidding Documents are approximate only and are subject to correction upon final measurement of the Work, and are subject further to the rights reserved by Owner to increase or diminish the amount of work under any classification as advantages to design or construction needs require.

**26. EVALUATION OF BIDDER RESPONSIBILITY (ENVELOPE "B")**

- A. Owner may determine whether a Bidder is qualified in its sole discretionary judgment.
- B. Owner will open Apparent Low Bidder's Envelope "B" and check its contents for compliance with paragraph 19 of this Document 00200 and this paragraph 26. Owner will notify Apparent Low Bidder in writing of any deficiencies found and will provide Bidder the opportunity to respond in writing with reasonable clarifications but will not allow any changes in the nature of Bidder as a business entity.
- C. Written clarifications made by Bidder in response to Owner's requests for clarifications during the Bid evaluation process become part of the Bid.
- D. If any Apparent Low Bidder is determined to be non-responsive or non-responsible, Owner may open the next Apparent Low Bidder's Envelope "B" pursuant to any procedures determined in Owner's reasonable discretion, and proceed for all purposes as if this Apparent Low Bidder were the original Apparent Low Bidder.
- E. In order to evaluate Bidder's ability to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time, Owner may conduct reasonable investigations and reference checks of Bidder, proposed Subcontractors, suppliers and other persons and organizations as Owner deems necessary to assist in the evaluation of any Bid and to establish Bidder's responsibility, qualifications, financial ability, proposed Subcontractors, suppliers, and other persons and organizations. Submission of a Bid constitutes Bidder's consent to the foregoing. Owner shall have the right to consider information provided by sources other than Bidder. Owner shall also have the right to communicate directly with Bidder's surety regarding Bidder's bonds.
- F. Bidder's compliance with the minimum qualification requirements in this paragraph will be measured by the experience of both the Bidder itself as well as the Key Personnel identified by Bidder in Document 00450 (Statement of Qualifications for Construction Work) who will have responsible charge of the various major components of the Work. If Bidder subcontracts portions of the Work, Owner, in its determination of whether the minimum qualification requirements have been met, will consider the qualifications of the Subcontractor's Key Personnel identified by Bidder in Document 00450 (Statement of Qualifications for Construction Work).

- G. Except as otherwise provided in this Document 00200 or in Document 00450 (Statement of Qualification for Construction Work), Owner will make final determinations regarding Bidder responsibility based solely upon the SOQ submitted as part of Envelope "B" on Bid day.

**27. PUBLIC RECORDS ACT REQUESTS, BID INFORMATION, AND CONFIDENTIALITY WAIVER**

- A. Per the Public Records Act, Owner will make available to the public Bidder's SOQ (if Bidder's Envelope "B" is opened), all correspondence and written questions submitted during the Bid period, all Bid submissions opened in accordance with the procedures of this Document 00200, and all subsequent Bid evaluation information. All submissions not opened will remain sealed and eventually be returned to the submitter. Except as otherwise required by law, Owner will not disclose proprietary financial information submitted that has been designated confidential by Bidder (including but not limited to audited financial statements and Part C, Financial Information in Bidder's SOQ. Any such proprietary financial information that a Bidder believes should be exempted from disclosure shall be specifically identified and marked as such. Blanket-type identification by designating whole pages or sections shall not be permitted and shall be invalid.
- B. Upon a request for records regarding this Bid which specifically includes confidential information marked by Bidder in accordance with Paragraph A, above, Owner will notify Bidder within ten Days from receipt of the request. If Owner agrees that the information so marked is proprietary financial information exempt from disclosure, Owner shall refuse to disclose the information and Bidder shall take all appropriate legal action and defend Owner's refusal to produce the information in all forums. If Owner does not agree that the information so marked is exempt from disclosure, Owner will so notify Bidder of a specific time when, in response to the request, the records will be made available for inspection in accordance with the Public Records Act.
- C. By submitting a bid, Bidder shall be deemed to have waived any objections to the release of all other information and also to the release of any financial information that was not designated as confidential at the time the bid is submitted.

**28. OWNER'S RIGHT TO REJECT BIDS**

- A. Bidder's failure to submit all required documents strictly as required entitles Owner to reject the Bid as non-responsive.
- B. Owner will reject all Bids received after the specified time and will return such Bids to Bidders unopened.
- C. Owner will reject as non-responsive any Bid not submitted on the required forms.
- D. Owner reserves the right in its sole discretion to reject any Bid as non-responsive as a result of any error or omission in the Bid.
- E. Owner reserves the right to reject any Bid not clearly written.
- F. Owner will reject as non-responsive any Bid submitted without the necessary Bid security.
- G. Owner may reject any or all Bids and waive any informalities or minor irregularities in the Bids. Owner also reserves the right, in its discretion, to reject any or all Bids and to re-Bid the Project. Owner reserves the right to reject any or all nonconforming, non-responsive, unbalanced, or conditional Bids, and to reject the Bid of any Bidder if Owner believes that it

would not be in the best interest of Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner. For purposes of this paragraph, an “unbalanced Bid” is one having nominal prices for some Bid items and enhanced prices for other Bid items.

**29. NOTICE OF INTENT TO AWARD FOR CONSTRUCTION**

- A. Document 00505 (Notice of Intent to Award for Construction) will be posted at Owner’s Office and in the main lobby of the County of Sonoma Administration Building, 575 Administration Drive, Santa Rosa, California. Owner will use reasonable efforts to deliver an electronic copy of Document 00505 (Notice of Intent to Award for Construction) to all Bidders who submitted Bids no later than the Business Day after issuance, although any delay or failure to do so will not extend the Bid protest deadline described below.

**30. BID PROTESTS**

- A. Any Bid protest must be submitted in writing to Owner (Attention: Contract Administration), before 3:30 p.m. of the fifth Business Day following posting of Document 00505 (Notice of Intent to Award for Construction). Owner’s staff will determine official time and will call out the specified time in the Bid reception area of Owner’s Office, stating that the period for accepting Bid protests is closed.
- B. The initial protest document must contain a complete statement of the basis for the protest. The protest must refer to the specific portion of the document that forms the basis for the protest. The protest must include the name, address, and telephone number of the person representing the protesting party.
- C. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.
- D. The procedure and time limits set forth in this paragraph are mandatory and are Bidder’s sole and exclusive remedy in the event of Bid protest. Bidder’s failure to comply with these procedures shall constitute a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings. A Bidder may not rely on a protest submitted by another Bidder but must timely pursue its own protest.

**31. NOTICE OF AWARD**

- A. If the Contract is to be awarded, it will be awarded to the lowest responsible responsive Bidder. Following completion of all required Owner procedures and receipt of all Owner approvals, Owner will issue Document 00510 (Notice of Award) to successful Bidder.

**32. POST-NOTICE OF AWARD REQUIREMENTS**

- A. After Notice of Award, the successful Bidder must execute and submit the following documents as indicated below.
- B. Submit the following documents to Owner by 5:00 p.m. of the 20<sup>th</sup> Day following Notice of Award. Execution of Contract by Owner depends upon approval of these documents:

- 1) Document 00520 (Agreement): To be executed by successful Bidder. Submit four originals, each bearing an original signature on the signature page and initials on each page.
  - 2) Document 00611 (Construction Performance Bond): To be executed by successful Bidder and surety, in the amount set forth in Document 00611 (Construction Performance Bond). Submit four originals. Liquidated Damages are described in Document 00520 (Agreement).
  - 3) Document 00612 (Construction Labor and Material Payment Bond): To be executed by successful Bidder and surety, in the amount set forth in Document 00612 (Construction Labor and Material Payment Bond). Submit four originals.
  - 4) The Guaranty in the form set forth in Document 00630 (Guaranty). Submit four originals, each bearing an original signature.
  - 5) One complete set of documentary information received or generated by successful Bidder in preparation of Bid prices for its Bid, as set forth in Document 00670 (Escrow Bid Documents).
  - 6) Insurance certificates and endorsements required by Article 4 of Document 00700 (General Conditions). Submit one original set.
- C. Owner shall have the right to communicate directly with Apparent Low Bidder's proposed performance bond surety, to confirm the performance bond. Owner may elect to extend the time to receive faithful performance and labor and material payment bonds.
- 1) If Bidder exercises the option to open an Escrow Account, Owner and Contractor shall, at the time the account is opened, deliver to Escrow Agent a fully executed counterpart of Document 00680, Escrow Agreement for Security Deposits in Lieu of Retention.

### **33. FAILURE TO EXECUTE AND DELIVER DOCUMENTS**

- A. Successful Bidder's failure to submit the documents required herein, in a proper and timely manner, entitles Owner to rescind its award and to cause Bidder's Bid security to be forfeited as provided herein.
- B. If Bidder to whom Contract is awarded, within the period described in paragraph 32 of this Document 00200, fails or neglects to execute and deliver all required Contract Documents and file all required bonds, insurance certificates, and other documents, Owner may, in its sole discretion, foreclose on Bidder's surety bond, or deposit Bidder's cashier's check or certified check for collection, and retain the proceeds thereof as liquidated damages for Bidder's failure to enter into the Contract Documents. Bidder agrees that calculating the damages Owner may suffer as a result of Bidder's failure to execute and deliver all required Contract Documents would be extremely difficult and impractical and that the amount of Bidder's required Bid security shall be the agreed and presumed amount of Owner's damages. In addition, upon such failure, Owner may determine the next Apparent Low Bidder and proceed accordingly.

### **34. RETURN OF BID SECURITY**

- A. Owner may retain Bid security of other than the Apparent Low Bidder for a period of 60 Days after issuance of the Notice of Award. After award, Owner will return to the respective unsuccessful Bidders their Bid securities and Bid bonds.

**35. CONFORMED PROJECT MANUAL**

- A. Following Award of Contract, Owner may prepare a conformed Project Manual reflecting Addenda issued during bidding, which will, failing objection, constitute the approved Project Manual.

**36. MODIFICATION OF COMMENCEMENT OF WORK**

- A. Owner expressly reserves the right to modify the date for the Commencement of Work under the Contract and to independently perform and complete work related to the Project. Owner accepts no responsibility to Contractor for any delays attributed to its need to complete independent work at the Site.

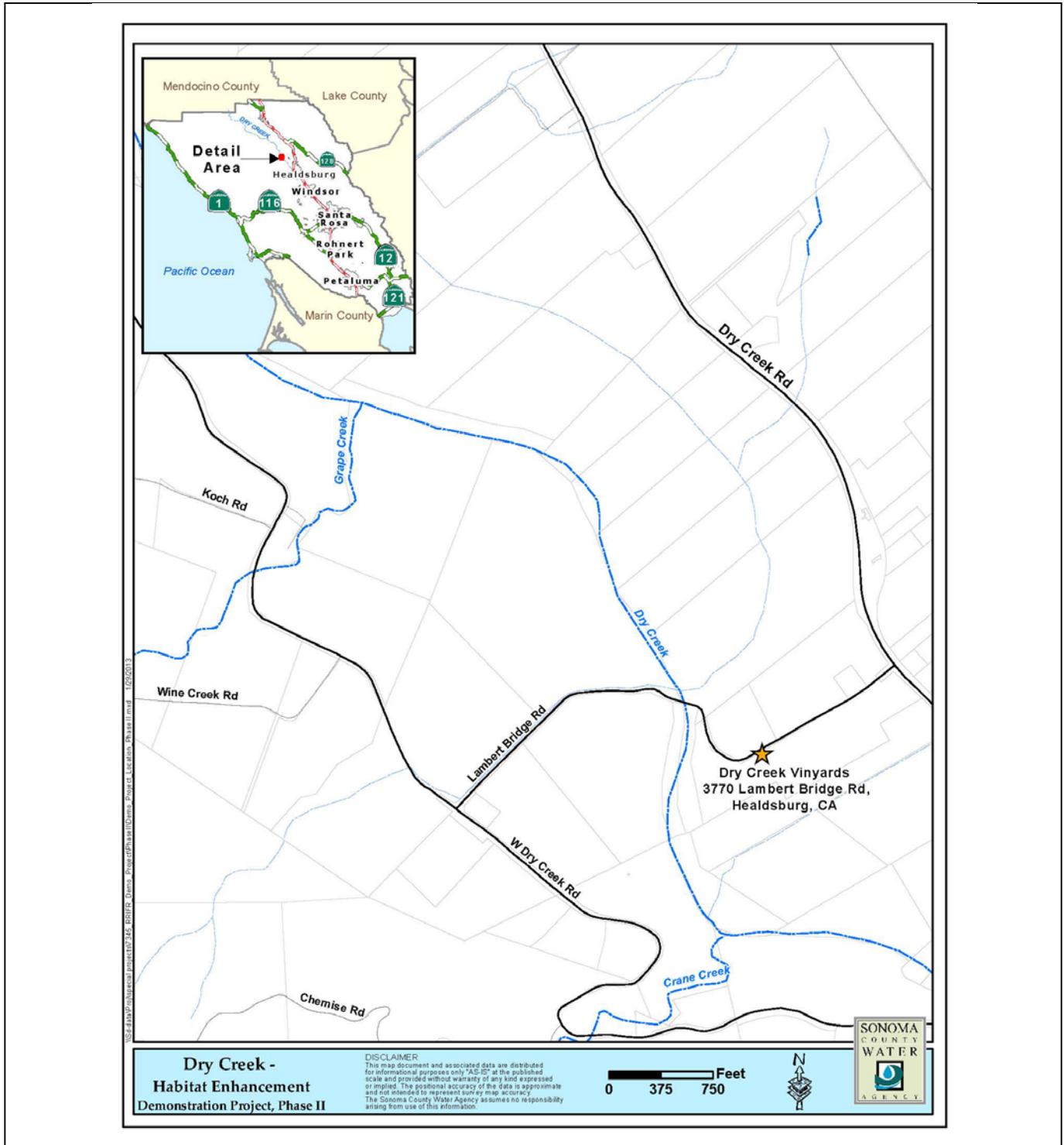
**37. EQUAL EMPLOYMENT OPPORTUNITY**

- A. Contractor shall comply with all applicable federal, state, and local laws, rules, and regulations in regard to nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, marital status, age, medical conditions, disability, or any other reason.

END OF DOCUMENT

DOCUMENT 00202

PRE-BID SITE VISIT VICINITY MAP

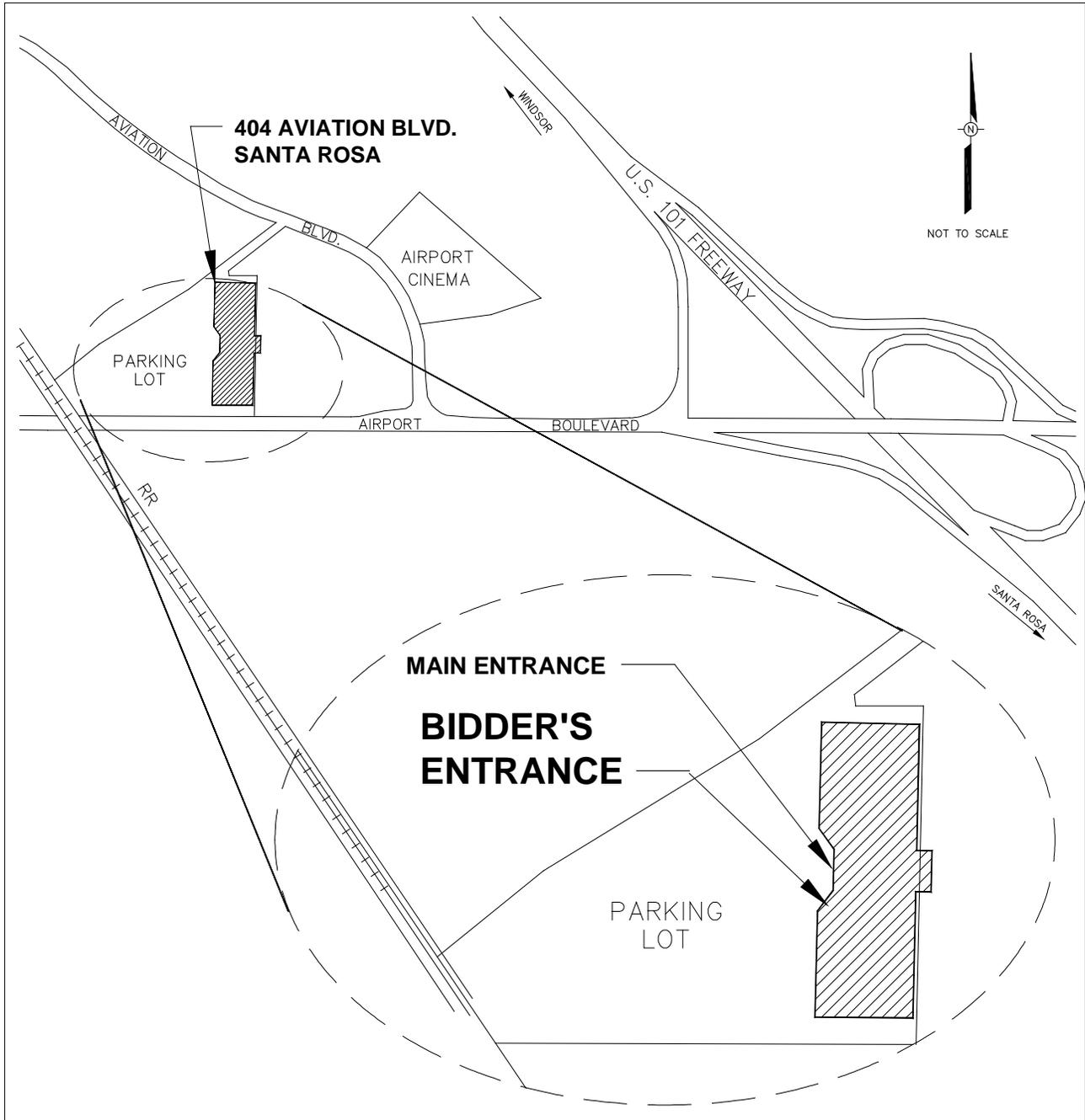


END OF DOCUMENT



DOCUMENT 00203

**BID SUBMITTAL VICINITY MAP**



END OF DOCUMENT



DOCUMENT 00210

**INDEMNITY AND RELEASE AGREEMENT**

Dated \_\_\_\_\_

POTENTIAL BIDDER: \_\_\_\_\_

OWNER: Sonoma County Water Agency

SITE: \_\_\_\_\_

PROJECT: Dry Creek Habitat Enhancement Demonstration Project, Phase II

In consideration of the above-referenced Owner’s permitting the undersigned potential bidder (“Bidder”) to have access to, and to conduct investigations, tests and/or inspections on, the Site, Bidder hereby agrees as follows:

1. To the greatest extent permitted by law, Bidder hereby releases, and shall defend, indemnify and hold harmless Owner, and its officers, employees, consultants, representatives, and agents, and all other parties having any other interest in the Site, against any claim or liability, including attorney’s fees, arising from or relating to any Site-related access, investigation, test, inspection and/or other activity conducted by Bidder or any of Bidder’s officers, employees, consultants, representatives, and/or agents, regardless of whether claim or liability is caused in part by the negligence of Owner or by any released and indemnified party.
2. Bidder hereby waives the provisions of California Civil Code Section 1542 which provides as follows:  
  

A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him, must have materially affected his settlement with the debtor.
3. Bidder shall repair any damage to the Site or adjacent property resulting from activities authorized hereunder, and return Site to its original condition as directed by Owner, and comply with and be subject to all other requirements and obligations described or referenced in Document 00320 (Geotechnical Data and Existing Conditions)
4. Attached hereto (or to be delivered separately before Bidder’s visit to the Site) is a certificate for comprehensive general liability insurance satisfying the requirements of Document 00700 (General Conditions).
5. Although this Indemnity and Release Agreement is not a Contract Document (see Document 00520 [Agreement]), it shall be fully effective and binding regardless of whether Bidder submits a Bid for the subject Project, is awarded a contract for the Project, or otherwise.

\_\_\_\_\_  
Name of Bidder

By: \_\_\_\_\_  
Signature

By: \_\_\_\_\_  
Signature

Its: \_\_\_\_\_  
Title (If Corporation: Chairman, President  
or Vice President)

Its: \_\_\_\_\_  
Title (If Corporation: Secretary, Assistant  
Secretary, Chief Financial Officer or  
Assistant Treasurer)

END OF DOCUMENT

## DOCUMENT 00320

**GEOTECHNICAL DATA AND EXISTING CONDITIONS****1. SUMMARY**

- A. This Document 00320 sets forth the terms and conditions under which Bidder may review, study, use, or rely upon geotechnical data at or contiguous to the Site, and existing conditions information concerning existing conditions and Underground Facilities at or contiguous to the Site. This Document 00320, the available geotechnical data, and the supplied existing conditions information are not Contract Documents.

**2. REPORT AND INFORMATION**

- A. Existence of Reports. Owner, its consultants, and prior contractors may have collected documents providing a general description of the Site and conditions of the Work. These documents may consist of geotechnical reports for and around the Site, contracts, contract specifications, tenant improvement contracts, as-built drawings, utility drawings, and information regarding Underground Facilities. These reports, documents and other information are not part of the Contract Documents.
- B. Inspection of Reports. Bidders may inspect geotechnical reports, documents, and information regarding existing conditions available at the Owner's Office, and may obtain copies at cost of reproduction and handling upon Bidder's payment for the costs. These reports, documents, and other information are not part of the Contract Documents. Nevertheless, by submitting a Bid, Bidder accepts full responsibility for reviewing, knowing and understanding the contents of all of these materials.
- C. Inclusion in Project Manual. Geotechnical reports may be included in the Project Manual and information regarding existing conditions may also be included in the Project Manual, but neither shall be considered part of the Contract Documents.
- D. Available Documentation. The following documentation is available for review for Contract Number 45-6.1-7 #3 through Owner:
1. Geotechnical Investigation Report:  
Dry Creek Habitat Enhancement Projects - Phase 3  
Sonoma County, California  
Sanders & Associates Geotechnical Engineering  
October 13, 2011

**3. USE OF INFORMATION ON EXISTING CONDITIONS**

- A. Aboveground Existing Conditions. Under no circumstances shall Owner be deemed to make a warranty or representation of existing aboveground conditions, as-built conditions, or other aboveground actual conditions verifiable by reasonable independent investigation. These conditions are verifiable by Bidder by the performance of its own independent investigation that Bidder must perform prior to bidding and Bidder must not rely on the information supplied by Owner regarding existing conditions. Bidder represents and agrees that in submitting its Bid, it is not relying on any information regarding existing conditions supplied by Owner.
- B. Underground Facilities. Information supplied regarding existing Underground Facilities at or contiguous to the Site is based on information furnished to Owner by others (e.g., the owners or builders of such Underground Facilities or others). Except as expressly set forth in this Document 00320, Owner does not assume responsibility for the accuracy,

completeness or thoroughness of this information, and Bidder is solely responsible for any interpretation or conclusion drawn from this information. Except as expressly set forth in this Document 00320, Owner will be responsible only for the general accuracy of information regarding Underground Facilities, and only for those Underground Facilities that are owned by Owner. This express assumption of responsibility applies only if Bidder has conducted the independent investigation required of it and discrepancies were not apparent.

#### **4. LIMITED RELIANCE PERMITTED ON CERTAIN GEOTECHNICAL INFORMATION**

- A. Geotechnical Data. Except as expressly set forth in this Document 00320, Owner does not warrant, and makes no representation regarding, the accuracy or thoroughness of any geotechnical data. Bidder represents and agrees that in submitting its Bid, it is not relying on any geotechnical data supplied by Owner, except as specifically set forth herein.
1. Bidder may rely upon the general accuracy of the "technical data" contained in the geotechnical reports and drawings identified above, but only insofar as it relates to subsurface conditions, provided Bidder has conducted the independent investigation required of it and discrepancies were not apparent. The term "technical data" in the referenced reports and drawings shall be limited as follows:
    - a. The term "technical data" shall include actual reported depths, reported quantities, reported soil types, reported soil conditions, and reported material, equipment, or structures that were encountered during subsurface exploration.
    - b. The term "technical data" does not include, and Bidder may not rely upon, any other data, interpretations, opinions or information shown or indicated in such drawings or reports that otherwise relate to subsurface conditions or described structures.
    - c. The term "technical data" shall not include the location of Underground Facilities.
    - d. Bidder may not rely on the completeness of reports and drawings for the purposes of bidding or construction. Bidder may rely upon the general accuracy of the "technical data" contained in such reports or drawings.
    - e. Bidder is solely responsible for any interpretation or conclusion drawn from any "technical data" or any other data, interpretations, opinions, or information contained in supplied geotechnical data.

#### **5. INVESTIGATIONS**

- A. Before submitting a Bid, each Bidder shall be responsible to obtain such additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site or otherwise, which may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Bidder and safety precautions and programs incident thereto or which Bidder deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of Contract Documents. Bidders shall advise Owner in writing during the Bid period of any questions, suppositions, inferences or deductions Bidders may have for Owner's review and response.
- B. Owner has provided time in the period prior to bidding for Bidder to perform these investigations.

#### **6. ACCESS TO SITE FOR INVESTIGATIONS**

- A. During the Pre-Bid Site Visit(s), Owner will provide each Bidder access to the Site to conduct such examinations, investigations, explorations, tests, and studies, as each Bidder

deems necessary for submission of a Bid. Bidders must fill all holes and clean up and restore the Site to its former conditions upon completion of such explorations, investigations, tests, and studies. Such investigations may be performed only under the provisions of Document 00200 (Instructions to Bidders) and Document 00700 (General Conditions) including, but not limited to, proof of insurance and obligation to indemnify against claims arising from such investigation work. Each Bidder shall supply all equipment required to perform any investigations as each Bidder deems necessary. Owner has the right to limit the number of pieces of machinery operating at one time due to safety concerns.

END OF DOCUMENT



DOCUMENT 00400

**BID FORM**

To be submitted as part of Envelope "A" by the time and date specified in Document 00200 (Instructions to Bidders), paragraph 1.

TO THE HONORABLE BOARD OF DIRECTORS OF THE SONOMA COUNTY WATER AGENCY

THIS BID IS SUBMITTED BY:

\_\_\_\_\_  
(Firm/Company Name)

Re: CONTRACT NUMBER 45-6.1-7 #3, Dry Creek Habitat Enhancement Demonstration Project, Phase II

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an agreement with the Sonoma County Water Agency, a public agency of the State of California ("Owner") in the form included in the Contract Documents, Document 00520 (Agreement), to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Sum and within the Contract Time indicated in this Bid and in accordance with all other terms and conditions of the Contract Documents.
2. Bidder accepts all of the terms and conditions of the Contract Documents, Document 00100 (Advertisement for Bids), and Document 00200 (Instructions to Bidders), including, without limitation, those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 90 Days after the day of Bid opening.
3. In submitting this Bid, Bidder represents:
  - (a) Bidder has examined all of the Contract Documents and all of the Addenda (receipt of all of which is hereby acknowledged). The Addenda are listed below.

Addendum Number	Addendum Date	Signature of Bidder

- (b) Bidder has visited the Site and performed all tasks, research, investigation, reviews, examinations, and analysis and given notices, regarding the Project and the Site, as set forth in Document 00520 (Agreement), Article 5.
- (c) Bidder has given Owner prompt written notice of all conflicts, errors, ambiguities, or discrepancies that it has discovered in or among the Contract Documents and as-built

drawings and actual conditions and the written resolution thereof through Addenda issued by Owner is acceptable to Contractor.

4. Based on the foregoing, Bidder proposes and agrees to fully perform the Work within the time stated and in strict accordance with the Contract Documents for the following sums of money listed in the following Schedule of Bid Prices:

SCHEDULE OF BID PRICES

All Bid items, including lump sums and unit prices, must be filled in completely. Bid items are described in Section 01100 (Summary of Work). Quote in figures only, unless words are specifically requested.

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1.	Bonds	XXXXXX	Lump Sum	XXXXX	\$
2.	Insurance	XXXXXX	Lump Sum	XXXXX	\$
3.	Safety Program and Implementation	XXXXXX	Lump Sum	XXXXX	\$
4.	Construction Material Waste Management Plan and Implementation	XXXXXX	Lump Sum	XXXXX	\$
5.	Storm Water Pollution Prevention Plan and Implementation	XXXXXX	Lump Sum	XXXXX	\$
6.	Mobilization/ Demobilization	XXXXXX	Lump Sum	XXXXX	\$
7.	Clearing and Grubbing	XXXXXX	Lump Sum	XXXXX	\$
8.	Temporary Access Improvements	XXXXXX	Lump Sum	XXXXX	\$
9.	Control of Water (Stream Diversion)	XXXXXX	Lump Sum	XXXXX	\$
10.	Control of Water (Dewatering)	XXXXXX	Lump Sum	XXXXX	\$
11.	Earthwork - Enhancement Area A*	13,150	Cubic Yard	\$	\$
12.	Earthwork - Enhancement Area B*	2,200	Cubic Yard	\$	\$
13.	Earthwork - Enhancement Area C*	12,450	Cubic Yard	\$	\$

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
14.	Earthwork - Wallace Property	XXXXXX	Lump Sum	XXXXX	\$
15.	Earthwork - Mascherini Property	XXXXXX	Lump Sum	XXXXX	\$
16.	Logs	637	Each	\$	\$
17.	Logs with Rootwads	371	Each	\$	\$
18.	Snags	311	Each	\$	\$
19.	Ballast Boulders (Owner furnished)	700	Each	\$	\$
20.	Ballast Boulders (Contractor furnished)	358	Each	\$	\$
21.	Streambed Boulders (Contractor furnished)	97	Each	\$	\$
22.	Cable Attachment, Log to Log	1,096	Each	\$	\$
23.	Cable Attachment, Log to Boulder	529	Each	\$	\$
24.	Storm Drain Outfall	XXXXXX	Lump Sum	XXXXX	\$
25.	Type 1 Slope Protection	40,000	Square Foot	\$	\$
26.	FES Lift (Type 2 and 3 Banks )	6,000	Square Foot	\$	\$
27.	FES Lift (Type 4 Bank)	13,000	Square Foot	\$	\$
28.	Live Stakes	1,000	Each	\$	\$
29.	½ Ton Riprap Backfill	2,000	Ton	\$	\$
30.	Riffles	12,000	Square Foot	\$	\$
31.	12" Diameter Ductile Iron Pipe	140	Linear Foot	\$	\$
32.	All Other Work	XXXXXX	Lump Sum	XXXXX	\$
<b>TOTAL BID PRICE</b>					\$
*Bid Items 11, 12, 13, (Earthwork A, B, And C), are designated as Final Pay Items.					

Total: \_\_\_\_\_  
 (Words)

5. Subcontractors for work included in all Bid items are listed on the attached Document 00430 (Subcontractors List).
6. The undersigned Bidder understands that Owner reserves the right to reject this Bid.
7. If written notice of the acceptance of this Bid, hereinafter referred to as Notice of Award, is mailed or delivered to the undersigned Bidder within the time described in paragraph 2 of this Document 00400 or at any other time thereafter unless the Notice of Award is withdrawn, the undersigned Bidder will execute and deliver the documents required by Document 00200 (Instructions to Bidders) within the times specified therein. These documents include, but are not limited to, Document 00520 (Agreement), Document 00611 (Construction Performance Bond), and Document 00612 (Construction Labor and Material Payment Bond).
8. Notice of Award or request for additional information may be addressed to the undersigned Bidder at the address set forth below.
9. The undersigned Bidder herewith encloses cash, a cashier's check, or certified check of or on a responsible bank in the United States, or a corporate surety bond furnished by a surety authorized to do a surety business in the State of California, in form specified in Document 00200 (Instructions to Bidders), in the amount of ten percent (10%) of the Total Bid Price and made payable to "Sonoma County Water Agency."
10. The undersigned Bidder agrees to commence Work under the Contract Documents on the date established in Document 00700 (General Conditions) and to complete all work within the time specified in Document 00520 (Agreement). The undersigned Bidder acknowledges that Owner has reserved the right to delay or modify the commencement date. The undersigned Bidder further acknowledges Owner has reserved the right to perform independent work at the Site, the extent of such work may not be determined until after the opening of the Bids, and that the undersigned Bidder will be required to cooperate with such other work in accordance with the requirements of the Contract Documents.
11. The undersigned Bidder agrees that, in accordance with Document 00700 (General Conditions), liquidated damages for failure to complete all Work in the Contract within the time specified in Document 00520 (Agreement) shall be as set forth in Document 00520 (Agreement).
12. The names of all persons interested in the foregoing Bid as principals are:  
  
(IMPORTANT NOTICE: If Bidder or other interested person is a corporation, give the legal name of corporation, state where incorporated, and names of president and secretary thereof; if a partnership, give name of the firm and names of all individual co-partners composing the firm; if Bidder or other interested person is an individual, give first and last names in full).

**NAME OF BIDDER:** \_\_\_\_\_  
Licensed in accordance with an act for the registration of Contractors, and with  
license number: \_\_\_\_\_ Expiration: \_\_\_\_\_.

\_\_\_\_\_  
Where incorporated, if applicable

\_\_\_\_\_  
Principals

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

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
Date of Execution

\_\_\_\_\_  
Place of Execution

NOTE: If Bidder is a corporation, set forth the legal name of the corporation together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation. If Bidder is a partnership, set forth the name of the firm together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership.

Business Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contractor's Representative(s), (name, title):

\_\_\_\_\_  
\_\_\_\_\_

Officers authorized to sign contracts:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Signature of Officer

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date of Execution

\_\_\_\_\_  
Place of Execution

Telephone Number(s):

---

Fax Number(s):

---

Email address(es):

---

Date of Bid:

---

END OF DOCUMENT

DOCUMENT 00411

**BOND ACCOMPANYING BID**

KNOW ALL BY THESE PRESENTS:

That the undersigned \_\_\_\_\_ [Name of Contractor] as Principal and the undersigned as Surety are held and firmly bound unto the SONOMA COUNTY WATER AGENCY, a public agency of the State of California ("Owner"), as obligee, in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) lawful money of the United States of America being at least ten percent (10%) of the aggregate amount of said Principal's base Bid, for the payment of which, well and truly to be made, we bind ourselves, our successors, executors, administrators, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the said Principal is submitting a Bid for Owner Contract Number 45-6.1-7 #3, Dry Creek Habitat Enhancement Demonstration Project, Phase II.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Bid submitted by the said Principal be accepted and the Contract be awarded to said Principal and said Principal shall within the required periods enter into the Contract so awarded and provide the required Construction Performance Bond, Construction Labor and Material Payment Bond, insurance certificates, and all other endorsements, forms, and documents required under Document 00200 (Instructions to Bidders), then this obligation shall be void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, in \_\_\_\_\_, California.

(Corporate Seal)

By

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

(Corporate Seal)

By

\_\_\_\_\_  
Attorney in Fact

(Evidence of execution shall be provided by Notarial Acknowledgement of the same, in accordance with California Civil Code section 1189, as amended January 1, 2008.)

END OF DOCUMENT





**General Liability:**

Carrier: \_\_\_\_\_

Address: \_\_\_\_\_

Phone and Fax: \_\_\_\_\_

Policy Number: \_\_\_\_\_

Policy Limits: \$ \_\_\_\_\_

A.M. Best Rating: \_\_\_\_\_

**Automobile Liability:**

Carrier: \_\_\_\_\_

Address: \_\_\_\_\_

Phone and Fax: \_\_\_\_\_

Policy Number: \_\_\_\_\_

Policy Limits: \$ \_\_\_\_\_

A.M. Best Rating: \_\_\_\_\_

**Professional Liability (if applicable, as required by Document 00800 [Supplementary Conditions]):**

Carrier: \_\_\_\_\_

Address: \_\_\_\_\_

Phone and Fax: \_\_\_\_\_

Policy Number: \_\_\_\_\_

Policy Limits: \$ \_\_\_\_\_

A.M. Best Rating: \_\_\_\_\_

**Environmental Impairment Liability (if applicable, as required by Document 00800 [Supplementary Conditions]):**

Carrier: \_\_\_\_\_

Address: \_\_\_\_\_

Phone and Fax: \_\_\_\_\_

Policy Number: \_\_\_\_\_

Policy Limits: \$ \_\_\_\_\_

A.M. Best Rating: \_\_\_\_\_

BIDDER CERTIFIES, UNDER PENALTY OF PERJURY, THAT THE FOREGOING INFORMATION IS CURRENT AND ACCURATE AND AUTHORIZES THE SONOMA COUNTY WATER AGENCY, AND ITS AGENTS AND REPRESENTATIVES TO OBTAIN A CREDIT REPORT AND/OR VERIFY ANY OF THE ABOVE INFORMATION.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

END OF DOCUMENT



DOCUMENT 00430

**SUBCONTRACTORS LIST**

Bidder submits the following information as to the subcontractors Bidder intends to employ if awarded the Contract.

Full Name of Subcontractor and Address of Mill or Shop	Email address of Subcontractor	Description of Work: Reference To Bid Items	Subcontractor's License No.

(Bidder to attach additional sheets if necessary)

END OF DOCUMENT



DOCUMENT 00450

**STATEMENT OF QUALIFICATIONS FOR CONSTRUCTION WORK**

STATEMENT OF QUALIFICATIONS CHECKLIST

This checklist is for Bidder's convenience and lists some of the completed documents Bidder shall ensure are submitted with Bidder's Statement of Qualifications.

- Letter of Assurance Regarding Performance and Payment Bonds (Document 00450, Attachment "A"). Modification of this form may result in rejection of the bid as non-responsive.
- Authorization to Contact Surety Form (Document 00450, Attachment "B")
- Statement of Qualifications Questionnaire (Document 00450, Attachment "C")
- Technical Resources identification and description
- Résumés of Key Personnel
- Cal/OSHA 300A log for 2012

(This page intentionally left blank)

## 1. REQUIRED CONTENTS OF SOQ SUBMISSION

- A. Financial Capacity. Owner reserves the right to require submission of audited or reviewed financial statements for the three most recently completed fiscal years for Bidder and each member of any proposed consortium or joint venture, prior to issuance of the Notice of Award. Also include audited or reviewed financial statements for the three most recently completed fiscal years for any parent company(ies) of Bidder and each member of any proposed consortium or joint venture.
- B. Capability to Provide Required Performance and Payment Bonds.
1. Include a completed "Letter of Assurance Regarding Performance and Payment Bonds" from Bidder's Surety in the form attached to this Document 00450 as Attachment "A";
  2. Include a completed "Authorization to Contact Surety" from Bidder in the form attached to this Document 00450 as Attachment "B."
- C. Human and Physical Resources. Identify, describe, and quantify for Bidder, and separately for Bidder's "designated Subcontractor(s)", the following technical resources for the Work:
1. For products or materials listed in the "Major Products List" (see Section 01330 [Submittal Procedures]), provide description and location of manufacturing facilities, naming products and quantifying production capacity and current demand;
  2. Description of field organization(s), naming skills and equipment;
  3. Description of safety program, quality control procedures, and safety experience; and
  4. Evidence of a valid California contractor's license and required licenses of all persons who are Key Personnel of the Bidder or any designated Subcontractor.
- D. Completed Questionnaire. Include a completed "Statement of Qualifications Questionnaire" in the form attached to this Document 00450 as Attachment "C." Add supplementary information if necessary.
- E. Résumés of Proposed Key Personnel. Include a resume for each named Key Personnel of Bidder, and Bidder's (including but not limited to the superintendent) designated Subcontractor(s), to include the following:
1. Name and proposed assignment of Key Personnel - do not include home addresses or phone numbers;
  2. Years of experience;
  3. Education - degrees, schools, and years obtained;
  4. Professional registration(s);
  5. Fluency in English (Yes/No);
  6. Experience directly related to above proposed assignment;
  7. At least three client references, including contact names, addresses, and telephone numbers; and
  8. Description of experience requirements as required by Document 00200 (Instructions to Bidders).
- F. Litigation History. Owner reserves the right to require submission of a description of litigation history for the past five years, including names of involved parties, nature of dispute, and disposition, prior to issuance of the Notice of Award.

## 2. GENERAL CONDITIONS

- A. General Conditions for Content. The SOQ shall be clear and concise to enable management-oriented personnel to make a thorough evaluation and arrive at a sound determination as to whether the SOQ meets Owner's requirements. To this end, the SOQ shall be so specific,

detailed, and complete as to demonstrate clearly and fully that the Bidder has a thorough understanding of and has demonstrated knowledge of the requirements to perform the Work (or applicable portion thereof).

- B. Explanations to SOQ. Any explanation requested by a Bidder regarding the meaning or interpretation of this Document 00450 shall be requested in writing in accordance with Document 00200 (Instructions to Bidders). Oral explanations or instructions will not be binding. Any information provided to any prospective Bidder concerning this Document 00450 will be furnished to all prospective Bidders as an Addendum to the Bidding Documents.

**3. DEFINITIONS**

- A. Except as set forth herein, all abbreviations and definitions of terms used in this Document 00450 are as set forth in Document 00700 (General Conditions) or Section 01420 (References and Definitions).

LETTER OF ASSURANCE REGARDING PERFORMANCE AND PAYMENT BONDS,  
AUTHORIZATION TO CONTACT SURETY FORM, AND STATEMENT OF QUALIFICATION  
QUESTIONNAIRE ARE ON FOLLOWING PAGES

**ATTACHMENT "A" -- Letter of Assurance Regarding Performance and Payment Bonds**

To Sonoma County Water Agency:

This letter is written by \_\_\_\_\_ [insert name of surety], a surety duly licensed to do business in the State of California, having a financial rating from A. M. Best Company of A or better. The purpose of this letter is to advise the Sonoma County Water Agency that this surety has agreed to provide \_\_\_\_\_ [insert name of Bidder] with the required performance and payment bonds in accordance with the requirements set forth in Documents 00611 (Construction Performance Bond) and 00612 (Construction Labor and Material Payment Bond) for the Dry Creek Habitat Enhancement Demonstration Project, Phase II, if the Bid submitted by said Bidder is accepted and the Contract is awarded to said Bidder. These performance and payment bonds shall be in the minimum penal sums provided therein.

\_\_\_\_\_  
Signature of Surety's Authorized Representative

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Date

**ATTACHMENT "B" -- Authorization to Contact Surety**

The Sonoma County Water Agency is hereby authorized to verify with the Surety identified in Attachment "A" that the Surety will, based upon Bid prices, issue the required bonds under the conditions stated in Attachment "A."

---

Signature of Bidder's Authorized Representative

---

Name and Title

---

Date

**ATTACHMENT "C" -- Statement of Qualifications Questionnaire**

Bidders shall complete the entire Statement of Qualification Questionnaire and submit it in accordance with Document 00200 (Instructions to Bidders) and this Document 00450. Failure to complete the questionnaire or inclusion of any false statement(s) shall be grounds for immediate disqualification. Label attachments with a reference to the related document, part, and question number.

**BIDDER'S CONTACT INFORMATION**

Company Name: \_\_\_\_\_

Owner of Company: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

**PART A: GENERAL INFORMATION**

Complete Part A before proceeding to Part B.

- 1. Does Bidder possess a valid and current California Contractor’s license for the Work proposed? Yes \_\_\_\_\_ No \_\_\_\_\_
- 2. Does Bidder have a minimum general liability insurance coverage as required by Document 00800 (Supplementary Conditions)? Yes \_\_\_\_\_ No \_\_\_\_\_

**Bidder will be immediately disqualified if any answer to questions 1 or 2 above is No.**

- 3. Has Bidder’s license been suspended or revoked at any time in the last five years? Yes \_\_\_\_\_ No \_\_\_\_\_
- 4. Has Bidder been “default terminated” by an owner (other than for convenience), or has a Surety completed a contract for Bidder within the last five years? Yes \_\_\_\_\_ No \_\_\_\_\_
- 5. Labor Commissioner assessments or determination of ineligibility to bid:
  - a. Has Bidder had a final civil wage and penalty assessment against it from the Labor Commissioner more than twice in the last five years? Yes \_\_\_\_\_ No \_\_\_\_\_
  - b. Has Bidder been determined by the Labor Commissioner to be ineligible to bid on public contracts more than twice in the last five years? Yes \_\_\_\_\_ No \_\_\_\_\_

**Bidder will be immediately disqualified if any answer to questions 3, 4, 5.a, or 5.b above is Yes.**

**PART B: SAFETY, PREVAILING WAGE, DISPUTES, AND BONDS**

**(SAFETY)**

1. Cal/OSHA Citations and Penalties: Yes\_\_\_\_\_ No\_\_\_\_\_
- If yes, please submit the following information to determine if Bidder meets the suggested safety criteria for this Project. Describe any Cal/OSHA citations and penalties that Bidder has received in the last three years. For each occurrence state whether the action by Cal/OSHA resulted in a citation, or a penalty, or both. Describe the activities that led to the action by Cal/OSHA. Provide dates, citation numbers, penalty amounts, and any other relevant information regarding the action by Cal/OSHA. Responses shall be machine written or neatly printed on company letterhead and signed by an officer of the company.

Separate sheet attached.

2. Experience Modification Rates:  
 What were Bidder’s Interstate Experience Modification Rates as established by the Workers’ Compensation Insurance Rating Bureau for the following three years?

2010: \_\_\_\_\_  
 2011: \_\_\_\_\_  
 2012: \_\_\_\_\_

Average of last three years: \_\_\_\_\_ (no rounding)

If Bidder was not eligible to obtain a formal rating from the Workers’ Compensation Insurance Rating Bureau for any of the years listed above, Bidder shall submit written documentation from its workers’ compensation insurance company that establishes what Bidder’s equivalent experience modification rate would be.

If average of last three years is greater than 1.1, Bidder shall provide an explanation here or as a separate attachment:

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3. Total Recordable Incident Rates (RIR):  
 What were Bidder’s Total Recordable Incident Rates (RIR) for each of the last three complete years?

2010: \_\_\_\_\_  
 2011: \_\_\_\_\_  
 2012: \_\_\_\_\_

Average of last three years: \_\_\_\_\_ (no rounding)

- 4. Total Lost Time Incident Rates (LTIR):  
What were Bidder’s Total Lost Time Incident Rates (LTIR) for each of the last three complete years?

2010: \_\_\_\_\_

2011: \_\_\_\_\_

2012: \_\_\_\_\_

Average of last three years: \_\_\_\_\_ (no rounding)

- 5. State the name of Bidder’s safety engineer/ manager or Site Safety Officer: \_\_\_\_\_  
Attach a résumé or outline of this individual’s safety and health qualifications and experience.

**(PREVAILING WAGE PROVISIONS)**

- 6. In the past five years, has Bidder been fined, penalized or otherwise found to have violated any prevailing wage or labor code provision? If yes, attach description of each occurrence.  
Yes \_\_\_\_\_ No \_\_\_\_\_

**(LICENSE PROVISIONS)**

- 7. In the past five years, has Bidder changed names or license numbers? If so, please state reason for change and list previous name(s) and any previous license number for any of Bidder’s principals.

Yes \_\_\_\_\_ No \_\_\_\_\_ Reason: \_\_\_\_\_

Previous name(s) and license number(s): \_\_\_\_\_

**(DISPUTES)**

- 8. In the past five years, has Bidder had any claims, litigation, or disputes resulting in mediation or arbitration, or termination for cause associated with any project? Yes \_\_\_\_\_ No \_\_\_\_\_  
If yes, attach description of each such instance including details of total claim amount, settlement amount, and owner’s name and phone number.

**(BONDING)**

- 9. Bonding Capacity - Provide documentation from Bidder’s surety identifying the following:

Name of bonding company/surety: \_\_\_\_\_

Name of Surety Agent: \_\_\_\_\_

Surety Agent address: \_\_\_\_\_

Surety Agent phone number: \_\_\_\_\_

Is surety a California-admitted surety? Yes \_\_\_\_\_ No \_\_\_\_\_

Is surety listed in the current edition of the California Department of the Treasury's Listing of approved sureties? Yes \_\_\_\_\_ No \_\_\_\_\_

List surety's A.M. Best Rating: \_\_\_\_\_

What is Bidder's total bonding capacity? \_\_\_\_\_

What percentage rate does Bidder pay for bonds? \_\_\_\_\_

**PART C: FINANCIAL INFORMATION**

1. Has Bidder ever reorganized under the protection of the bankruptcy laws?  
Yes \_\_\_ No \_\_\_ If yes, please state when \_\_\_\_\_
  
2. If Bidder has had the general liability carrier identified in Document 00420 (Bidder Registration Form) for less than five years, please provide additional information below for balance of the past five years.  
Agency Name: \_\_\_\_\_  
Contact Name: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Carrier: \_\_\_\_\_ Dates: \_\_\_\_\_ A.M. Best Rating: \_\_\_\_\_  
Carrier: \_\_\_\_\_ Dates: \_\_\_\_\_ A.M. Best Rating: \_\_\_\_\_  
Carrier: \_\_\_\_\_ Dates: \_\_\_\_\_ A.M. Best Rating: \_\_\_\_\_
  
3. Has Bidder ever had insurance terminated by a carrier? Yes \_\_\_ No \_\_\_  
If yes, explain on separate signed sheet marked with correlating cross-reference to this paragraph of the questionnaire.

**PART D: EXPERIENCE OF PRIME CONTRACTOR**

The unique nature of this Project requires prior similar experience of the firm and the Key Personnel assigned. Summarize similar project experience below and provide the detailed project information requested:

**Years of Experience.** List years of experience as a continuously operating entity engaged in the performance of similar work (seven years required, minimum): \_\_\_\_\_

**Key Personnel.** List Key Personnel who will be assigned to the Work:

Project Manager: \_\_\_\_\_

Project Superintendent: \_\_\_\_\_

Project Scheduler: \_\_\_\_\_

**Qualifying Projects.** List three construction projects of a similar nature and complexity, completed within the past seven years, with a contract dollar amount of at least \$3,000,000 each. For a project to be considered of similar nature and complexity for this subparagraph, it must include grading of at least 10,000 cubic yards; control of water during construction (and specifically measures intended to be used for this Project), including 1) diverting flows of 50 cfs or greater around work areas using bypass pipelines and cofferdams, 2) isolation of work areas using sheet piling, cofferdams or other barriers, and 3) local dewatering of saturated conditions. Names and references must be current and verifiable. If a separate sheet is used, it must contain all of the information shown on the table that follows:

**LIST OF QUALIFYING PROJECTS - PRIME CONTRACTOR**

	Project 1	Project 2	Project 3
Project Name			
Location			
Client			
Client Contact (name and phone number)			
Architect/Engineer			
Architect/Engineer Contact (name and phone number)			
Construction Manager, Project Manager, or Superintendent (name and phone number)			

Description of Project, Scope of Work performed			
Total cubic yards graded			
Size of diversion (CFS)			
Isolation of work measures used			
Local dewatering measures used			
Total Construction Cost			
Completion Date			

**PART E: EXPERIENCE OF DESIGNATED SUBCONTRACTOR(S)**

**Riparian Restoration Subcontractor**

The unique nature of this Project requires prior similar project experience of the designated Subcontractor(s), including the Bidder to the extent Bidder performs such Work itself, and the Key Personnel assigned. Summarize similar project experience below and provide the detailed project information requested:

**Key Personnel.** List Key Personnel that will be assigned to the Work:

Project Manager: \_\_\_\_\_

Project Superintendent: \_\_\_\_\_

**Qualifying Projects.** List three projects of a similar nature and complexity completed within the past five years. For a project to be considered of similar nature and complexity for this subparagraph, it must include:

1. Construction of at least 500 linear feet of stream channel habitat using typical aquatic habitat restoration techniques incorporating irregular natural materials such as boulders, alluvial streambed materials, logs, live cuttings and stakes, and biodegradable fabrics to conform with the channel design intent.
2. Specific construction and restoration techniques including:
  - Precision handling and placement of large logs and boulders to construct habitat and channel stabilization structures
  - Installing biotechnical slope stabilization measures such as soil lifts, crib walls, vegetated rip-rap and erosion control fabrics

If a separate sheet is used, it shall contain all of the information shown on the table that follows:

**LIST OF QUALIFYING PROJECTS**

	Project 1	Project 2	Project 3
Project Name			
Location			
Client			
Client Contact (name and phone number)			
Architect/Engineer			
Architect/Engineer Contact (name and phone number)			

Construction Manager, Project Manager, or Superintendent (name and phone number)			
Description of Project, Scope of Work performed			
Linear feet of channel habitat construction using natural materials, describe			
Placement of large logs and boulders to construct habitat and stabilization structures, describe			
Biotechnical slope stabilization measures, describe			
Completion Date			
Total Construction Cost			

Bidder certifies, under penalty of perjury, that the foregoing information is current and accurate and authorizes the Sonoma County Water Agency, and its agents and representatives to obtain a credit report and/or verify any of the above information.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

END OF DOCUMENT



DOCUMENT 00481

**NONCOLLUSION DECLARATION**  
PUBLIC CONTRACT CODE §7106

NONCOLLUSION DECLARATION TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID  
The undersigned declares:

I am the \_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing bid.  
[Office of Declarant] [Name of Bidder]

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, and 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 \_\_\_\_\_ [date], at \_\_\_\_\_ [city], \_\_\_\_\_ [state].

\_\_\_\_\_  
Signature of Principal

END OF DOCUMENT



## **CONTRACTING REQUIREMENTS**



DOCUMENT 00505

**NOTICE OF INTENT TO AWARD FOR CONSTRUCTION**

DATE POSTED: \_\_\_\_\_

CONTRACT NUMBER: 45-6.1-7 #3

PROJECT TITLE: Dry Creek Habitat Enhancement Demonstration Project, Phase II

Grant Davis, the General Manager of the Sonoma County Water Agency, intends to recommend to the Board of Directors of the Sonoma County Water Agency the award of the above-referenced Project to \_\_\_\_\_.

(Name of Contractor)

Grant Davis  
General Manager

By: \_\_\_\_\_

\_\_\_\_\_  
(Print name)

Title: \_\_\_\_\_

Date: \_\_\_\_\_

END OF DOCUMENT



DOCUMENT 00510

NOTICE OF AWARD

Dated \_\_\_\_\_

TO: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CONTRACT NO.: 45-6.1-7 #3

CONTRACT FOR:  
**Dry Creek Habitat Enhancement Demonstration Project, Phase II**

The Contract Sum of your contract is \_\_\_\_\_ Dollars (\$\_\_\_\_\_).

1. Several copies of the proposed Contract Documents listed below accompany this Notice of Award.
2. You must comply with the following conditions precedent by 5:00 p.m. of the 20<sup>th</sup> Day following the date of this Notice of Award, that is, by \_\_\_\_\_, \_\_\_\_\_ [month day, year].
  - a. Deliver to Owner four fully executed counterparts of Document 00520 (Agreement). Each copy of Document 00520 (Agreement) must bear your original signature on the signature page and your initials on each page.
  - b. Deliver to Owner four originals of Document 00611 (Construction Performance Bond), executed by you and your surety.
  - c. Deliver to Owner four originals of Document 00612 (Construction Labor and Material Payment Bond), executed by you and your surety.
  - d. Deliver to Owner original set of the insurance certificates with endorsements required under Document 00700 (General Conditions).
  - e. Deliver to Owner four original copies of Document 00630 (Guaranty), each executed by you.
  - f. Deliver to Owner one complete set of the documentary evidence received or generated by you in preparation of Bid prices for this Contract, as set forth in Document 00670 (Escrow Bid Documents).
3. Failure to comply with these conditions within the time specified will entitle Owner to consider your Bid abandoned, to annul this Notice of Award, and to declare your Bid security forfeited.
4. Within 21 Days after you comply with the conditions in paragraph 2 of this Document 00510, Owner will return to you one fully signed counterpart of Document 00520 (Agreement) with ten copies of the Project Manual (including Specifications and Drawings) and five sets of full-size Drawings.

5. Attend a Post-Notice of Award Meeting at Owner's office. This meeting will be scheduled for approximately one week after this Notice of Award is issued.
6. Upon commencement of Work, you and each of your Subcontractors shall certify and provide to Owner copies of payroll records on forms provided by the Division of Labor Standards Enforcement, in accordance with Section 1776 of the California Labor Code.

SONOMA COUNTY WATER AGENCY  
A Public Agency of the State of California ("Owner")

BY: \_\_\_\_\_  
Grant Davis, General Manager

END OF DOCUMENT

DOCUMENT 00520

AGREEMENT

P/T#: 7345-A6

THIS AGREEMENT, dated this \_\_\_ day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_ [Name of Contractor] whose place of business is located at

\_\_\_\_\_, [Address of Contractor] ("Contractor"), and the SONOMA COUNTY WATER AGENCY ("Owner"), a public agency of the State of California acting under and by virtue of the authority vested in the Owner by the laws of the State of California.

Owner is currently pursuing ISO 9001 and ISO 14001 certification. ISO provides a program for documentation and consistent implementation of an organization's processes in order to ensure repeatability, accuracy, and predictability while achieving optimal customer satisfaction. ISO 9001 refers to Quality Management Systems (QMS) and ISO 14001 refers to Environmental Management Systems (EMS). The QMS focuses on business performance and achieving success, while the EMS focuses on reducing Owner's environmental impact. Owner has integrated the two management systems into one system referred to as Owner's EMS/QMS. Contract Documents contain information and requirements related to ISO.

WHEREAS, Owner, by its Board Action on the \_\_\_ day of \_\_\_\_\_ awarded to Contractor the following Contract:

**CONTRACT NUMBER 45-6.1-7 #3  
Dry Creek Habitat Enhancement Demonstration Project, Phase II**

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, Contractor and Owner agree as follows:

**Article 1. Work**

- 1.1 Contractor shall complete all Work specified in the Contract Documents, in accordance with the Specifications, Drawings, and all other terms and conditions of the Contract Documents.

**Article 2. Notices to Owner**

- 2.1 Owner has designated Dennis Daly, Construction Management Section Manager, to act as Owner's Representative(s), who will represent Owner in performing Owner's duties and responsibilities and exercising Owner's rights and authorities in Contract Documents. Owner may change the individual(s) acting as Owner's Representative(s), or delegate one or more specific functions to one or more specific Owner's Representatives, including without limitation engineering, architectural, inspection and general administrative functions, at any time with notice and without liability to Contractor. Each Owner's Representative is the beneficiary of all Contractor obligations to Owner, including without limitation, all releases and indemnities.

2.2 Consulting Engineer: Inter-Fluve, Inc., 1020 Wasco Street, Suite 1, Hood River OR 97031. Consulting Engineer has no authority to act on behalf of Owner, to stop Work, to interpret conditions of the Contract, or to give direction to Contractor.

2.3 All notices or demands to Owner under the Contract Documents shall be to Owner’s Representative at:

Hard copies: 404 Aviation Blvd., Santa Rosa, California 95403-9019

Electronic: address to be provided to Contractor by Owner with Notice to Proceed or to such other person(s) and address(es) as Owner shall provide to Contractor.

**Article 3. Contract Time and Liquidated Damages**

3.1 Contract Time.

Contractor shall commence Work on the date established in the Notice to Proceed. Owner reserves the right to modify or alter the Commencement Date of the Work.

Contractor shall achieve Substantial Completion of the entire Work within 129 Days from the date when the Contract Time commences to run as provided in Document 00700 (General Conditions). Contractor shall achieve Final Completion of the entire Work and be ready for Final Payment in accordance with Section 01770 (Contract Closeout) 159 Days from the date when the Contract Time commences to run as provided in Document 00700 (General Conditions).

3.2 Liquidated Damages.

Owner and Contractor recognize that time is of the essence of this Agreement and that Owner will suffer financial loss in the form of Contract administration expenses (such as Project management and consultant expenses), if all or any part of the Work is not completed within the times specified above, plus any extensions thereof allowed in accordance with the Contract Documents. Consistent with Article 15 of Document 00700 (General Conditions), Contractor and Owner agree that because of the nature of the Project, it would be impractical or extremely difficult to fix the amount of actual damages incurred by Owner because of a delay in completion of all or any part of the Work. Accordingly, Owner and Contractor agree that as liquidated damages for delay Contractor shall pay Owner:

3.2.1 One thousand four hundred dollars (\$1,400.00) for each Day that expires after the time specified herein for Contractor to achieve Substantial Completion of the entire Work, until achieved.

3.2.2 Six hundred dollars (\$600.00) for each Day that expires after the time specified herein for Contractor to achieve Final Completion of the entire Work, until achieved.

These measures of liquidated damages shall apply cumulatively and except as provided below, shall be presumed to be the damages suffered by Owner resulting from delay in completion of the Work.

Liquidated damages for delay shall only cover administrative, overhead, interest on bonds, and general loss of public use damages suffered by Owner as a result of delay. Liquidated damages shall not cover the cost of completion of the Work, or other damages, including but not limited to damages resulting from Defective Work, lost revenues or costs of substitute facilities, penalties and other costs associated with violation of legal requirements or damages suffered by others who then seek to recover their damages from Owner (for example, delay claims of other contractors, subcontractors, tenants, or other third-parties), and defense costs thereof.

**Article 4. Contract Sum**

4.1 Owner shall pay Contractor the Contract Sum for completion of Work in accordance with Contract Documents as follows:

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
1.	Bonds	XXXXXX	Lump Sum	XXXXX	\$
2.	Insurance	XXXXXX	Lump Sum	XXXXX	\$
3.	Safety Program and Implementation	XXXXXX	Lump Sum	XXXXX	\$
4.	Construction Material Waste Management Plan and Implementation	XXXXXX	Lump Sum	XXXXX	\$
5.	Storm Water Pollution Prevention Plan and Implementation	XXXXXX	Lump Sum	XXXXX	\$
6.	Mobilization/ Demobilization	XXXXXX	Lump Sum	XXXXX	\$
7.	Clearing and Grubbing	XXXXXX	Lump Sum	XXXXX	\$
8.	Temporary Access Improvements	XXXXXX	Lump Sum	XXXXX	\$
9.	Control of Water (Stream Diversion)	XXXXXX	Lump Sum	XXXXX	\$
10.	Control of Water (Dewatering)	XXXXXX	Lump Sum	XXXXX	\$
11.	Earthwork - Enhancement Area A*	13,150	Cubic Yard	\$	\$
12.	Earthwork - Enhancement Area B*	2,200	Cubic Yard	\$	\$
13.	Earthwork - Enhancement Area C*	12,450	Cubic Yard	\$	\$

ITEM	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL
14.	Earthwork - Wallace Property	XXXXXX	Lump Sum	XXXXX	\$
15.	Earthwork - Mascherini Property	XXXXXX	Lump Sum	XXXXX	\$
16.	Logs	637	Each	\$	\$
17.	Logs with Rootwads	371	Each	\$	\$
18.	Snags	311	Each	\$	\$
19.	Ballast Boulders (Owner furnished)	700	Each	\$	\$
20.	Ballast Boulders (Contractor furnished)	358	Each	\$	\$
21.	Streambed Boulders (Contractor furnished)	97	Each	\$	\$
22.	Cable Attachment, Log to Log	1,096	Each	\$	\$
23.	Cable Attachment, Log to Boulder	529	Each	\$	\$
24.	Storm Drain Outfall	XXXXXX	Lump Sum	XXXXX	\$
25.	Type 1 Slope Protection	40,000	Square Foot	\$	\$
26.	FES Lift (Type 2 and 3 Banks )	6,000	Square Foot	\$	\$
27.	FES Lift (Type 4 Bank)	13,000	Square Foot	\$	\$
28.	Live Stakes	1,000	Each	\$	\$
29.	½ Ton Riprap Backfill	2,000	Ton	\$	\$
30.	Riffles	12,000	Square Foot	\$	\$
31.	12" Diameter Ductile Iron Pipe	140	Linear Foot	\$	\$
32.	All Other Work	XXXXXX	Lump Sum	XXXXX	\$
<b>TOTAL BID PRICE</b>					\$
*Bid Items 11, 12, 13, (Earthwork A, B, And C), are designated as Final Pay Items.					

**Article 5. Contractor’s Representations**

In order to induce Owner to enter into this Agreement, Contractor makes the following representations and warranties:

- 5.1 Contractor has visited the Site and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, and all local conditions, and federal, state and local laws and regulations that in any manner may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Contractor and safety precautions and programs incident thereto.
- 5.2 Contractor has examined thoroughly and understood all reports of exploration and tests of subsurface conditions, as-built drawings, drawings, products specifications or reports, available for Bidding purposes, of physical conditions, including Underground Facilities, which are identified in Document 00320 (Geotechnical Data and Existing Conditions) or which may appear in the Drawings. Contractor accepts the determination set forth in these Documents and Document 00700 (General Conditions) of the limited extent of the information contained in such materials upon which Contractor may be entitled to rely. Contractor agrees that except for the information so identified, Contractor does not and shall not rely on any other information contained in such reports and drawings.
- 5.3 Contractor has conducted or obtained and has understood all such examinations, investigations, explorations, tests, reports and studies (in addition to or to supplement those referred to in Section 5.2 of this Document 00520) that pertain to the subsurface conditions, as-built conditions, Underground Facilities and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, progress, performance or furnishing of Work, as Contractor considers necessary for the performance or furnishing of Work at the Contract Sum, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Document 00700 (General Conditions); and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by Contractor for such purposes.
- 5.4 Contractor has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

**Article 6. Contract Documents**

6.1 Contract Documents consist of the following documents, including all changes, Addenda, and Modifications thereto:

Document 00510	Notice of Award
Document 00520	Agreement
Document 00550	Notice to Proceed
Document 00611	Construction Performance Bond
Document 00612	Construction Labor and Material Payment Bond
Document 00630	Guaranty

Document 00650	Agreement and Release of Any and All Claims
Document 00660	Substitution Request Form
Document 00670	Escrow Bid Documents
Document 00680	Escrow Agreement for Security Deposit in Lieu of Retention
Document 00700	General Conditions
Document 00800	Supplementary Conditions
Document 00910	Addenda
Specifications	Divisions 1 through 16
Drawings listed in Sheet 1 of 46	

6.2 There are no Contract Documents other than those listed in this Document 00520, Article 6. Document 00320 (Geotechnical Data and Existing Conditions), and the information supplied through this document, are not Contract Documents. The Contract Documents may only be amended, modified or supplemented as provided in Document 00700 (General Conditions).

**Article 7. Miscellaneous**

- 7.1 Terms and abbreviations used in this Agreement are defined in Document 00700 (General Conditions) and Section 01420 (References and Definitions) and will have the meaning indicated therein.
- 7.2 It is understood and agreed that in no instance are the persons signing this Agreement for or on behalf of Owner or acting as an employee, agent, or representative of Owner, liable on this Agreement or any of the Contract Documents, or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of the Owner is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.
- 7.3 Contractor shall not assign any portion of the Contract Documents, and may subcontract portions of the Contract Documents only in compliance with the Subcontractor Listing Law, California Public Contract Code §4100 *et seq.* This Contract shall not be assigned or transferred without approval of Owner’s Board of Directors. Any such assignment or transfer without approval of Owner’s Board of Directors shall be void and of no force and effect.
- 7.4 The Contract Sum includes all allowances (if any).
- 7.5 In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, Contractor or Subcontractor offers and agrees to assign to the awarding body all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. §15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time Owner tenders final payment to Contractor, without further acknowledgment by the parties.
- 7.6 Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are deemed included in the Contract Documents and on file at Owner’s Office, and shall be made available to any interested party on request. Pursuant to

Section 1861 of the Labor Code, Contractor represents that it is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor shall comply with such provisions before commencing the performance of the Work of the Contract Documents.

7.7 Should any part, term or provision of this Agreement or any of the Contract Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality or unenforceability may be waived, they are hereby waived to the end that this Agreement and the Contract Documents may be deemed valid and binding agreements, enforceable in accordance with their terms to the greatest extent permitted by applicable law. In the event any provision not otherwise included in the Contract Documents is required to be included by any applicable law, that provision is deemed included herein by this reference (or, if such provision is required to be included in any particular portion of the Contract Documents, that provision is deemed included in that portion).

7.8 This Agreement and the Contract Documents shall be deemed to have been entered into in the County of Sonoma, State of California, and governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in Sonoma County.

7.9 Contractor accepts the claims procedure established by Article 12 of Document 00700 (General Conditions), as established under Section 930.2 et seq. of the California Government Code.

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IN WITNESS WHEREOF the parties have executed this Agreement in quadruplicate the day and year first above written.

Reviewed as to substance by Owner:

\_\_\_\_\_  
Grant Davis, Water Agency's General Manager

Reviewed as to funds by Owner:

\_\_\_\_\_  
Division Manager - Administrative Services

Reviewed as to form by County Counsel:

\_\_\_\_\_  
County Counsel

Certificates of Insurance and Guaranty are on file with and reviewed as to substance for Owner by:

\_\_\_\_\_  
Contract Administration/Inspection      Date

Attest:

\_\_\_\_\_  
Clerk of the Board of Directors

**CONTRACTOR:**

\_\_\_\_\_  
[Contractor's name]

By: \_\_\_\_\_  
[Signature]

\_\_\_\_\_  
[Please print name here]

Title: \_\_\_\_\_

[If Corporation: Chairman, President, or Vice President]

By: \_\_\_\_\_  
[Signature]

\_\_\_\_\_  
[Please print name here]

Title: \_\_\_\_\_

[If Corporation: Secretary, Assistant Secretary, Chief Financial Officer, or Assistant Treasurer]

**OWNER:**

SONOMA COUNTY WATER AGENCY, a  
Public Agency of the State of California

By: \_\_\_\_\_  
Chair, Board of Directors

END OF DOCUMENT



From this date forward, submit one electronic copy and at least one hard copy of all Project documents, unless otherwise required by the Contract Documents. Submit electronic copies to: [email address]\_\_\_\_\_.

Upon commencement of the Work, you and each of your Subcontractors shall certify and provide Owner copies of payroll records on forms provided by the Division of Labor Standards Enforcement, in accordance with Section 1776 of the California Labor Code.

SONOMA COUNTY WATER AGENCY,  
A Public Agency of the State of California

By : \_\_\_\_\_

Its: \_\_\_\_\_

[Notice to be sent in manner required by Contract Documents]

END OF DOCUMENT

DOCUMENT 00611

**CONSTRUCTION PERFORMANCE BOND**  
STANDARD EDITION

THIS CONSTRUCTION PERFORMANCE BOND ("Bond") dated \_\_\_\_\_, is in the penal sum of \_\_\_\_\_

[which is one hundred percent of the Contract Sum], and is entered into by and between the parties listed below to ensure the faithful performance of the Construction Contract listed below. This Bond consists of this page and the Bond Terms and Conditions, paragraphs 1 through 12, attached to this page. Any singular reference to \_\_\_\_\_ [insert name of Contractor] ("Contractor"), \_\_\_\_\_ [insert name of Surety] ("Surety"), Sonoma County Water Agency, a public agency of the State of California ("Owner") or other party shall be considered plural where applicable.

CONTRACTOR:

SURETY:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Principal Place of Business

\_\_\_\_\_  
City/State/Zip

\_\_\_\_\_  
City/State/Zip

CONSTRUCTION CONTRACT:

DRY CREEK HABITAT ENHANCEMENT DEMONSTRATION PROJECT, PHASE II  
CONTRACT NUMBER 45-6.1-7 #3

at Sonoma County, California

Signed \_\_\_\_\_, 20\_\_ in the Amount of \$ \_\_\_\_\_ (the "Penal Sum")

CONTRACTOR AS PRINCIPAL  
Company: (Corp. Seal)

SURETY  
Company: (Corp. Seal)

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Name and Title: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## BOND TERMS AND CONDITIONS

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to Owner for the complete and proper performance of the Construction Contract, which is incorporated herein by reference.
2. If Contractor completely and properly performs all of its obligations under the Construction Contract, Surety and Contractor shall have no obligation under this Bond.
3. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
  - 3.1 Owner has declared a Contractor Default under the Construction Contract pursuant to the terms of the Construction Contract; and
  - 3.2 Owner has agreed to pay the Balance of the Contract Sum:
    - 3.2.1 To Surety in accordance with the terms of this Bond and the Construction Contract;  
or
    - 3.2.2 To a contractor selected to perform the Construction Contract in accordance with the terms of this Bond and the Construction Contract.
4. When Owner has satisfied the conditions of paragraph 3, Surety shall promptly (within 30 Days) and at Surety's expense elect to take one of the following actions:
  - 4.1 Arrange for Contractor, with consent of Owner, to perform and complete the Construction Contract (but Owner may withhold consent, in which case the Surety must elect an option described in paragraphs 4.2, 4.3 or 4.4, below); or
  - 4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; provided, that Surety may not select Contractor as its agent or independent contractor without Owner's consent; or
  - 4.3 Undertake to perform and complete the Construction Contract by obtaining bids from qualified contractors acceptable to Owner for a contract for performance and completion of the Construction Contract and, upon determination by Owner of the lowest responsive and responsible Bidder, arrange for a contract to be prepared for execution by Owner and the contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract; and, if Surety's obligations defined in paragraph 6, below, exceed the Balance of the Contract Sum, then Surety shall pay to Owner the amount of such excess; or
  - 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances and, after investigation and consultation with Owner, determine in good faith its monetary obligation to Owner under paragraph 6, below, for the performance and completion of the Construction Contract and, as soon as practicable after the amount is determined,

tender payment therefor to Owner with full explanation of the payment's calculation. If Owner accepts Surety's tender under this paragraph 4.4, Owner may still hold Surety liable for future damages then unknown or unliquidated resulting from the Contractor Default. If Owner disputes the amount of Surety's tender under this paragraph 4.4, Owner may exercise all remedies available to it at law to enforce Surety's liability under paragraph 6, below.

5. If Surety does not proceed as provided in paragraph 4, above, then Surety shall be deemed to be in default on this Bond ten Days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond. At all times Owner shall be entitled to enforce any remedy available to Owner at law or under the Construction Contract including, without limitation, and by way of example only, rights to perform work, protect Work, mitigate damages, advance critical Work to mitigate schedule delay, or coordinate Work with other consultants or contractors.
6. Surety's monetary obligation under this Bond is limited by the amount of this Bond identified herein as the Penal Sum. This monetary obligation shall augment the Balance of the Contract Sum. Subject to these limits, Surety's obligations under this Bond are commensurate with the obligations of Contractor under the Construction Contract. Surety's obligations shall include, but are not limited to:
  - 6.1 The responsibilities of Contractor under the Construction Contract for completion of the Construction Contract and correction of Defective Work;
  - 6.2 The responsibilities of Contractor under the Construction Contract to pay liquidated damages, and for damages for which no liquidated damages are specified in the Construction Contract, actual damages caused by non-performance of the Construction Contract including, but not limited to, all valid and proper backcharges, offsets, payments, indemnities, or other damages;
  - 6.3 Additional legal, design professional and delay costs resulting from Contractor Default or resulting from the actions or failure to act of the Surety under paragraph 4, above (but excluding attorney's fees incurred to enforce this Bond).
7. No right of action shall accrue on this Bond to any person or entity other than Owner or its successors or assigns.
8. Surety hereby waives notice of any change, alteration or addition to the Construction Contract or to related subcontracts, purchase orders and other obligations, including changes of time. Surety consents to all terms of the Construction Contract, including provisions on changes to the Contract. No extension of time, change, alteration, Modification, deletion, or addition to the Contract Documents, or of the Work required thereunder, shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond.
9. Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction where a proceeding is pending between Owner and Contractor regarding the Construction Contract, or in the courts of the County of Sonoma, or in a court of competent jurisdiction in the location in which the Work is located. Communications from

Owner to Surety under paragraph 3.1 of this Bond shall be deemed to include the necessary agreements under paragraph 3.2 of this Bond unless expressly stated otherwise.

10. All notices to Surety or Contractor shall be mailed or delivered (at the address set forth on the signature page of this Bond), and all notices to Owner shall be mailed or delivered as provided in Document 00520 (Agreement). Actual receipt of notice by Surety, Owner or Contractor, however accomplished, shall be sufficient compliance as of the date received at the foregoing addresses.
11. Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein.
12. Definitions.
  - 12.1 Balance of the Contract Sum: The total amount payable by Owner to Contractor pursuant to the terms of the Construction Contract after all proper adjustments have been made under the Construction Contract, for example, deductions for progress payments made, and increases/decreases for approved Modifications to the Construction Contract.
  - 12.2 Construction Contract: The agreement between Owner and Contractor identified on the signature page of this Bond, including all Contract Documents and changes thereto.
  - 12.3 Contractor Default: Material failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract including, but not limited to, "default" or any other condition allowing a termination for cause as provided in Document 00700 (General Conditions).
  - 12.4 Owner Default: Material failure of Owner, which has neither been remedied nor waived, to pay Contractor progress payments due under the Construction Contract or to perform other material terms of the Construction Contract, if such failure is the cause of the asserted Contractor Default and is sufficient to justify Contractor termination of the Construction Contract.

END OF DOCUMENT

DOCUMENT 00612

**CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND**  
STANDARD EDITION

THIS CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND ("Bond") is dated \_\_\_\_\_, is in the penal sum of \_\_\_\_\_

[one hundred percent of the Contract Sum, and is entered into by and between the parties listed below to ensure the payment of claimants under the Construction Contract listed below. This Bond consists of this page and the Bond Terms and Conditions, paragraphs 1 through 13, attached to this page. Any singular reference to \_\_\_\_\_ [insert name of Contractor] ("Contractor"), \_\_\_\_\_ [insert name of Surety] ("Surety"), the Sonoma County Water Agency, a public agency of the State of California ("Owner") or other party shall be considered plural where applicable.

CONTRACTOR:

SURETY:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
Principal Place of Business

\_\_\_\_\_  
City/State/Zip

\_\_\_\_\_  
City/State/Zip

CONSTRUCTION CONTRACT:

DRY CREEK HABITAT ENHANCEMENT DEMONSTRATION PROJECT, PHASE II  
CONTRACT NUMBER 45-6.1-7 #3

at Sonoma County, California

Signed \_\_\_\_\_, 20\_\_ in the Amount of \$ \_\_\_\_\_ (the "Penal Sum")

CONTRACTOR AS PRINCIPAL  
Company: (Corp. Seal)

SURETY  
Company: (Corp. Seal)

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

Name and Title: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**BOND TERMS AND CONDITIONS**

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to Owner and to Claimants, to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.
2. With respect to Owner, this obligation shall be null and void if Contractor:
  - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants; and
  - 2.2 Defends, indemnifies and holds harmless Owner from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Construction Contract, provided Owner has promptly notified Contractor and Surety (at the address set forth on the signature page of this Bond) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to Contractor and Surety, and provided there is no Owner Default.
3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly through its Subcontractors, for all sums due Claimants. If Contractor or its Subcontractors, however, fail to pay any of the persons named in Section 9100 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to Work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of Contractor or Subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such Work and labor, then Surety shall pay for the same, and also, in case suit is brought upon this Bond, a reasonable attorney's fee, to be fixed by the court.
4. Consistent with the California Mechanic's Lien Law, Civil Code §8000, *et seq.*, Surety shall have no obligation to Claimants under this Bond unless the Claimant has satisfied all applicable notice requirements.
5. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety under this Bond.
6. Amounts due Contractor under the Construction Contract shall be applied first to satisfy claims, if any, under any Construction Performance Bond and second, to satisfy obligations of Contractor and Surety under this Bond.
7. Owner shall not be liable for payment of any costs, expenses, or attorney's fees of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
8. Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations. Surety further hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Construction Contract, or to the Work to be performed thereunder, or materials or

equipment to be furnished thereunder or the Specifications accompanying the same, shall in any way affect its obligations under this Bond, and it does hereby waive any requirement of notice or any such change, extension of time, alteration or addition to the terms of the Construction Contract or to the Work or to the Specifications or any other changes.

9. Suit against Surety on this Bond may be brought by any Claimant, or its assigns, at any time after the Claimant has furnished the last of the labor or materials, or both, but, per Civil Code §9558, must be commenced before the expiration of six months after the period in which stop notices may be filed as provided in Civil Code §9356.
10. All notices to Surety or Contractor shall be mailed or delivered (at the address set forth on the signature page of this Bond), and all notices to Owner shall be mailed or delivered as provided in Document 00520 (Agreement). Actual receipt of notice by Surety, Owner or Contractor, however accomplished, shall be sufficient compliance as of the date received at the foregoing addresses.
11. This Bond has been furnished to comply with the California Mechanic's Lien Law including, but not limited to, Civil Code §§9550, 9554, *et seq.* Any provision in this Bond conflicting with said statutory requirements shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirements shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
12. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.
13. Definitions.
  - 13.1.1 Claimant: An individual or entity having a direct contract with Contractor or with a Subcontractor of Contractor to furnish labor, materials or equipment for use in the performance of the Contract, as further defined in California Civil Code §9100. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a stop notice might be asserted. The term Claimant shall also include the Unemployment Development Department as referred to in Civil Code §9554(b).
  - 13.1.2 Construction Contract: The agreement between Owner and Contractor identified on the signature page of this Bond, including all Contract Documents and changes thereto.
  - 13.1.3 Owner Default: Material failure of Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract, provided that failure is the cause of the failure of Contractor to pay the Claimants and is sufficient to justify termination of the Construction Contract.

END OF DOCUMENT



DOCUMENT 00630

**GUARANTY**

To the SONOMA COUNTY WATER AGENCY, for construction of

DRY CREEK HABITAT ENHANCEMENT DEMONSTRATION PROJECT, PHASE II

Sonoma County, California

The undersigned guarantees all construction performed on this Project and also guarantees all material and equipment incorporated therein.

Contractor hereby grants to Owner for a period of one year following the date of Final Acceptance of the Work completed, or such longer period specified in the Contract Documents, its unconditional warranty of the quality and adequacy of all of the Work including, without limitation, all labor, materials and equipment provided by Contractor and its Subcontractors of all tiers in connection with the Work.

Neither final payment nor use or occupancy of the Work performed by the Contractor shall constitute an acceptance of Work not done in accordance with this Guaranty or relieve Contractor of liability in respect to any express warranties or responsibilities for faulty materials or workmanship. Contractor shall remedy any defects in the Work and pay for any damage resulting therefrom, which shall appear within one year, or longer if specified, from the date of Final Acceptance of the Work completed.

If within one year after the date of Final Acceptance of the Work completed, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work is found to be Defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, correct such Defective Work. Contractor shall remove any Defective Work rejected by Owner and replace it with Work that is not Defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Contractor fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the Defective Work corrected or the rejected Work removed and replaced. Contractor shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Contractor fails to correct Defective Work, or defects are discovered outside the correction period, Owner shall have all rights and remedies granted by law.

Inspection of the Work shall not relieve Contractor of any of its obligations under the Contract Documents. Even though equipment, materials, or Work required to be provided under the Contract Documents have been inspected, accepted, and estimated for payment, Contractor shall, at its own expense, replace or repair any such equipment, material, or Work found to be Defective or otherwise not to comply with the requirements of the Contract Documents up to the end of the guaranty period.

All abbreviations and definitions of terms used in this Agreement shall have the meanings set forth in the Contract Documents, including, without means of limitation, Document 00700 (General Conditions) and Section 01420 (References and Definitions).

The foregoing Guaranty is in addition to any other warranties of Contractor contained in the Contract Documents, and not in lieu of, any and all other liability imposed on Contractor under the Contract Documents and at law with respect to Contractor's duties, obligations, and performance under the Contract Documents. In the event of any conflict or inconsistency between the terms of this Guaranty and any warranty or obligation of the Contractor under the Contract Documents or at law, such inconsistency or conflict shall be resolved in favor of the higher level of obligation of the Contractor.

\_\_\_\_\_  
[Contractor's name]

By: \_\_\_\_\_  
[Signature]

\_\_\_\_\_  
[Please print name here]

Title: \_\_\_\_\_

Business Address: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00650

**AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS**

THIS AGREEMENT AND RELEASE OF ANY AND ALL CLAIMS ("Agreement and Release"), made and entered into this \_\_\_\_\_ [date] day of \_\_\_\_\_ [month], \_\_\_\_\_ [year], by and between the Sonoma County Water Agency, a public agency of the State of California ("Owner"), and \_\_\_\_\_ [name of Contractor] ("Contractor"), whose place of \_\_\_\_\_ business \_\_\_\_\_ is \_\_\_\_\_ at \_\_\_\_\_ [address of Contractor].

RECITALS

- A. Owner and Contractor entered into Contract Number 45-6.1-7 #3 (the "Contract").
- B. The Work under the Contract has been completed.

Now, therefore, it is mutually agreed between Owner and Contractor as follows:

AGREEMENT

- 1. Contractor will not be assessed liquidated damages except as detailed below:

Original Contract Sum	\$ _____
Modified Contract Sum	\$ _____
Payment to Date	\$ _____
Liquidated Damages	\$ _____
Payment Due Contractor	\$ _____

- 2. Subject to the provisions of this Agreement and Release, Owner will forthwith pay to Contractor the sum of \$ \_\_\_\_\_ Dollars and \_\_\_\_\_ Cents (\$ \_\_\_\_\_) under the Contract, less any amounts withheld under the Contract or represented by any Notice to Withhold Funds on file with Owner as of the date of such payment.

- 3. Contractor acknowledges and hereby agrees that there are no unresolved or outstanding claims in dispute against Owner arising from the Contract, except for the claims described in paragraph 4 of this Document 00650. It is the intention of the parties in executing this Agreement and Release that this Agreement and Release shall be effective as a full, final and general release of all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities of Contractor against Owner, and all of its agents, employees, consultants, inspectors, representatives, assignees and transferees, except for the Disputed Claims set forth in paragraph 4 of this Document 00650. Nothing in this Agreement and Release shall limit or modify Contractor’s continuing obligations described in paragraph 6 of this Document 00650.
- 4. The following claims submitted under Document 00700 (General Conditions), Article 12, are disputed (hereinafter, the “Disputed Claims”) and are specifically excluded from the operation of this Agreement and Release:

<u>Claim No.</u>	<u>Date Submitted</u>	<u>Description of Claim</u>	<u>Amount of Claim</u>
------------------	-----------------------	-----------------------------	------------------------

**[Insert information, including attachment if necessary]**

- 5. Consistent with California Public Contract Code Section 7100, Contractor hereby agrees that, in consideration of the payment set forth in paragraph 2 of this Document 00650, Contractor hereby releases and forever discharges Owner, and all of its agents, employees, consultants, inspectors, assignees and transferees from any and all liability, claims, demands, actions or causes of action of whatever kind or nature arising out of or in any way concerned with the Work under the Contract.
- 6. Guarantees and warranties for the Work, and any other continuing obligation of Contractor, shall remain in full force and effect as specified in the Contract Documents.
- 7. Contractor shall immediately defend, indemnify and hold harmless Owner, any Owner’s Representatives, Engineer, and all of their agents, employees, consultants, inspectors, assignees and transferees, from any and all claims, demands, actions, causes of action, obligations, costs, expenses, damages, losses and liabilities that may be asserted against them by any of Contractor’s suppliers and/or Subcontractors of any tier and/or any suppliers to them for any and all labor, materials, supplies and equipment used, or contemplated to be used in the performance of the Contract, except for the Disputed Claims set forth in paragraph 4 of this Document 00650.
- 8. Contractor hereby waives the provisions of California Civil Code Section 1542, which provide as follows:

A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release,

which if known by him, must have materially affected his settlement with the debtor.

9. The provisions of this Agreement and Release are contractual in nature and not mere recitals and shall be considered independent and severable, and if any such provision or any part thereof shall be at any time held invalid in whole or in part under any federal, state, county, municipal or other law, ruling, or regulation, then such provision, or part thereof shall remain in force and effect only to the extent permitted by law, and the remaining provisions of this Agreement and Release shall also remain in full force and effect, and shall be enforceable.
10. Contractor represents and warrants that it is the true and lawful owner of all claims and other matters released pursuant to this Agreement and Release, and that it has full right, title and authority to enter into this instrument. Each party represents and warrants that it has been represented by counsel of its own choosing in connection with this Agreement and Release.
11. All rights of Owner shall survive completion of the Work or termination of the Contract, and execution of this Agreement and Release.

\*\*\* CAUTION: THIS IS A RELEASE - READ BEFORE EXECUTING \*\*\*

SONOMA COUNTY WATER AGENCY,  
A Public Agency of the State of California

By: \_\_\_\_\_

Its: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Clerk of the Board of Directors

**[CONTRACTOR]**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Its: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Its: \_\_\_\_\_

REVIEWED AS TO FORM:

\_\_\_\_\_  
County Counsel

\_\_\_\_\_, 20 \_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00660

**SUBSTITUTION REQUEST FORM**

During Bid Period To: Greg Guensch Sonoma County Water Agency Fax: 707-524-3782	After Award of Contract To: Construction Management Section Sonoma County Water Agency Fax: 707-524-3791
--	---

Project: Dry Creek Habitat Enhancement Demonstration Project, Phase II

Bidder: \_\_\_\_\_

Subcontractor/Supplier: \_\_\_\_\_

Drawing Sheet Reference/Detail No: \_\_\_\_\_

The undersigned Bidder submits for consideration the following equipment instead of the specified item for the above Project:

<u>Section</u>	<u>Paragraph</u>	<u>Specified Item</u>
_____	_____	_____
_____	_____	_____

Proposed Substitution: \_\_\_\_\_  
\_\_\_\_\_

The undersigned encloses the information required herein. If this Document 00660 is being submitted by a Bidder wishing to use "equal" item(s) as provided in Document 00200 (Instructions to Bidders), the undersigned Bidder must also enclose the technical information (other than cost) otherwise required for a post-Award of Contract Request for Substitution ("RFS") under Section 01600 (Product Requirements). However, if this Document 00660 is being submitted under provisions of Contract Documents after Award of Contract, the undersigned Contractor must include all information required under Section 01600 (Product Requirements).

The undersigned has (a) attached manufacturer's literature, including complete technical data and laboratory test results, if applicable, (b) attached an explanation of why proposed substitution is a true equivalent to specified item, (c) included complete information on changes to Contract Documents that the proposed substitution will require for its proper installation, and (d) filled in the blanks below:

- A. Does the substitution affect dimensions shown on Drawings? (If yes, please explain)  
\_\_\_\_\_

B. Are the manufacturer's guarantees and warranties on the proposed substitution items identical to those on the specified items? If there are differences, please specify each and every difference in detail.

\_\_\_\_\_

C. What effect does the substitution have on other contractors, trades, or suppliers?

\_\_\_\_\_

D. What are the differences between the proposed substitution and the specified item? If proposed substitution has a color or pattern, provide a color board showing proposed substitution in relation to the other adjacent colors and patterns.

\_\_\_\_\_

E. Will granting the requested substitution cause any schedule delay? (If yes, please explain)

\_\_\_\_\_

The undersigned Bidder certifies that the function, appearance, and quality of the proposed substitution are equivalent or superior to those of the specified item.

Submitted by:

\_\_\_\_\_  
Bidder

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip

Telephone: \_\_\_\_\_

Date: \_\_\_\_\_

For Use by Owner:

\_\_\_ Accepted      \_\_\_ Accepted as Noted

\_\_\_ Not Accepted      \_\_\_ Received Too Late

By: \_\_\_\_\_  
Owner's Representative

Date: \_\_\_\_\_

Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

END OF DOCUMENT

DOCUMENT 00670

**ESCROW BID DOCUMENTS**

1. Requirements for Escrow Bid Documents.

- a. Within the time period established in Document 00200 (Instructions to Bidders), Contractor shall submit to Owner a set of Escrow Bid Documents as defined in paragraph 2 below. Escrow Bid Documents will be used only in the manner and for the purposes described in this Document 00670.
- b. The submission of the Escrow Bid Documents, as with the bonds and insurance documents required under Document 00200 (Instructions to Bidders), is considered an essential part of the Contract award. Should Contractor fail to make the submission within the allowed time specified, Contractor may be deemed to have failed to enter into the Contract, Contractor shall forfeit the amount of its Bid security accompanying Contractor's Bid, and Owner may award the Contract to the next lowest responsive responsible Bidder.
- c. NO PAYMENTS WILL BE MADE, NOR WILL OWNER ACCEPT CHANGE ORDER REQUESTS UNTIL THE ABOVE-REQUIRED INFORMATION IS SUBMITTED AND APPROVED. ALTERNATIVELY, OWNER MAY DECLARE THE BID NON-RESPONSIVE.
- d. Contractor shall submit the Escrow Bid Documents, in person by an authorized representative of the Contractor, to:

Construction Management Section  
Sonoma County Water Agency  
404 Aviation Boulevard  
Santa Rosa, California

2. Scope of Escrow Bid Documents.

- a. Within the time period specified in Document 00200 (Instructions to Bidders), Contractor shall submit one copy of all documentary information received or generated by Contractor in preparation of Bid prices for the Contract Documents, as specified in paragraphs 5 and 6 of this Document 00670. This material is referred to in this Document 00670 as the "Escrow Bid Documents." Contractor's Escrow Bid Documents will be held in escrow as provided in this Document 00670.
- b. Contractor represents and agrees, as a condition of award of the Contract, that the Escrow Bid Documents constitute all written information used in the preparation of its Bid, and that no other written Bid preparation information shall be considered in resolving disputes or claims or may be considered in legal proceedings. Contractor also agrees that nothing in the Escrow Bid Documents shall change or modify the terms or conditions of the Contract Documents. Contractor is advised that the Escrow Bid Documents will only be used as a guide in the resolution of disputes and claims.

3. Ownership of Escrow Bid Documents.
  - a. The Escrow Bid Documents are, and shall always remain, the property of Contractor, subject to joint review by Owner and Contractor, as provided in this Document 00670.
  - b. Owner stipulates and expressly acknowledges that the Escrow Bid Documents constitute trade secrets. This acknowledgement is based on Owner's express understanding that the information contained in the Escrow Bid Documents is not known outside Contractor's business, is known only to a limited extent and only by a limited number of Contractor's Employees, is safeguarded while in Contractor's possession, is extremely valuable to Contractor and could be extremely valuable to Contractor's competitors by virtue of it reflecting Contractor's contemplated construction techniques. Owner further acknowledges that the Escrow Bid Documents and the information contained in them are made available to Owner only because such action is an express pre-requisite to award of the Contract. Owner agrees to safeguard the Escrow Bid Documents, and all information contained in them, against disclosure to the fullest extent permitted by law, consistent with paragraph 4 of this Document 00670.
4. Escrow Bid Documents may be used in the determination of price adjustments and Change Orders and in the settlement of disputes and claims. If used in legal proceedings, Escrow Bid Documents shall be subject to an appropriate protective order limiting their disclosure.
5. Format and Contents of Escrow Bid Documents.
  - a. Contractor may submit Escrow Bid Documents in their usual cost-estimating format; a standard format is not required. Contractor shall prepare and submit the Escrow Bid Documents in English.
  - b. Owner requires Contractor to itemize clearly in the Escrow Bid Documents the estimated costs of performing the Work of each Bid item contained in Contractor's Bid. Contractor shall separate Bid items into sub-items as required to present a detailed cost estimate and allow a detailed cost review. The Escrow Bid Documents shall include all Subcontractor bids or quotes, supplier bids or quotes, quantity take-offs, crews, equipment, calculations of rates of production and progress, copies of quotes from Subcontractors and suppliers, and memoranda, narratives, add/deduct sheets, and all other information used by Contractor to arrive at the prices contained in the Bid. Escrow Bid Documents shall include costs of scheduled maintenance, depreciation, fleet rental expense discounts and incentives, and similar cost adjustments if used by Contractor to calculate its Bid prices. Estimated costs shall be broken down into Contractor's usual estimate categories such as direct labor, repair labor, equipment ownership and operation, expendable materials, permanent materials and subcontract costs as appropriate. Plant and equipment and indirect costs should be detailed in Contractor's usual format. Contractor shall identify its allocation of indirect costs, contingencies, markup and other items to each Bid item.
  - c. Contractor shall identify all costs. For Bid items amounting to less than \$10,000, Contractor may estimate costs without a detailed cost estimate, provided that Contractor includes applicable labor, equipment, materials and subcontracts, and allocates applicable indirect costs, contingencies and markup.

- d. Bid documents provided by Owner should not be included in the Escrow Bid Documents unless needed to comply with these requirements.

6. Submittal of Escrow Bid Documents.

- a. Submit Escrow Bid Documents in a container clearly marked on the outside with Contractor's name, date of submittal, Project name and the words "Escrow Bid Documents - Open only in the presence of Authorized Representatives of both Owner and Contractor." Owner will review the Escrow Bid Documents for initial compliance. Owner has three Days after receipt of Bidder's Escrow Bid Documents to demand additional information.
- b. By submitting Escrow Bid Documents, Contractor represents that the material in the Escrow Bid Documents constitutes all the documentary information used in preparation of the Bid and that Contractor has personally examined the contents of the Escrow Bid Documents container and has found that the documents in the container are complete. Contractor agrees that it will not introduce or rely on any other documents to prove how it prepared its Bid.
- c. If Contractor's Bid is based upon subcontracting any part of the Work, each Subcontractor whose total subcontract price exceeds five percent of the total Contract Sum proposed by Contractor, shall provide separate Escrow Documents to be included with those of Contractor. Such documents shall be opened and examined in the same manner and at the same time as the examination described above for Contractor.
- d. If Contractor wishes to subcontract any portion of the Work after award, Owner retains the right to require Contractor to submit Escrow Documents for the Subcontractor before approval of the subcontract.

7. Storage, Examination, and Final Disposition of Escrow Bid Documents.

- a. The Escrow Bid Documents will be placed in escrow until Final Completion of Work on the Project, in a mutually agreeable institution. Contractor shall pay the cost of storage for the Escrow Bid Documents until that time. The storage facilities shall be the appropriate size for all the Escrow Bid Documents and located conveniently to both Owner's and, to the extent reasonably possible, Contractor's offices, but in no event outside the County of Sonoma.
- b. Both Owner and Contractor shall examine the Escrow Bid Documents, at any time deemed necessary by either Owner or Contractor, to assist in the negotiation of price adjustments and Change Orders or the settlement of disputes and claims. Examination of the Escrow Bid Documents is subject to the following conditions:
  - i. As trade secrets, the Escrow Bid Documents are proprietary and confidential under paragraph 3.b. of this Document 00670.
  - ii. Owner and Contractor (and any Subcontractor, to the extent Escrow Bid Documents are required by a Subcontractor) shall each designate in writing to the other party(s) at least seven Days prior to any examination, representatives who are authorized to

examine the Escrow Bid Documents. Except as otherwise provided in a court order, no other persons shall have access to the Escrow Documents.

- iii. Except as otherwise provided in a court order, access to the documents may take place only in the presence of duly designated representatives of both Owner and Contractor. If Contractor fails to designate a representative or appear for joint examination on seven Days' notice, then Owner's Representative may examine the Escrow Bid Documents upon an additional three Days' notice.
- iv. Following Final Completion of Work on the Project and achievement of final settlement, Owner shall direct the escrow agent holding the Escrow Bid Documents in writing to return those documents to Contractor.

END OF DOCUMENT

DOCUMENT 00680

**ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION  
P.C.C. §22300**

THIS ESCROW AGREEMENT ("Escrow Agreement") is made and entered into this \_\_\_\_ [date] day of \_\_\_\_\_ [month], \_\_\_\_ [year], by and between the SONOMA COUNTY WATER AGENCY, a public agency of California (hereinafter called the "Owner"), whose address is 404 Aviation Blvd., Santa Rosa, CA 95403-9019; \_\_\_\_\_ [name of Contractor] ("Contractor"), whose \_\_\_\_\_ place \_\_\_\_\_ of \_\_\_\_\_ business \_\_\_\_\_ is \_\_\_\_\_ located \_\_\_\_\_ at \_\_\_\_\_ [Contractor's Address]; and [Owner, as escrow agent ...OR... \_\_\_\_\_ [Name of Bank], a state or federally chartered bank in the State of California, whose place of business is located at \_\_\_\_\_] ("Escrow Agent").

For the consideration hereinafter set forth, Owner, Contractor and Escrow Agent agree as follows:

1. Pursuant to Section 22300 of Public Contract Code of the State of California, Contractor has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by Owner pursuant to Contract Number 45-6.1-7 #3 entered into between Owner and Contractor for Dry Creek Habitat Enhancement Demonstration Project, Phase II in the amount of \_\_\_\_\_ [Contract Sum] dated \_\_\_\_\_ [Date of Contract] (the "Contract"). Alternatively, on written request of Contractor, Owner shall make payments of the retention earnings directly to Escrow Agent. When Contractor deposits the securities as a substitute for Contract earnings, Escrow Agent shall notify Owner within ten Days of the deposit. The market value of the securities at the time of substitution shall be at least equal to the cash amount then required to be withheld as retention under terms of Contract between Owner and Contractor. Securities shall be held in name of \_\_\_\_\_, and shall designate Contractor as the beneficial owner.
2. Owner shall make progress payments to Contractor for those funds which otherwise would be withheld from progress payments pursuant to Contract provisions, provided that Escrow Agent holds securities in form and amount specified in paragraph 1 of this Document 00680.
3. When Owner makes payment(s) of retention earned directly to Escrow Agent, Escrow Agent shall hold said payment(s) for the benefit of Contractor until the time that the escrow created under this Escrow Agreement is terminated. Contractor may direct the investment of the payments into securities. All terms and conditions of this Escrow Agreement and the rights and responsibilities of the parties shall be equally applicable and binding when Owner pays Escrow Agent directly.
4. Contractor shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account, and all expenses of Owner. Such expenses and payment terms shall be determined by Owner, Contractor, and Escrow Agent.

5. Interest earned on securities or money market accounts held in escrow and all interest earned on that interest shall be for sole account of Contractor and shall be subject to withdrawal by Contractor at any time and from time to time without notice to Owner.
6. Contractor shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from Owner to Escrow Agent that Owner consents to withdrawal of amount sought to be withdrawn by Contractor.
7. Owner shall have the right to draw upon the securities in event of default by Contractor. Upon seven Days written notice to Escrow Agent from Owner of the default, Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by Owner.
8. Upon receipt of written notification from Owner certifying that the Contract is final and complete, and that Contractor has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to Contractor all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payments of fees and charges.
9. Escrow Agent shall rely on written notifications from Owner and Contractor pursuant to paragraphs 5 through 8, inclusive, of this Document 00680 and Owner and Contractor shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of securities and interest as set forth.



IN WITNESS WHEREOF, the parties have executed this Escrow Agreement by their proper officers on the date first set forth above.

Owner

Contractor

\_\_\_\_\_

\_\_\_\_\_

Title

Title

Name

Name

Signature

Signature

Escrow Agent

\_\_\_\_\_

Title

Name

Signature

REVIEWED AS TO FORM:

\_\_\_\_\_  
County Counsel

\_\_\_\_\_  
Date

END OF DOCUMENT

## **CONDITIONS OF THE CONTRACT**



DOCUMENT 00700

**GENERAL CONDITIONS**

STANDARD EDITION

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## GENERAL CONDITIONS

### 1. GENERAL

#### 1.1 Documents

1.1.A. Contract Documents are complementary; what is called for by one is as binding as if called for by all. Contract Documents shall not be construed to create a contractual relationship of any kind between (1) Engineer or any Owner's Representative and Contractor; (2) Owner and/or its representatives and a Subcontractor, sub-Subcontractor, or supplier of any Project labor, materials, or equipment; or (3) between any persons or entities other than Owner and Contractor. Owner shall be deemed to be an intended third-party beneficiary of each agreement referenced in clause (2) above, and each such agreement shall so provide. Contractor is fully responsible for Contractor's own acts and omissions. Contractor is responsible for all acts and omissions of its Subcontractors, suppliers, and other persons and organizations performing or furnishing any of the Work, labor, materials, or equipment under a direct or indirect contract with Contractor.

#### 1.2 Exercise of Contract Responsibilities

1.2.A. In exercising its responsibilities and authorities under the Contract Documents, Owner does not assume any duties or responsibilities to any Subcontractor or supplier and does not assume any duty of care to Contractor, Contractor's Subcontractors or suppliers. Except as expressly set forth in the Contract Documents, in exercising their respective responsibilities and authorities under the Contract Documents, neither Engineer nor any Owner's Representative assumes any duties or responsibilities to any Subcontractor, sub-Subcontractor or supplier nor assumes any duty of care to Contractor or any Subcontractor, sub-Subcontractor or suppliers.

#### 1.3 Defined Terms

1.3.A. All abbreviations and definitions of terms used and not otherwise defined in this Document 00700 are set forth in Section 01420 (References and Definitions). This Document 00700 subdivides at first level into Articles, and then into paragraphs.

### 2. BIDDING

#### 2.1 Investigation Prior to Bidding

2.1.A. Prior to bidding, Bidders shall perform the work, investigations, research and analysis required by Article 5 of Document 00520 (Agreement). Under the Contract Documents, Contractor is charged with all information and knowledge that a reasonable Bidder would ascertain from having performed the required work, investigations, research, and analysis. Bid prices shall include entire cost of all "incidental work" to complete the Work, as that term is defined in Article 5 of this Document 00700.

2.1.B. Conditions Shown on Contract Documents: Information as to underground conditions, as-built conditions, or other conditions or obstructions indicated in the Contract Documents, *e.g.*, on Drawings or in Specifications, has been obtained with reasonable care, and has been recorded in good faith. Owner warrants, and Contractor may rely on, the accuracy of only limited types of information as discussed below.

1. Aboveground and As-Built Conditions: There is no express or implied warranty and no express or implied representation that any information as to aboveground conditions or as-built conditions indicated in the Contract Documents is correctly shown, or indicated, or complete. As a condition to bidding, Contractor shall verify by independent investigation all aboveground and as-built conditions. In submitting its Bid, Contractor shall rely on the results of its own independent investigation and shall not rely on Owner-supplied information regarding aboveground conditions and as-built conditions.
2. Subsurface Conditions: Contractor may rely only upon the general accuracy of actual reported depths, actual reported character of materials, actual reported soil types, actual reported water conditions, or actual obstructions shown or indicated in the Contract Documents. Owner is not responsible for (1) the completeness of any subsurface condition information for bidding or construction, (2) Contractor's conclusions or opinions drawn from any subsurface condition information, or (3) subsurface conditions that are not specifically shown. (For example, Owner is not responsible for soil conditions in areas contiguous to areas where a subsurface condition is shown.)
3. Conditions Shown in Reports and Drawings Supplied for Informational Purposes: Reference is made to Document 00320 (Geotechnical Data and Existing Conditions) for identification of geotechnical reports, "as-built" information, and other drawings or other documents describing physical conditions in or relating to existing surface or subsurface conditions or structures at or contiguous to the Site. These materials are not Contract Documents and, except for any "technical data" regarding subsurface conditions specifically identified in Document 00320 (Geotechnical Data and Existing Conditions), and "Underground Facilities" data, as limited in Document 00320 (Geotechnical Data and Existing Conditions), Contractor shall not in any manner rely on the information in these materials. Subject to the foregoing, Contractor shall make its own independent investigation of all conditions affecting the Work and must not rely on information provided by Owner.

## **2.2 Subcontractors**

- 2.2.A. Consistent with Public Contract Code Sections 4101 *et seq.*, Contractor shall not substitute any other person or firm in place of any Subcontractor listed in the Bid. Subcontractors shall not assign or transfer their subcontracts or permit them to be performed by any other contractor without Owner's written approval. At Owner's request, Contractor shall provide Owner with a complete copy of all executed subcontracts or final commercial agreements with Subcontractors and/or suppliers.
- 2.2.B. Subcontract agreements shall preserve and protect the rights of Owner under the Contract Documents so that subcontracting will not prejudice such rights. To the extent of the Work to be performed by a Subcontractor, Contractor shall require the Subcontractor's written agreement (1) to be bound to the terms of Contract Documents and (2) to assume vis-à-vis Contractor all the obligations and responsibilities that Contractor assumes toward Owner under the Contract Documents. (These agreements include all warranties, claims procedures and rules governing submittals to which Contractor is subject under the Contract Documents.)
- 2.2.C. Contractor shall provide for the assignment to Owner of all rights any Subcontractor may have against any manufacturer, supplier, or distributor for breach of warranties

and guarantees relating to the Work performed by the Subcontractor under the Contract Documents.

### **3. CONTRACT AWARD AND COMMENCEMENT OF THE WORK**

#### **3.1 Award of Contract**

3.1.A. Owner will make the Award of Contract by issuing a Notice of Award. As a condition to Owner signing Document 00520 (Agreement), however, Contractor shall deliver to Owner the executed agreements, forms, bonds, and insurance documents required by Document 00200 (Instructions to Bidders) in the required quantities and within the required times.

#### **3.2 Commencement of Work**

3.2.A. The Contract Time will commence to run on the 60<sup>th</sup> Day after the issuance of the Notice of Award or, if a Notice to Proceed is given, on the date indicated in the Notice to Proceed. See also paragraph 15.1.B of this Document 00700. Owner may give a Notice to Proceed at any time within 60 Days after the Notice of Award. Contractor shall not do any Work at the Site prior to the date on which the Contract Time commences to run.

### **4. BONDS AND INSURANCE**

#### **4.1 Bonds**

4.1.A. At or before the date indicated in Document 00200 (Instructions to Bidders), Contractor shall file with Owner the following bonds:

1. Corporate surety bond, in the form of Document 00611 (Construction Performance Bond), in the penal sum of 100% of the Contractor's Bid as accepted, to guarantee faithful performance of the Work; and
2. Corporate surety bond, in the form of Document 00612 (Construction Labor and Material Payment Bond), in the penal sum of 100% of the Contractor's Bid as accepted, to guarantee payment of wages for services engaged and of bills contracted for materials, supplies, and equipment used in performance of Contract Documents.

4.1.B. Sureties shall be satisfactory to Owner. Corporate sureties on these bonds and on bonds accompanying Bids shall be duly licensed to do business in the State of California and shall have an A.M. Best Company financial rating of A or better.

#### **4.2 Insurance**

4.2.A. See paragraph 2.A of Document 00800 (Supplementary Conditions), incorporated herein by this reference.

### **5. DRAWINGS AND SPECIFICATIONS**

#### **5.1 Intent**

5.1.A. Drawings and Specifications are intended to describe a functionally complete and operable Project (and all parts thereof) to be constructed in accordance with the requirements of Contract Documents. Contractor shall perform any work, provide services and furnish any materials or equipment that may reasonably be inferred from the requirements of Contract Documents or from prevailing custom or trade usage as

being required to produce this intended result. Contractor shall interpret words or phrases used to describe Work (including services), materials, or equipment that have well-known technical or construction industry or trade meaning in accordance with that meaning. Drawings' intent specifically includes the intent to depict construction that complies with all applicable laws, codes, and standards.

- 5.1.B. As part of the "Work," Contractor shall provide all labor, materials, equipment, machinery, tools, facilities, services, employee training and testing, hoisting facilities, Shop Drawings, storage, testing, security, transportation, disposal, the securing of all necessary or required field dimensions, the cutting or patching of existing materials, notices, permits, documents, reports, agreements, and any other items required or necessary to timely and fully complete Work described and the results intended by Contract Documents and, in particular, Drawings and Specifications. Divisions and Specification Sections and the identification on any Drawings shall not control Contractor in dividing Work among Subcontractors or suppliers or delineating the Work to be performed by any specific trade.
- 5.1.C. Contractor shall perform reasonably implied parts of Work as "incidental work" although absent from Drawings and Specifications. Incidental work includes any work not shown on Drawings or described in Specifications that is necessary or normally or customarily required as a part of the Work shown on Drawings or described in Specifications. Incidental work includes any work necessary or required to make each installation satisfactory, legally operable, functional, and consistent with the intent of Drawings and Specifications or the requirements of Contract Documents including required tasks to be performed under Division 1 of Specifications. Contractor shall perform incidental work without extra cost to Owner. Incidental work shall be treated as if fully described in Specifications and shown on Drawings, and the expense of incidental work shall be included in price Bid and Contract Sum.

## **5.2 Drawing Details**

- 5.2.A. A typical or representative detail on Drawings shall constitute the standard for workmanship and material throughout corresponding parts of Work. Where necessary, and where reasonably inferable from Drawings, Contractor shall adapt such representative detail for application to such corresponding parts of Work. The details of such adaptation shall be subject to prior approval by Owner. Repetitive features shown in outline on Drawings shall be in exact accordance with corresponding features completely shown.

## **5.3 Interpretation of Drawings and Specifications**

- 5.3.A. Should any discrepancy appear or any misunderstanding arise as to the import of anything contained in Drawings and Specifications, or should Contractor have any questions or requests relating to Drawings or Specifications, Contractor shall refer the matter to Owner, in writing. Owner will issue with reasonable promptness written responses, clarifications or interpretations as Owner may determine necessary, which shall be consistent with the intent of and be reasonably inferable from Contract Documents. Such written clarifications or interpretations shall be binding upon Contractor. If Contractor believes that a written response, clarification or interpretation justifies an adjustment in the Contract Sum or Contract Time, Contractor shall give Owner prompt written notice as provided in Section 01250 (Modification Procedures). If the parties are unable to agree to the amount or extent of the adjustment, if any, then

Contractor shall perform the Work in conformance with Owner's response, clarification, or interpretation and may make a written claim for the adjustment as provided in Article 12 of this Document 00700.

#### **5.4 Checking of Drawings**

- 5.4.A. Before undertaking each part of Work, Contractor shall carefully study and compare Contract Documents and check and verify pertinent figures shown in the Contract Documents and all applicable field measurements. Contractor shall be responsible for any errors that might have been avoided by such comparison. Figures shown on Drawings shall be followed; Contractor shall not scale measurements. Contractor shall promptly report to Owner, in writing, any conflict, error, ambiguity or discrepancy that Contractor may discover. Contractor shall obtain a written interpretation or clarification from Owner before proceeding with any Work affected thereby. Contractor shall provide Owner with a follow-up correspondence every ten Days until it receives a satisfactory interpretation or clarification.

#### **5.5 Standards to Apply Where Specifications are Not Furnished**

- 5.5.A. The following general specifications shall apply wherever in the Specifications, or in any directions given by Owner in accordance with or supplementing Specifications, it is provided that Contractor shall furnish materials or manufactured articles or shall do Work for which no detailed specifications are shown. Materials or manufactured articles shall be of the best grade, in quality and workmanship, obtainable in the market from firms of established good reputation. If not ordinarily carried in stock, the materials or manufactured articles shall conform to industry standards for first-class materials or articles of the kind required, with due consideration of the use to which they are to be put. Work shall conform to the usual standards or codes, such as those cited in Section 01420 (References and Definitions), for first-class work of the kind required. Contractor shall specify in writing to Owner the materials to be used or Work to be performed under this paragraph 5.5 ten Business Days prior to furnishing such materials or performing such Work.

#### **5.6 Deviation from Specifications and Drawings**

- 5.6.A. Contractor shall perform Work in accordance with Drawings and Specifications. Contractor may deviate from Drawings or the dimensions given in the Drawings, and may deviate from the Specifications, only upon Owner's advance written approval of the proposed deviation. If Work requires a Submittal prior to commencement, then Contractor's performance of such Work prior to Submittal being favorably reviewed shall be at Contractor's sole risk.
- 5.6.B. Owner may order that locations, lines, and grades for Work vary from those shown on Drawings. Changes may be made in locations, lines, or grades for Work under any item of Contract Documents. No payment in addition to unit price fixed in the Contract Documents for Work under respective items will be allowed on account of variations from Drawings in unit price items. In lump sum contracts, or where there are no unit price items covering Work affected by variations of locations, lines, or grades, all changes in the Contract Documents will be made as set forth in Article 14 of this Document 00700.

## **5.7 Precedence of Documents**

- 5.7.A. In the case of discrepancy or ambiguity in the Contract Documents, the following order of precedence shall prevail:
1. Modifications in inverse chronological order (i.e., most recent first), and in the same order as specific portions they are modifying;
  2. Document 00520 (Agreement), and terms and conditions referenced therein;
  3. Document 00800 (Supplementary Conditions);
  4. Document 00700 (General Conditions);
  5. Division 1 Specifications;
  6. Drawings and Division 2 through 16 Specifications;
  7. Written numbers over figures, unless obviously incorrect;
  8. Figured dimensions over scaled dimensions;
  9. Large-scale Drawings over small-scale Drawings.
- 5.7.B. Any conflict between Drawings and Division 2 through 16 Specifications will be resolved in favor of the document of the latest date (i.e., the most recent document), and if the dates are the same or not determinable, then in favor of Specifications.
- 5.7.C. Any conflict between a bill or list of materials shown in the Contract Documents and the actual quantities required to complete Work required by Contract Documents, will be resolved in favor of the actual quantities.
- 5.7.D. In the event the Specifications include divisions above Division 16 (e.g., Division 17 and above), then such divisions shall be included within the Contract Documents unless identified otherwise.

## **5.8 Ownership and Use of Drawings, Specifications and Contract Documents**

- 5.8.A. Drawings, Specifications, and other Contract Documents were prepared for use for Work of Contract Documents only. No part of Contract Documents shall be used for any other construction or for any other purpose except with the written consent of Owner. Any unauthorized use of Contract Documents is prohibited and at the sole liability of the user.

## **6. CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

### **6.1 Owner's Right to Perform Construction and to Award Separate Contracts**

- 6.1.A. Owner may perform with its own forces, construction or operations related to the Project. Owner may also award separate contracts in connection with other portions of the Project or other construction or operations, on the Site or areas contiguous to the Site, under conditions similar to these Contract Documents, or may have utility owners perform other work. When separate contracts are awarded for different portions of the Project or other construction or operations on the Site, the term "Contractor" in these Contract Documents shall mean the Contractor herein.

### **6.2 Mutual Responsibility**

- 6.2.A. Contractor shall afford all other contractors, utility owners, and Owner (if Owner is performing work with its own forces), proper and safe access to the Site, and reasonable opportunity for the installation and storage of their materials. Contractor shall ensure that the execution of its Work properly connects and coordinates with others' work, and shall cooperate with them to facilitate the progress of the Work.

- 6.2.B. Contractor shall coordinate its Work with the work of other separate contractors, Owner, and utility owners. Contractor shall hold coordination meetings with other contractors, Owner and its representatives, and utility owners as required by Section 01315 (Project Meetings).
- 6.2.C. Unless otherwise provided in the Contract Documents, Contractor shall do all cutting, fitting, and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. Contractor shall not endanger any work of other separate contractors, Owner, or utility owners by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Owner and the others whose work will be affected.
- 6.2.D. Contractor's duties and responsibilities under paragraph 6.2.A of this Document 00700 are for the benefit of Owner and also for the benefit of such other contractors and utility owners working at the Site to the extent that there are comparable provisions for the benefit of Contractor in the direct contracts between Owner and such other contractors and utility owners.
- 6.2.E. To the extent that any part of Contractor's Work is to interface with work performed or installed by other contractors or utility owners, Contractor shall inspect and measure the in-place work. Contractor shall promptly report to Owner in writing any defect in in-place work that will impede or increase the cost of Contractor's interface unless corrected. Owner will require the contractor responsible for the Defective Work to make corrections so as to conform to its contract requirements, or, if the defect is the result of an error or omission in the Contract Documents, issue a Change Order. If Contractor fails to measure, inspect and/or report to Owner in writing defects that are reasonably discoverable, Contractor shall bear all costs of accomplishing the interface acceptable to Owner. This provision shall be included in any and all other contracts or subcontracts for Work to be performed where such a conflict could exist.

### **6.3 Owner Authority over Coordination**

- 6.3.A. Owner will have authority over coordination of the activities of multiple contractors in cases where Owner performs Work with its own forces or contracts with others for the performance of other Work on the Project, or utilities Work on the Site. Owner may at any time and in its sole discretion, designate a person or entity other than Owner to have authority over the coordination of the activities among the various contractors. Owner's authority with respect to coordination of the activities of multiple contractors and utility owners shall not relieve Contractor of its obligation to other contractors and utility owners to coordinate its Work with other contractors and utility owners as specified in paragraph 6.2 of this Document 00700. Contractor shall promptly notify Owner in writing when another contractor on the Project fails to coordinate its work with the Work of Contract Documents.
- 6.3.B. Contractor shall suspend any part of the Work or carry on the same in such manner as directed by Owner when such suspension or prosecution is necessary to facilitate the work of other contractors or workers. No damages or claims by Contractor will be allowed if the suspension or Work change is due in whole or in part to Contractor's failure to perform its obligation to coordinate its Work with other contractors and utility owners. Damages or claims will be allowed only to the extent of fault by Owner if the suspension or Work change is due in whole or in part to another contractor's failure to coordinate its work with Contractor, other contractors, and utility owners.

Owner reserves the right to back charge Contractor for any damages or claims incurred by other contractors as a result of Contractor's failure to perform its obligations to coordinate with other contractors and utility owners. Owner may deposit the funds retained with a Court of competent jurisdiction pursuant to applicable interpleader procedures and Contractor releases Owner of further liability regarding such funds.

## **7. OWNER AND PAYMENT**

### **7.1 Owner's Representative(s)**

7.1.A. Owner's Representative(s) will have limited authority to act on behalf of Owner as set forth in the Contract Documents. Except as otherwise provided in these Contract Documents or subsequently identified in writing by Owner, Owner will issue all communications to Contractor through Owner's Representative, and Contractor shall issue all communications to Owner through Owner's Representative in a written document delivered to Owner. Should any direct communications between Contractor and Owner's consultants, architects, or engineers not identified in Article 2 of Document 00520 (Agreement) occur during field visits or by telephone, Contractor shall immediately confirm them in a written document copied to Owner.

### **7.2 Means and Methods of Construction**

7.2.A. Subject to those rights specifically reserved in the Contract Documents, Owner will not supervise, or direct, or have control over, or be responsible for, Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or Contractor's failure to comply with laws and regulations applicable to the furnishing or performance of Work. Owner will not be responsible for Contractor's failure to perform or furnish the Work in accordance with Contract Documents.

### **7.3 Receipt and Processing of Applications for Payment**

7.3.A. As required by Section 01200 (Price and Payment Procedures), Contractor shall prepare the schedules, submit Applications for Payment and warrant title to all Work covered by each Application for Payment. Owner will review Contractor's Applications for Payment and make payment thereon, and Contractor shall make payments to Subcontractors, suppliers, and others, as required by Section 01200 (Price and Payment Procedures).

## **8. CONTROL OF THE WORK**

### **8.1 Supervision of Work by Contractor**

8.1.A. Contractor shall supervise, inspect, and direct Work competently and efficiently, devoting the attention and applying such personal skills and expertise as may be required and necessary to perform Work in accordance with Contract Documents. Contractor shall be solely responsible for and have control and charge of construction means, methods, techniques, sequences and procedures, safety precautions, and programs in connection with the Work. Contractor shall be responsible to see that the completed Work complies accurately with Contract Documents.

8.1.B. Contractor shall keep on the Site at all times during Work progress a competent resident Superintendent, who shall not be replaced without Owner's express written consent. The Superintendent shall be Contractor's representative at the Site and shall

have complete authority to act on behalf of Contractor. All communications to and from the Superintendent shall be as binding as if given to or by Contractor.

## **8.2 Observation of Work by Owner**

- 8.2.A. Work shall be performed under Owner's general observation and administration. Contractor shall comply with Owner's directions and instructions in accordance with the terms of Contract Documents, but nothing contained in these General Conditions shall be taken to relieve Contractor of any obligations or liabilities under the Contract Documents. Owner's failure to review or, upon review, failure to object to any aspect of Work reviewed, shall not be deemed a waiver or approval of any non-conforming aspect of Work.
- 8.2.B. Owner may engage an independent consultant or engineer (collectively for purposes of this paragraph 8.2, "Engineer") to assist in administering the Work. If so engaged, Engineer will advise and consult with Owner, but will have authority to act on behalf of Owner only to extent provided in the Contract Documents or as set forth in writing by Owner. Engineer will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with Work. Engineer will not be responsible for or have control over the acts or omissions of Contractor, Subcontractors or their agents or employees, or any other persons performing Work.
- 8.2.C. Engineer may review Contractor's Submittals, such as Shop Drawings, Product Data, and Samples, but only for conformance with design concept of Work and with information given in the Contract Documents.
- 8.2.D. Engineer may visit the Site at intervals appropriate to stage of construction to become familiar generally with the progress and quality of Work and to determine in general if Work is proceeding in accordance with Contract Documents. Based on its observations, Engineer may recommend to Owner that it disapprove or reject Work that Engineer believes to be Defective or will not produce a complete Project that conforms to Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by Contract Documents. Owner will also have authority to require special inspection or testing of Work, whether or not the Work is fabricated, installed, or completed.
- 8.2.E. Engineer may conduct inspections to recommend to Owner the dates that Contractor has achieved Substantial Completion and Final Acceptance, and will receive and forward to Owner for review written warranties and related documents required by Contract Documents.

## **8.3 Access to Work**

- 8.3.A. During performance of Work, Owner and its agents, consultants, and employees may at any time enter upon Work, shops, or studios where any part of the Work may be in preparation, or factories where any materials for use in Work are being or are to be manufactured, and Contractor shall provide proper and safe facilities for this purpose, and shall make arrangements with manufacturers to facilitate inspection of their processes and products to such extent as Owner's interests may require. Other contractors performing work for Owner may also enter upon Work for all purposes required by their respective contracts. Subject to the rights reserved in the Contract Documents, Contractor shall have sole care, custody, and control of the Site and its Work areas.

**8.4 Existing Utilities Shown or Indicated in Contract Documents**

- 8.4.A. Drawings or Specifications may indicate above- and below-grade structures, drainage lines, storm drains, sewers, water, gas, electrical, chemical, hot water, and other similar items and utilities, and additional information may be on file at the Common Ground Alliance, 811. Contractor shall locate these known existing installations before proceeding with trenching or other operations that may cause damage, shall maintain them in service where appropriate, and shall repair any damage to them caused by the Work, at no increase in Contract Sum. Additional utilities whose locations are unknown to Owner are suspected to exist. Contractor shall be alert to their existence; if they are encountered, Contractor shall immediately report to Owner for disposition of the same. In addition to reporting if any utility is damaged, Contractor shall take appropriate action as provided in this Document 00700. Additional compensation or extension of time on account of utilities not shown or otherwise brought to Contractor's attention, including reasonable action taken to protect or repair damage, shall be determined as provided in this Document 00700.
- 8.4.B. At no additional cost to Owner, Contractor shall incorporate into the Work main or trunk line utilities identified in the Contract Documents and other utilities or underground structures known or reasonably discernible and that will remain in service, including reasonable adjustments to the design location (including minor relocations) of the existing or new installations. Contractor shall take immediate action to restore any in-service installations damaged by Contractor's operations. Should Owner determine that Contractor has not responded in a timely manner or not diligently pursued completion of the Work, Owner may restore service and deduct the costs of such action by Owner from the amounts due under the Contract.
- 8.4.C. Consistent with Government Code Section 4215, as between Owner and Contractor, Owner will be responsible for the timely removal, relocation, or protection of existing main or trunk line utility facilities located on the Site only if such utilities are not identified in the Contract Documents or Document 00320 (Geotechnical Data and Existing Conditions). Owner will compensate for the cost of locating and repairing damage not due to Contractor's failure to exercise reasonable care, removing and relocating such main or trunk line utility facilities not indicated in the Contract Documents or Document 00320 (Geotechnical Data and Existing Conditions) with reasonable accuracy, and equipment on the Project necessarily idled during such Work.
- 8.4.D. Prior to performing Work at the Site, Contractor shall lay out the locations of known underground utilities that are to remain in service and other significant known underground installations. At no additional cost to Owner, prior to commencing other Work in proximity to such known underground utilities or installations that can be readily inferred from adjacent surface improvements, Contractor shall further locate, by carefully excavating with small equipment, potholing, and principally by hand, such utilities or installations that are to remain and that are subject to damage. This obligation applies to all utilities (including, but not limited to, those referenced in paragraph 8.4.C of this Document 00700).
- 8.4.E. Nothing in this Document 00700 shall be deemed to require Owner to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities on the Site can be inferred by Contractor from the presence of an underground transmission main or other visible facilities, such as buildings, new asphalt, meters,

and junction boxes, on or adjacent to the Site. Contractor shall immediately secure all available information and notify Owner and utility, in writing, of its discovery, while performing Work under the Contract Documents, of any utility facilities not identified in the Drawings and Specifications.

## **8.5 Protection of Underground Facilities when Digging Trenches or During Excavation**

8.5.A. Before commencing Work of digging trenches or excavation, Contractor shall review all information available regarding subsurface conditions, including but not limited to information supplied in Document 00320 (Geotechnical Data and Existing Conditions), and subject to the terms and conditions of these documents, Contractor shall also comply with Government Code Sections 4216 to 4216.9, and in particular Section 4216.2 which provides, in part:

Except in an emergency, every person planning to conduct any excavation shall contact the appropriate regional notification center at least two working days, but no more than 14 calendar days, prior to commencing that excavation, if the excavation will be conducted in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the excavator, and, if practical, the excavator shall delineate with white paint or other suitable markings the area to be excavated. The regional notification center shall provide an inquiry identification number to the person who contacts the center and shall notify any member, if known, who has a subsurface installation in the area of the proposed excavation.

8.5.B. Contractor shall contact Common Ground Alliance, telephone 811, and schedule the Work to allow ample time for the center to notify its members and, if necessary, for any member to field locate and mark its facilities. Contractor is charged with knowledge of all subsurface conditions reflected in 811 records. Prior to commencing excavation or trenching Work, Contractor shall provide Owner with copies of all 811 records secured by Contractor. Contractor shall advise Owner of any conflict between information provided in Document 00320 (Geotechnical Data and Existing Conditions), the Drawings and that provided by 811 records. Contractor's excavation shall be subject to and comply with the Contract Documents, including without limitation paragraphs 2.1 and 8.4 of this Document 00700.

8.5.C. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated in the materials supplied by Owner or in information on file at 811 or is otherwise reasonably available to Contractor, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby (and in no event later than seven Days), and prior to performing any Work in connection therewith (except in an emergency as required by Article 16 of this Document 00700), identify the owner of such Underground Facility and give written notice to that owner and to Owner. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

8.5.D. Contractor shall be allowed an increase in the Contract Sum or an extension of the Contract Time, or both, to the extent that they are attributable to the existence of any Underground Facility that is owned and was built by Owner only where the Underground Facility:

1. Was not shown or indicated in the Contract Documents or in the information supplied pursuant to Document 00320 (Geotechnical Data and Existing Conditions) or in information on file at 811; and
  2. Contractor did not know of it; and
  3. Contractor could not reasonably have been expected to be aware of it or to have anticipated it from the information available. (For example, if surface conditions such as pavement repairs, valve covers, or other markings, indicate the presence of an Underground Facility, then an increase in the Contract Sum or an extension of the Contract Time will not be due, even if the Underground Facility was not indicated in the Contract Documents, in the information supplied to Contractor pursuant to Document 00320 [Geotechnical Data and Existing Conditions], in information on file at 811, or otherwise reasonably available to Contractor.)
- 8.5.E. Contractor shall bear the risk that Underground Facilities not owned or built by Owner may differ in nature or locations shown in information made available by Owner pursuant to Document 00320 (Geotechnical Data and Existing Conditions), in information on file at 811, or otherwise reasonably available to Contractor. Underground Facilities are inherent in construction involving digging of trenches or other excavations and Contractor is to apply its skill and industry to verify the information available.
- 8.5.F. The cost of all of the following will be included in the Contract Sum and Contractor shall have full responsibility for (a) reviewing and checking all available information and data including, but not limited to, Document 00320 (Geotechnical Data and Existing Conditions) and information on file at 811; (b) locating all Underground Facilities shown or indicated in the Contract Documents, available information, or indicated by visual observation including, but not limited to, and by way of example only, engaging qualified locating services and all necessary backhoeing and potholing; (c) coordinating the Work with the owners of such Underground Facilities during construction; and (d) the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

## **9. WARRANTY, GUARANTY, AND INSPECTION OF WORK**

### **9.1 Warranty and Guaranty**

- 9.1.A. General Representations and Warranties: Contractor represents and warrants that it is and will be at all times fully qualified and capable of performing every Phase of the Work and to complete Work in accordance with the terms of Contract Documents. Contractor warrants that all construction services shall be performed in accordance with generally accepted professional standards of good and sound construction practices and all requirements of Contract Documents. Contractor warrants that Work, including but not limited to each item of materials and equipment incorporated therein, shall be new, of suitable grade of its respective kind for its intended use, and free from defects in design, engineering, materials, construction and workmanship. Contractor warrants that Work shall conform in all respects with all applicable requirements of federal, state and local laws, applicable construction codes and standards, licenses, and permits, Drawings and Specifications and all descriptions set forth therein, and all other requirements of Contract Documents. Contractor shall not be responsible, however, for the negligence of others in the specification of specific

equipment, materials, design parameters and means or methods of construction where that is specifically shown and expressly required by Contract Documents.

9.1.B. Extended Warranties and Guaranties and Co-guarantor Obligation:

1. Extended Warranties or Guaranties: For any warranty or guaranty exceeding one year provided by the supplier or manufacturer of any equipment or materials used in the Project ("Extended Warranty"), Contractor shall assign such warranties and guaranties to Owner and supply Owner with all warranty and guaranty documents relative thereto.
2. Contractor as Co-guarantor: Contractor shall act as co-guarantor of equipment and materials for either the term of the Extended Warranty or 3 years, whichever is shorter, if the performance of the equipment or materials involves or affects water-tightness (above grade or below grade) or any type of moisture intrusion.

9.1.C. Environmental and Toxics Warranty: The covenants, warranties and representations contained in this paragraph 9.1.B. are effective continuously during Contractor's Work on the Project and following cessation of labor for any reason including, but not limited to, Project completion. Except as expressly shown in the Contract Documents, Contractor covenants, warrants and represents to Owner that:

1. To Contractor's knowledge after due inquiry, no lead or Asbestos-containing materials were installed or discovered in the Project at any time during Contractor's construction thereof. If any lead or Asbestos-containing materials were discovered, Contractor made immediate written disclosure to Owner.
2. To Contractor's knowledge after due inquiry, no electrical transformers, light fixtures with ballasts or other equipment containing PCBs were installed or discovered on the Project at any time during Contractor's construction thereof. If any such materials were discovered, Contractor made immediate written disclosure to Owner.
3. To Contractor's knowledge after due inquiry, no storage tanks for gasoline or any other toxic substance were installed or discovered on the Project at any time during Contractor's construction thereof. If any such materials were discovered, Contractor made immediate written disclosure to Owner.
4. Contractor's operations concerning the Project are and were not in violation of any applicable environmental federal, state, or local statute, law or regulation dealing with hazardous materials substances or toxic substances and no notice from any governmental body has been served upon Contractor claiming any violation of any such law, ordinance, code or regulation, or requiring or calling attention to the need for any Work, repairs, construction, alteration, or installation on or in connection with the Project in order to comply with any such laws, ordinances, codes, or regulations, with which Contractor has not complied. If there are any such notices with which Contractor has complied, Contractor shall provide Owner with copies thereof.

**9.2 Inspection of Work**

- 9.2.A. All materials, equipment, and workmanship used in Work shall be subject to inspection and testing at all times during construction and/or manufacture in accordance with the terms of Contract Documents. Work and materials, and manufacture and preparation of materials, from beginning of construction until Final Completion and acceptance of Work, shall be subject to inspection and rejection by Owner, its agents, representatives or independent contractors retained by Owner to

perform inspection services, or governmental agencies with jurisdictional interests. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and program so that they may comply therewith as applicable. Upon request or where specified, Owner shall be afforded access for inspection at the source of supply, manufacture or assembly of any item of material or equipment, with reasonable accommodations supplied for making such inspections.

- 9.2.B. Contractor shall furnish, in such quantities and sizes as may be required for proper examination and tests, Samples or test specimens of all materials to be used or offered for use in connection with Work. Contractor shall prepare Samples or test specimens at its expense and furnish them to Owner. Contractor shall submit all Samples in ample time to enable Owner to make any necessary tests, examinations, or analyses before the time it is desired to incorporate the material into the Work.
- 9.2.C. Contractor shall give Owner timely notice of readiness of Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- 9.2.D. If applicable laws or regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, and furnish Owner with the required certificates of inspection, or approval. Owner will pay the cost of initial testing and Contractor shall pay all costs in connection with any follow-up or additional testing. Contractor shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for the acceptance of materials or equipment to be incorporated in the Work, or of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.
- 9.2.E. If Contractor covers any Work, or the work of others, prior to any required inspection, test or approval without written approval of Owner, Contractor shall uncover the Work at Owner's request. Contractor shall bear the expense of uncovering Work and replacing Work.
- 9.2.F. In any case where Contractor covers Work contrary to Owner's request, Contractor shall uncover Work for Owner's observation or inspection at Owner's request. Contractor shall bear the cost of uncovering Work.
- 9.2.G. Whenever required by Owner, Contractor shall furnish tools, labor and materials necessary to make examination of Work that may be completed or in progress, even to extent of uncovering or taking down portions of finished Work. Should Work be found unsatisfactory, cost of making examination and of reconstruction shall be borne by Contractor. If Work is found to be satisfactory, Owner, in manner herein prescribed for paying for alterations, Modifications, and extra Work, except as otherwise herein specified, will pay for examination.
- 9.2.H. Inspection of the Work by or on behalf of Owner, or Owner's failure to do so, shall not under any circumstances be deemed a waiver or approval of any non-conforming aspect of the Work. Contractor shall have an absolute duty, in the absence of a written Change Order signed by Owner, to perform Work in conformance with the Contract Documents and to correct Defective Work immediately upon Contractor's knowledge.

9.2.I. Any inspection, evaluation, or test performed by or on behalf of Owner relating to the Work is solely for the benefit of Owner, and shall not be relied upon by Contractor. Contractor shall not be relieved of the obligation to perform Work in accordance with the Contract Documents, nor relieved of any guaranty, warranty, or other obligation, as a result of any inspections, evaluations, or tests performed by Owner, whether or not such inspections, evaluations, or tests are permitted or required under the Contract Documents. Contractor shall be solely responsible for testing and inspecting Work already performed to determine whether such Work is in proper condition to receive later Work.

### **9.3 Correction of Defective Work**

9.3.A. If Contractor fails to supply sufficient skilled workers, suitable materials or equipment, or to furnish or perform the Work in such a way that the completed Work will conform to Contract Documents, Owner may order Contractor to replace any such Defective Work, or stop any portion of Work to permit Owner (at Contractor's expense) to replace such Defective Work. These Owner rights are entirely discretionary on the part of the Owner, and shall not give rise to any duty on the part of Owner to exercise the rights for the benefit of Contractor or any other party.

9.3.B. Owner may direct Contractor to correct any Defective Work or remove it from the Site and replace it with Work that is not Defective and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting from the correction or removal. Contractor shall be responsible for any and all claims, costs, losses, and damages caused by or resulting from such correction or removal. A Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may decide the proper amount or, in its discretion may elect to leave the Contract Sum unchanged and deduct from moneys due Contractor, all such claims, costs, losses, and damages caused by or resulting from the correction or removal. If Contractor disagrees with Owner's calculations, it may make a claim as provided in Article 12 of this Document 00700. Owner's rights under this paragraph 9.3.B shall be in addition to any other rights it may have under the Contract Documents or by law.

9.3.C. Correction Period: If within one year after the date of Final Acceptance, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work (completed or incomplete) is found to be Defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, correct such Defective Work. Contractor shall remove any Defective Work rejected by Owner and replace it with Work that is not Defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Contractor fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the Defective Work corrected or the rejected Work removed and replaced. Contractor shall pay for all claims, costs, losses, and damages caused by or resulting from such removal and replacement. Where Contractor fails to correct Defective Work, or defects are discovered outside the correction period, Owner shall have all rights and remedies granted by law.

9.3.D. In special circumstances where a part of the Work is occupied or a particular item of equipment is placed in continuous service before Final Acceptance of all the Work, the

correction period for that part of Work or that item may start to run from an earlier date if so provided by Change Order.

- 9.3.E. Where Defective Work or rejected Work (and damage to other Work resulting therefrom) has been corrected, removed, or replaced under this provision after the commencement of the correction period, the correction period hereunder with respect to such Work shall be extended for an additional period of one year, or such longer period of time as may be prescribed by laws, regulations, or by the terms of the Contract Documents, after such correction or removal and replacement has been satisfactorily completed.

#### **9.4 Acceptance and Correction of Defective Work By Owner**

- 9.4.A. Owner may accept Defective Work. Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such Defective Work. If Owner accepts any Defective Work prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may deduct from moneys due Contractor, all claims, costs, losses, damages, expenses, and liabilities attributable to the Defective Work. If Contractor disagrees with Owner's calculations, Contractor may make a claim as provided in Article 12 of this Document 00700. If Owner accepts any Defective Work after final payment, Contractor shall pay to Owner, an appropriate amount as determined by Owner.
- 9.4.B. Owner may correct and remedy deficiency if, after five Days' written notice to Contractor, Contractor fails to correct Defective Work or to remove and replace rejected Work in accordance with paragraph 9.3.B of this Document 00700; or provide a plan for correction of Defective Work acceptable to Owner; or perform Work in accordance with Contract Documents. In connection with such corrective and remedial action, Owner may exclude Contractor from all or part of the Site; take possession of all or part of Work and suspend Contractor's Work related thereto; take possession of all or part of Contractor's tools, appliances, construction equipment, and machinery at the Site; and incorporate in Work any materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, its representatives, agents, employees, and other contractors and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph 9.4.B. Contractor shall be responsible for all claims, costs, losses, damages, expenses and liabilities incurred or sustained by Owner in exercising such rights and remedies. A Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to Work and the Contract Sum. If the parties are unable to agree to the amount of an appropriate decrease in the Contract Sum, Owner may deduct from moneys due Contractor, all claims, costs, losses and damages caused by or resulting from the correction or removal. If Contractor disagrees with Owner's calculations, Contractor may make a claim as provided in Article 12 of this Document 00700.

#### **9.5 Rights upon Inspection, Correction, or Acceptance**

- 9.5.A. Contractor shall not be allowed an extension of Contract Time because of any delay in the performance of Work attributable to the exercise by Owner of its rights and remedies under this Article 9. Where Owner exercises its rights under this Article 9, it

retains and may still exercise all other rights it has by law or under the Contract Documents including, but not limited to, the right to terminate Contractor's right to proceed with the Work under the Contract Documents for cause and/or make a claim or back charge where a Change Order cannot be agreed upon.

9.5.B. Inspection by Owner or its authorized agents or representatives shall not relieve Contractor of its obligation to have furnished material and workmanship in accordance with Contract Documents. Payment for Work completed through periodic progress payments, Final Payment, or otherwise shall not operate to waive Owner's right to require full compliance with Contract Documents and shall in no way be deemed as acceptance of any Defective Work paid therefor. Contractor's obligation to complete the Work in accordance with Contract Documents shall be absolute, unless Owner agrees otherwise in writing.

9.5.C. Neither acceptance of the whole or any part of Work by Owner nor any verbal statements on behalf of Owner or its authorized agents or representatives shall operate as a waiver or Modification of any provision of the Contract Documents, or of any power reserved to Owner herein nor any right to damages provided in the Contract Documents.

## **9.6 Proof of Compliance of Contract Provisions**

9.6.A. In order that Owner may determine whether Contractor has complied or is complying with requirements of Contract Documents not readily enforceable through inspection and tests of Work and materials, Contractor shall at any time, when requested, submit to Owner properly authenticated documents or other satisfactory proofs of compliance with all applicable requirements.

## **10. CONTRACTOR'S ORGANIZATION AND EQUIPMENT**

### **10.1 Contractor's Legal Address**

10.1.A. Address and facsimile number given in Contractor's Bid are hereby designated as Contractor's legal address and facsimile number. Contractor may change its legal address and facsimile number by notice in writing, delivered to Owner, which in conspicuous language advises Owner of a change in legal address or facsimile number, and which Owner accepts in writing. Delivery to Contractor's legal address or depositing in any post office or post office box regularly maintained by the United States Postal Service, in a wrapper with postage affixed, directed to Contractor at legal address, or of any drawings, notice, letter or other communication, shall be deemed legal and sufficient service thereof upon Contractor. Facsimile to Contractor's designated facsimile number of any letter, memorandum, or other communication on standard or legal sized paper, with proof of facsimile transmission, shall be deemed legal and sufficient service thereof upon Contractor.

### **10.2 Contractor's Office at the Work Site**

10.2.A. Contractor shall maintain an office at the Site, which office shall be headquarters of a Contractor representative authorized to transmit to and receive from Owner, communications, instructions, or Drawings. Communications, instructions, or Drawings given to Contractor's representative or delivered at the Site office in representative's absence shall be deemed to have been given to Contractor.

**10.3 Contractor's Superintendents or Forepersons**

- 10.3.A. Contractor shall at all times be represented on Site by one or more superintendents or forepersons authorized and competent to receive and carry out any instructions that Owner may give, and shall be liable for faithful observance of instructions delivered to Contractor or to authorized representative or representatives on Site.

**10.4 Proficiency in English**

- 10.4.A. Supervisors, security guards, safety personnel, and employees who have unescorted access to the Site shall possess proficiency in the English language in order to understand, receive, and carry out oral and written communications or instructions relating to their job functions, including safety and security requirements.

**10.5 Contractor's and Subcontractors' Employees**

- 10.5.A. Contractor shall employ, and shall permit its Subcontractors to employ, only competent and skillful personnel to do Work. If Owner notifies Contractor that any of its employees, or any of its Subcontractors' employees on Work is incompetent, unfaithful, disorderly, or profane, or fails to observe customary standards of conduct, or refuses to carry out any provision of the Contract Documents, or uses threatening or abusive language to any person on Work representing Owner, or violates sanitary rules, or is otherwise unsatisfactory, and if Owner requests that such person be discharged from Work, then Contractor or its Subcontractor shall immediately discharge such person from Work and the discharged person shall not be re-employed on the Work except with consent of Owner.

**10.6 Contractor to Supply Sufficient Workers and Materials**

- 10.6.A. Unless otherwise required by Owner under the terms of Contract Documents, Contractor shall at all times keep on the Site materials and employ qualified workers sufficient to prosecute Work at a rate and in a sequence and manner necessary to complete Work within the Contract Time. This obligation shall remain in full force and effect notwithstanding disputes or claims of any type.
- 10.6.B. At any time during progress of Work should Contractor directly or indirectly (through Subcontractors) refuse, neglect, or be unable to supply sufficient materials or employ qualified workers to prosecute the Work as required, then Owner may require Contractor to accelerate the Work and/or furnish additional qualified workers or materials as Owner may consider necessary, at no cost to Owner. If Contractor does not comply with the notice within three Business Days of date of service thereof, Owner shall have the right (but not a duty) to provide materials and qualified workers to finish the Work or any affected portion of Work, as Owner may elect. Owner may, at its discretion, exclude Contractor from the Site, or portions of the Site or separate Work elements during the time period that Owner exercises this right. Owner will deduct from moneys due or which may thereafter become due under the Contract Documents, the sums necessary to meet expenses thereby incurred and paid to persons supplying materials and doing Work. Owner will deduct from funds or appropriations set aside for purposes of Contract Documents the amount of such payments and charge them to Contractor as if paid to Contractor. Contractor shall remain liable for resulting delay, including liquidated damages and indemnification of Owner from claims of others.

10.6.C. Exercise by Owner of the rights conferred upon Owner in paragraph 10.6.B of this Document 00700, is entirely discretionary on the part of Owner. Owner shall have no duty or obligation to exercise the rights referred to in paragraph 10.6.B of this Document 00700 and its failure to exercise such rights shall not be deemed an approval of existing Work progress or a waiver or limitation of Owner's right to exercise such rights in other concurrent or future similar circumstances. The rights conferred upon Owner under paragraph 10.6.B of this Document 00700 are cumulative to Owner's other rights under any provision of the Contract Documents.

#### **10.7 Contractor to List Trades Working**

10.7.A. Contractor shall list the trades working on the Site and their scheduled activities on a daily basis, and provide a copy of that list to Owner.

#### **10.8 Contractor's Use of the Site**

10.8.A. Contractor shall not make any arrangements with any person to permit occupancy or use of any land, structure, or building within the limits of the Work, for any purpose whatsoever, either with or without compensation, in conflict with any agreement between Owner and any owner, former owner or tenant of such land, structure, or buildings. Contractor may not occupy Owner-owned property outside the limit of the Work as indicated on the Drawings unless it obtains prior approval from Owner.

#### **10.9 Apprenticeship Program**

10.9.A. Contractor and Subcontractors shall comply with the requirements of California Labor Code Sections 1776, 1777.5, and 1777.6 concerning the employment of apprentices by Contractor or Subcontractors. Willful failure to comply may result in penalties, including loss of the right to Bid on or receive public works contracts.

10.9.B. Section 1777.5, as amended, requires a Contractor or Subcontractor employing tradespersons in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of a public works project and which administers the apprenticeship program in that trade for a certification of approval. The certificate shall also fix the ratio of apprentices to journeypersons that will be used in performance of the Contract. The ratio of work performed by apprentices to journeypersons in such cases shall not be less than one *hour* of apprentice's work for every five *hours* of labor performed by journeypersons (the minimum ratio for the land surveyor classification shall not be less than one apprentice for each five journeypersons), except:

1. When unemployment for the previous three-month period in the area exceeds an average of 15 percent;
2. When the number of apprentices in training in the area exceeds a ratio of one to five;
3. When a trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis state-wide or locally; or
4. Assignment of an apprentice to any work performed under a public works contract would create a condition which would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyperson.

- 10.9.C. Contractor is required to make contributions to funds established for administration of apprenticeship programs if Contractor employs registered apprentices or journeypersons in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.
- 10.9.D. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of the California Department of Industrial Relations, or from the Division of Apprenticeship Standards and its branch offices.

## **11. PROSECUTION AND PROGRESS OF THE WORK**

### **11.1 Schedules and Examinations of Contract Documents**

- 11.1.A. Contractor shall submit schedules, reports, and Submittals in the appropriate quantity and within the required time, arrange conferences and meetings, and proceed with the Work in accordance with Contract Documents, including Sections 01315 (Project Meetings), 01320 (Progress Schedules and Reports), and 01330 (Submittal Procedures).
- 11.1.B. Contractor shall submit to Owner for review and discussion at the initial Schedule Review Meeting described in Section 01315 (Project Meetings):
  1. Progress Schedules and Reports as required by Sections 01320 (Progress Schedules and Reports) and 01330 (Submittal Procedures). Contractor shall utilize Progress Schedule in planning, scheduling, coordinating, performing, and controlling Work (including all activities of Subcontractors, assigned contractors, equipment vendors, and suppliers). Contractor shall update Progress Schedule on a monthly basis to depict accurately the actual progress of Work and for evaluating and preparing Contractor's monthly progress payments. Contractor's failure to submit and maintain an acceptable Progress Schedule may, in Owner's discretion, and without limiting the materiality of Contractor's other obligations under the Contract Documents, constitute grounds to declare Contractor in material breach of the Contract Documents.
  2. Within 21 Days after issuance of Notice to Proceed, a preliminary schedule of Submittals that shall list each required Submittal and the times for submitting, reviewing and processing such Submittal, as required by Section 01330 (Submittal Procedures). If no such schedule is agreed upon, then all Submittals shall be completed and submitted within 35 Days after the Notice of Award.
  3. Within 21 Days after issuance of Notice to Proceed, a preliminary Schedule of Values for all the Work which shall include quantities and prices of items aggregating the Contract Sum and shall subdivide each Schedule of Values into component activities in sufficient detail to serve as the basis for progress payments during construction. Such Schedule of Values shall include an appropriate amount of overhead and profit applicable to each item of Work, a line item for Project Record Documents, and a line item for Project scheduling, and shall conform to Section 01200 (Price and Payment Procedures).
- 11.1.C. Unless otherwise provided in the Contract Documents, at least 15 Days before submission of the first Application for Payment, a conference attended by Contractor, Owner, and others as appropriate, will be held to review for acceptability the schedules submitted in accordance with paragraph 11.1.B of this Document 00700. Contractor shall have an additional seven Days to make corrections and adjustments and to complete and resubmit the schedules. Schedules shall be updated and

completed as required by Sections 01200 (Price and Payment Procedures), 01320 (Progress Schedules and Reports) and 01330 (Submittal Procedures). No progress payment shall be due or owing to Contractor until the schedules are submitted to and acceptable to Owner or Engineer or both as meeting the requirements of the Contract Documents, including Sections 01200 (Price and Payment Procedures), 01320 (Progress Schedules and Reports) and 01330 (Submittal Procedures). Owner's acceptance of Contractor's schedules will not create any duty of care or impose on Owner any responsibility for the sequencing, scheduling, or progress of Work, nor will it interfere with or relieve Contractor from Contractor's full responsibility therefor.

- 11.1.D. Before commencing any portion of Work, Contractor shall inform Owner in writing as to time and place at which Contractor wishes to commence Work, and nature of Work to be done, in order that proper provision for inspection of Work may occur, and to assure measurements necessary for record and payment. Information shall be given to Owner a reasonable time in advance of time at which Contractor proposes to begin Work, so that Owner may complete necessary preliminary work without inconvenience or delay to Contractor.
- 11.1.E. Contractor shall submit Submittals to Owner (or Engineer if Owner so designates) for review in strict accordance with Section 01330 (Submittal Procedures). Submission of a Submittal shall constitute Contractor's representation that all requirements of Section 01330 (Submittal Procedures) have been complied with. All Submittals will be identified as Owner may require and in the number of copies specified in Section 01330 (Submittal Procedures).
- 11.1.F. Contractor shall not perform Work that requires submission of a Submittal prior to submission and favorable review of the Submittal. Where a Submittal is required by Contract Documents or the final Schedule of Submittals accepted by Owner, any related Work performed prior to Owner's approval of the pertinent Submittal shall be at the sole expense, responsibility, and risk of Contractor.

## **11.2 Cost Data**

- 11.2.A. Contractor shall maintain full and correct information as to the number of workers employed in connection with each subdivision of Work, the classification and rate of pay of each worker in the form of certified payrolls, the cost to Contractor of each class of materials, tools, and appliances used by Contractor in Work, and the amount of each class of materials used in each subdivision of Work. Contractor shall provide Owner with copies of certified payrolls every 2 weeks. If Contractor maintains or is capable of generating summaries or reports comparing actual Project costs with Bid estimates or budgets, Contractor shall provide Owner with a copy of such report upon Owner's request and whenever it is generated.
- 11.2.B. Contractor shall maintain daily job reports recording all significant activity on the job, including the number of workers on Site, Work activities, problems encountered, and delays. Contractor shall provide Owner with copies for each Day Contractor works on the Project, to be delivered to Owner either the same Day or the following morning before starting Work at the Site. Contractor shall take monthly progress photographs of all areas of the Work. Contractor shall maintain copies of all correspondence with Subcontractors and records of meetings with Subcontractors.
- 11.2.C. Owner shall have the right to audit and copy Contractor's books and records of any type, nature, or description relating to the Project (including but not limited to financial

records reflecting in any way costs claimed on the Project), and to inspect the Site, including Contractor's trailer, or other job Site office, and this requirement shall be contained in the subcontracts of Subcontractors working on Site. By way of example, Owner shall have the right to inspect and obtain copies of all Contract Documents, planning and design documents, Bid proposal and negotiation documents (subject to Document 00670 [Escrow Bid Documents]), cost records and job cost variance reports, design modification proposals, value engineering or other cost reduction proposals, revisions made to the original design, job Progress Reports, photographs, and as-built drawings maintained by Contractor. Owner and any other applicable governmental entity shall have the right to inspect all information and documents maintained under this paragraph 11.2 at any time during the Project and for a period of five years following Substantial Completion. This right of inspection shall not relieve Contractor of its duties and obligations under the Contract Documents. This right of inspection shall be specifically enforceable in a court of law, either independently or in conjunction with enforcement of any other rights in the Contract Documents.

- 11.2.D. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Contract Modifications, Change Orders, Work Directives, Force Account orders, and written interpretations and clarifications in good order and annotated to show all changes made during construction. These Project Record Documents, together with all approved Samples and a counterpart of all approved Shop Drawings, shall be maintained and available to Owner for reference. Upon completion of the Work, Contractor shall deliver to Owner, the Project Record Documents.

## **12. CLAIMS BY CONTRACTOR**

### **12.1 General**

- 12.1.A. Contract Interpretation Disputes: Should it appear to Contractor that Work to be performed or any of the matters relative to Contract Documents (including without limitation Drawings or Specifications) are not satisfactorily detailed or explained therein, or should any questions arise as to the meaning or intent of Contract Documents (including without limitation Drawings or Specifications), Contractor shall give written notice to Owner. Contractor shall bear all costs incurred in giving notice. Owner will render a determination regarding the issue, which shall be final. If Contractor disagrees with Owner's decision, Contractor's sole and exclusive remedy is to file a claim in accordance with this Article 12. Contractor shall diligently prosecute the Disputed Work (as defined below) to Final Completion pending resolution of any claim.
- 12.1.B. Work Disputes: Contractor shall give written notice to Owner of any dispute arising under the Contract Documents respecting the true value of any Work performed, the implementation of Work required by Contract Documents, any Work omitted, any extra Work that Contractor may be required to perform or time extensions, respecting the size of any payment to Contractor during the performance of Contract Documents, or of compliance with Contract Documents procedures. Owner will render a determination regarding the issue, which shall be final. If Contractor disagrees with Owner's decision, Contractor's sole and exclusive remedy is to file a claim in accordance with this Article 12. Pending the resolution of any claim, Contractor shall diligently prosecute the Disputed Work to Final Completion.

- 12.1.C. The claim notice and documentation procedure described in this Article 12 shall constitute a mandatory non-judicial settlement procedure and shall apply to all claims and disputes arising under the Contract Documents, including without limitation any claim or dispute by any Subcontractor or material supplier. All Subcontractor and supplier claims of any type shall be brought only through Contractor as provided in this Article 12. Under no circumstances shall any Subcontractor or supplier make any direct claim against Owner.
- 12.1.D. "Claim" means a written demand or written assertion by Contractor seeking, as a matter of right, the payment of money, the adjustment or interpretation of Contract Documents terms, or other relief arising under or relating to Contract Documents. In order to qualify as a "claim," the written demand must state that it is a claim submitted under this Article 12.
- 12.1.E. A voucher, invoice, proposed change, Application for Payment, or other routine or authorized form of request for payment is not a claim under the Contract Documents. If such request is disputed as to liability or amount, then the disputed portion of the submission may be converted to a claim under the Contract Documents by submitting a separate claim in compliance with claim submission requirements.
- 12.1.F. The provisions of this Article 12 survive termination, breach, or completion of the Contract Documents. Contractor shall bear all costs incurred in the preparation and submission of a claim.

## **12.2 Procedure**

- 12.2.A. Should any clarification, determination, action or inaction by Owner or Engineer, Work, or any other event, in the opinion of Contractor, exceed the requirements of or not comply with Contract Documents, or otherwise result in Contractor seeking additional compensation in time or money for any reason (collectively "Disputed Work"), then Contractor and Owner will make good faith attempts to resolve informally any and all such issues, claims and/or disputes. Before commencing the Disputed Work, or within seven Days after Contractor's first knowledge of the Disputed Work, whichever is earlier, Contractor shall file a written notice and cost proposal for the Disputed Work with Owner stating clearly and in detail its objection and reasons for contending the Work or interpretation is outside the requirements of Contract Documents. If a written notice and cost proposal for Disputed Work is not issued within this time period, or if Contractor proceeds with the Disputed Work without first having given the notice required by this paragraph 12.2.A, Contractor shall waive its rights to further claim on the specific issue.
- 12.2.B. Owner will review Contractor's timely notice and cost proposal for Disputed Work and provide a decision. If, after receiving the decision, Contractor disagrees with it or still considers the Work required of it to be outside of the requirements of Contract Documents, it shall so notify Owner, in writing, within seven Days after receiving the decision, by submitting a notice of potential claim, stating that a formal claim will be issued. Within 30 Days of receiving the decision, Contractor shall submit its claim in the form specified herein and all arguments, justification, cost or estimates, schedule analysis, and detailed documentation supporting its position. Contractor's failure to furnish notification within seven Days and all justifying documentation within 30 Days will result in Contractor waiving its right to the subject claim. If Disputed Work persists longer than 30 Days, then Contractor shall, every 30 Days until the Disputed

Work ceases, submit to Owner a document titled "Claim Update" that shall update and quantify all elements of the claim as completely as possible. Contractor's failure to submit a Claim Update or to quantify costs every 30 Days shall result in waiver of the claim for that 30-Day period. Claims or Claim Updates stating that damages, total damages (direct and indirect), schedule input and/or any time extension will be determined at a later date shall not comply with this paragraph 12.2.B and shall result in Contractor waiving its claim(s).

- 12.2.C. Upon receipt of Contractor's formal claim including all arguments, justifications, cost or estimates, schedule analysis, and all other documentation supporting its position as required herein, Owner or its designee will review the issue and render a final determination. Owner may in its discretion first conduct an administrative hearing on the claim, in which event Contractor shall appear and provide further substantiating information and documents if requested by Owner.
- 12.2.D. Claims shall be calculated in the same manner as Change Orders per Section 01250 (Modification Procedures). EXCEPT WHERE PROVIDED BY LAW, OR ELSEWHERE IN THESE CONTRACT DOCUMENTS (IF APPLICABLE), OWNER SHALL NOT BE LIABLE FOR SPECIAL OR CONSEQUENTIAL DAMAGES, AND CONTRACTOR SHALL NOT INCLUDE THEM IN ITS CLAIMS. CONTRACTOR SHALL BE LIMITED IN ITS RECOVERY ON CLAIMS TO THE CHANGE ORDER CALCULATIONS SET FORTH IN SECTION 01250 (MODIFICATION PROCEDURES).

### **12.3 Claim Format**

- 12.3.A. Contractor shall submit the claim justification in the following format:
1. Cover letter and certification under penalty of perjury of the accuracy of the claim;
  2. Summary of claim, including underlying facts, entitlement, schedule analysis, quantum calculations, Contract provisions supporting relief;
  3. List of documents relating to claim including Specifications, Drawings, clarifications/requests for information, schedules, notices of delay, and any others;
  4. Chronology of events and correspondence;
  5. Analysis of claim merit;
  6. Analysis of claim cost; and
  7. Attach supporting documents referenced in paragraph 12.3.A.3.

### **12.4 Mediation**

- 12.4.A. All Contractor claims not subject to the claim resolution procedures set forth in Section 01410 (Regulatory Requirements) shall, as a condition precedent to litigation (or if otherwise permitted by the Contract Documents, arbitration) thereon, first be mediated. Mediation shall be non-binding and utilize the services of a mediator mutually acceptable to the parties and, if the parties cannot agree, a mediator selected by the American Arbitration Association from its panel of approved mediators trained in construction industry mediation. Except as provided below in Section 12.7, all statutes of limitation shall be tolled from the date of the demand for mediation until a date two weeks following the mediation's conclusion. All unresolved Contractor claims shall be submitted to the same mediator. The cost of mediation shall be equally shared.

**12.5 Subcontractor Claims**

- 12.5.A. Contractor shall present as its claims all Subcontractor, sub-Subcontractor and supplier claims of any type, and prove them under the terms of the Contract Documents. Owner shall not be directly liable to any Subcontractor, any supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages or extra costs of any type arising out of or resulting from the Project.

**12.6 Exclusive Remedy**

- 12.6.A. Contractor's performance of its duties and obligations specified in this Article 12 and administration of a claim as provided in this Article 12 is Contractor's sole and exclusive remedy for disputes of all types pertaining to the payment of money, extension of time, the adjustment or interpretation of the Contract Documents terms or other contractual or tort relief arising from Contract Documents. This exclusive remedy and the limitation of liability (expressed herein and elsewhere throughout the Contract Documents) apply notwithstanding the completion, termination, suspension, cancellation, breach, or rescission of the Work or Contract Documents, negligence or strict liability by Owner, its representatives, consultants, or agents, or the transfer of Work or the Project to Owner for any reason whatsoever. Contractor waives and covenants not to raise any claims of waiver, estoppel, release, bar, or any other type of excuse for non-compliance with these Article 12 claim submission, administration, and mediation requirements. Compliance with the claim submission, administration, and mediation procedures described in this Article 12 is a condition precedent to the right to file a Government Code Claim, commence litigation or commence any other legal action. Claim(s) or issue(s) not raised in a timely protest and timely claim submitted under this Article 12 may not be asserted in any subsequent Government Code Claim, litigation or legal action. Owner shall not be deemed to waive any provision under this Article 12, if at Owner's sole discretion, a claim is administered in a manner not in accord with this Article 12.

**12.7 Final Claim Disposition**

- 12.7.A. If the Contractor's claims submitted in accordance with this Article 12 at Project completion total \$375,000 or less, then claims resolution shall proceed in the manner prescribed by Article 1.5, Chapter 1, Part 3 of Division 2 of the California Public Contract Code. If such claims exceed \$375,000, then Contractor shall prepare a compendium of claims submitted and not resolved as a result of these procedures, and submit them in a Govt. Code Section 910 form of claim for final investigation and consideration of their settlement prior to initiation of any litigation thereon, as required by Government Code Section 945.4. Pursuant to Government Code Section 930.2, the one-year period in Government Code Section 911.2 shall be reduced to 150 days.

**13. LEGAL AND MISCELLANEOUS****13.1 Laws and Regulations**

- 13.1.A. Contractor shall keep fully informed of and shall comply with all laws, ordinances, regulations, and orders of any properly constituted authority affecting the Contract Documents, Work and persons connected with Work, and shall protect and indemnify Owner and its officers, employees, consultants, and agents against any claim or liability, including attorneys' fees, arising from or based on violation of law, ordinance,

regulation or order, whether by Contractor or by Subcontractors, employees, or agents. Authorized persons may at any time enter upon any part of Work to ascertain compliance of all applicable laws, ordinances, regulations and orders.

- 13.1.B. Whenever Drawings and Specifications require larger sizes or higher standards than are required by any applicable law, ordinance, regulation, or order, Drawings and Specifications shall govern. Whenever Drawings and Specifications require something that will violate such laws, ordinances, regulations, or orders, then such laws, ordinances, regulations, or orders shall govern.

### **13.2 Permits and Taxes**

- 13.2.A. Contractor shall procure all permits and licenses applicable to the Work (including environmental matters to the extent applicable); pay all charges and fees, including fees for street opening permits; comply with, implement, and acknowledge effectiveness of all permits; initiate and cooperate in securing all required notifications or approvals therefore; and give all notices necessary and incident to due and lawful prosecution of Work, unless otherwise provided herein. Owner will pay applicable building permits, school, sanitation, and water fees for the completed construction. Contractor shall pay all sales and/or use taxes levied on materials, supplies, or equipment purchased and used on or incorporated into Work, and all other taxes properly assessed against equipment or other property used in connection with Work, without any increase in the Contract Sum. Contractor shall make necessary arrangements with proper authorities having jurisdiction over roads, streets, pipelines, navigable waterways, railroads, and other works in advance of operations, even where Owner may have already obtained permits for the Work.

### **13.3 Responsibility of Contractor and Indemnification**

- 13.3.A. Owner and each of its officers, employees, consultants, and agents including, but not limited to, the Board, Engineer, and each Owner's Representative, shall not be liable or accountable in any manner for loss or damage that may happen to any part of the Work; loss or damage to materials or other things used or employed in performing the Work; injury, sickness, disease, or death of any person; or damage to property resulting from any cause whatsoever except their sole negligence, willful misconduct or active negligence, attributable to performance or character of the Work, and Contractor releases all of the foregoing persons and entities from any and all such claims.
- 13.3.B. To the furthest extent permitted by law (including without limitation California Civil Code Section 2782), Contractor shall assume defense of, and indemnify and hold harmless, Owner and each of its officers, employees, consultants, and agents, including but not limited to, the Board, Engineer, and each Owner's Representative, from claims, suits, actions, losses and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies and attorneys' fees and consultants' fees, directly or indirectly arising out of, connected with or resulting from performance of the Work, failure to perform the Work, or condition of the Work which is caused in whole or part by any act or omission of Contractor, Subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether it is caused in part by the negligence of Owner or by any person or entity required to be indemnified hereunder.

- 13.3.C. With respect to third-party claims against Contractor, Contractor waives any and all rights to any type of express or implied indemnity against Owner and each of its officers, employees, consultants, and agents including, but not limited to, Owner, the Board, Engineer and each Owner's Representative.
- 13.3.D. Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of Contractor, its Subcontractors of any tier, or the officers or agents of any of them.
- 13.3.E. To the furthest extent permitted by law (including, without limitation, Civil Code Section 2782), the indemnities, releases of liability and limitations of liability, claims procedures, and limitations of remedy expressed throughout Contract Documents shall apply even in the event of breach of Contract, negligence (active or passive), fault or strict liability of the party(ies) indemnified, released, or limited in liability, and shall survive the termination, rescission, breach, abandonment, or completion of the Work or the terms of the Contract Documents. If Contractor fails to perform any of these defense or indemnity obligations, Owner may in its discretion back charge Contractor for Owner's costs and damages resulting therefrom and withhold such sums from progress payments or other Contract moneys which may become due.
- 13.3.F. The indemnities in the Contract Documents shall not apply to any indemnified party to the extent of its sole negligence or willful misconduct; nor shall they apply to Owner or other indemnified party to the extent of its active negligence.

#### **13.4 Concealed or Unknown Conditions**

- 13.4.A. If either of the following conditions is encountered at Site when digging trenches or other excavations that extend deeper than four feet below the surface, Contractor shall give a written Notice of Differing Site Conditions to Owner promptly before conditions are disturbed, except in an emergency as required by paragraph 16.4 of this Document 00700, and in no event later than seven Days after first observance of:
1. Subsurface or Latent physical conditions which differ materially from those indicated in the Contract Documents; or
  2. Unknown physical conditions of an unusual nature or which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.
- 13.4.B. In response to Contractor's Notice of Differing Site Conditions under paragraph 13.4.A, Owner will investigate the identified conditions, and if they differ materially and cause increase or decrease in Contractor's cost of, or time required for, performance of any part of the Work, Owner will issue either a Request for Proposal or a Construction Change Directive under the procedures described in the Contract Documents, including without limitation Section 01250 (Modification Procedures). If Owner determines that physical conditions at the Site are not Latent or are not materially different from those indicated in Contract Documents or that no change in terms of the Contract Documents is justified, Owner will so notify Contractor in writing, stating reasons (with Contractor retaining its rights under Article 12 of this Document 00700).
- 13.4.C. Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed Latent or materially different Site conditions (whether above or below grade) if:

1. Contractor knew of the existence of such conditions at the time Contractor submitted its Bid; or
  2. Contractor should have known of the existence of such conditions as a result of having complied with the requirements of Contract Documents, including without limitation paragraphs 2.1 and 8.4 of this Document 00700; or
  3. The information or conditions claimed by Contractor to be Latent or materially different consist of information, conclusions, opinions, or deductions of the kind that paragraph 2.1 of this Document 00700 precludes reliance upon; or
  4. Contractor was required to give written Notice of Differing Site Conditions and failed to do so within the time required.
- 13.4.D. If Owner and Contractor are unable to agree on entitlement to or as to the amount or length of any adjustment in the Contract Sum or Contract Time required under this paragraph 13.4, Contractor shall proceed with the Work as directed by Owner and may make a claim as provided in Article 12 of this Document 00700.

### **13.5 Notice of Hazardous Waste or Materials Conditions**

- 13.5.A. Contractor shall give a written Notice of Hazardous Materials Condition to Owner promptly, before any of the following conditions are disturbed (except in an emergency as required by paragraph 16.4 of this Document 00700), and in no event later than 24 hours after first observance of any:
1. Material that Contractor believes may be hazardous waste or hazardous material, as defined in Section 25117 of the Health and Safety Code (including, without limitation, Asbestos, lead, PCBs, petroleum and related hydrocarbons, and radioactive material) that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law (“hazardous material”); or
  2. Other material that may present an imminent substantial danger to persons or property exposed thereto in connection with Work at the Site (“other materials”).
- 13.5.B. Except as otherwise provided in the Contract Documents or as provided by applicable law, Contractor shall not be required to give any notice for the disturbance or observation of any such hazardous materials or other materials where such matter is disturbed or observed as part of the scope of Work under the Contract Documents (such as hazardous waste or hazardous material investigation, remediation or disposal activities which are identified as the subject of Work under the Contract Documents), where Contractor complies with all requirements in the Contract Documents and applicable law respecting such materials.
- 13.5.C. Contractor’s Notice of Hazardous Materials Condition shall indicate whether the hazardous materials or other materials were shown or indicated in the Contract Documents to be within the scope of Work, and whether the hazardous materials or other materials were brought to the Site by Contractor, its Subcontractors, suppliers, or anyone else for whom Contractor is responsible.
- 13.5.D. Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed hazardous waste or materials if:
1. Contractor knew of the existence of such hazardous materials or other materials at the time Contractor submitted its Bid; or
  2. Contractor should have known of the existence of such hazardous material or other materials as a result of its having the responsibility to obtain additional or

supplementary examinations, investigation, explorations, tests, studies, and data concerning the conditions at or contiguous to the Site prior to submitting its Bid; or

3. Contractor failed to give the written notice within the time required by paragraph 13.5.A of this Document 00700.

- 13.5.E. If Owner determines that conditions involve hazardous materials or other materials and that a change in Contract Document terms is justified, Owner will issue either a Request for Proposal or Construction Change Directive under the procedures described in the Contract Documents, including without limitation Section 01250 (Modification Procedures). If Owner determines that conditions do not involve hazardous materials or other materials or that no change in Contract Document terms is justified, Owner will notify Contractor in writing, stating the reasons for its determination.
- 13.5.F. In addition to the parties' other rights under paragraph 13.5.E of this Document 00700, if Contractor does not agree to resume Work based on a reasonable belief that it is unsafe, or does not agree to resume Work under special conditions, Owner may order the disputed portion of Work deleted from the Work, or performed by others, or Owner may invoke its right to terminate Contractor's right to proceed under the Contract Documents in whole or in part, for convenience or for cause as the facts may warrant.
- 13.5.G. If Contractor does not agree with any Owner determination of any adjustment in the Contract Sum or Contract Time under this paragraph 13.5, Contractor may make a claim as provided in Article 12 of this Document 00700.

### **13.6 Suspension of Work**

- 13.6.A. Owner may, without cause, order Contractor in writing to suspend, delay or interrupt Work in whole or in part for such period of time as Owner may determine. An adjustment shall be made for increases in cost of performance of Work of the Contract Documents caused by any such suspension, delay or interruption, calculated using the measures set forth in Section 01250 (Modification Procedures). No adjustment shall be made to extent that:
  1. Performance is, was or would have been so suspended, delayed or interrupted by another cause for which Contractor is responsible; or
  2. An equitable adjustment is made or denied under any other provision of Contract Documents; or
  3. The suspension of Work was the direct or indirect result of Contractor's failure to perform any of its obligations hereunder. Adjustments made in cost of performance may have a mutually agreed fixed or percentage fee; if the parties cannot agree, Contractor may file a claim under Article 12 of this Document 00700.

### **13.7 Termination of Contract for Cause**

- 13.7.A. Owner may declare Contractor in default of Contract Documents and Owner may terminate Contractor's right to proceed under the Contract Documents for cause:
  1. Should Contractor make an assignment for the benefit of creditors; admit in writing its inability to pay its debts as they become due; file a voluntary petition in bankruptcy; be adjudged a bankrupt or insolvent; be the subject of an involuntary petition in bankruptcy which is not dismissed within 60 Days; file a petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future

- statute, law, or regulation; file any answer admitting or not contesting the material allegations of a petition filed against Contractor in any such proceeding; or seek, consent to, or acquiesce in, the appointment of any trustee, receiver, custodian or liquidator of Contractor or of all or any substantial part of its properties or if Contractor, its directors or shareholders, take action to dissolve or liquidate Contractor; or
2. Should Contractor commit a material breach of the Contract Documents. If Owner declares Contractor in default due to material breach, however, Owner must allow Contractor an opportunity to cure such breach within ten Days of the date of notice from Owner to Contractor providing notice of the default; or, if such breach is curable but not curable within such ten-Day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Contractor to avail itself of a time period in excess of ten Days, Contractor must provide Owner within the ten-Day period with a written plan acceptable to Owner to cure said breach which includes, for example, evidence of necessary resources, Subcontractor commitments, schedules and recovery schedules meeting Contract Document requirements and showing a realistic and achievable plan to cure the breach. Contractor must then diligently commence and continue such cure according to the written plan); or
  3. Should Contractor violate or allow (by a Subcontractor or other person or entity for which Contractor is responsible) a violation of any valid law, statute, regulation, rule, ordinance, permit, license or order of any governmental agency applicable to the Project or Work and does not cure (or cause to be cured) such violation within ten Days of the date of the notice from Owner to Contractor demanding such cure; or, if such violation is curable but not curable within such ten-Day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for Contractor to avail itself of a time period in excess of ten Days, Contractor shall provide Owner within the ten-Day period with a written plan to cure said violation acceptable to Owner, and then diligently commence and continue performance of such cure according to the written plan.)
- 13.7.B. If Owner at any time reasonably believes that Contractor is or may be in default under the Contract Documents as provided in paragraph 13.7.A of this Document 00700, Owner may in its sole discretion notify Contractor of this fact and request written assurances from Contractor of performance of Contract Documents and a written plan from Contractor to remedy any default under the terms of Contract Documents which Owner may advise Contractor of in writing. Contractor shall, within 10 Days of Owner's request, deliver a written cure plan which meets the requirements of the written plan deliverable under paragraph 13.7.A.2 of this Document 00700. Failure of Contractor to provide such written assurances of performance and the required written plan, within ten Days of request, will constitute a material breach of Contract Documents sufficient to justify termination for cause.
- 13.7.C. In event of termination for cause, Owner will immediately serve written notice thereof upon Surety and Contractor. Surety shall have the rights and obligations set forth in Document 00611 (Construction Performance Bond). Subject to the Surety's rights under the Performance Bond (which rights are waived upon a default thereunder), Owner may take over the Work and prosecute it to completion by contract or by any other methods it may deem advisable.

- 13.7.D. In the event of termination by Owner as provided in paragraph 13.7.A of this Document 00700 for cause:
1. Owner will compensate Contractor for the value of the Work delivered to Owner upon termination as determined in accordance with the Contract Documents, subject to all rights of offset and back charges, and provided that Contractor provides Owner with updated as-builts and Project Record Documents showing the Work performed up to the date of termination. However, Owner will not compensate Contractor for its costs in terminating the Work or any cancellation charges owed to third parties.
  2. Contractor shall deliver to Owner possession of the Work in its then condition including, but not limited to, all designs, engineering, Project records, Project Record Documents, cost data of all types, Drawings and Specifications and contracts with vendors and Subcontractors, all other documentation associated with the Project, and all construction supplies and aids dedicated solely to performing the Work which, in the normal course of construction, would be consumed or only have salvage value at the end of the construction period. Contractor shall remain fully liable for the failure of any Work completed and materials and equipment provided through the date of such termination to comply with the provisions of the Contract Documents. The provisions of this paragraph 13.7.D shall not be interpreted to diminish any right which Owner may have to claim and recover damages for any breach of Contract Documents or otherwise, but rather, Contractor shall compensate Owner for all loss, cost, damage, expense, and/or liability suffered by Owner as a result of such termination and failure to comply with Contract Documents.
  3. Owner's rights under paragraph 13.7.D.2 shall be specifically enforceable to the greatest extent permitted by law. Owner shall, to the extent applicable, have all other rights and remedies set forth in any Bidding Document.
- 13.7.E. Owner may terminate portions or parts of the Work for cause, provided these portions or parts (1) have separate geographic areas from parts or portions of the Work not terminated or (2) are limited to the Work of one or more specific trades or Subcontractors. In such case, Contractor shall cooperate with a competing contractor as required under Article 6 of this Document 00700.
- 13.7.F. In the event a termination for cause is determined to have been made wrongfully or without cause, then the termination shall be treated as a termination for convenience, and Contractor shall have no greater rights than it would have had following a termination for convenience. Any Contractor claim arising out of a termination for cause shall be made in accordance with the provisions of the Contract Documents on claims and calculated in accordance with the provisions of the Contract Documents on Change Orders and claims. No other loss cost, damage, expense or liability may be claimed, requested or recovered by Contractor.

### **13.8 Termination of Contract for Convenience**

- 13.8.A. Owner may terminate performance of the Work under the Contract Documents in accordance with this clause in whole, or from time to time in part, whenever Owner shall determine that termination is in Owner's best interest. Termination shall be effected by Owner delivering to Contractor notice of termination specifying the extent to which performance of the Work under the Contract Documents is terminated and the effective date of the termination.

- 13.8.B. After receiving a notice of termination under paragraph 13.8.A of this Document 00700, and except as otherwise directed by Owner, Contractor shall:
1. Stop Work under the Contract Documents on date and to extent specified in notice of termination;
  2. Place no further orders or subcontracts for materials, services, or facilities except as necessary to complete portion of Work under the Contract Documents which is not terminated;
  3. Terminate all orders and subcontracts to extent that they relate to performance of Work terminated by the notice of termination;
  4. Assign to Owner in manner, at times, and to extent directed by Owner, all right, title, and interest of Contractor under orders and subcontracts so terminated. Owner shall have the right, in its sole discretion, to settle or pay any or all claims arising out of termination of orders and subcontracts;
  5. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with approval or ratification of Owner to extent Owner may require. Owner's approval or ratification shall be final for purposes of this paragraph 13.8;
  6. Transfer title to Owner, and deliver in the manner, at the times, and to the extent, if any, directed by Owner, all fabricated or unfabricated parts, Work in process, completed Work, supplies, and all other material produced as part of, or acquired in connection with performance of, Work terminated by the notice of termination, and completed or partially completed drawings, drawings, specifications, information, and other property which, if the Project had been completed, would have been required to be furnished to Owner;
  7. Use its best efforts to sell, in manner, at times, to extent, and at price or prices that Owner directs or authorizes, any property of types referred to in paragraph 13.8.B.6 of this Document 00700, but Contractor shall not be required to extend credit to any purchaser, and may acquire any such property under conditions prescribed and at price or prices approved by Owner. Proceeds of transfer or disposition shall be applied to reduce payments to be made by Owner to Contractor under the Contract Documents or shall otherwise be credited to the price or cost of Work covered by Contract Documents or paid in such other manner as Owner may direct;
  8. Complete performance of the part of the Work which was not terminated by the notice of termination; and
  9. Take such action as may be necessary, or as Owner may direct, to protect and preserve all property related to Contract Documents which is in Contractor's possession and in which Owner has or may acquire interest.
- 13.8.C. After receipt of a notice of termination under paragraph 13.8.A of this Document 00700, Contractor shall submit to Owner its termination claim, in form and with all certifications required by Article 12 of this Document 00700. Contractor's termination claim shall be submitted promptly, but in no event later than 6 months from effective date of the termination. Contractor and Owner may agree upon the whole or part of the amount or amounts to be paid to Contractor because of a total or partial termination of Work under this paragraph 13.8. If Contractor and Owner fail to agree on the whole amount to be paid to Contractor because of the termination of the Work under this paragraph 13.8, Owner's total liability to Contractor by reason of the termination shall be the total (without duplication of any items) of:

1. The reasonable cost to Contractor, without profit, for all Work performed prior to the effective date of the termination, including Work done to secure the Project for termination. Reasonable cost may not exceed the applicable percentage completion values derived from the Progress Schedule and the Schedule of Values. Deductions shall be made for cost of materials to be retained by Contractor, cost of Work defectively performed, amounts realized by sale of materials, and for other appropriate credits against cost of Work. Reasonable cost will include reasonable allowance for Project overhead and general administrative overhead not to exceed a total of ten percent of direct costs of such Work. When, in Owner's opinion, the cost of any item of Work is excessively high due to costs incurred to remedy or replace Defective or rejected Work, reasonable cost to be allowed will be the estimated reasonable cost of performing the Work in compliance with requirements of Contract Documents and excessive actual cost shall be disallowed.
  2. A reasonable allowance for profit on cost of Work performed as determined under paragraph 13.8.C.1 of this Document 00700, provided that Contractor establishes to Owner's satisfaction that Contractor would have made a profit had the Project been completed, and provided further that the profit allowed shall not exceed 5 percent of cost.
  3. Reasonable costs to Contractor of handling material returned to vendors, delivered to Owner or otherwise disposed of as directed by Owner.
  4. A reasonable allowance for Contractor's internal administrative costs in preparing termination claim.
  5. Except as provided in this paragraph 13.8.C of this Document 00700, Owner shall not be liable for costs incurred by Contractor or Subcontractors after receipt of a notice of termination. Such non-recoverable costs include, but are not limited to, anticipated profits on Work not performed as of the date of termination, post-termination employee salaries, post-termination general administrative expenses, post-termination overhead or unabsorbed overhead, costs of preparing and submitting Contractor's Bid, attorneys' fees of any type, and all costs relating to prosecution of claim or lawsuit.
  6. Owner shall have no obligation to pay Contractor under this paragraph 13.8 unless and until Contractor provides Owner with updated and acceptable as-builts and Project Record Documents for Work completed prior to termination.
- 13.8.D. In arriving at the amount due Contractor under this clause, there shall be deducted:
1. All unliquidated advances or other payments on account previously made to Contractor which are applicable to the terminated portion of Contract Documents;
  2. Any claim which Owner may have against Contractor in connection with Contract Documents; and
  3. The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by Contractor or sold under provisions of this paragraph 13.8, and not otherwise recovered by or credited to Owner.

### **13.9 Contingent Assignment of Subcontracts**

- 13.9.A. Contractor hereby assigns to Owner each Subcontract for a portion of the Work, provided that:
1. The assignment is effective only after Owner's termination of Contractor's right to proceed under the Contract Documents (or portion thereof relating to that Subcontract) pursuant to paragraphs 13.7 or 13.8 of this Document 00700.

2. The assignment is effective only for the Subcontracts which Owner expressly accepts by notifying the Subcontractor in writing;
3. The assignment is subject to the prior rights, if any, of the Surety, obligated by Document 00611 (Construction Performance Bond) provided under the Contract Documents, where the Surety exercises its rights to complete the Contract;
4. After the effectiveness of an assignment, Contractor shall, at its sole cost and expense (except as otherwise provided in paragraphs 13.7 or 13.8 of this Document 00700), sign all instruments and take all actions reasonably requested by Owner to evidence and confirm the effectiveness of the assignment in Owner; and
5. Nothing in this paragraph 13.9 shall modify or limit any of Contractor's obligations to Owner arising from acts or omissions occurring before the effectiveness of any Subcontract assignment, including but not limited to all defense, indemnity and hold-harmless obligations arising from or related to the assigned Subcontract.

### **13.10 Remedies and Contract Integration**

- 13.10.A. Subject to Contract Documents provisions regarding Contractor claims, claim review, and claim resolution, and subject to the limitations therein, the exclusive jurisdiction and venue for resolving all claims, counter-claims, disputes and other matters in question between Owner and Contractor arising out of or relating to Contract Documents, any breach thereof or the Project shall be the applicable court of competent jurisdiction located in the State of California, County of Sonoma. All Owner remedies provided in the Contract Documents shall be taken and construed as cumulative and not exclusive; that is, in addition to each and every other remedy herein provided; and in all instances Owner shall have any and all other equitable and legal rights and remedies which it would have according to law.
- 13.10.B. The Contract Documents, any Contract Modifications, and Change Orders shall represent the entire and integrated agreement between Owner and Contractor regarding the subject matters hereof and thereof and shall constitute the exclusive statement of the terms of the parties' agreement. The Contract Documents, and any Contract Modifications and Change Orders, shall supersede any and all prior negotiations, representations or agreements, written or oral, express or implied, that relate in any way to the subject matter of the Contract Documents or written Modifications. Owner and Contractor represent and agree that, except as otherwise expressly provided in the Contract Documents, they are entering into the Contract Documents and any subsequent written Modification in sole reliance upon the information set forth or referenced in the Contract Documents or Contract Modifications and the parties are not and will not rely on any other information.
- 13.10.C. In any proceeding to enforce the Contract Documents, Contractor and Owner agree that the finder of fact shall receive detailed instructions on the meaning and operation of the Contract Documents, including their conditions, limitations of liability and remedies clauses, claims procedures and any other provisions impacting major defenses and theories of liability of the parties. Detailed findings of fact shall be requested, to verify Contract enforcement.
- 13.10.D. Either party's waiver of any breach or failure to enforce any of the terms, covenants, conditions or other provisions of the Contract Documents at any time shall not in any way affect, limit, modify or waive that party's right thereafter to enforce or compel strict compliance with every term, covenant, condition or other provision hereof, any course of dealing or custom of the trade or oral representations notwithstanding.

**13.11 Patents**

13.11.A. Fees or claims for any patented invention, article or arrangement that may be used upon or in any manner connected with performance of the Work or any part thereof shall be included in the Bid price for doing the Work. Contractor shall defend, indemnify and hold harmless Owner and each of its officers, employees, consultants and agents, including, but not limited to, the Board and each Owner's Representative, from all damages, claims for damages, costs or expenses in law or equity, including attorneys' fees, arising from or relating to any claim that any article supplied or to be supplied under the Contract Documents infringes on the patent rights, copyright, trade name, trademark, service mark, trade secret or other intellectual property right of any person or persons or that the person or entity supplying the article does not have a lawful right to sell the same. Such costs or expenses for which Contractor agrees to indemnify and hold harmless the above indemnities include but are not limited to any and all license fees, whether such fees are agreed by any indemnitee or ordered by a court or administrative body of any competent jurisdiction.

**13.12 Substitution for Patented and Specified Articles**

13.12.A. Except as provided otherwise in Document 00200 (Instructions to Bidders) or in the Contract Documents, whenever in Specifications, material or process is designated by patent or proprietary name or by name of manufacturer, such designation shall be deemed to be used for purpose of facilitating description of material and process desired, and shall be deemed to be followed by the words "or Approved Equal" and Contractor may offer any substitute material or process that Contractor considers "equal" in every respect to that so designated and if material or process offered by Contractor is, in opinion of Owner, Equal in every respect to that so designated, its use will be approved. However, Contractor may utilize this right only by timely submitting Document 00660 (Substitution Request Form) as provided in Document 00200 (Instructions to Bidders). A substitution will be approved only if it is a true Equal item in every aspect of its design and quality, including but not limited to its dimensions, weights, service requirements, durability, functioning, impact on contiguous construction elements, overall schedule and design.

**13.13 Interest of Public Officers**

13.13.A. No representative, officer, or employee of Owner, no member of the governing body of the locality in which the Project is situated, no member of the locality in which Owner was activated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the Project, during the tenure of the official or for one year thereafter, shall, as principal, agent, attorney or otherwise, be directly or indirectly interested, in the Contract Documents or the proceeds thereof.

**13.14 Limit of Liability**

13.14.A. OWNER, AND EACH OF ITS OFFICERS, BOARD MEMBERS, EMPLOYEES, CONSULTANTS AND AGENTS INCLUDING, BUT NOT LIMITED TO, ENGINEER AND EACH OTHER OWNER REPRESENTATIVE, SHALL HAVE NO LIABILITY TO CONTRACTOR FOR SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, EXCEPT TO THE LIMITED EXTENT THAT THESE CONTRACT DOCUMENTS OR APPLICABLE PUBLIC CONTRACTING STATUTES MAY SPECIFY THEIR RECOVERY.

**14. MODIFICATIONS OF CONTRACT DOCUMENTS****14.1 Alterations, Modifications and Force Account Work**

- 14.1.A. No modification or deviation from the Drawings and Specifications will be permitted except by written Contract Modification.
- 14.1.B. Owner may, without notice to the sureties, make alterations, deviations, additions to, or deletions from Contract Documents; increase or decrease the quantity of any item or portion of the Work; expand, contract or otherwise change the Contract Time; delete any item or portion of the Work; and require extra Work. Contractor shall perform such Work under applicable provisions of the Contract Documents, unless specifically provided otherwise at the time the change is ordered. In the case of any ordered extra Work, Owner reserves the right to furnish all or portions of associated labor, material, and equipment, which Contractor shall accept and use without payment for costs, markup, profit, or otherwise for such Owner-furnished labor, materials, and equipment.
- 14.1.C. Changes affecting the Contract Time or Contract Sum of the Work shall be set forth in a written Change Order that shall specify:
1. The Work performed in connection with the change to be made;
  2. The amount of the adjustment of the Contract Sum, if any, and the basis for compensation for the Work ordered; and
  3. The extent of the adjustment in the Contract Time, if any.
- 14.1.D. A Change Order will become effective when signed by Owner. If Owner exercises its right to decide disputed issues pertaining to changed Work as set forth in Articles 12 and 14 of this Document 00700, then the resulting Change Order shall be effective when signed by Owner, notwithstanding that Contractor has not signed it.
- 14.1.E. Changes not affecting the Contract Time or Contract Sum of the Work, in Owner's discretion, may be set forth in a written RFI-Reply executed by Owner. Execution of such an RFI-Reply constitutes Contractor's agreement to make the specified change without change to the Contract Sum or the Contract Time.
- 14.1.F. Changes or deviations from Contract Documents affecting the Contract Time or Contract Sum of the Work shall not be made without the authority of an effective Change Order or Construction Change Directive as provided in Section 01250 (Modification Procedures), except in cases of emergency discussed in Article 16 of this Document 00700.
- 14.1.G. If changes ordered in design, workmanship or materials are of such a nature as to increase or decrease the cost of any part of the Work, the price fixed in the Contract Documents shall be increased or decreased by the amount that Contractor and Owner may agree upon as a reasonable and proper allowance for the cost increase or decrease. If an agreement cannot be reached, then Owner will reach a determination, which shall be final, subject to Contractor's rights under Article 12 of this Document 00700. In all cases Contractor shall perform the changed Work as directed by Owner subject to Contractor's rights under Article 12 of this Document 00700.
- 14.1.H. Contractor shall, upon Owner's request, permit inspection of the original unaltered Bid estimate, subcontract agreements, purchase orders relating to the change, and documents substantiating all costs associated with its cost proposal or claims arising from changes in the Work.

- 14.1.I. Changes in the Work made pursuant to this Article 14 and extensions of Contract Time necessary by reason thereof shall not in any way release the guarantees and warranties given by Contractor pursuant to provisions of the Contract Documents, nor shall such changes in the Work relieve or release the Sureties of bonds executed pursuant to said provisions. The Sureties, in executing such bonds, shall be deemed to have expressly agreed to any such change in the Work and to any extension of time made by reason thereof.
- 14.1.J. Procedures for Modifications of Contract Documents and for calculating the cost of extra and deleted Work are given in Section 01250 (Modification Procedures). Regarding delay and impact costs of any nature, Contractor may not seek delay compensation for on-Site or off-Site costs based on formulas, e.g., "Eichlay" or other formula. Rather, Contractor shall prove actual costs resulting from such delays. If Contractor requests compensation for delay to the construction, then Contractor shall prove and document actual costs plus markup per the cost categories and procedures in Section 01250 (Modification Procedures) in order to request, claim or prove compensation for delay.
- 14.1.K. Owner's General Manager is authorized to approve Change Orders in accordance with Resolution No. 04-0547 dated June 8, 2004. The approval period for such Change Orders is approximately seven Days from receipt of the signed Change Order from Contractor. If a Change Order is equal to or greater than the amounts authorized by Resolution No. 04-0547, it may be necessary for the Board to approve the Change Order, and if so the approval period is approximately 28 Days from receipt of the signed Change Order from Contractor. A performance bond rider covering the changed Work must be executed and delivered to Owner before proceeding with the changed Work. Contractor is charged with knowledge of Owner's approved Change Order limits and procedures in effect at the applicable time.

## **15. TIME ALLOWANCES**

### **15.1 Time Allowances for Performance of Contract Documents**

- 15.1.A. When Contractor and Owner have signed the Contract Documents, Owner will serve a Notice to Proceed upon Contractor to that effect, either by depositing notice in a post office or post office box regularly maintained by United States Postal Service in a pre-paid wrapper directed to Contractor at legal address or (at Owner's option) by delivery by other means at legal address.
- 15.1.B. The start date for Contract Time shall be on the date indicated in the applicable Notice to Proceed. If no date is indicated, the start date for Contract Time shall be the fifth Day from the date that Contractor receives, by hand delivery or facsimile transmission, Owner's written Notice to Proceed, unless the Notice to Proceed is served by mail only, in which case the start date for Contract Time shall be the fifth Day following the mailing date. The total number of Days for completion of the Work under the Contract Documents shall be as provided in Document 00520 (Agreement).

### **15.2 Entitlement to Change of Contract Time**

- 15.2.A. The Contract Time may only be changed by Change Order or by Contract Modification, and all time limits stated in the Contract Documents are of the essence of Contract Documents.
- 15.2.B. The Contract Time will be adjusted in an amount equal to the time lost due to:

1. Changes in the Work ordered by Owner;
  2. Acts or neglect by Owner, Engineer, any Owner's Representative, utility owners or other contractors performing other work, provided that Contractor has fully and completely performed its responsibilities under the Contract Documents; or
  3. Fires, floods, epidemics, abnormal weather conditions beyond the parameters otherwise set forth in this paragraph 15.2, earthquakes, civil or labor disturbances, strikes or Acts of God, provided damages resulting therefrom are not the result of Contractor's failure to protect the Work as required by Contract Documents.
- 15.2.C. The Contract Time shall not be extended for any cause identified in paragraph 15.2.B above, however, unless:
1. Contractor actually has been prevented from completing any part of the Work within the Contract Time due to delay that is beyond Contractor's control and due to reasons for which Contractor is not responsible (delays attributable to and within the control of a Subcontractor, or its subcontractors, or supplier shall be deemed to be delays within the control of Contractor);
  2. A claim for delay is made as provided herein; and
  3. Contractor submits a Time Impact Evaluation as required under Section 01320 (Progress Schedules and Reports) that demonstrates actual delay to critical Work activities that actually delay the progress of the Work in the amount of time requested.
- 15.2.D. Where Contractor is prevented from completing any part of the Work within the Contract Time due to delay beyond the control of both Owner and Contractor (including, but not limited to, adverse weather of all types and acts of other contractors or utilities), an extension of Contract Time, in an amount equal to the time lost due to such delay (without compensation), shall be Contractor's sole and exclusive remedy for such delay.

### **15.3 Weather-Related Delays**

- 15.3.A. Delays due to abnormal or adverse weather conditions will not be allowed for weather conditions that fall within the parameters listed herein. Adverse weather delays may be allowed only if the number of workdays of adverse weather exceeds these on a monthly basis and Contractor proves that adverse weather actually caused delays. Contractor shall give written notice of intent to claim an adverse weather Day within one Day of the adverse weather delay occurring. Rain parameters are as follows, prorated in the individual month Contractor starts and finishes Work.

Rain Days: January, [9]; February, [8]; March, [7]; April, [4]; May, [2]; June, [1]; July, [0]; August, [0]; September, [1]; October, [3]; November, [6]; and December, [8].

In order to qualify as an adverse weather delay with respect to the foregoing parameters, daily rainfall must exceed 0.10 of an inch or more at the Santa Rosa, California station, as measured by the National Oceanic & Atmospheric Administration, and Contractor must prove that the rain actually caused delay as set forth above.

- 15.3.B. Contractor shall include the foregoing rain parameters as a monthly activity in its Progress Schedule. As Work on the critical path is affected by rain, Contractor shall notify Owner and request that the Days be moved to the affected activities. Any adverse weather Days remaining shall be considered Project Float.

- 15.3.C. Adverse weather delay for rain shall be recognized for the actual period of time Contractor proves it was delayed by rain exceeding the specified parameters. For example, and not by way of limitation, if rain exceeding the specified parameters does not in fact delay Contractor's progress on the critical path, then no time extension shall be recognized; and conversely, if Contractor proves that rain exceeding the specified parameters causes delay to Contractor for a period longer than the number of rain Days incurred (e.g., if it rains during grading Work), then Contractor shall be entitled to a time extension equal to the actual period of such delay.
- 15.3.D. Contractor shall take reasonable steps to mitigate potential weather delays, such as dewatering the Site, covering Work and material that could be affected adversely by weather, and using all necessary construction means and methods to dry and/or aerate wet soils. Failure to do so shall be cause for Owner to not grant a time extension due to adverse weather, where Contractor could have avoided or mitigated the potential delay by exercising reasonable care.

#### **15.4 Notice of Delay**

- 15.4.A. Within seven Days of the beginning of any delay, Contractor shall notify Owner in writing, by submitting a notice of potential claim, of all anticipated delays resulting from the delay event in question. Any request for extension of time shall be accompanied by Contractor's written statement that the adjustment claimed is the entire adjustment to which the Contractor is entitled as a result of the occurrence of said event, and shall include a written schedule document that demonstrates delay to the critical path using a Time Impact Evaluation as specified in Section 01320 (Progress Schedules). Owner will determine all claims and adjustments in the Contract Time. No claim for an adjustment in the Contract Time will be valid and such claim will be waived if not submitted in accordance with the requirements of this paragraph 15.4.A.

#### **15.5 Time Extensions and/or Compensation Entitlement for Delays**

- 15.5.A. Contractor may receive a time extension and be compensated for delays caused directly and solely by Owner.
- 15.5.B. Contractor may receive a time extension without compensation for delays resulting in whole or in part from causes beyond the reasonable control of Contractor and Owner, e.g., adverse weather conditions exceeding Contract Documents parameters, acts of third parties unrelated to Contractor's obligations herein, earthquakes, Acts of God and epidemics. In such cases, a time extension without compensation shall constitute Contractor's sole and exclusive remedy for such delays.
- 15.5.C. Contractor shall not be entitled to any time extension or compensation including, but not limited to, extended field or home office overhead, field supervision, costs of capital, interest, escalation charges, acceleration costs or other impacts for any delays caused in whole or in part by Contractor's failure to perform its obligations under the Contract Documents, or during periods of delay concurrently caused by Contractor and either Owner or others.
- 15.5.D. Contractor shall not be entitled to damages for delay to the Work caused by the following reasons:
1. Owner's right to sequence the Work in a manner which would avoid disruption to Owner's contractors and their subcontractors and Owner's employees, exercised as a result of Contractor's failure to perform its cooperation and coordination

- responsibilities required by Contract Documents; Owner's enforcement of any government act or regulation; or the provisions of the Contract Documents;
2. For changed Site conditions that are beyond the parties' contemplation, except that Owner may approve direct costs associated with unknown conditions (but not costs or damages which result from such delays); and
  3. Extensive requests for clarifications to Contract Documents or Contract Modifications thereto, provided such clarifications or Contract Modifications are processed by Owner or its consultants in a reasonable time commensurate with Contract Documents requirements.

## **15.6 Liquidated Damages**

- 15.6.A. Time is of the essence. Execution of Contract Documents by Contractor shall constitute acknowledgement by Contractor that Contractor understands, has ascertained and agrees that Owner will actually sustain damages in the amount fixed in the Contract Documents for each and every Day during which completion of Work required is delayed beyond expiration of time fixed for completion or extensions of time allowed pursuant to provisions hereof. Contractor and Owner agree that specified measures of liquidated damages shall be presumed to be the damages actually sustained by Owner as defined below, and that because of the nature of the Project, it would be impracticable or extremely difficult to fix the actual damages.
- 15.6.B. Liquidated damages shall be considered not as a penalty but as agreed monetary damage sustained by Owner for increased Project administration expenses, including extra inspection, construction management, and architectural and engineering expenses related to the Project and Contract Documents because Contractor failed to perform and complete Work within time fixed for completion or extensions of time allowed pursuant to provisions hereof. Liquidated damages shall not be deemed to include within their scope additional damages or administrative costs arising from Defective Work, lost revenues, interest expenses, cost of completion of the Work, cost of substitute facilities, claims and fines of regulatory agencies, damages suffered by others or other forms of liability claimed against Owner as a result of delay (e.g., delay or delay-related claims of other contractors or subcontractors), and defense costs thereof. Contractor shall be fully responsible for the actual amount of any such damages it causes, in addition to the liquidated damages otherwise due Owner.
- 15.6.C. Owner may deduct from any money due or to become due to Contractor subsequent to time for completion of entire Work and extensions of time allowed pursuant to provisions hereof, a sum representing then-accrued liquidated damages. Should Contractor fall behind the approved Progress Schedule, Owner may deduct liquidated damages based on its estimated period of late completion. Owner need not wait until Final Completion to withhold liquidated damages from Contractor's progress payments. Should money due or to become due to Contractor be insufficient to cover aggregate liquidated damages due, then Contractor forthwith shall pay the remainder of the assessed liquidated damages to Owner.

## **16. WORKING CONDITIONS AND PREVAILING WAGES**

### **16.1 Use of Site/Sanitary Rules**

- 16.1.A. All portions of the Work shall be maintained at all times in neat, clean and sanitary condition. Contractor shall furnish toilets for use of Contractor's and Subcontractors'

employees on the Site where needed, and their use shall be strictly enforced. All toilets shall be properly secluded from public observation, and shall be located, constructed and maintained subject to Owner's approval.

- 16.1.B. Contractor shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Site and land areas identified in and permitted by Contract Documents and other land and areas permitted by applicable laws and regulations, rights of way, permits and easements or as designated by Owner, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, any improvement located thereon, or to the owner or occupant thereof resulting from the performance of Work.
- 16.1.C. During the progress of the Work, Contractor shall keep the Site and the Project free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, Contractor shall clean the Site, remove all waste materials, rubbish and debris from and about the Site as well as all tools, appliances, construction equipment and machinery and surplus materials. Contractor shall leave the premises clean and ready for occupancy by Owner at Substantial Completion of Work. Contractor shall restore to original condition all property not designated for alteration by Contract Documents.
- 16.1.D. Contractor shall not load nor permit any part of any structure or pavement to be loaded in any manner that will endanger the structure or pavement, nor shall Contractor subject any part of Work or adjacent property to stresses or pressures that will endanger it. Contractor shall conduct all necessary existing conditions investigation regarding structural, mechanical, electrical or any other system existing, shall perform Work consistent with such existing conditions, and shall have full responsibility for insufficiencies or damage resulting from insufficiencies of existing systems, equipment or structures to accommodate performing the Work.

## **16.2 Protection of Work, Persons, and Property**

- 16.2.A. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with Work. Contractor shall comply with all safety requirements specified in any safety program established by Owner, or required by state, federal or local laws and ordinances. Contractor shall be responsible for all damage to Work, property or structures, and all injuries to persons either on the Site or constituting the Work (e.g., materials in transit), arising from the performance of Work of the Contract Documents from any cause.
- 16.2.B. Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.
- 16.2.C. Contractor shall remedy all damage, injury or loss to any property referred to in paragraph 16.2.A of this Document 00700, caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, supplier, or any other person or organization directly or indirectly employed by any of them to perform or furnish any Work or

anyone for whose acts any of them may be liable. Contractor's duties and responsibility for safety and for protection of Work shall continue until such time as all the Work is completed and Final Acceptance of the Work. Owner and its agents do not assume any responsibility for collecting any indemnity from any person or persons causing damage to Contractor's Work.

- 16.2.D. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.
- 16.2.E. Owner may, at its option, retain such moneys due under the Contract Documents as Owner deems necessary until any and all suits or claims against Contractor for injury to persons or property shall be settled and Owner receives satisfactory evidence to that effect.

### **16.3 Responsibility for Safety and Health**

- 16.3.A. Contractor shall ensure that its and each tier of Subcontractors' employees, agents and invitees comply with applicable health and safety laws while at the Site. These laws include the Occupational Safety and Health Act of 1970 and rules and regulations issued pursuant thereto, and Owner's safety regulations as amended from time to time. Contractor shall comply with all Owner directions regarding protective clothing and gear.
- 16.3.B. Contractor shall be fully responsible for the safety of its and its Subcontractors' employees, agents and invitees on the Site. Contractor shall notify Owner, in writing, of the existence of hazardous conditions, property or equipment at the Site that are not under Contractor's control. Contractor shall be responsible for taking all the necessary precautions against injury to persons or damage to the property of Contractor, Subcontractors or persons from recognized hazards until the responsible party corrects the hazard.
- 16.3.C. Contractor shall confine all persons acting on its or its Subcontractors' behalf to that portion of the Site where Work under the Contract Documents is to be performed, Owner-designated routes for ingress and egress thereto, and any other Owner-designated area. Except those routes for ingress and egress over which Contractor has no right of control, within such areas, Contractor shall provide safe means of access to all places at which persons may at any time have occasion to be present.

### **16.4 Emergencies**

- 16.4.A. In emergencies affecting the safety or protection of persons or Work or property at the Site or adjacent thereto, Contractor, without special instruction or authorization from Owner, is obligated to act to prevent threat and damage, injury or loss, until directed otherwise by Owner. Contractor shall give Owner prompt written notice if Contractor believes that any significant changes in Work or variations from Contract Documents have been caused thereby. If Owner determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Change Order or Construction Change Directive will be issued to document the consequences of such action.

### **16.5 Use of Roadways and Walkways**

- 16.5.A. Contractor shall not unnecessarily interfere with use of any roadway, walkway or other facility for vehicular or pedestrian traffic. Before beginning any interference and

only with Owner's prior concurrence, Contractor may provide detour or temporary bridge for traffic to pass around or over the interference, which Contractor shall maintain in satisfactory condition as long as interference continues. Unless otherwise provided in the Contract Documents, Contractor shall bear the cost of these temporary facilities.

## **16.6 Nondiscrimination**

16.6.A. No person or entity shall discriminate in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sexual preference, or gender of such persons, except as provided in Section 12940 of the Government Code. Every contractor for public works violating the provisions of Section 1735 of the Labor Code is subject to all the penalties imposed for a violation of Chapter 1, Part 7, Division 2 of the Labor Code. Contractor agrees to comply with the provisions of Chapter 19, Article II, of the Sonoma County Code prohibiting discrimination in housing, employment, and services because of AIDS or HIV infection during the term of this Contract and any extensions of the term.

## **16.7 Prevailing Wages**

- 16.7.A. Contractor shall pay to persons performing labor in and about Work provided for in the Contract Documents an amount equal to or more than the general prevailing rate of per diem wages for (1) work of a similar character in the locality in which the Work is performed and (2) legal holiday and overtime work in said locality. The per diem wages shall be an amount equal to or more than the stipulated rates contained in a schedule that has been ascertained and determined by the Director of the State Department of Industrial Relations and Owner to be the general prevailing rate of per diem wages for each craft or type of workman or mechanic needed to execute this Contract. Contractor shall also cause a copy of this determination of the prevailing rate of per diem wages to be posted at each Site.
- 16.7.B. Contractor shall forfeit, as a penalty to Owner, Fifty Dollars (\$50.00) for each laborer, workman, or mechanic employed in performing labor in and about the Work provided for in the Contract Documents for each Day, or portion thereof, that such laborer, workman or mechanic is paid less than the said stipulated rates for any Work done under the Contract Documents by him or her or by any Subcontractor under him or her, in violation of Articles 1 and 2 of Chapter 1 of Part 7 of Division II of the California Labor Code. The sums and amounts which shall be forfeited pursuant to this paragraph 16.7.B and the terms of the Labor Code shall be withheld and retained from payments due to Contractor under the Contract Documents, pursuant to this Document 00700 and the Labor Code, but no sum shall be so withheld, retained or forfeited except from the final payment without a full investigation by either the State Department of Industrial Relations or by Owner. The Labor Commissioner pursuant to Labor Code Section 1775 shall determine the final amount of forfeiture.
- 16.7.C. Contractor shall insert in every subcontract or other arrangement which Contractor may make for performance of Work or labor on Work provided for in the Contract, provision that Subcontractor shall pay persons performing labor or rendering service under subcontract or other arrangement not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is

performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work fixed in the Labor Code.

- 16.7.D. Contractor stipulates that it shall comply with all applicable wage and hour laws, including without limitation Labor Code Sections 1813 and 1815.

### **16.8 Environmental Controls**

- 16.8.A. Contractor shall comply with all rules, regulations, ordinances, and statutes that apply to any Work performed under the Contract Documents including, without limitation, any toxic, water, storm water management, and soil pollution controls and air pollution controls specified in Government Code Section 11017. Contractor shall be responsible for insuring that Contractor's Employees, Subcontractors, and the public are protected from exposure to airborne hazards or contaminated water, soil, or other toxic materials used during or generated by activities on the Site or associated with the Project.

### **16.9 Shoring Safety Plan**

- 16.9.A. Any conflict between this paragraph 16.9 and Division 2 of the Specifications shall be resolved in favor of the most stringent requirement.
- 16.9.B. At least five Days in advance of any excavation five feet or more in depth, Contractor shall submit to Owner a detailed plan showing the shoring, bracing and sloping design (including calculations) and other provisions to be made for worker protection from the hazard of caving ground during the excavation, as required by Labor Code Section 6705. A civil or structural engineer registered in California shall prepare and sign any plan that varies from the shoring system standards established by the State Construction Safety Orders.
- 16.9.C. During the course of Work, Contractor shall be responsible for determining where sloping, shoring, and/or bracing is necessary and the adequacy of the design, installation, and maintenance of all shoring and bracing for all excavation, including any excavation less than five feet in depth. Contractor will be solely responsible for any damage or injuries that may result from excavating or trenching. Owner's acceptance of any drawings showing the shoring or bracing design or Work schedule shall not relieve Contractor of its responsibilities under this paragraph 16.9.
- 16.9.D. Appoint a qualified supervisory employee who shall be responsible to determine the sloping or shoring system to be used depending on local soil type, water table, stratification, depth, etc.

END OF DOCUMENT

## DOCUMENT 00800

**SUPPLEMENTARY CONDITIONS****1. SUMMARY**

A. This document includes requirements that supplement the paragraphs of Document 00700 (General Conditions).

**2. SUPPLEMENTS**

A. Supplement to paragraph 4.2:

**4.2.A. General.**

1. Contractor shall maintain and shall require all of its subcontractors and other agents to maintain the insurance listed below. Contractor shall not commence Work, nor allow its employees, subcontractors or anyone to commence Work until the required insurance has been submitted and approved by Owner and a Notice to Proceed has been issued. Any requirement for insurance to be maintained after completion of the Work shall survive this Agreement.
2. Owner reserves the right to review any and all of the required insurance policies and/or endorsements, but has no obligation to do so. Failure to demand evidence of full compliance with the insurance requirements set forth in this Contract or failure to identify any insurance deficiency shall not relieve Contractor from, nor be construed or deemed a waiver of, its obligation to maintain the required insurance at all times during the performance of this Contract.

**4.2.B. Contractor - Required Insurance.**

1. At or before the date specified in Document 00510 (Notice of Award), Contractor shall furnish to Owner satisfactory proof that Contractor has obtained the following insurance as specified below:
  - a. Workers' Compensation Insurance & Employers Liability Insurance.
    - 1) Workers' Compensation insurance with statutory limits as required by the Labor Code of the State of California.
    - 2) Employers Liability with limits of \$1,000,000 per Accident; \$1,000,000 Disease per employee; \$1,000,000 Disease per policy.
    - 3) The policy shall be endorsed to include a written waiver of the insurer's right to subrogate against Owner.
    - 4) Required Evidence of Insurance:
      - (a) Subrogation waiver endorsement, and
      - (b) Certificate of Insurance.
    - 5) If injury occurs to any employee of Contractor, Subcontractor, or sub-subcontractor for which the employee, or the employee's dependents in the event of employee's death, is entitled to compensation from Owner under provisions of the Workers' Compensation Insurance and Safety Act (Act), as amended, or for which compensation is claimed from Owner, Owner may retain out of sums due Contractor under Contract Documents, amount sufficient to cover such compensation, as fixed by the Act, as amended, until such compensation is paid, or until it is determined that no compensation is due. If Owner is compelled to pay compensation, Owner may, in its discretion, either deduct and retain

from the Contract Sum the amount so paid, or require Contractor to reimburse Owner.

- b. General Liability Insurance.
- 1) Commercial General Liability Insurance on a standard occurrence form, no less broad than ISO form CG 00 01.
  - 2) Minimum Limits. The required limits may be provided by a combination of General Liability Insurance and Commercial Umbrella Liability Insurance. If Contractor maintains higher limits than the specified minimum limits, Owner requires and shall be entitled to coverage for the higher limits maintained by Contractor.
    - (a) Projects under \$1,000,000: \$1,000,000 per Occurrence; \$2,000,000 General Aggregate; \$2,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project.
    - (b) Projects from \$1,000,000 - \$4,999,999: \$2,000,000 per Occurrence; \$4,000,000 General Aggregate; \$4,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project.
    - (c) Projects from \$5,000,000 - \$9,999,999: \$5,000,000 per Occurrence; \$5,000,000 General Aggregate; \$5,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project.
    - (d) Projects \$10,000,000 and Over: Minimum Limits: \$10,000,000 per Occurrence; \$10,000,000 General Aggregate; \$10,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project.
  - 3) Any deductible or self-insured retention shall be shown on the Certificate of Insurance. If the deductible or self-insured retention exceeds \$25,000 it must be approved in advance by Owner. Contractor is responsible for any deductible or self-insured retention and shall fund it upon Owner's written request, regardless of whether Contractor has a claim against the insurance or is named as a party in any action involving Owner.
  - 4) Insurance shall be maintained for the entire period of the Work, including any warranty period. Completed operations insurance shall be maintained after the end of the warranty period for the additional periods specified below:
    - (a) Projects under \$1,000,000: One (1) year after Final Completion and acceptance of the final payment for the Work.
    - (b) Projects from \$1,000,000 - \$4,999,999: Two (2) years after Final Completion and acceptance of the final payment for the Work.
    - (c) Projects from \$5,000,000 - \$9,999,999: Three (3) years after Final Completion and acceptance of the final payment for the Work.
    - (d) Projects \$10,000,000 and Over: Five (5) years after Final Completion and acceptance of the final payment for the Work.
  - 5) Owner, its Board of Directors, and its employees, representatives, consultants, and agents shall be additional insureds for liability arising out of ongoing and completed operations by or on behalf of the

- Contractor in the performance of the Contract Documents. Additional insureds status shall continue for the period(s) specified in paragraph 4).
- 6) Owner, its Board of Directors, and its employees, representatives, consultants, and agents shall be additional insureds for liability arising out of Contractor's ongoing operations (ISO endorsement CG 20 26, Additional Insured - Designated Person or Organization, or equivalent).
  - 7) The policy definition of "insured contract" shall include assumptions of liability arising out of both ongoing operations and the products-completed operations hazard (broad form contractual liability coverage including the "f" definition of insured contract in ISO form CG 00 01, or equivalent).
  - 8) The insurance provided to the additional insureds shall be primary to and non-contributory with any insurance or self-insurance program maintained by Owner *et al.*
  - 9) The policy shall not exclude injury or damage caused by, or resulting from, explosion, collapse and/or underground hazards.
  - 10) The policy shall not contain a Contractors' Warranty or other similar language which eliminates or restricts insurance because of a Subcontractor's failure to carry specific insurance or to supply evidence of such insurance.
  - 11) The policy shall be endorsed to include a written waiver of the insurer's right to subrogate against all persons or entities that are, or are required to be, additional insureds.
  - 12) The policy shall cover inter-insured suits between Contractor and the additional insureds and shall include a "separation of insureds" or "severability" clause which treats each insured separately.
  - 13) Required Evidence of Insurance:
    - (a) Additional insured endorsements or policy language granting additional insured status;
    - (b) Endorsement or policy language indicating that insurance is primary and non-contributory; and
    - (c) Certificate of Insurance.
- c. Automobile Liability Insurance.
- 1) Minimum Limits:
    - (a) Projects under \$1,000,000: \$1,000,000 combined single limit per accident.
    - (b) Projects \$1,000,000 and Over: \$2,000,000 combined single limit per accident.
  - 2) Insurance shall apply to all owned, hired, and non-owned vehicles.
  - 3) Owner, its Board of Directors, and its employees, representatives, consultants, and agents shall qualify as an insured.
  - 4) Insurance shall be maintained for the entire term of this Contract, including any warranty period.
  - 5) Required Evidence of Insurance:
    - (a) Endorsement or policy language indicating that Owner, its Board of Directors, and its employees, representatives, consultants, and agents; are insureds; and
    - (b) Certificate of Insurance.

- d. Contractors Pollution Liability Insurance.
- 1) Minimum Limits:
    - (a) Projects under \$5,000,000: \$1,000,000 per pollution Incident; \$1,000,000 Aggregate; and
    - (b) Projects \$5,000,000 and Over: \$2,000,000 per pollution Incident; \$2,000,000 Aggregate.
  - 2) Any deductible or self-insured retention shall be shown on the Certificate of Insurance. If the deductible or self-insured retention exceeds \$25,000 it must be approved in advance by Owner. Contractor is responsible for any deductible or self-insured retention and shall fund it upon Owner's written request, regardless of whether Contractor has a claim against the insurance or is named as a party in any action involving Owner.
  - 3) If the insurance is on a Claims-Made basis, the retroactive date shall be no later than the commencement of Work.
  - 4) Insurance shall be maintained for the entire period of the Work plus the additional periods as specified below:
    - (a) Projects under \$1,000,000: One (1) year after Final Completion and acceptance of the final payment for the Work.
    - (b) Projects from \$1,000,000 - \$4,999,999: Two (2) years after Final Completion and acceptance of the final payment for the Work.
    - (c) Projects from \$5,000,000 - \$9,999,999: Three (3) years after Final Completion and acceptance of the final payment for the Work.
    - (d) Projects \$10,000,000 and Over: Five (5) years after Final Completion and acceptance of the final payment for the Work.
  - 5) If the insurance is on a Claims-Made basis, the continuation coverage may be provided by: (a) renewal of the existing policy; (b) an extended reporting period endorsement; or (c) replacement insurance with a retroactive date no later than the commencement of the Work.
  - 6) Owner, its Board of Directors, and its employees, representatives, consultants, and agents; shall be additional insureds for liability arising out of operations by or on behalf of the Contractor in the performance of the Contract Documents.
  - 7) The insurance provided to the additional insureds shall apply on a primary and non-contributory basis with respect to any insurance or self-insurance program maintained by Owner *et al.*
  - 8) Required Evidence of Insurance:
    - (a) Additional insured endorsement or policy language granting additional insured status;
    - (b) Endorsement or policy language indicating that coverage is primary and non-contributory; and
    - (c) Certificate of Insurance.
- e. Professional Liability/Errors & Omissions Insurance.
- 1) Required if the Contractor or its employees engage in design or professional activities (architecture, engineering or surveying) that are not subcontracted out.
  - 2) Minimum Limit: \$1,000,000 per occurrence.

- 3) Any deductible or self-insured retention shall be shown on the Certificate of Insurance. If the deductible or self-insured retention exceeds \$25,000 it must be approved in advance by Owner.
  - 4) If the insurance is on a Claims-Made basis, the retroactive date shall be no later than the commencement of the Work.
  - 5) Insurance applicable to the Work performed under the Contract shall be continued for two (2) years after completion of the Work. Such continuation insurance may be provided by one of the following:
    - (a) renewal of the existing policy;
    - (b) an extended reporting period endorsement; or
    - (c) replacement insurance with a retroactive date no later than the commencement of the Work.
  - 6) Required Evidence of Insurance:
    - (a) Certificate of Insurance.
2. Increase of Minimum Limits.
    - a. Required minimum amounts of insurance may be increased should conditions of Work, in opinion of Owner, warrant such increase. Contractor shall increase required insurance amounts upon direction by Owner.
  3. Standards for Insurance Companies.
    - a. Insurers, other than the California State Compensation Insurance Fund, shall have an A.M. Best's rating of at least A:VII.
  4. Documentation.
    - a. The Certificate of Insurance shall include the following reference: Dry Creek Habitat Enhancement Demonstration Project, Phase II.
    - b. Contractor agrees to maintain current Evidence of Insurance on file with Owner for the periods of insurance specified above in Paragraphs 2.4.2.B.1.a through 2.4.2.B.1.e. Any requirement to maintain insurance after Final Completion of the Work, including providing Certificates evidencing required insurance, shall survive the Contract.
      - 1) Required Evidence of Insurance shall be submitted to Sonoma County Water Agency, 404 Aviation Boulevard, Santa Rosa, CA 95403-9019.
      - 2) Required Evidence of Insurance shall be submitted for any renewal or replacement of a policy that already exists, at least ten (10) days before expiration or other termination of the existing policy.
      - 3) Contractor shall provide immediate written notice if: (a) any of the required insurance policies is terminated; (b) the limits of any of the required policies are reduced; or (c) the deductible or self-insured retention is increased.
      - 4) Upon written request, certified copies of required insurance policies must be provided within thirty (30) days.
  5. Policy Obligations
    - a. Contractor's indemnity and other obligations shall not be limited by the foregoing insurance requirements.
  6. Material Breach.
    - a. If Contractor fails to maintain Insurance which is required pursuant to the Contract Documents, it shall be deemed a material breach. Owner, at its sole option, may terminate the Contract for default and obtain damages from Contractor resulting from said breach. Alternatively, Owner may purchase the required Insurance, and without further notice to Contractor, Owner may

deduct from sums due to Contractor any premium costs advanced by Owner for such insurance. These remedies shall be in addition to any other remedies available to Owner under the Contract Documents or Law.

4.2.C. Subcontractors - Required Insurance.

1. With respect to their portion of the Work, Subcontractors of all tiers shall maintain the same insurance required to be maintained by Contractor with limits as follows:
  - a. Minimum General Liability Limits for Framing, Mechanical, and Electrical Subcontractors.
    - 1) Projects under \$1,000,000: \$1,000,000 per Occurrence; \$2,000,000 General Aggregate; \$2,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project.
    - 2) Projects \$1,000,000 and Over: \$2,000,000 per Occurrence; \$4,000,000 General Aggregate; \$4,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project.
  - b. Minimum General Liability Limits for all Subcontractors other than Framing, Mechanical, and Electrical Subcontractors.
    - 1) \$1,000,000 per Occurrence; \$2,000,000 General Aggregate; \$2,000,000 Products/Completed Operations Aggregate. The General Aggregate shall apply separately to each Project.
  - c. Minimum Automobile Liability Limits.
    - 1) \$1,000,000 combined single limit per accident.
  - d. Minimum Employers Liability Limits.
    - 1) \$1,000,000 per Accident; \$1,000,000 Disease per employee; \$1,000,000 Disease per policy.
  - e. Professional Liability/Errors & Omissions Insurance.
    - 1) Required for any architect, engineer, surveyor or other licensed professional engaged by Contractor to perform portions of the Work.
    - 2) Minimum Limit: \$1,000,000.
    - 3) Any deductible or self-insured retention shall be shown on the Certificate of Insurance. If the deductible or self-insured retention exceeds \$25,000 it must be approved in advance by Owner.
    - 4) If the insurance is on a Claims-Made basis, the retroactive date shall be no later than the commencement of the Work.
    - 5) Coverage applicable to the Work performed under the Contract shall be continued for two (2) years after completion of the Work. Such continuation coverage may be provided by one of the following:
      - (a) renewal of the existing policy;
      - (b) an extended reporting period endorsement; or
      - (c) replacement insurance with a retroactive date no later than the commencement of the Work.
    - 6) Required Evidence of Insurance:
      - (a) Certificate of Insurance.

4.2.D. Builder's Risk.

1. With respect to Work under this Contract, Owner shall maintain "All-Risk" Course of Construction insurance as follows:
  - a. Insured Property shall include: (1) Real property in Course of Construction; (2) building materials and supplies intended to be in or on the completed Work located at the Site, in storage or in transit, and whether or not owned or

paid for by Owner; (3) fixtures and machinery intended to be in or on the completed Work; (4) scaffolding, cribbing, fencing, forms and temporary trailers, while located on the Site, in storage or in transit.

- b. Limit of insurance shall be the full contract value.
- c. Deductibles for claims against this coverage will not exceed \$50,000. Responsibility for paying deductibles is as follows:

<b>Contract Value or Description</b>	<b>Contractor's Responsibility for Deductible</b>	<b>Owner's Responsibility for Deductible</b>
Full Contract Value under \$1,000,000	First \$5,000	Balance of Deductible
Full Contract Value: \$1,000,000 - \$9,999,999	First \$10,000	Balance of Deductible
Full Contract Value: \$10,000,000 - \$19,999,999	First \$25,000	Balance of Deductible
Full Contract Value: \$20,000,000 and above	First \$30,000	Balance of Deductible

- d. Contractor and all Subcontractors of all tiers shall be additional insureds.
- e. Excluded property: Equipment, tools, and personal effects belonging to Contractor or Subcontractors of all tiers.
- f. Insured perils: All Risks of Direct Physical Damage or Loss, including flood and, for scheduled locations, earthquake, except as excluded.
- g. Exclusions may include, but are not limited to:
  - 1) Loss due to wear and tear, moth, vermin, termites, insects, latent defects, gradual deterioration, wet or dry rot, rust, corrosion, erosion or normal settling, shrinkage and/or expansion of buildings or foundations.
  - 2) Loss or damage due to contaminants and/or pollutants. However, fire losses arising directly or indirectly from pollutants or contaminants are covered.
  - 3) Loss of use or occupancy or consequential loss.
  - 4) Liquidated damages and/or penalties for delay or detention in connection with guarantees of performance or efficiency.
  - 5) Loss or damage caused by or resulting from infidelity or dishonesty on the part of any insured or the employees or agents of any insured.
  - 6) Inventory shortage or unexplained disappearance.
- h. A copy of Owner's Course of Construction Insurance, including all policy coverages, conditions and exclusions, shall control in the event of any conflict with the language of this Document 00800. Upon request, Owner will provide a Certificate of Property Insurance.

END OF DOCUMENT



DOCUMENT 00910

**ADDENDA**

Dry Creek Habitat Enhancement Demonstration Project, Phase II

[DOCUMENT TO BE COMPLETED AS ADDENDA DURING BID PERIOD]

END OF DOCUMENT



# **SPECIFICATIONS**

## **DIVISION 1**

### **GENERAL REQUIREMENTS**



## SECTION 01100

**SUMMARY****PART 1 GENERAL****1.1 SUMMARY**

## A. Section includes:

1. Summary of Work and Work Restrictions including:
  - a. Summary
  - b. Work Covered By Contract Documents
  - c. Bid Items, Allowances, and Alternates
  - d. Work Under Other Contracts
  - e. Future Work
  - f. Shutdown for Discovery of Cultural Resources
  - g. Cooperation of Contractor and Coordination with Other Work
  - h. Partial Occupancy/Utilization Requirements
  - i. Contractor Use of Site
  - j. Air Quality Standards
  - k. Protection of Existing Structures and Underground Facilities
  - l. Permits
  - m. Rights-of-Way
  - n. Document Tracking
  - o. Products Ordered In Advance
  - p. Owner-Furnished Products

**1.2 WORK COVERED BY CONTRACT DOCUMENTS**

- A. Work comprises construction of Owner's Dry Creek Habitat Enhancement Demonstration Project, Phase II, located within the Dry Creek Valley along Dry Creek from approximately ½ mile upstream of Lambert Bridge Rd to ½ mile downstream of Lambert Bridge Road, northwest of the City of Healdsburg in Sonoma County, California, including without limitation, habitat modification including new side channels, ponds, and alcoves; enhancements to existing pools through selective grading, installation of woody debris, log jams, and large boulders as anchor material; installation of erosion control measures; excavation; and dewatering. Contract Documents fully describe the Work.
- B. The Work of this Contract comprises construction of all the Work indicated, described in the Specifications, or otherwise required by the Contract Documents.
- C. Unless provided otherwise in the Contract Documents, all risk of loss to Work covered by Contract Documents shall rest with Contractor until Final Acceptance of the Work.
- D. Cost of maintenance of systems and equipment prior to Final Acceptance will be considered as included in prices Bid and no direct or additional payment will be made therefor.

**1.3 BID ITEMS, ALLOWANCES, AND ALTERNATES**

- A. Any Bid item may be deleted from the Work and Contract Sum, in total or in part, prior to or after award of Contract without compensation in any form or adjustment of other Bid items or prices therefore.
- B. Payment of all items is subject to provisions of Contract Documents, including without limitation Section 01200 (Price and Payment Procedures).

- C. For all Bid items, furnish and install all Work, including connections to existing systems, indicated and described in Specifications and all other Contract Documents. Work and requirements applicable to each individual Bid item, or unit of Work, shall be deemed incorporated into the description of each Bid item (whether Lump Sum or Unit Price).
- D. Bid item descriptions (listed by Bid item number):
1. Bonds. The lump sum price paid under this item shall be full payment for furnishing bonds as required by Document 00700 (General Conditions).
  2. Insurance. The lump sum price paid under this item shall be full payment for furnishing insurance as required by Document 00700 (General Conditions).
  3. Safety Program and Implementation. The lump sum price paid under this item shall be full payment for furnishing and implementing the Safety Program as required by Section 01540 (Site Security and Safety) and Document 00700 (General Conditions).
  4. Construction Material Waste Management Plan and Implementation. The lump sum price paid under this item shall be full payment for furnishing and implementing the Construction Material Waste Management Plan as required by Section 01741 (Construction Material Waste Management Plan).
  5. Storm Water Pollution Prevention Plan and Implementation. The lump sum price paid under this item shall be full payment for furnishing and implementing the Storm Water Pollution Prevention Plan as required by Section 01500 (Temporary Facilities and Controls).
  6. Mobilization/Demobilization. The lump sum price paid under this item shall be full payment for initial mobilization at Project commencement (50% to be paid then), including coordination with fish relocation operations, and cleanup and demobilization at Final Completion (50% to be paid then).
  7. Clearing and Grubbing. The lump sum price paid under this item shall be full payment for stripping, clearing, grubbing, removal, and disposal and/or stockpiling of materials required for construction of the Work.
  8. Temporary Access Improvements. The lump sum price paid under this item shall be full payment for providing, maintaining, and removing Temporary Access Improvements, including site restoration to pre-project conditions, and temporary traffic control.
  9. Control of Water (Stream Diversion). The lump sum price paid under this item shall be full payment for stream diversion as needed to execute the construction in accordance with applicable permitting requirements. Item may include but is not limited to furnishing and implementing the Control of Water Plan; construction of cofferdams, stream diversion pipelines or other conveyances, inlet and outlet protection, fish screening, and pumping.
  10. Control of Water (Dewatering). The lump sum price paid under this item shall be full payment for dewatering of work areas as needed to execute the construction in accordance with applicable permitting requirements and Control of Water Plan. Item may include, but is not limited to, construction of local cofferdams, groundwater pumping, and providing facilities necessary to discharge water in compliance with project permits.
  11. Earthwork - Enhancement Area A. The unit price paid under this item shall be full payment for grading, excavating, loading, hauling and disposing of material off Site, and hydroseeding of areas disturbed by grading in Off Channel Enhancement Area A. For the purposes of payment, this item will be measured by the cubic yard of material excavated. This item is designated as a Final Pay Item.

12. Earthwork – Enhancement Area B. The unit price paid under this item shall be full payment for grading, excavating, loading, hauling and disposing of material off Site, and hydroseeding of areas disturbed by grading in Off Channel Enhancement Area B. For the purposes of payment, this item will be measured by the cubic yard of material excavated. This item is designated as a Final Pay Item.
13. Earthwork – Enhancement Area C. The unit price paid under this item shall be full payment for grading, excavating, loading, hauling and disposing of material off Site, and hydroseeding of areas disturbed by grading in Off Channel Enhancement Area C. For the purposes of payment, this item will be measured by the cubic yard of material excavated. This item is designated as a Final Pay Item.
14. Earthwork – Wallace Property. The lump sum price paid under this item shall be full payment for excavation, stockpiling, temporary sloping and/or shoring, backfill, and placement of native substrate beyond limits of work defined in other bid items associated with the Wallace property. For the purposes of payment, this item will be measured by the cubic yard of material excavated.
15. Earthwork – Mascherini Property. The lump sum price paid under this item shall be full payment for excavation, stockpiling, temporary sloping and/or shoring, backfill, and placement of native substrate beyond limits of work defined in other bid items associated with the Mascherini property. For the purposes of payment, this item will be measured by the cubic yard of material excavated.
16. Logs. The unit price paid under this item shall be full payment for installing Owner-furnished logs, including loading and transport from stockpile location, local excavation and backfill, subgrade preparation, and slash installation. For the purposes of payment, this item will be measured by the unit for each log installed.
17. Logs with Rootwads. The unit price paid under this item shall be full payment for installing Owner-furnished logs with rootwads, including loading and transport from stockpile location, local excavation and backfill, subgrade preparation, and slash installation. For the purposes of payment, this item will be measured by the unit for each log with rootwad installed.
18. Snags. The unit price paid under this item shall be full payment for installing Owner-furnished snags, including loading and transport from stockpile location, vibratory installation, and pull testing as required. For the purposes of payment, this item will be measured by the unit for each snag installed.
19. Ballast Boulders (Owner-furnished). The unit price paid under this item shall be full payment for installing Owner-furnished ballast boulders including loading and transport from stockpile location. For the purposes of payment, this item will be measured by the unit for each Owner-furnished ballast boulder installed.
20. Ballast Boulders (Contractor-furnished). The unit price paid under this item shall be full payment for furnishing and installing Contractor-furnished ballast boulders. For the purposes of payment, this item will be measured by the unit for each Contractor-furnished ballast boulder installed.
21. Streambed Boulders (Contractor-furnished). The unit price paid under this item shall be full payment for installing Contractor-furnished boulders in Boulder Clusters and Boulder Fields, as indicated. For the purposes of payment, this item will be measured by the unit for each streambed boulder installed.
22. Cable Attachment, Log to Log. The unit price paid under this item shall be full payment for providing cable attachments for logs cabled to logs, including cable and

- clamps. For purposes of payment, this item will be measured by the unit for each connection location.
23. Cable Attachment, Log to Boulder. The unit price paid under this item shall be full payment for providing cable attachments for logs cabled to boulders, including cable, clamps, and epoxy. For purposes of payment, this item will be measured by the unit for each connection location.
  24. Storm Drain Outfall. The lump sum price paid under this item shall be full payment for construction of the storm drain outfall protection on Channel Enhancement Area A, including grading, riprap, boulders, and fabric.
  25. Type 1 Slope Protection. The unit price paid under this item shall be full payment for installation of Type 1 slope protection, including slope preparation, seed, stakes and fabric. For the purposes of payment, this item will be measured by the square foot of finished slope measured on the plane of the slope indicated.
  26. FES Lift (Type 2 and 3 Banks). The unit price paid under this item shall be full payment for construction of FES Lift at Type 2 and 3 Banks, including local excavation, subgrade preparation, installation of fabric encapsulated soil lifts, and placement of willow cuttings. For the purposes of payment, this item will be measured by the square foot of finished slope measured on the plane of the slope indicated.
  27. FES Lift (Type 4 Bank). The unit price paid under this item shall be full payment for construction of FES Lift at Type 4 bank, including local excavation, subgrade preparation, installation of fabric encapsulated soil lifts, and placement of willow cuttings. For the purposes of payment, this item will be measured by the square foot of finished slope measured on the plane of the slope indicated.
  28. Live Stakes. The unit price paid under this item shall be full payment for providing live stakes used in construction of Type 3 and 4 banks and storm drain outfall scour protection, including installing and maintaining the live stake material. For the purposes of payment, this item will be measured by the unit for each live stake installed.
  29. ½ Ton Riprap Backfill. The unit price paid under this item shall be full payment for providing riprap used in construction of Type 3 and 4 banks, including procurement of riprap, transport to the project site, local excavation, filter fabric, and placement of riprap and native interstitial material. For the purposes of payment, this item will be measured by the ton riprap installed.
  30. Riffles. The unit price paid under this item shall be full payment for construction of Riffles, including local excavation, subgrade preparation, and procurement and placement of riffle material including in-situ mixing as indicated. For the purposes of payment, this item will be measured by the square foot of finished riffle installed.
  31. 12" Diameter Ductile Iron Pipe. The unit price paid under this item shall be full payment for the 12-inch ductile iron pipe shown in Off-Channel Enhancement Area C, including procurement, loading and transport to the project site, local excavation, placement of pipe, backfill and surface restoration. For the purposes of payment, this item will be measured by the linear foot of pipe along the longitudinal axis.
  32. All Other Work. The lump sum price paid under this item shall be full payment for all Work of Contract Documents other than Work separately provided for under other Bid items.
- E. Allowances: (N/A)
- F. Alternates: (N/A)

**1.4 WORK UNDER OTHER CONTRACTS**

A. None expected.

**1.5 FUTURE WORK**

A. None expected.

**1.6 WORK SEQUENCE**

- A. Construct Work in stages and at times to accommodate Owner operation requirements during the construction period; coordinate construction schedule and operations with Owner.
- B. Owner's Department of Fish and Game (DFG) Lake or Streambed Alteration Agreement limits construction to the period from June 15 to October 15. Extensions beyond October 15 are weather-dependent and are subject to written requests from Owner and approval by DFG on a day-to-day basis.
- C. Construction between March 15<sup>th</sup> and August 1<sup>st</sup> is subject to surveys by Owner's Biological Monitor for active bird nests. Construction sites left unattended for more than two weeks during this season are subject to follow-up bird nesting surveys. If Owner's Biological Monitor identifies active nests, or behavior indicative of nesting, buffer zones will be established (50 feet for small songbirds, and 300 feet for larger species), and no work will be allowed within these buffer zones until the nests have been vacated. Any claims or Contract Modifications that arise from such delays will be processed in accordance with Section 01250 (Modification Procedures).

**1.7 WORK DAYS AND HOURS**

- A. Work Days and hours: Monday-Friday inclusive, 7:00 a.m.-5:00 p.m. local time; Saturday work is subject to Owner's written permission.
- B. Work at the Site on Sundays, holidays, or at night is not permitted, unless Contractor requests otherwise from Owner in writing at least 48 hours in advance and Owner approves in its sole discretion.
- C. Contractor will not be permitted to schedule utility shutdowns on Fridays.

**1.8 SHUTDOWN FOR DISCOVERY OF CULTURAL RESOURCES**

- A. If discovery is made of items of historical, archaeological, or paleontological interest, immediately cease all Work in the area of discovery. Archaeological indicators may include, but are not limited to, dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, human bones, and fossils. After cessation of excavation, immediately contact Owner. Do not resume Work until authorization is received from Owner. When resumed, excavation or other activities shall be as directed by Owner.

**1.9 COOPERATION OF CONTRACTOR AND COORDINATION WITH OTHER WORK**

- A. Coordinate with Owner and any Owner forces, or other contractors and forces, as required by Document 00700 (General Conditions), Article 6.
- B. Employ a full-time coordinator to constantly review Contract Documents, submittals, changes, and prepare overlay drawings as necessary to avoid conflicts, errors, omissions and untimely construction.

**1.10 PARTIAL OCCUPANCY/UTILIZATION REQUIREMENTS**

- A. Allow Owner to take possession of and use any completed or partially completed portion of the Work during the progress of the Work as soon as is possible without interference to the Work.
- B. Possession, use of Work, and placement and installation of equipment by Owner shall not in any way evidence the completion of the Work or any part of it.
- C. Contractor shall not be held responsible for damage to the occupied part of the Work resulting from Owner occupancy.
- D. Make available, in areas occupied, on a 24-hour per day and 7-day per week basis if required, any utility services, heating, and cooling in condition to be put in operation at the time of occupancy.
  - 1. Responsibility for operation and maintenance of said equipment shall remain with Contractor.
  - 2. Make, and Owner shall certify, an itemized list of each piece of equipment so operated with the date operation commences.
  - 3. Itemized list noted above shall be basis for commencement of warranty period for equipment.
  - 4. Owner shall pay for utility cost arising out of occupancy by Owner during construction.
- E. Use and occupancy by Owner prior to acceptance of Work does not relieve Contractor of its responsibility to maintain insurance and bonds required under the Contract until entire Work is completed and accepted by Owner.
- F. Prior to date of Final Acceptance of the Work by Owner, all necessary repairs or renewals in Work or part thereof so used, not due to ordinary wear and tear, but due to Defective materials or workmanship or to operations of Contractor, shall be made at expense of Contractor, as required in Document 00700 (General Conditions).
- G. Use by Owner of Work or part thereof as contemplated by this Section 01100 shall in no case be construed as constituting acceptance of Work or any part thereof. Such use shall neither relieve Contractor of any responsibilities under Contract, nor act as waiver by Owner of any of the conditions thereof.
- H. Owner may specify in the Contract Documents that portions of the Work, including electrical and mechanical systems or separate structures, shall be substantially completed on dates described in paragraph 1.5A of this Section 01100, if any, prior to Substantial Completion of all of the Work. Notify Owner in writing when Contractor considers any such part of the Work ready for its intended use and Substantially Complete and request Owner to issue a Certificate of Substantial Completion for that part of the Work.

**1.11 CONTRACTOR USE OF SITE**

- A. Confine operations at Site to areas permitted by Contract Documents, permits, ordinances, and laws.
- B. Do not unreasonably encumber Site with materials or equipment.
- C. Assume full responsibility for protection and safekeeping of products stored on premises.
- D. Move any stored products that interfere with operations of property owner or other contractor.
- E. Coordinate parking, storage, staging, and Work areas with property owner.
- F. Do not store construction materials in the Drip line of any tree.
- G. Access is available to the Site along the routes indicated.

**1.12 AIR QUALITY STANDARDS**

- A. Ensure that idling time for all heavy equipment is minimized to reduce on-Site emissions.
- B. Maintain equipment in good mechanical condition and have mufflers installed.
- C. Cover trucks hauling dirt.
- D. Limit dust emissions during periods of high winds (greater than 15 miles per hour).
- E. Replace ground cover in disturbed areas as soon as possible.
- F. Enclose, cover, water, or apply soil binders to exposed stockpiles.
- G. Remove earth tracked onto neighboring paved roads at least once daily.
- H. Limit equipment speed to 10 miles per hour in unpaved areas.
- I. Sprinkle unpaved construction areas with water, as needed.

**1.13 CONSTRUCTION STAKING AND MONUMENT PROTECTION**

- A. Owner will provide construction surveying (staking) and other surveying, mapping, or computational activities that Owner deems necessary in its sole judgment, including that which may be used by the Owner to determine pay quantities, or other elements required by or provided for in the Contract Documents.
- B. Contractor shall be responsible at its sole expense and direction for construction layout activities (as defined by Owner in its sole and exclusive judgment) and any surveying and/or mapping activities beyond that which will be performed by Owner in accordance with Paragraph A above, including that which may be required to establish and/or document as-built locations, alignments, elevations, grades or quantities required by or provided for in the Contract Documents.
- C. Contractor shall be required to prepare and submit to Owner, not less than five Business Days before the Preconstruction Meeting, a Construction Staking Outline consisting of completed draft Construction Survey Request forms detailing the scope, extent, and anticipated schedule of the construction staking proposed by Contractor for each phase of the work and separate Construction Survey Request to be submitted by Contractor during the course of the contract. Owner will review Contractor's Construction Staking Outline and notify Contractor of required changes, modifications, or deletions to the Construction Staking Outline prior to commencement of Work.
- D. Construction staking will be provided in accordance with the approved Construction Staking Outline. Modifications and alterations to the Construction Staking Outline must be submitted and approved by Owner not less than five Business Days in advance of the requested date that construction survey activities are to begin (see Construction Survey Request: Requested Start Date). Owner reserves the right to reject, require modification and/or deletions to any such subsequent submittal prior to acceptance.
- E. Contractor shall be responsible at its sole expense to ready the area required for construction survey activities prior to the arrival of Owner's survey crews on Site. For the purposes of construction surveying activities, readying includes clearing, grubbing and ensuring that the area required for construction surveys is clear of obstacles, debris, materials, equipment or hazards that would unreasonably interfere with or impede Owner's ability in Owner's reasonable judgment, to productively and effectively provide the construction survey requested, establish reliable, stable, survey points and stakes or markings on the ground. Owner reserves the right to delay, discontinue, or suspend construction surveys in areas and situations that in the sole judgment of Owner, are not sufficiently readied for such surveys. Owner is not responsible for delays resulting from the areas required for construction survey activities not being sufficiently readied prior to survey crew's arrival on Site.

- F. Contractor is responsible at its sole expense to provide traffic control for construction surveying activities, and shall coordinate with Owner to ensure sufficient traffic control and or safety measures are in place, prior to the arrival of the survey crew on Site. Owner reserves the right to delay, discontinue or suspend construction surveys in areas and situations that in the sole judgment of Owner lack sufficient traffic control and/or safety measures to safely, productively and efficiently accommodate construction survey activities. Owner is not responsible for delays resulting from the areas required for construction survey activities lacking sufficient traffic control and/or safety measures in place prior to survey crew's arrival on Site.
- G. Construction Survey Request(s) shall be submitted by Contractor not less than five Business Days prior to the date that the Site will be readied for construction surveying activities (hereafter referred to as the advanced notice period for Construction Survey Request(s)). Scheduling or time changes for a previously accepted Construction Survey Request shall be submitted to Owner not less than two Business Days in advance of the date that the Site will be readied. Requests submitted after 12:00 noon will be held over to the next Business Day for the purposes of beginning the advanced notice period for Construction Survey Requests.
- H. Contractor is responsible to ensure that sufficient time is allowed to meet the advanced notice period for Construction Survey Request(s) requirements, to perform Site preparation requirements outlined above, to accommodate Owner's scheduling and resource availability, and for the Owner to complete construction survey activities. Contractor shall coordinate with Owner well in advance of the anticipated need, to ensure that sufficient resources are available to complete the construction surveys requested. No extension of time will be granted for delays resulting from construction survey activities.
- I. Contractor shall not begin work on any element of construction until construction staking or related survey activity associated with a Construction Survey Request submitted by the Contractor has been completed. For the purposes of this section: Completion of construction staking or related survey activity shall be determined by Owner. Contractor will be notified by Owner.
- J. Contractor shall protect and preserve stakes set by Owner in accordance with the above. Contractor shall be responsible at its sole expense for re-staking or verification of survey stakes, cut/fills or markings that are damaged, destroyed or otherwise made un-useful/reliable by activities within its control in the reasonable judgment of Owner. Owner will provide replacement stakes or verification surveys requested by Contractor at Contractor's expense in accordance with normal staff rates and charges associated with personnel, equipment and materials required to perform such activities.
- K. Whenever Contractor knows or reasonably should know that any Work or construction-related activity required under this Contract may, or is likely to damage, destroy or cause any property or right of way monument(s), survey control point(s), or Bench Marks to become unusable, Contractor shall notify Owner a minimum of five Business Days in advance of such work or activity. Owner will reference property or right of way monument(s) and survey control point(s) by survey, swing ties, or other appropriate means prior to their disturbance or destruction. Owner will replace or restore as appropriate property or right of way monuments and survey control point(s) disturbed, destroyed or otherwise made un-useful by Contractor's activities upon completion of the construction activities.
- L. Contractor shall protect and preserve property or right of way monuments and survey control points, and shall be responsible at its sole expense for the cost replacing or restoring damaged or destroyed property or right of way monuments and survey control points,

including the cost of preparing and filing a Corner Record or Record of Survey when required under Sec. 8771(b) of the Business and Professions Code of the State of California where sufficient notification to Owner was not provided in accordance with the above. Owner will perform such Surveying and Mapping activities required in Owner's sole judgment, to restore or replace property or right of way monuments and survey control point(s) disturbed, destroyed or otherwise made un-useful by Contractor's activities and required to comply Sec. 8771(b) of the Business and Professions Code of the State of California, in accordance with staff rates and charges in effect for the associated personnel, equipment and materials required to perform such activities.

#### **1.14 PROTECTION OF EXISTING STRUCTURES AND UNDERGROUND FACILITIES**

- A. The Drawings may indicate existing above- and below-grade structures, drainage lines, storm drains, sewers, pumps, water lines, gas lines, electrical lines, and other similar items and Underground Facilities that are known to Owner.
- B. Where overhead service to a structure, known to receive service, does not exist, then underground service shall be assumed to exist.
- C. Perform potholing using hand or mechanical vacuum methods within 24 inches (in any direction) of the Underground Facilities. This may be done on an area-by-area basis, but shall be accomplished at least 7 Days in advance of the date of construction within such area.
- D. No attempt has been made to locate private utilities on private property such as sprinkler irrigation systems or electrical conduits. Contact the property owners prior to construction.
- E. In addition to reporting, if a utility is damaged, Contractor shall take appropriate action as provided in Document 00700 (General Conditions).
- F. Additional compensation or extension of time on account of utilities not indicated or otherwise brought to Contractor's attention including reasonable action taken to protect or repair damage shall be determined as provided in Document 00700 (General Conditions).

#### **1.15 PERMITS**

- A. Permits, agreements, or written authorizations that are known by Owner to apply to this Project are listed below:
  1. *US Department of the Army, Corps of Engineers Clean Water Act, Section 404 Individual permit.* The Corps' nationwide permit is available for review at Owner's Office.
  2. *California Department of Fish and Game 1601, Stream Alteration Agreement (Notification #1600-2012-0004-R3).* A copy of Owner's agreement is included at the end of this Section 01100.
  3. *North Coast Regional Water Quality Control Board (NCRWQCB), Clean Water Act, Section 401 Certification* for the Sonoma County Water Agency Dry Creek Habitat Enhancement Demonstration Project, dated May 10, 2012. A copy of the certification is included at the end of this Section 01100.
  4. *State Water Resources Control Board (SWRCB ), Order No. 2009-0009 – DWQ, National Pollutant Discharge Elimination System (NPDES), General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit).* The permit is available at Owner's office or is available online at [http://www.swrcb.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits.shtml). Owner will file a Notice of Intent with SWRCB to obtain coverage under the General Permit. Contractor shall provide the Storm Water Pollution Prevention Plan, as described in Section 01500 (Temporary Facilities and Controls), in support of the Notice

of Intent. Owner has determined that this Project has a combined risk level 2 as defined by SWRCB.

5. *County of Sonoma Grading Permit.* Obtain a permit from PRMD for grading Work.
- B. All other permits that may be required, including, but not limited to, electrical, mechanical, fire prevention, irrigation, grading, slope protection, tree cutting, dechlorinated water discharge, and flushing water discharge have not been applied for and shall be obtained by Contractor.
- C. Applicable permit fees, if specifically listed in Document 00700 (General Conditions), will be reimbursed by Owner to the extent specified therein. All other permit fees shall be paid by Contractor.
- D. Furnish copies of Contractor-obtained permits to Owner.

#### **1.16 RIGHTS-OF-WAY**

- A. Owner is in the process of acquiring the rights-of-way indicated. In the event that Owner is unable to acquire the right-of-way by the Notice to Proceed, the Notice to Proceed may exclude certain portions of the Work.
- B. Owner has acquired easements and license areas as indicated. Contractor may use the easements and license areas for accessing the Site, performing survey staking, or storing equipment, materials, and supplies for this Project, subject to the following:
  1. Contractor is responsible for damage to vineyards caused by dust directly resulting from Contractor construction activities (Farrow property).
  2. The Contractor shall inspect and document the condition of all of property owners' paved and unpaved roads prior to commencement of any Contractor construction activities (Farrow property & Van Alyea property).
  3. Contractor shall return all roads used to before condition at the end of the construction. (Farrow property & Van Alyea property).
  4. Contractor shall provide property owner with unimpeded access to vineyards during vineyard harvest to include property owner equipment parking and grape loading areas.
  5. Contractor shall only use Farrow's existing paved road located at the southerly edge of Farrow's property.
  6. Property owner shall notify Contractor of said parking and grape loading areas and shall notify Contractor of potential harvest dates a minimum of four weeks prior to the beginning of harvest. (Farrow property).
- C. If Contractor desires to use the temporary construction easement for any other purposes, or if Contractor desires to perform an operation that is not specified herein, submit a written request in advance to Owner for approval.

#### **1.17 DOCUMENT TRACKING**

- A. Owner will maintain a computerized document control system to monitor the generation, status, and filing of documents. Documents such as, but not limited to, Contracts, Cost Proposals, Change Orders (proposed and approved), Meeting Minutes, Schedules and Reports, Payment Applications, certificates of insurance, Safety Reports, Requests for Information, Requests for Substitutions, correspondence, communications, notices, Submittals, transmittals, and logs shall be submitted electronically for Owner to control the documents using the computerized system. Owner will use the computerized system to track and manage all documents on the Project, after Notice to Proceed, to the greatest extent possible.

- B. Provide all Project documents to Owner in electronic format with a minimum of one hard copy, unless otherwise required by the Contract Documents. If file size prohibits electronic transmittal, submit to Owner on compact disk (CD).
- C. Provide electronic format documents in searchable portable document format (PDF), unless otherwise required by the Contract Documents or directed in writing by Owner.

## **PART 2 PRODUCTS**

### **2.1 PRODUCTS ORDERED IN ADVANCE**

- A. As provided in Section 01200 (Price and Payment Procedures), paragraph 1.5E, and subject to all other provisions of the Contract Documents, Owner will pay for the following materials and equipment prior to incorporation into the Work:
  - 1. Materials:
    - a. None
  - 2. Equipment:
    - a. None

### **2.2 OWNER-FURNISHED PRODUCTS**

- A. Owner-Furnished Products:
  - 1. Ballast Boulders
  - 2. Logs
  - 3. Logs with rootwads
  - 4. Snags
- B. Owner's Responsibilities:
  - 1. Provide stockpile locations at 3333 Skaggs Springs Rd, Geyserville, California 95441, for Owner-furnished products.
  - 2. On delivery, inspect products jointly with Contractor.
- C. Contractor's Responsibilities:
  - 1. Select Owner-furnished materials for compliance with Contract Documents.
  - 2. Load from Owner-furnished stockpile site, transport, and unload products at Site; inspect for completeness or damage jointly with Owner.
  - 3. Handle, store, install, and finish products.
  - 4. Repair or replace items damaged after receipt.
  - 5. Install into Project per Contract Documents.

## **PART 3 EXECUTION - NOT USED**

END OF SECTION

OWNER PERMITS FOLLOW THIS SECTION





State of California – The Natural Resources Agency  
DEPARTMENT OF FISH AND GAME  
Bay Delta Region  
7329 Silverado Trail  
Napa, CA 94558  
(707) 944-5520  
[www.dfg.ca.gov](http://www.dfg.ca.gov)

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



May 21, 2012

Grant Davis  
Sonoma County Water Agency  
404 Aviation Boulevard  
Santa Rosa, CA 95403

Subject: Final Lake or Streambed Alteration Agreement  
Notification No. 1600-2012-0004-R3  
Dry Creek Habitat Enhancement Demonstration Project

Dear Mr. Davis:

Enclosed is the final Streambed Alteration Agreement (“Agreement”) for the Dry Creek Habitat Enhancement Demonstration Project (“Project”). Before the Department may issue an Agreement, it must comply with the California Environmental Quality Act (“CEQA”). In this case, the Department, acting as a responsible agency, filed a notice of determination (“NOD”) on May 21, 2012, based on information contained in the Mitigated Negative Declaration the lead agency prepared for the Project.

Under CEQA, filing a NOD starts a 30-day period within which a party may challenge the filing agency’s approval of the project. You may begin your project before the 30-day period expires if you have obtained all necessary local, state, and federal permits or other authorizations. However, if you elect to do so, it will be at your own risk.

If you have any questions regarding this matter, please contact Adam McKannay, Environmental Scientist, at (707) 944-5534 or [amckannay@dfg.ca.gov](mailto:amckannay@dfg.ca.gov).

Sincerely,

Craig J. Weightman  
Acting Environmental Program Manager  
Bay Delta Region

**Copy**  
Sonoma County Water Agency

**MAY 23 2012**

To: Cuneo

CF/45-6.1-2 Dry Creek Habitat Enhancement Demonstration Project (ID 3283)

cc: David Cuneo  
Lieutenant Jones  
Warden Reed  
Adam McKannay

*Conserving California’s Wildlife Since 1870*

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**CALIFORNIA DEPARTMENT OF FISH AND GAME**  
BAY DELTA REGION  
7329 SILVERADO TRAIL  
NAPA, CALIFORNIA 94558  
(707) 944-5520  
[WWW.DFG.CA.GOV](http://WWW.DFG.CA.GOV)



**STREAMBED ALTERATION AGREEMENT**  
NOTIFICATION No. 1600-2012-0004-R3  
Dry Creek; Sonoma County

SONOMA COUNTY WATER AGENCY  
DRY CREEK HABITAT ENHANCEMENT DEMONSTRATION PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Game (DFG) and Sonoma County Water Agency (Permittee) as represented by Grant Davis.

**RECITALS**

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on January 5, 2012, that Permittee intends to complete the project described herein.

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

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

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

**PROJECT LOCATION**

The project is located at Dry Creek, in the County of Sonoma, State of California; Latitude N38 39.2307, Longitude W122 55.6575.

The project area is located within the Dry Creek Valley along Dry Creek from approximately ¾ -mile upstream of Lambert Bridge Road to ½-mile downstream of Lambert Bridge Road.

Ver. 02/16/2010

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## PROJECT DESCRIPTION

The National Marine Fisheries Service (NMFS) issued the *Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation District in the Russian River Watershed* (Russian River Biological Opinion) (Exhibit A) on September 24, 2008. NMFS' Russian River Biological Opinion is a culmination of more than a decade of consultation between the Water Agency, the U.S. Army Corps of Engineers (Corps), and the NMFS regarding the impact of the Water Agency's and Corps' water supply and flood control activities on three fish species listed under the federal Endangered Species Act: Central California Coast steelhead, Central California Coast coho salmon, and California Coastal Chinook salmon. The California Department of Fish and Game (DFG) issued a consistency determination on November 9, 2009 (Exhibit B), finding that the Russian River Biological Opinion was consistent with the requirements of the California Endangered Species Act (CESA) and adopted the measures identified in the Russian River Biological Opinion.

NMFS' Russian River Biological Opinion found that summer flows in the upper Russian River and Dry Creek are too high for optimal juvenile coho salmon and steelhead habitat. Current summer flows in Dry Creek range from 105 to 175 cubic feet per second (cfs). The velocities associated with these summer flows make it difficult for the juvenile fish to thrive. NMFS' Russian River Biological Opinion recognizes that large reductions in the summertime flows in Dry Creek would impair the Water Agency's ability to deliver water to its customers. Therefore, the Russian River Biological Opinion requires habitat enhancement of six miles of Dry Creek to improve summer rearing conditions for coho salmon and steelhead while allowing the Water Agency to maintain the existing flow range in Dry Creek of 105 to 175 cfs for water supply purposes. The six miles of habitat enhancement are to be distributed over the entire length of Dry Creek below Warm Springs Dam and implemented at a minimum of eight locations on the creek. It is intended that the enhancements for summer rearing will also provide winter rearing and refugia habitat. The habitat enhancements are to be implemented in phases to allow for evaluation of their effectiveness as the effort progresses.

The Dry Creek Habitat Enhancement Demonstration Project (Project) would implement habitat enhancement projects within an approximately one mile reach of Dry Creek. The purpose of the project is to demonstrate to regulators, landowners, and local decision makers the feasibility of Dry Creek habitat enhancements on a smaller scale and, in particular, to determine how they could be constructed, what they may ultimately look like, and how effective they are before implementing the full six miles of habitat enhancements on Dry Creek.

Project activities would consist of actions such as dewatering and bypass flow pumping, stockpiling of materials, removal of vegetation, excavation of the backwater/alcove areas, revegetation, and placement of boulder and log structures. Construction in or

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near the streambed would occur during the months of June through October during summer low-flows. All flows in Dry Creek (approximately 100 to 120 cfs) would need to be diverted around the work area during construction. Work areas would be isolated from the moving stream using some type of imported barrier or material (water filled bladders, gravel cofferdams, sheetpile cofferdams, etc.). Typically, the work area would be isolated and the creek flow would be allowed to continue flowing adjacent to the isolated work area. In some cases it may be necessary to completely isolate the creek from bank to bank. In this case, bypass pumping or a gravity bypass from the upstream end of the work area to the downstream end of the work area would occur to bypass creek flows around the work area. The bypass would result in the work area being dewatered during construction. Dewatering would require installation of cofferdams upstream and downstream of the project site and diverting stream flow around the project site.

Enhancements in the Project area will emphasize natural stream characteristics, or geomorphology, which refers to the manner in which water and sediment combine to create habitat features friendly to fish. By using enhancement practices that emulate natural geomorphic conditions, the benefits provided to young coho and steelhead and their longevity are optimized. The proposed Project would consist of the following enhancement practices, which are described below:

- Streambank Stabilization: This enhancement practice is applied in areas of bank erosion to retain property and to enhance the habitat characteristics along the edge of the stream.
- Backwater Channels, Alcoves, and Ponds: This enhancement practice consists of areas off to the side of the stream that in summer connect to the mainstem of Dry Creek only at their downstream end.
- Side Channels: Side channels run parallel to the main stream and connect to the main stream at both upstream and downstream ends, even during the summer. The flow of the stream is split between the two channels.
- Log Jams: A log jam is an accumulation of logs that may be constructed in an area where it would be beneficial to provide velocity refuge for fish and/or to initiate or stabilize a turn or fork in the channel.
- Pool Enhancements: Pools are deeper areas of the stream. In a healthy stream, pools provide key habitat for young fish because currents are slow, the flow patterns are diverse, and fish can hide beneath logs that project into the water.
- Riffle Construction: Riffles are areas where the streambed is steeper and the current is swift. Riffles play a key role in controlling the elevation of the streambed and releasing the stream's energy to slow the current flowing through adjoining pools.

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- **Riparian Vegetation Management:** Dry Creek has extensive vegetative growth along the channel, which includes many non-native or invasive weed species. In some areas, overly dense stands of vegetation impair stream function by channelizing the flow of the creek and acting like a levee, which forces energy into the creek bed, and results in pools that are too long, with water that moves too swiftly. Riparian vegetation management would include selective thinning of existing vegetation, removal of invasive weeds, and in some cases, replanting of native vegetation.
- **Monitoring and Maintenance:** The Water Agency would be responsible for monitoring and maintaining the project components throughout the expected lifespan of the proposed structures (15-25 years). Monitoring activities could consist of activities such as fish surveys, stream profile and cross-section measurements, vegetation surveys, wildlife surveys, and photo documentation of structures. Failing structures, or structures that aren't performing as intended (not inundated properly, inundated too much, buried, having too high of velocities still) may require additional maintenance work in future years after the initial construction to restore or enhance the originally intended functions. Vegetation management is expected to occur annually for the first few years after implementation and then on a three- to five-year recurring basis in order to maintain the desired vegetation species and densities in the project area.

### PROJECT IMPACTS

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

- Coho salmon (Federal Endangered, California Endangered)
- Chinook salmon (Federal Threatened)
- Steelhead trout (Federal Threatened)

The adverse effects the project could have on the fish or wildlife resources identified above include:

- relocation of stream channel or lake
- change in contour of bed, channel or bank
- change in gradient of bed, channel or bank
- change in channel cross-section (confinement or widening);
- loss of bank stability during construction
- accelerated channel scour
- change in composition of channel materials (Large Woody Debris or substrate particle size);
- debris dams
- Increased turbidity

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- disruption to nesting birds and other wildlife
- change in shading or insolation leading to vegetative change
- diversion of flow water from, or around, activity site
- direct take of aquatic species from pumps
- rewatering
- dewatering

## MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

### 1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to DFG personnel, or personnel from another state, federal, or local agency upon request.
- 1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 Notification of Conflicting Provisions. Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, DFG shall contact Permittee to resolve any conflict.
- 1.4 Project Site Entry. Permittee agrees that DFG personnel may enter the project site at any time to verify compliance with the Agreement.
- 1.5 No Trespass. To the extent that any provisions of this Agreement provide for activities that require the 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.

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## 2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

- 2.1 Instream Work Period – Work in the stream channel below the top of bank shall be confined to the period June 15 through October 15. Revegetation work is not confined to this time period.
- 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 by the DFG representative who reviewed the project (see Contact Information section). Permittee shall submit a written request for a work period variance to DFG. The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. The work period variance request should consider the effects of increased stream flows, rain delays, increased erosion control measures, limited access due to saturated soil conditions, and limited growth of erosion control grasses due to cool weather. Work period variances are issued at the discretion of DFG. DFG will review the written request to work outside of the established work period. DFG reserves the right to require additional measures to protect fish and wildlife resources as a condition for granting the variance. DFG will have seven (7) calendar days to review the proposed work period variance.
- 2.3 Work according to plans. All work shall be completed according to the plans submitted to DFG entitled *Dry Creek Habitat Enhancement Demonstration Project*, April 27, 2012, Interfluve, Inc.(Exhibit C). If the Permittee finds it necessary to update project plans prior to construction, the updated plans will be submitted to DFG at least 30 days prior to beginning project activities to determine if an Amendment to this Agreement is required. Updated project plans shall be submitted for each of the work seasons in which work on the project is expected to occur, these plans shall be similar in scope and content as Exhibit C. Project activities shall not proceed until DFG has approved the updated plans in writing.

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### Dewatering and Temporary Diversions

- 2.4 Work In Isolation Of Flowing Stream. Any work within the stream channel shall be performed in isolation from the flowing stream.
- 2.5 Boulder Cluster Installation. Where the disturbance to construct coffer dams to isolate the work site would be greater than to complete the action (for example, placement of a single boulder cluster), the action shall be carried out without dewatering and fish relocation. Project elements that are proposed for installation in the flowing stream shall be submitted and approved by DFG in writing at least fifteen (15) days prior to beginning installation of the element.
- 2.6 Diversion Plan. If flowing water is present or reasonably anticipated, the Permittee shall submit for approval a detailed water diversion and dewatering plan to DFG at least fifteen (15) working days prior to commencing work within the stream zone. Dewatering structures may include the use of sand bag, Port-a-dams, water bladder dams, K-rails or driven sheet metal coffer dams. DFG will review the proposed dewatering plan, to approve the plan or provide the requirements for that approval. The Permittee may not commence the dewatering or the diversion of water without the explicit written approval from DFG.
- 2.7 Maintain Aquatic Life. When any dam or other artificial obstruction is being constructed, maintained, or placed in operation, Permittee shall allow sufficient water at all times to pass downstream to maintain aquatic life below the dam pursuant to Fish and Game Code §5937.
- 2.8 Screen According to Existing Standards. The inlets of the dewatering pump structure shall be fitted with fish screens meeting the "fry-size" criteria of DFG and the National Marine Fisheries Service before water is pumped from within the coffer dams (see screening criteria at: <http://swr.nmfs.noaa.gov/hcd/policies.htm>.)
- 2.9 Fish Relocation: Fish relocation shall be performed by a Qualified Biologist, with all necessary State and Federal permits. Rescued fish shall be moved to the nearest appropriate site outside of the work area. A record shall be maintained of all fish rescued and moved. The record shall include the date of capture and relocation, the method of capture, the location of the relocation site in relation to the project site, and the number and species of fish captured and relocated. The record shall be provided to DFG within two (2) weeks

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of the completion of the work season or project, whichever comes first.

- 2.10 Clean Obstruction Only. Any temporary dam or other artificial obstruction constructed by Permittee shall only be built from materials which will cause little or no siltation, such as clean gravels.
- 2.11 Maintain Water Quality. Permittee shall divert flow in a manner that prevents turbidity, siltation, or pollution and provides flows to downstream reaches. Flows to downstream reaches shall be provided during all times that the natural flow would have supported aquatic life. Said flows shall be sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion.
- 2.12 Restore Normal Flows. Permittee shall restore normal flows to the effected stream immediately upon completion of work at that location.

#### **Wildlife Protection and Prevention - General**

- 2.13 Qualified Biologist. A qualified biologist is an individual who is approved by DFG and approved and/or permitted by the National Marine Fisheries Service (NMFS) to handle steelhead trout, Chinook salmon, and coho salmon.
- 2.14 Biological Monitor. A biological monitor is an individual experienced with construction level biological monitoring and who is able to recognize species in the project area and who is familiar with the habits and behavior of those species. Biological monitors shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this project. All biological monitors for the project shall be approved by DFG prior to commencement of covered activities.
- 2.15 Bird Surveys. If construction will occur between March 15<sup>th</sup> and August 15<sup>th</sup>, the work area will be surveyed by a Biological Monitor to determine if active nests are present. If the construction site is left unattended for more than two weeks during the breeding season, another survey will be completed to determine if the birds have moved back into the area and are occupying active nests. If active nests or behavior indicative of nesting are encountered, those areas plus a 50-foot buffer for small songbirds and 300-feet for larger species (e.g. raptors, owls, etc.) designated by the biologist will be avoided until the nests have been vacated.

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- 2.16 No Heavy Equipment in Stream. No heavy equipment shall operate in the portion of the stream bed where flowing water is present or anticipated during the term of this agreement except as may be necessary to construct coffer dams and associated stream diversion and/or bypass structures to divert stream flow and isolate the work site.
- 2.17 Only clean rocks and boulders. Only clean rocks and boulders shall be used for the project unless specified otherwise with the design plans and project description.
- 2.18 No debris to be used as rip rap. No broken concrete or other construction waste materials shall be used as rock slope protection.
- 2.19 Rock slope protection. Rock slope protection shall be properly keyed into the bank and be of sufficient size to remain in place and withstand highest velocity of water anticipated within the stream channel.
- 2.20 No extraction. Rock, gravel, and/or other materials shall not be imported to, taken from or moved within the bed or banks of the stream except as otherwise addressed in this Agreement within Exhibit C.
- 2.21 Native Plant Materials Required. Revegetation shall include only local plant materials native to the project area, unless otherwise approved by DFG in writing.

#### **Wildlife Protection and Prevention - Special Status Species**

- 2.22 Listed species. The project site has been identified as an area that is potentially inhabited by species listed under the federal Endangered Species Act and/or the California Endangered Species Act, including, coho salmon (Federal and State Endangered) and steelhead trout (Federal Threatened). This agreement does not authorize for the take, or incidental take of any State or Federal listed threatened or endangered listed species. The Permittee has received Federal take authorization for coho salmon, steelhead trout and chinook salmon under the *Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation District in the Russian River Watershed*, National Marine Fisheries Service, 2008 (Exhibit A) and State authorization for incidental take of coho salmon under the

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*Consistency Determination, Fish and Game Code Section 2080.1, CESA Tracking Number 2080-2009-016-03, California Department of Fish and Game, November 9, 2009 (Exhibit B).*

### **Erosion Control**

- 2.23 Erosion Control Measures. Permittee shall utilize erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a river, stream, or lake.
- 2.24 Silt Laden Runoff. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control measures, such as, silt fences, straw hay bales, gravel or rock lined ditches, water check bars, and broadcasted straw shall be used where ever silt laden water has the potential to leave the work site and enter the stream.
- 2.25 Erosion Control Maintenance. Permittee shall make modifications, repairs and improvements to erosion control measures whenever it is needed. Materials used to repair or improved erosion control measures shall not pose a risk to fish or wildlife.
- 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>
- 2.27 Treat exposed areas. All exposed/disturbed areas and access points within the stream zone left barren of vegetation as a result of the construction activities shall be restored by seeding with a blend of native erosion control grass seeds. Seeded areas shall be mulched. All other areas of disturbed soil which drain toward the stream channel shall be seeded with erosion control grass seeds. Revegetation shall be completed as soon as possible after construction activities in those areas cease. Seeding placed after October 15 must be covered with broadcast straw, jute netting, coconut fiber blanket or similar erosion control blanket.

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### **Equipment and Vehicles**

- 2.28 Operating Equipment and Vehicle Leaks. Any equipment or vehicles driven and/or operated within or adjacent to the stream shall be checked and maintained daily to prevent leaks of materials that could be deleterious to aquatic and terrestrial life or riparian habitat.
- 2.29 Stationary Equipment Leaks. Stationary equipment such as motors, pumps, generators, and welders, located within or adjacent to the stream shall be positioned over drip pans. Stationary heavy equipment shall have suitable containment to handle a catastrophic spill/leak.
- 2.30 Clean Up Equipment. Clean up equipment such as extra boom, absorbent pads, skimmers, shall be on site prior to the start of work within the stream zone.
- 2.31 Equipment Maintenance and Fueling. No equipment maintenance or fueling shall be done within or near any stream channel or lake margin where petroleum products or other pollutants from the equipment may enter these areas.
- 2.32 Equipment Storage. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, shall be located outside of the stream channel and banks.
- 2.33 Stockpiled Materials. Building materials and/or construction equipment shall not be stockpiled or stored where they may be washed into the water or cover aquatic or riparian vegetation. Stockpiles shall be covered when measurable rain is forecasted.

### **Debris Materials and Waste**

- 2.34 Location of Spoil Sites. Spoil sites shall not be located within a stream or locations that may be subjected to high storm flows, where spoil may be washed back into a stream, or where it may impact streambed habitat, aquatic or riparian vegetation.
- 2.35 No Dumping. Permittee and all contractors, subcontractors, and employees shall not dump any litter or construction debris within the stream, or where it may pass into the stream.
- 2.36 Pick Up Debris. Permittee shall pick up all debris and waste daily.

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- 2.37 Wash water. Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a lake or flowing stream or placed in locations that may be subjected to high storm flows.
- 2.38 Clean-up. All construction debris and associated materials shall be removed from the work site upon completion of this project.

#### **Toxic and Hazardous Materials**

- 2.39 Toxic Materials. Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into the stream or its tributaries shall be contained in water tight containers or removed from the project site.
- 2.40 Hazardous Substances. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, resulting from project related activities, shall be prevented from contaminating the soil and/or entering the waters of the state. Any of these materials, placed within or where they may enter the stream by Permittee or any party working under contract, or with the permission of Permittee, shall be removed immediately.
- 2.41 Hazardous Materials. Debris, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to aquatic life, wildlife, or riparian habitat resulting from the project related activities shall be prevented from contaminating the soil and/or entering the waters of the State.

#### **Spills and Emergencies**

- 2.42 Spill Cleanup. Permittee shall begin the cleanup of all spills immediately. DFG shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures. The Permittee shall have all spill clean-up equipment on site during construction.
- 2.43 Spill Containment. All activities performed in or near a stream shall have absorbent materials designated for spill containment and clean up activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the clean up activities.

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DFG shall be notified by the Permittee and consulted regarding clean-up procedures.

### 3. Reporting Measures

Permittee shall meet each reporting requirement described below.

- 3.1 Adaptive management, monitoring, and evaluation plan. In accordance with the Biological Opinion (Exhibit A, pages 271-272), prior to construction of the project, the Permittee shall submit a post-construction adaptive management, monitoring and evaluation plan for this project for review and approval by NMFS and DFG. This monitoring plan shall include implementation monitoring, effectiveness monitoring and validation monitoring.
- 3.2 Commencement and completion of work. The Permittee shall notify the DFG within ten (10) working days of beginning work within the stream zone or area covered in this agreement. In addition, the Permittee shall notify the DFG within five (5) working days of the completion of work within the stream zone on this project.
- 3.3 Fish Relocation Record. A record shall be maintained of all fish rescued and moved. The record shall include the date of capture and relocation, the method of capture, the location of the relocation site in relation to the project site, and the number and species of fish captured and relocated. The record shall be provided to DFG within two (2) weeks of the completion of the work season or project, whichever comes first.
- 3.4 Notification to the California Natural Diversity Database. If any special status species are observed in project surveys, Permittee or designated representative shall submit Natural Diversity Data Base (NDDDB) forms to the NDDDB for all preconstruction survey data within five (5) working days of the sightings, and provide to DFG's Regional office three (3) copies of the NDDDB forms and survey maps.

### CONTACT INFORMATION

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

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To Permittee:

Grant Davis  
Sonoma County Water Agency  
404 Aviation Boulevard  
Santa Rosa, CA 95403  
Grant.Davis@scwa.ca.gov

To DFG:

Department of Fish and Game  
Bay Delta Region  
7329 Silverado Trail  
Napa, California 94558  
Attn: Lake and Streambed Alteration Program – Adam McKannay  
Notification #1600-2012-0004-R3  
Fax (707) 944-5553  
amckannay@dfg.ca.gov

**LIABILITY**

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

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

**SUSPENSION AND REVOCATION**

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

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

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### **ENFORCEMENT**

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

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

### **OTHER LEGAL OBLIGATIONS**

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

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

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

### **AMENDMENT**

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

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

### **TRANSFER AND ASSIGNMENT**

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

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

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

### **EXTENSIONS**

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

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

### **EFFECTIVE DATE**

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

### **TERM**

This Agreement shall expire on December 31, 2016, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

### **EXHIBITS**

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

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- A. National Marine Fisheries Service (NMFS), *Biological Opinion for the Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River Watershed*, September 24, 2008.
- B. California Department of Fish and Game, *Consistency Determination, Fish and Game Code Section 2080.1, CESA Tracking Number 2080-2009-016-03*, November 9, 2009.
- C. *Dry Creek Habitat Enhancement Demonstration Project*, April 27, 2012, Interfluve, Inc., sheets 1-15.

**AUTHORITY**

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

**AUTHORIZATION**

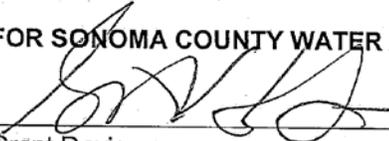
This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify DFG in accordance with FGC section 1602.

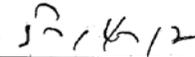
Notification #1600-2012-0004-R3  
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**CONCURRENCE**

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

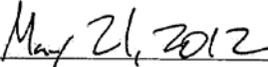
**FOR SONOMA COUNTY WATER AGENCY**

  
\_\_\_\_\_  
Grant Davis  
General Manager

  
\_\_\_\_\_  
Date

**FOR DEPARTMENT OF FISH AND GAME**

  
\_\_\_\_\_  
Scott Wilson  
Acting Regional Manager

  
\_\_\_\_\_  
Date

Prepared by: Adam McKannay  
Environmental Scientist

Date Prepared: March 16, 2012  
Date Revised: April 27, 2012

*\* Revised page 1 \**

FOR DEPARTMENT USE ONLY				
Date Received	Amount Received	Amount Due	Date Complete	Notification No.
1/5/12	\$4432.75	\$		1600-2012-0004-3



County of Sonoma  
OK # 123371

STATE OF CALIFORNIA

*Lick Array*



DEPARTMENT OF FISH AND GAME

**NOTIFICATION OF LAKE OR STREAMBED ALTERATION**

Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

**1. APPLICANT PROPOSING PROJECT**

Name	Grant Davis		
Business/Agency	Sonoma County Water Agency		
Street Address	404 Aviation Boulevard		
City, State, Zip	Santa Rosa, CA 95403		
Telephone	(707) 547-1900	Fax	
Email	Grant.Davis@scwa.ca.gov		

**2. CONTACT PERSON** *(Complete only if different from applicant)*

Name	David Cuneo		
Street Address	404 Aviation Boulevard		
City, State, Zip	Santa Rosa, CA 95403		
Telephone	(707) 547-1935	Fax	
Email	david@scwa.ca.gov		

**3. PROPERTY OWNER** *(Complete only if different from applicant)*

Name	multiple landowners - see attached list		
Street Address			
City, State, Zip			
Telephone		Fax	
Email			

**4. PROJECT NAME AND AGREEMENT TERM**

A. Project Name		Dry Creek Habitat Enhancement Demonstration Project		
B. Agreement Term Requested		<input checked="" type="checkbox"/> Regular (5 years or less) <input type="checkbox"/> Long-term (greater than 5 years)		
C. Project Term		D. Seasonal Work Period		E. Number of Work Days
Beginning (year)	Ending (year)	Start Date (month/day)	End Date (month/day)	
2012	2016	06/15	10/15	610.00

*changed personnel  
1/23/12*

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

5. AGREEMENT TYPE

Check the applicable box. If box B, C, D, or E is checked, complete the specified attachment.

A.	<input checked="" type="checkbox"/> Standard (Most construction projects, excluding the categories listed below)	
B.	<input type="checkbox"/> Gravel/Sand/Rock Extraction (Attachment A)	Mine I.D. Number: _____
C.	<input type="checkbox"/> Timber Harvesting (Attachment B)	THP Number: _____
D.	<input type="checkbox"/> Water Diversion/Extraction/Impoundment (Attachment C)	SWRCB Number: _____
E.	<input type="checkbox"/> Routine Maintenance (Attachment D)	
F.	<input type="checkbox"/> DFG Fisheries Restoration Grant Program (FRGP)	FRGP Contract Number: _____
G.	<input type="checkbox"/> Master	
H.	<input type="checkbox"/> Master Timber Harvesting	

6. FEES

Please see the current fee schedule to determine the appropriate notification fee. Itemize each project's estimated cost and corresponding fee. *Note: The Department may not process this notification until the correct fee has been received.*

A. Project		B. Project Cost	C. Project Fee
1	Dry Creek Habitat Enhancement Demonstration Project	\$7,000,000.00	\$4,482.75
2			
3			
4			
5			
		D. Base Fee (if applicable)	
		<b>E. TOTAL FEE ENCLOSED</b>	<b>\$4,482.75</b>

7. PRIOR NOTIFICATION OR ORDER

A. Has a notification previously been submitted to, or a Lake or Streambed Alteration Agreement previously been issued by, the Department for the project described in this notification?

Yes (Provide the information below)       No

Applicant: \_\_\_\_\_ Notification Number: \_\_\_\_\_ Date: \_\_\_\_\_

B. Is this notification being submitted in response to an order, notice, or other directive ("order") by a court or administrative agency (including the Department)?

No       Yes (Enclose a copy of the order, notice, or other directive. If the directive is not in writing, identify the person who directed the applicant to submit this notification and the agency he or she represents, and describe the circumstances relating to the order.)

Continued on additional page(s)

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

8. PROJECT LOCATION

<p>A. Address or description of project location.  <i>(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)</i></p> <p>The Project area is located within the Dry Creek Valley and would be along Dry Creek from approximately ½- mile upstream of Lambert Bridge Road to ½-mile downstream of Lambert Bridge Road.</p> <p>Directions to site: Highway 101 north to Healdsburg in Sonoma County. Take Dry Creek Road exit and head west on Dry Creek Road (left at end of highway offramp). Follow Dry Creek Road to Lambert Bridge Road (at first stop sign you come to along Dry Creek Road - approximately 7 miles west of Highway 101). Turn left on Lambert Bridge Road. Drive approximately 1/2 mile until reaching Lambert Bridge at Dry Creek.</p> <p style="text-align: right;"><input type="checkbox"/> Continued on additional page(s)</p>				
B. River, stream, or lake affected by the project.		Dry Creek		
C. What water body is the river, stream, or lake tributary to?		Russian River		
D. Is the river or stream segment affected by the project listed in the state or federal Wild and Scenic Rivers Acts?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		
E. County	Sonoma			
F. USGS 7.5 Minute Quad Map Name	G. Township	H. Range	I. Section	J. ¼ Section
Geyserville, Calif.	9N	10W		
<input type="checkbox"/> Continued on additional page(s)				
K. Meridian (check one)	<input type="checkbox"/> Humboldt <input checked="" type="checkbox"/> Mt. Diablo <input type="checkbox"/> San Bernardino			
L. Assessor's Parcel Number(s)				
various - see attached list				
<input type="checkbox"/> Continued on additional page(s)				
M. Coordinates (If available, provide at least latitude/longitude or UTM coordinates and check appropriate boxes)				
Latitude/Longitude	Latitude: N38 39.2307		Longitude: W122 55.6575	
	<input type="checkbox"/> Degrees/Minutes/Seconds		<input type="checkbox"/> Decimal Degrees <input checked="" type="checkbox"/> Decimal Minutes	
UTM	Easting:	Northing:	<input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11	
Datum used for Latitude/Longitude or UTM		<input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> NAD 83 or WGS 84		

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

9. PROJECT CATEGORY AND WORK TYPE (Check each box that applies)

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization – bioengineering/recontouring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bank stabilization – rip-rap/retaining wall/gabion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat dock/pier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Boat ramp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bridge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Channel clearing/vegetation management	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Debris basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diversion structure – weir or pump intake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Filling of wetland, river, stream, or lake	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat enhancement – revegetation/mitigation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Levee	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low water crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road/trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment removal – pond, stream, or marina	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm drain outfall structure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary stream crossing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utility crossing : Horizontal Directional Drilling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jack/bore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open trench	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

Project activities would consist of actions such as dewatering and bypass flow pumping, stockpiling of materials, removal of vegetation, excavation of the backwater/alcove areas, and placement of boulder and log structures. Construction in or near the streambed would occur during the months of June through October during summer low-flows. Construction is scheduled to occur during the summer and fall of 2012. Because the available construction window is limited to the June through October period, construction activities may need to be halted in October 2012 and resumed the following summer in 2013. All flows in Dry Creek (approximately 100 to 120 cfs) would need to be diverted around the work area during construction. Work areas would be isolated from the moving stream using some type of imported barrier or material (water filled bladders, gravel cofferdams, sheetpile cofferdams, etc.). Typically, the work area would be isolated and the creek flow would be allowed to continue flowing adjacent to the isolated work area. In some cases it may be necessary to completely isolate the creek from bank to bank. In this case, bypass pumping from the upstream end of the work area to the downstream end of the work area would occur to bypass creek flows around the work area. The bypass pumping would result in the work area being dewatered during construction. Dewatering would require installation of cofferdams upstream and downstream of the project site and diverting stream flow around the project site.

Enhancements in the Project area will emphasize natural stream characteristics, or geomorphology, which refers to the manner in which water and sediment combine to create habitat features friendly to fish. By using enhancement practices that emulate natural geomorphic conditions, the benefits provided to young coho and steelhead and their longevity are optimized. The proposed Project would consist of the following enhancement practices: streambank stabilization; backwater channels, alcoves, and ponds; side channels; log jams; pool enhancement; riffle construction; and riparian vegetation management.

Continued on additional page(s)

B. Specify the equipment and machinery that will be used to complete the project.

The decision of what type of equipment will be used to complete the project will be made by the construction contractor, but will likely consist of a variety of heavy equipment (excavators, backhoes, haul trucks, cranes).

Continued on additional page(s)

C. Will water be present during the proposed work period (specified in box 4.D) in the stream, river, or lake (specified in box 8.B).  Yes  No (Skip to box 11)

D. Will the proposed project require work in the wetted portion of the channel?  Yes (Enclose a plan to divert water around work site)  No

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

The project will require the removal of riparian vegetation, excavation of channel and bank areas, fill in the channel and bank areas, and planting in order to construct the proposed habitat improvements within Dry Creek. The entire project area is approximately 20 acres in area and is located along approximately a 1 mile section of Dry Creek.

Continued on additional page(s)

B. Will the project affect any vegetation?  Yes (Complete the tables below)  No

Vegetation Type	Temporary Impact	Permanent Impact
riparian trees at pond/alcove/bank/LWD installation sites	Linear feet: <u>3200</u> Total area: <u>approx. 5 acres</u>	Linear feet: _____ Total area: _____
riparian understory (Himalayan blackberry, giant reed, vinca, etc.)	Linear feet: _____ Total area: _____	Linear feet: <u>5800</u> Total area: <u>approx. 15 acres</u>

Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
willow	200	<1" - 10"
alder	100	

Continued on additional page(s)

C. Are any special status animal or plant species, or habitat that could support such species, known to be present on or near the project site?

Yes (List each species and/or describe the habitat below)  No  Unknown

Continued on additional page(s)

D. Identify the source(s) of information that supports a "yes" or "no" answer above in Box 11.C.

Steelhead, Chinook, and coho salmon are known to be present within the project site. The project's purpose is to enhance the available habitat for steelhead and coho.

Continued on additional page(s)

E. Has a biological study been completed for the project site?

Yes (Enclose the biological study)  No

*Note: A biological assessment or study may be required to evaluate potential project impacts on biological resources.*

F. Has a hydrological study been completed for the project or project site?

Yes (Enclose the hydrological study)  No

*Note: A hydrological study or other information on site hydraulics (e.g., flows, channel characteristics, and/or flood recurrence intervals) may be required to evaluate potential project impacts on hydrology.*

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

12. MEASURES TO PROTECT FISH, WILDLIFE, AND PLANT RESOURCES

<p>A. Describe the techniques that will be used to prevent sediment from entering watercourses during and after construction.</p> <p>Construction activities are scheduled to occur between June 15th and October 15th when rainfall events are not anticipated and flows in Dry Creek are at their seasonal lowest. Typical flows in Dry Creek will be 110 cfs or less and 10 cfs or less in Crane Creek; however, Dry Creek flow may increase up to 140 cfs for periods of several days on multiple occasions during the construction period. The construction contractor will be required to submit for approval prior to commencement of work a diversion and dewatering plan an erosion and pollution control plan. See attached CEQA documentation, technical specifications and drawings for additional details.</p> <p style="text-align: right;"><input type="checkbox"/> Continued on additional page(s)</p>
<p>B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and plant resources.</p> <p>Flows in Dry Creek will be diverted around construction areas and the construction areas will be dewatered prior to construction. Pre-construction fish rescue efforts will be undertaken by qualified biologists to remove fish from the construction area. Nesting bird surveys will also be conducted prior to the removal of riparian vegetation. See attached CEQA documentation, technical specifications and drawings for additional details.</p> <p style="text-align: right;"><input type="checkbox"/> Continued on additional page(s)</p>
<p>C. Describe any project mitigation and/or compensation measures to protect fish, wildlife, and plant resources.</p> <p>The project is considered to be a self-mitigating project through the nature of the project design. The project itself is a habitat enhancement project that will result in an increase in habitat area and value within the project area. As part of the project design, the project will increase backwater and alcove areas to provide additional habitat for coho salmon, increase woody debris to provide protective cover for coho and steelhead, provide instream boulder clusters to provide resting areas for steelhead, and include bank stabilization features that will enhance fish habitat while stabilizing actively eroding streambanks within the project area. The project design also incorporates revegetating with native plants in upland, riparian, and wetland zones in the project area. Implementation, effectiveness, and validation monitoring will occur in accordance with the</p> <p style="text-align: right;"><input type="checkbox"/> Continued on additional page(s)</p>

13. PERMITS

<p>List any local, state, and federal permits required for the project and check the corresponding box(es). Enclose a copy of each permit that has been issued.</p>	
<p>A. <u>401 Water Quality Certification (North Coast RWQCB)</u></p>	<p><input checked="" type="checkbox"/> Applied    <input type="checkbox"/> Issued</p>
<p>B. <u>404 Permit (US Army Corps of Engineers, San Francisco District)</u></p>	<p><input checked="" type="checkbox"/> Applied    <input type="checkbox"/> Issued</p>
<p>C. <u>3836R Permit (County of Sonoma)</u></p>	<p><input checked="" type="checkbox"/> Applied    <input type="checkbox"/> Issued</p>
<p>D. Unknown whether <input type="checkbox"/> local, <input type="checkbox"/> state, or <input type="checkbox"/> federal permit is needed for the project. (Check each box that applies)</p>	
<p><input type="checkbox"/> Continued on additional page(s)</p>	

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

14. ENVIRONMENTAL REVIEW

A. Has a draft or final document been prepared for the project pursuant to the California Environmental Quality Act (CEQA), National Environmental Protection Act (NEPA), California Endangered Species Act (CESA) and/or federal Endangered Species Act (ESA)?			
<input checked="" type="checkbox"/> Yes (Check the box for each CEQA, NEPA, CESA, and ESA document that has been prepared and enclose a copy of each) <input type="checkbox"/> No (Check the box for each CEQA, NEPA, CESA, and ESA document listed below that will be or is being prepared)			
<input type="checkbox"/> Notice of Exemption	<input checked="" type="checkbox"/> Mitigated Negative Declaration	<input type="checkbox"/> NEPA document (type): _____	
<input checked="" type="checkbox"/> Initial Study	<input type="checkbox"/> Environmental Impact Report	<input type="checkbox"/> CESA document (type): _____	
<input type="checkbox"/> Negative Declaration	<input checked="" type="checkbox"/> Notice of Determination (Enclose)	<input checked="" type="checkbox"/> ESA document (type): <u>Biological Opinion</u>	
<input type="checkbox"/> THP/ NTMP	<input checked="" type="checkbox"/> Mitigation, Monitoring, Reporting Plan		
B. State Clearinghouse Number (if applicable)		2010062082	
C. Has a CEQA lead agency been determined?		<input checked="" type="checkbox"/> Yes (Complete boxes D, E, and F) <input type="checkbox"/> No (Skip to box 14.G)	
D. CEQA Lead Agency	Sonoma County Water Agency		
E. Contact Person	David Cuneo	F. Telephone Number	(707) 547-1935
G. If the project described in this notification is part of a larger project or plan, briefly describe that larger project or plan.			
The Water Agency is required under NMFS's Biological Opinion to enhance habitat along 6 miles of Dry Creek. The Dry Creek Habitat Enhancement Demonstration Project represents enhancement activities along a 1-mile reach of Dry Creek. Future phases of habitat enhancement within Dry Creek will occur as sites and projects are identified.			
<input type="checkbox"/> Continued on additional page(s)			
H. Has an environmental filing fee (Fish and Game Code section 711.4) been paid?			
<input checked="" type="checkbox"/> Yes (Enclose proof of payment) <input type="checkbox"/> No (Briefly explain below the reason a filing fee has not been paid)			
See attached CEQA Notice of Determination and Fish and Game Filing Fee receipt.			
Note: If a filing fee is required, the Department may not finalize a Lake or Streambed Alteration Agreement until the filing fee is paid.			

15. SITE INSPECTION

Check one box only.
<input type="checkbox"/> In the event the Department determines that a site inspection is necessary, I hereby authorize a Department representative to enter the property where the project described in this notification will take place at any reasonable time, and hereby certify that I am authorized to grant the Department such entry.
<input checked="" type="checkbox"/> I request the Department to first contact (insert name) <u>David Cuneo</u> at (insert telephone number) <u>(707) 547-1935</u> to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

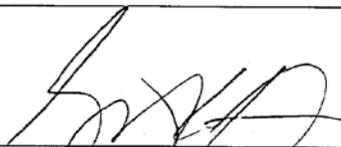
NOTIFICATION OF LAKE OR STREAMBED ALTERATION

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?
<input checked="" type="checkbox"/> Yes (Please enclose the information via digital media with the completed notification form)
<input type="checkbox"/> No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I and/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

	<u>1-5-12</u>
Signature of Applicant or Applicant's Authorized Representative	Date
<u>Grant Davis</u>	
Print Name	

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**North Coast Regional Water Quality Control Board**

May 10, 2012

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In the Matter of  
**Water Quality Certification**  
for  
**Sonoma County Water Agency**  
**Dry Creek Habitat Enhancement Demonstration Project**  
**WDID No. 1B12001WNSO**

APPLICANT: Sonoma County Water Agency  
RECEIVING WATER: Dry Creek  
HYDROLOGIC UNIT: Warm Springs Hydrologic Sub Area No. 114.24  
Russian River Hydrologic Area 114.00  
COUNTY: Sonoma  
FILE NAME: Sonoma County Water Agency Dry Creek Habitat  
Enhancement Demonstration Project

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BY THE EXECUTIVE OFFICER:

1. On January 5, 2012, the Sonoma County Water Agency (Applicant) filed an application for water quality certification (certification) under section 401 of the Clean Water Act (33 U.S.C. § 1341) with the California Regional Water Quality Control Board, North Coast Region (Regional Water Board) for activities related to the Sonoma County Water Agency Dry Creek Habitat Enhancement Demonstration Project (Project). The Project involves implementing habitat enhancement, bank stabilization, vegetation management, and stream bed stabilization along a one mile reach of Dry Creek. The Regional Water Board provided public notice of the application pursuant to title 23, California Code of Regulations, section 3858 on March 7, 2012, and posted information describing the project on the Regional Water Board’s website. We did not receive any public comments on this project.
2. Project is being done in response to the *Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation District in the Russian River*

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*Watershed* (Biological Opinion), issued by the National Marine Fisheries Service on September 24, 2008. A total of six (6) miles of habitat enhancement work is planned under the Biological Opinion within the fourteen (14) miles of Dry Creek between Warm Springs Dam and its confluence with the Russian River. The Project is a pilot project along a 1-mile section of Dry Creek to assess methods and success of habitat enhancement efforts. Project is located along Dry Creek, between confluence with Grape Creek (latitude 38.65979°N, longitude 122.93587°W, upstream end) and below the confluence with Crane Creek (latitude 38.64944°N, longitude 122.92354°W, downstream end), in Sonoma County. The Project will cause permanent impacts to approximately 21.1 acres and 4,600 linear feet of bed and bank of Dry Creek.

3. Project activities will consist of actions such as dewatering and bypass flow pumping, stockpiling of materials, removal of vegetation, excavation of backwater/alcove areas, and placement of boulder and log structures. Construction in or near the streambed will occur during the months of June through October during summer low-flows. Construction is scheduled for the Summer and Fall of 2012. Because the available construction window is limited to the June through October period, construction activities may need to be halted in October 2012 and resumed the following summer in 2013. All flows in Dry Creek (approximately 100 to 120 cfs) will need to be diverted around most of the work area during construction. Most work areas will be isolated from the moving stream using some type of imported barrier or material (water filled bladders, gravel cofferdams, sheetpile cofferdams, etc.). Typically, the work area will be isolated and the creek flow will be allowed to continue flowing adjacent to the isolated work area. In some cases, it may be necessary to completely isolate the creek from bank to bank. In this case, bypass pumping from the upstream end of the work area to the downstream end of the work area will occur to bypass creek flows around the work area. The bypass pumping will result in the work area being dewatered during construction. Dewatering will require installation of cofferdams upstream and downstream of the project site and diverting stream flow around the project site. Work within the live flowing channel may be necessary, and may create less impact than dewatering, for placement of boulder clusters.
4. Enhancements in the Project area will emphasize natural stream characteristics, or geomorphology, which refers to the manner in which water and sediment combine to create habitat features friendly to fish. By using enhancement practices that emulate natural geomorphic conditions, the benefits provided to young coho salmon (*Oncorhynchus kisutch*) and steelhead trout (*Oncorhynchus mykiss*) and their longevity are optimized. The proposed Project will consist of the construction of five off-channel habitat areas, six constructed riffles, two bank stabilization areas, boulder clusters, installation of approximately 1,600 logs and root wads, and vegetation management (removal of non-natives, planting of natives).

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5. The Project incorporates adaptive management techniques to specify goals, objectives, and monitoring methods to verify effectiveness and longevity of habitat enhancements. An Adaptive Management and Monitoring Framework Plan includes implementation monitoring, effectiveness monitoring, and validation monitoring to determine if structures were installed as designed, if structures created habitat, and what the fish response to created habitat is, respectively. Reports will be submitted to the involved agencies annually. Future work may be adapted to improve performance of any of these factors, and may necessitate amendments to this Order.
6. Activities proposed within the Project are for the benefit of salmonids and other aquatic creatures and create more complex habitat within Dry Creek. Therefore, compensatory mitigation is unnecessary for this portion of the Project on Dry Creek.
7. The Applicant has applied for authorization from the United States Army Corps of Engineers to perform the project under a 10-year Individual Permit, pursuant to Clean Water Act, section 404. The Applicant has obtained a Lake and/or Streambed Alteration Agreement (R1-04-0436) from DFG.
8. The Sonoma County Water Agency, as lead California Environmental Quality Act (CEQA) agency, completed an Initial Study/Mitigated Negative Declaration and filed a Notice of Determination with the State Clearinghouse, (SCH No. 2010062082) on November 15, 2011, pursuant to CEQA guidelines.
9. The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. This Order is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater, and does not otherwise authorize degradation of the waters affected by this project.
10. This discharge is also regulated under State Water Resources Control Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this water quality certification.  
[http://www.waterboards.ca.gov/board/decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0017.pdf](http://www.waterboards.ca.gov/board/decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf)

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Receiving Water: Warm Springs Hydrologic Sub Area No. 114.24  
 Russian River Hydrologic Area 114.00

Filled or Excavated Area: Area Permanently Impacted: 21.1 acre of stream  
 channel and bank

Total Linear Impacts: Length Permanently Impacted: 4,600 linear feet of  
 stream channel and bank

Dredge Volume: 28,100 Cubic Yards

Latitude/Longitude: 38.65979°N, 122.93587°W, upstre am end  
 38.64944°N, 122.92354°W, downstream end

Expiration: May 10, 2017

Accordingly, based on its independent review of the record, the Regional Water Board certifies that the Sonoma County Water Agency Dry Creek Habitat Enhancement Demonstration Project (WDID No. 1B12001WNSO), as described in the application, will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the Applicant complies with the following terms and conditions:

**All conditions of this order apply to the Applicant (and all their employees) and all contractors (and their employees), sub-contractors (and their employees), and any other entity or agency that performs activities or work on the project as related to this Water Quality Certification.**

1. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and title 23, California Code of Regulations, section 3867.
2. This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to title 23, California Code of Regulations, section 3855, subdivision (b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity this certification is conditioned upon total payment of any fee required under title 23, California Code of Regulations, section 3833, and owed by the Applicant.

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4. The Regional Water Board shall be notified annually and in writing at least five working days (working days are Monday – Friday) prior to the commencement of ground disturbing activities, with details regarding the construction schedule, in order to allow staff to be present onsite during construction, and to answer any public inquiries that may arise regarding the project.
5. Adaptive management and monitoring reports shall be submitted to the Regional Water Board annually, by December 31 of each year for the duration of the entire Dry Creek project, or as requested by the Regional Water Board.
6. The Russian River is identified as impaired for sediment and temperature under Clean Water Act Section 303(d). At present, total maximum daily loads (TMDLs) have not been established for this water body. If TMDLs are established and implementation plans are adopted for this watershed prior to the expiration date of the requested Certification, the Regional Water Board may revise the provisions of that Certification to address actions identified in such action plans. Bank erosion is identified as a source contributing to the sediment impairment. Removal of riparian vegetation is identified as a source contributing to temperature impairment. Activities that will be authorized by this Order are designed to increase riparian vegetation and reduce sediment discharges from bank erosion. Actions authorized by this Order require implementation of Best Management Practices (BMPs) for sediment and turbidity control and planting of more riparian zone shade vegetation at and near the project site. Accordingly, this pending Order is consistent with, and implements, BMPs that would attenuate sediment and temperature adverse impacts.

Accordingly, this Order is consistent with, and implements BMPs that would attenuate sediment/siltation and nutrient adverse impacts. At present, there are no watershed-specific implementation plans for these TMDLs. If TMDL implementation plans are adopted for these watersheds prior to the expiration date of this Order, the Regional Water Board may revise the provisions of this Order to address actions identified in such action plans.

7. If groundwater is encountered during construction, it will be discharged to an upland location where it cannot flow into Waters of the State. BMPs that may be used include: storage tanks, sediment desilting basins, and water filters. Additionally, BMPs such as the use of washed gravel, sand bags, straw, and/or silt fences will be used as necessary to control velocity of the land discharge and erosion. Groundwater shall not be discharged to waters of the State.
8. Pursuant to Regional Water Board Resolution R1-2004-0087, Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters within the North Coast Region (Sediment TMDL Implementation Policy), the Executive Officer is directed to “rely on the use of all available authorities,

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including existing regulatory standards, and permitting and enforcement tools to more effectively and efficaciously pursue compliance with sediment-related standards by all dischargers of sediment waste.”

9. The federal antidegradation policy requires that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. This Order is consistent with applicable federal and State antidegradation policies, as it does not authorize the discharge of increased concentrations of pollutants or increased volumes of treated wastewater.
10. Non-compensatory mitigation measures include the use of Best Management Practices (BMPs) to be employed during construction to minimize sediment production and prevent the movement of loose soil off-site and cement containment, to ensure that materials do not enter the waterway. All erosion control measures will be installed and in place by October 15, or during non-construction periods as necessary, and maintained thereafter by the contractor/Applicant. All disturbed soil will be revegetated with native species or seeded with native grasses. If vegetation cannot be reestablished before expected rainfall, mulching, erosion control fabric, or other sediment control measures will be implemented to prevent delivery of sediment to the drainages. All equipment will be maintained in good working order and spill kits will be on hand during construction. Equipment shall not be staged, or fueled, near waters of the State. Additionally, all required BMPs shall be on-site and ready for timely deployment before the start of construction activities.
11. Applicant shall prioritize use of wildlife-friendly 100% biodegradable erosion control products/BMPs. For purposes of this Order, photodegradable synthetic products are not considered biodegradable. Applicant shall not use or allow the use of erosion control products, that contain synthetic (e.g., plastic or nylon) netting or materials for permanent erosion control (i.e., erosion control materials to be left in place for two years or after the completion date of the project). If the Applicant finds that erosion control netting or products have entrapped or harmed wildlife, the Applicant shall remove the netting or product and replace it with wildlife-friendly biodegradable products. The Applicant shall not use or allow the use of soil stabilization products that contain synthetic materials within waters of the United States or waters of the State at any time. Applicant shall remove any remaining synthetic netting or materials remaining at the end of two years, or sooner.

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12. No debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature, other than that authorized by this Order, shall be allowed to enter into or be placed where it may be washed by rainfall into waters of the State. When operations are completed, any excess material or debris shall be removed from the work area.
13. All activities and BMPs shall be implemented according to the submitted application and the conditions in this certification.
14. A copy of this Order and the application documents submitted by the Applicant for this certification shall be provided to all contractors and subcontractors conducting the work, and shall be in their possession at the work site.
15. The Applicant shall provide Regional Water Board staff access to the project site to document compliance with this certification.
16. If, at any time, an unauthorized discharge to surface water (including wetlands, lakes, rivers or streams) occurs, or any water quality problem arises, the associated project activities shall cease immediately until adequate BMPs are implemented including stopping work. The Regional Water Board shall be notified promptly and in no case more than 24 hours after the unauthorized discharge or water quality problem arises.
17. Prior to implementing any change to the project that may have a significant or material effect on the findings, conclusions, or conditions of this Order, the Applicant shall obtain the written approval of the Regional Water Board Executive Officer. If the Regional Water Board is not notified of a significant alteration to the project, it will be considered a violation of this Order, and the Applicant may be subject to Regional Water Board enforcement action(s).
18. All project work shall be conducted as described in this Order and in the application submitted by the Applicant. If the Regional Water Board is not notified of a significant alteration to the project, it will be considered a violation of this Order, and the Applicant may be subject to Regional Water Board enforcement actions.
19. The Applicant shall provide a copy of this Order and State Water Resources Control Board (SWRCB) Order No. 2003-0017-DWQ to any contractor(s), subcontractor(s), and utility company(ies) conducting work on the project, and shall require that copies remain in their possession at the work site. The Applicant shall be responsible for ensuring that all work conducted by its contractor(s), subcontractor(s), and utility companies is performed in accordance with the information provided by the Applicant to the Regional Water Board.

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20. The Applicant shall implement the project in accordance with the project described in the application and the findings above, and shall comply with all applicable water quality standards as detailed in the Basin Plan.
21. Disturbance or removal of existing vegetation shall not exceed the minimum necessary to complete the project.
22. Fueling, lubrication, maintenance, storage, and staging of vehicles and equipment shall not result in a discharge or threatened discharge to any waters of the State including dry portions of the shoreline. At no time shall the Applicant or its contractors allow use of any vehicle or equipment, which leaks any substance that may impact water quality.
23. The Regional Water Board may add to or modify the conditions of this Order, as appropriate, to implement any new or revised water quality standards and implementation plans adopted and approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
24. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Order. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this Order to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. In response to any violation of the conditions of this Order, the Regional Water Board may add to or modify the conditions of this Order as appropriate to ensure compliance.
25. In the event of any change in control of ownership of land presently owned or controlled by the Applicant, the Applicant shall notify the successor-in-interest of the existence of this Order by letter and shall forward a copy of the letter to the Regional Water Board at the above address.

To discharge dredged or fill material under this Order, the successor-in-interest must send to the Regional Water Board Executive Officer a written request for transfer of the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, and the address and telephone

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number of the person(s) responsible for contact with the Regional Water Board. The request must also describe any changes to the project proposed by the successor-in-interest or confirm that the successor-in-interest intends to implement the project as described in this Order.

26. Except as may be modified by any preceding conditions, all certification actions are contingent on: a) the discharge being limited to and all proposed mitigation being completed in strict compliance with the Applicant's project description, and b) compliance with all applicable requirements of the Water Quality Control Plan for the North Coast Region (Basin Plan).
27. The authorization of this certification for any dredge and fill activities expires on May 10, 2017. Conditions and monitoring requirements outlined in this Order are not subject to the expiration date outlined above, and remain in full effect and are enforceable.

If you have any questions or comments, please call Stephen Bargsten at (707) 576-2653.

Original Signed By

**Matthias St. John**  
Executive Officer

120510\_SKB\_Dry\_Creek\_Habitat\_Enhancement\_Demonstration\_401

**Weblink:** State Water Resources Control Board Order No. 2003-0017 -DWQ, General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification can be found at: [http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2003/wqo/wqo2003-0017.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0017.pdf)

**Original to:** Mr. Grant Davis, Sonoma County Water Agency, 404 Aviation Boulevard, Santa Rosa, CA 95403



## SECTION 01200

**PRICE AND PAYMENT PROCEDURES****PART 1 GENERAL****1.1 SUMMARY**

A. Section includes:

1. Description of requirements and procedures for determining amount of Work performed and for obtaining payment for Work performed.

**1.2 REFERENCES**

- A. California Public Contract Code
- B. Code of Civil Procedure

**1.3 SCOPE OF WORK**

Work under Contract Documents, or under any Bid item, allowance, or Alternate, shall include all labor, materials, taxes, transport, handling, storage, supervision, administration, and all other items necessary for the satisfactory completion of Work, whether or not expressly specified or indicated.

**1.4 DETERMINATION OF QUANTITIES**

- A. Quantity of Work to be paid for under any item for which a unit price is fixed in Contract Documents shall be number, as determined by Owner, of units of Work satisfactorily completed in accordance with Contract Documents or as directed by Owner. Unless otherwise provided, determination of number of units of Work so completed will be based, so far as practicable, on actual measurement or count within prescribed or ordered limits, and no payment will be made for Work done outside of limits. Measurements and computations will be made by methods set forth in Contract Documents, including without limitation this Section 01200. If methods are not so set forth, measurements shall be made in any manner which Owner considers appropriate for class of Work measured (e.g., pre-assigned values, percentage completion, units completed or incremental Milestones). Contractor must immediately inform Owner of any disputes regarding quantity measurements and shall immediately supply Owner with any documentation supporting the disputed measurements.
- B. Final Pay Items:
  1. Final Pay Items: For any item of Work designated as a Final Pay Item, the estimated quantity for such item shall be the quantity payable under the Contract Documents, regardless of whether the estimated quantity is less than the actual quantity needed for the Work, unless (1) prior to commencement of the Work, Contractor verifies that an adjustment to the estimated quantity is warranted based on independent calculations made and submitted to Owner and Owner agrees to such adjustment pursuant to subsection 1.4B.2, or (2) the dimensions of any portion of that item are revised by Owner, or (3) the item or any portion of the item is eliminated by Owner. The estimated quantity for each item of Work designated as a Final Pay Item shall be considered as approximate only, and no guarantee is made that the actual quantity needed to complete the Work will equal the estimated quantity. It is the Contractor's responsibility to verify the actual terrain, and no quantity adjustment will be made after commencement of Work, except as Owner may direct pursuant to subsection 1.4B.3.

2. Adjustments to Estimated Quantity Requested by Contractor: Contractor may undertake calculations prior to commencement of the Work in order to verify the estimated quantity for a Final Pay Item. Should Contractor conclude an adjustment to the estimated quantity is warranted based on these calculations, Contractor may submit such calculations to Owner to request Owner's approval of an adjustment to the estimated quantity. Should Owner agree to a revised quantity, compensation for the item will be based on the revised quantity multiplied by the bid unit price for the item.
3. Adjustments to Estimated Quantity Requested by Owner: If the dimensions of any portion of the item are revised or eliminated by Owner, and the revisions result in the increase or decrease in the estimated quantity of Work, the quantity for the item will be revised in the amount represented by the changes in the dimensions agreed to by Owner, and the compensation for the item will be based on the revised quantity multiplied by the bid unit price for the item.

## 1.5 SCOPE OF PAYMENT

- A. Except as otherwise expressly stated in Section 01100 (Summary), payment to Contractor at the unit price or other price fixed in Contract Documents for performing Work required under any item, or (if the Contract is on a single lump sum price basis) at the lump sum price fixed in the Contract Documents for performing all Work required under Contract Documents, and as either may be adjusted pursuant to any approved Change Order or Construction Change Directive, shall be full compensation for completing, in accordance with Contract Documents, all Work required under the item or under Contract Documents, and for all expense incurred by Contractor for any purpose in connection with the performance and completion of said Work, including all incidental Work necessary for completion of the Work.
- B. The Contract Sum, whether lump sum, unit price or otherwise, shall be deemed to include all costs necessary to complete required Work, all costs (if any) for loss or damage arising from nature of Work or prosecution of the Work, and from action of elements. Unless Contract Documents expressly provide otherwise, the Contract Sum shall be deemed to include:
  1. Any and all costs arising from any unforeseen difficulties which may be encountered during, and all risks of any description connected with, prosecution of Work or prosecution of Bid item (whether lump sum or unit price) until acceptance by Owner;
  2. All expenses incurred due to suspension, or discontinuance of Work or discontinuance of Bid item (whether lump sum or unit price) as provided in Contract Documents;
  3. Escalation to allow for cost increases between time of Contract Award and completion of Work or completion of Bid item (whether lump sum or unit price).
- C. Whenever it is specified herein that Contractor is to do Work or furnish materials of any class for which no price is fixed in Contract Documents, it shall be understood that Contractor is to do such Work or furnish such materials without extra charge or allowance or direct payment of any sort, and that cost of doing Work or furnishing materials is to be included in price Bid, unless it is expressly specified herein, in particular cases, that Work or material is to be paid for as extra Work.
- D. Unit Prices shall apply to Work covered by unit prices so long as actual quantities performed on the Project are not less than 75 percent or greater than 125 percent of the estimated quantities contained in Document 00400 (Bid Form) or otherwise referenced in Section 01100 (Summary). If actual quantities exceed these parameters, then the unit price shall be adjusted by an amount to reflect the Contractor's incremental cost differential

resulting from increased or decreased economies of scale. For quantities reduced to less than 75 percent of the estimated Bid quantity, the payment for the total pay quantity of such item of Work will in no case exceed the payment that would have been made for the performance of 75 percent of the estimated Bid quantity for such item at the original Contract unit price.

- E. No payment shall be made for materials or equipment not yet incorporated into the Work, except as specified in Section 01100 (Summary).
- F. For any materials and equipment referenced in Section 01100 (Summary) as subject to payment prior to incorporation into the Work, where Contractor requests payment on the basis of such materials and equipment not incorporated in the Work, Contractor must satisfy the following conditions:
  - 1. The materials and/or equipment shall be delivered and suitably stored at the Site or at another local location agreed to in writing, for example, a mutually acceptable warehouse;
  - 2. Full title to the materials and/or equipment shall vest in Owner at the time of delivery to the Site, warehouse or other storage location;
  - 3. Obtain a negotiable warehouse receipt, endorsed over to Owner for materials and/or equipment stored in an Off Site warehouse. No payment will be made until such endorsed receipts are delivered to Owner;
  - 4. Stockpiled materials and/or equipment shall be available for Owner inspection, but Owner shall have no obligation to inspect them and its inspection or failure to inspect shall not relieve Contractor of any obligations under the Contract Documents. Materials and/or equipment shall be segregated and labeled or tagged to identify these specific Contract Documents;
  - 5. After delivery of materials and/or equipment, if any inherent or acquired defects are discovered, Defective materials and/or equipment shall be removed and replaced with suitable materials and/or equipment at Contractor's expense;
  - 6. At Contractor's expense, insure the materials and/or equipment against theft, fire, flood, vandalism, and malicious mischief, as well as any other coverages required under the Contract Documents;
  - 7. Contractor's Application for Payment shall be accompanied by a bill of sale, invoice or other documentation warranting that Owner has received the materials and equipment free and clear of all liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner. This documentation shall include, but not be limited to, conditional releases of mechanics' liens and stop notices from all those providing materials and equipment as to which the Application for Payment relates, as well as unconditional releases of the same from the same as to the previous Application for Payment for which they have not already been provided.
- G. Amounts previously paid for materials and equipment prior to incorporation into the Work shall be deducted from amounts otherwise due Contractor as they are incorporated.

## 1.6 BASIS OF PAYMENT

- A. Unit Price Quantities: When estimated quantity for specific portions of Work is listed in Document 00400 (Bid Form), quantity of Work to be paid for shall be actual number of units satisfactorily completed, as determined by Owner and certified by Contractor, in accordance with Contract Documents.

- B. Lump Sum: When estimated quantity for specific portion of Work is not indicated and unit is designated as lump sum, payment will be on a lump sum basis for Work satisfactorily completed in accordance with Contract Documents.
- C. Allowances: Allowance items (if any) will be paid for as provided in Section 01100 (Summary). Funds authorized for Allowance Work will not be released for Contract payments unless Owner has authorized Allowance Work in writing.
- D. Owner does not expressly, or by implication, agree, warrant, or represent in any manner, that actual amount of Work will correspond with amount shown or estimated and reserves right to increase or decrease amount of any class or portion of Work, to leave out entire Bid item or items, or to add work not originally included in Bid or Contract Documents, when in its judgment such change is in best interest of Owner. No change in Work shall be considered a waiver of any other condition of Contract Documents. No claim shall be made for anticipated profit, for loss of profit, for damages, or for extra payment whatever, except as otherwise expressly provided for in Contract Documents, because of any differences between amount of Work actually done and estimated amount as set forth herein, or for elimination of Bid items.

## 1.7 PROGRESS PAYMENTS

- A. Owner's General Manager is authorized to approve progress payments in conformance with Contract Documents and the Auditor/Controller of the County of Sonoma is authorized to process such payments upon their submission by the General Manager.
- B. If requested by Contractor, progress payments will be made monthly.
- C. Schedule of Values:
  - 1. Within the time set forth in Document 00700 (General Conditions), submit a detailed breakdown of Contractor's Bid by scheduled Work items and/or activities, including coordination responsibilities and Project Record Documents responsibilities. Where more than one Subcontractor comprises the work of a Work item or activity, the Schedule of Values shall show a separate line item for each subcontract. Furnish such breakdown of the total Contract Sum by assigning dollar values (cost estimates) to each applicable Progress Schedule network activity, which cumulative sum equals the total Contract Sum. The format and detail of the breakdown shall be as directed by Owner to facilitate and clarify future progress payments to Contractor for direct Work under Contract Documents. This breakdown shall be referred to as the Schedule of Values.
  - 2. Contractor's overhead, profit, insurance, cost of bonds (except to the extent expressly identified in a Bid item) and/or other financing, as well as "general conditions costs," (e.g., Site cleanup and maintenance, temporary roads and access, off-Site access roads, temporary power and lighting, security, and the like), shall be prorated through all activities so that the sum of all the Schedule of Values line items equals Contractor's total Contract Sum, less any allowances designated by Owner. Scheduling, record documents and quality assurance control shall be separate line items.
  - 3. Owner will review the breakdown in conjunction with the Progress Schedule to ensure that the dollar amounts of this Schedule of Values are, in fact, fair market cost allocations for the Work items listed. Upon favorable review by Owner, Owner will accept this Schedule of Values for use. Owner shall be the sole judge of fair market cost allocations.
  - 4. Owner will reject any attempt to increase the cost of early activities, i.e., "front loading," resulting in a complete reallocation of moneys until such "front loading" is corrected. Repeated attempts at "front loading" may result in suspension or termination of the

Work for default, or refusal to process progress payments until such time as the Schedule of Values is acceptable to Owner.

- D. Monthly Report Sheets and Applications for Payment: Contractor shall establish and maintain records of cost of the Work in accordance with generally accepted accounting practices; reconcile the amount of Work completed monthly with Owner, and sign Owner's monthly report sheet certifying to the Work done. Monthly report sheets shall be considered the true record of the Cost of the Work and Contractor shall submit in a form acceptable to Owner an itemized cost breakdown of Contractor's record of Cost of the Work together with supporting data and any certification required by Owner. In addition:
1. On or before the sooner of (a) the 20<sup>th</sup> Day of each month and (b) receipt of Owner's approval of the updated Schedule as required by Section 01320 (Progress Schedules and Reports), Owner and Contractor will reconcile any differences in the field, based on the reconciled monthly report sheets, and Contractor shall submit to Owner an Application for Payment for the cost of the Work put in place during the period from the 15<sup>th</sup> Day of the previous month to the 15<sup>th</sup> Day of the current month, along with the Owner-approved updated Schedule. Such Applications for Payment shall be for the total value of activities completed or partially completed, including approved activity costs, based upon Schedule of Values prices (or Bid item prices if unit price) of all labor and materials incorporated in the Work up until midnight of the last Day of that one month period, less the aggregate of previous payments. Accumulated retainage shall be shown as separate item in payment summary. If Contractor is late submitting its Application for Payment, that Application may be processed at any time during the succeeding one-month period, resulting in processing of Contractor's Application for Payment being delayed for more than a Day for Day basis.
  2. Applications for Payment may include, but are not necessarily limited to the following:
    - a. Material, equipment, and labor incorporated into the Work, less any previous payments for the same.
    - b. Up to 75 percent of the cost of equipment identified in paragraph 1.5F of this Section 01200 (if any), if purchased and delivered to the Site or stored off Site, as may be approved by Owner.
    - c. Up to 50 percent of the cost of materials identified in paragraph 1.5F of this Section 01200 (if any), specifically fabricated for the Project that are not yet incorporated into the Work.
  3. At the time any Application for Payment is submitted, certify in writing the accuracy of the Application and that Contractor has fulfilled all scheduling requirements of Document 00700 (General Conditions) and Section 01320 (Progress Schedules and Reports), including updates and revisions. A responsible officer of Contractor shall execute the certification.
  4. No progress payment will be processed prior to Owner receiving all requested, acceptable schedule update information. Failure to submit a schedule update complying with Section 01320 justifies denying the entire Application for Payment, or in Owner's discretion withholding amounts as described in paragraph 1.7E.10 of this Section 01200.
  5. Each Application for Payment shall list each Change Order and Construction Change Directive ("CCD") executed prior to date of submission, including the Change Order/CCD Number, and a description of the Work activities, consistent with the descriptions of original Work activities. Submit a monthly Change Order/CCD status log to Owner.

6. If Owner requires substantiating data, submit information requested by Owner, with cover letter identifying Project, Application for Payment number and date, and detailed list of enclosures.
7. If Contractor fails or refuses to participate in monthly Work reconciliations or other construction progress evaluation with Owner, Contractor shall not receive current payment until Contractor has participated fully in providing construction progress information and schedule update information to Owner.

E. Progress Payments

1. Owner will review Contractor's Application for Payment following receipt. If adjustments need to be made to percent of completion of each activity, Owner will make appropriate notations and return to Contractor. Contractor shall revise and resubmit. All parties shall update percentage of completion values in the same manner, i.e., express value of an accumulated percentage of completion to date.
2. Each Application for Payment may be reviewed by Owner and/or inspectors to determine whether the Application for Payment is proper, and shall be rejected, revised, or approved by Owner pursuant to the Schedule of Values prepared in accordance with paragraph 1.7C of this Section 01200.
3. If it is determined that the Application for Payment is not proper and suitable for payment, Owner will return it to the Contractor as soon as practicable, but no later than seven Days after receipt, together with a document setting forth in writing the reasons why the Application for Payment is not proper. If Owner determines that portions of the Application for Payment are not proper or not due under the Contract Documents, then Owner may approve the other portions of the Application for Payment, and in the case of disputed items or Defective Work not remedied, may withhold up to 150 percent of the disputed amount from the progress payment.
4. Pursuant to California Public Contract Code Section 20104.50, if Owner fails to make any progress payment within 30 Days after receipt of an undisputed and properly submitted Application for Payment from Contractor, Owner shall pay interest to the Contractor equivalent to the legal rates set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure. The 30-Day period shall be reduced by the number of Days by which Owner exceeds the seven-Day return requirement set forth herein.
5. As soon as practicable after approval of each Application for Payment for progress payments, Owner will pay to Contractor in manner provided by law, an amount equal to 95 percent of the amounts otherwise due as provided in the Contract Documents, or a lesser amount if so provided in Contract Documents, provided that payments may at any time be withheld if, in judgment of Owner, Work is not proceeding in accordance with Contract, or Contractor is not complying with requirements of Contract, or to comply with stop notices or to offset liquidated damages accruing or expected.
6. Before any progress payment or final payment is due or made, Contractor shall submit satisfactory evidence that Contractor is not delinquent in payments to employees, Subcontractors, suppliers, or creditors for labor and materials incorporated into Work. This specifically includes, without limitation, conditional lien release forms for the current progress payment and unconditional release forms for past progress payments.
7. Owner reserves and shall have the right to withhold payment for any equipment and/or specifically fabricated materials that, in the sole judgment of Owner, are not adequately and properly protected against weather and/or damage prior to or following incorporation into the Work.

8. Granting of progress payment or payments by Owner, or receipt thereof by Contractor, shall not be understood as constituting in any sense acceptance of Work or of any portion thereof, and shall in no way lessen liability of Contractor to replace unsatisfactory Work or material, though unsatisfactory character of Work or material may have been apparent or detected at time payment was made.
9. When Owner shall charge sum of money against Contractor under any provision of Contract Documents, amount of charge shall be deducted and retained by Owner from amount of next succeeding progress payment or from any other moneys due or that may become due Contractor under Contract. If, on completion or termination of Contract, such moneys due Contractor are found insufficient to cover Owner's charges against it, Owner shall have right to recover balance from Contractor or Sureties.
10. If Contractor fails to submit an acceptable Progress Schedule update, or fails to bring an acceptable Project Record Drawings update to Progress Payment Meeting, Owner may retain 5% of each Progress Payment amount thereafter (in addition to any other retention) until Owner's acceptance of a Progress Schedule or Project Record Drawings update. This retention shall apply cumulatively.

## **1.8 FINAL PAYMENT**

- A. As soon as practicable after all required Work is completed in accordance with Contract Documents, including punchlist, testing, record documents and Contractor maintenance after Final Acceptance, Owner will pay to Contractor, in manner provided by law, unpaid balance of Contract Sum of Work (including without limitation retentions), or whole Contract Sum of Work if no progress payment has been made, determined in accordance with terms of Contract Documents, less sums as may be lawfully retained under any provisions of Contract Documents or by law.
- B. Prior progress payments shall be subject to correction in the final payment. Owner's determination of amount due as final payment shall be final and conclusive evidence of amount of Work performed by Contractor under Contract Documents and shall be full measure of compensation to be received by Contractor.
- C. Contractor and each assignee under an assignment in effect at time of final payment shall execute and deliver at time of final payment, and as a condition precedent to final payment, Document 00650 (Agreement and Release of Any and All Claims).

## **1.9 EFFECT OF PAYMENT**

- A. Payment will be made by Owner, based on Owner's observations at the Site and the data comprising the Application for Payment. Payment will not be a representation that Owner has:
  1. Made exhaustive or continuous on-Site inspections to check the quality or quantity of Work;
  2. Reviewed construction means, methods, techniques, sequences, or procedures;
  3. Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by Owner to substantiate Contractor's right to payment; or
  4. Made examination to ascertain how or for what purpose Contractor has used money previously paid on account of the Contract Sum.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION

## SECTION 01250

**MODIFICATION PROCEDURES****PART 1 GENERAL****1.1 SUMMARY**

A. Section includes:

1. Description of general procedural requirements for alterations, Modifications, and extras.

**1.2 GENERAL**

- A. Any change in scope of Work or deviation from Contract Documents including, without limitation, extra Work, or alterations or additions to or deductions from the original Work, shall not invalidate the original Contract, and shall be performed under the terms of the Contract Documents.
- B. Only Contractor or Owner may initiate changes in scope of Work or deviation from Contract Documents.
1. Contractor may initiate changes by submitting RFIs, Notice of Differing Site Conditions, or Notice of Hazardous Waste or Materials Conditions.
    - a. RFIs shall be submitted to seek clarification of or request changes in the Contract Documents.
    - b. Notices of Differing Site Conditions shall be submitted in accordance with Document 00700 (General Conditions).
    - c. Notices of Hazardous Waste or Materials Conditions shall be submitted in accordance with Document 00700 (General Conditions).
  2. Contractor shall be responsible for its costs to implement and administer RFIs throughout the Contract duration. Regardless of the number of RFIs submitted, Contractor shall not be entitled to additional compensation for administrative costs. Contractor shall be responsible for both Owner and its Engineer's administrative costs for answering RFIs where the answer could reasonably be found by reviewing the Contract Documents, as determined by Owner; at Owner's discretion, such costs may be deducted from progress payments or final payment.
  3. Owner may initiate changes by issuing a Supplemental Instruction, which may revise, add to or subtract from the Work.
  4. Owner may initiate changes in the Work or Contract Time by issuing RFPs to Contractor. Such RFPs will detail all proposed changes in the Work and request a quotation of changes in Contract Sum and Contract Time from Contractor.
  5. Owner may also, by Construction Change Directive ("CCD"), order changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions, the Contract Sum and Contract Time being adjusted accordingly. A CCD shall be used in the absence of total agreement on the terms of a Change Order and may, upon notice, consist of a Change Order executed by Owner only.

**1.3 PROCEDURES**

- A. Cost Proposal and Procedures: Whenever Contractor is required in this Section 01250 to prepare a Cost Proposal, and whenever Contractor is entitled to submit a Cost Proposal and elects to do so, Contractor shall prepare and submit to Owner for consideration a Cost Proposal using the form attached to this Section 01250. All Cost Proposals must contain a

complete breakdown of costs of credits, deducts, and extras; and itemizing materials, labor, taxes, overhead and profit. All Subcontractor Work shall be so indicated. Individual entries on the Cost Proposal form shall be determined as provided in paragraphs 1.4 and 1.5 of this Section 01250. After receipt of a Cost Proposal with a detailed breakdown, Owner will act promptly thereon.

1. If Owner accepts a Cost Proposal, Owner will prepare Change Order for Owner and Contractor signatures.
  2. If Cost Proposal is not acceptable to Owner because it does not agree with cost and/or time included in Cost Proposal, Owner will submit in a response what it believes to be a reasonable cost and/or adjustment, if any. Except as otherwise provided in this Section 01250, Contractor shall have seven Days in which to respond to Owner with a revised Cost Proposal.
  3. When necessity to proceed with a change does not allow the Owner sufficient time to conduct a proper check of a Cost Proposal (or revised Cost Proposal), Owner may order Contractor to proceed on basis to be determined at earliest practical date. In this event, value of change, with corresponding equitable adjustment to Contract, shall not be more than increase or less than decrease proposed.
- B. Request for Information (RFI): Whenever Contractor requires information regarding the Project or Contract Documents, or receives a request for information from a Subcontractor, Contractor may prepare and deliver an RFI to Owner, using the Contractor interface for Owner's project management software. Contractor must submit time critical RFIs at least 30 Days before scheduled start date of the affected Work activity. Contractor shall reference each RFI to an activity of Progress Schedule and shall note time criticality of the RFI, indicating time within which a response is required. Contractor's failure to reference RFI to an activity on the Progress Schedule and note time criticality on the RFI shall constitute Contractor's waiver of any claim for time delay or interruption to the Work resulting from any delay in responding to the RFI.
1. Owner will respond within 15 Days from receipt of RFI with a written response to Contractor. Contractor shall distribute response to all appropriate Subcontractors.
  2. If Contractor is satisfied with the response and does not request change in Contract Sum or Contract Time, then the response shall be executed without a change.
  3. If Contractor believes the response is incomplete, Contractor shall issue another RFI to Owner clarifying original RFI. Additionally, Owner may return RFI requesting additional information should original RFI be inadequate in describing condition.
  4. If Contractor believes that the response results in change in Contract Sum or Contract Time, Contractor shall notify Owner in writing within 15 Days after receiving the response. If Owner disagrees with Contractor, then Contractor may give notice of intent to submit a Claim as described in Article 12 of Document 00700 (General Conditions), and submit its Claim within 30 Days. If Owner agrees with Contractor, then Contractor must submit a Cost Proposal within 21 Days of receiving the response to the RFI. Contractor's failure to deliver either the foregoing notice and Claim or Cost Proposal by the respective deadlines stated in the foregoing sentences shall result in waiver of the right to file a Cost Proposal or Claim.
- C. Supplemental Instruction: Owner may issue Supplemental Instruction to Contractor.
1. If Contractor is satisfied with Supplemental Instruction and does not request change in Contract Sum or Contract Time, then Supplemental Instruction shall be executed without a Change Order.

2. If Contractor believes that Supplemental Instruction results in change in Contract Sum or Contract Time, then Contractor must submit a Cost Proposal to Owner within 21 Days of receiving the Supplemental Instruction.
- D. Construction Change Directives: If at any time Owner believes in good faith that a timely Change Order will not be agreed upon using the foregoing procedures, Owner may issue a CCD with its estimated cost and/or time adjustment. Upon receipt of CCD, Contractor shall promptly proceed with the change of Work involved and concurrently respond to Owner's CCD within 10 Days.
1. Contractor's response must be any one of following:
    - a. Return CCD signed, thereby accepting Owner's response, time, and cost.
    - b. Submit a (revised if applicable) Cost Proposal with supporting documentation (if applicable, reference original Cost Proposal number followed by letter A, B, etc. for each revision), if Owner so requests.
    - c. Give notice of intent to submit a Claim as described in Article 12 of Document 00700 (General Conditions), and submit its Claim within 30 Days.
  2. If the CCD provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:
    - a. Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation.
    - b. Unit prices stated in the Contract Documents or subsequently agreed upon.
    - c. Cost to be determined in a manner agreed.
  3. CCD signed by Contractor indicates the agreement of Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.
  4. If Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by Owner on the basis of reasonable expenditures and savings of those performing the Work attributable to the change including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. If the parties still do not agree on the price for a CCD, Contractor may file a Claim per Article 12 of Document 00700 (General Conditions). Contractor shall keep and present, in such form as Owner may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this paragraph shall be limited to those provided in paragraphs 1.4 and 1.5 of this Section 01250.
  5. Pending final determination of cost to Owner, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by Contractor to Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by Owner. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.
- E. Owner Requested RFP: Contractor shall furnish a Cost Proposal within 21 Business Days of Owner's RFP. Upon approval of Cost Proposal, Owner will issue a Change Order directing Contractor to proceed with extra Work. If the parties do not agree on the price, Owner may either issue a CCD or decide the issue per Article 12 of Document 00700 (General Conditions). Contractor shall perform the changed Work notwithstanding any claims or disagreements of any nature.
- F. Differing Site Conditions: Contractor shall submit Notices of Differing Site Conditions to resolve problems regarding differing underground Site conditions encountered in the

execution of the Work pursuant to paragraph 13.4 of Document 00700 (General Conditions), which shall govern. If Owner determines that a change in Contract Sum or Contract Time is justified, Owner will issue RFP or CCD.

- G. Hazardous Waste Conditions: Contractor shall submit Notices of Hazardous Waste or Materials Conditions to resolve problems regarding hazardous materials encountered in the execution of the Work pursuant to paragraph 13.5 of Document 00700 (General Conditions), which shall govern. If Owner determines that a change in Contract Sum or Contract Time is justified, Owner will issue RFP or CCD.
- H. All Changes:
1. Documentation of Change in Contract Sum and Contract Time:
    - a. Contractor shall maintain detailed records of Work performed on a time-and-material basis.
    - b. Contractor shall document each proposal for a change in cost or time with sufficient data to allow evaluation of the proposal.
    - c. Contractor shall, on request, provide additional data to support computations for:
      - 1) Quantities of products, materials, labor, and equipment.
      - 2) Taxes.
      - 3) Justification for any change in Contract Time and new Progress Schedule showing revision due, if any.
      - 4) Credit for deletions from Contract, similarly documented.
    - d. Contractor shall support each claim for additional costs, and for Work performed on a cost-and-percentage basis, with additional information including:
      - 1) Credit for deletions from Contract, similarly documented.
      - 2) Origin and date of claim.
      - 3) Dates and times Work was performed and by whom.
      - 4) Time records and wage rates paid.
      - 5) Invoices and receipts for products, materials, equipment, and subcontracts, similarly documented.
  - I. Correlation of Other Items:
    1. Contractor shall revise Schedule of Values and Application for Payment forms to record each authorized Change Order or CCD as a separate line item and adjust the Contract Sum as shown thereon prior to the next monthly pay period.
    2. Contractor shall revise the Progress Schedules prior to the next monthly pay period.
    3. Contractor shall enter changes in Project Record Documents prior to the next monthly pay period.
  - J. Responses: For all responses for which the Contract Documents, including without limitation this Section 01250, do not provide a specific time period, recipients shall respond within a reasonable time.

#### **1.4 COST DETERMINATION**

- A. Total cost of extra Work or of Work omitted shall be the sum of labor costs, material costs, equipment rental costs, and specialist costs as defined herein plus overhead and profit as allowed herein. This limit applies in all cases of claims for extra Work, whether calculating Cost Proposals, Change Orders or CCDs, or calculating claims of all types, and applies even in the event of fault, negligence, strict liability, or tort claims of all kinds, including strict liability or negligence. Contractor may recover no other costs arising out of or connected with the performance of extra Work, of any nature. No special, incidental or consequential damages may be claimed or recovered against Owner, its representatives or agents, whether

arising from breach of Contract, negligence, or strict liability, unless specifically authorized in the Contract Documents.

- B. Markup for Overhead and Profit: (Overhead shall be as defined in paragraph 1.8 of this Section 01250)
1. Markup for overhead and profit on labor for extra Work shall not exceed 15 percent.
  2. Markup for overhead and profit on materials for extra Work shall not exceed 15 percent.
  3. Markup for overhead and profit on owner-operated equipment for extra Work shall not exceed 15 percent.
  4. Markup for overhead and profit on equipment for extra Work shall not exceed 10 percent.
  5. When extra Work is performed by a first tier Subcontractor, Contractor shall receive a 5 percent markup on Subcontractors' total costs of extra Work. First tier Subcontractor's markup on its Work shall not exceed percentages listed in paragraphs 1.4B.1, 1.4B.2, 1.4B.3, and 1.4B.4 immediately above.
  6. When extra Work is performed by a lower tier Subcontractor, Contractor, first tier Subcontractors, and lower tier Subcontractors shall divide (as mutually agreed) a total of 5 percent markup on the lower tier Subcontractors' total costs of extra Work.
  7. Notwithstanding the foregoing, in no case shall the total markup on any extra Work exceed 20 percent of the direct cost, notwithstanding the actual number of Contract tiers.
  8. On proposals covering both increases and decreases in Contract Sum, markup for overhead and profit shall be included on the net amount as determined in this paragraph 1.4.
  9. The markup shall include profit, small tools, cleanup, engineering, supervision, warranties, cost of preparing the cost proposal, jobsite overhead, and home office overhead.
- C. Taxes:
1. All State sales tax, use tax, and Sonoma County and applicable City sales taxes shall be included.
  2. Federal and Excise tax shall not be included.
- D. Owner-Operated Equipment: When owner-operated equipment is used to perform extra Work, Contractor will be paid as follows:
1. Payment for cost of equipment will be made at no more than rates of such equipment established in paragraph 1.5C of this Section 01250.
  2. Payment for cost of labor will be made at no more than rates of such labor established by collective bargaining agreements for type of worker and location of Work, whether or not owner-operator is actually covered by such an agreement.
  3. Invoices for owner-operated equipment need not itemize labor and equipment costs, unless specifically requested by Owner. In any event, the total rate for owner-operated equipment shall not exceed the combined rates for labor and equipment listed in paragraphs 1.4D.1 and 1.4D.2 above.
- E. Accord and Satisfaction: Every Change Order and accepted CCD shall constitute a full accord and satisfaction, and release, of all Contractor (and if applicable, Subcontractor) claims for additional time, money or other relief arising from or relating to the subject matter of the change including, without limitation, impacts of all types, cumulative impacts, inefficiency, overtime, delay, and any other type of claim. Contractor may elect to reserve its rights to disputed claims arising from or relating to the changed Work at the time it signs a Change Order or accepts a CCD, but must do so expressly in a writing delivered concurrently with the executed Change Order or approved CCD, and must also submit a

Claim for the reserved disputed items pursuant to Article 12 of Document 00700 (General Conditions) no later than 30 Days of Contractor's first written notice of its intent to reserve rights.

## 1.5 COST BREAKDOWN

- A. Labor: Contractor will be paid cost of labor for workers (including forepersons when authorized by Owner) used in actual and direct performance of extra Work. Labor rate, whether employer is Contractor, Subcontractor or other forces, will be sum of following:
1. Actual Wages: Actual wages paid shall include any employer payments to or on behalf of workers for health and welfare, pension, vacation, and similar purposes.
  2. Labor surcharge: Payments imposed by local, county, state, and federal laws and ordinances, and other payments made to, or on behalf of, workers, other than actual wages as defined in paragraph 1.5A.1 of this Section 01250, such as taxes and insurance. Labor surcharge shall be and shall not exceed that set forth in Caltrans official labor surcharges schedule which is in effect on date upon which extra Work is accomplished and which schedule is incorporated herein by reference as though fully set forth herein.
- B. Material: Only materials furnished by Contractor and necessarily used in performance of extra Work will be paid for. Cost of such materials will be cost, including sales tax, to purchaser (Contractor, Subcontractor or other forces) from supplier thereof, except as the following are applicable:
1. If cash or trade discount by actual supplier is offered or available to purchaser, it shall be credited to Owner notwithstanding fact that such discount may not have been taken.
  2. For materials salvaged upon completion of extra Work, salvage value of materials shall be deducted from cost, less discounts, of materials.
  3. If cost of a material is, in opinion of Owner, excessive, then cost of material shall be deemed to be lowest current wholesale price at which material is available in quantities concerned delivered to Site, less any discounts as provided in paragraph 1.5B.1 of this Section 01250.
- C. Equipment: For Contractor- or Subcontractor-owned equipment, payment will be made at rental rates listed for equipment in Caltrans official equipment rental rate schedule which is in effect on date upon which extra Work is accomplished and which schedule is incorporated herein by reference as though fully set forth herein. If there is no applicable rate for an item of equipment, then payment shall be made for Contractor- or Subcontractor-owned equipment at rental rate listed in the most recent edition of the Association of Equipment Distributors (AED) book. For rented equipment, payment will be made based on actual rental invoices. Equipment used on extra Work shall be of proper size and type. If, however, equipment of unwarranted size or type and cost is used, cost of use of equipment shall be calculated at rental rate for equipment of proper size and type, as determined by Owner. Rates paid shall be deemed to cover cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals. Unless otherwise specified, manufacturer's ratings, and manufacturer-approved modifications, shall be used to classify equipment for determination of applicable rates. Individual pieces of equipment or tools not listed in said publication and having a replacement value of \$100 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor as payment is included in payment for labor. Payment will not be made for time in which equipment is inoperative due to breakdowns.

1. For Contractor or Subcontractor -owned equipment on Site, payment for equipment use will be for time equipment is in operation on extra Work being performed or on standby as approved by Owner.
  2. For rented equipment on Site, the following shall be used in computing rental time of equipment:
    - a. When hourly rates are listed, less than 30 minutes of operation shall be considered to be ½ hour of operation.
    - b. When daily rates are listed, less than four hours of operation shall be considered to be ½ Day of operation.
  3. For equipment that must be brought to Site to be used exclusively on extra Work, cost of transporting equipment to Site and its return to its original location shall be determined as follows:
    - a. Owner will pay for costs of loading and unloading equipment.
    - b. Cost of transporting equipment in low bed trailers shall not exceed hourly rates charged by established haulers.
    - c. Cost of transporting equipment shall not exceed applicable minimum established rates of California Public Utilities Commission.
    - d. Owner will not make any payment for transporting and loading and unloading equipment if equipment is used on Work in any other way than upon extra Work.
  4. For rented equipment, rental period may begin at time equipment is unloaded at Site of extra Work and terminate at end of the performance of the extra Work or Day on which Owner directs Contractor to discontinue use of equipment, whichever first occurs. Excluding Saturdays, Sundays, and Owner's legal holidays, unless equipment is used to perform extra Work on such Days, rental time to be paid per Day shall be four hours for zero hours of operation, six hours for four hours of operation and eight hours for eight hours of operation, time being prorated between these parameters. Hours to be paid for equipment that is operated less than eight hours due to breakdowns, shall not exceed eight less number of hours equipment is inoperative due to breakdowns.
- D. Work Performed by Special Forces or Other Special Services: When Owner and Contractor, by agreement, determine that special service or item of extra Work cannot be performed by forces of Contractor or those of any Subcontractors, service or extra Work item may be performed by specialist. Invoices for service or item of extra Work on basis of current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with established practice of special service industry to provide complete itemization. In those instances wherein Contractor is required to perform extra Work necessitating a fabrication or machining process in a fabrication or machine shop facility away from Site, charges for that portion of extra Work performed in such facility may, by agreement, be accepted as a specialist billing. Owner must be notified in advance of all off-Site Work. In lieu of overhead and profit provided in paragraph 1.4B of this Section 01250, 15 percent will be added to specialist invoice price, after deduction of any cash or trade discount offered or available, whether or not such discount may have been taken.

## 1.6 FORCE-ACCOUNT WORK

- A. If it is impracticable because of nature of Work, or for any other reason, to fix an increase or decrease in price definitely in advance, the Contractor may be directed to proceed at a not-to-exceed (NTE) maximum price which shall not under any circumstances be exceeded. Subject to such limitation, such extra Work shall be paid for at actual necessary cost for

- Force-Account Work or at the negotiated cost, as determined by Owner. The cost for Force-Account Work shall be determined pursuant to paragraphs 1.4 and 1.5 of this Section 01250.
- B. Force-Account Work shall be used when it is not possible or practical to price out the changed Work prior to the start of that Work. In these cases, Force-Account Work will be utilized during the pricing and negotiation phase of the change. Once negotiations have been concluded and a bilateral agreement has been reached, the tracking of the Work under Force-Account is no longer necessary. Force-Account Work shall also be used when negotiations between Owner and Contractor have broken apart and a bilateral agreement on the value of the changed Work cannot be reached. Owner may approve other uses of Force-Account Work.
  - C. Whenever any Force-Account Work is in progress, definite price for which has not been agreed on in advance, Contractor shall report to Owner each Business Day in writing in detail amount and cost of labor and material used, and any other expense incurred in Force-Account Work on preceding Day, by using the Cost Proposal form attached hereto. No claim for compensation for Force-Account Work will be allowed unless report shall have been made.
  - D. Whenever Force-Account Work is in progress, definite price for which has not been agreed on in advance, Contractor shall report to Owner when 75 percent of the NTE amount has been expended.
  - E. Force-Account Work shall be paid as extra Work under this Section 01250. Methods of determining payment for Work and materials provided in this paragraph 1.6 shall not apply to performance of Work or furnishings of material that, in judgment of Owner, may properly be classified under items for which prices are otherwise established in Contract Documents.

## **1.7 OWNER-FURNISHED MATERIALS**

- A. Owner reserves right to furnish materials as it deems advisable, and Contractor shall have no claims for costs and overhead and profit on such materials.

## **1.8 OVERHEAD DEFINED FOR MODIFICATIONS**

- A. The following constitutes charges that are deemed included in overhead for all Contract Modifications, including Force-Account Work or CCD Work, whether incurred by Contractor, Subcontractors, or suppliers, and Contractor shall not invoice or receive payment for these costs separately:
  1. Drawings: field drawings, Shop Drawings, as-builts, etc., including submissions of drawings
  2. Routine field inspection of Work proposed
  3. General superintendence
  4. General administration and preparation of cost proposals, schedule analysis, Change Orders, and other supporting documentation as necessary
  5. Computer services
  6. Reproduction services
  7. Salaries of project engineer, superintendent, timekeeper, storekeeper, and secretaries
  8. Janitorial services
  9. Temporary on-Site facilities:
    - a. Offices
    - b. Telephones
    - c. Plumbing
    - d. Electrical: Power, lighting

- e. Platforms
- f. Fencing, etc.
- g. Water
- h. Sanitation
- 10. Home office expenses
- 11. Insurance and Bond premiums
- 12. Procurement and use of vehicles and fuel used coincidentally in Work otherwise included in the Contract Documents
- 13. Surveying
- 14. Estimating
- 15. Protection of Work
- 16. Handling and disposal fees
- 17. Permit fees
- 18. Final cleanup
- 19. Other incidental Work

**1.9 RECORDS AND CERTIFICATION**

- A. Force-Account (cost reimbursement) charges shall be recorded daily and summarized in Cost Proposal form attached hereto. Contractor or authorized representative shall complete and sign form each Day. Contractor shall also provide with the form: the names and classifications of workers and hours worked by each; an itemization of all materials used; a list by size, type, and identification number of equipment and hours operated; and an indication of all Work performed by specialists.
- B. No payment for Force-Account Work shall be made until Contractor submits original invoices substantiating materials and specialists charges.
- C. Owner shall have the right to audit all records in possession of Contractor relating to activities covered by Contractor's claims for Modification of Contract, including Force-Account Work and CCD Work.
- D. Further, Owner will have right to audit, inspect, or copy all records maintained in connection with this Contract, including financial records and Escrow Bid Documents, in possession of Contractor relating to any transaction or activity occurring or arising out of, or by virtue of, the Contract. If Contractor is a joint venture, right of Owner shall apply collaterally to same extent to records of joint venture sponsor, and of each individual joint venture member. This right shall be specifically enforceable, and any failure of Contractor to voluntarily comply shall be deemed an irrevocable waiver and release of all claims then pending that were or could have been subject to the Article 12 of Document 00700 (General Conditions).

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION

COST PROPOSAL FORM FOLLOWS ON NEXT PAGE

**COST PROPOSAL (CP)**

**Dry Creek Habitat Enhancement** Demonstration Project, Phase II  
 Contract Number 45-6.1-7 #3

**CP Number:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**In Response To** \_\_\_\_\_  
 RFP #, etc.

**To: Sonoma County Water Agency**  
 Attention: Contract Administration/Inspection  
 404 Aviation Boulevard, Santa Rosa, CA 95403-9019

**Subject Ref. No:** \_\_\_\_\_  
 (for Project Manager use only)

**Phone:** (707) 547-1913

**Fax:** (707) 524-3791

**From:** [Insert Contractor's Name/Address]

\_\_\_\_\_

This Cost Proposal is in response to the above-referenced \_\_\_\_\_ [insert RFP, etc. as applicable].

Brief description of change(s): \_\_\_\_\_

ITEM DESCRIPTION	PRIME CONTR.	SUB 1	SUB 2	SUB 3	SUB 4	TOTAL
<b>MATERIAL</b>						
<b>DIRECT LABOR COST</b>						
<b>EQUIPMENT</b>						
Other (Specify)						
<b>Total Cost</b>						
Subcontractor's Markup for Overhead and Profit 15 percent						
Contractor's Markup for Overhead and Profit 15 percent (Labor and Materials)						
Contractor's Markup for Overhead and Profit 10 percent (Equipment Rental)						
Markup for Overhead and Profit to Contractor for Subcontractor's Work 5 percent						
<b>GRAND TOTAL</b>						
(percent of Total Cost above not including any Markup for Overhead and Profit) [Grand Total divided by Total Cost]						
<b>REQUESTED CHANGE IN CONTRACT TIME (DAYS)</b>						

By Contractor:

Signature:

Date:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## SECTION 01315

**PROJECT MEETINGS****PART 1 GENERAL****1.1 SUMMARY**

## A. Section Includes:

1. Descriptions of the required Project meetings for the Work. These meetings include:
  - a. Post-Notice of Award Meeting
  - b. Schedule Review Meetings
  - c. Preconstruction Conference
  - d. Monthly Progress Meetings
  - e. Progress Payment Meetings
  - f. Optional Submittal Review Meeting
  - g. ISO Training Meetings
  - h. Special Meetings
  - i. Safety Meetings

**1.2 POST-NOTICE OF AWARD MEETING**

- A. Owner will call for and administer a Post-Notice of Award Meeting at time and place to be announced.
- B. Contractor's general superintendent, Contractor's foreman, preparer of Safety Program, preparer of SWPPP, if applicable, and all major Subcontractors shall attend this meeting.
- C. Agenda will include, but not be limited to, discussion of requirements for the following items:
  1. Insurance
  2. Bonds
  3. Owner's ISO Program and Contractor Requirements
  4. Notice to Proceed
  5. Commencement of Contract Time
  6. Start of Work at Site
  7. Contractor's Initial and Original Schedule
  8. Contractor's Schedule of Values
  9. Contractor's Schedule of Submittals
  10. Submittal and RFI procedures
  11. Safety Program
  12. SWPPP, if applicable
  13. Permits
  14. Name of Owner's Representative
  15. Other items as appropriate
- D. Owner will distribute minutes of Post-Notice of Award Meeting to attendees. Attendees shall have 5 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Post-Notice of Award Meeting.

### 1.3 SCHEDULE REVIEW MEETINGS

- A. Within 30 Days of issuance of Notice to Proceed, meet with Owner and conduct initial review of Contractor's draft Schedule of Submittals, draft Schedule of Values, and Initial Schedule.
- B. Authorized representative in Contractor's organization, designated in writing, who will be responsible for working and coordinating with Owner relative to preparation and maintenance of Progress Schedule shall attend the initial schedule review meeting.
- C. Contractor shall, within 30 Days from the commencement of Contract Time and prior to commencement of Work at the Site, meet with Owner to review the Original Progress Schedule and construction schedule submittals.
  1. Contractor shall have its manager, superintendent, scheduler, and key Subcontractor representatives, as required by Owner, in attendance. The meeting will take place over a continuous one-Day period.
  2. Owner's review will be limited to submittals' conformance to Contract Documents requirements including, but not limited to, coordination requirements. Owner's review may also include:
    - a. Clarifications of Contract Requirements
    - b. Directions to include activities and information missing from submittals
    - c. Requests to Contractor to clarify its schedule
  3. Within 5 Days of the Schedule Review Meeting, Contractor shall respond in writing to all questions and comments expressed by Owner at the meeting.
- D. Owner will administer Schedule Review Meetings and shall distribute minutes of Schedule Review Meetings to attendees. Attendees shall have 5 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Schedule Review Meetings.

### 1.4 PRECONSTRUCTION CONFERENCE

- A. Owner will call for and administer Preconstruction Conference at time and place to be announced.
- B. Contractor, all major Subcontractors, and major suppliers shall attend Preconstruction Conference.
- C. Agenda will include, but not be limited to, the following items.
  1. Bonds
  2. Owner's ISO Program and Contractor Requirements
  3. Notice to Proceed
  4. Commencement of Contract Time
  5. Start of Work at Site
  6. Contractor's Schedule
  7. Contractor's Schedule of Submittals
  8. Submittal and RFI procedures
  9. Safety Program
  10. SWPPP
  11. Permits
  12. Owner's Representative
  13. Personnel and vehicle permit procedures
  14. Use of premises
  15. Location of the Contractor's on-Site facilities
  16. Security

17. Housekeeping
  18. Inspection and testing procedures, on-Site and off-Site
  19. Control and reference point survey procedures
  20. Safety Program
  21. Jurisdictional agency requirements
  22. Other items as appropriate
- D. Owner will distribute copies of minutes to attendees. Attendees shall have 7 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of Preconstruction Conference.

## **1.5 WEEKLY PROGRESS MEETINGS**

- A. Owner will schedule and administer weekly progress meetings throughout duration of Work. Progress meetings will be held monthly on approximately the 20<sup>th</sup> of each month.
1. Meetings shall be held at Contractor's on-Site office unless otherwise directed by Owner.
  2. An Owner Representative will prepare agenda and distribute it at the meeting to Contractor.
  3. Contractor's general superintendent shall attend these meetings.
- B. These meetings are considered a critical component of overall monthly schedule update submittal and Contractor shall have appropriate personnel attend. Contractor's job superintendent, major Subcontractors and suppliers, Owner, and others as appropriate shall attend progress meetings.
- C. Agenda will contain the following items, as appropriate:
1. Review of Work progress since last meeting, including percent complete of each activity
  2. Review of the schedule update submittal
    - a. Time impact evaluations for Change Orders and Time Extension Request
    - b. Actual and anticipated activity sequence changes
    - c. Actual and anticipated duration changes
    - d. Actual and anticipated Contractor delays
  3. Review the Application for Payment
  4. Status of Construction Work Schedule, delivery schedules, adjustments
  5. Submittal, RFI, and Change Order status
  6. Review of the Contractor's safety program activities and results, including report on all serious injury and/or damage accidents
  7. Other items affecting progress of Work

## **1.6 PROGRESS PAYMENT MEETINGS - NOT USED**

## **1.7 OPTIONAL SUBMITTAL REVIEW MEETING - NOT USED**

## **1.8 ISO TRAINING MEETINGS**

- A. Owner will conduct on-Site ISO awareness training during the first weekly toolbox safety talk conducted for the Project and as needed thereafter as additional Contractor and Subcontractor staff become active on-Site.

## **1.9 SPECIAL MEETINGS**

- A. Owner or Contractor may call special meetings by notifying all desired participants and Owner 5 Days in advance, giving reason for meeting. Special meetings may be held without advance notice in emergency situations.

- B. At any time during the progress of Work, Owner shall have authority to require Contractor to attend meeting of any or all of the Subcontractors engaged in Work or in other work, and notice of such meeting shall be duly observed and complied with by Contractor.
- C. Contractor shall schedule and conduct coordination meetings as necessary to discharge coordination responsibilities in Document 00700 (General Conditions). Contractor shall give Owner 5 Days written notice of coordination meetings. Contractor shall maintain minutes of coordination meetings. Attendees shall have 7 Days to submit comments or additions to minutes. Minutes will constitute final memorialization of results of coordination meetings.

**1.10 SAFETY MEETINGS**

- A. Conduct monthly Contractor Safety Committee meetings.
- B. Conduct weekly toolbox safety talks.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION

## SECTION 01320

**PROGRESS SCHEDULES AND REPORTS****PART 1 GENERAL****1.1 GENERAL**

- A. Progress Schedule shall be based on and incorporate Milestone and completion dates specified in Contract Documents.
- B. Overall time of completion and time of completion for each Milestone shown on Progress Schedule shall adhere to times in Document 00520 (Agreement), unless an earlier (advanced) time of completion is requested by Contractor and agreed to by Owner. A Change Order shall formalize any such agreement.
  - 1. Owner is not required to accept an earlier (advanced) schedule, i.e., one that shows early completion date(s) for the Contract Time.
  - 2. Contractor is not entitled to extra compensation in event agreement is reached on an earlier (advanced) schedule and Contractor completes its Work, for whatever reason, beyond completion date shown in earlier (advanced) schedule but within the Contract Time.
- C. Failure of Progress Schedule to include any element of the Work or any inaccuracy in Progress Schedule will not relieve Contractor from responsibility for accomplishing the Work in accordance with the Contract. Owner's acceptance of Schedule shall be for its use in monitoring and evaluating job progress, payment requests, and time extension requests, and shall not, in any manner, impose a duty of care upon Owner, or act to relieve Contractor of its responsibility for means and methods of construction.

**1.2 ORIGINAL PROGRESS SCHEDULE**

- A. Contractor shall submit its Original Schedule for review no later than the Preconstruction Conference and prior to commencement of Work at the Site. Original Schedule and all updates shall comply with all standards herein.

**1.3 SCHEDULE FORMAT AND LEVEL OF DETAIL**

- A. Original Schedule shall indicate all separate submittals, fabrication, procurement and field construction activities required for completion of the Work, including but not limited to the following:
  - 1. All Contractor, Subcontractor, and assigned Contractor Work shall be shown in a logical Work sequence that demonstrates a coordinated plan of Work for all contractors. The intent is to provide a common basis of acceptance, understanding, and communication, as well as interface with other contractors.
  - 2. Incorporate Schedule of Submittals into each Schedule.
  - 3. Activities related to the delivery of Contractor- and Owner-furnished equipment to be Contractor-installed per Contract shall be shown.
  - 4. All activities shall be identified through codes or other identification to indicate the building (i.e. buildings, Site Work) and Contractor/Subcontractor responsibility to which they pertain.
  - 5. Break up the Work schedule into activities of durations of approximately 21 Days or less each, except for non-field construction activities or as otherwise deemed acceptable by Owner.

6. Show the critical path in red. For each activity, show early start, late start, early finish, late finish, durations measured in Days, Project Float, resources, predecessor and successor activities, planned workday/week for the activity, manpower loading, and scheduled/actual progress payments.
- B. Seasonal weather conditions (which do not constitute a delay as defined herein) shall be considered in the planning and scheduling of all potential Work influenced by high or low ambient temperatures or presence of high moisture for the completion of the Work within the allotted Contract Time.
- C. Failure by Contractor to include any element of Work required for performance of the Work on the detailed construction schedule shall not excuse Contractor from completing all Work required within the Contract Time.
- D. A two-week "look ahead," detailed daily bar chart schedule shall be updated and issued weekly.
- E. Prepare schedule using Microsoft® Office Project software for all scheduling, including schedule updates. Upon request, provide scheduling software to Owner for review of electronic schedule files.

#### **1.4 WEEKLY SCHEDULE UPDATE SUBMITTALS**

- A. Following acceptance of Contractor's Initial Schedule, monitor progress of Work and adjust Schedule each month to reflect actual progress (shown in blue) and any anticipated changes to planned activities.
  1. Each Schedule update submitted shall be complete, including all information requested for the Initial Schedule and Original Schedule submittal.
  2. Each update shall continue to show all Work activities including those already completed. Completed activities (shown in blue) shall accurately reflect "as built" information by indicating when activities were actually started and completed, and Contractor warrants the accuracy of as-built information as shown.
- B. Updating, changing or revising of any report, curve, schedule or narrative submitted to Owner by Contractor under this Contract, nor Owner's review or acceptance of any such report, curve, schedule or narrative shall not have the effect of amending or modifying, in any way, the Contract Substantial Completion date or Milestone dates or of modifying or limiting, in any way, Contractor's obligations under this Contract.

#### **1.5 RECOVERY SCHEDULE**

- A. If a Schedule update shows a Substantial Completion date 21 Days beyond any Contract Substantial Completion date, or individual Milestone completion dates, submit to Owner within seven Days the proposed revisions to recover the lost time. As part of this submittal, provide a written narrative for each revision made to recapture the lost time. If the revisions include sequence changes, provide a schedule diagram comparing the original sequence to the revised sequence of Work. If Owner reasonably requests, show the intended critical path; secure appropriate Subcontractor and supplier consent to the recovery Schedule; submit a narrative explaining trade flow and construction flow changes, duration changes, added/deleted activities, critical path changes and identify all near critical paths and man-hour loading assumptions for major Subcontractors.

#### **1.6 TIME IMPACT EVALUATION (TIE) FOR CHANGE ORDERS, TIME EXTENSIONS AND OTHER DELAYS**

- A. When Contractor requests a time extension for any reason, Contractor shall submit a TIE that includes both a written narrative and a schedule diagram depicting how the changed

Work or other impact affects other schedule activities. The schedule diagram shall show how Contractor proposes to incorporate the changed Work or other impact in the schedule, and how it impacts the current Schedule update critical path or otherwise. Contractor is also responsible for requesting time extensions based on the TIE's impact on the critical path. The diagram shall be tied to the main sequence of scheduled activities to enable Owner to evaluate the impact of changed Work to the scheduled critical path.

- B. Comply with the requirements of paragraph 1.6A of this Section 01320 for all types of delays such as, but not limited to, Contractor/Subcontractor delays, adverse weather delays, strikes, procurement delays, fabrication delays, etc.
- C. Contractor is responsible for all costs associated with the preparation of TIEs, and the process of incorporating TIEs into the current schedule update.

### **1.7 DAILY REPORTS**

- A. Provide daily construction reports showing personnel, trades, equipment, and supervision on Site; weather; Work started and completed and any impediments, problems, or delays, for the workday. Submit to Owner the following Day.

### **1.8 COST DATA**

- A. Contractor shall provide Owner with cost data for each Day Contractor works on the Project, to be delivered to Owner either the same Day or the following morning before starting Work at the Site. Contractor shall take monthly progress photographs of all areas of the Work. Contractor shall maintain copies of all correspondence with Subcontractors and records of meetings with Subcontractors.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION - NOT USED**

END OF SECTION



## SECTION 01330

**SUBMITTAL PROCEDURES****PART 1 GENERAL****1.1 SUMMARY**

## A. Section Includes:

1. Description of general requirements for Submittals for the Work, as applicable:
  - a. Procedures
  - b. Schedule of Submittals
  - c. Construction Material Waste Management Plan
  - d. Safety Program
  - e. Progress Schedule
  - f. Product Data
  - g. Shop Drawings
  - h. Samples
  - i. Coordination Drawings (If Applicable)
  - j. Quality Assurance/Control Submittals
    - 1) Design Data
    - 2) Test Reports
    - 3) Certificates
    - 4) Manufacturers' Instructions
    - 5) Work Plans
  - k. Installation, Operation, and Maintenance Manual
  - l. Project Record Documents
  - m. Storm Water Pollution Prevention Program
  - n. Delay of Submittals

**1.2 PROCEDURES**

- A. Submit at Contractor's expense the Submittals required by the Contract Documents.
- B. Submit Submittals to Owner in accordance with accepted Schedule of Submittals. If no such schedule is agreed upon, then all Submittals shall be submitted within 35 Days after receipt of Notice of Award from Owner.
- C. Transmit each item with the appropriate Submittal transmittal form (included at the end of this Section 01330). Where manufacturer's standard drawings or data sheets are used, they shall be marked clearly to show those portions of the data that are applicable to this Project. Inapplicable portions shall be marked out. Organize Submittals by Specification Section. Submittals containing information about more than one Specification Section will be returned for resubmittal. Submittals shall include all information requested by each Specification Section. Incomplete Submittals will be returned not reviewed by Owner.
- D. The data shown on the Submittals shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Owner the materials and equipment Contractor proposes to provide and to enable Owner to review the information for the limited purposes specified in this Section 01330. Submittals shall be identified clearly as to material, supplier, pertinent data such as catalog numbers and the use for which it is intended and otherwise as Owner may require to enable Owner to review the Submittal.

- E. At the time of each submission, give Owner specific written notice of all variations, if any, that the Submittal may have from the requirements of the Contract Documents, and the reasons therefore. This written notice shall be in a written communication attached to the Submittal transmittal form. In addition, cause a specific notation to be made on each Submittal submitted to Owner for review and approval of each such variation. If Owner accepts deviation, Owner will note its acceptance on the returned Submittal transmittal form and, if necessary, issue appropriate Contract Modification.
- F. Submittal coordination and verification is the responsibility of Contractor; this responsibility shall not be delegated in whole or in part to Subcontractors or suppliers. Before submitting each Submittal, review and coordinate each Submittal with other Submittals and with the requirements of the Work and the Contract Documents, and determine and verify:
  - 1. All field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
  - 2. All materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
  - 3. All information relative to Contractor's sole responsibility for means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto.
- G. Contractor's submission to Owner of a Submittal shall constitute Contractor's representation that it has satisfied its obligations under the Contract Documents, and as set forth immediately above in this paragraph 1.2 of this Section 01330, with respect to Contractor's review and approval of that Submittal.
- H. Designation of Work "by others," if shown in Submittals, shall mean that Work will be responsibility of Contractor rather than Subcontractor or supplier who has prepared Submittals.
- I. After review by Owner of each Submittal, an electronic copy of each Submittal will be returned to Contractor with actions defined as follows:
  - 1. NO EXCEPTIONS TAKEN - Accepted subject to its compatibility with future Submittals and additional partial Submittals for portions of the Work not covered in this Submittal. Does not constitute approval or deletion of specified or required items not shown on the Submittal.
  - 2. MAKE CORRECTIONS NOTED (NO RESUBMISSIONS REQUIRED) - Same as item 1 above, except that minor corrections as noted shall be made by Contractor.
  - 3. REVISE AS NOTED AND RESUBMIT - Rejected because of major inconsistencies or errors that shall be resolved or corrected by Contractor prior to subsequent review by Owner.
  - 4. REJECTED - RESUBMIT - Submitted material does not conform to Drawings and/or Specifications in major respect, i.e.: wrong size, model, capacity, or material.
- J. Make a complete and acceptable Submittal at least by second submission. Owner reserves the right to deduct monies from payments due Contractor to cover additional costs of review beyond the second submission per paragraph 1.2T. Illegible Submittals will be rejected and returned to Contractor for resubmission. Contractor shall be in breach of the Contract if Contractor's first resubmittal, following a Submittal which Owner determines falls within categories 3 or 4 above, does not fall within categories 1 or 2 above.
- K. Favorable review will not constitute acceptance by Owner of any responsibility for the accuracy, coordination, or completeness of the Submittals. Accuracy, coordination, and

completeness of Submittals shall be sole responsibility of Contractor, including responsibility to back-check comments, corrections, and modifications from Owner's review before fabrication. Contractor, Subcontractors, or suppliers may prepare Submittals, but Contractor shall ascertain that Submittals meet requirements of Contract Documents, while conforming to structural space and access conditions at point of installation. Owner's review will be only to assess if the items covered by the Submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as indicated by the Contract Documents. Favorable review of Submittal, method of Work, or information regarding materials and equipment Contractor proposes to furnish shall not relieve Contractor of responsibility for errors therein and shall not be regarded as assumption of risks or liability by Owner, or any officer or employee thereof, and Contractor shall have no claim under Contract Documents on account of failure or partial failure or inefficiency or insufficiency of any plan or method of Work or material and equipment so accepted. Favorable review shall be considered to mean merely that Owner has no objection to Contractor using, upon Contractor's own full responsibility, plan or method of Work proposed, or furnishing materials and equipment proposed.

- L. Unless otherwise specified, Owner's review will not extend to the means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- M. Submit complete initial Submittal for those items where required by individual Specification Sections. Complete Submittal shall contain sufficient data to demonstrate that items comply with Specifications, shall meet minimum requirements for submissions cited in Specification Sections, shall include motor data and seismic anchorage certifications, where required, and shall include necessary revisions required for equipment other than first named. If Contractor submits incomplete initial Submittal when complete Submittal is required, Submittal may be returned to Contractor without review.
- N. Copy, conform, and distribute reviewed Submittals in sufficient numbers for Contractor's files, Subcontractors, and vendors.
- O. After Owner's review of Submittal, revise as noted and resubmit as required. Identify changes made since previous Submittal.
  - 1. Begin no fabrication or Work that requires Submittals until return of Submittals not requiring resubmittal. Do not extrapolate from Submittals covering similar Work.
  - 2. Normally, Submittals will be processed and returned to Contractor within 30 Days of receipt.
- P. Distribute reviewed Submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.
- Q. All Submittals shall be number-identified by Contractor, prior to submission to Owner, in accordance with Owner's numbering format. Owner will provide Contractor with sample numbering format.
- R. Submission Requirements:
  - 1. Deliver Submittals to Owner at least 30 Days before dates reviewed Submittals will be needed.

The following table lists the number of initial Submittals required from Contractor for each type of submission and to whom Contractor shall distribute the information.

Submittals requiring resubmission will require the same quantity and distribution as an initial Submittal.

Submittal	Contractor Submittal	
	# of Hard copies/ Prints/ Samples	Electronic copy
	Items Go To →	Owner
	Owner	Owner
Schedule of Submittals	1	✓
Construction Material Waste Management Plan	1	✓
Monthly Progress Reports for Construction Material Waste Management Plan	1	✓
Safety Program	1	✓
Fire Protection Plan	1	✓
Progress Schedule	1	✓
Product Data	1	✓
MSDSs	1	✓
Drawings or any documents larger than 11" x 17"	2	✓
Quality Assurance/Control Submittals:		
Design Data	1	✓
Test Reports	1	✓
Certificates	1	✓
Manufacturers' Instructions	1	✓
Work Plans	1	✓
Storm Water Pollution Prevention Program	1	✓
Other Documents	1	✓

2. Accompany each copy of the Submittal(s) with a Submittal transmittal form, containing:
  - a. Date, revision date, and Submittal identification number.
  - b. Project name and Owner's Contract number.
  - c. Contractor's name, address, and job number.
  - d. Specification Section number clearly identified.
  - e. The quantity of Shop Drawings, Product Data, or Samples submitted.
  - f. Notification of deviations from Contract Documents.
  - g. MSDS for each item complying with OSHA's Hazard Communication Standard 29 CFR 1910.1200.
  - h. Other pertinent data.
3. Submittal shall include:
  - a. Date and revision dates.
  - b. Revisions, if any, identified.
  - c. Project Name and Contract number.
  - d. The names of:
    - 1) Contractor, Subcontractor, Supplier, Manufacturer, and separate detailer, when pertinent.
  - e. Identification of product material by location within the Project.

- f. Relation to adjacent structure or materials.
  - g. Field dimensions, clearly identified as such.
  - h. Specification Section number and applicable detail reference number and Drawing number.
  - i. Applicable reference standards, such as ASTM, ANSI, FS, NEMA, SMACNA or ACI.
  - j. A blank space, on the first sheet of each Submittal set, 5" x 4" for the Owner's stamp.
  - k. Identification of deviations from Contract Documents.
- S. Resubmission requirements:
- 1. Shop Drawings:
    - a. Revise initial Shop Drawings as required and resubmit as specified for initial Submittals.
    - b. Indicate on Shop Drawings any changes that have been made other than those requested by Owner.
  - 2. Product Data and Samples:
    - a. Submit new Product Data and Samples as required for initial Submittals.
  - 3. Installation, Operation, and Maintenance Manual:
    - a. Revise initial Installation, Operation, and Maintenance Manual(s) as required and resubmit as specified for initial Submittals.
- T. Charge for resubmissions:
- 1. One re-examination of Contractor's Submittals that have been returned for correction or replacement will be included in Owner's budget. Any additional re-examination of Contractor's Submittals will be considered additional scope services to be paid by Contractor through Owner. Contractor shall pay Owner (or Owner may deduct from any progress or final payment), for engineering personnel, on an hourly basis at 2.5 times direct payroll expenses, and for consultant personnel time at 1.25 times the amount billed Owner.

### **1.3 SCHEDULE OF SUBMITTALS**

- A. Submit a preliminary Schedule of Submittals as required herein and by Document 00700 (General Conditions). Utilize Owner's Submittal Log form to prepare Schedule of Submittals. Owner's Submittal Log form will be provided to Contractor in electronic media format compatible with Microsoft® Excel 2000.
- B. Schedule of Submittals will be used by Owner to schedule its activities relating to review of Submittals. Schedule of Submittals shall indicate a spreading out of Submittals and early Submittals of long-lead-time items and of items that require extensive review.
- C. Schedule of Submittals will be reviewed by Owner and shall be revised and resubmitted until accepted by Owner.
- D. Unless otherwise specified, transmit Submittals for associated items simultaneously to ensure that information is available for checking each item when it is received. Identify on the Submittal transmittal form that such Submittals should be reviewed together.

### **1.4 CONSTRUCTION MATERIAL WASTE MANAGEMENT PLAN**

- A. Submit Construction Material Waste Management Plan specific to these Contract Documents as required by Section 01741 (Construction Material Waste Management Plan).

### **1.5 SAFETY PROGRAM**

- A. Submit Safety Program specific to these Contract Documents as required by Section 01540 (Site Security and Safety).

**1.6 PROGRESS SCHEDULE**

- A. See Section 01320 (Progress Schedules and Reports) for schedule and report requirements. Section 01320 (Progress Schedules and Reports) shall control in any conflict with this Section 01330.
- B. Progress schedules, schedule updates, and reports shall be submitted using software described Section 01320 (Progress Schedules and Reports). Electronic files shall be complete copies, including all programs and electronic coding.

**1.7 PRODUCT DATA**

- A. Within ten Days after Contract Time commences to run, submit complete list of major products proposed for use (included at the end of this Section 01330), with name of manufacturer, telephone number, trade name, and model number of each product. Tabulate data by Specification Section.
- B. Product or Catalog Data:
  - 1. Manufacturers' standard drawings shall be modified to delete non-applicable data or include applicable data.
  - 2. Manufacturers' catalog sheets, brochures, diagrams, schedules, charts, illustrations, and other standard descriptive data:
    - a. Mark each copy to identify pertinent materials, products, or models.
    - b. Show dimensions and clearances required, performance characteristics and capacities, wiring diagrams and controls.
  - 3. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
  - 4. Material Safety Data Sheets:
    - a. In addition to MSDSs otherwise required by the Contract Documents, submit MSDSs for any products containing a hazardous substance such as paints, solvents, thinners, varnish, lacquer, glues and adhesives, mastics, sealants, equipment fuel, equipment lubricant, or other materials needed for the Project as required by the individual Specification Sections or as otherwise specified in the Contract Documents.
    - b. MSDSs must be submitted with Product Data Submittal in order for the Submittal to be reviewed.
- C. Supplemental Data:
  - 1. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturer's standard data to provide information unique to Project.

**1.8 SHOP DRAWINGS - NOT USED****1.9 SAMPLES - NOT USED****1.10 COORDINATION DRAWINGS - NOT USED****1.11 QUALITY ASSURANCE/CONTROL SUBMITTALS**

- A. Design Data:
  - 1. Indicate that material or product conforms to or exceeds specified requirements.
- B. Test Reports:
  - 1. Indicate that material or product conforms to or exceeds specified requirements.
  - 2. Reports may be from recent or previous tests on material or product, but shall be acceptable to Owner. Comply with requirements of each individual Specification Section.
- C. Certificates:

1. Indicate that material or product conforms to or exceeds specified requirements.
2. Submit supporting reference data, affidavits, and certifications as appropriate.
3. Certificates may be recent or from previous test results on material or product, but shall be acceptable to Owner.

D. Work Plans:

1. Submit work plans with sufficient detail to clearly indicate compliance with Specification requirements and to clearly describe by what means and methods Contractor intends to execute the subject Work.

**1.12 INSTALLATION, OPERATION, AND MAINTENANCE MANUAL - NOT USED**

**1.13 PROJECT RECORD DOCUMENTS**

- A. Submit Project Record Documents as required by Section 01780 (Project Record Documents).

**1.14 STORM WATER POLLUTION PREVENTION PROGRAM (IF APPLICABLE)**

- A. Submit Storm Water Pollution Prevention Program if required by Section 01500 (Temporary Facilities and Controls).

**1.15 DELAY OF SUBMITTALS**

- A. Delay of Submittals by Contractor is considered avoidable delay. Liquidated damages incurred because of late Submittals will be assessed to Contractor.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION

TRANSMITTAL FORM FOLLOWS THIS PAGE

**SUBMITTAL, TRANSMITTAL NO. \_\_\_\_\_**

Project Name: <b>Dry Creek Habitat Enhancement Demonstration Project, Phase II</b>		Date Received:		
Owner: Sonoma County Water Agency Attention: Construction Management Section 404 Aviation Boulevard Santa Rosa, CA 95403-9019		Checked By:		
Contractor: Address:		Log Page:		
Attention:		Specification Section Number:		
		1st Submittal <input type="checkbox"/>	Resubmittal <input type="checkbox"/>	
By _____ Date _____ Contractor's signature above shall constitute Contractor's representation that it has satisfied its obligations under the Contract Documents with respect to Contractor's review and approval of Submittals.				
Date Transmitted:		Previous Transmittal Date:		
No. Copies	Description	Manufacturer	Dwg. or Data No.	Action Taken*

Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- \* The action designated above is in accordance with the following legend:
- |  |   |
|--|---|
| A - No Exceptions Taken<br>B - Make Corrections Noted (No Resubmission Required)<br>C - Revise as Noted and Resubmit | D - Rejected - Resubmit<br>1. Not enough information for review<br>2. No reproduces submitted<br>3. Copies illegible<br>4. Not enough copies submitted<br>5. Wrong sequence number<br>6. Wrong resubmittal number<br>7. Wrong Specification section number<br>8. Wrong form used<br>9. See comments |
|--|---|

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By \_\_\_\_\_ Date \_\_\_\_\_

## SECTION 01410

**REGULATORY REQUIREMENTS****PART 1 GENERAL****1.1 SUMMARY**

- A. Section includes: regulatory requirements that may be applicable to Contract Documents.
- B. Specific reference in the Specifications to codes and regulations or requirements of regulatory agencies shall mean the latest printed edition of each adopted by the regulatory agency in effect at the time of the opening of Bids, except as may be otherwise specifically stated in the Contract Documents.
- C. Should any conditions develop not covered by the Contract Documents wherein the finished Work will not comply with current codes, a Change Order detailing and specifying the required Work shall be submitted to and approved by Owner before proceeding with the Work.

**1.2 REFERENCES TO REGULATORY REQUIREMENTS**

- A. Codes, laws, ordinances, rules and regulations referred to shall have full force and effect as though printed in full in these Specifications. Code, laws, ordinances, rules and regulations are not furnished to Contractor, because Contractor is assumed to be familiar with these requirements. The listing of applicable codes, laws, and regulations for hazardous waste abatement Work in the Contract Documents is supplied to Contractor as a courtesy and shall not limit Contractor's responsibility for complying with all applicable laws, regulations, or ordinances having application to the Work. Where conflict among the requirements or with these Specifications occurs, the most stringent requirements shall be used.
- B. Conform to referenced codes, laws, ordinances, rules and regulations.

**1.3 CODES**

- A. Codes that apply to Contract Documents include, but are not limited to, the following:
  - 1. CBC (Part 2, Title 24, CCR, including, without means of limitation, Sections 16A, 102A.23, 308, 420A, 504-506, 904.2.6, 1019 and 1604)
  - 2. CEC (Part 3, Title 24, CCR)
  - 3. CMC (Part 4, Title 24, CCR)
  - 4. CPC (Part 5, Title 24, CCR),
  - 5. State Elevator Safety Regulations (Part 7, Title 24, CCR)
  - 6. UPC
  - 7. UMC
  - 8. NEC
  - 9. Sonoma County Code

**1.4 LAWS, ORDINANCES, RULES, AND REGULATIONS**

- A. During prosecution of Work to be done under Contract Documents, comply with applicable laws, ordinances, rules and regulations, including, but not limited to, the following:
  - 1. Federal:
    - a. Americans With Disabilities Act of 1990
    - b. 29 CFR, Section 1910.1001, Asbestos
    - c. 40 CFR, Subpart M, National Emission Standards for Asbestos

- d. Executive Order 11246
- e. Federal Endangered Species Act
- f. Clean Water Act
- 2. State of California:
  - a. California Code of Regulations, Titles 5, 8, 19, 21, 22, 24 and 25
  - b. California Public Contract Code
  - c. California Health and Safety Code
  - d. California Government Code
  - e. California Labor Code
  - f. California Civil Code
  - g. California Code of Civil Procedure
  - h. CPUC General Order 95, Rules for Overhead Electric Line Construction
  - i. CPUC General Order 128, Rules for Construction of Underground Electric Supply and Communications Systems
  - j. Cal/OSHA
  - k. OSHA: Hazard Communications Standards
  - l. California Endangered Species Act
  - m. Water Code
  - n. Fish and Game Code
- 3. State of California Agencies:
  - a. State and Consumer Services Agency
  - b. Office of the State Fire Marshall
  - c. Office of Statewide Health Planning and Development
  - d. Department of Fish and Game
  - e. Bay Area Air Quality Management District
  - f. San Francisco Bay Regional Water Quality Control Board
  - g. North Coast Regional Water Quality Control Board
    - 1) Order No. 93-61
    - 2) Order No. 81-73
    - 3) Clean Water Act Section 401
- 4. County of Sonoma:
  - a. Ordinance 3836R
  - b. Building permit
  - c. Electrical permit
  - d. Grading permit
  - e. Encroachment permit
  - f. Valley Oak Protection Ordinance
- 5. Local Agencies:
  - a. Applicable City Ordinances
  - b. Northern Sonoma County Air Pollution Control District
- 6. Other Requirements:
  - a. National Fire Protection Association (NFPA): Pamphlet 101, Life Safety.
  - b. References on Drawings or in Specifications to "code" or "building code" not otherwise identified shall mean the codes specified in this Section 01410, together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction.
- B. Have access to all of the foregoing within 24 hours.
- C. Other Applicable Laws, Ordinances and Regulations:

1. Work shall be accomplished in conformance with all applicable laws, ordinances, rules and regulations of federal, state, and local governmental agencies and jurisdictions having authority over the Project.
  2. Work shall be accomplished in conformance with all rules and regulations of public utilities and utility districts.
  3. Where such laws, ordinances rules, and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Time and Contract Sum, except where changes in laws, ordinances, rules, and regulations occur subsequent to the time of opening of the Bids.
- D. Change Orders and Claims. The California Public Contract Code (including but not limited to Section 7105 (d)(2)) applies to all contract procedures for changes, time extensions, change orders (time and money), and claims, and per California Government Code Section 930.2, et seq., Contractor's timely compliance with these procedures is a mandatory prerequisite to filing a Government Code Claim. Any change, alteration, modifications, waiver, or omission to implement these procedures, shall have no legal effect unless approved in advance in a fully executed Change Order approved by the Board. Federal construction law (U.S. v. Holspruch 326 U.S. 234) and the jurisprudence of the Federal District of Columbia Circuit shall supplement (but not supersede) California law on construction claims topics including but not limited to, termination claims, home office overhead claims, and delay/disruption claims.

## 1.5 PRECEDENCE

- A. Where Drawings or Specifications require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, Drawings and Specifications shall take precedence so long as such increase is legal.
- B. Where no requirements are identified on Drawings or in Specifications, comply with all requirements of applicable codes, ordinances and standards of governing authorities having jurisdiction.
- C. Conflicts between referenced regulatory requirements: Comply with the one establishing the more stringent requirement.
- D. Conflicts between referenced regulatory requirements and Contract Documents: Comply with the one establishing the more stringent requirement.

## 1.6 REQUIRED PROVISIONS ON CONTRACT CLAIM RESOLUTION

- A. The California Public Contract Code specifies required provisions on resolving contract claims less than \$375,000, which are set forth below, and constitute a part of this Contract.
  1. For the purposes of this section, "Claim" means a separate demand by Contractor of \$375,000 or less for (1) a time extension, (2) payment or money or damages arising from Work done by or on behalf of Contractor arising under the Contract Documents and payment of which is not otherwise expressly provided for or the Claimant is not otherwise entitled to, or (3) an amount the payment of which is disputed by Owner. In order to qualify as a Claim, the written demand must state that it is a Claim submitted under Article 12 of Document 00700 (General Conditions) and be submitted in compliance with all requirements of Document 00700 (General Conditions), Article 12. Separate Claims which total more than \$375,000 do not qualify as a "separate demand of \$375,000 or less," as referenced above, and are not subject to this section.

2. A voucher, invoice, payment application, or other routine or authorized form of request for payment is not a Claim for purposes of this section. If such request is disputed as to liability or amount, then the disputed portion of the submission may be converted to a Claim under this section by submitting a separate claim in compliance with Contract Documents claim submission requirements.
  3. Caution: This section does not apply to tort claims and nothing in this section is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 and Chapter 2 of Part 3 of Division 3.6 of Title 1 of the California Government Code.
- B. Procedure:
1. The Claim must be in writing, submitted in compliance with all requirements of Document 00700 (General Conditions), Article 12, including, but not limited to, the time prescribed by and including the documents necessary to substantiate the Claim, pursuant to Document 00700 (General Conditions), paragraph 12.3. Claims must be filed on or before the day of final payment. Nothing in this section is intended to extend the time limit or supersede notice requirements for the filing of claims as set forth in Document 00700 (General Conditions), Article 12 or elsewhere in the Contract Documents.
  2. For Claims of fifty thousand dollars (\$50,000) or less
    - a. Owner shall respond in writing within 45 days of receipt of the Claim, or
    - b. Owner may request in writing within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims Owner may have against Claimant.
      - 1) If additional information is thereafter required, it shall be requested and provided in accordance with this section, upon mutual agreement of Owner and Claimant.
      - 2) Owner's written response to the Claim, as further documented, shall be submitted to Claimant within 15 days after receipt of further documentation or within a period of time no greater than taken by Claimant in producing the additional information, whichever is greater.
  3. For Claims over Fifty Thousand Dollars (\$50,000) and less than or equal to \$375,000:
    - a. Owner shall respond in writing within 60 days of receipt of the Claim, or
    - b. Owner may request in writing within 30 days of receipt of the Claim, any additional documentation supporting the Claim or relating to any defenses or claims Owner may have against Claimant.
      - 1) If additional information is thereafter required, it shall be requested and provided in accordance with this section, upon mutual agreement of Owner and Claimant;
      - 2) Owner's written response to the Claim, as further documented, shall be submitted to Claimant within 30 days after receipt of further documentation or within a period of time no greater than taken by Claimant in producing the additional information, whichever is greater.
  4. Meet and Confer:
    - a. If Claimant disputes Owner's written response, or Owner fails to respond within the time prescribed above, Claimant shall notify Owner, in writing, either within 15 days of receipt of Owner's response or within 15 days of Owner's failure to timely respond, and demand an informal conference to meet and confer for settlement of

the issues in dispute. Upon demand Owner will schedule a meet and confer conference within 30 days for settlement of the dispute.

- b. Following the meet and confer conference, if the Claim or any portion remains in dispute, Claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the California Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time Claimant submits its written claim as set forth in paragraph 12.2.B of Document 00700 (General Conditions), until the time that Claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

## **1.7 COMPLIANCE WITH AMERICANS WITH DISABILITIES ACT**

- A. Contractor acknowledges that, pursuant to the Americans with Disabilities Act (ADA), programs, services, and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. Contractor shall provide the services specified in the Contract Documents in a manner that complies with the ADA and any and all other applicable federal, state, and local disability rights legislation. Contractor agrees not to discriminate against disabled persons in the provision of services, benefits, or activities provided under this Agreement and further agrees that any violation of this prohibition on the part of Contractor, its employees, agents, or assigns shall constitute a material breach of the Contract Documents.

## **1.8 SUBSTITUTION OF SECURITIES IN LIEU OF RETENTION**

- A. In accordance with the provisions of Public Contract Code Section 22300, substitution of securities for any moneys withheld under Contract Documents to ensure performance is permitted under following conditions:
  1. At request and expense of Contractor, securities listed in Section 16430 of the Government Code, bank or savings and loan certificates of deposit, interest bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Contractor and Owner which are equivalent to the amount withheld under retention provisions of Contract shall be deposited with Controller or with a state or federally chartered bank in California, as the escrow agent, who shall then pay such moneys to Contractor. Upon satisfactory completion of Contract, securities shall be returned to Contractor.
  2. Alternatively, Contractor may request and Owner shall make payment of retentions earned directly to the escrow agent at the expense of Contractor. At the expense of Contractor, Contractor may direct the investment of the payments into securities and receive the interest earned on the investments upon the same terms provided for in this Section 01410 for securities deposited by Contractor. Upon satisfactory completion of Contract Documents, Contractor shall receive from escrow agent all securities, interest, and payments received by the escrow agent from Owner, pursuant to the terms of this Section 01410. Pay to each Subcontractor, not later than 20 Days after receipt of the payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention withheld to insure the performance of Contractor.
  3. Contractor shall be beneficial owner of securities substituted for moneys withheld and shall receive any interest thereon.

4. Enter into escrow agreement with Controller according to Document 00680 (Escrow Agreement for Security Deposits in Lieu of Retention), as authorized under Public Contract Code Section 22300, specifying amount of securities to be deposited, terms and conditions of conversion to cash in case of default of Contractor, and termination of escrow upon completion of Contract Documents.
5. Public Contract Code Section 22300 is hereby incorporated in full by this reference.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION

## SECTION 01420

**REFERENCES AND DEFINITIONS****PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes: Reference standards, abbreviations, symbols, definitions, and terminology used in Contract Documents.
- B. Full titles are given in this Section for standards cited in other Sections of Specifications.
- C. Material and workmanship specified by reference to number, symbol, or title of specific standard such as state standard, commercial standard, federal specifications, technical society, or trade association standard, or other similar standard, shall comply with requirements of standards except when more rigid requirements are specified or required by applicable codes.
- D. Standards referred to, except as modified herein, shall have full force and effect as though printed in the Contract Documents. Standards are not furnished to Contractor because manufacturers and trades involved are assumed to be familiar with their requirements.

**1.2 REFERENCE TO STANDARDS AND SPECIFICATIONS OF TECHNICAL SOCIETIES; REPORTING AND RESOLVING DISCREPANCIES**

- A. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual, code, or laws or regulations (including all amendments, changes, errata, addenda, and supplements) in effect at the time of opening of Bids, except as may be otherwise specifically stated in the Contract Documents.
  - 1. When an edition or effective date of a reference is not given, it shall be understood to be the current edition or latest revision published as of the date of opening Bids.
    - a. Exception: Comply with issues in effect as listed in governing legal requirements.
- B. If during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such law or regulation applicable to the performance of the Work or of any such standard, specification, manual, or code, or of any instruction of any supplier, report it in writing at once by submitting a RFI to Owner, and do not proceed with the Work affected thereby until consent to do so is given by Owner.
- C. Except as otherwise specifically stated in the Contract Documents or as may be provided by Change Order, CCD, or Supplemental Instruction, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
  - 1. The provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
  - 2. The provisions of any such laws or regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such law or regulation).
- D. No provision of any such standard, specification, manual, code, or instruction shall be effective to change the duties and responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the

Contract Documents, nor shall it be effective to assign to Owner, Engineer, or any of their consultants, agents, representatives or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

- E. Comply with the applicable portions of standards and specifications published by the technical societies, institutions, associations, and governmental agencies referred to in Specifications.
- F. Referenced Grades, Classes, and Types: Where an alternative or optional grade, class, or type of product or execution is included in a reference but is not identified in Drawings or in Specifications, provide the highest, best, and greatest of the alternatives or options for the intended use and prevailing conditions.
- G. Jobsite Copies:
  - 1. Obtain and maintain at the Site copies of reference standards identified on Drawings and in Specifications in order to properly execute the Work.
  - 2. At a minimum, the following shall be readily available at the Site:
    - a. Safety Codes: State of California, Division of Industrial Safety regulations.
- H. ASTM and ANSI References: Specifications and Standards of the American Society for Testing and Materials International (ASTM International) and the American National Standards Institute (ANSI) are identified in the Drawings and Specifications by abbreviation and number only and may not be further identified by title, date, revision, or amendment. It is presumed that Contractor is familiar with and has access to these nationally- and industry-recognized specifications and standards.

**1.3 ABBREVIATIONS**

A. Listed hereinafter are the various organizations or references which may appear in the Contract Documents, along with their respective acronyms and/or abbreviations:

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	Architectural Aluminum Manufacturers Association
AAP	Affirmative Action Program
AASHTO	American Association of State Highway and Transportation Officials
AB	Aggregate Base
ABMA	American Bearing Manufacturers Association
ABPA	American Board Products Association
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
AED	Association of Equipment Distributors
AFBMA	Anti-friction Bearing Manufacturers Association
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMCA	Air Moving and Conditioning Association, Inc.
ANSI	American National Standards Institute (formerly American Standards Association)
APA	American Plywood Association
API	American Petroleum Institute

ARI	Air-Conditioning and Refrigeration Institute
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigeration, and Air-Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	ASTM International
AWCI	Association of the Wall and Ceiling Industries
AWG	American Wire Gauge
AWPA	American Wood-Preservers' Association
AWPB	American Wood Preservers Bureau
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIL	Basic Insulation Level
BOD	Biological Oxygen Demand
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	State of California, Department of Transportation
CBC	California Building Code
CCD	Construction Change Directive
CCR	California Code of Regulations
CEC	California Electric Code or California Energy Commission
CF	Cubic Foot or Cubic Feet
CFM	Cubic Feet per Minute
CFR	Code of Federal Regulations
CGA	Common Ground Alliance
CI	Chlorine Institute, Inc.
CISPI	Cast Iron Soil Pipe Institute
CL	Center Line
CLMFI	Chain Link Fence Manufacturers Institute
CMAA	Crane Manufacturers Association of America, Inc.
CMC	California Mechanical Code
CO	Change Order
COE	United States Army Corps of Engineers
CPC	California Plumbing Code
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CRA	California Redwood Association
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standards, U.S. Department of Commerce
CSA	Canadian Standards Association
CY	Cubic Yard or Cubic Yards
DFPA	Douglas Fir Plywood Institute
DFT	Dry Film Thickness
DHI	Door and Hardware Institute
EIA	Electronic Industries Association
EPA	Environmental Protection Agency
ETL	Electrical Testing Laboratories
FGMA	Flat Glass Marketing Association

FPS	Feet per Second or Fluid Power Society
FS	Federal Specifications
GA	Gypsum Association
GPM	Gallons Per Minute
Greenbook	Standard Specifications for Public Works Construction
HI	Hydraulic Institute
HMI	Hoist Manufacturer's Institute
HMMA	Hollow Metal Manufacturer's Association
HP	Horse Power
HPMA	Hardwood Plywood Manufacturers Association
HVAC	Heating, Ventilating and Air Conditioning
IACS	International Annealed Copper Standards
IAPMO	International Association of Plumbing and Mechanical Officials
ICBO	International Conference of Building Officials
ICEA	Insulated Cable Engineers Association
ID	Identification or Inside Diameter
IEEE	Institute of Electrical and Electronic Engineers
IES	Illuminating Engineering Society
ISA	International Society of Arboriculture
ISAS	Instrumentation, Systems, and Automation Society
ISO	International Organization for Standardization
JATC	Joint Apprenticeship Training Committee
JV	Joint Venture
LBE	Local Business Enterprise
LLC	Limited Liability Corporation or Company
LS	Lump Sum
M.I.	Middle Initial
M/WBE	Minority and/or Woman-Owned Business Enterprise
MBE	Minority Business Enterprise
MGD	Million Gallons per Day
MIA	Masonry Institute of America
MIA	Marble Institute of America
MLSFA	Metal Lath/Steel Framing Association
MS	Military Specifications
MSDS	Material Safety Data Sheet
MSS	Manufacturers Standardization Society of the Valve & Fitting Industry
NAAMM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NBS	National Bureau of Standards
NEC	National Electric Code
NEMA	National Electric Manufacturers Association
NESC	National Electrical Safety Code
NFoPA	National Forest Products Association
NFPA	National Fire Protection Association
NIC	Not In Contract
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
NPT	National Pipe Thread

NRMCA	National Ready Mixed Concrete Association
NSF	National Sanitation Foundation
NTS	Not to Scale
NWWDA	National Wood Windows and Doors Association
OC	On Center
OD	Outside Diameter
OSHA	Occupational Safety and Health Administration
OSHPD	Office of Statewide Health Planning and Department
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
PDI	Plumbing and Drainage Institute
PG&E	Pacific Gas and Electric Company
PL	Property Line
PLC	Programmable Logic Controller
PM	Preventive Maintenance
PPM	Parts per Million
PR	Proposal Request
PRMD	Permits and Resource Management Department, County of Sonoma
PS	Product Standard, U. S. Department of Commerce
PSF or psf	Pounds per Square Foot
PSI or psi	Pounds per Square Inch
PSIG	Pounds per Square Inch Gauge
PVC	Polyvinyl chloride
RC	Relative Compaction
RFI	Request for Information
RFP	Request for Proposals
RFS	Request for Substitution
RIS	Redwood Inspection Service
RPM	Revolutions per Minute
SAE	Society of Automotive Engineers
SDeI	Steel Deck Institute
SDoI	Steel Door Institute
SDR	Standard Dimension Ratio
SF	Square Foot or Square Feet
SFM	State of California, Office of State Fire Marshal
SIDR	Standard Inside Dimension Ratio
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joint Institute
SMACNA	Sheet Metal and Air Conditioning Contractors National Association
SPIB	Southern Pine Inspection Bureau
SSPC	Society for Protective Coating (formerly Steel Structures Painting Council)
SWI	Steel Window Institute
TCA	Tile Council of America
TIE	Time Impact Evaluation
TMS	The Masonry Society
TPI	Truss Plate Institute Inc.
UFC	Uniform Fire Code
UL	Underwriters' Laboratories, Inc.

UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code
USA	Underground Service Alert
USACE	United States Army Corps of Engineers
USC	United States Code
VOC	Volatile Organic Compounds
WBE	Women’s Business Enterprise
WCLIB	West Coast Lumber Inspection Bureau
WHI	Warnock Hersey International
WIC	Woodwork Institute of California
WWPA	Western Wood Products Association
WWPI	Western Wood Preservers Institute

B. Abbreviations in Specifications:

cm	centimeter (centimeters)
Co.	Company
Corp.	Corporation
cu	Cubic
dia	diameter
Div	Division
ft	foot (feet)
g	gram (grams) or Standard Acceleration of Gravity
gal	gallon (gallons)
gpd	gallons per Day
hr	hour
in	inch (inches)
Inc.	Incorporated
kg	kilogram (kilograms)
km	kilometer (kilometers)
kVAR	kilovolts amperes reactive
kW	kilowatt
l	liter (liters)
lb(s)	Pound(s)
m	meter (meters)
mfr	manufacturer
mg	milligram (milligrams)
ml/mls	milliliter (milliliters)
mm	millimeter (millimeters)
No	number
sq	square
Sta	Station
T & G	tongue and groove
Typ	typical
US	United States
yd	yard (yards)

## C. Abbreviations on Drawings:

1. As listed for Specifications above.
2. Additional abbreviations, used only on Drawings, are indicated thereon.

**1.4 SYMBOLS**

## A. Symbols in Specifications:

:	“shall be” or “shall” - where used within sentences or paragraphs
#1	number
1#	pound
&	and
%	percent
C	Centigrade
F	Fahrenheit
°	degree
/	“per,” except where used to combine words; example: power/fuel, and in that case it means “and”
“	inch (inches)
’	foot (feet)
@	at

## B. Symbols on Drawings:

1. As listed for Specifications above.
2. Symbols, used only on Drawings, are indicated thereon.

**1.5 DEFINITIONS**

- A. Wherever any of the words or phrases defined below, or a pronoun used in place thereof, is used in any part of the Contract Documents, it shall have the meaning here set forth. In the Contract Documents, the neuter gender includes the feminine and masculine, and the singular number includes the plural.
- B. The following definitions shall apply regardless of capitalization unless the context otherwise requires:
  1. Wherever words “as directed,” “as required,” “as permitted,” or words of like effect are used, it shall be understood that direction, requirements, or permission of Owner is intended. Words “sufficient,” “necessary,” “proper,” and the like shall mean sufficient, necessary, or proper in judgment of Owner. Words “approved,” “acceptable,” “satisfactory,” “favorably reviewed,” or words of like import, shall mean approved by, or acceptable to, or satisfactory to, or favorably reviewed by Owner.
  2. Wherever the word “may” or “ought” is used, the action to which it refers is discretionary. Wherever the word “shall” or “will” is used, the action to which it refers is mandatory.
  3. Addenda: Written or graphic instruments issued prior to the opening of Bids, which clarify, correct, or change the bidding requirements or the Contract Documents. Addenda shall not include the minutes of the Pre-Bid Conference, if any, or Site Visit.
  4. Agency: The Sonoma County Water Agency (SCWA), a public agency of the State of California, acting under and by virtue of the authority vested in the Owner by the laws of the State of California.

5. Agreement (Document 00520): Agreement is the basic Contract Document that binds the parties to construction Work. Agreement defines relationships and obligations between Owner and Contractor and by reference incorporates Conditions of Contract, Drawings, and Specifications and contains Addenda and all Modifications subsequent to execution of Contract Documents.
6. Alternate: Work added to or deducted from the base Bid, if accepted by Owner.
7. Application for Payment: Written application for monthly or periodic progress or final payment made by Contractor complying with the Contract Documents.
8. Approved Equal: Approved in writing by Owner as being of equivalent quality, utility and appearance.
9. Asbestos: Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by OSHA or Cal/OSHA.
10. Bid: The offer or proposal of the Bidder submitted on the prescribed form(s) setting forth the prices for the Work to be performed.
11. Bidder: One who submits a Bid.
12. Bidding Documents: All documents comprising the Project Manual (including all documents and Specification Sections listed in Document 00010 [Table of Contents]), including documents supplied for bidding purposes only and Contract Documents.
13. Board: The Board of Directors of the Owner.
14. Business Day: Any Day other than Saturday, Sunday, and the following days that have been designated as holidays by Owner. If a holiday falls on a Saturday, the preceding Friday will be the holiday. If a holiday falls on a Sunday, the following Monday will be the holiday.
  - a. New Year's Day, January 1;
  - b. Martin Luther King Jr.'s Birthday, third Monday in January;
  - c. Lincoln's Birthday, February 12;
  - d. Presidents' Day, third Monday in February;
  - e. Memorial Day, last Monday in May;
  - f. Independence Day, July 4;
  - g. Labor Day, first Monday in September;
  - h. Veterans' Day, November 11;
  - i. Thanksgiving Day, as designated by the President;
  - j. The Day following Thanksgiving Day;
  - k. Christmas Day, December 25; and
  - l. Each day appointed by the Governor of California and formally recognized by the Sonoma County Board of Supervisors as a day of mourning, thanksgiving, or special observance.
15. By Owner: Work that will be performed by Owner or its agents at the Owner's expense.
16. By Others: Work that is outside scope of Work to be performed by Contractor under this Contract, which will be performed by Owner, other contractors, or other means.
17. Change Order: A written instrument prepared by Owner and signed by Owner and Contractor, stating their agreement upon all of the following:

- a. a change in the Work;
  - b. the amount of the adjustment in the Contract Sum, if any; and
  - c. the amount of the adjustment in the Contract Time, if any.
18. Code Inspector: A local or state agency responsible for the enforcement of applicable codes and regulations.
  19. Concealed: Work not exposed to view in the finished Work, including within or behind various construction elements.
  20. Construction Change Directive (“CCD”): A written order prepared and signed by Owner, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both.
  21. Contract Conditions or Conditions of the Contract: Consists of two parts: General Conditions and Supplementary Conditions.
    - a. General Conditions are general clauses that are common to the Owner Contracts, including Document 00700 (General Conditions).
    - b. Supplementary Conditions modify or supplement General Conditions to meet specific requirements for these Contract Documents, including Document 00800 (Supplementary Conditions).
  22. Contract Documents and Contract: Contract Documents and Contract shall consist of the documents identified as the Contract Documents in Document 00520 (Agreement), plus all changes, Addenda, and Modifications thereto.
  23. Contract Modification: Either:
    - a. a written amendment to Contract signed by Contractor and Owner; or
    - b. a Change Order; or
    - c. a Construction Change Directive; or
    - d. a written directive for a minor change in the Work issued by Owner.
  24. Contract Sum: The sum stated in the Agreement and, including authorized adjustments, the total amount payable by Owner to Contractor for performance of the Work and the Contract Documents. The Contract Sum is also sometimes referred to as the Contract Price or the Contract Amount.
  25. Contract Time: The number or numbers of Days or the dates stated in the Agreement:
    - a. to achieve Substantial Completion of the Work or designated Milestones; and/or
    - b. to complete the Work so that it is ready for final payment and is accepted.
  26. Contractor: The person or entity identified as such in the Agreement and referred to throughout the Contract Documents as if singular in number and neutral in gender. The term “Contractor” means the Contractor or its authorized representative.
  27. Contractor’s Employees: Persons engaged in execution of Work under Contract as direct employees of Contractor, as Subcontractors, or as employees of Subcontractors.
  28. Day: One calendar day of 24 hours measured from midnight to the next midnight, unless the word “day” is specifically modified to the contrary.
  29. Defective: An adjective which, when modifying the word “Work,” refers to Work that is unsatisfactory or unsuited for the use intended, faulty, or deficient, that does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents

- (including but not limited to approval of Samples and “or equal” items), or has been damaged prior to final payment (unless responsibility for the protection thereof has been assumed by Owner). Owner is the judge of whether Work is Defective.
30. Drawings: The graphic and pictorial portions of Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.
  31. Engineer: If used elsewhere in the Contract Documents, “Engineer” shall mean a person holding a valid California State Architect’s or Engineer’s license representing the Owner in the administration of the Contract Documents. Engineer may be an employee of or an independent consultant to Owner. When Engineer is referred to within the Contract Documents and no Engineer has in fact been designated, then the matter shall be referred to Owner. The term Engineer shall be construed to include employees of Engineer and/or employees that Engineer supervises. When the designated Engineer is an employee of Owner, his or her authorized representatives on the Project will be included under the term Engineer. If Engineer is an employee of Owner, Engineer is the beneficiary of all Contractor obligations to Owner, including without limitation, all releases and indemnities.
  32. Equal: Equal in opinion of Owner. Burden of proof of equality is responsibility of Contractor.
  33. Exposed: Work exposed to view in the finished Work, including behind louvers, grilles, registers and various other construction elements.
  34. Final Acceptance or Final Completion: Owner’s acceptance of the Work as satisfactorily completed in accordance with Contract Documents. Requirements for Final Acceptance/Final Completion include, but are not limited to:
    - a. All systems having been tested and accepted as having met requirements of Contract Documents.
    - b. All required instructions and training sessions having been given by Contractor.
    - c. All required permitting reports.
    - d. All Project Record Documents having been submitted by Contractor, reviewed by Owner, and accepted by Owner.
    - e. All punch list Work, as directed by Owner, having been completed by Contractor.
    - f. Generally all Work, except Contractor maintenance after Final Acceptance/Final Completion, having been completed to satisfaction of Owner.
  35. Final Pay Item: A Final Pay Item is any item of Work (identified as such in the Contract Documents) for which Contractor shall be paid on a lump sum basis unless adjustments to the estimated quantity are agreed to by Owner in accordance with the provisions of Section 01200 (Price and Payment Procedures), in which case compensation for the item will be based on the revised quantity multiplied by the bid unit price for the item.
  36. Force Account: Work directed to be performed without prior agreement as to lump sum or unit price cost thereof, and which is to be billed at cost for labor, materials, equipment, taxes, and other costs, plus a specified percentage for overhead and profit.
  37. Furnish: Supply only, do not install.
  38. Indicated: Shown or noted on the Drawings.
  39. Install: Install or apply only, do not furnish.

40. Latent: Not apparent by reasonable inspection, including but not limited to, the inspections and research required as a condition to bidding under Document 00700 (General Conditions).
41. Law: Unless otherwise limited, all applicable laws including without limitation all federal, state, and local laws, statutes, standards, rules, regulations, ordinances, and judicial and administrative decisions.
42. Material: This word shall be construed to embrace machinery, manufactured articles, materials of construction (fabricated or otherwise), and any other classes of material to be furnished in connection with Contract, except where a more limited meaning is indicated by context.
43. Milestone: A principal event specified in Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all Work.
44. Modification: Same as Contract Modification.
45. Not in Contract: Work that is outside the scope of Work to be performed by Contractor under Contract Documents.
46. Notice of Completion: Shall have the meaning provided in California Civil Code Section 9204, and any successor statute.
47. Off Site: Outside geographical location of the Project.
48. Owner: The Agency.
49. Owner-Furnished, Contractor-Installed: Items furnished by Owner at its cost for installation by Contractor at its cost under Contract Documents.
50. Owner's Representative(s): See Document 00520 (Agreement).
51. Partial Utilization: Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all of the Work.
52. PCBs: Polychlorinated byphenyls.
53. Phase: A specified portion of the Work (if any) specifically identified as a Phase in Document 00520 (Agreement) or Document 01100 (Summary).
54. Product Data: That information (brochures, catalog sheets, manufacturer's cut sheets, etc.) supplied by vendors having technical and commercial characteristics of the supplied equipment or materials and accompanying commercial terms such as warranties, instructions, and manuals.
55. Progress Report: A periodic report submitted by Contractor to Owner with progress payment invoices accompanying progress schedule. See Section 01320 (Progress Schedules and Reports) and Document 00700 (General Conditions).
56. Project: Total construction of which Work performed under Contract Documents may be whole or part.
57. Project Float: As defined in paragraph 1.2.B.3, Section 01320 (Progress Schedules and Reports).
58. Project Manual: Project Manual consists of Bidding Requirements, Agreement, Bonds, Certificates, Contract Conditions, Drawings, and Specifications.
59. Project Record Documents: All Project deliverables required under Sections 01700 et seq., including without limitation, as-built drawings; Project Record Specifications; Installation, Operation, and Maintenance Manuals; and Machine Inventory Sheets.

60. Provide: Furnish and install.
61. Request for Information ("RFI"): A document prepared by Contractor requesting information regarding the Project or Contract Documents as provided in Section 01250 (Modification Procedures). The RFI system is also a means for Owner to submit Contract Document clarifications or supplements to Contractor.
62. Request for Proposals ("RFP"): A document issued by Owner to Contractor whereby Owner may initiate changes in the Work or Contract Time as provided in Contract Documents. See Section 01250 (Modification Procedures).
63. Request for Substitution ("RFS"): A document prepared by Contractor requesting substitution of materials as permitted and to the extent permitted in Contract Documents. See Section 01600 (Product Requirements).
64. RFI-Reply: A document consisting of supplementary details, instructions, or information issued by Owner that clarifies or supplements Contract Documents, and with which Contractor shall comply. RFI-Replies do not constitute changes in Contract Sum or Contract Time except as otherwise agreed in writing by Owner. RFI-Replies will be issued through the RFI administrative system.
65. Samples: Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
66. Sanitation Standards: The Sonoma County Water Agency Design and Construction Standards for Sanitation Facilities.
67. Shop Drawings: All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
68. Shown: As indicated on Drawings.
69. Site: The particular geographical location of Work performed pursuant to Contract Documents.
70. Specifications: The written portion of the Contract Documents consisting of requirements for materials, equipment, construction systems, standards, and workmanship for the Work; performance of related services; and are contained in Divisions 1 through 16.
71. Specified: As written in Specifications.
72. Subcontractor: A person or entity that has a direct contract with Contractor to perform a portion of the Work at the Site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and neutral in gender and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.
73. Substantial Completion: The Work (or a specified part thereof) has progressed to the point where, in the opinion of Owner as evidenced by a Certificate of Substantial Completion, the Work is sufficiently complete, in accordance with Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if no such certificate is issued, when the Work (or specified part) is complete and ready for final payment as evidenced by written recommendation of

- Owner for final payment. The terms “Substantially Complete” and “Substantially Completed” as applied to all or part of the Work refer to Substantial Completion thereof.
74. Superintendence: Executive oversight and charge of the main aspects of construction, including scheduling, sequence of subcontractor Work, and quality control.
  75. Supplemental Instruction: A written directive from Owner to Contractor ordering alterations or Modifications that do not result in change in Contract Sum or Contract Time, and do not substantially change Drawings or Specifications. See Section 01250 (Modification Procedures).
  76. Testing and special inspection agency: An independent entity engaged by Owner to inspect and/or test the workmanship, materials, or manner of construction of buildings or portions of buildings, to determine if such construction complies with the Contract Documents and applicable codes.
  77. Underground Facilities: All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities that have been installed underground to furnish any of the following services or materials: Electricity, gases, chemicals, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems, or water.
  78. Unit Price Work: Shall be the portions of the Work for which a unit price is provided in Document 00520 (Agreement) or Section 01100 (Summary).
  79. Work: The entire completed construction, or the various separately identifiable parts thereof, required to be furnished under the Contract Documents within the Contract Time. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents including everything shown in the Drawings and set forth in the Specifications. Wherever the word “work” is used, rather than the word “Work,” it shall be understood to have its ordinary and customary meaning.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION - NOT USED**

END OF SECTION



## SECTION 01450

**QUALITY CONTROL****PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Contractor's Quality Control
- B. Quality of the Work
- C. Inspections and Tests by Governing Authorities
- D. Inspections and Tests by Serving Utilities
- E. Inspections and Tests by Manufacturer's Representatives
- F. Tests and Inspections by Owner or Owner's Independent Testing and Inspection Agency
- G. Additional Testing and Inspection

**1.2 CONTRACTOR'S QUALITY CONTROL**

- A. Contractor's Quality Control: Ensure that products, services, workmanship, and Site conditions comply with requirements of Drawings and Specifications by coordinating, supervising, testing, and inspecting the Work and by utilizing only suitably qualified and appropriately audited, licensed, or trained personnel.
- B. Quality Requirements: Work shall be accomplished in accordance with quality requirements of Drawings and Specifications, including, by reference, all codes, laws, rules, regulations, and standards. When no quality basis is prescribed, the quality and testing procedures shall be in accordance with the best-accepted practices of the construction industry for the locale of the Project, for projects of this type, or standards set by engineering or technical societies (e.g., ASTM or ASHRAE), whichever is more stringent.
- C. Quality Control Personnel: Employ and assign knowledgeable and skilled personnel as necessary to perform quality control functions to ensure that the Work is provided as required.
- D. At Contractor's expense, Contractor may employ a certified independent testing agency to perform compaction tests where there is disagreement. Owner may consider such tests, but will have the authority to make the final determination of relative compaction.
- E. At Contractor's expense, Contractor may employ a certified independent welding inspection agency to perform welding inspections. Owner may consider such tests, but will have the authority to make the final determination of welding quality.

**1.3 QUALITY OF THE WORK**

- A. Quality of Products: Unless otherwise indicated or specified, all products shall be new, free of defects, and fit for the intended use.
- B. Quality of Installation: All Work shall be produced plumb, level, square and true, or true to indicated angle, and with proper alignment and relationship between the various elements, as indicated or required by Contract Documents.
- C. Protection of Completed Work: Take all measures necessary to preserve completed Work free from damage, deterioration, soiling, and staining, until acceptance by Owner.
- D. Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Unless more stringent requirements are indicated or specified, comply with manufacturer's instructions and recommendations, reference standards and building code research report requirements in preparing, fabricating, erecting, installing, applying, connecting, and finishing Work.

- E. Deviations from Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Secure Owner's advance written consent. Document and explain all deviations from reference standards and building code research report requirements and manufacturer's product installation instructions and recommendations, including acknowledgement by the manufacturer that such deviations are acceptable and appropriate for the Project.
- F. Verification of Quality: Work shall be subject to verification of quality by Owner in accordance with provisions of the Contract Documents.
  - 1. Cooperate by making Work available for inspection.
  - 2. Such verification may include mill, plant, shop, or field inspection as required.
  - 3. Provide access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.
  - 4. Provide all information and assistance as required, including that by and from subcontractors, fabricators, materials suppliers and manufacturers, for verification of quality by Owner.
  - 5. Applicable provisions of the Contract Documents shall govern Contract Modifications, if any, resulting from such verification activities.
- G. Observations by Owner's Consultants: Periodic and occasional observations of Work in progress will be made by Owner and Owner's consultants as deemed necessary to review progress of Work and general conformance with design intent.
- H. Limitations on Inspection, Test, and Observation: Neither employment of independent testing and inspection agency nor observations or tests by Owner and Owner's consultants shall in any manner relieve Contractor of obligation to perform Work in full conformance to all requirements of Contract Documents.
- I. Owner's Acceptance and Rejection of Work: Owner reserves the right to reject all Work not in conformance with the requirements of the Drawings and Specifications, or otherwise Defective.
- J. Correction of Defective Work: Defective Work shall be modified, replaced, repaired or redone by the Contractor at no change in Contract Sum or Contract Time.
- K. Acceptance of Defective Work: Acceptance of Defective Work, without specific written acknowledgement and approval of Owner, shall not relieve the Contractor of the obligation to correct such Work.
- L. Contract Adjustment for Defective Work: Should Owner determine that it is not feasible or in Owner's interest to require Defective Work to be repaired or replaced, an equitable reduction in Contract Sum shall be made by agreement between Owner and Contractor. If equitable amount cannot be agreed upon, a Construction Change Directive will be issued and the amount in dispute resolved in accordance with applicable provisions of Document 00700 (General Conditions).
- M. Non-Responsibility for Defective Work: Owner and Owner's consultants disclaim any and all responsibility for Work produced not in conformance with the Drawings and Specifications.
- N. Responsibility for Defective Work: Contractor shall have full responsibility for all consequences resulting from Defective Work, including without limitation all delays, disruptions, extra inspection and correction costs by Contractor and Owner and re-Work, and extra time and costs of all types. Contractor waives excuses for Defective Work relating to Owner's prior review of Submittals and/or prior failure to notice Defective Work in place on inspection.

**1.4 INSPECTIONS AND TESTS BY GOVERNING AUTHORITIES**

- A. Regulatory Requirements for Testing and Inspection: Comply with CBC requirements and all other requirements of governing authorities having jurisdiction.
- B. Inspections and Tests by Governing Authorities: Cause all tests and inspections required by governing authorities having jurisdiction to be made for Work under this Contract.
  - 1. Such authorities may include, but are not limited to PRMD, Fire Department, and similar agencies.
  - 2. Except as specifically noted, scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.

**1.5 INSPECTIONS AND TESTS BY SERVING UTILITIES**

- A. Inspections and Tests by Serving Utilities: Cause all tests and inspections required by serving utilities to be made for Work under this Contract. Scheduling, conducting, and paying for such inspections shall be solely the Contractor's responsibility.

**1.6 INSPECTIONS AND TESTS BY MANUFACTURER'S REPRESENTATIVES**

- A. Inspections and Tests by Manufacturer's Representatives: Cause all tests and inspections specified to be conducted by materials or systems manufacturers to be made. Additionally, all tests and inspections required by materials or systems manufacturers as conditions of warranty or certification of Work shall be made, the cost of which shall be included in the Contract Sum.

**1.7 TESTS AND INSPECTIONS BY OWNER OR OWNER'S INDEPENDENT TESTING AND INSPECTION AGENCY**

- A. Owner may conduct or Owner may select an independent testing and inspection agency or agencies to conduct tests and inspections as indicated on Drawings, in Specifications, and as required by governing authorities having jurisdiction.
- B. Responsibility for payment for such tests and inspections shall be as indicated in paragraph 1.7D below. All time and costs for Contractor's service related to such tests and inspections shall be included in Contract Time and Contract Sum.
- C. Contractor shall pay for all additional charges by testing and inspection agencies and governing authorities having jurisdiction due to the following:
  - 1. Contractor's failure to properly schedule or notify testing and inspection agency or authorities having jurisdiction.
  - 2. Changes in sources, lots, or suppliers of products after original tests or inspections.
  - 3. Changes in means, methods, techniques, sequences, and procedures of construction that necessitate additional testing, inspection, and related services.
  - 4. Changes in mix designs for concrete and mortar after review and acceptance of submitted mix design.
  - 5. Contractor-submitted requests to change materials or products, which are accepted, but require testing and/or reinspection beyond original design.
- D. In addition to tests to be performed by Contractor (and to be paid by Contractor) as required elsewhere in Contract Documents, tests and special inspections that may be performed by Owner or Owner's independent testing and inspection agency or agencies and paid by Owner include, but are not limited to, the following:

<u>SECTION</u>	<u>TESTS</u>
02315	Compaction
02315	Gradation
02590	Gradation

- E. Owner may perform tests at any time at its discretion.
- F. California Test Method No. 216 (Relative Compaction of Untreated and Treated Soils and Aggregates) and 231 (Relative Compaction of Untreated/Treated Soils and Aggregates [Area Concept Utilizing Nuclear Gauges]) may be modified as follows:
  - 1. In lieu of the specified 10-pound hammer, a Test Lab Model No. F-590 Mechanical Compactor (or equal) with a 10-pound hammer will be used.
  - 2. In lieu of the specified split cylindrical mold, a non-split cylindrical mold of the same diameter and wall thickness will be used.
  - 3. Any of the provisions of Test Method No. 216 which conflict with the use of such equipment described in (1) and (2) are considered void to the extent they preclude the use of such equipment.
  - 4. In lieu of the specified test form, an Owner standard form will be used.
  - 5. Correction for oversize material may be obtained from a table based upon the given equations and the coefficient for +3/4-inch aggregate will be computed from the following formulae:
    - $Y = 1.0$  for  $P = 10$  to  $20$
    - $Y = 1.0 - .002 (P - 20)$  for  $P = 20$  to  $50$
 where:
    - $Y =$  coefficient for 3/4" aggregate
    - $P =$  percent retained on 3/4" screen
  - 6. In lieu of the sand cone method of determination of in-place density, the method described in Part 1 of California Test Method 231 will be used except that the mode of operation and the probe depth will be determined by Owner.
  - 7. In-place density and relative compaction will be determined on the basis of individual test sites in lieu of the area concept.
- G. Test and Inspection Reports: After each inspection and test by an independent testing and inspection agency or agencies, one copy of report shall be promptly submitted to Owner, who will distribute copies to Contractor and any agency having jurisdiction (if required by Code).
  - 1. Reports shall clearly identify the following:
    - a. Date issued.
    - b. Project name and number.
    - c. Identification of product and Specifications Section in which Work is specified.
    - d. Name of inspector.
    - e. Date and time of sampling or inspection.
    - f. Location in Project where sampling or inspection was conducted.
    - g. Type of inspection or test.
    - h. Date of test.
    - i. Results of tests.
    - j. Comments concerning conformance with Contract Documents and other requirements.

2. Test reports shall indicate specified or required values and shall include statement whether test results indicate satisfactory performance of products.
3. Samples taken but not tested shall be reported.
4. Test reports shall confirm that methods used for sampling and testing conform to specified test procedures.
5. When requested, testing and inspection agency shall provide interpretations of test results.

H. Contractor Responsibilities for Inspections and Tests:

1. Unless specified otherwise, notify Owner and testing agency 72 hours in advance of expected time of each test and inspection, and for all other operations requiring inspection and testing services, by submitting Contractor's inspection request in writing (or, if Owner provides a specific form, on that form).
  - a. When tests or inspections cannot be performed after such notice, due to Contractor's negligence, reimburse Owner for testing and inspection agency personnel and travel expenses incurred.
2. Deliver to laboratory or designated location, adequate samples of materials proposed to be used that require advance testing, together with proposed mix designs.
3. Cooperate with testing and inspection agency personnel, Owner, and Owner's consultants. Provide access to Work areas and off-Site fabrication and assembly locations, including during weekends and after normal Work hours.
4. Provide incidental labor and facilities to provide safe access to Work to be tested and inspected, to obtain and handle Samples at the Site or at source of products to be tested, and to store and cure test Samples.
5. Provide, at least 15 Days in advance of first test or inspection of each type, a schedule of tests or inspections indicating types of tests or inspections and their scheduled dates.

## 1.8 ADDITIONAL TESTING AND INSPECTION

- A. If initial tests or inspections made by Owner or the testing and inspection agency reveal that materials do not comply with Contract Documents, or if Owner has reasonable doubt that materials do not comply with Contract Documents, additional tests and inspections shall be made as directed.
1. If additional tests and inspections establish that materials comply with Contract Documents, Owner shall pay all costs for such tests and inspections.
  2. If additional tests and inspections establish that materials do not comply with Contract Documents, all costs of such tests and inspections shall be deducted from Contract Sum.
  3. If Work requiring inspection is covered by follow-on or follow-up Work before it is inspected, uncover Work so proper inspections can be performed. All costs of such tests and inspections shall be deducted from Contract Sum.

## PART 2 PRODUCTS - NOT USED

## PART 3 EXECUTION - NOT USED

END OF SECTION



SECTION 01500

**TEMPORARY FACILITIES AND CONTROLS**

**PART 1 GENERAL**

**1.1 SUMMARY**

- A. Section Includes:
  - 1. Temporary Electricity
  - 2. Temporary Telephone
  - 3. Temporary Water
  - 4. Temporary Sanitary Facilities
  - 5. Temporary Barriers and Enclosures
  - 6. Tree and Plant Protection
  - 7. Water Control
  - 8. Noise Control
- B. Ensure to Owner that all construction equipment and vehicles used for the Work are equipped with properly installed engine mufflers where applicable.
  - 1. Storm Water Pollution Prevention Plan
  - 2. Removal of Temporary Facilities and Controls

**1.2 DEFINITIONS**

- A. Dripline: The area on the ground from the trunk of any tree to the point directly below the outermost tips of the foliage of that tree.
- B. Tree damage: Tree damage shall include, but not be limited to, the following: significant injury to the root system or other parts of a tree including burning, application of toxic substances, damaging through contact with equipment or machinery, changing the natural grade within the dripline, compacting the soil within the dripline, interfering with the normal water requirements of the tree, unauthorized trenching or excavating within the dripline, or unauthorized removal of more than 1/3 of the live wood, foliage, or roots.

**1.3 TEMPORARY ELECTRICITY**

- A. Provide, maintain, and pay for electrical power at the Site for construction purposes.

**1.4 TEMPORARY TELEPHONE**

- A. Provide, maintain, and pay for telephone service to field office at time of Project mobilization.

**1.5 TEMPORARY WATER**

- A. Provide, maintain, and pay for suitable quality water service required for construction operations.

**1.6 TEMPORARY SANITARY FACILITIES**

- A. Provide and maintain required temporary buildings with sanitary toilets for use of all workers.
- B. Comply with all minimum requirements of the Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.

## 1.7 TEMPORARY BARRIERS AND ENCLOSURES

- A. Provide barriers to prevent unauthorized entry to construction areas, to allow for Owner's use of Site, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades required by governing authorities to control public access to existing buildings.
- C. Protect vehicular traffic, stored materials, Site, and structures from damage.
- D. Provide temporary construction fence as indicated.

## 1.8 TREE AND PLANT PROTECTION

- A. Owner will designate trees that are to be removed or preserved in staging areas, along access routes, or where construction is to be performed. Under no circumstances are additional trees to be removed without written permission from Owner.
- B. Trees and shrubbery that are not to be removed shall be protected from injury or damage within the dripline resulting from Contractor's operations.
- C. No storage of materials or equipment will be allowed within the dripline
- D. Exposure to harmful substances: No storage or dumping of any substances that may be harmful to trees shall occur at any location on the Site.
- E. Limb Protection: Choose equipment and execute work in a manner that will minimize removal or damage to overhanging tree branches. Remove limbs only when directed by Owner. Prune or remove limbs, if authorized, in accordance with ANSI A300. Owner will provide a copy of the guidelines upon request. "Heading" of any tree will not be permitted.
- F. All damage to trees designated for preservation shall be immediately reported to Owner, who will file a report so that penalties may be determined.
- G. For any tree that is removed without Owner's permission or is irreparably damaged, in the opinion of Owner, Owner may elect to pursue any of the following remedies in its sole discretion:
  - 1. Require Contractor to repair by pruning, if possible, or replace trees not intended for removal. Whether or not a tree can be repaired by pruning will be determined by Owner. Subsequent pruning, if appropriate, shall be conducted by a Certified Arborist at Contractor's expense.
  - 2. Require Contractor to remove trees that cannot be repaired by pruning, and replace with new trees of minimum 4 inch caliper.
  - 3. Assess money damages in the amount of \$27.00 per square inch of cross section, measured at 4 1/2 feet above ground, but not less than \$250.00, which damages shall be deducted from monies due or to become due under the Contract. If tree protection is not performed or is not performed adequately, and Owner determines that a tree has been irreparably damaged, Owner may assess the same damages as for unauthorized removal of a tree.

## 1.9 WATER CONTROL

- A. See Section 02240 (Control of Water) for information on water control.
- B. Grade Site to drain unless otherwise indicated or specified.
- C. Maintain excavations free of water.
- D. Protect Site from puddling or running water.
- E. Provide water barriers as required to protect Site from soil erosion.

**1.10 NOISE CONTROL**

- A. When required by OSHA Standards, construction workers shall be provided with ear protection to operate equipment.
- B. Ensure to Owner that all construction equipment and vehicles used for the Work are equipped with properly installed engine mufflers where applicable.

**1.11 STORM WATER POLLUTION PREVENTION PLAN**

- A. Prior to commencement of Work at the Site, obtain Owner approval on a Storm Water Pollution Prevention Plan (SWPPP) prepared in accordance with:
  - 1. The Caltrans Storm Water Quality Handbooks:
    - a. Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual; and
    - b. Construction Site Best Management Practices (BMPs) Manual.
  - 2. State Water Resources Control Board (SWRCB), Order No. -2009-0009 - DWQ, National Pollutant Discharge Elimination System (NPDES), General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). The permit is available at Owner's office or is available online at: [http://www.swrcb.ca.gov/water\\_issues/programs/stormwater/constpermits.shtml](http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits.shtml). The requirements of this order replace and supersede State Water Board Orders No 99-08-DWQ and 2003-0007-DWQ.
- B. Develop and implement a monitoring program in accordance with the requirements of the General Permit to verify compliance with the General Permit.
- C. Submit SWPPP to Owner for review in accordance with Section 01330 (Submittal Procedures). Provide the SWPPP to Owner prior to commencement of Work at the Site.
- D. The SWPPP shall include all of the requirements in paragraphs 1.12A, 1.12B, and 1.12C of this Section 01500. Particular attention shall be paid to:
  - 1. Site Map
  - 2. Locations of all equipment and materials storage
  - 3. Location and containment for fueling area, construction entrances, and concrete washouts
  - 4. Locations of all other staging areas, stockpile areas, and disposal sites.
  - 5. Location of sanitation facilities
  - 6. All erosion and sediment control BMPs, as well as non-storm water BMPs
  - 7. Dewatering plan
- E. Water Pollution Control Drawings shall be of sufficient size and scale to detail BMP locations. Remove all extraneous information from the base sheets to improve clarity, including geometric equations, notes, details, and all data not related to water pollution control work. Use a copy of the appropriate Drawing(s) as a base sheet(s) with the pertinent stage of construction drawn in as an overlay to accurately reflect Site conditions at various phases of construction. Provide enlarged detail mapping as necessary to detail BMP locations.
- F. Revise and update the SWPPP whenever there is a change in construction operations that may affect the Site drainage patterns or discharge of pollutants to surface waters, groundwaters, or a separate municipal storm sewer system.
- G. Failure to fully comply with the requirements of the General Permit shall subject Contractor to all fines, damages, and job delays incurred due to failure to implement the SWPPP.
- H. Keep a copy of the General Permit, together with updates and revisions at the Site. Furnish SWPPP to Owner upon Owner's request.

**1.12 REMOVAL OF TEMPORARY FACILITIES AND CONTROLS**

- A. Remove temporary utilities, equipment, facilities, and materials prior to final inspection.
- B. Remove underground installations to a minimum depth of.
- C. Clean and repair damage caused by installation or use of temporary Work.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION

## SECTION 01540

**SITE SECURITY AND SAFETY****PART 1 GENERAL****1.1 SUBMITTALS**

- A. Safety Program.
- B. Fire Protection Plan.

**1.2 PROTECTION**

- A. Continuously maintain protection as necessary to protect the Work, as a whole and in part, and adjacent property and improvements from accidents, injuries or damage.
- B. Properly protect the Work:
  - 1. With lights, guard rails, temporary covers and barricades.
  - 2. Enclose excavations with proper barricades.
  - 3. Brace and secure all parts of the Work against storm and accident.
  - 4. Provide such additional forms of protection that may be necessary under existing circumstances.
- C. Provide and maintain in good condition all protective measures required to adequately protect the public from hazards resulting from the Work and to exclude unauthorized persons from the Work. When regulated by Building Code, Cal OSHA, or other authority, such legal requirements for protection shall be considered as minimum requirements. Be responsible for the protection in excess of such minimum requirements as required.

**1.3 CONTROL OF SITE**

- A. Ensure that no alcohol, firearms, weapons, or controlled substance enters or is used at the Site. Immediately remove from the Site and terminate the employment of any employee found in violation of this provision.

**1.4 SAFETY PROGRAM**

- A. Prior to starting any Work at the Site, submit a Safety Program that has been reviewed and approved by an Industrial Hygienist certified by the American Board of Industrial Hygiene or by a Certified Safety Professional. The Safety Program shall include the name, certification number, and certification seal of the Industrial Hygienist or Certified Safety Professional. Comply with the Safety Program and all applicable federal, state, and local regulation codes, rules, law and ordinances.
- B. Receipt and/or review of the Safety Program by Owner, Engineer or Owner's Representative shall not relieve Contractor of any responsibility for complying with all applicable safety regulations.
- C. It is essential that Contractor and each Subcontractor implement an effective and vigorous Safety and Health Program to cover their respective portions of the Work. Subject to Contractor's overall responsibility for Project safety, it shall be understood that the full responsibility for providing a safe place to work with respect to their respective portions of the Work rests with each individual Contractor and Subcontractor.
- D. Safety Program components:
  - 1. Injury and Illness Prevention Program (IIPP): Conforming to the General Industrial Safety Orders (CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 3203), and the California Labor Code (Section 6401.7).

2. Site-Specific Safety and Health Plan (SSHP): Describing health and safety procedures that shall be implemented during the Work in order to ensure safety of the public and those performing the Work. Follow the guidelines for a SSHP listed in CCR Title 8, Division 1, Chapter 4, Subchapter 7, Section 5192, Item (b)(4) f.
- E. The wearing of hard hats shall be mandatory at all times for personnel on Site. Supply sufficient hard hats to equip properly all employees and visitors.
- F. Whenever an exposure exists, appropriate personal protective equipment (PPE) shall be used by all affected personnel. Supply PPE to all personnel under Contractor's direction.

## 1.5 SAFETY REQUIREMENTS

- A. Standards: Maintain the Project in accordance with state and local safety and insurance standards.
- B. Hazards Control:
  1. Store volatile wastes in covered metal containers and remove from premises daily.
  2. Prevent accumulation of wastes that create hazardous conditions.
  3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
  1. Do not burn or bury rubbish or waste material on the Site.
  2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
  3. Do not dispose of wastes into streams or waterways.
- D. Provide accident information on the forms provided by Contractor. This information shall be provided on the same Day as the occurrence of said incident.

## 1.6 SITE SAFETY OFFICER

- A. Designate one of Contractor's staff as "Site Safety Officer" whose duties shall include the responsibility for enforcing the environmental protection provisions of the Contract Documents including safety and health, the requirements of the Occupational Safety and Health Act, and other applicable federal, state and local standards. Submit for review by Owner Contractor's intended traffic flow plan, security plan, program for temporary structures, housecleaning plan, demolition program, and environmental safety and health plan. After review by Owner, the implementation and enforcement of these plans shall become the responsibility of the Site Safety Officer. Any changes in the plans shall be requested by Contractor through the Site Safety Officer for written concurrence by Owner.
- B. Owner's risk management representative(s) shall be allowed access to accident/injury and illness reports, inspection reports, scheduling and construction meetings, and safety meetings.

## 1.7 FIRE PROTECTION PLAN

- A. Prior to starting any Work at the Site, submit a fire protection plan that has been reviewed and approved by the County of Sonoma Fire and Emergency Services Department. It is recommended that the plan include, but not be limited to, a discussion of the following items:
  1. Equipment spark arresters
  2. Fire-extinguishing equipment on hand
  3. Method of operation in case of fire
  4. Notification to authorities of any fire
  5. Access available during performance of Work

6. Educating workers of fire protection plan
7. Storage protection for flammable materials

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION



## SECTION 01600

**PRODUCT REQUIREMENTS****PART 1 GENERAL****1.1 SECTION INCLUDES**

- A. Products
- B. Product Options and Substitutions
- C. Product Delivery Requirements
- D. Product Storage and Handling

**1.2 PRODUCTS**

- A. Products: New material, machinery, components, equipment, fixtures, and systems forming the Work. Does not include machinery and equipment used for preparation, fabrication, conveying, and erection of the Work. Products may also include existing materials or components required for reuse.
- B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
- C. For similar components, provide interchangeable components of the same manufacturer.

**1.3 PRODUCT OPTIONS AND SUBSTITUTIONS**

- A. Summary:
  - 1. This paragraph 1.3 describes procedures for selecting products and requesting substitutions of unlisted materials in lieu of materials named in the Specifications or approved for use in Addenda that were not already the subject of a Document 00660 (Substitution Request Form) submittal as provided in Document 00200 (Instructions to Bidders).
- B. For products specified by naming one manufacturer only, Owner believes that the manufacturer listed is capable of producing equipment or products that will satisfy the requirements of the associated Specification. This statement, however, shall not be construed as an endorsement of a particular manufacturer's product, nor shall it be construed that a named manufacturer's standard product will comply with the requirements of the associated Specification. In such cases, the Owner is not aware of an equal manufacturer.
- C. Contractor's Options:
  - 1. For products specified only by reference standard: Select any product meeting that standard.
  - 2. For products specified by naming one or more products or manufacturers:
    - a. Select products of any named manufacturer meeting Specifications.
    - b. If product becomes unavailable due to no fault of Contractor or if the product specified no longer complies with local regulations or laws, submit Request for Substitution (RFS), including all information contained in this Section 01600 and a fully executed Document 00660 (Substitution Request Form), but using the term "Contractor" each place the term "Bidder" appears in that form.
- D. Substitutions:
  - 1. Except as provided in Document 00200 (Instructions to Bidders) with respect to "or Approved Equal" items, Owner will consider Contractor's substitution requests only when product becomes unavailable due to no fault of Contractor or if the product

specified no longer complies with local regulations or laws. Requests for review of proposed substitute items will not be accepted from anyone other than Contractor. The RFS shall state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice Contractor's achievement of Substantial Completion on time, and whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for work on the Project).

2. Submit separate RFS for each product and support each request with:
  - a. Product identification.
  - b. Manufacturer's literature.
  - c. Samples, as applicable.
  - d. Name and address of similar projects on which product has been used, and dates of installation.
  - e. Name, address, and telephone number of manufacturer's representative or sales engineer.
  - f. For construction methods: Detailed description of proposed method; drawings illustrating methods.
3. Where required, itemize a comparison of the proposed substitution with product specified and list significant variations including, but not limited to dimensions, weights, service requirements, and functional differences. If variation from product specified is not pointed out in submittal, variation will be rejected even though submittal was favorably reviewed. Identify all variations of the proposed substitute from that specified in the RFS and indicate available maintenance, repair, and replacement service.
4. State whether the substitute will require a change in any of the Contract Documents (or provisions of any other direct contract with Owner for work on the Project) to adapt the design of the proposed substitute, and whether or not incorporation or use of the substitute in connection with Work is subject to payment of any license fee or royalty. Submit data relating to changes in construction schedule.
5. Include accurate cost data comparing proposed substitution with product and amount of net change in Contract Sum including, but not limited to, an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by Owner in evaluating the proposed substitute. Owner may require Contractor to furnish additional data about the proposed substitute.
6. Owner will not consider substitutions for acceptance (or, in Owner's sole discretion, Owner may make Contractor solely responsible for all resulting costs, expenses and other consequences) when a substitution:
  - a. Results in delay meeting construction Milestones or completion dates.
  - b. Is indicated or implied on submittals without formal request from Contractor.
  - c. Is requested directly by Subcontractor or supplier.
  - d. Acceptance will require substantial revision of Contract Documents.
  - e. Disrupts Contractor's job rhythm or ability to perform efficiently.
7. Substitute products shall not be ordered without written acceptance of Owner.
8. Owner will determine acceptability of proposed substitutions and reserve right to reject proposals due to insufficient information.
9. Accepted substitutions will be evidenced by a Change Order or a CCD. All Contract Document requirements apply to Work involving substitutions.

- E. Contractor's Representation and Warranty:
1. Contractor's RFS constitutes a representation and warranty that Contractor:
    - a. Has investigated proposed product and determined that it meets or exceeds, in all respects, specified product.
    - b. Will provide the same warranty for substitution as for specified product.
    - c. Will coordinate installation and make other changes that may be required for Work to be complete in all respects.
    - d. Waives claims for additional costs which may subsequently become apparent.
    - e. Will compensate Owner for additional redesign costs associated with substitution.
    - f. Will be responsible for Construction Schedule slippage due to substitution.
    - g. Will be responsible for Construction Schedule delay due to late ordering of available specified products caused by requests for substitution that are subsequently rejected by Owner.
    - h. Will compensate Owner for all costs; including extra costs of performing Work under Contract Documents, extra cost to other contractors, and any claims brought against Owner, caused by late requests for substitutions or late ordering of products.
- F. Owner's Duties:
1. Review Contractor's RFS with reasonable promptness.
  2. Notify Contractor in writing of decision to accept or reject requested substitution.
- G. Administrative Requirements:
1. Specified products, materials, or systems for Project may include engineering or on-file standards required by the regulatory agency. Contractor's substitution of products, materials or systems may require additional engineering, testing, reviews, approvals, assurances, or other information for compliance with regulatory agency requirements or both. Provide all agency approvals or other additional information required and pay additional costs for required Owner services made necessary by the substitution at no increase in Contract Sum or Contract Time, and as a part of substitution proposal.

#### **1.4 PRODUCT DELIVERY REQUIREMENTS**

- A. Deliver products in accordance with manufacturer's instructions.
- B. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

#### **1.5 PRODUCT STORAGE AND HANDLING**

- A. Store products only in staging area per provisions of Section 01100 (Summary).
- B. Handle, store, and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.
- C. For exterior storage of fabricated products, place on appropriate supports, above ground.
- D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
- E. Store loose granular materials on solid flat surfaces in a well-drained area.
- F. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- G. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION

## SECTION 01740

## CLEANING

## PART 1 GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Progress Cleaning
  - 2. Final Cleaning
- B. Related Sections:
  - 1. Section 01500 (Temporary Facilities and Controls)
  - 2. Section 02315 (Excavation and Fill)

## 1.2 PROGRESS CLEANING

- A. Perform periodic cleaning to ensure that any streets and other Owner and public properties are maintained free from accumulation of waste materials, dust, mud, and debris.
- B. Where required, wet down surfaces to lay dust and prevent the blowing of dust to nearby residences or public properties.
- C. Keep all paved roads clean and free of dust, mud, and debris resulting from Contractor's operations. Daily cleanup throughout the job will be necessary as Contractor progresses with its Work, but extra attention to cleanup shall be made prior to weekends and holidays. Without limiting the foregoing, remove trench spoil along traveled ways daily; grade and vacuum broom surfaces initially where applicable and later water flush with high-pressure sprays, being careful to avoid downstream contamination.
- D. All dust, mud, spoils, and construction debris shall be removed daily from all roadways, ditches, shoulders, and private property (fills or spoils placed on private property at private property owner's written request excepted).
- E. Disposal of Materials:
  - 1. All waste materials, debris, and rubbish shall be disposed of at sites to be chosen by Contractor in accordance with applicable local, state, and federal regulations.
  - 2. Contractor is cautioned that the County of Sonoma and cities within the county have regulations governing the disposal of rubble, broken pavement, and similar materials.
  - 3. Become familiar with the requirements of the agency having jurisdiction over any contemplated disposal site and comply with all such requirements.
- F. All excess soil from performance of Work shall be disposed at sites to be chosen by Contractor in accordance with applicable local, state, and federal regulations, and, if applicable, in accordance with Contractor's soil disposal plan. If Contractor elects to dispose of soil on any private property, prior to any such disposal, a letter allowing such disposal shall be obtained from the property owner and presented to Owner. The letter shall state that the property owner has complied with all necessary local, state, and federal laws with respect to disposal on property owner's property. Contractor is advised that the property owner is required to obtain a fill permit from PRMD. Regardless of the location of the disposal area, Contractor shall specify the location in the Storm Water Pollution Prevention Plan (SWPPP) if required under Section 01500 (Temporary Facilities and Controls). Any requirements in the SWPPP that pertain to the area of Work shall also apply to the disposal area. In addition, placement of fill in wetland areas is subject to permit procedures of the US Army Corps of Engineers. At the completion of Work, a letter from

each affected property owner will be required releasing Contractor, Owner, and any Owner consultant from future liability.

- G. If Contractor does not properly clean the Site, in the opinion of Owner, then Owner shall have the option of using outside equipment to perform the cleanup and such cost will be withheld from the Contract Sum.

### **1.3 FINAL CLEANING**

- A. Execute final cleaning prior to final inspection, using only properly skilled workers.
- B. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from exposed interior and exterior finished surfaces.
- C. Repair, patch, and touch up marred surfaces to match adjacent finishes.
- D. Clean interior and exterior surfaces exposed to view: remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- E. Clean equipment and fixtures to a sanitary condition, clean or replace filters of mechanical equipment operated during construction, clean ducts, blowers and coils of units operated without filters during construction.
- F. Clean Site.
- G. Mechanically sweep paved areas.
- H. Remove waste and surplus materials, rubbish, and construction facilities from Site.

### **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION - NOT USED**

END OF SECTION

SECTION 01741

**CONSTRUCTION MATERIAL WASTE MANAGEMENT PLAN**

**PART 1 GENERAL**

**1.1 CONSTRUCTION MATERIAL WASTE MANAGEMENT PLAN**

- A. Submit Construction Material Waste Management Plan that includes, but is not limited to:
  - 1. Management monitoring program that includes, at a minimum, multiple recyclables containers. Goal is to divert 75 percent of materials waste to recycling instead of landfill. This applies only to materials that would typically be disposed via dumpster.
  - 2. Current recycling program used by each material supplier for materials listed in Divisions 1-16.
  - 3. Estimate of on-Site material reuse (native fill) in tons.
  - 4. Completed Self-Certification of Compliance for Contractor and each listed Subcontractor. Self-Certification of Compliance form is included at the end of this Section 01741.
- B. Submit monthly progress reports updated with waste management log that includes which material containers have been removed, how many have been removed, and the weight of those containers.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION



**SELF-CERTIFICATION OF COMPLIANCE WITH  
CONSTRUCTION MATERIAL WASTE PLAN**

Firm Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

Principal Service or Product: \_\_\_\_\_

\_\_\_\_\_

Prime Contractor

Supplier of Material/Service

Subcontractor

Broker

\_\_\_\_\_

Sole Ownership

Corporation

Partnership

Joint Venture

I, Contractor/Subcontractor, hereby certify that I have read and understood, and agree to adopt and implement, the approved Construction Waste Management Plan for the **Dry Creek Habitat Enhancement Demonstration Project, Phase II.**

Certified by:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



## SECTION 01770

## CONTRACT CLOSEOUT

**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
1. Description of Contract closeout procedures including:
    - a. Removal of Temporary Construction Facilities
    - b. Substantial Completion
    - c. Final Completion
    - d. Project Record Documents
    - e. Project Guarantee
    - f. Warranties
    - g. Turn-In
    - h. Computer Programs
    - i. Release of Claims
    - j. Fire Inspection Coordination
    - k. Building Inspection Coordination

**1.2 REMOVAL OF TEMPORARY CONSTRUCTION FACILITIES**

- A. Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities.
- C. Restore permanent facilities used during construction to specified condition.
- D. Comply with paragraph 1.13 of Section 01500 (Temporary Facilities and Controls).

**1.3 SUBSTANTIAL COMPLETION**

- A. When Contractor considers Work or designated portion of the Work as Substantially Complete, submit timely written notice to Owner, with list of items remaining to be completed or corrected.
- B. Within reasonable time, Owner will inspect to determine status of completion.
- C. Should Owner determine that Work is not Substantially Complete, Owner will promptly notify Contractor in writing, listing all defects and omissions.
- D. Remedy deficiencies and send a second written notice of Substantial Completion. Owner will reinspect the Work. If deficiencies previously noted are not corrected on reinspection, then Contractor shall pay the cost of the reinspection.
- E. When Owner concurs that Work is Substantially Complete, Owner will issue a Certificate of Substantial Completion, accompanied by Contractor's list of items to be completed or corrected as verified by Owner.
- F. A punch list examination will be performed upon Substantial Completion. One follow-up review of punch list items for each discipline will be provided. If further Site visits are required to review punch list items due to incompleteness of the Work by Contractor, Contractor shall reimburse Owner for costs associated with these visits.

**1.4 FINAL COMPLETION**

- A. Final Completion occurs when Work meets requirements for Owner's Final Acceptance. When Contractor considers Work is Finally Complete, submit written certification that:

1. Contractor has inspected Work for compliance with Contract Documents, and all requirements for Final Acceptance have been met.
  2. Except for Contractor maintenance after Final Acceptance, Work has been completed in accordance with Contract Documents and deficiencies listed with Certificate of Substantial Completion have been corrected. Equipment and systems have been tested in the presence of Owner, and are operative.
  3. Work is complete and ready for final inspection.
- B. In addition to submittals required by Contract Documents, provide submittals required by governing authorities and submit final statement of accounting giving total adjusted Contract Sum, previous payments, and sum remaining due.
- C. When Owner finds Work is acceptable and final closeout submittals are complete, Owner will issue final Change Order reflecting approved adjustments to Contract Sum not previously made by Change Order. Should Owner determine that Work is incomplete or Defective:
1. Owner promptly will so notify Contractor, in writing, listing the incomplete or Defective items.
  2. Promptly remedy the deficiencies and notify the Owner when it is ready for reinspection.
  3. When Owner determines that the Work is acceptable under the Contract Documents, Owner will request Contractor to make closeout submittals.
- D. Final adjustments of accounts:
1. Submit a final statement of accounting to Owner, showing all adjustments to the Contract Sum and complete and execute Document 00650 (Agreement and Release of Any and All Claims).
  2. If so required, Owner shall prepare a final Change Order for submittal to Contractor, showing adjustments to the Contract Sum that were not previously made into a Contract Modification.

## 1.5 PROJECT RECORD DOCUMENTS

- A. Contract Documents will not be closed out and final payment will not be made until completion and submittal of Project Record Documents described in Section 01780 (Project Record Documents).

## 1.6 PROJECT GUARANTEE

- A. Requirements for Contractor's guarantee of completed Work are included in Article 9 of Document 00700 (General Conditions). Guarantee Work done under Contract against failures, leaks, or breaks or other unsatisfactory conditions due to defective equipment, materials, or workmanship, and perform repair work or replacement required, at Contractor's sole expense, for period of one year from date of Final Acceptance.
- B. Neither recordation of Final Acceptance nor final certificate for payment nor provision of the Contract nor partial or entire use or occupancy of premises by Owner shall constitute acceptance of Work not done in accordance with Contract Documents nor relieve Contractor of liability in respect to express warranties or responsibility for faulty materials or workmanship.
- C. Owner may make repairs to Defective Work as set forth in Document 00700 (General Conditions), paragraph 9.3.
- D. If, after installation, operation, or use of materials or equipment to be provided under Contract proves to be unsatisfactory to Owner, Owner shall have right to operate and use materials or equipment until said materials and equipment can, without damage to Owner,

be taken out of service for correction or replacement. Period of use of Defective materials or equipment pending correction or replacement shall in no way decrease guarantee period required for acceptable corrected or replaced items of materials or equipment.

- E. Nothing in this Section 01770 shall be construed to limit, relieve, or release Contractor's, Subcontractors', and equipment suppliers' liability to Owner for damages sustained as result of latent defects in equipment caused by negligence of suppliers' agents, employees, or Subcontractors. Stated in another manner, warranty contained in the Contract Documents shall not amount to, nor shall it be deemed to be, waiver by Owner of any rights or remedies (or time limits in which to enforce such rights or remedies) it may have for Defective workmanship or Defective materials under laws of this State pertaining to acts of negligence.

## 1.7 WARRANTIES

- A. Execute Contractor's Submittals and assemble warranty documents and operation and maintenance manuals executed or supplied by Subcontractors, suppliers, and manufacturers.
1. Provide table of contents and assemble in 8½ inches by 11 inches three-ring binder with durable plastic cover, appropriately separated and organized.
  2. Assemble in Specification Section order.
- B. Submit material prior to final Application for Payment.
1. For equipment put into use with Owner's permission during construction, submit within 14 Days after first operation.
  2. For items of Work delayed materially beyond Date of Substantial Completion, provide updated Submittal within 14 Days after acceptance, listing date of acceptance as start of warranty period.
- C. Warranties are intended to protect Owner against failure of Work and against deficient, Defective, and faulty materials and workmanship, regardless of sources.
- D. Limitations: Warranties are not intended to cover failures that result from the following:
1. Unusual or abnormal phenomena of the elements
  2. Vandalism after Substantial Completion
  3. Insurrection or acts of aggression including war
- E. Related Damages and Losses: Remove and replace Work which is damaged as result of Defective Work, or which must be removed and replaced to provide access for correction of warranted Work.
- F. Warranty Reinstatement: After correction of warranted Work, reinstate warranty for corrected Work to date of original warranty expiration or to a date not less than one year after corrected Work was done, whichever is later.
- G. Replacement Cost: Replace or restore failing warranted items without regard to anticipated useful service lives.
- H. Warranty Forms: Submit drafts to Owner for approval prior to execution. Forms shall not detract from or confuse requirements or interpretations of Contract Documents.
1. Warranty shall be countersigned by manufacturers.
  2. Where specified, warranty shall be countersigned by Subcontractors and installers.
- I. Rejection of Warranties: Owner reserves right to reject unsolicited and coincidental product warranties that detract from or confuse requirements or interpretations of Contract Documents.

- J. Term of Warranties: For materials, equipment, systems, and workmanship, warranty period shall be one year minimum from date of Final Completion of entire Work except where:
  - 1. Detailed Specifications for certain materials, equipment or systems require longer warranty periods.
  - 2. Materials, equipment or systems are put into beneficial use of Owner prior to Final Completion as agreed to in writing by Owner.
- K. Transfer of Warranties: Any warranty shall automatically transfer, without charge, to a subsequent owner who acquires the Project. Any transfer of the Project shall not extend the duration of any warranty.
- L. Warranty of Title: No material, supplies, or equipment for Work under Contract shall be purchased subject to any chattel mortgage, security agreement, or under a conditional sale or other agreement by which an interest therein or any part thereof is retained by seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver premises, together with improvements and appurtenances constructed or placed thereon by Contractor, to Owner free from any claim, liens, security interest, or charges, and further agrees that neither Contractor nor any person, firm, or corporation furnishing any materials or labor for any Work covered by Contract shall have right to lien upon premises or improvement or appurtenances thereon. Nothing contained in this paragraph, however, shall defeat or impair right of persons furnishing materials or labor under bond given by Contractor for their protection or any rights under law permitting persons to look to funds due Contractor in hands of Owner.

## **1.8 TURN-IN**

- A. Contract Documents will not be closed out and final payment will not be made until all keys and locks issued to Contractor during prosecution of Work and letters from property owners, if required under paragraph 1.2.F of Section 01740 (Cleaning), are turned in to Owner.

## **1.9 COMPUTER PROGRAMS - NOT USED**

### **1.10 RELEASE OF CLAIMS**

- A. Contract Documents will not be closed out and final payment will not be made until Document 00650 (Agreement and Release of Any and All Claims) is completed and executed by Contractor and Owner.

### **1.11 FIRE INSPECTION COORDINATION**

- A. Coordinate fire inspection and secure sufficient notice to Owner to permit convenient scheduling (if applicable).

### **1.12 BUILDING INSPECTION COORDINATION**

- A. Coordinate with Owner a final inspection for the purpose of obtaining an occupancy certificate (if applicable).

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION



## SECTION 01780

**PROJECT RECORD DOCUMENTS****PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
  - 1. Administrative and procedural requirements for the following Project Record Documents:
    - a. Project Record Drawings and Shop Drawings
    - b. Project Record Specifications
    - c. Miscellaneous Project Record Submittals
- B. Specific Project Record Documents requirements that expand requirements of this Section may be included in the individual Sections of Divisions 2 through 16.

**1.2 SUBMITTAL**

- A. During construction, bring hard-copy updates of the Project Record Drawings (Field Set) to monthly Progress Payment Meetings.
- B. At completion of Project, deliver Project Record Documents to Owner. Project Record Documents required include:
  - 1. Marked-up copies of Drawings (Field Set)
  - 2. Final Project Record Drawings
  - 3. Marked-up copies of Specifications
  - 4. Marked-up copies of Shop Drawings, if applicable
  - 5. Miscellaneous Project Record Submittals
- C. Accompany submittal with transmittal letter containing:
  - 1. Date
  - 2. Project title and Owner's Contract number
  - 3. Contractor's name and address
  - 4. Number and title of each Project Record Document
  - 5. Certification that each document as submitted is complete and accurate, and signature of Contractor or Contractor's authorized representative.

**1.3 GENERAL**

- A. Prior to start of construction, Owner will provide one full size set of Drawings and one copy of the Project Manual for Contractor's use for recording as-built conditions.
- B. Post changes and Modifications to the Contract Documents as they occur. Do not wait until the end of the Project. Owner will review Project Record Documents on a monthly basis to assure compliance with this requirement.
- C. Refer instances of uncertainty to Owner for resolution.
- D. Maintenance of Documents:
  - 1. Store Project Record Documents in the field office apart from Contract Documents used for construction.
  - 2. Do not permit Project Record Documents to be used for construction purposes.
  - 3. Maintain Project Record Documents in good order and in a clean, dry, neat, and legible condition.
  - 4. Make Project Record Documents available at all times for inspection by Owner.

## 1.4 PROJECT RECORD DRAWINGS AND SHOP DRAWINGS

- A. Quality Draftsmanship: Project Record Drawings and Project Record Shop Drawings shall be prepared by competent drafters and shall be clear and fully legible. Owner shall be the sole judge of the acceptability of the Project Record Drawings and Project Record Shop Drawings.
- B. Mark-up Procedure: During the construction period, maintain a set of full size prints of Drawings and Shop Drawings for Project Record Documents purposes ("Field Set"). Stamp each document (on each sheet or page) "PROJECT RECORD" in 2-inch high letters. Keep record documents current. Note: A reference by number to a Change Order, CCD, RFI, RFQ, RFP, Field Order or other such document is not acceptable as sufficient record information on any record document. Do not permanently conceal any Work until required information has been recorded.
1. Mark Drawings and Shop Drawings to indicate the actual installation where the installation varies appreciably from the installation shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:
    - a. Dimensional changes to the Drawings and Shop Drawings
    - b. Revisions to details shown on the Drawings and Shop Drawings
    - c. Depths of various elements of foundation in relation to main floor level or survey datum
    - d. Variable or concealed field conditions
    - e. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements
    - f. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure
    - g. Locations of underground Work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub outs, invert elevations, and similar items
    - h. Actual numbering and set points of each electrical circuit
    - i. Field changes of dimension and detail
    - j. Revisions to routing of piping and conduits
    - k. Revisions to electrical circuitry
    - l. Actual equipment locations
    - m. Duct, conduit, and cable size and routing
    - n. Changes made by Change Order or CCD
    - o. Details not on original Drawings or Shop Drawings
  2. Mark completely and accurately Drawings or Shop Drawings, whichever is the most capable of showing actual physical conditions. Where Shop Drawings are marked, show cross-reference on Drawings location.
  3. Mark important additional information that was either shown schematically or omitted from original Drawings.
  4. Use revision block to record information related to the mark-ups, including CCD numbers; Alternate numbers, Change Order numbers, and similar identification.
  5. Mark Drawing and Shop Drawing sets with red, erasable colored pencil.
  6. Responsibility for Mark-up: Where feasible, the individual or entity who obtained Project Record Drawing or Shop Drawing data, whether the individual or entity is the installer, Subcontractor, or similar entity, is required to prepare the mark-up on Project Record Drawings or Shop Drawings.

- a. Accurately record information in an understandable and legible drawing technique.
  - b. Record data as soon as possible after it has been obtained. In the case of concealed installations, record and check the mark-up prior to concealment.
- C. Preparation of Project Record Drawings and Project Record Shop Drawings: Immediately prior to inspection for Certification of Substantial Completion, review completed marked-up Project Record Drawings (Field Set) and Project Record Shop Drawings with Owner. When authorized, prepare final Project Record Drawings and Project Record Shop Drawings.
- 1. Project Record Drawings:
    - a. Prior to review of Contractor's Application for Payment, the Owner and Contractor will review updates to the Field Set of Project Record Drawings to verify that record documents are current.
    - b. Upon Certification of Substantial Completion, Contractor will transfer all updates from the "Field Set" to a clean set of full size contract drawings furnished by the Owner. Each sheet shall include a Project Record Drawing stamp which is dated and "wet signed" by the Contractor.
    - c. If Contractor chooses and Owner approves in advance, Contractor may submit electronic updates on final Project Record Drawings, so long as final Project Record Drawings preserve the integrity of the data and are compatible with Owner's software.
  - 2. Project Record Shop Drawings:
    - a. Transfer all information previously marked on Field Set to a separate clean set of Shop Drawings provided by Owner. Erase, redraw, and add details and notations where applicable. Identify and date each Shop Drawing; include the printed designation "PROJECT RECORD SHOP DRAWING" in a prominent location on each Shop Drawing. Bind the set with durable paper cover sheets, with appropriate identification, including titles, dates, and other information on cover sheet.
- D. In addition to requirements of this Section, comply with supplemental requirements of Divisions 15.
- 1. Division 15 of the Specifications may require the preparation of large scale, detailed layout drawings of the Work of that Division. These layout drawings are not Shop Drawings as defined by Section 01420 (References and Definitions), but together with Shop Drawings or layout drawings of all other affected Sections are used to check, coordinate, and integrate the work of the various Sections.
  - 2. Include these layout drawings as part of the Project Record Documents.

## 1.5 PROJECT RECORD SPECIFICATIONS

- A. During the construction period, maintain one copy of the Specifications, including Addenda and Modifications issued, for Project Record Documents purposes.
- B. Mark the Project Record Specifications to indicate the actual installation where the installation varies substantially from that indicated in Specifications issued. Note related Project Record Drawing information, where applicable. Give particular attention to substitutions, selection of product options, Change Order and CCD Work, and information on concealed installation that would be difficult to identify or measure and record later.
  - 1. In each Specification Section where products, materials or units of equipment are specified or scheduled, mark the copy with the proprietary name and model number of the product furnished.

2. Record the name of the manufacturer, catalog number, supplier and installer, and other information necessary to provide a record of selections made and to document coordination with Installation, Operation, and Maintenance Manuals.
  3. For each principal product specified, indicate whether data has been submitted in Installation, Operation, and Maintenance Manuals.
- C. Preparation of Project Record Specifications: Immediately prior to inspection for Certification of Substantial Completion, review completed Field Set Project Record Specifications with Owner. When authorized, prepare final Project Record Specifications.
1. After Substantial Completion and before Final Completion, carefully transfer all data shown on the Field Set to a separate clean set of Specifications provided by Owner. Include the printed designation "PROJECT RECORD SPECIFICATION" in a prominent location on the Specifications.

**1.6 MISCELLANEOUS PROJECT RECORD SUBMITTALS - NOT USED**

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

END OF SECTION

**DIVISION 2**

**SITE CONSTRUCTION**



## SECTION 02231

### CLEARING AND GRUBBING

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. Section Includes:
  - 1. Clearing and grubbing operations as required to install the Work.
- B. Related Sections:
  - 1. Section 01500 (Temporary Facilities and Controls)
  - 2. Section 02960 (Large Woody Debris Installation)

#### PART 2 PRODUCTS

##### 2.1 MATERIALS

- A. Cleared Debris:
  - 1. Salvage and stockpile or distribute the material as follows:
    - a. Trees and shrubs of non-invasive species: Salvage and use as slash in the construction of the Work as indicated or per the direction of Owner.
    - b. Other cleared materials such as trash, refuse, invasive plants, and other materials that could be detrimental to the creek environment shall be considered non-useable debris, and disposed of off-Site by Contractor.

#### PART 3 EXECUTION

##### 3.1 PREPARATION

- A. Locate, identify, and protect utilities to remain free from damage.
- B. Protect benchmarks, survey control points, and existing structures from damage or displacement.

##### 3.2 SITE CLEARING AND GRUBBING

- A. Clear and grub in areas to be excavated.
  - 1. Clearly mark excavation areas to be cleared and grubbed.
  - 2. Remove and grub trees, shrubs, brush, downed timber, rotten wood, heavy growth of grass and weeds, vines, rubbish, and debris within the limits of excavation.
- B. Clear other areas within the Project limits as necessary to complete the Work.
  - 1. Owner to approve nature and extent of clearing prior to commencement of clearing activity.
- C. Protect all other existing trees and vegetation at the Site.
- D. Trees removed during construction, unless specified otherwise, are to be salvaged and used as slash as indicated in this Section, otherwise as approved by the Owner, or disposed as described herein.
- E. Disposal of Cleared Materials:
  - 1. Dispose of non-useable cleared debris off-Site in a legal manner.
  - 2. Stockpiled slash materials not used in the Work may be chipped into pieces no larger than 6 square inches and no thicker than 1/2-inch. The chipped material may be spread over the finished floodplain areas or as approved by Owner.

3. Do not burn combustible materials on Site.
- F. Upon completion of the Site clearing, obtain Owner's acceptance of the extent of clearing.

END OF SECTION

## SECTION 02240

**CONTROL OF WATER****PART 1 GENERAL****1.1 SUMMARY**

## A. Section Includes:

1. Isolation of the Work Site and control of water and/or local dewatering necessary to complete the Work.

**1.2 SUBMITTALS**

## A. Control of Water Plan:

1. Prior to commencement of construction, submit a Control of Water Plan that satisfies the requirements of all applicable permits. The Plan shall be sufficient to protect the Work in progress and facilitate the Work by maintaining a generally dry work environment, or by sufficiently isolating and controlling water within the Work Site to prevent any release and/or permit violations.
2. The Control of Water Plan shall include:
  - a. A narrative of the methods to be used and provisions for repairs to failed dewatering facilities.
  - b. A complete list of equipment and materials to be used and stored on-Site and a schedule for their delivery and installation at the Site.
  - c. Drawings, data, and operation schedule.
  - d. Location, depth, and design of bulk bag or other coffer dams, sheet piling, sediment control barriers, well points, headers, sumps, and ditches.
  - e. Size and location of discharge lines.
  - f. Capacities of pumps and stand-by units.
  - g. Location of water control facilities.
  - h. Calculations which demonstrate the adequacy of the proposed diversion and dewatering facilities.
  - i. If any water from within the immediate Work area is to be released or pumped to surface waters, a description of applicable pre-treatment by applicable permits and regulations.
  - j. Erosion protection methods at all discharge locations.
  - k. The Control of Water Plan shall include provisions for fish rescue by Owner.

**PART 2 PRODUCTS****2.1 EQUIPMENT**

- A. Isolation of the Work Site and dewatering the Work area may include the use of coffer dams, sheet piling, sediment control barriers, sump pumps, temporary pipelines for water movement, rock or gravel placement, and other methods designed by Contractor and submitted for review by Owner as part of Control of Water Plan.

**2.2 MATERIALS**

- A. Isolation of the Work Site and dewatering the Work area may include the use of coffer dams, sheet piling, sediment control barriers, sump pumps, temporary pipelines for water

movement, rock or gravel placement, and other methods designed by Contractor and submitted for review by Owner. Materials required to implement these measures shall be of the Contractor's Specification, submitted for review by Owner as part of Control of Water Plan.

B. Inlet Screening:

1. If required by applicable permits and regulations, pumps drawing from surface waters shall be screened in conformance with California Department of Fish and Game and National Marine Fisheries Service (NMFS) fish screening criteria and all necessary permits.

## PART 3 EXECUTION

### 3.1 CONTROL OF WATER

- A. Boulder Cluster and Boulder Field installation may be completed without diverting flow from or dewatering the installation locations, provided the boulders are placed in a manner the does not require equipment operation in the active flowing stream, and turbidity impacts associated with placement are minimized. All other work shall be completed only after diverting streamflow away from the active work zones, in conjunction with local dewatering as necessary to maintain a reasonably dry work environment for the work.
- B. Contractor shall be responsible for installation, maintenance, and operation of the water control works. Contractor shall provide all equipment necessary for control of water. Contractor shall have on hand, at all times, sufficient provisions, equipment and machinery in good working condition and shall have available, at all times, competent workers for the operation of the facilities. Adequate standby resources shall be kept available at all times to ensure reliable operations and maintenance of water control facilities during any type of pump or power failure.
- C. Streamflow during the project construction can be expected to vary. Additionally, rainfall may occur during the construction period. Contractor-supplied provisions, methods and equipment must accommodate the anticipated range in flow without discharging sediment from the Project Site. Anticipated flows in Dry Creek are 150 cfs or less.
- D. No turbid water shall be allowed to drain away from Work completed or under construction or be discharged from the Site. Contractor shall visually monitor on an ongoing basis; and before, during, and after rain events. If required, numeric turbidity and pH levels shall be monitored by Contractor in accordance with applicable permits.
- E. Open conveyance systems, if utilized, shall include an impermeable lining or other protection to prevent erosion of soil from the Site, and leakage of water from the conveyance to recharge the adjacent dewatered zone.
- F. As applicable, any diversion systems will include barriers at upstream and downstream ends of the system and along the Project to isolate the Work Site from Dry Creek and prevent flow or backflow into the active Work area while instream work activity is being conducted. Barrier construction shall be of Contractor's design and may include bulkbags cofferdams, sheet piling, sandbags, wrapped k-rail barriers, or other method. Materials utilized shall be clean and free of debris and pollutants.
- G. All materials used for control of water shall be clean and stable. No materials that can be washed away by stream flows will be allowed, such as topsoil, or non-encapsulated sand or fine gravel.
- H. Contractor shall provide drainage for the Site grading at all times. Divert surface runoff from excavations and trenches.

- I. Contractor shall divert identified storm water outlets, if any, around the Work area by gravity or with pumps and hoses.
- J. With the exception of fish rescue, it shall be the sole responsibility of Contractor to control the rate and effect of the water control provisions to avoid all objectionable settlement, subsidence, or erosion of the channel bed, banks, or floodplain caused by discharge flows, and to mitigate impacts to Dry Creek, including fish and wildlife resources.
- K. Contractor shall coordinate and schedule Work activities to allow for a fish rescue by Owner. The fish rescue shall take place in conjunction with diversion of Dry Creek. Fish rescue operations will be required for each segment of Dry Creek diverted. Contractor shall coordinate the fish rescue with Owner, providing a minimum notice of 7 calendar days prior to diverting any stream segment. Following diversion of streamflow, fish shall be rescued by Owner's personnel from residual pools in accordance with all applicable laws, permits, and regulations. Specific requirements related to fish rescue are as follows:
  - 1. Contractor shall divert the flow of Dry Creek in a gradual manner, such that the flow is progressively reduced by half over the period of a single work day, and then reduced to a flow of 10 cfs before 9 am on the subsequent work day.
  - 2. Following substantial diversion, flow of 10 cfs shall be maintained in Dry Creek for a period of 2 days to facilitate fish rescue operations.
  - 3. After the remaining 10 cfs is diverted from Dry Creek, the Owner requires one additional day for fish rescue from isolated pools in the diverted stream section.
  - 4. Provided the above requirements are met, the Contractor may commence work in the diverted stream on the fifth day following commencement of diversion.
- L. The Contractor shall locally dewater active work zones as necessary maintain the water level below the ground surface to the depth of required excavation and to facilitate satisfactory completion of the work.
- M. Contractor may utilize well points or sump pumps, or a combination thereof, to accomplish local dewatering of the Work. Contractor is fully responsible for the selection and final design of the dewatering systems required to complete the Work.
- N. Means shall be employed to prevent pumping of fine sands or silts from the subsurface during dewatering. Continuously check to ensure that the subsurface soil is not being removed by the dewatering operation.
- O. Outlets of all dewatering pumps shall be constructed and managed in a manner that prevents discharge of turbid water to the active flowing stream, existing drainage ways, culverts. Dispose of dewatered discharge in accordance with applicable permits. Disposal method shall not damage property.

END OF SECTION



## SECTION 002255

**SHORING****PART 1 GENERAL****1.1 SUBMITTALS**

## A. Shop Drawings:

1. Shoring System(s):
  - a. Include supporting calculations for all proposed shoring systems. Include all details, arrangements, and the methods of installation, as applicable. Indicate depth of excavation at which support system will be installed.
  - b. Show in the calculations the full excavation depth load to be carried by various members of the support system. Include design loads and calculated deflections of shoring and support members.
  - c. Describe method of installation and removal of shoring, including the sequencing of specific components as related to excavation, construction and backfilling operations.

**1.2 DEFINITIONS**

- A. For the purposes of this section, shoring or shoring system shall mean shoring, sheeting, shielding, sloping, bracing, or equivalent provisions and protective systems for worker protection from the hazard of caving ground in open trenches and other excavations.

**1.3 SYSTEM DESCRIPTION**

## A. Design Requirements:

1. Comply with CCR Title 8, Division 1, Chapter 4, subchapter 4 (Construction Safety Orders), Section 1541.1
2. Support earth and rock pressure, unrelieved hydrostatic pressures, utility loads, equipment, applicable traffic and construction loads, and other surcharge loads.
3. Support the maximum loads that can occur during construction.

## B. Performance Requirements:

1. Provide a stable excavation without lateral or vertical movement or settlement of the ground.
2. Prevent damage to or movement of adjacent structures and utilities.
3. Provide dry conditions to facilitate expeditious construction within excavations.

**1.4 PROJECT CONDITIONS**

## A. Project Requirements

1. If existing utilities interfere with proposed method of support, modify the support system at Contractor's expense.

**PART 2 PRODUCTS****2.1 MATERIALS**

- A. All timber and structural metal used for the supporting system, whether new or used shall be sound and free from defects that may impair their strength.

## **PART 3 - EXECUTION**

### **3.1 GENERAL**

- A. Proceed with caution in areas where utilities are within the shoring and excavation prism. Expose utilities by hand excavation.
- B. Maintain bracing support members in tight contact with each other and with the surface being supported.
- C. Sheet piling and other shoring shall be removed in such a manner as to prevent caving at the walls of excavations or damage to piping, structures or other improvements.
- D. All voids created by the removal of the supporting system shall be immediately filled with well-graded cohesionless sand, lean concrete, or sand cement grout.
- E. Remove shoring as backfilling progresses but only when banks are stable and safe from caving or collapse.
- F. Unless otherwise approved by Owner, no sheeting shall be left in a trench and no backfill shall be made against the sheeting before it is removed. If sheeting extends below the invert of the work and is approved by Owner to be left in place, the upper portion shall be removed by trimming in a manner satisfactory to the Owner.

END OF SECTION

## SECTION 02315

**EXCAVATION AND FILL****PART 1 GENERAL****1.1 SUMMARY****A. Section Includes:**

1. Earthwork shall consist of excavation and fill placement to the lines and grades as indicated. Earthwork includes, but is not limited to:
  - a. Excavation of soil and sediment and reuse of selected approved material in construction of the Work.
  - b. Management of excavated materials on site and disposal of excess excavated material.
  - c. Grading to achieve the lines and grades indicated.

**B. Related Sections:**

1. Section 02231 (Clearing and Grubbing)
2. Section 02240 (Control of Water)
3. Section 02950 (Streambed Construction)

**1.2 REFERENCES**

- A. California Test Methods 216 and 231

**1.3 SUBMITTALS**

- A. Grading/ Access Plan: Include sequence of grading work, type of equipment to be used, and location of access ramp into Work area from vineyard road.

**PART 2 PRODUCTS****2.1 MATERIALS****A. Select fill:**

Granular soil material excavated from within Project footprint that is deemed acceptable for reuse in Project construction by Owner, including fill and/or backfill within the Project limits. Select fill shall generally be free-draining sandy gravel and/or cobble materials, depending on application ; free of chemical contaminants, stumps, and other deleterious materials; and organic material greater than 2 inches in diameter. When identified, select fill shall be stockpiled for eventual use by Contractor.

**B. Select soil:**

Soil material excavated from within Project footprint that is deemed acceptable for reuse in Project construction by Owner, including fill and/or backfill within the Project limits. Select fill shall generally be silty and/or sandy soil with limited gravel or cobble materials; free of chemical contaminants, stumps, and other deleterious materials; and organic material greater than 2 inches in diameter. Select soil shall be suitable to enable vegetative establishment by native riparian or other vegetation. When identified, select soil shall be stockpiled for eventual use by Contractor.

**C. Native substrate:**

Stream substrate material excavated from within Project footprint that is deemed acceptable for reuse in Project construction by Owner, including backfill within the Project limits.

Native substrate shall generally be native streambed gravel and cobble, mixed with sand; free of chemical contaminants, stumps, and other deleterious materials; and organic material greater than 2 inches in diameter. When identified, native substrate shall be stockpiled for eventual use by Contractor.

D. Spoils:

1. Excavated material not classified as select fill, select soil, or native substrate. Excess stockpiled select fill that remains after completion of the Work shall be classified as spoils.
2. Excess spoils shall be disposed of by Contractor in an off-Site location in accordance with applicable regulations. Contractor may make arrangements with property owners for placement of spoils on owner's property, provided that all placement of spoils complies with all permitting requirements.
3. Spoils generated from the Project shall not be marketed or sold for profit.

## **PART 3 EXECUTION**

### **3.1 PROTECTION**

- A. Perform all earthwork in strict compliance with the Stormwater Pollution Prevention Plan (SWPPP) prepared by Contractor and approved by Owner.
- B. Excavation performed above the waterline shall proceed such that excavated materials are carried away from the water or otherwise collected and contained before being allowed to contact surface waters.
  1. Maintain stockpiles and excavations in such a manner to prevent inconvenience or damage to structures on-Site or on adjoining property.
  2. Avoid surcharge or excavation procedures which can result in heaving, caving, or slides.
- C. Dispose of waste materials, legally, off Site. Burning, as a means of waste disposal, is not permitted.

### **3.2 CONSTRUCTION**

- A. The Work includes all operations in connection with excavation and construction of fills and embankments, rough grading, and disposal of excess materials required to attain the finish lines and grades as indicated.
  1. Contract Drawings may indicate existing grade, subgrade and finished grade required for construction of Project. Initial staking shall be performed by Owner. Contractor shall control the grades of the Work, performing temporary staking and other measures to ensure that the grading meets the specified tolerances.
  2. Materials to be excavated are generally a mix of fill, native soil, and native streambed consisting of riparian, streambank, and streambed soil and substrate materials, and wetland soils with variable organic contents. These may include cobble, gravel, sand, silts, and clays.
  3. Other materials which may be concealed beneath the waterline or present grade may be encountered during excavation including, but not limited to, concrete, asphalt, abandoned cars, car bodies, other metal objects, and other waste objects. Such material shall be considered spoils and be disposed of by Contractor in accordance with all applicable regulations.
  4. Varying soil moisture contents will be encountered during the excavation. Contractor shall be equipped to handle excavation with moisture content ranging from dry to very wet during excavation, handling, loading, transport, and disposal.

5. Excavated material deemed acceptable for use as select fill, select soil, and native substrate by Owner shall be stockpiled, managed, and eventually placed in the Work as indicated. Excess stockpiled materials that remain after the completion of the Work shall be reclassified as spoils and disposed of accordingly.
  6. Do not carry excavations beyond that required to complete the Work to the lines and grades indicated, except as directed by Owner.
  7. Protection of finish grade: During construction, shape and drain embankment and excavations. Maintain ditches and drains to provide drainage at all times. Protect graded areas against action of elements prior to acceptance of Work. Reestablish grade where settlement or erosion occurs.
  8. Excavations performed shall be contained with silt fences, sheetpile, or other means to prevent excavated material from entering Dry Creek.
  9. Shoring: Shore, sheet pile, slope, or brace excavations as required complete the Work in accordance with all applicable standards and regulations. Remove shoring as backfilling progresses but only when banks are stable and safe from caving or collapse. Requirements and design to be determined by Contractor.
  10. Drainage: Control grading so that ground is pitched to prevent water from running into areas beyond the limits of work. Provide measures required to keep active excavations clear of water during construction. Discharge of pumped water shall be in strict compliance with all applicable permits.
  11. Access ramp from vineyard road to Work area shall not be excavated into existing terrain. Temporary fill for access ramp may be placed and subsequently removed, if approved in advance by Owner.
- B. Construct fills as indicated:
1. Construct embankments and fills at locations and to lines and grades indicated. Completed fill shall correspond to shape of typical cross section or contour indicated, regardless of method used to show shape, size, and extent of line and grade of completed Work.
  2. Fill shall be placed in 8 inch to 12 inch loose lifts. Place layers horizontally and compact each layer prior to placing additional fill. Contractor shall compact each lift of fill to 85% relative compaction, unless otherwise approved by Owner.
  3. Compact as required to obtain specified density. Control moisture for each layer necessary to meet requirements of compaction.
- C. Tolerances for grading shall be -0.3 feet for bottom of off-channel enhancement areas, and +/- 0.3 feet in other areas.
- D. Quantity Estimates
- 1) The quantity of excavation incorporates the volume defined by the difference between existing and design ground surfaces. This quantity does not include excavation to subgrade for log jam or large woody debris structures, or other Work items indicated, unless specifically identified in the description of the Work item.

### 3.3 FIELD QUALITY CONTROL

- A. Verify that all design grades and compaction specifications have been achieved as indicated.
- B. Site Tests:
  1. Owner will test for in-place moisture-density tests after receiving written request from Contractor.
  2. Bedding, Backfill, Structural Bedding, and Backfill Material:

- a. The in-place density and moisture of soils and aggregates may be determined by the use of nuclear methods and the area concept as per California Test 231 with the following conditions:
  - 1) The test for maximum density shall be determined as specified in Part II of California Test 216.

**3.4 FIELD QUALITY ASSURANCE**

- A. Owner will review finished areas of grading and check for conformance with the Drawings.

END OF SECTION

## SECTION 02371

### RIPRAP

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Section Includes:

1. Riprap for use in installation of storm drain outfall (SDO), scour protection and Type 3 and Type 4 bank treatments.
2. Boulders for use in boulder cluster, boulder field, and large woody debris installation. (Owner and Contractor supplied.)

##### 1.2 RELATED SECTIONS

- A. Section 02315 (Excavation and Fill)
- B. Section 02373 (Geotextile)
- C. Section 02960 (Large Woody Debris Installation)
- D. Section 02950 (Streambed Construction)

##### 1.3 REFERENCES

- A. American Association of State Highway and Transportation Officials (AASHTO):
  1. AASHTO T85 - Standard Method of Test for Specific Gravity and Absorption of Coarse Aggregate
  2. AASHTO T96 - Standard Method of Test for Resistance to Degradation of Small-Size Course Aggregate by Abrasion and Impact in the Los Angeles Machine
- B. State of California, Caltrans, Standard Specifications, 2010

##### 1.4 SUBMITTALS

A. Imported Riprap (Contractor Provided)

1. The Contractor shall submit the following information to the Owner for two representative samples and gain approval prior to hauling rock to the project site.
  - a. Rock source location, name of supplier, and phone number of contact person and samples of the rock to be used.
  - b. Gradation (by size and weight) and specific gravity for rock materials.
  - c. Bulk density of the rock and the method of determination.
  - d. Required material quality test results.
  - e. Acknowledgement that products submitted meet requirements of standards referenced.

2. The Contractor shall arrange to have the Owner observe a representative sample at the quarry.
  3. Tests on additional samples may be required by the Owner to ensure the rock meets Specification. The Contractor will be responsible for the costs of additional test(s) that fail to meet Specifications.
- B. Imported Boulders (Contractor Provided)
1. The Contractor shall submit the following information to the Owner and gain approval prior to hauling rock to the project site.
    - a. Rock source location, name of supplier, and phone number of contact person and samples of the rock to be used.
    - b. Range of boulder size along median, or B, axis.
    - c. Bulk density of the rock and the method of determination.
    - d. Required material quality test results.
    - e. Acknowledgement that products submitted meet requirements of standards referenced.
  2. The Contractor shall arrange to have the Owner observe a representative sample at the quarry.
  3. Tests on additional samples may be required by the Owner to insure the rock meets Specification. The Contractor will be responsible for the costs of additional test(s) that fail to meet Specifications.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

A. Riprap

1. Imported riprap shall meet the requirements set forth in Division VIII Section 72-2 of Caltrans Standard Specifications for Rock Slope Protection, 1/2 Ton Rock.

B. Boulders

1. The median axis of boulders will have approximate minimum dimension of 3 feet and nominal minimum weight of 1 ton, unless otherwise directed by the Owner. Boulders will be imported by the Contractor. Boulders shall be hard, durable, resistant to weathering and to water action, and void of cracks and other defects. Serpentine rocks should be avoided.
2. Boulders shall meet the following material quality requirements:

<b>Quality Requirements</b>	
<b>Test and Method</b>	<b>Specification Limits</b>
Apparent Specific Gravity, AASHTO T 85,	2.65

min	
Absorption, AASHTO T 85, % max	3.0
Abrasion, AASHTO T 96, % max/500 rev	35

3. A portion of the boulders will be furnished by the Owner at the Owner’s stockpile location.

**PART 3 EXECUTION**

**3.1 CONSTRUCTION**

A. Riprap

1. The Contractor shall provide a level, compact area of sufficient size to dump and sort typical loads of riprap at an approved location; and shall dump loads, as specified, in this area; and shall assist the Owner as needed to sort and measure the stones for the purpose of determining if the riprap is within Specifications. Mechanical equipment as needed to assist in this sorting shall be provided by the Contractor at no additional cost.
2. The riprap shall be handled or placed with an excavator as to secure a stone mass of the thickness, height and length shown on the Drawings, or as staked, with a minimum of voids.
3. Undesirable voids shall be filled with small stones or spalls. The rock shall be manipulated sufficiently by means of a bulldozer, excavator, rock tongs, or other suitable equipment to secure a reasonably regular surface and mass stability.
4. Riprap protection shall be placed to its full course thickness at one operation and in such manner as to avoid damaging the filter cloth or displacing the underlying material. Placing of riprap protection in layers or by dumping into chutes or by similar methods likely to cause segregation will not be permitted.
5. All riprap shall be so placed and distributed that there will be no large accumulation or area composed mainly of either the larger or small sizes of stone.
6. Unless otherwise authorized, the riprap protection shall be placed in conjunction with the construction of the embankment with only sufficient lag in construction of the riprap protection as may be necessary to place geotextile fabric and to prevent mixture of embankment and riprap material. Filter fabric shall be placed as specified in Section 02373 (Geotextile) and as indicated.
7. Riprap shall be mixed with select fill, select soil, and native substrate for installation as shown on the Drawings. Care shall be taken to avoid segregation of sizes in placement. Direct contact shall be maintained between riprap pieces, with the added select fill, select soil, or native substrate filling the voids in the riprap.

B. Boulders

1. Boulders shall be placed as specified in Sections 02960 (Large Woody Debris Installation) and 02950 (Streambed Construction) and as indicated.
2. The Contractor will be responsible for managing the boulders on Site and transporting the boulders from Owner's stockpile location to the installation locations.

END OF SECTION

## **SECTION 02373**

### **GEOTEXTILE**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Description of work:

1. The Contractor shall provide all labor, materials, and equipment necessary for the installation of filter fabrics.
2. Filter fabric refers to materials used to maintain separation between riprap or filter gravel and underlying soils.

##### **1.2 RELATED SECTIONS**

- A. Section 02315 (Excavation and Fill)  
B. Section 02371 (Riprap)

##### **1.3 REFERENCES**

- A. American Society for Testing and Materials (ASTM)
1. ASTM D-3786 - Test for Bursting Strength of Textile Fabrics.
  2. ASTM D-4355 - Test for Deterioration of Tensile Strength.
  3. ASTM D-4491 - Test method for Coefficient of Permeability.
  4. ASTM D-4533 - Test method for Trapezoidal Tear Strength.
  5. ASTM D-4595 - Test for Tensile Properties.
  6. ASTM D-4632 - Test method for Grab Breaking Load and Elongation of Geotextiles.
  7. ASTM D-4751 - Test method for Apparent Opening Size.
  8. ASTM D-4833 - Test for Index Puncture Resistance.
  9. ASTM D-4886 - Test for Abrasion Resistance.
  10. ASTM D-5199 - Test for Measuring Nominal Thickness.
  11. ASTM D-5261 - Test for Measuring Mass per Unit Area.
  12. ASTM D-6241 - Test for Static Puncture Strength.
- B. Army Corp of Engineers (COE)
1. COE 02215 - Corp of Engineers Plastic Filter Fabric Specifications

**1.4 QUALITY CONTROL**

- A. Each roll of filter fabric shall be packaged individually in a suitable sheet, wrapper, or container to protect the fabric from damage to ultraviolet light, moisture, and mud during normal storage and handling.
- B. Each roll of filter fabric shall be identified with a tag or label securely affixed to the outside of the roll on one end. The label shall include the manufacturer or supplier, the style number, and the roll and lot numbers.
- C. Store all filter fabrics elevated off the ground and ensure that they are adequately covered to protect the material from damage. Protect coir and filter fabrics from sharp objects which may damage the fabric.
- D. Filter fabrics damaged during transport, storage or placement shall be replaced at the Contractors expense.
- E. The Owner may randomly select and obtain samples from rolls of filter fabric after arrival on the site and prior to installation to compare to previously submitted samples.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

A. Filter Fabric

- 1. Filter fabric shall be composed of polypropylene monofilament yarns, which are woven into a stable network such that the yarns retain their relative position, inert to biological degradation and resistant to naturally encountered chemicals, alkalis, and acids. Filter fabric shall have the following minimum material properties and be Mirafi Filterweave 404 or Approved Equal:

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			Machine Direction	Cross Direction
Wide Width Tensile Strength	ASTM D 4595	kN/m (lbs/in)	43.8 (250)	40.3 (230)
Grab Tensile Strength	ASTM D 4632	N (lbs)	1780 (400)	1402 (315)
Grab Tensile Elongation	ASTM D 4632	%	15	15
Trapezoid Tear Strength	ASTM D 4533	N (lbs)	666 (150)	734 (165)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	5511 (800)	
Puncture Strength	ASTM D 4833	N (lbs)	668 (150)	
CBR Puncture Strength	ASTM D 6241	N (lbs)	5118 (1150)	
Apparent Opening Size (AOS)	ASTM D 4751	mm (U.S. Sieve)	0.43 (40)	
Percent Open Area	COE-02215	%	1	
Permittivity	ASTM D 4491	sec-1	0.90	

Permeability	ASTM D 4491	cm/sec	0.07
Flow Rate	ASTM D 4491	l/min/m <sup>2</sup> (gal/min/ft <sup>2</sup> )	2852 (70)
Abrasion Resistance	ASTM D 4886	% retained	60 (typical)
UV Resistance (at 500 hours)	ASTM D 4355	% strength retained	90

Physical Properties	Test Method	Unit	Typical Value
Mass/Unit Area	ASTM D 5261	g/m <sup>2</sup> (oz/yd <sup>2</sup> )	298 (8.8)
Thickness	ASTM D 5199	mm (mils)	0.9 (34)
Roll Dimensions (width x length)	--	m (ft)	4.5 (15) x 91 (300)

**PART 3 EXECUTION**

**3.1 EXAMINATION**

- A. Verify the filter fabric is of correct specifications.
- B. Beginning of installation means acceptance of existing conditions.

**3.2 INSTALLATION**

A. Filter Fabric

1. Filter fabric will be placed in construction of riprap, storm drain outlet scour protection, and Type 3 and 4 bank treatments as indicated.
2. Install according to manufacturer's instructions, and as shown on the Drawings.
3. The area to be covered by the filter fabric shall generally be graded to a smooth condition free from depressions and protruding rocks, sticks, and other debris which may prevent a smooth application or that may damage the fabric. Care shall be taken to remove all objects that would interfere with application or damage the filter fabric.
4. Warp or seam (with minimum overlaps as described below) the filter fabric around LWD to ensure that the fabric coverage is continuous along the Type 3 and 4 bank treatments, except where the LWD penetrates the filter fabric application. Ensure tight sealing of the filter fabric around the LWD.
5. The filter fabrics shall be placed and anchored per manufacturer recommendations.
6. All joints/overlaps in material shall be a minimum of 12 inches.
7. Repair damaged material by placing a piece of fabric that is sufficiently large to cover the damaged area plus 2 feet of adjacent undamaged filter fabric in all directions.

END OF SECTION



## **SECTION 02641**

### **PIPE CULVERTS**

#### **PART 1 GENERAL**

##### **1.1 SUMMARY**

A. Description of work:

1. The Contractor shall provide all labor, materials, and equipment necessary for the installation of drain pipes.

##### **1.2 RELATED SECTIONS**

A. Section 02315 (Excavation and Fill)

##### **1.3 REFERENCES**

A. American Society for Testing and Materials (ASTM)

1. ASTM A-716 - Standard Specification for Ductile Iron Culvert Pipe

B. American National Standards Institute (ANSI)

1. ANSI A21.10 - Ductile-Iron and Gray-Iron Fittings, 3 In.-48 In, for Water
2. ANSI A21.11 - Rubber-Gasket Joints for Ductile Iron Pressure Pipe and Fittings

#### **PART 2 PRODUCTS**

##### **2.1 MATERIALS**

C. Ductile Iron Pipe

1. All ductile iron culvert pipe shall conform to the requirements of ASTM A 716 for the specified diameters and strength classes. All pipe shall be smooth and circular in cross section. All gray and ductile iron fittings shall conform to the requirements of ANSI A21.10 for the specified diameters. All joints shall be push-on type conforming to the requirements of ANSI A21.11 for the specified diameters.

#### **PART 3 EXECUTION**

##### **3.1 INSTALLATION**

A. General

1. Drain pipe and bedding shall be constructed of the sizes, classes, dimensions, and materials and to the alignments and grades shown on the Drawings.

B. Pipe Bedding

1. Bedding for drainage pipe shall be constructed by bedding the drainage pipe on a natural earth subgrade shaped by a template to fit the lower part of the pipe exterior for at least 10 percent of its overall height. After pipe installation select earth material shall then be rammed under the haunches and tamped in layers not over 6 inches in loose thickness around the pipe to the springline. The remaining depth of trench shall then be backfilled with native material, compacted to 90% relative compaction, unless otherwise approved by Owner. When bell and spigot pipe is to be placed, recesses shall be dug in the bedding material of sufficient width and depth to accommodate the bell without its resting on the bottom of the recess. The width of the recess shall not exceed the width of the bell by more than 2 inches.

### C. Pipe Laying

1. Inspection Before Laying. The Contractor shall inspect all pipe upon delivery and such pipe as does not conform to the requirements of these Specifications and which are not suitable for use shall be rejected and immediately removed from the work site.
2. Pipe Ends Cleaned and Lubricated Before Laying. Preparatory to making pipe joints, all surfaces of the portions of the pipe to be jointed or of the factory made jointing materials shall be clean and dry. All necessary lubricants, primer, adhesives, etc., shall be used as recommended by the pipe or joint manufacturer's specifications.
3. Care During Hoisting, Placing, and Shoving Home. Equipment used to handle, lay and joint pipe shall be so equipped and used as to prevent damage to the pipe and its jointing materials. All pipe and fittings shall be carefully handled and lowered into the trench. Damaged pipe or jointing material will not be accepted and shall not be installed. All rejected material shall be removed from the job site.
4. Uniform Pipe Bearing.
  - a. Special care shall be taken to insure that the pipe is solidly and uniformly bedded, cradled, or encased in accordance with the type of bedding, cradle, or encasement required by the Plans. No pipe shall be brought into position for joining until the preceding length has been bedded, joined and secured in place.
  - b. Where a concrete cradle is required, the pipe shall be supported at not more than two places with masonry supports of minimum size sufficient to provide the required clearance and to prevent displacement during placing of concrete.
5. Direction of Work. The laying of pipe in finished trenches shall be commenced at the lowest point. When installed the bell or grooved end shall be forward or upgrade. All pipe shall be laid with ends abutting and true to line and grade. They shall be carefully centered so that when laid they will form a drain with a uniform invert.
6. Alignment and Grade. Each piece of pipe shall be checked for vertical and horizontal alignment immediately after being laid.
7. Bedding to Secure Pipe. As soon as possible after the joint is made, sufficient material shall be placed alongside each side of the pipe to offset conditions that might tend to move the pipe off line and grade. Particular care shall be used to prevent disturbance or damage to the pipe and the joints during backfilling.
8. Flotation and Water in the Trench.
  - a. The Contractor shall take all necessary precautions to prevent flotation of the pipe in the trench.

- b. Water shall not be allowed to rise in the trench until the joint materials and any concrete cradle or encasement is hardened and cannot be damaged by the water.
9. Open Ends. Whenever pipe laying is stopped for any significant length of time, such as at the end of a workday, the unfinished end shall be protected from displacement, flotation, cave-in, in-wash of soil or debris, or other injuries. A suitable temporary tight fitting plug, stopper, or bulkhead shall be placed in the exposed ends of the pipe.
10. Curved Alignment. Curved storm drain alignments shall be constructed with manufactured, beveled end radius pipe for circular pipe sizes of 21 inch diameter and larger. Curved storm drain alignments for noncircular pipe and circular pipe smaller than 21 inch diameter shall be constructed with a brick radius. Curved storm drain alignments shall not be constructed by breaking joints of straight pipe sections. Curved alignments of corrugated metal storm drain shall be constructed of shop fabricated radii constructed to the radius specified.

#### D. Pipe Joint.

##### 1. General.

- a. Jointing operations shall continue immediately following the laying of such pipe section. In no case shall any pipe section be left overnight which has not been completely jointed to the preceding pipe section in conformance with these Specifications.

##### 2. Ductile Iron Pipe.

- a. The two ends to be joined shall be thoroughly cleaned and a rubber gasket compatible with the type of pipe ends to be joined shall be placed on the spigot end of the pipe. Lubricant recommended by the joint material manufacturer shall be liberally applied to the gasket and both ends of the pipe immediately before pipe ends are joined. The upstream pipe shall be positioned such that the spigot may enter the bell squarely.
- b. Suitable means shall be used to force the spigot end of the pipe into the bell end without damage to the pipe and its jointing materials and without disturbing the previously laid pipes and joints.

#### E. Cleaning and Inspection

1. The interior of the pipe shall, as the work progresses, be cleared of all dirt, cement extruded joint materials, debris, and extraneous materials of every description. On small pipe where cleaning after laying may be difficult, a squeegee shall be kept in the pipe line and pulled forward past each joint immediately after its completion.
2. All work shall be in undamaged condition and constructed properly in accordance with the Drawings and Contract Documents. All defects and leaks disclosed by tests shall be remedied. No piping shall be buried, covered, or concealed until it has been inspected, tested, and approved. To do otherwise will be grounds for rejection of the pipe by the Owner. All tests shall be performed by the Contractor under supervision of the Owner.
3. While the pipe is being laid between adjoining structures in each straight or working section of the drain, light from the finished or other end of the section shall remain constantly in plain view throughout the entire length of such section and shall show the

true character and shape of the interior surface of the drain. The test shall be applied for each working section after the drain is complete in all respects before it is accepted.

4. Pipe sizes greater than 36 inch diameter or equivalent diameter shall be entered and examined, while smaller diameter or equivalent diameter pipe shall be visually inspected from each end of the pipe section. Pipe sections shall be visually inspected for debris and obstructions, structural cracks and defects, joint tolerances, joint workmanship, and satisfactory connection to drainage structures.

END OF SECTION

## SECTION 02906

### PLANTING OF TREES, SHRUBS, AND GROUNDCOVERS

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Description of work:

1. Purchase, storage, installation and maintenance of live cuttings as indicated and described herein.

##### 1.2 RELATED SECTIONS

- A. Section 02921 (Seeding)  
B. Section 02970 (Fabric Encapsulated Soil Lifts)  
C. Section 02980 (Surface Fabric Treatment)

#### PART 2 PRODUCTS

##### 2.1 PLANTING MATERIALS

A. Live Stakes and Live Cuttings

1. Live stakes and live cuttings consist of cuttings from live stems shrubs or trees that are provided in an un-rooted condition and have the ability to establish roots and shoots if planted under proper conditions.
2. Live stakes and live cuttings shall be taken from healthy, dormant plants within 100 miles of the project site.
3. The materials shall be collected between October 15 and March 1-and no more 14 days before installation. Contractor shall provide documentation from supplier that the materials were harvested no more than 14 days prior to planting. Any deviation from these sourcing requirements requires approval of the Owner. Documentation authenticating the date cuttings were acquired shall be submitted to the Owner prior to acceptance.
4. Cuttings shall remain continuously wet from harvest to placement, stored in water and shade with approximately 80% of length from distal end submerged. Water should be changed every 1 to 2 days if cuttings are kept in a container.
5. The basal end (bottom) of the materials shall be indicated by a clean, slanted cut. All lateral stems shall be removed at the juncture with the main stem. Tops of the materials (distal ends) shall be indicated by a cut perpendicular to the stem.
6. The diameter of live stakes shall be 2 inches at their midpoint, and shall be of sufficient length to satisfy the installation requirements shown on the Drawings.

- 7. The diameter of live cuttings shall be 0.5 to 1 inch at their midpoint, and shall be of sufficient length to satisfy the installation requirements shown on the Drawings.
- 8. Live stakes and cuttings shall consist of a mix of the following species:

Common Name	Scientific Name	Target Percentage
Redosier Dogwood	Cornus sericea	30%
Sandbar Willow	Salix exigua	25%
Red Willow	Salix laevigata	30%
Pacific Willow	Salix lasiandra	25%

**PART 3 EXECUTION**

**3.1 QUALITY CONTROL**

- A. The Contractor shall provide all equipment, labor, materials, and technical expertise to install, maintain and irrigate site plantings through the completion of the project, and demobilization, until the dormant period which follows project completion.
- B. Planted areas guarantee: Areas that do not meet success criteria for plant establishment on July 1st after the Substantial Completion Date shall be re-planted during the first available planting period, as determined by the Engineer. Re-planting shall be performed at the Contractor’s expense, and in conformance with planting specifications.
- C. Planting success criteria: The Engineer will conduct surveys to verify planting success. An area will be considered satisfactory if it meets the following criteria:
  - 1. A minimum of 80 percent survival of installed plant material; and
  - 2. Vegetation shall be in healthy condition.

**3.2 PLANTING**

- A. Planting shall occur in areas as indicated.
- B. Planting shall not be permitted during the following conditions unless otherwise approved:
  - 1. Temperatures less than 32 degrees Fahrenheit
  - 2. Temperatures greater than 90 degrees Fahrenheit
  - 3. Saturated soil conditions
  - 4. Wind velocities greater than 20 mph.
- C. Apply water as needed during and after plant installation to insure maximum success of the planted species. During the construction of all bank treatments that incorporate plant material, water as required to minimize stress on the plant materials.
- D. Live Stakes and Live Cuttings:

1. Live cuttings shall be placed for installation of Fabric Encapsulated Soil (FES) Lifts as indicated.
  2. Live stakes shall be utilized for joint staking between stone and other materials for installation of large woody debris structures, streambank treatment type 3 and 4, and storm drain scour protection as indicated.
  3. Care shall be taken during placement of construction materials around the cuttings and stakes to avoid damage to the materials.
  4. When placed between riprap materials, live stakes shall be embedded in a continuous layer of native substrate, select soil, and/or select fill, or any combination thereof, which fills the voids in the riprap material without preventing stone to contact between adjacent pieces of riprap.
- E. Irrigation and Maintenance:
1. Irrigation shall be provided by the Contractor to ensure plant establishment.
  2. After installation, plant materials shall be pruned or otherwise maintained to prevent dessication until the dormant period that follows installation.

END OF SECTION



**SECTION 02921**

**SEEDING**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. Description of work:

1. Purchase, storage, and installation of seed stock as indicated and described herein.

**1.2 RELATED SECTIONS**

A. Section 02970 (Fabric Encapsulated Soil Lifts)

B. Section 02980 (Surface Fabric Treatment)

**1.3 REFERENCES**

A. State of California, Caltrans, Standard Specifications, 2010

**1.4 SUBMITTALS**

A. Certified seed mix, hydromulch and tackifier

**PART 2 PRODUCTS**

**2.1 MATERIALS**

A. Seed

1. Seed mix shall be used for Fabric Encapsulated Soil (FES) Lifts, Surface Fabric Treatment, and seeding all disturbed areas as indicated.

2. Seed mix shall be as defined below:

Common Name	Scientific name	% by weight
Blue Wildrye	<i>Elymus glaucus</i>	40%
California Brome	<i>Bromus carinatus</i>	40%
Native Red fescue	<i>Festuca rubra</i>	15%
Tufted hairgrass	<i>Deschampia caespitosa</i>	5%

3. Seed shall be healthy and vigorous and free of noxious weed seeds. Any adjustments or substitutions in seed species or composition shall be approved by the Owner. Seeds that have become wet, moldy, or otherwise damaged, or do not meet the Specifications shall be legally disposed of offsite and replaced at Contractor's expense.

B. Hydroseed:

1. Shall include the following:

Material Description	Material Type	Application Rate
Seed	Seed as described above	30 LB/ ACRE
Fiber	Wood	500 LB/ ACRE
Tackifier	Psyllium	125 lb/acre

2. Wood fiber and tackifier shall meet the requirements set forth in Division III Section 21 of Caltrans Standard Specifications for Erosion Control.

C. Hydromulch:

1. Shall include the following:

Material Description	Material Type	Application Rate
Fiber	Wood	4000 LB/ ACRE
Tackifier	Psyllium	300 lb/acre

2. Wood fiber and tackifier shall meet the requirements set forth in Division III Section 21 of Caltrans Standard Specifications for Erosion Control.

**PART 3 EXECUTION**

**3.1 SEED**

A. Seeding for FES Lift and surface fabric treatments:

1. Dry seed shall be broadcast on the soil beneath coir fabrics at a rate of 25 pounds per acre.
2. Do not walk on seeded areas after germination period has commenced.

B. Hydroseeding and hydromulch for otherwise untreated disturbed areas:

1. Disturbed areas not otherwise treated shall be hydroseeded according to the requirements set forth in Division III Section 21 of Caltrans Standard Specifications for Erosion Control.
2. Hydromulch shall be applied to untreated slopes steeper than 3:1, if any, according to the requirements set forth in Division III Section 21 of Caltrans Standard Specifications for Erosion Control.
3. Do not walk on seeded areas after germination period has commenced.

C. Irrigation:

1. Irrigation shall be provided by the Contractor as necessary to ensure establishment according to quality control provisions.

### 3.2 QUALITY CONTROL

- A. Seeded areas guarantee: Areas that do not meet seed success criteria for native seed mix establishment on July 1st after the Substantial Completion Date shall be re-seeded during the first available seeding period, as determined by the Engineer. Re-seeding shall be performed at the Contractor's expense, and in conformance with the seeding specifications.
- B. Seeding success criteria: The Engineer will conduct surveys to verify seeding success. Overall coverage will be the dominant criteria, not species assemblage. An area will be considered satisfactory if it meets the following criteria:
  - 1. A minimum of 80 percent intended vegetative cover (noxious weeds and undesirable non-native species will not be considered to be intended vegetation);
  - 2. Not more than 10% of the seeded area with bare spots larger than 1 square foot; and
  - 3. Vegetation shall be in healthy condition.

END OF SECTION



**SECTION 02950**

**STREAMBED CONSTRUCTION**

**PART 1 GENERAL**

**1.1 SUMMARY**

A. Description of work:

1. This item consists of furnishing and placing Riffle Substrate and Boulder Clusters, and Boulder Field as indicated.

**1.2 RELATED SECTIONS**

- A. Section 02315 (Excavation and Fill)
- B. Section 02371 (Riprap)

**1.3 REFERENCES**

- A. AASHTO T 85 - Specific Gravity of Coarse Aggregate.
- B. AASHTO T 96 - Test for Resistance to Degradation for Small-Size Coarse Aggregate.

**1.4 SUBMITTALS**

- A. Riffle substrate test results
  1. Gradation
  2. Specific gravity
  3. Absorption
  4. Abrasion

**PART 2 PRODUCTS**

**2.1 MATERIALS**

A. Riffle Substrate shall be rounded, hard, durable, resistant to weathering and to water action, and be free from overburden, spoil, shale, limestone, structural defects and organic material. The least dimension of any piece of stone shall not be less than one-third its greatest dimension. Unless otherwise approved, the materials shall meet the following quality requirements:

<b>Quality Requirements</b>	
<b>Test and Method</b>	<b>Specification Limits</b>
Apparent Specific Gravity, AASHTO T 85, min	2.65

Absorption, AASHTO T 85, % max	3.0
Abrasion, AASHTO T 96, % max/500 rev	35

Riffle Substrate installed in place will form a compact and consolidated streambed with limited void space, free from segregation of stone sizes. Riffle Substrate will meet the gradation listed below.

Riffle Substrate		
% Passing Weight Basis	Median Diameter (inches)	
	Minimum	Maximum
100	14	16
84	11	13
50	9	10
16	1.8	2.0
5	0.3	0.4

- B. Native Substrate be as defined in Section 02315 (Excavation and Fill).
- C. Boulder Clusters shall consist of boulders as described in Section 02371 (Riprap).

**PART 3 EXECUTION**

**3.1 CONSTRUCTION**

- A. Riffle Substrate shall be placed to form designated sections of the streambed as herein specified and as indicated on the Drawings. Riffle Substrate shall be placed to match the design grades shown on the Drawings.
- B. Native Substrate exhumed from the former streambed surface during excavation, Section 02315 (Excavation and Fill) shall be stockpiled and reused as determined by the Owner.
- C. Do not carry the excavation for the channel shape deeper than the typical subgrade elevation shown on the Drawings. Excavation carried below subgrade shall be replaced with Native Substrate or Riffle Substrate as appropriate. The Contractor shall bear all costs for correcting over excavated areas.
- D. The finished subgrade will be reviewed by the Owner and approved prior to placement of Riffle Substrate and Native Substrate.
- E. Place Riffle Substrate in a manner that prevents segregation of stone sizes. Stone shall be placed such that the constructed river bed forms a consolidated, homogeneous layer, which may require mixing in place and/or water-jetting of the placed material to fill voids in the placed layers.

- F. Place Riffle Substrate according to the following method, or alternative method approved by the Owner:
1. Typical sequence for construction of riffle substrate in the streambed portion of the installation as indicated is as follows. In the following sequence specification, 'framework' is used to describe the Riffle Substrate materials equal to or larger than 6 inches in diameter, and 'small fraction' is used to describe the riffle substrate materials smaller than 6 inches in diameter.
  2. Grade subgrade.
  3. Place a 4- to 6-inch thick loose layer of the small fraction as first course.
  4. Place single layer of framework and work the rocks down so they fit securely into the underlying small fraction material.
  5. Place stone material in an alternating sequence of framework with small fraction locally in a sufficiently small area and work sufficient volume of small fraction in to fill the voids of the framework. Small fraction shall not inhibit stone to stone contact of framework.
  6. Hydraulic washing of small fraction into framework shall be required with each placement of small fraction to fill voids of framework. A pump discharge of sufficient volume and force to compact and settle the smaller streambed material shall be used. Place water onto the streambed material to wash and settle small fraction into the voids within the framework. Recycled water collected from within the work area may be used. The method and duration of water application shall be sufficient to ensure that small fraction material penetrates to the full depth of the voids in the framework and that all of the voids are completely filled with small fraction materials at an even gradation of sizes. Contractor shall control discharge of wash water per Specifications and applicable regulations.
  7. Repeat as necessary to meet the thickness and grades indicated on the Plans. Place channel material in a manner that prevents segregation of stone sizes. Stone shall be placed such that the constructed stream bed and banks form a consolidated layer.

Grade tolerance for Riffle Substrate is +0.2' (no under), when considering the neat line across the installed materials. Boulder Clusters and Boulder Field shall be constructed by placing accumulations of boulders on the streambed as indicated. The nominal gap between the boulders shall be 3 to 5 feet

END OF SECTION



## SECTION 02960

## LARGE WOODY DEBRIS INSTALLATION

**PART 1 GENERAL****1.1 SUMMARY**

- A. Section Includes:
  - 1. Installation and testing of large woody debris (LWD) as indicated.
- B. Related Sections:
  - 1. Section 02231 (Clearing and Grubbing)

**1.2 REFERENCES**

- A. ASTM C-307 Test for Tensile Strength
- B. ASTM C-579 Test for Compressive Strength
- C. ASTM C-580 Test for Flexural Strength and Modulus of Elasticity
- D. ASTM D-570 Test for Water Absorption of Plastics
- E. FF-C-450 Federal Specification: Clamps, Wire Rope

**1.3 SUBMITTALS**

- A. Product Data:
  - 1. Epoxy adhesive, cable and cable clamps.
- B. Samples:
  - 1. Epoxy adhesive, cable and cable clamps.

**PART 2 PRODUCTS****2.1 MATERIALS**

- A. Owner-furnished large woody debris.
  - 1. The number and location of large woody debris are as indicated.
  - 2. Large woody debris shall primarily consist of redwood and Douglas fir species, with up to 40 eucalyptus logs with rootwads designated for installation in locations outside the active channel of Dry Creek.
  - 3. Large woody debris trunk diameter at breast height (DBH) shall be 18 inches or greater.
  - 4. For logs and logs with rootwads, trunk length shall be 30 feet or greater. For snags, trunk length shall be 20 feet or greater.
    - a. For logs with rootwads, length shall be measured from the crown of the rootwad to the tip of the log.
    - b. For logs and snags, length shall be measured from cut end to cut end
  - 5. Root wads shall consist of stout roots, such that roots of minimum 2 inch diameter shall form a root wad at least 4 feet in diameter. The root wad shall be kept intact, even if greater than 4 feet in diameter. Roots 2 inch diameter or larger shall not be cut. Soil shall be removed from the root wads.
  - 6. Only redwood shall be used for snags within the active channel of Dry Creek.
  - 7. Owner may designate cleared materials as slash during clearing and grubbing for use in installation of the Work, as indicated. See Section 02231 (Clearing and Grubbing).
- B. Cable:

- 1. For logs cabled to boulders, cable shall be galvanized, steel core, 1/2-inch diameter, and shall have a minimum nominal tensile capacity of 12 tons.
- 2. For logs cabled to logs, cable shall be galvanized, steel core, 3/8-inch diameter and shall have a minimum nominal tensile capacity of 7 tons.
- C. Epoxy Adhesive:
  - 1. Epoxy adhesive used to secure cable to rock boulders as indicated shall be Hilti HIT HY 150 epoxy or Approved Equal. Under no circumstances shall epoxy adhesive be applied in a submerged condition. When cured, the epoxy adhesive shall meet or exceed the following criteria:
 

Compressive Strength	ASTM C579	10,420 psi
Tensile Strength	ASTM C307	2,310 psi
Flexural Strength	ASTM C580	4,250 psi
Modulus of Elasticity	ASTM C307	1.02 x 10 <sup>6</sup> psi
Water Absorption	ASTM D570	0.12%
- D. Cable Clamps:
  - 1. Cable clamps shall be galvanized steel and shall meet the performance requirements of Federal Specification FF-C-450 TYPE 1 CLASS 1. Cable clamps shall be Crosby Clips (G-450) or Approved Equal.
- E. Boulders:
  - 1. See Section 02371 (Riprap)

**PART 3 EXECUTION**

**3.1 CONSTRUCTION**

- A. Large woody debris will be furnished by Owner at the designated stockpile site, then loaded and hauled by Contractor to the Site for installation into the Work.
- B. Contractor shall be responsible for managing the large woody debris on Site and transporting these materials from the on-Site stockpile location to the installation locations.
- C. Care should be taken when handling log materials to minimize damage such as abrasion, splitting, crushing and shearing to the tree trunk and root wads. Root wads shall be maintained intact through handling and transportation from Owner stockpile to installation locations.
- D. Excavate as necessary to place large woody debris while minimizing disturbance to the subgrade. Shape, trim, and finish subgrade to allow for placement of large woody debris as indicated.
- E. Place large woody debris and boulders where required in final configuration after consultation with and approval of Owner.
- F. Locations for large woody debris and the installed configurations and orientations shall generally be as indicated on the Drawings. However, Owner will coordinate with the Contractor in adjusting the locations, configurations and orientations of the large woody debris and ballast materials, depending on the specific ground, terrain and existing vegetative characteristics at each installation location, and the size and shape of materials actually delivered to the site.
- G. Ballast boulders shall be buried beneath finish grade, unless otherwise approved by Owner.
- H. Ballast boulder installation shall be sequenced with snag pullout resistance testing program, described below.
- I. Contractor shall endeavor to conceal cable attachments beneath finish grade to the extent practicable.

## J. Logs cabled to boulders:

1. Each log to boulder cable connection shall consist of a single piece of cable wrapped around the log, with each end secured to a separate boulder by embedment of each end in a hole, and secured with epoxy. Two boulders are required for each log-to-boulder connection.
2. Where logs will be cabled to boulders, 9/16-inch diameter holes 8 inches deep shall be drilled into rock boulders to secure cable with epoxy as indicated. Holes shall be placed in solid rock only, away from obvious fractures or other inconsistencies observed on the boulder surface. Holes shall be scoured and cleaned in accordance with the epoxy manufacturer's instructions for concrete installations. All epoxy anchor hole preparation shall be observed in the presence of Owner. Cable ends shall be clean and oil-free. Epoxy adhesive shall not be applied in a submerged condition.
3. The axis of the cable shall be perpendicular to the axis of the woody debris axis to hold the woody debris down tightly to the underlying material. Minimize distance between logs and boulders, with no gaps. Make a complete wrap with the cable around each piece of woody debris to be cabled. Place clamps on either side of the woody debris at the point where the cable departs from the loop to secure the cable to itself and to fix the diameter of the cable loop.
4. Following clamping, cable shall not have any gap between the cable and the woody debris when levered with a steel bar. The cable shall be tight between the rock boulder anchored end and the woody debris after placement; no slack shall be allowed.
5. There shall be no slack in the cable when cable is inserted into the bottom of the epoxied holes. Fill holes enough to ensure complete coverage. Excess epoxy squeeze-out shall be visible at the top of the hole as the cable is seated in the anchor hole.
6. Place, tamp, and compact surrounding material around the woody debris and boulders, as required, to remove the potential for rocking motion of the woody debris and boulders. For woody debris placed within bank treatment areas, work bank treatment materials around the woody debris to match the lines and grades as indicated.

## K. Logs cabled to other logs:

1. Where logs will be cabled to other logs, the axis of the cable shall be perpendicular to the axis of each piece of woody debris to hold the woody debris tightly to each other. Use two cable clamps at each clamping location, as indicated.
2. Following clamping, cable shall not have any gap between the cable and the woody debris when levered with a steel bar. No slack shall be allowed.
3. Place, tamp, and compact surrounding material around the woody debris, as required, to remove the potential for rocking motion of the woody debris. If woody debris is placed within bank treatment areas, work bank treatment materials around the woody debris to match the lines and grades as indicated.

## L. Snags:

1. Unless otherwise approved by Owner, snags shall be driven to the depths of burial shown on the Drawings through vibratory methods.
2. Pullout Resistance Testing Program:
  - a. At the onset of installing snags across the site and prior to installing ballast boulders in LWD structures, snags shall be tested for pullout resistance through a pullout resistance testing program.
  - b. Pullout resistance testing shall be conducted on snags that have been installed at their final placement locations.

- c. Snag pullout resistance testing shall be accomplished in the presence of the Engineer with a scale that can be easily read while testing progresses, with testing capacity of up to 25,000 pounds.
- d. Pullout resistance testing of snags shall be accomplished at locations determined by the Engineer, at the frequencies listed below:
  - 1) Within active channel of Dry Creek following diversion, in saturated native substrate - 5 locations
  - 2) Within Off-Channel Area A, at channel bottom elevation in saturated soil - 5 locations
  - 3) Within Off-Channel Area A, at floodplain elevation - 3 locations
  - 4) Within Off-Channel Area C, at channel bottom elevation in saturated soil - 5 locations
  - 5) Within Off-Channel Area C, at floodplain elevation - 3 locations
- e. Based on the results of the pullout resistance testing program, the Engineer may adjust the boulder ballast required at the LWD structure installation locations.

END OF SECTION

## SECTION 02970

### FABRIC ENCAPSULATED SOIL (FES) LIFTS

#### PART 1 GENERAL

##### 1.1 SUMMARY

A. Description of work:

1. Fabric Encapsulated Soil (FES) Lifts shall be placed for streambank treatment Types 2, 3, and 4 and shall be constructed as specified herein and as indicated.
2. The Contractor shall provide all labor, materials, and equipment necessary for the construction and installation of FES Lifts.

##### 1.2 RELATED SECTIONS

- A. Section 02980 (Surface Fabric Treatment)
- B. Section 02906 (Planting of Trees, Shrubs and Groundcovers)
- C. Section 02921 (Seeding)
- D. Section 02950 (Streambed Construction)

##### 1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM)
  1. ASTM D 6525 – Test for Measuring Nominal Thickness of Permanent Rolled Erosion Control Products
  2. ASTM D 1117 – Standard Guide for Evaluating Nonwoven Fabrics
  3. ASTM D 6475 – Test for Measuring Mass Per Unit Area of Erosion Control Blankets
  4. ASTM D 1388 – Test for Stiffness of Fabrics
  5. ASTM D 6818 – Test for Ultimate Tensile Properties of Turf Reinforcement Mats
  6. ASTM D 1777 – Test for Thickness of Textile Materials
  7. ASTM D 4595 – Test for Tensile Properties of Geotextiles by the Wide-Width Strip Method
  8. ASTM D 3776 – Test for Mass Per Unit Area (Weight) of Fabric
- B. Erosion Control Technology Council (ECTC)
  1. Standard Specification for Rolled Erosion Control Products

##### 1.4 SUBMITTALS

A. Samples:

1. Submit technical data for and samples of coir fabrics (woven and nonwoven) proposed for use in construction of FES lifts for approval by the Owner.

**PART 2 PRODUCTS**

**2.1 MATERIALS**

A. Nonwoven Coir Fabric

1. The inner layer of nonwoven coir fabric shall be North American Green (NAG) style C125BN 100% biodegradable coconut fiber mat or Approved Equal. The fabric shall meet or exceed the following criteria:

Property	Test Method	Criterion
Thickness	ASTM D 6525	0.28 in (7.11 mm)
Resiliency	ECTC Guidelines	85%
Water Absorbency	ASTM D 1117	365%
Mass/Unit Area	ASTM D 6475	8.83 oz/yd <sup>2</sup> (300 g/m <sup>2</sup> )
Swell	ECTC Guidelines	40%
Smolder Resistance	ECTC Guidelines	Yes
Stiffness	ASTM D 1388	0.11 oz-in
Light Penetration	ECTC Guidelines	17.7%
Tensile Strength -MD	ASTM D 6818	141.6 lbs/ft (2.1 kN/m)
Elongation - MD	ASTM D 6818	14%
Tensile Strength - TD	ASTM D 6818	222 lbs/ft (3.29 kN/m)
Elongation - TD	ASTM D 6818	14.3%
Roll Width	Measured	6.6 ft.

B. Woven Coir Fabric

1. The outer layer of woven coir fabric shall be a high strength 700 Weight (100% coconut fiber), continuously woven mat (i.e., without seams). The fabric shall meet or exceed the following criteria:

Parameter	Test Method	Criterion
Thickness	ASTM D 1777	0.30 inches
Tensile Strength	ASTM D 4595	100 lb/in x 70 lb/in
Mass/Unit Area	ASTM D 3776	20 oz./yd <sup>2</sup>
Open Area	Measured	50%, maximum
Roll Width	Measured	9.9 ft or 13.2 ft (see below)

The woven coir fabric (if without seams) shall be Bon Terra CF-7, DeKoWe 700, Nedra KoirMat 700, Rolanka BioDMat 70, or Approved Equal.

C. Wood Stakes

1. Wood Stakes shall be used to anchor all coir fabrics. Stakes shall be wooden stakes solid and free of knots or defects. Stakes shall be 24" in length. Stakes shall be wedge shaped with a minimum equivalent diameter equal to 1.5" at the top and should come to a point at the bottom. Stakes should be constructed by cutting a standard grade 2"x 4" lumber lengthwise along the diagonal to create wedge shaped stakes, or by some other method resulting in a stake of dimensions approved by the Owner.

D. Seed

1. Material requirements for Seed are specified in Section 02921 (Seeding) of these specifications.

E. Live Cuttings

1. Material requirements for Live Cuttings are specified in Section 02906 (Planting of Trees, Shrubs and Groundcovers of these specifications).

F. Streambed Gravel

1. Streambed Gravel shall be as described in Section 02950 (Streambed Construction).

**PART 3 EXECUTION**

**3.1 CONSTRUCTION**

- A. The number of lifts to be installed for each section of streambank shall be according to the total vertical bank height designated for FES lift construction as follows:

<b>Total Vertical Bank Height</b>	<b>Number of Lifts</b>
< 1.5'	1
1.6' to 3.0'	2
3.1' to 4.5'	3
4.6' to 6.0'	4
6.1' to 7.5'	5
7.6' to 9.0'	6
9.1' to 10.5'	7
10.6' to 12.0'	8
12.1' to 13.5'	9
13.6' to 15.0'	10

- B. Fabric widths: 13.2 foot wide woven coir fabrics shall be used for the top and bottom lift at each location. 9 foot wide fabrics shall be used for all middle (if required) lifts.
- C. Perform all shaping of the subgrade to the elevations, lines and grades, as indicated. Shape, trim, and finish slopes of channels to conform with the subgrade lines, grades, and cross sections as indicated. The subgrade shall be graded to a smooth condition free from depressions and protruding rocks, sticks, and other debris which may prevent a smooth application or that may damage the fabric. Care shall be taken to remove all objects that would interfere with application or damage the coir fabrics. The finished subgrade shall be approved by the Owner prior to placement of any new material.
- D. Do not carry the excavation for the subgrade deeper than the elevation shown. Excavation carried below the subgrade lines shown on the Plans shall be replaced with constructed streambed. The Contractor shall bear all costs for correcting over excavated areas.

- E. Place live cuttings on 1-foot centers between fabric wrapped soil lifts per Section 02906 (Planting of Trees, Shrubs and Groundcover).
- F. Place forms along the bank in locations to achieve the lines and grades shown on the Drawings.
- G. Roll woven coir fabric along the streambank and place fabric against the subgrade and (vertical) form face with embedment lengths as indicated.
- H. Roll nonwoven coir fabric along the streambank and place on top of the woven coir fabric to achieve the embedment length shown on the Drawings.
- I. Remove all wrinkles in coir fabric and insure that fabrics rest tightly against the subgrade and form face with the proper embedment lengths. Allow excess coir fabric to drape over the form toward the stream channel.
- J. Apply Seed Mix per Section 02921 (Seeding) of the Specifications to that portion of nonwoven coir fabric that is placed against the vertical face of the form.
- K. Fill material as designated on the Drawings shall be placed in layers not to exceed 0.5 feet and then compacted to 85% maximum density. Additional layers of soil mixtures shall be placed and compacted to reach a lift height of 1.0 to 1.5 feet as indicated.
- L. Apply Streambank Seed Mix per Section 02921 (Seeding) of the Specifications to the soil lift prior to wrapping with fabric. In the case of multiple lifts, be sure to seed only those areas exposed following completion of the entire bank.
- M. Pull coir fabrics that are draped over the form back over seeded soil. Pull coir fabrics tight and stake according to the Specifications and Drawings.
- N. Supplemental stakes shall be installed in any areas where the fabric is loose and can easily be pulled away from the surface. Finished fabric installation should be tight and not easily moved by hand.
- O. Wood stakes may be placed through both layers of coir fabrics. It is not required to anchor the nonwoven and woven fabrics individually. Wood stakes shall be placed between the fibers of the woven coir fabric. Cutting of the coir fabrics to facilitate wooden stake placement will not be allowed.
- P. Damaged coir fabric shall be repaired or replaced. If damaged coir fabric has a tear of 6 inches or less, scrap fabric may be placed beneath damaged woven coir fabric such that it extends 24 inches beyond the damaged area in all directions. Stake around the tear with 4 wooden stakes on 12-inch centers. Coir fabrics with tears greater than 6 inches shall be replaced at the Contractor's expense.
- Q. Remove forms. Note, forms can be removed by hand, or pried with a bar if necessary. Contractor shall not use motorized equipment to remove forms.
- R. Repeat D-O, above, to achieve the lines and grade shown on the Plans.
- S. Maintenance: Live Cuttings and Seed placed in Fabric Encapsulated Soil Lifts shall be watered and maintained by Contractor in accordance with Section 02906 (Planting of Trees, Shrubs and Groundcovers) and 02921 (Seeding) of these Specifications.

END OF SECTION

**SECTION 02980****SURFACE FABRIC TREATMENT****PART 1 GENERAL****1.1 SUMMARY****A. Description of work:**

1. The Contractor shall provide all labor, materials, and equipment necessary for the installation of coir fabrics.
2. Locations shall include regraded streambanks for Type 1 Bank Treatment areas.

**1.2 RELATED SECTIONS****A. Section 02921 (Seeding)****1.3 REFERENCES****A. American Society for Testing and Materials (ASTM)**

1. ASTM D-1117 - Standard Guide for Evaluating Nonwoven Fabrics.
2. ASTM D-1777 - Test for Thickness.
3. ASTM D-1388 - Test for Stiffness.
4. ASTM D-3776 - Test for Mass Per Unit Area.
5. ASTM D-4595 - Test for Tensile Properties.
6. ASTM D-6475 - Test for Mass Per Unit Area.
7. ASTM D-6525 - Test for Nominal Thickness.
8. ASTM D-6818 - Test for Ultimate Tensile Properties.

**B. Erosion Control Technology Council (ECTC)**

1. Standard Specifications for Rolled Erosion Control Products

**1.4 QUALITY CONTROL**

- A. Coir fabrics shall consist of 100% biodegradable mats. Nylon fiber material in any of the coir fabrics is not acceptable. Only those coir fabrics specified will be accepted unless otherwise approved by the Engineer.
- B. Each roll of coir and filter fabric shall be packaged individually in a suitable sheet, wrapper, or container to protect the fabric from damage to ultraviolet light, moisture, and mud during normal storage and handling.
- C. Each roll of coir and filter fabric shall be identified with a tag or label securely affixed to the outside of the roll on one end. The label shall include the manufacturer or supplier, the style number, and the roll and lot numbers.

- D. Store all coir and filter fabrics elevated off the ground and ensure that they are adequately covered to protect the material from damage. Protect coir and filter fabrics from sharp objects which may damage the fabric.
- E. Coir and filter fabrics damaged during transport, storage or placement shall be replaced at the Contractors expense.
- F. The Engineer may randomly select and obtain samples from rolls of coir and filter fabric after arrival on the site and prior to installation to compare to previously submitted samples.

## **PART 2 PRODUCTS**

### **2.1 MATERIALS**

- A. Nonwoven Coir Fabric
  - 1. As specified in Section 02970 (Fabric Encapsulated Soil Lifts)
- B. Woven Coir Fabric
  - 1. As specified in Section 02970 (Fabric Encapsulated Soil Lifts)
- C. Wood Stakes
  - 1. As specified in Section 02970 (Fabric Encapsulated Soil Lifts).
- D. Seed
  - 1. Material requirements for Seed are specified in Section 02921 (Seeding) of these specifications.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Verify the coir fabrics are of correct specifications.
- B. Beginning of installation means acceptance of existing conditions.

### **3.2 INSTALLATION**

- A. Coir Fabrics (Woven and Nonwoven)
  - 1. Coir fabrics will be placed within Type 1 Bank Treatment areas as indicated.
  - 2. Install according to manufacturer's instructions and according to the Drawings. Place woven coir fabrics, as indicated on the Drawings, overlying nonwoven coir fabric.
  - 3. The area to be covered by the coir fabrics shall be graded to a smooth condition free from depressions and protruding rocks, sticks, and other debris which may prevent a smooth application or that may damage the fabric. Care shall be taken to remove all objects that would interfere with application or damage the coir fabrics.
  - 4. Following surface preparation, install seed as indicated and described in Section 02921 (Seeding) prior to placement of coir fabrics.

5. The coir fabrics shall be placed and anchored as indicated using wood stakes. Wood stakes may be placed through both layers of coir fabrics. It is not required to anchor the nonwoven and woven fabrics individually. Wood stakes shall be placed between the fibers of the woven coir fabric. Cutting of the coir fabrics to facilitate wooden stake placement will not be allowed.
6. Damaged coir fabric shall be repaired or replaced. If damaged coir fabric has a tear of 6 inches or less, scrap fabric may be placed beneath damaged woven coir fabric such that it extends 24 inches beyond the damaged area in all directions. Stake around the tear with 4 wooden stakes on 12-inch centers. Coir fabrics with tears greater than 6 inches shall be replaced at the Contractor's expense.

END OF SECTION

