



MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

CALL FOR BIDS

CARMEL RIVER BANK STABILIZATION AT RANCHO SAN CARLOS ROAD

DAVID J. STOLDT, GENERAL MANAGER

May 2018

Revised May 29, 2018

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BID ADDENDUM 1 – May 29, 2018

CARMEL RIVER BANK STABILIZATION AT RANCHO SAN CARLOS ROAD

Item 1 – Labor Code Section 1776 Compliance

The language below is to be incorporated into the Notice Inviting Sealed Bids and into Section 5 Wage Scale in the Contract for the work.

“The Contract is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The prime contractor shall post job site notices, as prescribed by regulation. Each contractor and subcontractor shall furnish the records specified in Labor Code Section 1776 directly to the Labor Commissioner, in the manner prescribed under Section 1771.4.”

Item 2 – Add clarification concerning physical and mailing address for bid.

Item 3 – Correct numbering in Contract form, starting with 19.

Item 4 – Correct numbering in Special Conditions starting with 15.

Item 5 – SECTION 01568 - EROSION AND POLLUTION CONTROLS

This section is amended to add the following specification:

6.4 HYDROSEED

Hydro seeding shall consist of mixing and applying seed, commercial fertilizer and stabilizing emulsion, or any combination thereof, with fiber and water. The Contractor shall supply all materials and equipment and shall apply the hydroseed mix in the locations specified on the construction drawings and as described below.

A. PAYMENT

Payment for this item shall be the price as established in the Bid Schedule. Such payment shall constitute full compensation for all labor, materials, equipment, and all other items necessary and incidental to the completion of the work.

B. ITEMS OF WORK AND CONSTRUCTION DETAILS

The Contractor shall mix seed, emulsion, fiber, and fertilizer in a tank with a built-in continuous agitation system of sufficient operating capacity to produce a homogeneous mixture and a discharge system which will apply the mixture at a continuous and uniform rate. The seed mix shall be blue wildrye (*Elymus glaucus*) on slopes more than six (6) feet above the channel bottom and creeping wild rye (*Leymus triticoides*) on lower slopes. Seed shall be applied at 10 to 20 pounds per acre. The quantity of water shall be as needed for application, except that when

stabilizing emulsion is specified, the ratio of total water to total stabilizing emulsion in the mixture shall be as recommended by the manufacturer of the emulsion. The Contractor shall apply a minimum of 500 pounds of fiber per acre, which shall be mixed and applied with the seed, emulsion, and fertilizer. The fiber shall be furnished and applied at the Contractor's expense.

A dispersing agent may be added to the mixture provided the Contractor furnishes evidence that the additive is not harmful. Any material considered harmful, as determined by the MPWMD, shall not be used. Any mixture containing stabilizing emulsion shall not be applied during rainy weather or when soil temperatures are below 40° F. Pedestrians or equipment shall not be permitted to enter areas where mixtures containing stabilizing emulsion have been applied. The Contractor shall hydroseed all areas disturbed by grading operations, except for the channel bottom and stream bank areas where riprap is exposed. Where geotextile or other erosion control fabric is to be placed on a slope, the seed mix shall be placed prior to placement of the geotextile. Otherwise, the seed mix shall be placed after all work on the area to be seeded has been completed.

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This specification is amended as follows:

The Contractor shall first determine the density and unit weight of native soil as described in ASTM D1556/D1556M. A minimum of two tests of native soil shall be carried out at locations as directed by the District Engineer. After placement of cuttings, fill material shall be placed in lifts no greater than 8 inches each. Fill material shall be compacted to the density of native soil as determined by test. A minimum of two tests of compacted fill shall be carried out at locations as directed by the District Engineer. Contractor shall take care not to break willow or cottonwood cuttings during compaction.

Item 7 – Plan Sheet 4.2 Right Bank Stabilization

No excavation into the right streambank as shown in Detail 4.2 B will be allowed. Bank logs shall not be excavated into the bank as shown. Bank logs shall be placed with the cut end at the existing streambank and anchored with screw anchors.

Plans, Specifications, and bid forms may be secured at no charge from the Monterey Peninsula Water Management District, 5 Harris Court, Bldg. G Street, P. O. Box 85, Monterey, California 93942-0085 or may be downloaded from the District's web page at

<http://www.mpwmd.net/who-we-are/project-bids-rfps/>

For further information, please contact Larry Hampson, larry@mpwmd.net or at 831-658-5620.

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MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

NOTICE INVITING SEALED BIDS

CARMEL RIVER BANK STABILIZATION AT RANCHO SAN CARLOS ROAD

NOTICE IS HEREBY GIVEN, that sealed bids will be received by the Board of Directors, Monterey Peninsula Water Management District, at the District office, 5 Harris Court, Bldg G, Monterey CA 93940 until **2 p.m. on June 29, 2018**, at which time they shall be publicly opened and read. Mail-in bids may also be sent to the P. O. Box 85, Monterey, California, 93942-0085. Work is as follows:

- Approximately 300 cubic yards of excavation
- Approximately 225 cubic yards of imported fill
- Approximately 950 tons of imported rock
- Installation of approximately 160 lineal feet of log crib wall
- Installation of approximately 60 lineal feet of logs and boulders for streambank stabilization
- Seeding and Erosion Control

Any bids received after the deadline for bid submittal shall be returned unopened.

Site is located in the Carmel River at the Rancho San Carlos Road Bridge, Carmel Valley CA 93924. The nearest cross street is Carmel Valley Road and Rancho San Carlos Road.

This work shall be done in accordance with the Specifications therefore adopted, to which special reference is hereby made. The Contractor shall furnish all labor, supplies, equipment, and services required to perform the work, except as expressly stated in the Construction Specifications. The Contractor shall hold a valid Class A, General Contractors License issued by the State of California.

Each bid shall be accompanied by U.S. currency, certified check, cashiers check, or Contractor's bond in an amount not less than ten percent (10%) of the bid amount, and shall be made payable to the Monterey Peninsula Water Management District.

Responses to this Call for Bids shall incorporate the general prevailing rates in the locality in which the work is to be performed as determined by the State Director of the Department of Industrial Relations. It shall be incumbent upon the successful bidder to pay not less than the minimum hourly wage required by the Schedule of Wage Determinations to be paid to the various laborers and mechanics employed directly upon the site of the work. In the event that any change in the above rates is made, said changed rates shall apply to this public project without adjustment in bid price. A copy of said Schedule of Wage Determinations is on file at the District office.

The District reserves the right to reject any and all bids or to waive any irregularities or informalities in any bid or in the bidding. No bidder shall withdraw his or her bid for a period of 180 calendar days after the date set by the District for the opening thereof. Award of a contract and Notice to Proceed is subject to the District obtaining all necessary permits and authorizations for work.

Timing is of the essence in the conduct of this project. Upon authorization of a contract by the District Board of Directors, a notice of award will be sent to the successful bidder. The successful bidder will then have 10 calendar days to return a signed contract agreement, together with faithful performance bonds and any other required documentation.

Work must begin within 10 calendar days from issuance of the notice to proceed by the District. The work must be completed by October 31, 2018. If the bidder fails or refuses to enter into a contract to do the work, then the bid guaranty accompanying the bid shall be paid to the District as liquidated damages (General Provisions Sect. 2.03).

The Engineer's estimate for this work is \$570,000. **There will be an optional field inspection of the project area on Friday, June 15, 2018 at 9:00 a.m.** Please meet at the Santa Lucia Conservancy at 26700 Rancho San Carlos Road on the south side of the Rancho San Carlos Road Bridge.

Plans, Specifications, and bid forms may be secured at no charge from the Monterey Peninsula Water Management District, 5 Harris Court, Bldg. G Street, P. O. Box 85, Monterey, California 93942-0085 or may be downloaded from the District's web page at

<http://www.mpwmd.net/who-we-are/project-bids-rfps/>

For further information, please contact Larry Hampson, larry@mpwmd.net or at 831-658-5620.

INSTRUCTIONS TO BIDDERS

BID SUBMITTAL

A sealed bid shall be made and submitted on the blank form provided herein, without substitution or omission, in accordance with Section 1.02 of the General Conditions. The bid shall be sealed in an envelope marked "**Carmel River Bank Stabilization at Rancho San Carlos Road Project Bid**". All bids received by mail shall be sealed and clearly marked. Bids that do not meet these requirements shall not be eligible for consideration.

BID GUARANTY

Each bid shall be accompanied by either U.S. currency, certified check, cashier's check, or proposed Contractor's bond of a surety company acceptable to the District in an amount not less than ten percent (10%) of the bid amount, and shall be made payable to the Monterey Peninsula Water Management District.

BID PRICE

The bid price shall include everything necessary for the performance of the complete job, including but not limited to furnishing all materials, equipment, tools, superintendence, labor, and services except as expressly stated in the Construction Specifications.

TAXES

Bid prices shall include allowance for all federal, state, and local taxes.

BONDS

The posting of a Faithful Performance Bond by the Contractor in the amount of one hundred percent (100%) of the total contract price as specified in Section 4 of the General Provisions will be required as part of this project.

A Material-and-Labor Bond shall also be required to be posted by the Contractor in the amount of one hundred percent (100%) of the total contract price, as specified in Section 4 of the General Provisions.

The Contractor has the option to substitute certain securities for a faithful performance bond, pursuant to an escrow agreement. The Contractor shall inform the District in writing upon submittal of the bid of his intention to substitute securities for a faithful performance bond.

**MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
MONTEREY COUNTY, CALIFORNIA**

**BID TO PROVIDE CARMEL RIVER BANK STABILIZATION
AT RANCHO SAN CARLOS ROAD**

Monterey Peninsula Water Management District
5 Harris Court Bldg. G, Monterey CA 93940
or
P.O. Box 85, Monterey, CA 93942-0085

Ladies and Gentlemen:

Pursuant to the foregoing Notice Inviting Sealed Bids, the undersigned hereby proposes and binds himself by the District, under this Bid, to execute in accordance with such award, a contract of which this Bid and the Specifications shall be a part, to furnish any and all labor, materials, equipment, and services necessary for satisfactory performance and completing the work set forth in said Specifications within the time hereinafter set forth and at the prices named in this bid as follows*:

BID FORM

Item	Description	Quantity	Unit	Unit Cost	Total Cost
	Mobilization and General Conditions				
1	Mobilization/demobilization	1	LS		
2	Demolition	1	LS		
3	Erosion Control & Exclusionary Fencing	1	LS		
4	Temporary Construction Ramp	1	LS		
	Log Cribwall - left bank				
5	Excavation ¹	1	LS		
6	Fill ²	225	CY		
7	15' x 9" Logs	36	EA		
8	15' x 12" Logs	36	EA		
9	15' x 15" Logs	41	EA		
10	15' x 15" Logs with Rootwads	5	EA		
11	1.5-ton Boulders	350			
12	1-ton Boulders	232	LS		
13	1/2-ton Boulders	175			
14	Bolted Connections	252	LS		
15	Channel Bed Fill	175	LS		
16	Construct Cribwall	1	EA		
	Right Bank Stabilization				
17	Excavation ¹	1	LS		
18	Fill ²	1	LS		
19	Bank Logs (18' x 18")	3	EA		
20	Footer Logs (18' x 18")	2	EA		
21	1.5-ton Boulders	72	EA		
22	Duckbill anchor	3	EA		
23	8-inch marine screw anchor	3	EA		
24	Construct RB stabilization	1	EA		
25	Seeding	5,500	SF		
26	Erosion Control Blanket	4,700	SF		
	Total				
	Optional Items				
	Bid Alternate - Temporary Diversion and Dewatering³	1	LS		

1. Left bank excavation = 225 CY. Right bank excavation = 55 CY. Anticipated to produce channel bed fill.

* Upon award, this Bid Form shall become a part of the final contract

The undersigned has examined the location of the proposed work and/or is familiar with the Specifications and the local conditions in the place where the work is to be done.

The undersigned has checked carefully all the above figures and understands that the District shall not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

The undersigned understands that the District reserves the right to reject any or all bids, and to waive any irregularities or informalities in bids received. Award shall be made which, in the judgement of the District, is to the best interest of the District. It is agreed that this bid may not be withdrawn within a period of 180 days after the date set for the opening thereof.

In accordance with the Construction Specifications, the undersigned further agrees to so plan the work and prosecute it with such diligence that said work shall be commenced within 10 days after issuance of the notice to proceed, and the work shall be completed within ___ days from issuance of the notice to proceed.

The undersigned agrees, if awarded the contract, that there shall be paid by the undersigned and all subcontractors under him, to all laborers, workmen, and mechanics employed in the execution of such contract or any subcontract thereunder, not less than the general prevailing rate of per diem wages, and rates for overtime and legal holidays in the locality in which the work is to be performed, as established by the State Director of the Department of Industrial Relations.

The undersigned or his or her subcontractors currently possess and agree to maintain valid **Contractor's Licenses** issued by the State of California necessary to prosecute the work.

Bidder: _____ Tax I.D.Number: _____

Business Address: _____

List all Contractor's License No.: _____

Telephone:(____) _____

e-mail: _____

By: _____ Dated: _____

Title: _____

This form to be submitted with the bid.

BIDDER'S EXPERIENCE QUALIFICATIONS

The Bidder has been engaged in the contracting business, under the present business name for _____ years. Experience in work of a nature similar to that covered in the bid extends over a period of _____ years. **The Bidder must demonstrate successful completion of at least one project involving heavy construction work in a live stream containing steelhead or other salmonid species.**

The bidder, as a contractor, has never failed to satisfactorily complete a contract awarded to him, except as follows:

Year	Type of Work	Contract Amount	Location and for Whom Performed

Bidder _____

Signed _____

Title _____

Date _____

This form to be submitted with the bid.

SUBCONTRACTOR'S EXPERIENCE QUALIFICATIONS

The subcontractor has been engaged in the contracting business, under the present business name for _____ years. Experience in work of a nature similar to that covered in the bid extends over a period of _____ years.

The subcontractor has never failed to satisfactorily complete a contract awarded to him, except as follows:

Please indicate for whom the work was conducted, the type of work, and who can be contacted as a reference for the work:

Year	Type of Work	Contract Amount	Location and for Whom Performed
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please attach additional sheet(s) as needed.

Signed _____

Title _____

Date _____

This form to be submitted with the bid.

SECURITY FOR COMPENSATION CERTIFICATION

TO: MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

I am aware of the provisions of Section 3700 of the Labor Code of the State of California which require every employer to be insured against liability for worker's compensation or to undertake self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of the work of this Contract:

Date

(Signature of Bidder)

Business Address:

Place of Residence:

(This certificate must be executed by the successful bidder prior to the award of Contract.)

FAIR EMPLOYMENT PRACTICES CERTIFICATION

TO: MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

The undersigned, in submitting a bid for performing the following work by Contract, hereby certifies that he has or shall meet the standards of affirmative compliance with Fair Employment Practices requirements of the special provisions contained herein:

Date

(Signature of Bidder)

Business Address:

Place of Residence:

(This certification must be executed by the successful bidder prior to the award of the Contract.)

**NONCOLLUSION AFFIDAVIT TO BE EXECUTED
BY BIDDER AND SUBMITTED WITH BID**

State of California)
) ss.
County of _____)

being first duly sworn, deposes and says that he or she is _____ of the party making the foregoing bid; that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that bid is genuine and not collusive or sham; that 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 that anyone shall refrain from bidding; that 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, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true, and, further, that 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, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Signature

Date

The title of the affidavit provides that it is "to be executed by bidder and submitted with the bid."

CONTRACT AGREEMENT

This agreement, made and entered into this _____ day of _____ 20____, by and between the Monterey Peninsula Water Management District, Monterey County, State of California, hereinafter called the District, and _____ hereinafter called the Contractor.

WITNESSETH: That the District and Contractor have mutually covenanted and agree, and by these presents do covenant and agree with each other as follows:

1. That for and in consideration of the covenants and agreements hereinafter contained on the part of the District, and the sums of money hereinafter designated to be paid to the Contractor by the District in the manner and form as hereinafter provided in the attached Specifications, the Contractor hereby covenants and agrees with the District to furnish all labor, tools, appliances, equipment, plant and transportation, and any and all other expenses necessary or incidental to the performance of certain work hereinafter specified, and to build, construct and complete all works for the Monterey Peninsula Water Management District, State of California, all as more particularly as set forth in these Specifications filed in the District Office, and identified by the signatures of the parties to the Agreement.

This Agreement specifically includes all items of work described in the Bid, all in accordance with the Specifications. All terms and conditions contained in any of the component parts of this contract shall apply to the above designated schedule.

2. Time of Performance. In accordance with the Specifications, the undersigned further agrees to so plan the work and to prosecute it with such diligence that said work shall be commenced within _____ consecutive calendar days from Notice to Proceed.

In the event the work is not completed within the time agreed upon, the provisions of General Provisions Paragraph 11.08 regarding damages shall govern.

3. Payments. Payments shall be made by check to Contractor for work performed at the times and in the manner provided in the Specifications and General Provisions, Section 11).
4. Component Parts. This Contract shall consist of the following documents, each of which is on file in the office of the District Secretary and all of which are incorporated herein and made a part herein and made a part hereof by reference thereto:

Bid Form
Contractor's Experience Qualifications
Subcontractor's Experience Qualifications, if any
Security for Compensation Certification
Fair Employment Practices Certification
Non-Collusion Affidavit
Contract Agreement
Special Conditions
Construction Specifications
Construction Drawings
General Provisions
Addenda, if any

5. Wage Scale. Reference is hereby made to the wage scale established by the State Director of the Department of Industrial Relations which is hereby specified as the rate of prevailing wage to paid workers on this project, and the provisions of Article 2, Chapter 1, Part 7, Division 2 (commencing with Section 1770) of the Labor Code shall be complied with. A copy of the prevailing wage rates is on file and may be inspected at the District office.

It is further agreed that no person shall be hired by the undersigned or any sub-contractor under him, who is a not a Citizen of the United States, unless the undersigned or any sub-contractor has verified the person's right to live and work in the United States as stipulated in Section 121 of the U.S. Immigration Reform and Control Act (P.L. 99-603).

The Contract is subject to compliance monitoring and enforcement by the Department of Industrial Relations. The prime contractor shall post job site notices, as prescribed by regulation. Each contractor and subcontractor shall furnish the records specified in Labor Code Section 1776 directly to the Labor Commissioner, in the manner prescribed under Section 1771.4.

6. Hours of Labor. The Contractor shall forfeit, as penalty to the District, twenty-five dollars (\$25) for each worker employed in the execution of the Contract by him or by the subcontractor, for each calendar day during which any workman is required or permitted to labor more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, in violation of the provisions of Article 3, Chapter 1, Page 7, Division 2 (commencing with Section 1810) of the Labor Code of the State of California.
7. Apprentices. In accordance with the provisions of Section 1777.5 of the Labor Code, and in accordance with the rules and procedures of the California Apprenticeship Council, properly indentured apprentices shall be employed in the prosecution of the work. The number so employed shall be as set forth in the certificate issued by the appropriate joint apprenticeship committee unless a certificate of exemption has been issued by the Division of Apprenticeship Standards. Willful failure by the Contractor to comply with said Section 1777.5 shall result in his being denied the right to bid on a public works contract for a period of six months from the date the determination is made.

Information relative to number of apprentices, identifications, wages, hours of employment and standards of working conditions shall be obtained from the Director of the Department

of Industrial Relations, who is the Administrative Officer of the California Apprenticeship Council.

8. Trenching. Trenching shall be done in accordance with Sections 6705, 6706, 6707 of the Labor Code.
9. Worker's Compensation Insurance. In accordance with the provisions of Article 5, Chapter 1, Part 7, Division 2 (commencing with Section 1860) and Chapter 4, Part 1, Division 4 (commencing with Section 3700) of the Labor Code of the State of California, the Contractor is required to secure the payment of compensation to his employees and shall for that purpose obtain and keep in effect adequate Worker's Compensation Insurance. Proof of such insurance coverage shall be provided to the District prior to commencement of any work on this project.

The undersigned Contractor is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and shall comply with such provisions before commencing the performance of the work in this Contract.

10. Security for Compensation. Contractor hereby stipulates that the provisions of Section 1775 of the Labor Code of the State of California shall be complied with. Contractor further agrees to secure the payment of compensation to his employees in accordance with the provisions of Section 3700 of the Labor Code of the State of California.
11. Discrimination. Attention is directed to Section 1735 of the Labor Code, which reads as follows:

"No discrimination shall be made in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons, except as provided in Section 12940 of the Government Code and every contractor for public works violating this section is subject to all penalties imposed for a violation of this chapter.

(Amended by Stats. 1976, c. 1174, p. 5270, subsection 1; Stats. 1980, c. 992, p. 3166, subsection 10.)

In connection with the performance of work under this Contract, the Contractor agrees as follows:

- (a) The Contractor shall not willfully discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex. Such action shall include, but not be limited to, the following: Upgrading, demotion or transfer; recruitment advertising; layoff or

termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants to employment, notices setting forth the provisions of this Fair Employment Practices section.

- (b) The Contractor shall send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, advising the said labor union or worker's representative of the Contractor's commitments under this section, and shall post copies of the notices in conspicuous places available to employees and applicants to employment.
- (c) The Contractor shall permit access to his records of employment, employment advertisements, application forms, and other pertinent data and records by the Fair Employment Practices Commission, the awarding authority or any other appropriate agency of the State of California designated by the awarding authority, for the purposes of investigation to ascertain compliance with the Fair Employment Practices section of this Contract.
- (d) A finding of willful violation of the Fair Employment Practices section of this Contract or of the Fair Employment Practices Act shall be regarded by the awarding authority as a basis for determining the Contractor to be not a "responsible bidder" as to future contract for which such Contractor may submit bids, for revoking the Contractor's prequalification rating, if any, and for refusing to establish, reestablish or renew a prequalification rating for the Contractor.

The awarding authority shall deem a finding of willful violation of the Fair Employment Practices Act to have occurred upon receipt of written notice from the Fair Employment Practices Commission that it has investigated and determined that the Contractor has violated the Fair Employment Practices Act and has issued an order under Labor Code Section 1426 or obtained an injunction under Labor Code Section 1429.

Upon receipt of such written notice from the Fair Employment Practices Commission, the awarding authority shall notify the Contractor that unless he demonstrates to the satisfaction of the awarding authority within a stated period that the violation has been corrected, his prequalification rating will be revoked at the expiration of such period.

- (e) The Contractor agrees that should the awarding authority determine that the Contractor has not complied with the Fair Employment Practices section of this Contract, then pursuant to Labor Code Sections 1735 and 1775 the Contractor shall, as a penalty to the awarding authority, forfeit for each calendar day or portion thereof, for each person who was denied employment as a result of such non-compliance, the penalties provided in the Labor Code for violation of prevailing wage rates. Such moneys may be recovered from the Contractor. The awarding authority may deduct any such damages from any moneys due the Contractor.

- (f) Nothing contained in this Fair Employment Practices section shall be construed in any manner of fashion so as to prevent the awarding authority or the State of California from pursuing any other remedies that may be available by law.
- (g) Prior to awarding the Contract, the Contractor shall certify to the awarding authority that he has or will meet the following standards for affirmative compliance, which shall be evaluated in each case by the awarding authority.
 - (1) The Contractor shall provide evidence, as required by the awarding authority, that he has notified all supervisors, foremen and other personnel officers in writing of the content of the anti-discrimination clause and their responsibilities under it.
 - (2) The Contractor shall provide evidence, as required by the awarding authority, that he has notified all sources of employees' referrals (including unions, employment agencies, advertisements, Department of Employment) of the content of the anti-discrimination clause.
 - (3) The Contractor shall file a basic compliance report, as required by the awarding authority. Willfully false statements made in such reports shall be punishable as provided by law. The compliance report shall also spell out the sources of the work force and who had the responsibility for determining who to hire, or whether or not to hire.
 - (4) Personally, or through his representatives, the Contractor shall, through negotiations with the unions with whom he has agreements, attempt to develop an agreement which will:
 - a. Spell out responsibilities for nondiscrimination in hiring, referral, upgrading and training.
 - b. Otherwise implement an affirmative anti-discrimination program in terms of the unions' specific areas of skill and geography to the end that qualified minority workers shall be available and given an equal opportunity for employment.
 - (5) The Contractor shall notify the contracting agency of opposition to the anti-discrimination clause by individuals, firms or organizations during the period of its prequalification.
- (h) The Contractor shall include the provisions of the foregoing paragraphs 1 through 5 in every first-tier subcontract so that such provisions shall be binding upon each subcontractor.

12. Contract Sum. The contract sum is the total amount payable by District to Contractor for the performance of the work encompassed by the Contract documents. The contract sum is \$_____, unless modified in accordance with the Contract.

13. Disputes. Contractor shall continue to perform under this Agreement during any dispute. Contractor and the District hereby agree to make good faith efforts to resolve disputes as quickly as possible. In the event any dispute arising from or related to this Agreement results in litigation or arbitration, the prevailing party shall be entitled to recover all reasonable costs incurred, including court costs, attorney fees, expenses for expert witnesses (whether or not called to testify), expenses for accountants or appraisers (whether or not called to testify), and other related expenses. Recovery of these expenses shall be as additional costs awarded to the prevailing party, and shall not require initiation of a separate legal proceeding.
14. Successors and Assigns. This Agreement and the rights, privileges, duties, and obligations of the District and Contractor under this Agreement, to the extent assignable or delegable, shall be binding upon and inure to the benefit of the parties and their respective successors, permitted assigns, and heirs.
15. Notices. Notices required under this Agreement shall be delivered personally or by first class, postage pre-paid mail to the District's and Contractor's contract administrators at the addresses listed below: _____.
16. Conflict of Interest. Contractor represents that it presently has no interest and agrees not to acquire any interest during the term of this Agreement which would directly or indirectly conflict in any manner or to any degree with the full and complete performance of the professional services required to be rendered under this Agreement.
17. Amendment. This Agreement may be amended or modified only by an instrument in writing signed by the District and the Contractor.
18. Assignment and Subcontracting. The Contractor shall not assign, sell, or otherwise transfer its interest or obligations in this Agreement without the prior written consent of the District. None of the services covered by this Agreement shall be subcontracted without the prior written approval of the District. Notwithstanding any such subcontract, Contractor shall continue to be liable for the performance of all requirements of this Agreement.
19. Waiver. Any waiver of any terms and conditions of this Agreement must be in writing and signed by the District and the Contractor. A waiver of any of the terms and conditions of this Agreement shall not be construed as a waiver of any other terms or conditions in this Agreement.
20. Headings. The headings are for convenience only and shall not be used to interpret the terms of this Agreement.
21. Governing Law. This Agreement shall be governed by and interpreted under the laws of the State of California.
22. Construction of Agreement. The District and Contractor agree that each party has fully participated in the review and revision of this Agreement and that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not apply in the interpretation of this Agreement or any amendment to this Agreement.

23. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement.
24. Authority. Any individual executing this Agreement on behalf of the District or the Contractor represents and warrants hereby that he or she has the requisite authority to enter into this Agreement on behalf of such party and bind the party to the terms and conditions of this Agreement.
25. Integration. This Agreement, including the exhibits any documents incorporated by reference, represent the entire Agreement between the District and the Contractor with respect to the subject matter of this Agreement and shall supersede all prior negotiations, representations, or agreements, either written or oral, between the District and the Contractor as of the effective date of this Agreement, which is the date that the District signs the Agreement.
26. Interpretation of Conflicting Provisions. In the event of any conflict or inconsistency between the provisions of this Agreement and the provisions of any exhibit or other attachment to this Agreement, the General Provisions of this Agreement shall prevail and control.
27. Severability. If any of the provisions contained in the Contract are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions shall not be impaired thereby. Limitations of liability and indemnities shall survive termination of the Contract for any cause. If a part of this Contract is valid, all valid parts that are severable from the invalid part remain in effect. If a part of this Contract is invalid in one or more of its applications, the part remains in effect in all valid applications that are severable from the invalid applications.

IN WITNESS WHEREOF, District Board of Directors has caused these presents to be executed by its officers, thereunto duly authorized, and Contractor has subscribed same, all on the day and year first above written.

Contractor

By _____

Title _____

MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

By _____

Title _____

APPROVED AS TO FORM:

District Counsel

SPECIAL CONDITIONS

1. CLEANUP WORK

- a. During construction, the Contractor shall keep the worksite, areas adjacent to the worksite and access roads in an orderly condition, free and clear from debris and discarded materials. Care shall be taken to prevent spillage when hauling is being done. Any spillage or debris resulting from the Contractor's operations shall be immediately removed.
- b. Upon completion of the work the Contractor shall remove from the worksite, areas adjacent to the worksite and access roads all plant, building, debris, unused material, and other material belonging to the Contractor or used under the Contractor's direction during construction. The Contractor shall repair all damage caused by the Contractor to a condition that equals or exceeds the condition at the start of the work.
- c. The Contractor shall repair any damage caused by the project work to private access roads and adjacent landscaped areas. Repair work shall restore damaged areas to the original condition. Such repairs shall be made in a timely manner and shall be inspected by the District Engineer prior to completion of contract work.
- d. Areas used to temporarily store equipment, rip-rap and/or other construction materials shall be returned to a pre-project condition. The Contractor shall identify such areas to the District Engineer, who shall review and approve the location. All areas outside of the river channel that are disturbed or compacted by heavy equipment shall be returned to pre-project conditions. All rip-rap and/or other materials inadvertently covered over at temporary storage site(s) shall be excavated and removed from the temporary storage site.

2. QUANTITIES OF WORK AND MATERIALS

The quantities listed in the bid schedule for which unit prices are requested are estimates only. See clause title "Quantity Variations" of these Special Conditions.

3. QUANTITY VARIATIONS

- a. Where the quantity of work shown for an item in the bid schedule, including any modifications thereof, is estimated, no adjustment of the contract price nor of the performance time shall be made for overruns or underruns which are within 20 percent of the estimated quantity of any such item.
- b. For overruns of more than 20 percent, the District Engineer shall re-estimate the quantity for the item, establish an equitable contract price for the overrun of more than 20 percent, adjust contract performance time equitably, and modify the contract in writing; accordingly, this clause to thereafter be applicable to the total re-estimated item quantity.

- c. For underruns of more than 20 percent, the District Engineer shall determine the quantity for the item, establish an equitable contract price therefore, adjust contract performance time equitably, and modify the contract in writing accordingly.

4. WEATHER

- a. The District Engineer may order suspension of the work in whole or in part, commencing with the day after receipt of the Notice to Proceed by the Contractor, due to weather or the effects of weather at the site, for such time as he or she considers it unfavorable for satisfactory prosecution of the work.
- b. When the District Engineer orders suspension under (a) of this clause, the contract completion date shall be extended a full calendar day for each calendar day during suspension of the work if:
 - 1. All work is suspended (work of an emergency, protective or maintenance nature may be performed at any time); and
 - 2. The hours lost in any workday of the authorized work week through suspension equal one-half or more of an authorized workday.
- c. If the District Engineer orders suspension of work as provided in (a) of this clause and the hours lost in the work day immediately preceding a non-work day equal one-half or more of the hours in an authorized work day, the contract completion date shall be extended a full calendar day for each non-work day during suspension of the work.
- d. When the District Engineer orders any suspension of the work under this clause, the Contractor shall not be entitled to any cost or damages resulting from such suspension.
- e. When the contract completion date is extended under this clause, the contract shall be modified in writing accordingly.

5. NON-COMPLIANCE WITH CONTRACT REQUIREMENTS

- a. The District Engineer may order suspension of the work in whole or in part for such time as he deems necessary because of the failure of the Contractor to comply with any of the requirements of this contract, and the completion date shall not be extended on account of any such suspension of the work.
- b. When the District Engineer orders any suspension of the work under (a) of this clause, the Contractor shall not be entitled to any costs or damages resulting from such suspension.
- c. The rights and remedies of the District provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

6. SHUTDOWN OF WORK DUE TO HIGH FLOWS IN RIVER

Some of the work contained in this contract is to be performed in the Carmel River, and thus is subject to the continuance of flows within the stream channel. If, in the opinion of the District Engineer, in consultation with the California Department of Fish and Wildlife and the National Marine Fisheries Service, the flows within the banks of the river exceed allowable levels, the work in the flowing stream contained in this contract shall be immediately ended. The District Engineer shall determine the actual amount of work performed by the Contractor, and shall utilize the clause entitled "Quantity Variations" to determine if an adjustment in contract price is necessary due to the cancellation of the remaining work.

When the District Engineer orders a cancellation of the work under this clause, the Contractor shall not be entitled to any costs or damages resulting from such cancellation, except those previously covered under this clause.

7. PERMIT REQUIREMENTS AND INTERPRETATION OF PLANS AND SPECIFICATIONS

This project operates under provisions of federal, state and local statutes. The District has obtained or will obtain all applicable permissions and permits prior to initiation of construction. The Contractor shall comply with all applicable laws and ordinances for work in the riverbed of the Carmel River. The District Engineer or his designated substitute shall perform project supervision and inspection during the construction period. Additionally, the District Engineer or his designated substitute shall have final authority over interpretation of the Plans and Specifications.

8. PRESERVATION OF EXISTING VEGETATION

Live trees within the project area shall not be damaged or removed, except as specified in the Plans and Specifications. The Contractor shall be responsible for trimming of trees. The Contractor shall furnish equipment and labor for the removal of trees and limbs.

9. THREATENED SPECIES

Two sensitive species, steelhead (*Oncorhynchus mykiss*) and California red-legged frogs (*Rana aurora draytonii*), may be present in or near the work site. Both species are listed as threatened and are under the protection of the Federal Endangered Species Act (ESA). The Federal permit from the U.S. Army Corps of Engineers for this project includes protections to reduce or minimize potential impacts to these species and their habitats. A copy of the permit may be obtained from the District. All employees and subcontractors of the Contractor must be able to identify these threatened species and their habitats. MPWMD biologists will provide worker training at the site prior to commencement of construction. Failure to adhere to the conditions of the Federal permit may subject the Contractor to severe penalties up to and including a \$50,000 fine for each mortality of a threatened species and/or one year in jail if convicted of a violation of the ESA.

10. DUST CONTROL

The Contractor shall control dust from use of access roads to the site and from grading activities within the river bottom. Control methods may include the use of watering trucks, placement of decomposed granite or other suitable material. The cost of dust control shall be included in the price of labor, equipment, and materials for the work.

11. WORK IN THE LIVE STREAM – ALTERNATE BID ITEM

Work in the live stream is not permitted, except as directed in the Plans and Specifications and permits for the work. All equipment operators working in the channel of the river shall carry a copy of the Stream Alteration Agreement issued by the California Department of Fish and Wildlife to MPWMD.

If there is flow at the site during construction, the Contractor shall divert the stream around the work site such that equipment does not work in the live stream. Diversion may occur with sand bags, coffer dams and piping, or other means as approved by the District Engineer and as allowed under permits for the project. The District will provide staff to remove and relocate any steelhead found at the site before dewatering operations begin.

Payment for dewatering shall be as shown in the Bid Form under Bid Alternate - Temporary Diversion and Dewatering.

12. EXOTIC SPECIES

All materials and equipment brought into work sites shall be free of exotic species. Equipment shall be cleaned by the Contractor and inspected by the District Engineer prior to entering the work site. It should be noted that New Zealand mud snail, an invasive species, is present in the Carmel River and can be spread by equipment that comes into contact with the snail.

13. ARCHEOLOGICAL MONITORING

It is the Contractor's responsibility to retain a qualified archaeological monitor who will be on-site during construction that may extend into native sediments. If archaeological materials are encountered, the monitor will be authorized to stop construction as necessary to protect the find. The monitor will contact the qualified archaeologist. The qualified archaeologist will work with the District to assess the significance of the find, contact the Native American Heritage Commission (NAHC), and determine appropriate avoidance or mitigation measures. Construction may resume in the area when mitigation has been completed and the District has authorized the activity.

A Monterey County Archeological Consultant list is available at:

<http://www.co.monterey.ca.us/home/showdocument?id=32020>

Should any items with archeological significance be found during construction, the Contractor may request reimbursement for costs associated with notifying NAHC and for costs associated with avoidance or mitigation measures.

14. PROTECTION OF NATIVE SANTA BARBARA SEDGE

Santa Barbara Sedge on the south bank of the river is to be protected from construction activities as described in the Cultural Resources report for the project.

15. MEETINGS

- A) Prior to the commencement of Work at the Site, a preconstruction conference will be held at District's Office at a mutually agreed time, but no later than 14 days after the Notice to Proceed. The conference shall be attended by Contractor's Project Manager, Superintendent, Quality Control Engineer, Safety Representative, and Subcontractors. Subcontractor attendance shall be requested and approved by District Engineer. Other attendees will be:
- 1) District Engineer and other authorized District employees.
 - 2) Other Governmental Representatives, as appropriate.
 - 3) Utilities Representatives, as appropriate.
 - 4) Others as Requested by Contractor and Owner upon Approval by the District Engineer.
- B) The purpose of the conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The complete agenda will be furnished to Contractor prior to the meeting date. However, Contractor should be prepared to discuss all of the items listed below.
- 1) Contractor's initial schedules.
 - 2) Procedures for and transmittal, review, and distribution of Contractor's submittals (normal and deferred).
 - 3) Processing applications for payment.
 - 4) Maintaining record documents.
 - 5) Special inspection procedures.
 - 6) Critical work sequencing.
 - 7) Field decisions and Change Orders.
 - 8) Use of Site, office and storage areas, security, housekeeping, and Owner's needs.
 - 9) Major equipment deliveries and priorities.
 - 10) Contractor's assignments for safety and first aid.
 - 11) Daily Report Form.
 - 12) Submittal Transmittal Form.
 - 13) Temporary utilities.
 - 14) Special Conditions
- C) District Engineer will preside at the preconstruction conference and will arrange for keeping and distributing the minutes to all persons in attendance. Contractor shall advise District Engineer within 5 days of receipt of minutes if Contractor does not agree with the content of minutes.
- D) PROGRESS MEETINGS

- 1) District Engineer will schedule and hold regular on-site progress meetings at least weekly and at other times as requested by Contractor or as required by progress of the Work. Contractor and District Engineer shall attend each meeting and other representatives of District may also attend. Contractor may at its discretion request attendance by representatives of its suppliers, manufacturers, utilities, and subcontractors. Attendance by such representatives shall be subject to approval of District Engineer.
- 2) District Engineer will preside at the progress meetings and will arrange for keeping and distributing the minutes. Contractor shall advise District Engineer within 5 days of receipt of minutes if Contractor does not agree with content of minutes. The purpose of the meetings is to review the progress of the Work including review of Contractor's three week look-ahead schedule, review submittal and Request for Information status, review change order status, review coordination with operations, maintain coordination of efforts, address field problems, and resolve other problems which may develop. The three-week look-ahead schedule shall include but not be limited to key upcoming activities such as major equipment deliveries to the Site, key construction activities and key testing activities. The three-week look-ahead schedule shall be in the form of marked-up Drawings and schedules/flow charts to depict the activities. During each meeting, Contractor shall present any issues that may impact its progress and propose solutions with a view to resolve these issues expeditiously.

SECTION 01010 - SUMMARY OF WORK

PART 7 - GENERAL

7.1 SUMMARY

- A. The work covered by this contract includes:
 - 1. Excavation and grading and construction of streambank stabilization.
- B. The above description is for general information only. Provide all work required by the Contract Documents.

7.2 CONTRACT DOCUMENTS

- A. The contract drawings indicate the general arrangement and location of equipment, pipe, fixtures, outlets, etc. Follow the indicated positions as closely as possible. The exact location of the various items is subject to building construction and the actual equipment furnished by the Contractor. Contractor shall verify the location of all items furnished, installed, or connected.
- B. The Drawings are not to be scaled. All implied locations shall be determined at the building site after field measurements have been taken.
- C. Should interferences or discrepancies prevent the installation of any part of the work, the District Engineer shall be notified and will determine the steps necessary to complete the true development of the intent of the Drawings and Specifications.

7.3 TIME OF COMMENCEMENT AND COMPLETION

- A. Notice to Proceed: Within ten calendar days after the execution of the Contract, written Notice to Proceed will be provided by Owner to Contractor or as required in the General Conditions. Contractor shall begin the Work upon receipt of the Notice to Proceed. Notwithstanding any other provision of the Contract, Owner shall not be obligated to accept or to pay for any Work furnished by Contractor prior to delivery of the Notice to Proceed, whether or not Owner has knowledge of the Work.
- B. The calendar work day count will commence on the date specified in the Notice to Proceed or as required in the General Conditions.
- C. Substantial Completion
 - 1. Substantial completion of the Work and completion of all items of Work shall be as set forth in the Agreement.

7.4 SPECIFICATIONS

- A. The following standard specifications, including current revisions and supplements may be referred to in these Contract Documents to establish minimum standards for materials, construction, and inspection procedures. Unless otherwise shown or specified, the provisions for measurement and payment contained in such standard specifications will not apply.
 - 1. Caltrans Standard Specifications, 2015, as prepared by the California State Transportation Agency.
 - 2. Manual on Uniform Traffic Control Devices (MUTCD).
- B. In case of conflict between the several parts of the specifications and between the various referenced standard specifications, the most stringent shall govern as determined by the District Engineer. Where these specifications refer to recognized standards, such as ASTM, Federal Specifications, N.F.P.A., the reference shall be to the latest edition, unless specified otherwise.

7.5 CONTRACTOR'S COPIES OF CONTRACT DOCUMENTS

- A. Owner will provide Contractor with two sets of full-size drawings, two sets of half size drawings, and two sets of specifications. At least one complete set of Contract Documents, including one full-size set of Drawings shall be kept at the site of construction in good condition, and at all times available to the District Engineer. Additional copies of the Contract Documents, if required, will be furnished by the District Engineer at net cost of reproduction to the Contractor.

7.6 COORDINATION OF WORK WITH OWNER AND OTHERS

- A. Contractor shall coordinate its work with other contractors who may be working on and or in the Project area and cooperate with them. Contractor shall also coordinate its activities with Owner.

7.7 PERMITS AND FEES

- A. The acquisition of all permits required, and payment of all fees, inspection charges and other similar costs shall be the responsibility of Owner.

7.8 CLEANUP AND SITE MAINTENANCE

- A. Contractor shall clean daily all dirt, gravel, construction debris and other foreign material resulting from its operations from all streets and roads in the vicinity of the Work and shall maintain a clean, orderly and safe construction site at all times during prosecution of the Work. If required by the District Engineer, Contractor shall use wash trucks or street sweepers fitted with spray misters to minimize dust.

7.9 EXISTING UTILITIES

- A. In general, the locations of existing major underground utilities and some minor utilities are indicated on the Drawings. This information has been obtained from utility maps and from oral descriptions provided by the various agencies involved. Owner does not guarantee the accuracy or completeness of this information, and it is to be understood that other above ground or underground facilities not shown on the Drawings may be encountered during the course of the Work.
- B. Contractor shall notify all utility companies and public agencies affected by the construction 48 hours prior to excavation.

7.10 RESTORATION OF STRUCTURES AND SURFACES

- A. General: Whenever any of the Work is accomplished on or through property other than that owned by Owner, Contractor shall furnish Owner, before final acceptance of the Work by Owner, a written release from the subject property owner or an authorized representative of the owner of the property affected, stating that the restoration of structures and surfaces has been satisfactorily accomplished. If in the opinion of the Owner the release is arbitrarily withheld, the Owner may, at its sole discretion, accept the portion of the Work involved and cause final payment therefore to be made.
- B. In addition to the requirements of any applicable utility permit, street use permit or franchise relating to this Contract, Contractor shall, as a minimum for any restoration work, conform to standard plans and specifications of the agency which controls the use of the right-of-way in which this construction work is performed.
- C. Existing stakes and marks: All section, section subdivision, property corners, plat, U.S.C. and G.S., U.S.G.S., and other official monuments or bench marks, shall be carefully preserved or replaced. In the event any such monument or marker is disturbed as a result of Contractor's operations, Contractor shall replace or reset the monument or marker in a manner satisfactory to the District Engineer and shall provide a survey map to be recorded with the County. Replaced or reset monuments shall be of acceptable type and quality, and shall be, located so as to clear existing utilities or any other interferences. They shall be placed in a manner consistent with good and recognized engineering and surveying practices.
- D. All waterways, channels, drainage ditches, drains, culverts and similar facilities that are damaged by actions of Contractor shall be restored as nearly as possible to their original condition. Where necessary, Contractor shall provide temporary facilities or temporarily realign such watercourses to maintain a continuously serviceable facility until it is restored to its original location and condition. Restoration of such facilities shall be as shown and specified.

7.11 CONSTRUCTION STAKING

- A. Owner has provided horizontal control points and vertical datum benchmarks as noted on the Drawings. Contractor shall provide all construction staking.

7.12 GEOTECHNICAL STUDIES

- A. A geotechnical study has not been performed for the Project. Contractor shall make its own deductions and conclusions as to the nature of the materials to be excavated and the difficulties which may arise from subsurface conditions.

7.13 EXCESS MATERIALS AND DEBRIS

- A. Disposal of excess materials and debris shall be in accordance with applicable federal, state and local laws. Contractor may not dispose of debris on the Project sites.

7.14 ARCHAEOLOGY

- A. During construction, if artifacts or any other archaeological objects are discovered, Contractor shall stop construction immediately and notify Owner. Owner will notify the appropriate authorities. Contractor shall cooperate with authorities investigating the find.

7.15 EMERGENCY RESPONSE

- A. At the preconstruction meeting, Contractor shall provide Owner with a list of phone numbers of those employees responsible for responding to emergency calls outside normal working hours concerning Contractor's Work.
- B. Upon failure to immediately respond to a problem with corrective action, Owner may respond without further notice to Contractor and deduct all costs thereof from any payments due or coming due Contractor. Owner shall not be required to act in any situation and nothing shall relieve Contractor of its duties in this regard.

7.16 TRAFFIC CONTROL

- A. Traffic shall not be affected by the Work unless Contractor has an approved traffic control and maintenance plan.
- B. Contractor shall provide all lighting, barricades, cones, signs, and flaggers necessary to direct traffic during working hours and at all other times as required to ensure the public safety and promote safe vehicular travel.
- C. All traffic control measures shall meet the requirements of the Manual on Uniform Traffic Control Devices for Streets and Highways.

7.17 AS-BUILT DRAWINGS

- A. Contactor shall be required to provide complete, accurate as-built data to the District Engineer prior to final payment. The District Engineer will furnish one additional set of construction plans for final as-built recording. As-built data shall be kept current daily and available for review daily by the District Engineer. Prior to authorization of each monthly progress pay estimate, the District Engineer will review Contactor's current as-built plans for completeness and accuracy.

7.18 "Or Equal" Clause

- A. In order to establish a basis of quality, certain processes, types of machinery and equipment or kinds of material may be specified on the plans or herein by designating a manufacturer's name and referring to brand or product designation. It is not the intent of these specifications to exclude other processes, equipment or materials of a type and quality equal to those designated. When a manufacturer's name, brand or item designation is given, it shall be understood that the words "or equal" follow such name or designation, whether in fact they do so or not. If Contractor desires to furnish items of equipment by manufacturers other than those specified, he shall secure the approval of District Engineer prior to placing a purchase order.
- B. No extras will be allowed Contractor for any changes required to adopt the substitute equipment. Therefore, Contractor's proposal for an alternate shall include all costs for any modifications to the plans, such as structural and foundation changes, additional piping or changes in piping, electrical changes or any other modifications which may be necessary or required for approval and adoption of the proposed alternate equipment. Approval of alternate equipment by District Engineer before or after bidding does not guarantee or imply that the alternate equipment will fit the design without modifications.

SECTION 01060 - REGULATORY AND SAFETY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. This section specifies regulatory requirements applicable to this project that include, but shall not be limited to, Environmental Protection Agency, Occupational Safety and Health Administration (OSHA), Cal/OSHA, and other applicable federal, state and local governmental regulations.

1.2 WATER AND AIR POLLUTION CONTROL

- A. During the term of the Contract, Contractor's operations shall conform to applicable laws and regulations of the California Environmental Protection Agency (CalEPA), and other agencies of the State and Federal government, as well as, local Ordinances and Resolutions designed to prevent, control and abate water and air pollution.
- B. During all phases of the Work, or when directed, protect work sites, storage, and disposal areas from washout and erosion. Take precautions to control or abate dust nuisance and air pollution by cleaning up, sweeping, sprinkling, covering, enclosing or sheltering work areas, and stockpiles, and by promptly removing from paved streets earth or other material which may become airborne or may be washed into waterways or drainage systems.
- C. The Contractor is required to submit for approval an erosion control plan prior to the start of site work.

1.3 NOISE

- A. Measures shall be taken to minimize noise. The Contractor shall review the site and understand the relationship of the site to surrounding facilities.

1.4 SAFETY AND HEALTH REGULATIONS

- A. The Contractor shall comply with safety and health regulations for construction.

1.5 POSTING OF REGULATIONS

- A. The Contractor shall comply with all Cal/OSHA posting regulations as well as State and Federal Labor Law requirements.

1.6 RESPONSIBILITY FOR DAMAGE

- A. The Contractor shall bear sole responsibility for damage to completed portions of the project or to property located off the project caused by erosion, siltation, run-off, or other related items during the construction of the project.
- 1.7 The Contractor shall also bear sole responsibility for any pollution of rivers, streams, groundwater or other waters which may occur as a result of construction operations. The Contractor shall exercise all necessary precautions throughout the life of the project to prevent pollution, erosion, siltation, and property damage.

SECTION 01300

SUBMITTALS

PART 2 - GENERAL

2.1 SUBMITTAL REQUIREMENTS

- A. All submittals shall be electronic copies unless hardcopies are specified. Electronic copies shall be in PDF format unless otherwise specified.
- B. General:
 - 1. All submittals shall be identified by project title, and number and shall include Contractor's name, date and revision date. In addition, shop drawings, product data and samples shall include names of subcontractor and supplier, applicable specification section number and Contractor's stamp, initialed or signed, certifying to review of submittal, verification of field measurements and compliance with Contract Documents.
 - 2. All submittals shall be accompanied by a submittal transmittal form. Equipment numbers shall be listed for items being submitted. A separate form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.
 - 3. A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted. Original submittal numbers shall have the following format: "XXX"; where "XXX" is the sequential number assigned by the Contractor. Resubmittal shall have the following format: "XXXY"; where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for resubmittals; i.e., A, B, or C being the 1st, 2nd, and 3rd resubmittals, respectively. Submittal 25B, for example, is the second resubmittal of Submittal 25.
 - 4. Submittal Completeness: Submittals which do not have all the information required to be submitted are not acceptable and will be returned without review.
- C. Shop drawings (if required): Show the information, dimensions, connections and other details necessary to ensure that the shop drawings accurately interpret the contract documents. Show adjoining work in such detail as required to indicate proper connections. Where adjoining connected work requires shop drawings or product data, submit such information for review at the same time so that connections can be accurately checked.
- D. Product data: Modify product data by deleting information which is not applicable to the project or by marking each copy to identify pertinent products. Supplement standard information, if necessary, to provide additional information applicable to project. It is

recognized that in some cases manufacturer's product data will be adequate and further shop drawings as stated in the specifications may not be required, unless requested by the District Engineer.

E. Samples

1. Submit 2 (unless specific number is specified) of each sample required by the specifications. Samples shall show the quality, type, range of color, finish and texture of the material intended to be furnished for the work.
2. Samples shall become the property of the District unless specifically stated otherwise, and will not be incorporated in the work.

F. Review Procedure: Unless otherwise specified, within 14 days after receipt of the submittal, the District Engineer will review the submittal. The returned submittal will indicate one of the following actions:

1. If the review indicates that the material, equipment, or work method is in general conformance with the design concept and complies with the Drawings and specifications, submittal copies will be marked "NO EXCEPTION TAKEN" and given review action 1. In this event the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.
2. If the review indicates that limited corrections are required, copies will be marked "NOTE MARKINGS" and given review action 2. The Contractor may begin implementing the work method or incorporating the material and equipment covered by the submittal in accordance with the noted corrections. Where submittal information will be incorporated in O&M data, a corrected copy shall be provided, otherwise no further action is required.
3. If the review reveals that the submittal is insufficient or contains incorrect data, copies will be marked "COMMENTS ATTACHED". If the comments are of a nature that can be confirmed without a resubmittal, copies will be further marked "CONFIRM" and given review action 3. If the comments require a revision and resubmittal, copies will be further marked "RESUBMIT" and given review action 4. Except at its own risk, the Contractor shall not undertake work covered by this submittal until the attached comments have been either confirmed by a separate written communication or the submittal has been revised, resubmitted and returned marked with "NO EXCEPTIONS TAKEN" or "NOTE MARKINGS".
4. If the review indicates that the material, equipment, or work method is not in general conformance with the design concept or in compliance with the Drawings and specifications, copies of the submittal will be marked "REJECTED" and given review action 5. Except at its own risk, the Contractor shall not undertake work covered by such submittals until a new submittal is made and returned marked either "NO EXCEPTIONS TAKEN" or "NOTE MARKINGS".

G. Effects of Review of Contractor's Submittals: Review of Drawings, method of work, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of its responsibility for errors therein and shall not be regarded as an assumption of risks or liability by the District Engineer, and the

Contractor shall have not claim under the Contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of "NO EXCEPTIONS TAKEN" or "NOTE MARKINGS" shall mean that the District Engineer has no objection to the Contractor, upon the Contractor's own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

2.2 SCHEDULE

A. The Contractor shall provide the following schedules and submit them not later than 10 days after notice to proceed.

1. Contractor's construction schedule:

- a. The Contractor will be required to prepare and submit to the District Engineer for review an overall construction schedule covering all work to be performed.
- b. The schedule shall indicate the sequence of the work, the time of starting and completion of each part and the installation dates for major items.
- c. The schedule shall be submitted to the District Engineer for review. This schedule shall be revised and resubmitted as necessary until it is acceptable to the District Engineer. Action on payment requests will be contingent upon receipt of an acceptable construction schedule.
- d. The construction schedule shall include, but not be limited to, the following item:
 - 1) Shop drawing receipt from Contractor, submitted to District Engineer, review and return to Contractor (if applicable).
 - 2) Material and equipment order, delivery and installation and checkout.
 - 3) Backfilling, grading, seeding and erosion control.
 - 4) Subcontractor's item of work.
 - 5) Final cleanup.
 - 6) Substantial Completion.
 - 7) Allowance for inclement weather.
 - 8) Final Completion.
- e. The construction schedule shall be a series of line diagram showing a step by step sequence of each construction activity. Construction activities proceeding simultaneously should be shown as parallel lines. Each activity shall be labeled and the estimated number of days to complete the activity shall be shown on the schedule.
- f. Should the Contractor fail to meet any critical dates within the schedule, the Contractor shall immediately undertake appropriate action which shall assure an acceptable return to the approved construction schedule.
- g. The Contractor will be required to accept the risk of any delays caused by the rate of progress of the work to be performed under the above contract, and that in the event the Contractor is delayed in the prosecution and

completion of their work because of such conditions, they shall have no claim for damages or contract adjustment.

2. Contractor's list of subcontractors: Establish the items of work proposed to be accomplished by subcontractors, the name and address of each proposed subcontractor and the date proposed to award each subcontract.
 3. Schedule of submittals: Establish for each item for which shop drawings, product data or samples are required, the date of submission will be made and the date approval is required for the installation to be completed in accordance with the Construction Schedule.
 4. The Contractor's list of subcontractors and schedule of submittals shall be based upon the Contractor's progress schedule so that the work can progress in accordance with the approved progress schedule.
- B. The Contractor shall immediately advise the District Engineer of any proposed changes in their submitted schedules. If, in the opinion of the District Engineer, any submitted schedule is inadequate to ensure completion of work within the time limit, or is otherwise not in accordance with the specification, or if the work is not being adequately or properly prosecuted in any respect, the District Engineer shall have the right to require the Contractor to submit new schedules providing for proper and timely completion of the work. In accordance with the General Conditions, progress payments may be held until an acceptable updated schedule is provided.

During the term of this Contract, the District Engineer may require any schedule to be modified so that the changes in the work of this Contract or related contracts (if any) are properly reflected in the schedule.

SECTION 01400
QUALITY CONTROL

PART 3 - GENERAL

3.1 SUMMARY

- A. Work under this Section includes all testing required by the Contract as specified herein and further specified in the technical sections.

3.2 BUILDING CODE

3.3 TESTING METHODS

- A. All tests shall be made in accordance with commonly recognized standards of national organizations unless alternate specific testing methods are set forth in the technical specifications.

3.4 COSTS

- A. The Contractor shall employ and pay for an independent testing laboratory to perform all testing services as specified in the technical sections. Additional inspection and tests required because of defective work or ill-timed notices are performed at the Contractor's expense.

3.5 QUALITY ASSURANCE

- A. Samples: The Contractor shall supply samples if and when required by the Specifications or the District Engineer. These samples or test specimens shall be prepared and furnished with information as to their source in such quantities and size as may be required for proper examination and tests, with all freight charges prepaid. All samples shall be submitted before shipment of materials to the site of the work and in ample time to permit the making of proper tests, analysis, examination, rejections and resubmissions before the time required to incorporate the materials into the work. No such materials shall be used in work until they have been reviewed in writing by the District Engineer. Samples of materials will be retained by the District Engineer for reference and comparison purposes.

3.6 COMPACTION TESTING

- A. Compaction testing, if required by the District Engineer, shall be completed by the Contractor's certified testing laboratory at the sole expense of the Contractor. Prior to the start of construction, the Contractor shall obtain and provide the District Engineer with a certified Standard Proctor test for each type of backfill material used at his sole expense. Material used to complete the certified Proctor test shall be taken from the pit used to provide backfill and shall be no more than two weeks old from the date the Proctor test was completed and the date submitted by the Contractor to the District Engineer. All costs associated with testing shall be considered incidental to the project.
- B. A minimum of two compaction tests shall be performed. All compaction tests shall be taken at locations and depths as directed by the District Engineer or District Engineer's field representative. Contractor or Contractor's field testing agent shall provide the District Engineer with a certified copy of the compaction test results within 48 hours of taking the test. All tests shall be recorded, including all failed tests and retests. All failed compaction tests shall not only require the Contractor to recompact and test again, but shall include an additional compaction test at other locations as determined by the District Engineer. Contractor shall provide District Engineer or District Engineer's representative 24 hours written notice prior to the start of any compaction testing.
- C. Payment will be considered only for backfill that has met the required compaction testing specifications, and results submitted to the District Engineer. Areas not meeting specified compaction shall be recompacted and methodology for future backfill efforts modified to meet the requirements.
- D. The Contractor shall assume full responsibility of the means and methods applied to the compaction of backfill. Testing identified above is the minimum, and the Contractor, at his own discretion, may conduct additional testing as he deems necessary, to ensure the backfill meets the specified compaction requirements.

3.7 CONTRACTOR'S RESPONSIBILITY

- A. Access: Furnish free access to various parts of the work and assist testing inspection personnel in performance of their duties at no additional cost to the Owner
- B. Concealed work: When directed by the District Engineer, the Contractor shall open for inspection any part of the work which has been concealed. Should the Contractor refuse or neglect such a request, the Owner may employ any other person to open up the same or do so himself. If any parts of the work have been concealed in violation of the District Engineer's instructions or, if on being opened, it is found not to be in accordance with the terms of the contract documents, the expense of opening and recovering, whether done by the Contractor or not, shall be charged to the Contractor.
- C. Data: Furnish samples, records, drawings, certificates and similar data as may be required by testing and inspection personnel to assure compliance with the contract documents

- D. Notices: The Contractor shall notify the District Engineer not less than 48 hours before work requiring inspection is started. The Contractor shall schedule portions of the work requiring inspection and additional testing by the District Engineer, so that the agency's time on the project is continuous and as brief as possible. Provide notice to the District Engineer 48 hours prior to concealment.

3.8 INSPECTORS

- A. Appointment: The District Engineer may appoint inspectors to inspect any and all portions of the work. Such inspection may extend to any or all parts of the work, and to the preparation or manufacture of materials to be used.
- B. Authority of Inspector: Inspectors are not authorized to revoke, alter, enlarge or relax the provisions of the Contract Documents, and the inspector is placed on the work to keep the District Engineer informed as to the progress of the Work and the manner in which it is being done. He may also call the attention of the Contractor to any deviations from the plans or specifications. Failure of the inspector or the District Engineer to call the attention of the Contractor to faulty work or deviation from the Contract Documents shall not constitute acceptance of said work. An inspector is not authorized to approve or accept any portions of the Work or to issue instructions contrary to the contract documents. The inspector will exercise only such additional authority as may be specially delegated to him by the District Engineer, notice of which will be given in writing to the Contractor.

3.9 TEST REPORTS

- A. Independent testing and inspection agency and/or agencies will prepare logs, test reports and certificates applicable to specific tests and inspections. Reports shall include description of method of test, identification of samples and portions of the work tested. They shall state description of location of work, time and date of obtaining and testing samples, weather and climatic conditions, and evaluation of results of tests, including recommendations for action. Electronic copies shall be submitted to the Owner, District Engineer and Contractor.

3.10 DEFECTIVE WORK

- A. Remove and replace any work found defective or not complying with requirements of contract documents, at no additional cost to the Owner.
- B. Work will be checked as it progresses, but failure to detect any defective work or materials shall not in any way prevent later rejection when such defect is discovered, nor shall it obligate the District Engineer for final acceptance.
- C. District reserves the right to conduct their own quality assurance testing, obtain material samples and to test products for compliance with pertinent requirements of the Contract

Documents, irrespective of prior testing and/or certification of the products by the manufacturer.

1. The Contractor shall cooperate as required for collecting and forwarding the required samples without charge, and in ample time to permit testing prior to use, and provide safety measures and devices to protect those who take the samples.
2. In the absence of any reference specification, materials shall meet the specifications and requirements of the American Society for Testing and Materials (ASTM) or the American Association of State Highway and Transportation Officials (AASHTO). When there is not pertinent coverage under ASTM or AASHTO, the material shall meet specifications and requirements of applicable commercial standards. Lacking such coverage, materials shall meet requirements established by reputable industry for a high-quality product of the kind involved.

The Contractor shall not rely on District testing for his own performance required to meet the requirements outlined within the Contract Documents. Copies of test results will be provided to Contractor upon Contractor's written request.

SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 PUBLIC SAFETY AND CONVENIENCE

- A. The Contractor shall comply with all rules and regulations of the city, state and county authorities regarding the closing of public streets or highways to the use of public traffic. No roads shall be closed to the public except by express permission of the District Engineer. The Contractor shall conduct the work so as to ensure the least possible obstruction to traffic and normal commercial pursuits.
- B. The Contractor shall protect all obstructions within traveled roadways with approved signs, barricades and lights where necessary or where ordered by the District Engineer for the safety of the public. The convenience of the general public and residents along the Work area and the protection of persons and property are of prime importance and shall be provided for in an adequate and satisfactory manner. Access to all residences and businesses in the project area shall be maintained at all times.
- C. Whenever the Contractor's operations create a hazardous condition, he shall furnish flagperson and guards as necessary to give adequate warning to the public of any dangerous condition encountered.
- D. The Contractor shall patrol daily the traffic control area and reset all disturbed signs and traffic control devices immediately. All nonapplicable signs shall be removed or covered during periods not required. All signs and barricades necessary for nighttime traffic control shall be fully reflectorized. The Contractor shall provide and maintain, at his own expense, all labor, tools, materials, and equipment required to maintain traffic, including flagging.

1.2 CONSTRUCTION UTILITIES AND MISCELLANEOUS FACILITIES

- A. General: The Contractor shall provide the temporary facilities and controls as hereinafter specified and as required by law.
- B. Power: Unless otherwise specified, the Contractor shall provide all necessary power and special connections to power lines.
- C. Water: Potable water is available for the Contractor's use on the work site. The Contractor should coordinate with the District Engineer for water necessary for its operations.
- D. Sanitary facilities: The Contractor shall provide adequate toilet facilities for all workmen employed on the work. The Contractor shall maintain the same in a sanitary condition from the beginning of the Work until completion and shall then remove the

facilities and disinfect the premises. All portions of the Work shall be maintained at all times in a sanitary condition.

- E. Equipment storage: The Contractor shall be responsible for storing equipment and materials.
- F. Contractor shall provide a suitable staging area for storage of materials and equipment. Contractor cannot store materials in the right-of-way or private roads on the site without District written permission.

1.3 BARRIERS

- A. The Contractor shall erect and maintain guard rails or other suitable barriers where required.

1.4 FIRE PREVENTION CONTROL

- A. General: Take all precautions necessary and required to prevent fires. Comply with the requirements of local authorities having jurisdiction.
- B. Fuel for cutting and heating torches shall be gas only, and shall be contained in Underwriter's Laboratory approved containers.
- C. Provide and maintain a 20 pound capacity, dry-chemical type fire extinguisher in the immediate vicinity of the work when welding tools or torches of any type are in use.
- D. Do not use volatile liquids for cleaning agents or as fuels for motorized equipment or tools within building, except with the written approval of the District Engineer.

1.5 RUBBISH REMOVAL

- A. General:
 - 1. Clean up the debris resulting from work at least once a day and more often, if it interferes with the work of others or presents a fire hazard. Closely pile debris where directed.
 - 2. Remove and dispose of all debris at once if it presents a fire hazard, or when directed.

1.6 DISCONTINUANCE, CHANGES AND REMOVAL

- A. A. When directed and no longer required, remove the temporary facilities specified herein. If any of the permanent systems are used for temporary facilities, restore them to "as new" condition. Material used for temporary facilities, which are removed, shall become the property of the Contractor which shall be removed from the site by the Contractor.

1.7 SECURITY

- A. The Contractor is responsible for security of his own operations at all times.

1.8 PROJECT SIGNS

- A. The Contractor shall provide and install project signs where necessary to inform the public, deliverymen, or subcontractors of any construction activity having impact on public access and use of the adjacent lands, roads, or streams. Signs shall be placed at least 48 hours prior to related operations and shall be removed promptly upon completion of the project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01500

SECTION 01568 - EROSION AND POLLUTION CONTROLS

PART 4 - GENERAL

4.1 SUMMARY

- A. It shall be the responsibility of the Contractor to prevent pollution of air, water and soil resulting from his operations.
- B. The Contractor shall perform work required to prevent soil from eroding or otherwise entering onto all paved areas and into natural watercourses, ditches, and public sewer systems and to prevent dust attributable to his operations from entering the atmosphere. This work shall be in accordance with Federal, State and Local codes.
- C. Water containing suspended material from any part of the Contractor's operations shall be clarified before discharging to drains or streams.
- D. Noise pollution shall be minimized through the use of proper mufflers on all construction equipment.

PART 5 - PRODUCTS

5.1 GENERAL

- A. Dust palliatives (additives) shall conform to the Standard Specifications.
- B. Other erosion control structures and products as shown on the drawings.

PART 6 - EXECUTION

6.1 STREETS, AND SIDEWALKS

- A. Streets, haul roads and (if directed by the Owner's Representative) detours and bypass roads shall be swept by automatic self-contained sweepers as required to keep them free of dirt or debris.
- B. Excessive dirt on pavements and gravel roadways shall be removed by means of hand shoveling or appropriate mechanical equipment and the area swept as directed above.
- C. Sidewalks and driveways shall be cleaned by means of shovels and hand brooms or appropriate mechanical equipment.

- D. Dust on unsurfaced streets or parking areas and any remaining dust on surfaced streets shall be controlled with an approved dust palliative as directed by the Owner's Representative.
- E. The Contractor shall comply with the above requirements on a daily basis. If the Contractor fails to perform the above work in a satisfactory manner, the Owner's Representative may stop all work, except cleanup operations, until the Contractor has satisfactorily complied with the above requirement.

6.2 WATER DISCHARGED TO DRAINS OR STREAMS

- 6.3 The Contractor shall construct and maintain filters, sedimentation traps, or stilling basins with overflows to clarify waters containing suspended materials from fill areas, and excavations before discharging to drains or streams.

6.4 HYDROSEED

Hydro seeding shall consist of mixing and applying seed, commercial fertilizer and stabilizing emulsion, or any combination thereof, with fiber and water. The Contractor shall supply all materials and equipment and shall apply the hydroseed mix in the locations specified on the construction drawings and as described below.

A. PAYMENT

Payment for this item shall be the price as established in the Bid Schedule. Such payment shall constitute full compensation for all labor, materials, equipment, and all other items necessary and incidental to the completion of the work.

B. ITEMS OF WORK AND CONSTRUCTION DETAILS

The Contractor shall mix seed, emulsion, fiber, and fertilizer in a tank with a built-in continuous agitation system of sufficient operating capacity to produce a homogeneous mixture and a discharge system which will apply the mixture at a continuous and uniform rate. The seed mix shall be blue wildrye (*Elymus glaucus*) on slopes more than six (6) feet above the channel bottom and creeping wild rye (*Leymus triticoides*) on lower slopes. Seed shall be applied at 10 to 20 pounds per acre. The quantity of water shall be as needed for application, except that when stabilizing emulsion is specified, the ratio of total water to total stabilizing emulsion in the mixture shall be as recommended by the manufacturer of the emulsion. The Contractor shall apply a minimum of 500 pounds of fiber per acre, which shall be mixed and applied with the seed, emulsion, and fertilizer. The fiber shall be furnished and applied at the Contractor's expense.

A dispersing agent may be added to the mixture provided the Contractor furnishes evidence that the additive is not harmful. Any material considered harmful, as determined by the MPWMD, shall not be used. Any mixture containing stabilizing

emulsion shall not be applied during rainy weather or when soil temperatures are below 40° F. Pedestrians or equipment shall not be permitted to enter areas where mixtures containing stabilizing emulsion have been applied.

The Contractor shall hydroseed all areas disturbed by grading operations, except for the channel bottom and stream bank areas where riprap is exposed. Where geotextile or other erosion control fabric is to be placed on a slope, the seed mix shall be placed prior to placement of the geotextile. Otherwise, the seed mix shall be placed after all work on the area to be seeded has been completed.

END OF SECTION 01568

SECTION 01600 – MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes general requirements pertaining to materials and equipment. Any such requirements as may be specified elsewhere or required by law are additional to the provisions included in this section.

1.2 SOURCE OF MATERIALS

- A. No source has been provided for any of the materials required for construction of this project. The Contractor shall make his own arrangements to obtain this material at his own expense and all costs of acquiring, producing and placing this material in the finished work will be considered incidental to the bid item involved.

1.3 QUALITY AND QUANTITY

- A. Material and equipment: Material and equipment shall be new and of a quality equal to that specified or accepted, and shall be furnished in quantities required to avoid delays in the progress of the work. Mechanical and electrical equipment shall be the products of established manufacturers of good reputation regularly engaged in the fabrication of such equipment.
- B. The Work shall be executed in conformity with the best accepted standard practice of the trade so as to contribute to maximum efficiency of operation, accessibility and appearance, minimum cost of maintenance and construction of future alternations and additions. It shall be so executed that the completed work will conform and adjust itself to any existing installation.
- C. When materials are specified: When materials are specified to conform to ASTM, Federal, or other reference specifications, the materials delivered to the site shall bear the manufacturer's printed labels stating that the materials meet the requirements of such referenced specifications.

1.4 TRANSPORTATION AND HANDLING

- A. Factory-packed products: Factory-packed products shall be delivered in the manufacturer's original containers.
- B. Products: Products shall be transported and handled in such a manner as to prevent their damage.

- C. Arrangements: Arrange for delivery of products within the time limits established by the Engineer.
- D. Furnish: Furnish workmen to receive and unload products delivered to the site. Do not deliver, or have delivered, any products to the site unless such forces are available.

1.5 STORAGE AND PROTECTION

- A. Neatly pile, store and protect: Neatly pile, store and protect products in safe locations.
- B. Protect: Protect products subject to damage by temperature or other weather conditions.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01600

SECTION 01700 - PROJECT CLOSEOUT

PART 1 - GENERAL

1.1 SUMMARY

- A. This section details the general requirements pertaining to the closeout of the construction project. Not all requirements are listed herein and the Contractor shall provide all paperwork and closeout items required by the contract.

1.2 CLOSEOUT TIMETABLE

- A. The Contractor shall establish dates for equipment testing, acceptance periods, and on-site training sessions (as required under the contract). Such dates shall be established not less than 10 days prior to beginning any of the foregoing items, to allow the District and their authorized representatives sufficient time to schedule attendance at such activities. The timetable shall be presented to the District Engineer in a written format.

1.3 SUBSTANTIAL COMPLETION

- A. When the Contractor considers that the Work, is substantially complete as defined in the General Conditions, the Contractor shall prepare for submission to the District Engineer a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents.
- B. When the District Engineer on the basis of an inspection determines that the Work is substantially complete, the District Engineer will then prepare a Certificate of Substantial completion which shall establish the date of substantial completion; state the responsibilities of the District and Contractor for security, maintenance, heat, utilities, damage to the work and insurance; and fix the time within which the Contractor shall complete the items listed therein.
- C. Warranties required by the Contract Documents shall commence on the date of substantial completion of the work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the District and the Contractor for their written acceptance of the responsibilities assigned to them in such certificates.
- D. Upon substantial completion of the work and upon application by the Contractor and certification by the District Engineer, the District shall make payment, reflecting adjustment in retainage, if any, for such work or portion thereof, as provided in the contract document.

1.4 WRITTEN RELEASES

- A. Whenever any of the work is accomplished on or through property other than that controlled by the District, the Contractor shall furnish the District, before final acceptance of the Work by the District, a written release from the subject property owner or proper authority citing for the owner of the property affected, stating that the restoration of structures and surfaces has been satisfactorily accomplished. If in the opinion of the District the release is arbitrarily withheld, the District may at its sole discretion, accept the portion of the Work involved and cause final payment therefore to be made.

1.5 FINAL WALKTHROUGH INSPECTION

- A. When the Contractor has informed the District Engineer that the Work has been completed, the Contractor shall participate in a final walkthrough inspection with the District Engineer at which time the final punchlist will be prepared. The punchlist shall include all previously noted preliminary punchlist items and/or non-compliance or uncompleted work items. The Contractor shall complete and sign off all punchlist items with the District Engineer.

1.6 FINAL CLEANUP

- A. The Contractor shall promptly remove from the vicinity of the completed Work, all rubbish, unused materials, concrete forms, construction equipment, and temporary structures and facilities used during construction. Final acceptance of the Work by the District will be withheld until the Contractor has satisfactorily performed the final cleanup of the site.

1.7 CORRECTION OF DEFECTIVE WORK

- A. The Contractor shall comply with the defective Work correction requirements contained in the General Conditions.
- B. Replacement of earth fill or backfill, where it has settled below the required finish elevations, shall be considered as a part of such required corrective work, and any repair or resurfacing constructed by the Contractor which becomes necessary by reason of such settlement shall likewise be considered as a part of such required corrective work unless the Contractor shall have obtained a statement in writing from the affected private owner or public agency releasing the District from further responsibility in connection with such repair or resurfacing
- C. The Contractor shall make all repairs and replacements promptly upon receipt of written order from the District. If the Contractor fails to make such repairs or replacements promptly, the District reserves the right to do the Work and the Contractor and its surety shall be liable to the District for the cost thereof.

1.8 FINAL SUBMITTALS

- A. The Contractor, prior to requesting final payment, shall obtain and submit the following items to the District Engineer for transmittal to the District:
1. Written guarantees, as required.
 2. Completed record drawings.
 3. Certificates of inspection and acceptance by local governing agencies having jurisdiction.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01700

GENERAL PROVISIONS

SECTION 1. BID REQUIREMENTS AND CONDITIONS

1.01 Examination of Plans, Specifications, Contract, and Site of Work The Contractor shall examine carefully the site of the work contemplated, the plans and specifications, and the proposal and contract forms therefor. The submission of a bid shall be conclusive evidence that the contractor has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work to be performed, the quantities of materials to be furnished, and as to the requirements of the proposal, plans, specifications, and the contract.

Where the District has made investigations of site conditions including surface and subsurface conditions in areas where work is to be performed under the contract, bidders or Contractors may, upon written request, inspect the records of the District as to such investigations subject to and upon the conditions hereinafter set forth. Such investigations are made only for the purpose of study and design.

Where there has been prior construction by the District or other public agencies within the project limits, records of such prior construction that are currently in the possession of the District and which have been used by, or are known to, the designers and administrators of the project will be made available for inspection by bidders or Contractors, upon written request, subject to the conditions hereinafter set forth. Such records may include, but are not limited to, as-built drawings, design calculations, foundation and site studies, project reports and other data assembled in connection with the investigation, design, construction and maintenance of such prior projects.

Inspection of such records of investigations and project records may be made at the office of the District. The records of investigations and project records are not a part of the contract and are available solely for the convenience of the bidder or Contractor. It is expressly understood and agreed that the District assumes no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations thus made, the records thereof, or of project records, or of the interpretations set forth therein or made by the District in its use thereof. There is no warranty or guaranty, either express or implied, that the conditions indicated by such investigations or records are representative of those existing in the project area, or that unlooked-for developments may not occur, or that materials other than, or in proportions different from those indicated, may not be encountered.

No information derived from such inspection of investigations or compilation thereof made by the District or from the District Engineer, or any of his assistants, will in any way relieve the bidder or Contractor from any risk or from properly fulfilling the terms of the contract.

The availability or use of information described in this Section 1.01 is not to be construed in any way as a waiver of the provisions of the first paragraph in this Section 1.01. A bidder or Contractor is cautioned to make such independent investigation and examination as he deems necessary to satisfy himself as to conditions to be encountered in the performance of the work.

1.02 Bid Submittal. A sealed bid shall be made of the original bid documents and any subsequent Addenda provided by the District, without substitution or omission. All bids shall be signed, with address included, by the bidding Contractor or the bidding contractor's authorized

representative. Bids made by individuals must show the individual's signature and post office address; if made by a firm or partnership, the name and post office address of the firm or partnership and the signature of one or all partners must be shown. Bids submitted by corporations must show the name and post office address of the corporation, the name of the state under whose laws the corporation is chartered, and the signature and title of the person signing on behalf of the corporation.

Any bid submitted by a partnership shall be signed by an authorized general partner; any bid submitted by a corporation shall be signed by an authorized corporate officer. Deviations shall cause the bid to be rejected.

Each bid shall be enclosed in a sealed envelope and endorsed as specified in the notice to contractors. Bidding Contractors are warned against bids containing irregularities of any kind, including erasures, omissions, conditions, alterations, or additional bids, as such bids may be rejected.

1.03 Withdrawal of Bids. Any bid may be withdrawn at any time prior to the hour fixed in the notice to contractors for the opening of bids, provided that a request in writing, executed by the bidder or his duly authorized representative, for the withdrawal of such bid, is filed with the District. The withdrawal of a bid shall not prejudice the right of a bidder to file a new bid.

1.04 Public Opening of Bids. Bids shall be publicly opened and read at the time and place indicated in the notice to bidders. Bidding Contractors or their agents are invited to be present.

1.05 Bid Guaranty. Each bid shall be accompanied by either a U.S. currency certified check, cashier's check, or bidding Contractor's bond of a surety company acceptable to the District in an amount not less than ten percent (10%) of the bid amount, and shall be made payable to the District.

1.06 Qualifications of Bidders. Each bidding Contractor shall be licensed in accordance with the provisions of Sections 7065, et seq., Business and Professions Code, State of California, and shall be skilled and regularly engaged in the general class or type of work called for under this contract.

It is the intention of the District to award a contract only to a bidding Contractor who is able to furnish satisfactory evidence that he has the requisite experience and ability and that he has sufficient capital, facilities, and plant to enable him to prosecute the work successfully and promptly, and to complete it within the time set forth in the contract.

In determining the degree of responsibility to be credited to a bidding Contractor, the District shall weigh any evidence indicating the Contractor, or personnel guaranteed to be employed in responsible charge of the work, has satisfactorily performed other contracts of like nature and magnitude. The District shall perform such an investigation of the low bidder prior to award of the Contract.

1.07 Disqualification of Bidders. More than one bid from an individual, firm or partnership, a corporation or an association under the same or different names shall not be considered. Reasonable ground for believing that any bidding Contractor is interested in more than one bid for

the work shall cause the rejection of all bids in which such bidding Contractor is interested. If there is reason to believe that collusion exists among the bidding Contractors, none of the participants in such collusion will be considered. Bids in which the prices obviously are unbalanced may be rejected.

1.08 List of Subcontractors. In accordance with Sections 4100-4114, Public Contract Code, each bid shall have listed the name and address of each subcontractor and sub-subcontractor to whom the bidder proposes to sublet or permit to be sub-sublet portions of the work. A subcontractor is defined as one who contracts with the Contractor to furnish materials and labor, or to perform labor only for performance of work at the building site. Subcontractors shall be listed on the form provided herewith. In the list of Subcontractors, the Contractor shall specify the portion of the work which will be done by each subcontractor.

SECTION 2. AWARD AND EXECUTION OF CONTRACT

2.01 Award of Contract. Award of contract, if it be awarded, shall be to the lowest responsible bidding Contractor whose bid complies with all the specified requirements. The award, if made, will be made within sixty (60) days after the opening of the bids. The District reserves the right to reject any and all bids. Sub-subcontractors are defined as those who contract a subcontractor to furnish materials and labor, or to perform labor only for performance of work at the building site. Sub-subcontractors shall be listed on the form provided herewith when their identity is known in advance, and shall be listed in a subsequent writing which shall be transmitted to the District without delay for those sub-subcontractors whose identity cannot presently be ascertained.

2.02 Return of Bid Guaranties. Within sixty (60) days after the bids are opened, the District shall return the bid guaranties accompanying each of the bids that are not to be considered in making the award. All other bid guaranties shall be held until the contract has been fully executed, after which they shall be returned to the respective bidders whose bids they accompany. The District will return all bid guaranties within a reasonable time but in no event later than sixty (60) days from date of the award.

2.03 Execution of Contract. The contract agreement shall be signed by the successful bidder and returned to the District, together with the faithful performance bonds, within five (5) days after the notice of award has been sent to him by mail at the address given by him in his bid. If the bidder fails or refuses to enter into a contract to do the work, then the bid guaranty accompanying the bid shall be paid to the District as liquidated damages.

SECTION 3. NATURE OF CONTRACT

3.01 Definitions. Whenever any word or expression defined in this section, or pronoun used in its stead, occurs in these contract documents, it shall have and is mutually understood to have the meaning given:

- a. "District" shall mean the Monterey Peninsula Water Management District, its board of directors or any other board, body, official or officials to which or to whom the power belonging to the District has been properly delegated. The District is recognized as "owner" in the specifications for this Project.

- b. "Biologist" shall mean the Biologist duly and officially appointed by the District to monitor the work of construction under this contract, acting personally or through agents or assistants duly authorized by him, such agents or assistants acting within the scope of the particular duties entrusted to them. By this designation, no requirement shall attach that such individual be licensed by the State of California.
- c. "District Engineer" shall mean the Engineer duly and officially appointed by the District to supervise and direct the work of construction under this contract, acting personally or through agents or assistants duly authorized by him, such agents or assistants acting within the scope of the particular duties entrusted to them. By this designation, no requirement shall attach that such individual be licensed by the State of California.
- d. "Engineer of Record" shall mean the Engineer who has prepared the plans and specifications. By this designation, the Engineer shall be licensed by the State of California unless the Engineer works for the District.
- e. "Inspector" shall mean the engineering or technical inspector or inspectors duly authorized or appointed by the District Engineer or District, limited to the particular duties entrusted to said inspector(s).
- f. "Contractor" shall mean the party entering into contract with the District for the performance of work covered by this contract, and his authorized agents or legal representatives. This term shall also apply to all bidding contractors insofar as the provisions of Section 1 of the General Provisions apply.
- g. "Date of Signing of Contract" or words equivalent thereto, shall mean the date upon which this contract, with the signature of the Contractor affixed, together with the prescribed bonds, shall be or shall have been delivered to the District or its duly authorized representative.
- h. "Day" or "Days", unless herein otherwise expressly defined, shall mean a calendar day or days of twenty-four (24) hours each, beginning at 00:00 and ending at 24:00 (midnight).
- i. "The Work" shall mean the work to be done under this contract, unless some other meaning is indicated by the context.
- j. "Contract Drawings" or "Plans" shall mean and include all drawings which may have been prepared by or on behalf of the District, as a basis for bids, when duly signed and made a part of this contract by incorporation or reference; all drawings submitted in pursuance of the terms of this contract by the successful bidder with his bid and by the Contractor to the District if and when approved by the District Engineer; and all drawings submitted by the District Engineer to the Contractor during the progress of the work as provided for herein.

All such Contract drawings or plans shall be stamped by a licensed professional engineer registered within the State of California.

- k. Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that reference to the drawings accompanying these specifications is made unless stated otherwise. Where "as directed", "as permitted", "approved", or words of similar import are used, it shall be understood that the direction, requirements, permission, approval, or acceptance of the District Engineer is intended unless stated otherwise. As used herein, "provide" shall be understood to mean "provide complete in place", that is "furnish and install". "Install" shall mean the installation complete in place of an item of equipment furnished by the District.
- l. Specifications. The directions, provisions, and requirements contained here; supplemented by any special provisions as provided herein, pertaining to the method and manner of performing the work, to kinds, quantities, and qualities of materials to be furnished under the contract, and method of measurement and payment.
- m. Superintendent. The executive representative of the Contractor, **present on the work site at all times during progress**, authorized to receive and fulfill instructions from the District Engineer and to accept orders for changed and extra work.
- n. Change Orders. A written order by the District Engineer or his authorized representative to the Contractor making changes in the plans or specifications. If the change involves items for which there is no contract unit price, the order shall so state and stipulate that the changes shall be performed as extra work or work omitted.
- o. Extra Work. Work or material, the performance or furnishing of which is found necessary for the proper completion of the improvement, the payment for which is not covered by any item of the bid schedule and for which no means of payment, direct or indirect, has been provided in the contract.

3.02 Official Copies of Contract. This Contract shall be executed and signed in duplicate, one copy shall be filed with the District, and one copy shall be delivered to the Contractor.

3.03 Titles and Headings. The subheadings and titles printed on the drawings, in these general provisions, in the specifications, and elsewhere in the contract documents, are inserted for the convenience of reference only, and shall not be taken or considered as having any bearing on the interpretation thereof.

3.04 Effect of Inspection and Payments. Inspection by the District Engineer or by any Inspector, or any order, measurement, approved modification, certificate or payment of money, or acceptance of any part or whole of the work, or any extension of time, or any possession by the District or its agents, shall not operate as a waiver for any provision of this contract or of any power reserved therein to the District, or any right to damage thereunder; no breach of this contract shall be held to be a waiver of any or subsequent breach. All remedies shall be taken and construed as cumulative.

3.05 Effect of Extension of Time. The granting of any extension of time due to delays which in the judgment of the District are unavoidable delays, shall in no way operate as a waiver on the part of the District of its rights under this contract.

3.06 Extra Work. If change orders requiring extra work are given in accordance with the provisions of this contract, such work shall be considered a part hereof and subject to each and all of the contract terms and requirements. No extra work which is reasonably estimated to exceed twenty percent (20%) of the cost of the contract work or project is authorized without compliance with applicable competitive bidding statutes.

3.07 Recognition of Subcontractors or Sub-Subcontractors. No subcontractor or sub-subcontractor shall be recognized as such, and all persons engaged in the work of construction shall be considered as employees of the Contractor and their work shall be subject to the provisions of the contract, including specifically these general provisions, the specifications and the contract drawings.

SECTION 4. BONDS

4.01 Faithful Performance Bond. As a part of the execution of this contract, the Contractor shall furnish and bear the cost of a bond of a Surety Company acceptable to the District, which bond is conditioned upon the faithful performance of all covenants and stipulations under this contract. The amount of the bond shall be one hundred percent (100%) of the total contract price, as such sum is set forth in the agreement.

As a condition precedent to satisfactory completion of this contract, an amount equal to ten percent (10%) of the contract price shall be withheld for the period specified in said bond until completion and acceptance of the work by the District.

4.02 Material-and-Labor Bond. As a part of the execution of this contract, the Contractor shall furnish and bear the cost of a bond of a Surety Company acceptable to the District in a sum not less than one hundred percent (100%) of the total contract price, as such sum is set forth in the agreement, for the payment in full of all persons, companies, or corporations who perform labor upon or furnish materials to be used in the work under this contract, in accordance with the provisions of Sections 3247 and 3248, Civil Code.

4.03 Notification of Surety Companies. The surety companies shall familiarize themselves with all of the conditions and provisions of this contract, and they waive the right of special notification of any change or modification of this contract or of extension of time, or of decreased or increased work, or of the cancellation of the contract, or of any other act or acts by the District or the District's authorized agents, under the terms of this contract, including but not limited to change orders or extra work, and failure to so notify the aforesaid surety companies of changes shall in no way relieve the surety companies of their obligation under this contract.

4.04 Power of Attorney. Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their Power of Attorney.

SECTION 5. INSURANCE

5.01 Indemnification Agreement. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the Monterey Peninsula Water Management District, their

officers, agents and employees both severally and collectively from and against all claims, damages, losses, injury, liability, costs, and expenses of whatsoever kind or nature including but not limited to attorney's fees and all defense costs howsoever the same may be caused resulting directly or indirectly from or arising out of the activities, operations, or work performed by the Contractor, its employees, agents, subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable and without limiting the generality of the foregoing, the same shall include; (1) bodily injury, sickness, disease or death to any person or persons or, (2) injury to or destruction of tangible and/or property including that of the Monterey Peninsula Water Management whether direct or consequential including the loss of use resulting therefrom. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described herein. The District, at its sole option, may choose to provide all or a portion of the defense of claims, damages, losses, liability, costs, and expenses as set forth above, and in such event, Contractor shall indemnify and hold harmless the District from the costs and expenses, including attorney's fees, of such defense.

5.02 General Insurance Requirements. The Contractor shall procure, purchase at its expense and maintain in full force and effect such insurance as will protect it from claims, damages, losses, liability, costs, and expenses as set forth herein which may arise out of or result from or in any way connected with the Contractor's activities, work, services, and/or operations performed by the Contractor under the Contract, whether such activities or operations be by itself or by any subcontractor or by any sub-subcontractor or by anyone directly or indirectly employed by any of them, or by anyone else for whose acts the Contractor or any of them is or may be liable. The procurement and maintenance by the Contractor of policies required under this Contract shall not relieve, limit or satisfy Contractor's obligation to indemnify, defend and save harmless the District, their officers, directors, agents and employees.

- a. Contractor represents that he will, prior to commencement of work pursuant to this agreement, name and endorse on to his Comprehensive General Liability insurance policy the District as an "Additional Insured" as respect to liability arising out of your activities, services, operations or work performed by Contractor for District (ISO form CG 20 09 11 85 or its equivalence). Contractor shall obtain and keep in full force and effect insurance policies and in appropriate limits as specified by the Insurance Requirements and shall require any subcontractor or sub-subcontractor to provide evidence of similar liability insurance coverages.
- b. Contractor shall add to his Comprehensive General Liability insurance policy a severability or interest clause or such similar wording if his policy does not automatically have this clause already written into it. Such language shall be similar to: "The insurance afforded applies separately to each insured against whom claim is made or suit is brought, including claims made or suits brought by any person included within the persons insured provision of this insurance against any other such person or organization."
- c. All policies carried by Contractor shall contain a provision or be endorsed to state that coverage as respects to District shall not be suspended, voided, canceled or non-renewed except after the insurance company has given to District at least thirty (30) days prior written notice to the address shown below prior to any such termination of coverage

becomes effective.

- d. Contractor shall on all policies or coverages required to be carried by Contractor pursuant to this contract, agrees to give to District thirty (30) days prior written notice by certified mail, return receipt requested, to the address shown below notification of any limitations, reductions or material change in coverage or in limits available.
- e. Prior to the execution of the contract, Contractor shall file with District copies of all insurance policies, certificates of insurance of coverage actually in force, along with original endorsements effecting coverages required to be carried by Contractor pursuant to this section. With respects to each renewal or replacement of any such insurance, the requirements of this paragraph must be complied with not less than thirty (30) days prior to the expiration or cancellation of the policy being renewed or replaced.
- f. All insurance policies carried by or available to Contractor shall be primary and not excess nor contributing with any insurance issued to or available to District. Any insurance or self-insurance maintained or carried by District shall be excess of the Contractor's insurance and shall not participate in nor contribute with such insurance carried by or available to Contractor. District will not be responsible for any payment of premiums due as a result of compliance with the terms and conditions of the insurance requirements. The cost of such insurance shall be borne solely by the Contractor.
- g. District shall be under no duty either to ascertain the existence of or to examine such insurance policies or to advise Contractor in the event such insurance coverage does not comply with the requirements hereof. However, District may, at any time, and from time to time, inspect and copy any and all insurance policies, endorsements, certificates and correspondence required to be carried by Contractor pursuant to this Contract.

5.03 Workers' Compensation Insurance. Each Bidder shall submit concurrently with his Bid a Certificate of Insurance for Compensation, in accordance with the provisions of Labor Code Sections 1860-61 and any acts amendatory thereof. Before beginning the work the Contractor shall furnish to the District satisfactory proof that he has taken out, for the period covered by the work under this contract, full compensation insurance for all persons whom he may employ directly or through subcontractors, in carrying out the work contemplated under this Contract, in accordance with the "Workers' Compensation and Insurance Act," Sections 3200 et seq., Labor Code.

- a. The following endorsements are to be attached to the Worker's Compensation Policy:
 - (1) Waiver of Subrogation Endorsement
 - (2) Alternate Employer Endorsement
 - (3) Thirty (30) Days Prior Notice
- b. If the Contractor fails to maintain such insurance, the District may take out compensation insurance which the District might be liable to pay under the provisions of the Act by reason of any employee of the Contractor being injured or killed, and deduct and retain the amount of the premiums for such insurance from any sums due the Contractor.

- c. If any injury occurs to any employee of the Contractor for which the employee, or his dependents in the event of his death, is entitled to compensation from the District under the provisions of said Act, or for which compensation is claimed from the District, the District may retain from the sums due the Contractor under this contract an amount sufficient to cover such compensation, as fixed by said Act, until such compensation is paid, or until it is determined that no compensation is due, and if the District is compelled to pay such compensation District will deduct and retain from such sums the amount so paid.

5.04 Specific Insurance Requirements

- a. Provide evidence of valid and collectible insurance carried for those exposures indicated by an "X". [coverages to be determined for each contract]
- A. ____ Professional Liability Errors & Omissions
 - B. ____ Workers Compensation and Employers Liability
 - C. ____ Automobile Liability - "Any Auto - Symbol 1"
 - D. ____ Comprehensive General Liability, including: Bodily Injury, Property Damage, Personal Injury (A,B,C,D,&E), "X,C,U"
Broad Form Blanket Contractual, Broad Form Property Damage
 - E. ____ Protection & Indemnity (Aviation)
- b. Minimum Limits of Insurance. For coverage specified in 5.04 (a), Contractor shall maintain limits of insurance protection no less than:
- (1) Professional Liability shall be not less than \$2,000,000 per claim and in the aggregate.
 - (2) Workers' Compensation as required by the Labor Code of the State of California and Employers Liability limits of Bodily Injury by Accident \$2,000,000 Each accident, Bodily Injury by Disease \$2,000,000 Each Employee; and Bodily Injury by Disease \$2,000,000 Policy Limit.
 - (3) Business Automobile Liability, Insurance Services Offices, "ISO" from CA 00 01 12-92 or its equivalence with limits not less than \$2,000,000 combined single limit per accident for bodily injury and property damage.
 - (4) Commercial General Liability, Insurance Services Offices, "ISO" form CG 00 01 11-88 or its equivalence with limits not less than \$2,000,000 combined single limit per occurrence for bodily injury, property damage, personal injury and shall specifically include contractual liability providing protection for liability assumed by the Contractor under this contract. Coverage for "Explosion, Collapse and Underground" shall be specifically endorsed on to the policy for full coverage under the policy.
 - (5) Protection & Indemnity (Aviation) shall not be less than \$5,000,000 combined single limit, including passengers.
- c. All insurance correspondence, certificates, binders, etc., shall be mailed to:

Monterey Peninsula Water Management District
Attn: Administrative Services Manager
P.O. Box 85
Monterey, CA 93942-0085

- d. All policies carried by the Contractor shall be primary coverage to any and all other policies that may be in force. The "District" will not be responsible for payment of premiums due as a result of compliance with the terms and conditions of the insurance requirements.
- e. All such policies of insurance shall be issued by domestic United States insurance companies with general policy holders' rating of not less than "B" and admitted to do business in the State of California.

5.05 Other Insurance Provisions. The Contractor shall comply with the following insurance provisions:

- a. Additional Insured. The "Persons Insured" provision on each policy shall include as additional insureds: (1) "Monterey Peninsula Water Management District, their officers, directors, agents and employees.
- b. Waiver of Subrogation. Contractor hereby waives any and all right of recovery against (1) the Monterey Peninsula Water Management District, their officers, directors, agents, and employees for any loss or damage sustained by the Contractor which is insured under valid and collectible insurance policy or policies secured pursuant to Paragraph 5.02 or any other property insurance applicable to the activities of the Contractor.

5.06 Hold Harmless. The following entities are to be held harmless: (1) Monterey Peninsula Water Management District and its directors, officers, agents and employees.

5.07 Property Insurance. If required by District, the Contractor shall, before commencing the work, take out and maintain during the life of this contract, an "All Risk" Property Insurance Policy as shall protect him, any sub-contractor performing work covered by this contract, the District and its officers, directors, agents, and employees, from any damage to the work being performed under this contract, including finished structures, partially finished structures, and all materials and equipment which are to be incorporated into the work. The Contractor shall furnish the District satisfactory proof that such a policy has been secured, and which shall be for not less than the amount listed in the contract documents.

5.08 Issuance of Stop-Work Order. The Contractor will be issued an immediate stop-work order when the District is notified of cancellation of any insurance required under this Contract. Such stop order shall continue until District is notified and provided proof of new or reinstated insurance. Neither the Contractor nor the subcontractor shall be entitled to any increase in Contract performance time, or to any adjustment in Contract price due to the effects of such a stop-work order.

SECTION 6. DUTIES AND RESPONSIBILITIES OF CONTRACTOR

6.01 Legal Address of Contractor. The Contractor's address as shown in the bid, as well as such office or headquarters the Contractor establishes at the site of the work, hereby are designated as addresses to which drawings, samples, notices, letters, articles, or other communications to the Contractor may be mailed or delivered. The delivery at either of these places of any item or communication from the District or agents thereof to the Contractor shall be deemed sufficient service of such delivery. The Contractor's address as shown in the bid may be changed at any time by notice in writing from the Contractor to the District. Nothing herein contained shall be deemed to preclude or render inoperative the service of any drawing, sample, notice, letter or other article or communication to or upon the Contractor personally.

6.02 Contractor's Representative and Office at Site. Before starting work, the Contractor shall designate in writing a representative who shall have complete authority to act for it. An alternative representative may be designated as well. The representative or alternate shall be present at the Work site whenever work is in progress or whenever actions of the elements necessitate its presence to take measures necessary to protect the Work, persons, or property. Any order or communication given to this representative shall be deemed delivered to the Contractor. A joint venture shall designate only one representative and alternate. In the absence of the Contractor's representative or alternate, instructions or directions may be given by the District Engineer to the superintendent or person in charge of the specific work to which the order applies. Such order shall be complied with promptly and referred to the Contractor or its representative.

In order to communicate with the District, the Contractor's representative, superintendent, or person in charge of specific work shall be able to speak, read, and write the English language.

The names of Contractors, Subcontractors, architects, or engineers may be displayed at the work site on removable signs. The size, location and content of each sign, however, shall require the advance written approval of the District Engineer.

During the performance of this contract the Contractor shall maintain a suitable office at the site of the work which shall be the headquarters of a representative authorized to receive drawings, instructions or other communications or articles from the District or District's agents; and any such thing given to the said representative or delivered at the Contractor's office at the site of the work in his absence shall be deemed to have been given to the Contractor. A signed receipt shall be given to the District or District's representative upon such delivery. The Contractor shall maintain a complete set of plans and specifications at the site office whenever work is in progress.

6.03 Permits and Licenses. Unless otherwise described under Special Conditions, the Contractor shall acquire, pay for and possess such State and local permits or licenses as are required by law, such as the general building permit, the plan check fee, utility connection fees, Department of Fish and Game permits, and Army Corps of Engineer permits, and the Contractor shall furnish satisfactory proof to the District, upon request, that such permits or licenses are and will be in effect throughout the entire life of this contract. **The Contractor shall keep all permits and licenses posted on the job site or other location approved by the District, and forward copies of all permits obtained to the District.**

The District, at its sole option, may choose to provide any or all permits and licenses.

6.04 Attention to Work. The Contractor shall give his personal attention to and shall supervise the work to the end that it shall be prosecuted faithfully, and when he is not personally present on the work, he shall at all reasonable times be represented by a competent superintendent or foreman who shall receive and obey all instructions or orders given under this contract, and who shall have full authority to execute the same and to supply materials, tools and labor without delay, and who shall be the legally appointed representative of the Contractor. The Contractor shall be liable for the faithful observation of any instructions delivered to him or to his authorized representative.

6.05 Liability of Contractor. The Contractor shall do all of the work and furnish and pay for all labor, materials, tools, and appliances, except as otherwise herein expressly stipulated, necessary or proper for performing and completing the work herein required in the manner and within the time herein specified. The mention of any specific duty or liability imposed upon the Contractor shall not be construed as a limitation or restriction of any general liability or duty imposed upon the Contractor by this contract, said reference to any specific duty or liability being made herein merely for the purpose of explanation.

6.06 Status of Contractor. The right of general inspection by the District shall not make the Contractor an agent of the District, and the liability of the Contractor for all damages to persons or to public or private property, arising from the Contractor's execution of the work, shall not be lessened because of such general inspection.

6.07 Right of Appeal. The Contractor shall have the right to appeal from any decision by any inspector to the District Engineer and from the District Engineer to the General Manager of the Monterey Peninsula Water Management District.

6.08 Protection of Persons and Property. The Contractor shall at all times during the progress of the work, or temporary suspension of the work, provide, erect and maintain all proper and/or necessary temporary walks, roads, driveways, guards, railings, lights and warning signs, provide a sufficient number of flagmen and take all necessary precautions at all times for the protection of the work and safety of the public, and those engaged in the work. Streets and alleys closed to traffic shall be protected by effective barricades. Signs and barricades shall conform to standards approved by the District Engineer. All barricades and obstructions shall be illuminated at night with reflector signs and lights, and all lights for this purpose shall be kept burning from sunset to sunrise. If in the opinion of the District Engineer or his authorized representative, the Contractor, during the course of the work, does not provide sufficient light and barricades and other safety devices, the District may provide them and deduct the cost thereof from monies due the Contractor under this contract. The Contractor shall also furnish, install and maintain at his own expense, such temporary fences, gates and barricades as may be required to confine cattle or other stock to the limits existing before the start of construction operations.

6.08.1 Cleanup and Dust Control. Throughout all phases of construction, including suspension of work, and until the final acceptance, the Contractor shall keep the site clean and free from rubbish and debris. The Contractor shall also abate dust nuisance by cleaning, sweeping and sprinkling with water, or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other methods.

Materials and equipment shall be removed from the site as soon as they are no longer necessary. Before the final inspection, the site shall be cleared of equipment, unused materials, and rubbish so as to present a satisfactory clean and neat appearance. All cleanup costs shall be included in the Contractor's Bid.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

Failure of the Contractor to comply with the District Engineer's cleanup orders may result in an order to suspend work until the condition is corrected. No additional compensation will be allowed as a result of such suspension.

6.08.2 Water Pollution Control. The Contractor shall exercise every reasonable precaution to protect channels, storm drains, and bodies of water from pollution. It shall conduct and schedule operations so as to minimize or avoid muddying and silting of said channels, drains, and waters. Water pollution control work shall consist of constructing those facilities which may be required to provide prevention, control, and abatement of water pollution.

6.08.3 Drainage Control. The Contractor shall maintain drainage within and through the work areas. Earth dams will not be permitted in paved areas. Temporary dams of native material, sandbags, or other acceptable material will be permitted when necessary. Such dams shall be removed from the site as soon as their use is no longer necessary.

6.08.4 Air Pollution Control. The Contractor shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate the regulations of any legally constituted authority.

6.09 Use of Explosives. When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger life or property. Before blasting operations are undertaken, at least twenty-four (24) hours written notice must be given to the District and the District Engineer. The Contractor shall be responsible for obtaining permits from the appropriate authorities. Explosives shall at all times be handled, used and stored in accord with all applicable regulations. Approval of the use of explosives by the District Engineer or District shall not relieve the Contractor from liability for claims caused by blasting operations.

6.10 Notice of Entrance. If any portions of the work specified herein are to be installed in rights-of-way passing through privately owned land, it is of utmost importance that before entering any private property, the Contractor shall give the tenant and inspector a minimum of forty-eight (48) hours' notice.

6.11 Preservation and Restoration of Property. The Contractor shall be responsible for the preservation of all public and private property along and adjacent to the work being constructed, and shall be responsible for restoring said property to the condition in which it existed before the Contractor undertook the work. The Contractor shall not be required to restore trees if they have

been specifically designated for removal, but otherwise shall be required to restore all property including but not limited to trees, vegetation, lawns, land monuments, utilities, fences, driveways, and bridges which have been disturbed in performance of the work. The Contractor shall carefully protect from disturbance or damage all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location.

The Contractor shall confine his operations to the area within the limits of construction, and not disturb ground outside of construction stakes, and shall not unreasonably encumber the site with materials or equipment.

The Contractor shall be familiar with all restrictions which apply to works or activity within streambeds and watercourses and shall insure that all activities of Contractor, subcontractors, and sub-subcontractors comply with those restrictions and protect the streambed, banks, water, and water life from disturbance and/or damage.

6.12 Maintenance of Traffic. Throughout the performance of the work in connection with this contract, the Contractor shall construct and adequately maintain suitable and safe crossings over trenches and such detours as are necessary, to care for public and private traffic, and to permit ingress and egress from public ways and private dwellings. The material excavated from trenches shall be compactly deposited along the sides of the trench in such manner as shall give as little inconvenience as possible to the traveling public and to adjoining property owners.

6.13 Protection of Utilities. The Contractor's attention is directed to the potential existence of pipes, cables, culverts, and other above and below ground structures and improvements which may or may not be shown on the plans. It is the responsibility of the Contractor to use reasonable care to ascertain the existing location of such utilities in advance of any operations so that they shall not be disturbed or damaged by him during the progress of the work. The contractor shall exercise care in avoiding damage to those utility facilities which are to remain in service subsequent to the construction of the work under this contract, and he will be held responsible for their repair if damaged. There is no guarantee that all utilities or obstructions are shown on construction drawings or that locations indicated are accurate.

The Contractor shall uncover all piping, conduit or other buried utilities, to a point one foot below the pipe or conduit, where crossings, interferences or connections are indicated, prior to trenching or excavating for any work structure, to determine actual elevations. If the contractor does not expose all required utilities, he shall not be entitled to additional compensation for work necessary to avoid interferences nor for repair to damaged utilities.

The Contractor shall be compensated for costs of locating and repairing damages not due to the failure of the contractor to exercise reasonable care and for the costs of removing or relocating such utility facilities and for equipment on the project necessarily idled during such work.

The Contractor shall not be assessed liquidated damages for delay in completion of the project, when such delay was caused by the failure of the District or the District Engineer or the owner of the utility to provide for removal or relocation of such utility facilities.

If the location of pipelines or other works being installed by the Contractor under this contract

conflicts with the location of existing pipelines, the Contractor shall so notify the District Engineer in writing. The District Engineer shall ascertain the location of the existing utility in question and may at his discretion relocate the pipeline or other work being installed for the convenience of the Contractor. It shall not be construed that the District or the District Engineer is in any way required or obligated to locate or relocate pipelines or other works to locations other than shown on the construction drawings.

6.14 Protection of Bridges. The Contractor shall be responsible for any damage which he may cause to bridges, culverts and road structures. He shall determine in advance the allowable safe load for each structure and, if necessary, provide special shoring and support at his expense.

6.15 Assumption of Risks. Until the completion and final acceptance by the District of all of the work under and implied by this contract, the work shall be under the Contractor's responsible care and charge. The Contractor shall rebuild, repair, restore and make good all injuries, damages, re-erections, and repairs, occasioned or rendered necessary, by causes of any nature whatsoever, excepting only acts of God and none other, to all or any portions of the work, excepting as otherwise stipulated.

6.16 Responsibility for Damage. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless the District, its officers, agents and employees both severally and collectively from and against all claims, damages, losses, injury, liability, costs, and expenses of whatsoever kind or nature including but not limited to attorney's fees and all defense costs howsoever the same may be caused resulting directly or indirectly from or arising out of the activities, operations, or work performed by the Contractor, its employees, agents, subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable and without limiting the generality of the foregoing, the same shall include; (1) bodily injury, sickness, disease or death to any person or persons or; (2) injury to or destruction of tangible and/or property including that of the District's whether direct or consequential including the loss of use resulting therefrom; (3) loss of, injury to, or destruction of materials, supplies, equipment, or tools, including those of owner, contractor, subcontractors, or sub-subcontractors. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described herein. The District, at its sole option, may choose to provide all or a portion of the defense of claims, damages, losses, liability, costs, and expenses as set forth above, and in such event, Contractor shall indemnify and hold harmless the District from the costs and expenses, including attorney's fees, of such defense. The District shall have the right to estimate the amount of such damage and to cause the District to pay the same, and the amount so paid for such damage shall be deducted from the money due the Contractor under this contract; or the whole or so much of the money due or to become due the Contractor under this contract, as may be considered necessary by the District, shall be retained by the District until such suits or claims for damages shall have been settled or otherwise disposed of, and satisfactory evidence to that effect furnished to the District.

6.17 Protection of District Against Patent Claims. All fees, royalties, or claims for any patented invention, article, or method that may be used upon or in any manner connected with the work under this contract shall be included in the price bid for the work, and the Contractor and his sureties shall protect and hold the District, together with all of the District's officers, agents and

employees, harmless against any and all demands made for such fees or claims brought or made by the holder of any invention or patent, and before the final payment is made on account of this contract the Contractor shall, if requested by the District Engineer, furnish acceptable proof of a proper release from all such fees or claims.

Should the Contractor, his agents, or employees, or any of them, be enjoined from furnishing or using any invention, article, material or appliance supplied or required to be supplied or used under this contract, the Contractor shall promptly substitute other articles, materials or appliances, in lieu thereof, of equal efficiency, quality, finish, suitability and market value and satisfactory in all respects to the District Engineer. Or in the event that the District Engineer elects, in lieu of such substitution, to have supplied, and to retain and use, any such invention, article, material or appliance, as may by this contract be required to be supplied, in that event the Contractor shall pay such royalties and secure such valid licenses as may be requisite and necessary for the District, the District's officers, agents, and employees, or any of them to use such invention, article, material or appliance without being disturbed or in any way interfered with by any proceeding in law or equity on account thereof. Should the Contractor neglect or refuse to make the substitution promptly, or to pay such royalties and secure such licenses as may be necessary, then in that event the District Engineer shall have the right to make such substitution, or the District may pay such royalties and secure such licenses and charge the cost thereof against any money due the Contractor from the District or recover the amount thereof from him and his sureties notwithstanding final payment under this contract may have been made.

6.18 Cooperation and Collateral Work. The Contractor shall cooperate with all other contractors who may be performing work on behalf of the District and workers who may be employed by the District on any work in the vicinity of the work to be done under this contract; and he shall so conduct his operations as to interfere to the least possible extent with the work of such contractors or Agents. He shall make good promptly, at his own expense, any injury or damage that may be sustained by other contractors or employees of the District at his hands.

The Contractor shall be responsible for ascertaining the nature and extent of any simultaneous, collateral, and essential work by others. The District, its workers and contractors and others, shall have the right to operate within or adjacent to the Work site during the performance of such work. The District, the Contractor, and each of such workers, contractors and others, shall coordinate their operations and cooperate to minimize interference. The Contractor shall include in its Bid all costs involved as a result of coordinating its work with others. The Contractor will not be entitled to additional compensation from the District for damages resulting from such simultaneous, collateral, and essential work. If necessary to avoid or minimize such damage or delay, the Contractor shall redeploy its work force to other parts of the Work. Should the Contractor be delayed by the District, and such delay could not have been reasonably foreseen or prevented by the Contractor, the District Engineer will determine the extent of the delay, the effect on the project, and any extension of time.

If the work of the Contractor is delayed because of any acts or omissions of any other contractor or of the District, the Contractor shall on that account have no claim against the District other than for an extension of time.

If any portions of the work specified herein are to be installed in any right-of-way owned by the

State, County, Municipality, or other public entities or public utilities, it shall be incumbent upon the Contractor to familiarize himself with the regulations of each of these agencies, especially concerning traffic controls, lights, barricades, and backfill requirements. Such portions of the work which may fall within the right-of-way of the agencies described above will necessarily be subject to their inspection and approval before acceptance of these portions of the work by the District Engineer. Any costs for inspection by agents other than those of the District shall be borne by the Contractor. Where other agencies have jurisdiction over some portion of the work, and the requirements of the agencies are at variance with this specification, then that portion of the work shall be done in accordance with the requirements of the agency(ies), as agreed to by the District.

6.19 Compliance with Laws and Regulations. The Contractor shall keep himself fully informed of all existing and future State and Federal laws and County, Municipal or District ordinances and regulations which in any manner affect those engaged or employed in the work, or the materials and equipment used in the work, or which in any way affect the conduct of the work and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. If any discrepancy or inconsistency is discovered in the drawings or specifications, or in this contract in relation to any such law, ordinance, regulation, order or decree, the Contractor shall forthwith report the same to the District Engineer in writing. He shall at all times observe and comply with, all such existing and future laws, ordinances, regulations, order and decrees. The Contractor shall protect and indemnify the District and all of the District's officers, agents and employees against any claim or liability arising from or based upon the violation of any such law, ordinance, regulation, order or decree, whether by the Contractor himself or by his employees or by subcontractors or sub-subcontractors.

The Contractor shall be aware of and comply with any of the following provisions of law that may apply to the performance of work under this Contract:

- a. The Fair Labor Standards Act of 1939 (20 U.S.C. 201-219);
- b. The Walsh-Healy Public Contracts Act (41 U.S.C. 35-45);
- c. The Contract Work Hours Standards Act - Overtime Compensation (40 U.S.C. 327-330, and the California state requirement under Labor Code '1810, 1811, and 1815 which define 8 hours as a legal day's work;
- d. Laws restraining the Use of Convict Labor;
- e. Utilization of Small Business and Small Disadvantaged Business Concerns (Public Law 95-507);
- f. The Equal Employment Opportunity clause in Section 202 of Executive Order (E.O.) 11246, as amended, and the implementing rules and regulations 41 CFR Part 60) are incorporated herein by reference, unless this order is exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of E.O. 11246 or provisions of any superseding E.O. As used in this clause, "Contractor" means Seller. Unless this order is exempted, the applicable Equal Employment Opportunity Compliance Certificate

previously submitted by Seller to Buyer is by reference also incorporated herein.

- g. The affirmative action for Handicapped Workers Clause in Title 41, Code of Federal Regulations, Part 60, Subsection 741.4 and the implementing rules and regulations of the Department of Labor associated therewith are incorporated herein by reference unless the contract amount is under \$2,500.
- h. The Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era Clause of Title 41, Code of Federal Regulations, Part 60, Subsection 25014 and the implementing rules and regulations of the Department of Labor associated therewith are incorporated herein by reference, unless the contract amount is under \$10,000.
- I. The requirements of Labor Code '3700 and '1860 which require the contractor to secure the payment of compensation to its employees, and which require the contractor to execute a certification form, as follows:
 - "I am 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 I will comply with such provisions before commencing the performance of the work of this contract."
- j. The requirements of Public Contract Code '7106 which requires the contractor to execute a noncollusion affidavit.
- k. The requirements of Public Contract Code '4104 setting forth the "Subletting and Subcontracting Fair Practices Act" and which require the Contractor to identify any subcontractor who will perform work or render service in excess of one-half of one percent of the Contractor's total bid estimate.
- l. The requirements of Labor Code '1776 which requires the Contractor to keep accurate payroll records, and make them available for inspection on request, and Labor Code '1777.5 requirements for apprentice labor.
- m. Public Contract Code '7104 which requires a clause specific to hazardous waste and unforeseen conditions in any public works contract involving excavations deeper than four feet. The Code also requires the Contractor to notify the District in writing if any hazardous waste or other unforeseen latent physical conditions are found in the course of excavation. The District must promptly investigate and issue a change order if necessary.
- n. Labor Code '6705 which requires special trench shoring for public works in excess of \$25,000.
- o. Business & Professions Code "7028.7 and 7028.15 pertaining to licensing requirements for Contractors who perform public works.

- p. Public Contract Code '7013(b) requires a provision regarding antitrust claims assignments. The contractor or subcontractor must "offer and agree to assign any antitrust claim arising from the purchase of goods, services or materials."
- q. Workers' compensation laws (Labor Code '3700 - insurance, Business & Professions Code "7124.6 - disclosure of complaints, 7125 - address of insurance carrier, and 7125.1 - evidence of coverage).
- r. All other federal, state and local laws; and
- s. All other federal, state and local regulations and orders issued under any applicable law.
- t. Governing Law and Venue. In the event of litigation, the contract documents and all matters related to the work shall be governed by and controlled only in accordance with the laws of the State of California. Venue shall be with the appropriate state court in the County of Monterey only.
- u. The Americans with Disabilities Act (ADA) prohibiting discrimination on the basis of disability.

6.20 Construction Utilities. The Contractor shall be responsible for providing and bearing the cost, for and in behalf of his work under this contract, all necessary utilities, such as special connections to water supply, telephones, power lines, fences, roads, watchmen, suitable storage places, and approved sanitary facilities for his employees.

6.21 Approval of Contractor's Plans. The approval by the District Engineer of any drawing or any method of work proposed by the Contractor shall not relieve the Contractor of any of his responsibility for any errors therein and shall not be regarded as any assumption of risk or liability by the District or any officer or employee thereof, and the Contractor shall have no claim under this contract on account of the failure or partial failure or deficiency of any plan or method so approved. Such approval shall be considered to mean merely that the District Engineer has no objection to the Contractor's using upon his own full responsibility, the plan or method proposed.

6.22 Suggestions to Contractor. Any plan or method of work suggested by the District Engineer to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor; and the District Engineer and the District shall assume no responsibility therefor.

6.23 Termination of Unsatisfactory Subcontractors. Should any subcontractor or sub-subcontractor fail to perform in a satisfactory manner the work undertaken by him, such subcontractor or sub-subcontractor shall be terminated immediately by the Contractor upon written notice from the District Engineer or such sub-subcontractor shall be terminated by the sub-contractor at the direction of the Contractor upon written notice from the District Engineer.

6.24 Hiring and Dismissal of Employees. During the performance of this contract, the Contractor agrees as follows:

- a. The Contractor shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, mental condition, marital status, or sex. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this Equal Opportunity clause.
- b. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, religious creed, color, national origin, ancestry, physical disability, mental disability, mental condition, marital status, or sex.

The Contractor shall employ only such foremen, mechanics and laborers as are competent and skilled in their respective lines of work and whenever the District Engineer shall notify the Contractor in writing that any person on the work is, in his opinion, incompetent, unfaithful, intemperate, or disorderly, or refuses to carry out the provisions of this contract, or uses threatening or abusive language to any person on the work representing the District, or is otherwise unsatisfactory, such person shall be discharged immediately from the work and shall not be re-employed upon it except with the consent of the District Engineer.

6.25 Wages of Employees. The Contractor shall provide a copy of his certified payroll for the project weekly to the District Engineer. The District shall investigate any discrepancies in actual payments to those required by the general prevailing rates determined by the State Director of the Department of Public relations for the locality in which the work is performed.

The time of service of any worker shall be restricted to eight (8) hours during any calendar day and forty (40) hours during a calendar week unless overtime compensation is paid at not less than one and one-half times the basic rate of pay.

The Contractor shall forfeit, as penalty, to the District, fifty dollars(\$50) for each worker employed in execution of the contract by him or by any subcontractor, for each calendar day during which any worker is required or permitted to labor more than eight (8) hours in any one (1) calendar day and forty (40) hours in any one (1) calendar week in violation of the provisions of Section 1775, Labor Code.

The Contractor shall comply with Section 1776, Labor Code, by maintaining accurate and complete payroll records and making such records available for inspection. Subcontractors shall also comply with the Section 1776 provisions, but the prime responsibility for maintenance and availability of complete and accurate payroll records rests with the Contractor.

6.26 Preservation of Stakes and Marks. The Contractor shall preserve carefully bench marks, reference points, and stakes, and in case of willful or careless destruction he will be charged with the resulting expense of replacement and shall be responsible for any mistakes that may be caused

by their unnecessary loss or disturbance.

6.27 Protection of Contractor's Work and Property. The Contractor shall protect his work, supplies, and materials from damage due to the nature of the work, the action of the elements, trespassers, or any cause whatsoever until the completion and acceptance of the work by the District.

Neither the District nor any of the District's agents assume any responsibility for collecting indemnity from any person or persons causing damage to the work of the Contractor.

6.28 Assistance to District Engineer. At the request of the District Engineer, the Contractor shall provide workers from his force, and tools, stakes and other materials to assist the District Engineer temporarily in making measurements and surveys and in establishing temporary or permanent reference marks. Payment for such materials and assistance will be made as provided for under the caption "Extra Work," provided, however, that the cost of setting stakes and marks carelessly lost or destroyed by the Contractor's employees will be assessed to the Contractor.

6.29 Removal of Condemned Materials and Structures. The Contractor shall remove from the site of the work, without delay, all rejected and condemned materials or structures of any kind brought to or incorporated in the work, and upon his failure to do so, or to make satisfactory progress in so doing, within forty-eight (48) hours after the service of a written notice from the District Engineer, the condemned materials or work may be removed by the District and the cost of such removal shall be deducted from the money that may be due or may become due the Contractor on account of or by virtue of this contract. No such rejected or condemned material shall again be offered for use by the Contractor under this contract.

6.30 Proof of Compliance with Contract. In order that the District Engineer may determine whether the Contractor has complied with the requirements of this contract not readily ascertainable through inspection and tests of the work and materials, the Contractor, shall, at any time when requested, submit to the District Engineer properly authenticated documents or other satisfactory proofs as to his compliance with such requirements.

6.31 Approval of Variations. The work done by the Contractor under this contract shall not vary in any manner from the specifications, drawings and contract stipulations, or from any materials, samples of which have been submitted and approved, except by written permission of the District Engineer.

6.32 Modification of Work by Contractor. Should conditions develop during the progress of the work to make it impossible or impracticable for the Contractor to comply strictly with the terms of this contract, the Contractor shall apply in writing to the District Engineer for modification, provided that it be not detrimental to the work or of additional cost. If such modification is acceptable to the District Engineer, the Contractor shall be so notified in writing, whereupon the modification may be made. If such modification is not acceptable to the District Engineer, the Contractor shall determine some other method of doing the work which shall be acceptable to and duly accepted by the District Engineer.

Such modifications shall in no way affect, vitiate, or make void this contract or any part thereof,

except what is necessarily affected by such alterations and is clearly the evident intention of the parties to this contract.

6.33 Cleaning Up. The Contractor shall not allow the site of the work to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition throughout the construction period. The District Engineer shall have the right to determine what is or is not waste material or rubbish and the place, manner and timing of disposal.

On or before the completion of the work, the Contractor shall, without charge therefore, carefully clean out all pits, pipes, chambers or conduits and shall tear down and remove all temporary structures built by him and shall remove rubbish of all kinds from any of the grounds which he has occupied and leave them in first-class condition, to the satisfaction of the District's Representative.

6.34 Subsequent Repair. The Contractor shall promptly make all needed repairs arising out of defective materials and equipment or faulty workmanship whether caused by the Contractor, sub-contractors or sub-subcontractors, irrespective of fault, during the period specified in the Bond of Faithful Performance after the date of completion of the work under this contract and the final acceptance of the same by the District. The District is hereby authorized to make such repairs if within ten (10) days after the mailing of a notice in writing to the Contractor, or his agent, the said Contractor shall neglect to make or undertake with due diligence the aforesaid repairs; provided, however, that in case of an emergency where, in the opinion of the District, delay would cause serious loss or damage, repairs may be made without notice being sent to the Contractor, and the Contractor shall pay the costs thereof.

6.35 Hazardous Waste and Differing Site Conditions.

- a. When the work involves digging trenches or other excavations deeper than four feet, the Contractor shall promptly, and before disturbing the site, notify the District Engineer in writing of: (1) material believed to be hazardous waste as defined in Section 25117, Health and Safety Code; (2) subsurface or latent physical conditions at the site differing from those indicated; or (3) unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract. The District Engineer shall promptly investigate the conditions, and if he finds that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.
- b. No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in (a) above; provided, however, the time prescribed therefor may be extended by the government. If a dispute arises whether the conditions materially differ or involve hazardous waste or cause a change in the cost or time for performance of the work, the Contractor shall not be excused from the scheduled completion date, but shall proceed with all work to be performed under the contract. Contractor shall retain all rights under the Contract or by law with respect to the dispute.

- c. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.
- d. The removal of 100 square feet or more of surface area of asbestos-related material or of other hazardous substances as defined in Section 7058.7, Business and Professions Code, shall be encompassed by a new and separate contract undertaken with a contractor certified in accordance with Section 7058.5(a), Business and Professions Code.
If, however, an emergency condition arises by reason of the discovery of asbestos-related material or hazardous substances, the removal thereof shall be contracted and performed as day labor or by contract without giving notice for bids, or both.

The meaning of "emergency condition" shall be that as defined by Sections 10122 and 22035, Public Contract Code.

6.36 Assignment of Antitrust Claims. In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the District all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 USC Sec. 15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties. (Public Contract Code, '7103.5).

6.37 Records and Confidentiality.

- a. Confidentiality. Contractor and its officers, employees, agents, and subcontractors shall comply with all federal, state, and local laws which provide for the confidentiality of records and other information. Contractor shall not disclose any confidential records or other confidential information received from the District or prepared in connection with the performance of this Agreement, unless District specifically permits Contractor to disclose such records or information. Contractor shall promptly transmit to District any request for disclosure of any such confidential records or information. Contractor shall not use any confidential information gained by Contractor in the performance of this Agreement except for the sole purpose of carrying out Contractor's obligations under this Agreement.
- b.
- c. District Records. When this Agreement expires or terminates, Contractor shall return to District any District records which Contractor used or received from District to perform services under this Agreement.
- d. Maintenance of Records. Contractor shall prepare, maintain, and preserve all reports and records that may be required by federal, state, and District rules and regulations related to services performed under this Agreement. Contractor shall maintain such records for a period of at least three years after receipt of final payment under this Agreement. If any litigation, claim, negotiation, audit exception, or other action relating to this Agreement is

pending at the end of the three-year period, then Contractor shall retain said records until such action is resolved.

- e. Access to and Audit of Records. The District shall have the right to examine, monitor and audit all records, documents, conditions, and activities of the Contractor and its subcontractors related to services provided under this Agreement. Pursuant to Government Code section 8546.7, if this Agreement involves the expenditure of public funds in excess of \$10,000, the parties to this Agreement may be subject, at the request of the District or as part of any audit of the District, to examination and audit of matters connected with the performance of this Agreement for a period of three years after final payment under the Agreement.
- f. Royalties and Inventions. District shall have a royalty-free, exclusive and irrevocable license to reproduce, publish, and use, and authorize others to do so, all original computer programs, writings, sound recordings, pictorial reproductions, drawings, and other works of similar nature produced in the course of or under this Agreement. Contractor shall not publish any such material without the prior written approval of District.

SECTION 7. DUTIES AND POWERS OF DISTRICT

7.01 Authority of the District Engineer. All work done under this contract shall be done in a workmanlike manner and shall be performed to the reasonable satisfaction of the District Engineer who shall have general supervision of all work included hereunder. To prevent disputes and litigation, the District Engineer shall in all cases determine the amount, quality, acceptability and fitness of the several kinds of work and materials which are to be paid for under this contract; shall decide all questions relative to the true construction, meaning, and intent of the specifications and drawings; shall decide all questions which may arise relative to the classifications and measurements of quantities and materials and the fulfillment of this contract; and shall have the power to reject or condemn any work or material which does not conform to the terms of this contract. His estimate and decision in all matters shall be a condition precedent to an appeal to the District, or the right of the Contractor to receive, demand, or claim any money or other compensation under this agreement and a condition precedent to any liability on the part of the District to the Contractor on account of this contract.

Prior to giving approval of extra work or work omitted as contemplated by Section 11.05 of this contract, the District Engineer shall obtain written approval by the District.

7.02 Substitute for District Engineer. Whenever the District Engineer shall be unable to act, in consequence of absence or other cause, then such person as the District Engineer or the District shall designate, shall perform any and all of the duties and be vested with any or all powers herein given to the District Engineer.

7.03 Authority of Inspectors. Properly authorized and accredited inspectors shall be considered to be the representatives of the District limited to the duties and powers entrusted to them. It will be their duty to inspect materials and workmanship of those portions of the work to which they are assigned, either individually or collectively, under instructions of the District Engineer and to report any and all deviations from the drawings, specifications, and other contract

provisions which may come to their notice. Any inspector may be considered to have the right to order the work entrusted to his supervision stopped, if in his opinion such action becomes necessary, until the District Engineer is notified and has determined and ordered that the work may proceed in due fulfillment of all contract requirements.

7.04 Liability of District Officials. No District official, nor the District Engineer, nor any authorized assistant of any of them, shall be personally responsible for any liability arising under this contract.

7.05 Termination of Contract. If the work provided for under this contract shall be abandoned or if the contract shall be sublet or sub-sublet or assigned without the consent of the District or if at any time the District Engineer shall be of the opinion that the conditions specified as to the rate of progress are not being fulfilled, or that the work or any part thereof is unnecessarily delayed, or that the Contractor is willfully violating any of the conditions or provisions of this contract or is executing the same in bad faith, or if the Contractor is adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver is appointed on account of his insolvency, the District shall notify in writing the Contractor to fulfill the conditions of this contract, and should the Contractor fail to begin compliance with said notice within five (5) days, the District may, at the District's discretion, notify in writing the Contractor to discontinue all work under this contract, or any part thereof, and thereupon the Contractor shall discontinue work, and the District may, by contract or otherwise, at the District's discretion, complete the work or such part thereof, and may take possession of the work and use therein such materials, machinery, implements and tools of every description as shall be found upon the work or provide whatever is needed for the completion of the work and charge the expense thereof to the Contractor.

In order to meet the expense so incurred, the District is hereby authorized by the Contractor to draw a warrant in the name of the Contractor and in favor of those persons, firms, or corporations doing the work or providing the materials or labor therefor, against the fund or appropriation set aside for the purpose of this contract, and when a warrant is so drawn it shall be conclusive upon the Contractor, and shall be to all intents and purposes the same as drawn by the Contractor in person. When any of the said demands have been audited and paid, the amount of the same shall be deducted from the fund or appropriation set aside for the purposes of this contract being so terminated. The Contractor shall immediately, upon due notice in writing from the District Engineer, remove from the premises all materials and personal property belonging to him which have not already been used in the construction of the work, or which are not in place in the work and he shall forfeit all sums due him under this contract, and both he and his sureties shall be liable on his bond for all damages caused the District by reason of his failure to complete this contract.

Neither the extension of time, for any reason, beyond the date fixed for the completion of this work, nor the doing and acceptance of any part of the work called for by the terms of this contract, subsequent to the said date, shall be deemed to be a waiver by the District of the right to abrogate, annul, or terminate this contract for abandonment or cause as provided above.

7.06 Early Termination. Notwithstanding any provision to the contrary, if for any fiscal year of this agreement, the governing body of the District fails to appropriate or allocate funds for future periodic payments under the Agreement after exercising reasonable efforts to do so, the District, may, upon thirty (30) days notice, order work on the project to cease. The District will remain

obligated to pay the work already performed but shall not be obligated to pay the balance remaining unpaid beyond the fiscal period for which funds have been appropriated or allocated and for which the work has not been done.

7.07 Access to Work. During the performance of the work under this contract, the District and the District's agents and employees may at any time enter upon the work, or the shops where any part of such work may be in preparation, or the factories where any materials for use in the work are being or are to be manufactured or fabricated, and the Contractor shall provide proper and safe facilities therefor, and shall make arrangements with manufacturers to facilitate inspection of their processes and products to such extent as the District's interest may require. Other contractors performing work for the District may also, for all purposes required by their respective contracts, enter upon the work.

7.08 Removal or Replacement of Work Done without Lines, Grades, or Levels. Any work done without lines, levels, or grades being given by the District Engineer or without the supervision of an inspector, or which in the opinion of the District Engineer is deficient in construction, may be ordered replaced at the Contractor's sole cost and expense, except when such work is authorized by the District Engineer in writing.

7.09 Retention of Imperfect Work. If any portion of the work done or material furnished, under this contract, shall prove defective and not in accordance with the specifications and drawings, and if the imperfection in the same shall not be of sufficient magnitude or importance to make the work dangerous or undesirable, or, if the removal of such work is impracticable or will create conditions which are dangerous or undesirable, the District Engineer shall have the right and authority to retain such work instead of requiring the imperfect work to be removed and reconstructed, but he shall make such deductions therefor in the payments due or to become due the Contractor as may be just and reasonable. A contract modification shall be written containing any such deductions.

7.10 Modification of Work by District. The District Engineer shall have the right, in writing, to order additions to, omissions from, or corrections, alterations and modifications in the line, grade, form, dimensions, plan or kind or amount of work or materials herein contemplated, or any part thereof, either before or after the beginning of construction.

The order of such additions, omissions, corrections, alterations, and modifications shall be in writing and signed by the District Engineer, and such order shall then be binding upon the Contractor.

Such alterations shall in no wise affect, vitiate or make void this contract or any part thereof, except that which is necessarily affected by such alterations and is clearly the evident intention of the parties to this contract.

7.11 Extra Work by District. In case of neglect or refusal by the Contractor to perform any extra work which may be authorized by the District Engineer or to make satisfactory progress in the execution of the same, the District may employ any person or persons to perform such work and the Contractor shall not in any way interfere with the person or persons so employed.

7.12 Additional and Emergency Protection. Wherever, in the opinion of the District Engineer,

the Contractor has not taken sufficient precautions for the safety of the public or the protection of the works to be constructed under this contract, or of adjacent structures or property which may be injured by processes of construction on account of such neglect, and whenever, in the opinion of the District Engineer, an emergency shall arise and immediate action shall be considered necessary in order to protect public or private personal or property interest, then and in that event, the District Engineer, with or without notice to the Contractor, may provide suitable protection to the said interests by causing such work to be done and such material to be furnished as shall provide such protection as the District Engineer may consider necessary and adequate.

The cost and expense of such work and material so furnished shall be borne by the Contractor and if the same shall not be paid on presentation of the bills therefor, then such costs shall be deducted from any amounts due or to become due the Contractor. The performance of such emergency work under the direction of the District Engineer shall in no way relieve the Contractor from any damages which may occur during or after precaution has been taken by the District Engineer.

7.13 Use and Possession Prior to Completion. The District shall have the right to take possession of or use any completed or partially completed part of the work. Prior to such possession or use, the District's representative shall furnish the Contractor an itemized list of work remaining to be performed or corrected on such portions of the project as are to be possessed or used by the District, provided that failure to list any item of work shall not relieve the Contractor of responsibility for compliance with the terms of the contract. Such possession or use shall not be deemed an acceptance of any work under the contract. If such prior possession or use by the District delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment in the contract price or the time of completion will be made and the contract shall be modified in writing accordingly.

7.14 Rights-of-Way. The District shall provide all rights-of-way and easements in or beneath pipes and other structures which will be constructed by the Contractor under this contract. If through the failure of the District to acquire or clear title to rights-of-way, the Contractor sustains loss which could not have been avoided by the judicious handling of forces and plant, there shall be paid to the Contractor such amount as the District Engineer may find to be a fair and reasonable compensation for such part of the Contractor's actual loss as the District Engineer deems unavoidable.

Actual loss shall be understood to include no items other than necessary payments, idle time of men, idle time of equipment, cost of extra moving of equipment, and cost of longer hauls, with no allowance in any case for overhead or profit.

If performance of the Contractor's work is delayed as the result of the failure of the District to acquire or clear title to rights- of-way, a commensurate extension of time will be granted.

7.15 Relocating Existing Public Utilities. Should it be necessary to move the property of any owner of a public utility or franchise, such owner shall be notified by the District Engineer, upon proper application by the Contractor, to move the property within a specified time, and the Contractor shall not interfere with said property before the expiration of the time so specified. Should the Contractor desire to have any alterations made in public utility or private improvements in order to facilitate his operations and for his sole benefit, which alterations would not be

otherwise required, he shall make whatever arrangements are necessary with the owners of that utility or private improvement and bear all expenses in connection therewith.

SECTION 8. SCOPE AND INTENT OF SPECIFICATIONS AND DRAWINGS

8.01 Interpretation of Specifications and Drawings. The specifications and the contract drawings are intended to be explanatory of each other. Any work indicated in the contract drawings and not in the specifications, or vice versa, is to be executed as if indicated in both. Should it appear that the work to be done, or any of the matters relative thereto, are not sufficiently detailed or explained in these contract documents, including the contract drawings, the Contractor shall apply in writing to the District Engineer for such further explanations as may be necessary, and shall conform thereto as part of this contract, so far as may be consistent with the terms of this contract. In the event of any doubt or question arising respecting the true meaning of the specifications, reference shall be made to the District and its decision thereon shall be final.

8.02 Figured Dimensions. Figured dimensions on the contract drawings shall in all cases be given precedence over scaled dimensions. If figured dimensions do not correspond to scaled dimensions, the Contractor shall request the District Engineer to verify the accuracy of the figured dimensions. It shall be the responsibility of the Contractor to ascertain the correct scale of all contract drawings in his possession including those which may have been reduced for reproduction.

8.03 Errors or Discrepancies. If the Contractor, in the course of the work, discovers any discrepancies between the drawings and the conditions of the ground, or any errors or omissions in the drawings or in the layout given by stakes, points or instructions, it shall be his duty to inform the District Engineer immediately in writing, and the District Engineer shall promptly verify the same. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

8.04 Drawings to be Furnished by Contractor. As soon as practicable after the execution of this contract, the Contractor shall supply working drawings of devices to be furnished hereunder as are called for herein or as are required by the District Engineer to make clear the details of construction and to demonstrate fully that all materials and equipment comply with the intent and provisions of this contract. Unless otherwise herein specified, such drawings shall be submitted to the District Engineer for his approval upon his request. Should any drawings furnished by the Contractor not be approved by the District Engineer, the Contractor shall make the revisions required and resubmit them to the District Engineer for approval. After due approval by the District Engineer, these drawings shall become a part of this contract and the work shall be done in conformity therewith. No such work shall be begun or devices purchased until the drawings detailing such items have been approved. The approval of the drawings shall not relieve the Contractor of responsibility or waive or modify any of the provisions or requirements of this contract.

All plans and drawings, whether prepared by the Contractor, Subcontractors, Architect, or District Engineer, are the property of the District.

8.05 Additional Drawings by District. The contract drawings are intended to be comprehensive and to indicate in detail the scope of the work. However, the District Engineer may furnish the

Contractor additional drawings during the progress of the work in order to clarify and define in greater detail the intent of the contract drawings or specifications. The Contractor may request such detailed drawings by submitting his request in writing to the District Engineer at least two (2) weeks in advance of the time they are required.

8.06 Lines and Grades. All work under this contract shall be constructed to the lines and grades shown on the contract drawings which shall be furnished by the District Engineer. The Contractor shall advise the District Engineer at least forty-eight (48) hours in advance of the time and place he wishes to do work, in order that lines and grades may be furnished and necessary measurements for record and payment made with minimum inconvenience to the District Engineer and/or delay to the Contractor.

8.07 Method of Measurement. Unless specifically stated otherwise in this contract, no extra measurement or measurements according to local custom of any kind shall be allowed in measuring the work under this contract, but only the length, area, solid contents, number, weight, or time in standard units, as the case may be, shall be considered as specified. Pipelines shall be measured horizontally.

SECTION 9. WORKMANSHIP, MATERIALS AND EQUIPMENT

9.01 General Quality. Materials and equipment shall be new and of a quality equal to or superior to that specified or approved. Work shall be done and completed in a thorough and workmanlike manner and in strict conformance with the plans and specifications.

9.02 Quality in Absence of Detailed Specifications. Whenever under this contract it is provided that the Contractor shall furnish materials or manufactured articles or shall do work for which no detailed specifications are set forth, the materials or manufactured articles shall be of the best grade in quality and workmanship obtainable in the market from firms of established good reputation, or, if not ordinarily carried in stock, shall conform to the usual standards for first-class materials or articles of the kind required, with due considerations of the use to which they are to be put. In general, the work performed shall be in full conformity and harmony with the intent to secure the best standard of construction and equipment of the work as a whole or in part.

9.03 Domestic Preference. The District reserves the right to specify only manufactured materials produced in the United States. If required under Special Conditions, only manufactured materials made in the United States substantially from materials produced in the United States, shall be employed in the performance of this contract, in accordance with the provisions of Sections 4300-4305 and of Sections 4330-4334 (Articles 1 and 2, Chapter 4, Division 5) of the Government Code of the State of California and any acts amendatory thereof and under the proviso of Title III, Section 3, of the Act of March 3, 1933, 47 Stat. 1520 (U.S. Code, Title 41, Sec. 10b).

9.04 Samples and Tests. No material shall be used in the work until it has been approved by the District Engineer. All material and equipment are subject to test to determine their conformity with these specifications. Certified factory and mill tests normally shall be acceptable for standard manufactured items. Tests on other materials, including concrete mix designs and aggregate quality tests shall be made in a materials testing laboratory, approved by the District Engineer. All tests shall be performed as specifically or otherwise designated by the District

Engineer, and shall be completed to his satisfaction.

All tests shall be furnished by the Contractor at his expense except the following, which shall be performed at the District's expense: Initial soil compaction and stabilization tests, foundation bearing tests, concrete cylinder compression tests. In areas where soil compaction must be repeated due to failure of the compacted material to pass the initial compaction tests, the Contractor shall pay for any and all retesting required subsequent to the initial test.

9.05 Materials and Equipment Specified by Name. Unless otherwise specified in the technical sections of these specifications, any material or equipment indicated or specified by patent, proprietary, or manufacturer's name, shall be considered as used for the purpose of describing the items desired and establishing the standard of quality and utility required. In such cases, the names shall be considered as followed by the words "or approved equal." The Contractor may supply any material or equipment which is equal in every respect to that specified, provided, however, that written approval for its use is first obtained from the District Engineer who shall be the sole judge of its quality and ability to meet the specifications. The Contractor shall append to the request for substitution sufficient data, drawings, samples, literature or other detailed information as will demonstrate to the District Engineer that the proposed substitute material is equal in quality and utility to the material specified. The Contractor shall also append the exact amount of credit or charge to be received by the District resulting from said substitution.

The District Engineer shall approve, in writing, such proposed substitution provided its quality and utility are, in his exclusive opinion, satisfactorily demonstrated and the resulting credit or charge to the District warrants such substitution. Such approval shall not relieve the Contractor from complying with the requirements of the contract documents, and the Contractor shall be responsible at his own expense for any changes caused by this proposed substitution which affects other parts of his own work or the work of other contractors.

9.06 Standard Specifications. Wherever standard specifications are referred to, they shall be the latest revised edition of the Standard Specification referred to and shall be considered to be a part of these specifications insofar as they apply. Standard specifications from the following may be referred to herein:

- American Concrete Institute (ACI)
- American Institute of Steel Construction (AISC)
- American Society for Testing Materials (ASTM)
- American Standards Association (ASA)
- American Water Works Association (AWWA)
- Federal Specifications (Fed. Specs.)
- Uniform Building Code (UBC)
- State of California, Division of Highways, (Caltrans.)

9.07 Inspection. All work and materials shall be subject to inspection by the District Engineer.

The District Engineer may assign such assistants as he may deem necessary to inspect the material to be furnished and the work to be done under this contract, and to see that the same strictly conform therewith.

The District Engineer shall be notified at the time and place of preparation, manufacture, or construction of all material for work or any part of the work which he may wish to inspect, and of the time and place of making the factory tests required under this contract. Such notification shall be given a sufficient length of time in advance of the beginning of the work on such material or part or of the beginning of such test to allow arrangements to be made for inspecting and testing or witnessing, as the case may be, if such inspection and testing or witnessing are deemed practicable by the District Engineer.

When the District Engineer considers such action to be proper and practicable, he shall at the written request of the Contractor cause materials for use upon the work to be inspected at the point of production or manufacture. The District Engineer may at any time, if he so desires, cause an inspection to be made.

Any work done in the absence of an inspector that may be complete or in progress shall be subject to examination, if required by the District Engineer, and the Contractor shall furnish all tools, labor, materials, and other facilities necessary to make such examination, even to the extent of uncovering or taking down portions of the finished work. The cost of making such examination and the removal of defective work and reconstruction shall be defrayed by the Contractor.

9.08 Compliance with State Safety Code. This is covered in Section 01060.

9.09 Storage of Materials. Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. They shall be so located and disposed that prompt and proper inspection thereof may be made.

9.10 Field Tests, Adjustments and Operation. As soon as the progress of the work permits it shall be placed in service.

The Contractor shall arrange for the presence, as necessary during the succeeding thirty-day (30) period, of representatives of manufacturers of all the various pieces of equipment and parts of the installation, or other qualified persons, who shall instruct the District operating personnel in the operation and care thereof. The Contractor shall superintend the operation of any equipment during the thirty-day (30) period and shall be responsible for the proper operation thereof; and he shall make no claim against the District for any damage to the equipment during such operation, or for the services of the above-mentioned representatives or other qualified persons. The Contractor shall make such changes, adjustments, or replacements as may be required to make the same comply with the specifications, or to replace any defective parts or material.

9.11 Warranty of Supplies, Equipment and Related Services. Notwithstanding the inspection and acceptance by the District of all supplies, equipment and related services furnished under the Contract, the Contractor warrants that:

- a. All supplies, equipment and related services under this Contract will be free from defects in material or workmanship and will comply with the specifications of the Contract.
- b. All aspects of the shipment of supplies and equipment related to the Contract will conform

to the specifications of the Contract. Failure by the Contractor to conform to the shipping requirements stated in this Contract shall constitute a breach."

9.12 Guarantees. In addition to guarantees called for elsewhere in this Contract, Contractor shall and does guarantee all work and materials for a minimum period of one year from the date of recordation of the Notice of Completion against defective material or faulty workmanship that may arise within that period.

SECTION 10. PROSECUTION OF THE WORK

10.01 Equipment and Methods. The work under this contract shall be prosecuted with all materials, tools, machinery, apparatus, and labor and by such methods as are necessary to complete execution of everything described, shown, or reasonably implied under this contract.

The Contractor shall give the District Engineer full information in advance as to his plans for carrying out any part of the work. If at any time before the beginning or during the progress of the work, any part of the Contractor's plant, or equipment or any of his methods of execution of the work, appear to the District Engineer to be unsafe, inefficient, or inadequate to insure the required quality or rate of progress of the work, he may order the Contractor to increase or improve his facilities or methods, and the Contractor shall comply promptly with such orders; but neither compliance with such orders or failure of the District Engineer to issue such orders shall relieve the Contractor from his obligation to secure the degree of safety, the quality of the work, and the rate of progress required of the Contractor. The Contractor alone shall be responsible for the safety, adequacy, and efficiency of his plant, equipment and methods.

10.02 Time of Completion. The Contractor shall promptly begin the work under this contract and all portions of the project made the subject of this contract shall be begun and so prosecuted that they shall be completed and ready for full use within the Contract performance time listed in the contract.

10.03 Avoidable Delays. Avoidable delays in the prosecution or completion of the work shall include all delays which might have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor.

Delays in the prosecution of parts of the work, which may in themselves be unavoidable but do not necessarily prevent or delay the prosecution of other parts of the work nor the completion of the whole work within the time herein specified, reasonable loss of time resulting from the necessity of submitting plans to the District Engineer for approval and from the making of surveys, measurements, and inspections, and by such interruptions as may occur in the prosecution of the work on account of the reasonable interference of other contractors employed by the District, which do not necessarily prevent the completion of the whole work within the time herein specified, will be considered by the District as avoidable delays within the meaning of this contract.

10.04 Unavoidable Delays. Unavoidable delays in the prosecution or completion of the work under this contract shall include all delays which may result, through causes beyond the control of the Contractor and which he could not have provided against by the exercise of care, prudence, foresight and diligence. Orders issued by the District changing the amount of work to be done, the quantity of material to be furnished, or the manner in which the work is to be prosecuted, and

unforeseen delays in the completion of the work of other contractors under contract with the District will be considered unavoidable delays, so far as they necessarily interfere with the Contractor's completion of the whole of the work. Delays due to adverse weather conditions may, at the discretion of the District, be considered unavoidable. However, the Contractor shall anticipate such delays and plan his work accordingly. The District shall provide an extension for weather delays as covered in the Special Provisions to the contract.

10.05 Notice of Delays. Whenever the Contractor foresees any delay in the prosecution of the work, and in any event immediately upon the occurrence of any delay which the Contractor regards as an unavoidable delay, he shall notify the District Engineer in writing of the probability of the occurrence of such delay and its cause, in order that the District Engineer may take immediate steps to prevent, if possible, the occurrence or continuance of the delay, or, if this cannot be done, may determine whether the delay is to be considered avoidable or unavoidable, how long it continues, and to what extent the prosecution and completion of the work are to be delayed thereby.

After the completion of any part of the whole of the work, the District Engineer, in estimating the amount due the Contractor, shall assume that any and all delays which have occurred in its prosecution and completion have been avoidable delays, except such delays as shall have been called to the attention of the District Engineer in writing at the time of their occurrence and found by him to have been unavoidable. The Contractor shall make no claim that any delay not called to the attention of the District Engineer at the time of its occurrence has been an unavoidable delay.

10.06 Extension of Time. Should any delays occur which the District Engineer may consider unavoidable, as herein defined, the Contractor shall, pursuant to his application, be allowed an extension of time, beyond the time herein set forth, proportional to said delay or delays in which to complete this contract; and liquidated damages for delay shall not be charged against the Contractor by the District during an extension of time granted because of unavoidable delay or delays.

10.07 Unfavorable Weather and Other Conditions. During unfavorable weather and other conditions, the Contractor shall pursue only such portions of the work as shall not be damaged thereby. No portions of the work on which satisfactory quality or efficiency will be affected by any unfavorable conditions shall be constructed while these conditions remain, unless by special means or precautions approved by the District Engineer, the Contractor shall be able to overcome them.

10.08 Sunday, Holiday and Night Work. No work shall be done between the hours of 6 p.m. and 7 a.m., nor on Sundays or legal holidays except such work as is necessary for the proper care and protection of work already performed, or except in case of an emergency, and in any case only with the permission of the District Engineer.

It is understood, however, that night work may be established as a regular procedure by the Contractor if he first obtains the written permission of the District Engineer and that such permission may be revoked at any time by the District Engineer if the Contractor fails to maintain at night adequate force and equipment for reasonable prosecution and to justify inspection of the work.

SECTION 11. PAYMENT

11.01 Progress Payments. Payments shall be made within 30 days upon presentation of undisputed and properly submitted estimates prepared jointly by the Contractor and District's representative and received and properly certified and approved by the District Engineer. Payments shall be based upon the percentage of the work completed under each payment item during the preceding month, or upon actual quantities performed.

If the District fails to make a timely payment after receipt of an undisputed, properly submitted payment request or estimate, interest shall be paid the Contractor at the legal rate until paid.

Payment requests or estimates determined not to be properly submitted or disputed shall be returned, with written reasons therefor, to the Contractor as soon as practicable, but not later than seven (7) days after receipt.

The number of days available to the District to make a payment without incurring interest shall be reduced by the number of days, if any, exceeding the seven-day return requirement of disputed or improperly submitted payment requests or estimates.

These provisions shall not apply to that portion of the final payment designated by the Contract as retention earnings.

11.02 Retentions. The District shall retain five percent (5%) of the amount of each progress estimate, and the accumulation of said amounts so retained from the progressive payments to the extent unencumbered shall be paid to the Contractor in no less than thirty-five (35) days after the completion of the work and acceptance by the District Engineer and the District.

In lieu of retention of five percent (5%) of the amount of each progress payment, the Contractor may elect to deposit certain securities (certificate of deposit or other interest bearing securities) equivalent to the amount to be withheld. The Contractor shall notify the District in writing upon the presentation of estimates of the Contractor's intention to enter into an escrow agreement.

The Contractor also has the option, at his cost, to request the District to make payment of retentions earned, directly into an escrow agent, pursuant to the terms of Section 22300, Public Contract Code.

11.03 Acceptance. The Contractor shall notify the District Engineer in writing of the completion of the work whereupon the District Engineer shall promptly, by personal inspection, satisfy himself as to the actual completion of the work in accordance with the terms of the contract. After receiving a recommendation for acceptance of the work from the District Engineer in writing, the District shall either accept or reject the work, stating the conditions for acceptance if the work is rejected. When the District accepts the work, it shall file a "Notice of Completion" with the County Recorder in the County of Monterey and shall promptly notify the Contractor in writing of the recordation. The Contractor warrants and guarantees that title to all work, materials and equipment accepted by the District shall pass to the District free and clear of all liens, claims, security interests or encumbrances, and that no work, materials or equipment accepted will have been acquired by the Contractor, subcontractor or sub-subcontractor, or by any other person performing the work at the site or furnishing materials or equipment for the project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or

otherwise imposed by the Contractor or such other person.

11.04 Final Quantities and Payment. The District Engineer shall, as soon as practicable after the final acceptance of the work done under this contract, make a final determination of the amount of work done thereunder and the value thereof.

Such final determination shall be signed by the District Engineer, and after approval, the District shall pay or cause to be paid to the Contractor, in the manner provided by law, the entire sum so found to be due hereunder, after deducting therefrom all previous payments and such other lawful amounts as the terms of this contract prescribe.

In no case shall final payment be made in less than thirty-five (35) days after the completion of the work and its acceptance by the District.

11.05 Extra Work and Work Omitted. Whenever corrections, alterations, or modification of the work under this contract are ordered by the District Engineer and approved by the District and increase the amount of work to be done, such added work shall be known as extra work, and when such corrections, alterations, or modifications decrease the amount of work to be done, such subtracted work shall be known as work omitted.

When the Contractor considers that any changes ordered involve extra work, he shall immediately notify the District Engineer in writing and after receipt of the District Engineer's written authorization to proceed, and subsequently keep him informed as to when and where alleged extra work is to be performed and shall make claim for compensation therefor each month not later than the first day of the month following that in which the work claimed to be extra work was performed, and he shall submit a daily complete statement of materials used and expenses incurred on account of extra work performed, showing allocation of all materials and expenses.

All such claims shall state the date of the District Engineer's written order authorizing the work on account of which claim is made. Unless such notification is made in writing and unless complete statements of materials used and expenses incurred on account of such alleged extra work are furnished as above required, the Contractor shall not be entitled to payment on account of such alleged extra work and any future claims for compensation for such alleged extra work shall be invalidated.

When changes decrease the amount of work to be done, they shall not constitute a claim for damages on account of anticipated profits on the work that may be omitted.

11.06 Compensation for Extra Work or Work Omitted. Whenever corrections, additions, or modifications in the work under this contract change the amount of work to be done or the amount of compensation due the Contractor and such changes have been ordered in writing by the District Engineer, then a price may be agreed upon, or failing such an agreement in price, an amount equal to the sum of the following five (5) items shall be used as the full and proper compensation therefor, and such amount shall be added to or subtracted from, as the case may be, the price fixed by the terms of this contract for the part of the work affected:

- a. The necessary reasonable cost to the Contractor of the material required for the work as furnished by the Contractor and delivered by him at the site of the work.

- b. The necessary cost to the Contractor of the labor (including foremen devoting their exclusive attention to the work in question), required to incorporate all of said material into the work and to finish the work in accordance with directions.
- c. Appropriate overhead and profit.
- d. The cost of workers= compensation insurance premiums on the labor included in item (b).

In order that a proper estimate may be made by the District Engineer of the net cost of labor and materials entering into extra work, in accordance with the procedure just stated, the Contractor shall furnish daily an itemized statement of material and labor supplied, together with the cost of such material and the wages paid, and shall furnish vouchers for quantities and prices of such labor, material, or work. In case the Contractor fails to comply with the above provisions, such failure shall be deemed a voluntary waiver of right, and Contractor thereafter shall have no claim for compensation against the District.

This method of determining the price of work shall not apply to the performance of any work which is required or reasonably implied to be performed or furnished under this contract.

11.07 Compensation to District for Extension of Time. In case the work called for under this contract is not completed within the time limit stipulated herein, the District shall have the right, as provided hereinabove, to extend the time of completion thereof. If the time limit be so extended, the District shall have the right to charge to the Contractor and to deduct from the final payment for the work the actual cost to the District of Engineering, inspection, superintendence, and other overhead expenses which are directly chargeable to the extension of time. The cost of final surveys and preparation of the final estimate shall not be included in such charges.

11.08 Liquidated Damages for Delay. It is agreed by the parties to the contract that time is of the essence and that in case all the work is not completed before or upon the expiration of the time limit as set forth, damage will be sustained by the District, and that it is and shall be impracticable to determine the actual amount of damage by reason of such delay, and it is therefore agreed that the Contractor will pay to the District the sum of two hundred fifty dollars (\$250) per day for each and every calendar day's delay beyond the time prescribed. It is agreed that such damages shall be in addition to the compensation required pursuant to paragraph 11.07 above.

In addition, the District shall have the right to charge to the Contractor and to deduct from the final payment for the work the actual cost to the District of Engineering, inspection, superintendence, and other overhead expenses, which are directly chargeable to the contract and which accrue during the period of such delay, except that the cost of final surveys and preparation of the final estimate shall not be included in such charges.

No liquidated damages shall be paid to the District for unavoidable delays pursuant to sections 6.13 and 10.06 of these General Provisions.

11.09 Progress Schedule and Report. Before beginning work, the Contractor shall file with the District Engineer a proposed schedule of progress indicating the various subdivisions of the work and the time required to complete them. On the last day of each calendar month, a copy of the

schedule shall be submitted with note thereon indicating the percentage completion of each division of work on that date. The form of the schedule shall be approved by the District Engineer. No payments shall be made to the Contractor until such schedule has been submitted and approved by the District Engineer.

11.10 Cost Breakdown. Within fifteen (15) days after execution of the contract, the Contractor shall submit in an acceptable form a schedule showing the subdivision of his contract into its various parts, with quantities and prices, as a basis for checking and computing monthly estimates. No payments shall be made to the Contractor until such schedule has been submitted and approved by the District Engineer.

11.11 Compliance with terms of State or Federal Grant. If this Contract has been or will be funded with monies received by the District pursuant to a contract with the state or federal government in which the District is the grantee, Contractor will comply with all the provisions of said contract, to the extent applicable to Contractor as a subgrantee under said contract, and said provisions shall be deemed a part of this Agreement, as though fully set forth herein. Upon request, District will deliver a copy of said contract to Contractor, at no cost to Contractor.

SECTION 12. EMPLOYMENT OF APPRENTICES

12.01 Apprentices. Attention is directed to the provisions in Sections 1777.5 (Chapter 1411, Statutes of 1968) and 1777.6 of the Labor Code concerning the employment of apprentices by the Contractor or subcontractor under him.

Section 1777.5, as amended, requires the Contractor or subcontractor employing tradesmen in any apprenticeable occupation to apply to the joint apprenticeship committee nearest the site of the public works project and which administers the apprenticeship program in that trade for a certificate of approval. The certificate shall also fix the ratio of apprentices to journeymen that shall be used in the performance of the contract. The ratio of apprentices to journeymen in such cases shall not be less than one to five except:

- a. When employment in the area of coverage by the joint apprenticeship committee has exceeded an average of 15 percent (15%) in the ninety (90) days prior to the request for certificate, or,
- b. When the number of apprentices in training in the area exceeds a ratio of one-to-five, or
- c. When the trade can show that it is replacing at least 1/30 of its membership through apprenticeship training on an annual basis statewide or locally, or
- d. When assignment of an apprentice would create a condition which would jeopardize his/her life or the life, safety, or property of fellow employees or the public at large or if the specific assigned task is of such a nature that training cannot be provided by a journeyman.

Where the Contractor properly shows that apprentices are employed in the state on all contracts on an annual average of not less than one hour of apprentice labor to five hours of journeyman labor, a certificate may be granted by the Division of Apprenticeship Standards exempting the Contractor from the one to five hourly ratio otherwise required by Section 1777.5, Labor Code.

The Contractor is required to make contributions to funds established for the administration of apprenticeship programs if he employs registered apprentices or journeymen in any apprenticeable trade on such contracts and if other contractors on the public works site are making such contributions.

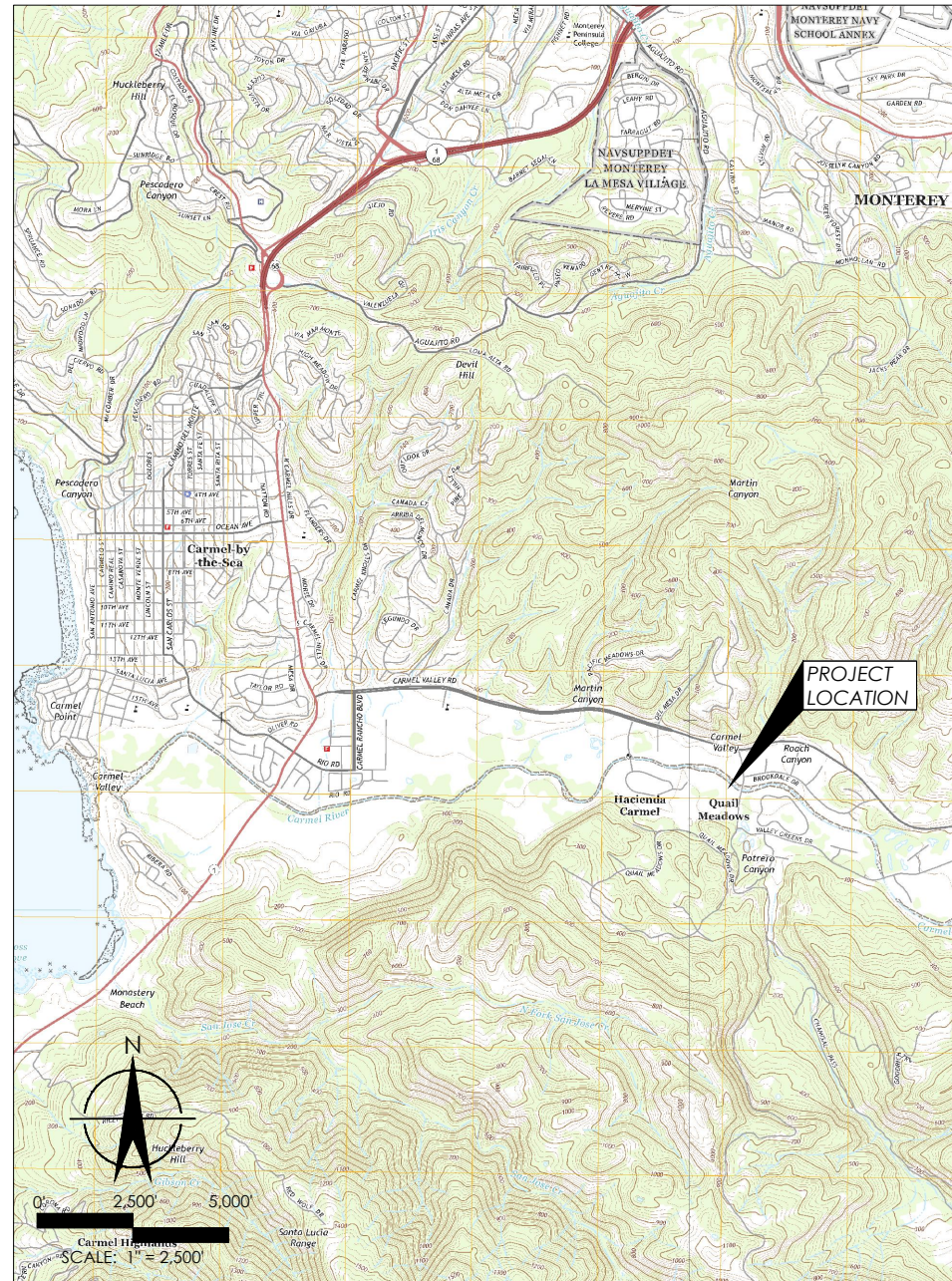
The Contractor shall be responsible to comply with the requirements of Sections 1777.5 and 1777.6 in the employment of apprentices.

Information relative to apprenticeship standards, wage schedule, and other requirements may be obtained from the Division of Apprenticeship Standards at <https://www.dir.ca.gov/das/das.html> .

U:\LARRY\CARMEL RIVER\SLEEPYHOLLOW\FACILITY UPGRADE\CONSTRUCTION\BID\SLEEPY HOLLOW-CALL FOR BIDS-MAY 10, 2018.DOCX

CARMEL RIVER BANK STABILIZATION AT RANCHO SAN CARLOS ROAD MONTEREY COUNTY, CALIFORNIA

LOCATION MAP



PREPARED FOR:

**MONTEREY PENINSULA WATER
MANAGEMENT DISTRICT**
LARRY HAMPSON, P.E.
THOMAS CHRISTENSEN
5 HARRIS COURT, BUILDING G
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TEL. (831) 658-5620

CIVIL ENGINEER/ GEOMORPHOLOGIST:

BALANCE HYDROLOGICS
PETER KULCHAWIK, P.E.
JONATHAN OWENS
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BERKELEY, CALIFORNIA 94710
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SHEET INDEX:

SHEET 1.0: COVER SHEET
SHEET 2.0: GENERAL NOTES
SHEET 3.0: SITE PREPARATION PLAN - BASE BID
SHEET 3.0 ALT: SITE PREPARATION PLAN -
BID ALTERNATE
SHEET 3.1: BANK STABILIZATION PLAN
SHEET 4.0: LOG CRIBWALL DETAIL
SHEET 4.1: LOG CRIBWALL STAKING AND
ASSEMBLY PLAN
SHEET 4.2: RIGHT BANK STABILIZATION DETAIL
SHEET 4.1: PLANTING DETAILS
SHEET 4.4: BANK STABILIZATION NOTES

SCHEDULE OF MATERIALS:

ITEM	UNIT	QTY
Environmental Requirements		
Construction Limit Fencing	LF	800
Temporary Wattles	LF	300
Temporary Construction Entrance	EA	1
Erosion Control/Environmental Compliance	LS	1
Layout and Staking		
	DA Y S	2
Mobilization and Demobilization		
	LS	1
Temporary Diversion and Dewatering		
Base Bid	LS	1
Bid Alternate	LS	1
Log Cribwall		
Excavation ¹	CY	225
Fill ²	CY	450
15' x 9" Logs	EA	36
15' x 12" Logs	EA	36
15' x 15" Logs	EA	41
15' x 15" Logs with Rootwads	EA	5
1.5-ton Boulders	EA	350
1-ton Boulders	EA	232
1/2-ton Rock	CY	175
Bolted Connections	EA	252
Channel Bed Fill ¹	CY	175
Willow Branches	EA	2,000
Construct Cribwall	LS	1

ITEM	UNIT	QTY
Right Bank Stabilization		
Excavation	CY	55
Fill	CY	55
Bank Logs	EA	3
Footer Logs	EA	2
1.5-ton Boulders	EA	72
Duckbill anchor	EA	3
Construct Right Bank Stabilization	LS	1
Willow Posts		
	EA	26
Willow Poles		
	EA	375
Seeding		
	SF	5,500
Erosion Control Blanket		
	SF	4,700

1. THE EXCAVATION FOR THE LOG CRIBWALL IS ANTICIPATED TO PRODUCE ENOUGH SUITABLE MATERIAL FOR REUSE AS CHANNEL BED FILL.
2. FILL IS COUNTED AS THE NATIVE SOIL THAT WILL BE REPLACED ABOVE THE LOG CRIBWALL.

MATERIALS QUANTITIES ARE APPROXIMATE. ACTUAL QUANTITIES MAY VARY DEPENDING ON FIELD CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL MATERIALS TO CONSTRUCT THE PROJECT AS SHOWN IN THESE DRAWINGS.



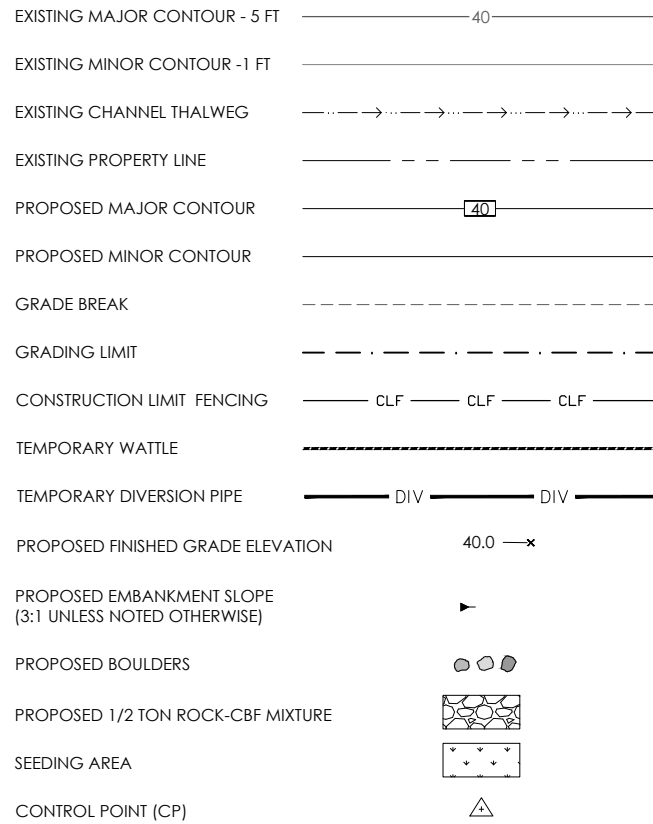
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
P. KULCHAWIK	20170706	PK	DRAFT DESIGN
P. KULCHAWIK	20170718	PK	FINAL DESIGN
E. BALLMAN	20180302	PK	FINAL DESIGN (REVISED)
P. KULCHAWIK	20180302	PK	FINAL DESIGN (REVISED)



COVER SHEET
CARMEL RIVER BANK STABILIZATION
AT RANCHO SAN CARLOS ROAD
MONTEREY COUNTY, CALIFORNIA
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

PROJECT NUMBER 217107
SCALE -
SHEET 1.0

LEGEND:



ABBREVIATIONS:

'	FEET
"	INCH
#	NUMBER
APPROX	APPROXIMATE
CBF	CHANNEL BED FILL
CCR	CALIFORNIA CODE OF REGULATIONS
CLF	CONSTRUCTION LIMIT FENCING
DBH	DIAMETER AT BREAST HEIGHT (4' FROM GROUND)
DIA, Ø	DIAMETER
E	EASTING
ECB	EROSION CONTROL BLANKET
EG	EXISTING GRADE
ELEV	ELEVATION
EX	EXISTING
FG	FINISH GRADE
FT	FEET
GALV	GALVANIZED
H	HORIZONTAL
IN	INCH
LB	POUND
LF	LINEAR FEET
LT	LEFT
MAX	MAXIMUM
MIN	MINIMUM
MPWMD	MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
N	NORTHING
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
OC	ON CENTER
PROP	PROPOSED
Q10	10-YEAR STREAMFLOW
Q100	100-YEAR STREAMFLOW
RCP	REINFORCED CONCRETE PIPE
STA	STATION
TYP	TYPICAL
V	VERTICAL
WSE	WATER SURFACE ELEVATION
YR	YEAR
Z	ELEVATION

GENERAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE PROJECT SITE TO VERIFY SITE CONDITIONS AND FOR COMPLETELY UNDERSTANDING THE REQUIRED SCOPE OF WORK SHOWN ON THESE DRAWINGS AND CONTAINED IN THE PROJECT SPECIFICATIONS.
- ALL PARTS OF THIS PROJECT - INCLUDING SOIL PREPARATION, EARTHWORK, AND PLANTING - ARE SUBJECT TO FIELD DESIGN BY THE ENGINEER'S REPRESENTATIVE. AT ANY TIME, THE CONTRACTOR'S OPERATIONS AND CONSTRUCTION MAY BE SUBJECT TO OBSERVATION BY THE ENGINEER'S REPRESENTATIVE. WHEN REQUESTING THE PRESENCE OF THE ENGINEER'S REPRESENTATIVE AT THE PROJECT SITE FOR DESIGN CLARIFICATION, STAGE ACCEPTANCE, OR OTHER APPROVALS, THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCE NOTICE DIRECTLY TO THE ENGINEER'S REPRESENTATIVE.
- UTILITY LOCATIONS DEPICTED HEREIN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES BEFORE THE START OF ANY CONSTRUCTION OPERATIONS, INCLUDING AND NOT LIMITED TO EXCAVATION OR TRENCHING. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) AT 811/1-800-227-2600. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS ADVANCE NOTICE FOR LOCATING UTILITIES.
- THE CONTRACTOR SHALL INSTALL CONSTRUCTION LIMIT FENCING, AND STAKE AND FLAG THE LIMITS OF GRADING AT LOCATIONS SHOWN ON THE DRAWINGS BEFORE THE START OF ANY OTHER SITE WORK INCLUDING DEMOLITION, CLEARING AND GRUBBING, AND EARTHWORK. REFER TO THE ENVIRONMENTAL REQUIREMENTS NOTES (THIS SHEET) FOR ADDITIONAL REQUIREMENTS AND INFORMATION.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER'S REPRESENTATIVE IMMEDIATELY UPON FINDING ANY FIELD CONDITIONS THAT WOULD CONFLICT WITH THE INFORMATION INDICATED ON THESE DRAWINGS OR THE PROJECT SPECIFICATIONS. ALL FIELD ADJUSTMENTS MUST BE APPROVED BY THE ENGINEER'S REPRESENTATIVE BEFORE CONSTRUCTION OF SAID ADJUSTMENTS; FAILURE TO DO SO SHALL RESULT IN THE CONTRACTOR ASSUMING FULL RESPONSIBILITY FOR ANY REQUIRED REVISIONS OR FIELD MODIFICATIONS, AS DIRECTED BY THE ENGINEER'S REPRESENTATIVE, AT NO ADDITIONAL COST.
- CONFORM TO EXISTING GRADES AND CONDITIONS WHENEVER POSSIBLE. ANY ADJACENT OR OFFSET AREAS DISTURBED BY THE CONTRACTOR'S OPERATION MUST BE RESTORED BY THE CONTRACTOR TO THE PRE-DISTURBANCE CONDITIONS TO THE SATISFACTION OF THE ENGINEER'S REPRESENTATIVE.
- ALL LUBRICATION, REFUELING, OR MAINTENANCE OF CONSTRUCTION VEHICLES SHALL BE CONDUCTED WITHIN APPROVED CONSTRUCTION STAGING AREAS.
- STAGING AREAS MUST BE CONTAINED BY MEANS DESCRIBED IN THE ENVIRONMENTAL REQUIREMENTS NOTES (THIS SHEET) TO CONFINE THE AREA AND PREVENT CONTAMINANTS FROM ENTERING NEARBY CHANNELS AND WATER BODIES.
- ELEVATIONS ARE RELATIVE TO THE NAVD 88 DATUM.
- NORTHING AND EASTING COORDINATES ARE IN CALIFORNIA STATE PLANE NAD 83 ZONE IV.
- PRESERVE TREES AND VEGETATION OUTSIDE OF THE LIMITS OF WORK. ANY TREES OR VEGETATION DISTURBED OUTSIDE OF THE LIMITS OF WORK SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY TREES GREATER THAN 6" THAT ARE OUTSIDE OF THE GRADING LIMITS AND INTERFERE WITH THE WORK MAY ONLY BE REMOVED WITH APPROVAL FROM THE ENGINEER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN TO MITIGATE FOR ANY ANTICIPATED IMPACTS TO TRAFFIC ON RANCHO SAN CARLOS ROAD, AND TO PROVIDE ALL SIGNAGE AND FLAGGING CREWS FOR VEHICLE AND PEDESTRIAN SAFETY.

EARTHWORK NOTES:

- EARTHWORK OPERATIONS SHALL BE EXECUTED ACCORDING TO THESE PLANS AND THE RELEVANT PROJECT PERMITS.
- THE CONTRACTOR SHALL CONSTRUCT FINISHED SURFACES TO $\pm 0.3'$ OF THE ELEVATIONS INDICATED ON THE PLANS.
- EXCAVATING, FILLING, AND GRADING WORK SHALL NOT BE PERFORMED DURING WEATHER CONDITIONS WHICH MIGHT DAMAGE OR BE DETRIMENTAL TO THE CONDITION OF EXISTING GROUND, IN-PROGRESS WORK, OR COMPLETED WORK. WHEN THE WORK IS INTERRUPTED BY RAIN; EXCAVATING, FILLING, AND GRADING WORK SHALL NOT RESUME UNTIL THE SITE AND SOIL CONDITION (MOISTURE CONTENT) ARE SUITABLE FOR COMPACTION.
- SOIL MATERIAL THAT IS TOO WET FOR COMPACTION SHALL BE LEFT TO DRAIN, THEN TO BE AERATED AND DRIED BY DISKING AND HARROWING OR OTHER APPROVED METHODS UNTIL THE MOISTURE CONTENT OF THE MATERIAL IS UNIFORM AND WITHIN THE SPECIFIED LIMITS.
- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS FOR THE EROSION CONTROL MEASURES SHOWN ON THESE PLANS.
- MATERIAL USED FOR FILL SHALL BE AN INERT, INORGANIC SOIL, FREE FROM DELETERIOUS SUBSTANCES, AND OF SUCH QUALITY THAT IT WILL COMPACT THOROUGHLY WITHOUT THE PRESENCE OF VOIDS WHEN ROLLED. INORGANIC SOIL IS DEFINED AS SOIL CONTAINING LESS THAN TWO PERCENT BY WEIGHT OF ORGANIC MATERIAL WHEN TESTED IN ACCORDANCE WITH ASTM D2974. EXCAVATED ON-SITE MATERIAL WILL BE CONSIDERED SUITABLE FOR FILL, IF IT IS FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES AND CONFORMS TO THE REQUIREMENTS SPECIFIED HEREIN.
- EXCAVATED MATERIAL THAT IS SUITABLE FOR FILL SHALL BE CONDITIONED FOR REUSE AND PROPERLY STOCKPILED FOR LATER FILLING OPERATIONS. CONDITIONING SHALL CONSIST OF SPREADING MATERIAL IN LAYERS NOT TO EXCEED 8 INCHES THICK AND RAKING FREE OF DEBRIS AND RUBBLE. CONDITIONING MAY TAKE PLACE WITHIN THE GRADING LIMITS AND STAGING AREAS. EXCAVATED MATERIALS SHALL BE DEEMED SUITABLE IF MATERIALS CONFORM TO THE NOTES HEREIN AND ARE ACCEPTED BY THE ENGINEER'S REPRESENTATIVE. DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF.
- MATERIAL EXCAVATED FROM THE PROJECT SITE SHALL BE DEEMED UNSUITABLE FOR REUSE IF IT IS: OF SUCH NATURE AS TO BE INCAPABLE OF BEING COMPACTED TO SPECIFIED DENSITY USING ORDINARY METHODS, TOO WET TO BE PROPERLY COMPACTED AND CIRCUMSTANCES PREVENT SUITABLE DRYING PRIOR TO INCORPORATION INTO THE WORK, FOUND TO CONTAIN DEBRIS WASTE, VEGETATION OR OTHER DELETERIOUS MATTER, OR OTHERWISE DEEMED UNSUITABLE BY THE ENGINEER'S REPRESENTATIVE.

- MAINTAIN SLOPES AND EMBANKMENTS UNTIL SUBSTANTIAL COMPLETION AND ACCEPTANCE OF THE WORK. PROMPTLY REPAIR SLIDES, SLOPES, WASHOUTS, SETTLEMENTS, AND SUBSIDENCES THAT OCCUR FOR ANY REASON, AND REFINISH THE SLOPE OR EMBANKMENT TO THE INDICATED LINES AND GRADES. COMPLY WITH APPLICABLE REQUIREMENTS OF CCR, TITLE 8, TRENCH CONSTRUCTION SAFETY ORDERS.
- THE CONTRACTOR SHALL TAKE ALL MEANS NECESSARY TO PREVENT THE INTRODUCTION AND SPREAD OF NON-NATIVE PLANTS.
- EXCAVATE AND SEPARATELY STOCKPILE SUITABLE MATERIAL FOR FILL. STOCKPILE COARSE MATERIAL EXCAVATED FROM THE RIVERBED SEPARATELY (FOR POSSIBLE REUSE AS CBF) FROM FINER MATERIAL EXCAVATED FROM THE UPPER BANK. ESTABLISH STOCKPILES ON SITE ONLY IN LOCATIONS WHERE THEY DO NOT INTERFERE WITH THE PROGRESS OF WORK.
- FILL MATERIAL SHALL BE PLACED IN LIFTS NO GREATER THAN 8 INCHES EACH. COMPACT EACH LAYER OF FILL MATERIAL TO NOT LESS THAN 85 PERCENT RELATIVE COMPACTION, AS DETERMINED BY ASTM D1557. THE CONTRACTOR IS RESPONSIBLE FOR ACHIEVEMENT OF PROPER COMPACTION DURING FILL AND BACKFILL PLACEMENT.
- IMPORTED FILL MATERIAL SHALL BE CERTIFIED WEED-FREE, GRANULAR MATERIAL NEARLY FREE OF ORGANIC DEBRIS WITH A LIQUID LIMIT LESS THAN 40, A PLASTICITY INDEX LESS THAN 15, 100 PERCENT PASSING THE 8-INCH SIEVE, AND LESS THAN 30 PERCENT PASSING THE NO. 200 SIEVE.
- ENSURE THAT THE TOP 2" OF SOIL IN PLACED FILL IS FREE OF CONCRETE, RUBBLE, DEBRIS, BRANCHES, ROOTS, STUMPS, WIRE, OR OTHER DELETERIOUS MATTER 1" IN DIAMETER AND LARGER. DISPOSE OF DEBRIS OFFSITE ACCORDING TO STATE AND LOCAL REGULATIONS AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL MEASURES DURING EARTHWORK OPERATIONS THAT ARE IN ACCORDANCE WITH LOCAL AND STATE REQUIREMENTS, ALONG WITH PERMIT CONDITIONS.
- THE ENGINEER'S REPRESENTATIVE SHALL APPROVE FINISH GRADE ELEVATIONS.

ENVIRONMENTAL REQUIREMENTS NOTES:

- NO DEBRIS, SOIL, SILT, SAND, BARK, SLASH, SAWDUST, ASPHALT, RUBBISH, PAINT, OIL, CEMENT OR CONCRETE OR WASHINGS THEREOF, OIL OR PETROLEUM PRODUCTS, OR OTHER ORGANIC OR EARTHEN MATERIALS FROM CONSTRUCTION ACTIVITIES SHALL BE ALLOWED TO ENTER INTO OR BE PLACED WHERE IT MAY BE WASHED BY RAINFALL OR RUNOFF OUTSIDE THE CONSTRUCTION LIMITS. WHEN OPERATIONS ARE COMPLETED, EXCESS MATERIALS OR DEBRIS SHALL BE REMOVED FROM THE WORK AREA BY LEGAL MEANS AND AT THE COST OF THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT CREATE A NUISANCE OR POLLUTION AS DEFINED IN THE CALIFORNIA WATER CODE. THE CONTRACTOR SHALL NOT CAUSE A VIOLATION OF ANY APPLICABLE WATER QUALITY STANDARDS FOR RECEIVING WATERS ADOPTED BY THE REGIONAL BOARD OR THE STATE WATER RESOURCES CONTROL BOARD, AS REQUIRED BY THE CLEAN WATER ACT.
- PROVIDE ADEQUATE CONTROLS FOR DUST, WATER POLLUTION, AIR POLLUTION, AND NOISE POLLUTION PER THE GENERAL CONTRACT PROVISIONS.
- THE CONTRACTOR SHALL CLEAN UP ALL SPILLS AND IMMEDIATELY NOTIFY THE ENGINEER'S REPRESENTATIVE IN THE EVENT OF A SPILL.
- STATIONARY EQUIPMENT SUCH AS MOTORS, PUMPS, AND GENERATORS, SHALL BE EQUIPPED WITH DRIP PANS.
- THE CONSTRUCTION SITE SHALL BE MAINTAINED TO ENSURE THAT DRAINAGE FROM THE SITE WILL MINIMIZE EROSION OF STOCKPILED OR STORED MATERIALS AND THE ADJACENT NATIVE SOIL MATERIAL. THE CONTRACTOR SHALL REPLACE MATERIALS LOST DUE TO EROSION AT NO ADDITIONAL COST AND BE RESPONSIBLE FOR REMEDIATING ANY IMPACTS AT OR OUTSIDE THE PROJECT SITE FROM ERODED MATERIALS.
- ALL CONSTRUCTION EQUIPMENT SHALL BE PROPERLY SERVICED AND MAINTAINED IN EXCELLENT OPERATING CONDITION TO REDUCE EMISSIONS. NO LEAKS OF ANY SIZE ARE PERMITTED AT ANY TIME. THE CONTRACTOR SHALL SECURE REPLACEMENTS FOR ANY EQUIPMENT THAT IS INOPERABLE FOR MORE THAN TWO (2) DAYS. CONTRACTOR SHALL MAKE COPIES OF EQUIPMENT SERVICE LOGS AVAILABLE UPON REQUEST.
- EXCESS MATERIAL SHALL BE DISPOSED OF CONSISTENT WITH ALL APPLICABLE LEGAL REQUIREMENTS. FOR MATERIALS DISPOSED OFFSITE, THE CONTRACTOR SHALL OBTAIN DISPOSAL FACILITY PERMITS. RECYCLED MATERIALS SHALL BE RECYCLED OFFSITE AS PER STATE AND LOCAL REGULATIONS. ANY CHEMICAL OR HAZARDOUS MATERIAL USED IN THE PERFORMANCE OF THE WORK SHALL BE HANDLED, STORED, APPLIED, AND DISPOSED OF CONSISTENT WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
- CONSTRUCTION LIMIT FENCING MATERIAL SHALL BE BRIGHTLY COLORED (CLEARLY VISIBLE), AT LEAST 48 INCHES HIGH, AND SECURELY FASTENED TO METAL POSTS. CONSTRUCTION LIMIT FENCING MUST BE CAPABLE OF PREVENTING THE PUBLIC FROM ENTERING THE WORK AREA. CONSTRUCTION LIMIT FENCING SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED BY THE CONTRACTOR UPON FINAL APPROVAL FROM MPWMD.
- TEMPORARY WATTLES SHALL BE CERTIFIED AS WEED-FREE AND SHALL BE CAPABLE OF CONTROLLING SEDIMENT AND RUNOFF AS DESCRIBED HEREIN.
- ALL PORTIONS OF THE WORK AREA COMPACTED BY CONSTRUCTION ACTIVITIES, INCLUDING CONSTRUCTION ACCESS ROUTES, SHALL BE DECOMMISSIONED BY LOOSENING COMPACTED SOILS TO AN AVERAGE DEPTH OF TWELVE (12) INCHES WITHOUT INVERTING THE SOIL PROFILE. THIS METHOD OF SOILS LOOSENING CAN BE ACCOMPLISHED BY INSERTING THE BUCKET OF AN EXCAVATOR OR BACKHOE (WITH OR WITHOUT BUCKET MOUNTED RIPPING TINES) VERTICALLY INTO THE SOILS PROFILE AND REMOVING THE BUCKET WITHOUT CURLING THE BUCKET. THE INTENTION OF THIS LOOSENING METHOD IS TO MINIMIZE DISTURBANCE TO EXISTING VEGETATION AND TO MAINTAIN THE MAJORITY OF EXISTING TOPSOIL AND PLANT DETRITUS ON OR NEAR THE SOIL SURFACE WHEN LOOSENING IS COMPLETE. THE CONTRACTOR SHALL REVEGETATE DECOMMISSIONED AREAS PER THE DIRECTION OF MPWMD.

PREPARED FOR:
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Blue Balance Hydrologics, Inc.
 805 Broadway, Suite 107
 Berkeley, CA 94702-2222
 tel (916) 704-1000 fax (916) 704-1001
 www.bluebalance.com

DESIGNED BY	DRAWN BY	CHECKED BY	IN CHARGE	DATE	BY	DATE	SUBMITTALS / REVISIONS
P KULCHAWIK	P KULCHAWIK	E BALLMAN	P KULCHAWIK	20180302	PK	20170706	DRAFT DESIGN
					PK	20170718	FINAL DESIGN
					PK	20180302	FINAL DESIGN (REVISED)



GENERAL NOTES

**CARMEL RIVER BANK STABILIZATION
AT RANCHO SAN CARLOS ROAD**
 MONTEREY COUNTY, CALIFORNIA
 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

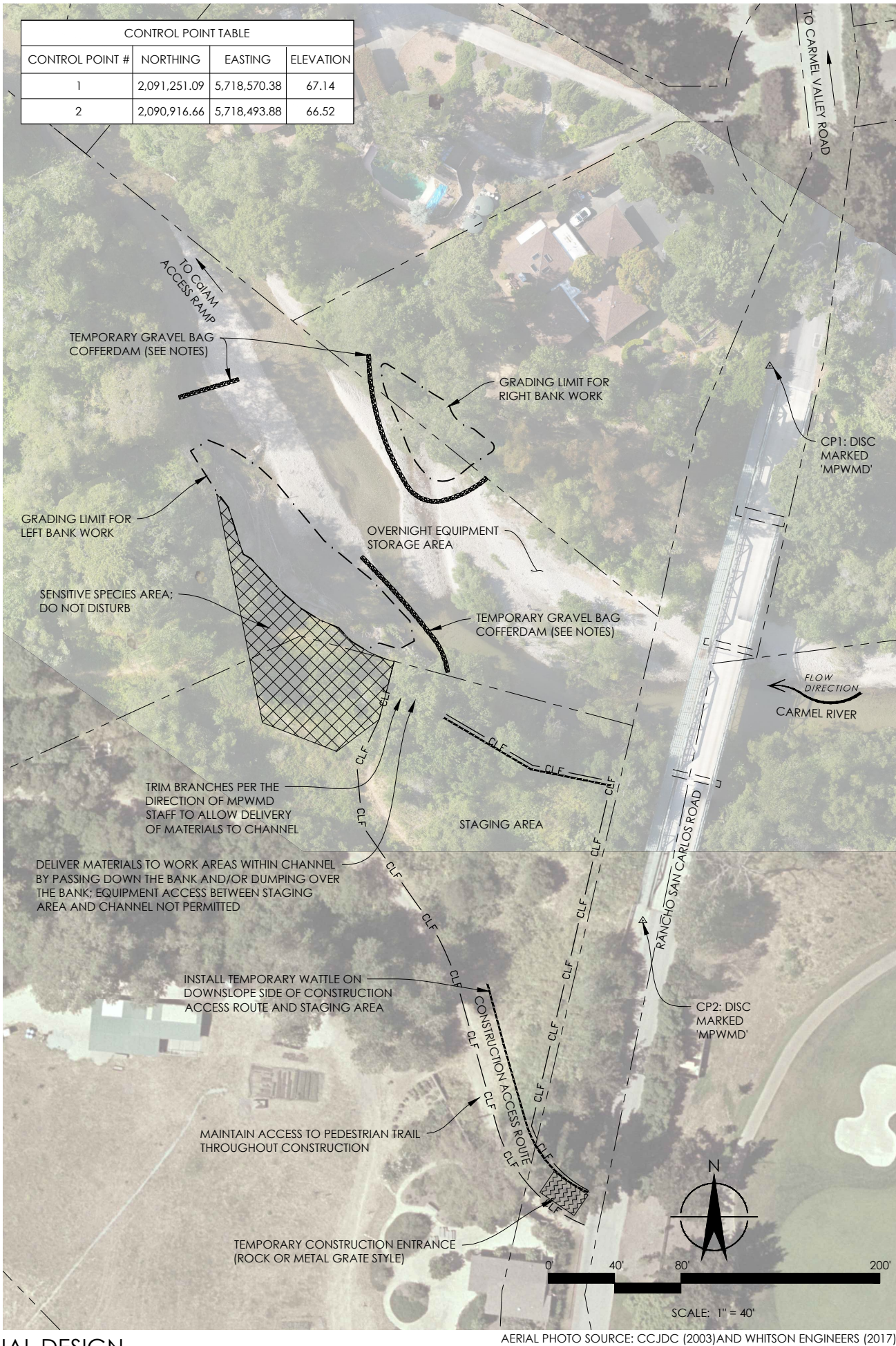
PROJECT NUMBER: 217107
 SCALE: -
 SHEET: **2.0**

Y:_PROJECTS\217107 CARMEL RIVER - SAN CARLOS STREAMBANK RESTORATION\217107 CAD\217107 SHEETS\217107-00-GEN NOTES.DWG

FINAL DESIGN

Y:\PROJECTS\217107_CARMEL RIVER - SAN CARLOS STREAMBANK RESTORATION\217107_CAD\217107_SHEETS\217107-000-SITE PREP.DWG

CONTROL POINT TABLE			
CONTROL POINT #	NORTHING	EASTING	ELEVATION
1	2,091,251.09	5,718,570.38	67.14
2	2,090,916.66	5,718,493.88	66.52



AERIAL PHOTO SOURCE: CCJDC (2003) AND WHITSON ENGINEERS (2017)



SITE PREPARATION GENERAL NOTES:

- CONSTRUCT THE BASE BID IF THE CARMEL RIVER IS DRY UPON PROJECT MOBILIZATION.
- CLEAR AND GRUB THE GRADING LIMITS PRIOR TO ANY GROUND DISTURBANCE. CLEARING AND GRUBBING SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL OBJECTIONABLE MATERIAL NOT SPECIFIED ELSEWHERE IN THESE DRAWINGS (OR OTHER CONTRACT DOCUMENTS), INCLUDING TREES (LESS THAN 6" DBH), SHRUBS, OTHER VEGETATION, DEBRIS, AND RUBBISH.
- PRESERVE TREES WITHIN THE STAGING AREA GREATER THAN 6" DBH. ANY TREES GREATER THAN 6" DBH SHALL REQUIRE THE APPROVAL OF MPWMD PRIOR TO REMOVAL.

EQUIPMENT ACCESS NOTES:

- EQUIPMENT SHALL ACCESS THE WORK AREA BY THE ROUTE SHOWN. DELIVERY OF MATERIALS TO/FROM THE WORK AREA IS NOT PERMITTED VIA THE EQUIPMENT ACCESS ROUTE.
- THE CONTRACTOR SHALL IMPROVE THE EQUIPMENT ACCESS ROUTE TO ALLOW ACCESS TO THE CHANNEL, INCLUDING REMOVAL OF THE WOOD RETAINING WALL AT THE CCIAM ACCESS RAMP AND TREE LIMBING. REMOVAL OF TREES AND LIMBS LARGER THAN 6" DIAMETER SHALL BE APPROVED BY MPWMD STAFF.
- ALL TRACK EQUIPMENT DRIVING UP THE BED OF THE CARMEL RIVER SHALL BE EQUIPPED WITH RUBBER SHOES.

TEMPORARY GRAVEL BAG COFFERDAM AND DEWATERING NOTES:

- GENERAL
 - THE BASE BID ASSUMES THAT THE CARMEL RIVER WILL BE DRY DURING THE CONSTRUCTION PERIOD, HOWEVER, IT IS POSSIBLE THAT A RAIN EVENT COULD PRODUCE ENOUGH RUNOFF TO GENERATE STEAMFLOW IN THE RIVER. THE TEMPORARY GRAVEL BAG COFFERDAMS WILL NOT BE REQUIRED IF THE CARMEL RIVER REMAINS DRY THROUGHOUT THE CONSTRUCTION PERIOD, AND ARE SHOWN AS A PROTECTIVE MEASURE IN THE EVENT THAT STREAMFLOW RETURNS TO THE RIVER. THE CONTRACTOR SHALL MONITOR WEATHER FORECASTS THROUGHOUT THE CONSTRUCTION PERIOD. IF 3" OR MORE OF RAIN IS FORECAST FOR A RAIN EVENT, THE CONTRACTOR SHALL INSTALL TEMPORARY GRAVEL BAGS COFFERDAMS IN THE LOCATIONS SHOWN.
 - THE LAYOUT OF THE TEMPORARY GRAVEL BAG COFFERDAMS IS A SUGGESTED MINIMUM TO PROTECT THE WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL PROTECTIVE MEASURES AS NEEDED AND AS BASED ON FIELD CONDITIONS. ALL PROTECTIVE MEASURES SHALL BE FOCUSED ON PREVENTING SEDIMENT GENERATED BY CONSTRUCTION ACTIVITIES FROM ENTERING THE CHANNEL.
- MATERIALS
 - GRAVEL BAGS:
 - BAG MATERIAL: BAGS SHALL BE EITHER POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MINIMUM UNIT WEIGHT 135 G/M2 (FOUR OUNCES PER SQUARE YARD), MULLEN BURST STRENGTH EXCEEDING 2,070 KPA (300 PSI) IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D3786, AND ULTRAVIOLET STABILITY EXCEEDING 70% IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D4355.
 - BAG SIZE: EACH GRAVEL-FILLED BAG SHALL HAVE A LENGTH OF 450 MM (18 IN), WIDTH OF 300 MM (12 IN), THICKNESS OF 75 MM (3 IN), AND MASS BETWEEN 13 KG AND 22 KG (28 AND 48 LB). BAG DIMENSIONS ARE NOMINAL, AND MAY VARY BASED ON LOCALLY AVAILABLE MATERIALS. ALTERNATIVE BAG SIZES SHALL BE SUBMITTED TO THE ENGINEER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DEPLOYMENT.
 - FILL MATERIAL: FILL MATERIAL SHALL BE BETWEEN 10 MM AND 20 MM (0.4 AND 0.8 INCH) IN DIAMETER, AND SHALL BE CLEAN AND FREE FROM CLAY BALLS, ORGANIC MATTER, WEEDS, AND OTHER DELETERIOUS MATERIALS. THE OPENING OF GRAVEL-FILLED BAGS SHALL BE SECURED SUCH THAT GRAVEL DOES NOT ESCAPE. GRAVEL-FILLED BAGS SHALL BE BETWEEN 13 KG AND 22KG (28 AND 48 LB) IN MASS. FILL MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER'S REPRESENTATIVE.
 - PUMPS
 - THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND SERVICES AS REQUIRED FOR PROVIDING THE NECESSARY DEWATERING WORK AND PROVIDE BACK-UP EQUIPMENT AS NECESSARY FOR REPLACEMENT AND FOR UNANTICIPATED EMERGENCIES.
 - THE PUMPS AND PUMPING APPARATUS USED FOR THE DEWATERING SHALL BE OF THE SUBMERSIBLE TYPE WITH SUFFICIENT CAPACITY TO CONTROL SUMP WATER LEVELS AS DESCRIBED HEREIN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE POWER TO OPERATE THE DEWATERING SYSTEMS, INCLUDING THE PUMPING EQUIPMENT, AS NEEDED TO ASSURE THAT DEWATERING IS EFFECTIVE DURING ALL WORK WITHIN THE BANKS OF THE CREEK. THE CONTRACTOR SHALL PROVIDE BACK-UP POWER AS NEEDED TO ASSURE THAT POWER INTERRUPTIONS DO NOT LEAD TO DAMAGE TO FINISHED OR IN-PROCESS WORK OR DELAYS IN COMPLETING THE WORK. ALL EQUIPMENT, INCLUDING ANY GENERATORS USED FOR PRIMARY OR BACK-UP POWER SUPPLY, SHALL BE OPERATED IN COMPLIANCE WITH ALL PERTINENT NOISE AND AIR POLLUTION REDUCTION REQUIREMENTS.
- EXECUTION
 - THE COFFERDAMS SHALL BE CONSTRUCTED IN THE LOCATIONS AND TO THE MINIMUM ELEVATIONS SHOWN ON THE PLANS.
 - WHEN STREAMFLOW HAS CEASED OR THERE IS NO LONGER FORECAST RAIN, THE COFFERDAMS SHALL BE REMOVED AND DISPOSED OF IN CONFORMANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS AND AT THE CONTRACTOR'S EXPENSE. DISPOSING OF GRAVELS IN THE CHANNEL IS NOT PERMITTED.
 - PUMP INCIDENTAL GROUNDWATER ENCOUNTERED DURING EXCAVATION AS NEEDED TO FACILITATE COMPLETION OF THE WORK.
 - WATER PUMPED FROM WITHIN EXCAVATION AREAS OR THE PORTION OF THE CHANNEL ENCLOSED BY THE COFFERDAMS SHALL BE SPRAYED ONTO THE OVBANK AREA TO ALLOW FOR INFILTRATION. THE DISCHARGED WATER SHALL BE MONITORED THROUGHOUT CONSTRUCTION TO AVOID FLOW CONCENTRATION THAT COULD LEAD TO THE FORMATION OF RILLS.

PREPARED FOR:
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT
Balance Hydrologics, Inc.
 885 Bryant Way, Suite 107
 Berkeley, CA 94702-2222
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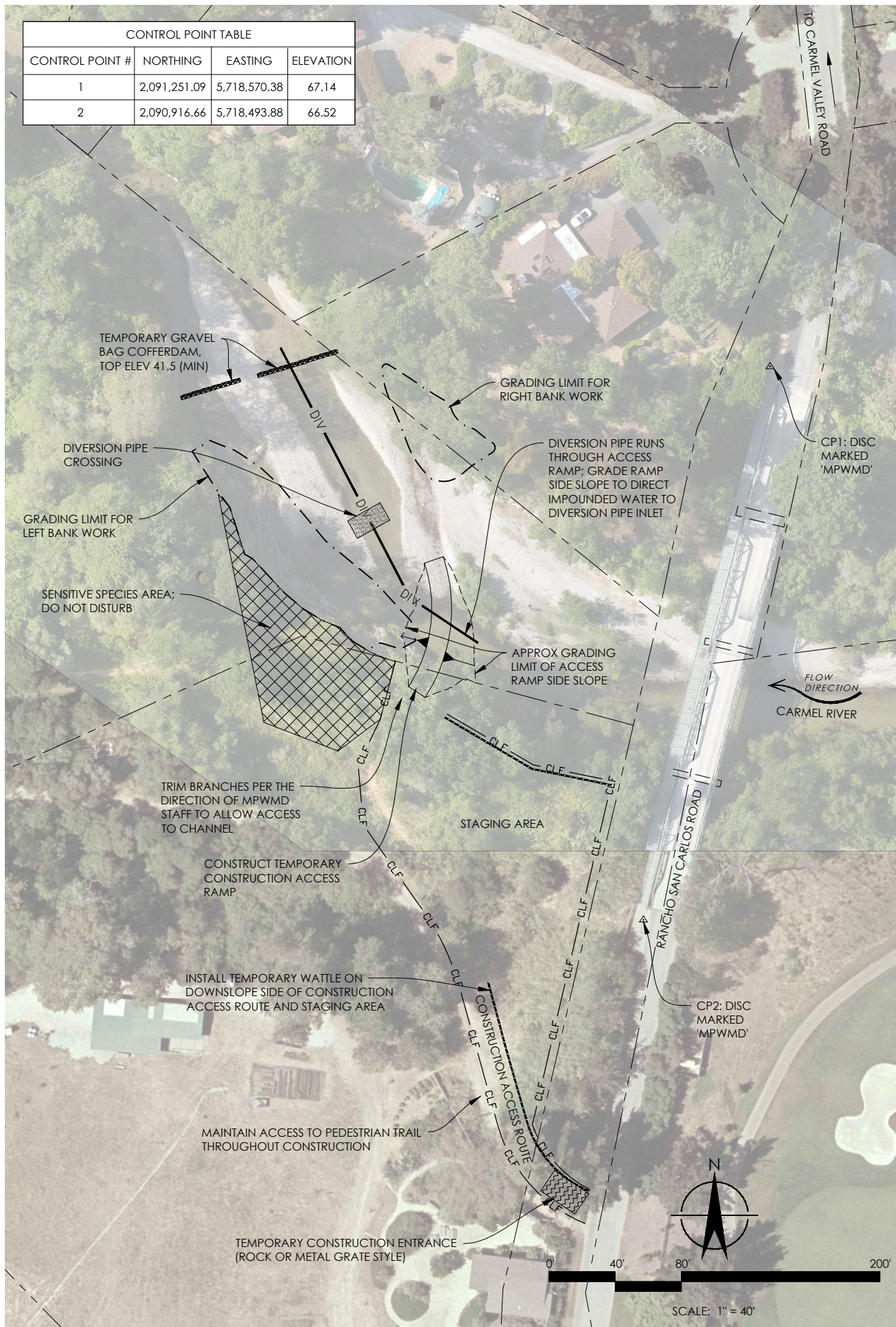
DESIGNED BY		SUBMITTALS / REVISIONS	
P. KULCHAWIK	20170706 PK	BY	DATE
P. KULCHAWIK	20170718 PK	DRAFT DESIGN	
E. BALLMAN	20180302 PK	FINAL DESIGN (REVISED)	
P. KULCHAWIK		IN CHARGE	
		DATE	20180302



**SITE PREPARATION PLAN -
 BASE BID**
**CARMEL RIVER BANK STABILIZATION
 AT RANCHO SAN CARLOS ROAD**
 MONTEREY COUNTY, CALIFORNIA
 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

PROJECT NUMBER	217107
SCALE	AS SHOWN
SHEET	
	3.0

CONTROL POINT TABLE			
CONTROL POINT #	NORTHING	EASTING	ELEVATION
1	2,091,251.09	5,718,570.38	67.14
2	2,090,916.66	5,718,493.88	66.52



AERIAL PHOTO SOURCE: CCJDC (2003) AND WHITSON ENGINEERS (2017)

SITE PREPARATION GENERAL NOTES:

1. THE BID ALTERNATE SHALL BE IMPLEMENTED IN LIEU OF THE BASE BID SITE PREPARATION PLAN (SHEET 3.0) IN THE EVENT THAT THERE IS STREAMFLOW IN THE CARMEL RIVER UPON PROJECT MOBILIZATION.
2. CLEAR AND GRUB THE GRADING LIMITS PRIOR TO ANY GROUND DISTURBANCE. CLEARING AND GRUBBING SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL OBJECTIONABLE MATERIAL NOT SPECIFIED ELSEWHERE IN THESE DRAWINGS (OR OTHER CONTRACT DOCUMENTS), INCLUDING TREES (LESS THAN 6" DBH), SHRUBS, OTHER VEGETATION, DEBRIS, AND RUBBISH.
3. PRESERVE TREES WITHIN THE STAGING AREA GREATER THAN 6" DBH. ANY TREES GREATER THAN 6" DBH SHALL REQUIRE THE APPROVAL OF MPWMD PRIOR TO REMOVAL.

TEMPORARY GRAVEL BAG COFFERDAM AND DEWATERING NOTES:

1. GENERAL
 - 1.1. THE SITE PREPARATION PLAN - BID ALTERNATE IS A SUGGESTED MINIMUM TO PROTECT THE WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL PROTECTIVE MEASURES AS NEEDED AND AS BASED ON FIELD CONDITIONS. ALL PROTECTIVE MEASURES SHALL BE FOCUSED ON PREVENTING SEDIMENT GENERATED BY CONSTRUCTION ACTIVITIES FROM ENTERING THE CHANNEL.
2. MATERIALS
 - 2.1. GRAVEL BAGS:
 - 2.1.1. BAG MATERIAL: BAGS SHALL BE EITHER POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MINIMUM UNIT WEIGHT 135 G/M2 (FOUR OUNCES PER SQUARE YARD), MULLEN BURST STRENGTH EXCEEDING 2,070 KPA (300 PSI) IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D3786, AND ULTRAVIOLET STABILITY EXCEEDING 70% IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D4355.
 - 2.1.2. BAG SIZE: EACH GRAVEL-FILLED BAG SHALL HAVE A LENGTH OF 450 MM (18 IN), WIDTH OF 300 MM (12 IN), THICKNESS OF 75 MM (3 IN), AND MASS BETWEEN 13 KG AND 22 KG (28 AND 48 LB). BAG DIMENSIONS ARE NOMINAL, AND MAY VARY BASED ON LOCALLY AVAILABLE MATERIALS. ALTERNATIVE BAG SIZES SHALL BE SUBMITTED TO THE ENGINEER'S REPRESENTATIVE FOR APPROVAL PRIOR TO DEPLOYMENT.
 - 2.1.3. FILL MATERIAL: FILL MATERIAL SHALL BE BETWEEN 10 MM AND 20 MM (0.4 AND 0.8 INCH) IN DIAMETER, AND SHALL BE CLEAN AND FREE FROM CLAY BALLS, ORGANIC MATTER, WEEDS, AND OTHER DELETERIOUS MATERIALS. THE OPENING OF GRAVEL-FILLED BAGS SHALL BE SECURED SUCH THAT GRAVEL DOES NOT ESCAPE. GRAVEL-FILLED BAGS SHALL BE BETWEEN 13 KG AND 22KG (28 AND 48 LB) IN MASS. FILL MATERIAL IS SUBJECT TO APPROVAL BY THE ENGINEER'S REPRESENTATIVE.
 - 2.2. PUMPS
 - 2.2.1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND SERVICES AS REQUIRED FOR PROVIDING THE NECESSARY DEWATERING WORK AND PROVIDE BACK-UP EQUIPMENT AS NECESSARY FOR REPLACEMENT AND FOR UNANTICIPATED EMERGENCIES.
 - 2.2.2. THE PUMPS AND PUMPING APPARATUS USED FOR THE DEWATERING SHALL BE OF THE SUBMERSIBLE TYPE WITH SUFFICIENT CAPACITY TO CONTROL SUMP WATER LEVELS AS DESCRIBED HEREIN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE POWER TO OPERATE THE DEWATERING SYSTEMS, INCLUDING THE PUMPING EQUIPMENT, AS NEEDED TO ASSURE THAT DEWATERING IS EFFECTIVE DURING ALL WORK WITHIN THE BANKS OF THE CREEK. THE CONTRACTOR SHALL PROVIDE BACK-UP POWER AS NEEDED TO ASSURE THAT POWER INTERRUPTIONS DO NOT LEAD TO DAMAGE TO FINISHED OR IN-PROCESS WORK OR DELAYS IN COMPLETING THE WORK. ALL EQUIPMENT, INCLUDING ANY GENERATORS USED FOR PRIMARY OR BACK-UP POWER SUPPLY, SHALL BE OPERATED IN COMPLIANCE WITH ALL PERTINENT NOISE AND AIR POLLUTION REDUCTION REQUIREMENTS.
 - 2.3. DIVERSION PIPE: DIVERSION PIPE AND COUPLINGS SHALL BE 15-INCH DIAMETER (MINIMUM) POLYVINYL CHLORIDE (PVC) OR SDR-35. THE MATERIAL SHALL BE SELECTED FOR FLEXIBILITY AND DURABILITY TO ALLOW FOR THE OCCASIONAL RELOCATION OF THE DIVERSION PIPING DURING CONSTRUCTION ACTIVITIES.
3. EXECUTION
 - 3.1. THE CONTRACTOR SHALL COORDINATE WITH MPWMD ON FISH RELOCATION PRIOR TO INSTALLING COFFERDAMS.
 - 3.2. THE COFFERDAMS SHALL BE CONSTRUCTED IN THE LOCATIONS AND TO THE MINIMUM ELEVATIONS SHOWN ON THE PLANS.
 - 3.3. INSTALL THE DIVERSION PIPE AT A MINIMUM SLOPE OF 1 PERCENT. THE DIVERSION PIPE SHALL BE INSTALLED TO ALLOW FOR GRAVITY FLOW.
 - 3.4. INSPECT THE DIVERSION PIPE AND COFFERDAMS DAILY DURING THE CONSTRUCTION PERIOD TO ENSURE THEY ARE EFFECTIVELY CONVEYING STREAMFLOW. PERFORM CORRECTIVE MAINTENANCE AS NEEDED.

- 3.5. PUMP INCIDENTAL GROUNDWATER ENCOUNTERED DURING EXCAVATION AS NEEDED TO FACILITATE COMPLETION OF THE WORK.
- 3.6. WATER PUMPED FROM WITHIN EXCAVATION AREAS OR THE PORTION OF THE CHANNEL ENCLOSED BY THE COFFERDAMS SHALL BE SPRAYED ONTO THE OVERBANK AREA TO ALLOW FOR INFILTRATION. THE DISCHARGED WATER SHALL BE MONITORED THROUGHOUT CONSTRUCTION TO AVOID FLOW CONCENTRATION THAT COULD LEAD TO THE FORMATION OF RILLS.

TEMPORARY CONSTRUCTION ACCESS RAMP NOTES:

1. THE TEMPORARY CONSTRUCTION ACCESS RAMP SHALL BE CONSTRUCTED WITH CLEAN SAND, GRAVEL, COBBLES, AND BOULDERS, OR A MIXTURE THEREOF. FINE-GRAINED MATERIAL HAVING THE POTENTIAL TO INCREASE TURBIDITY IN THE CARMEL RIVER IS NOT PERMITTED.
2. THE CONFIGURATION OF THE ACCESS RAMP IS APPROXIMATE. THE FINAL CONFIGURATION SHALL BE DETERMINED BY THE CONTRACTOR ACCORDING TO FIELD CONDITIONS, HOWEVER, THE SOUTH END (UPHILL SIDE) OF THE RAMP MAY NOT BE MOVED WITHOUT APPROVAL FROM MPWMD.
3. REMOVE THE RAMP UPON COMPLETION OF THE WORK AND RESTORE THE CHANNEL BANKS TO PRE-PROJECT CONDITIONS.
4. ALL TRACK EQUIPMENT DRIVING UP THE BED OF THE CARMEL RIVER SHALL BE EQUIPPED WITH RUBBER SHOES.

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FINAL DESIGN

PREPARED FOR:

 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

Balance Hydrologics, Inc.
 865 Bryant Way, Suite 107
 Berkeley, CA 94702-2222
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 www.balancehydro.com

DESIGNED BY	DRAWN BY	CHECKED BY	IN CHARGE	DATE
P. KULCHAWIK	P. KULCHAWIK	E. BALLMAN	P. KULCHAWIK	20180302

DATE	BY	SUBMITTALS / REVISIONS
20170706	PK	DRAFT DESIGN
20170718	PK	FINAL DESIGN
20180302	PK	FINAL DESIGN (REVISED)

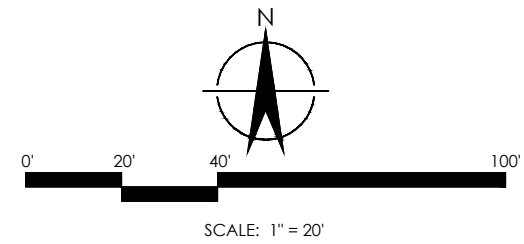
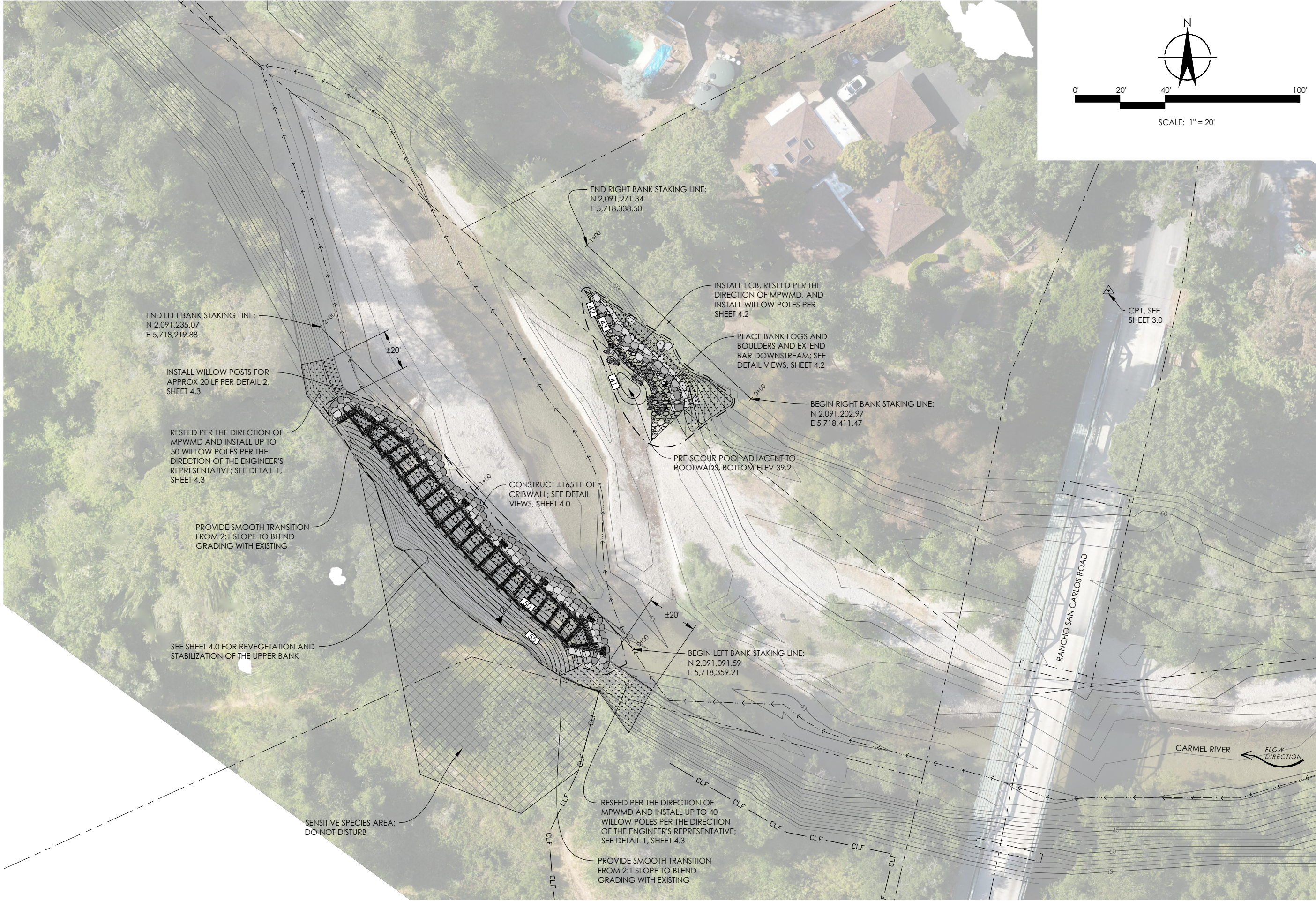


SITE PREPARATION PLAN - BID ALTERNATE
CARMEL RIVER BANK STABILIZATION AT RANCHO SAN CARLOS ROAD
 MONTEREY COUNTY, CALIFORNIA
 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

PROJECT NUMBER	217107
SCALE	1" = 40'
SHEET	

3.0 ALT

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PREPARED FOR:

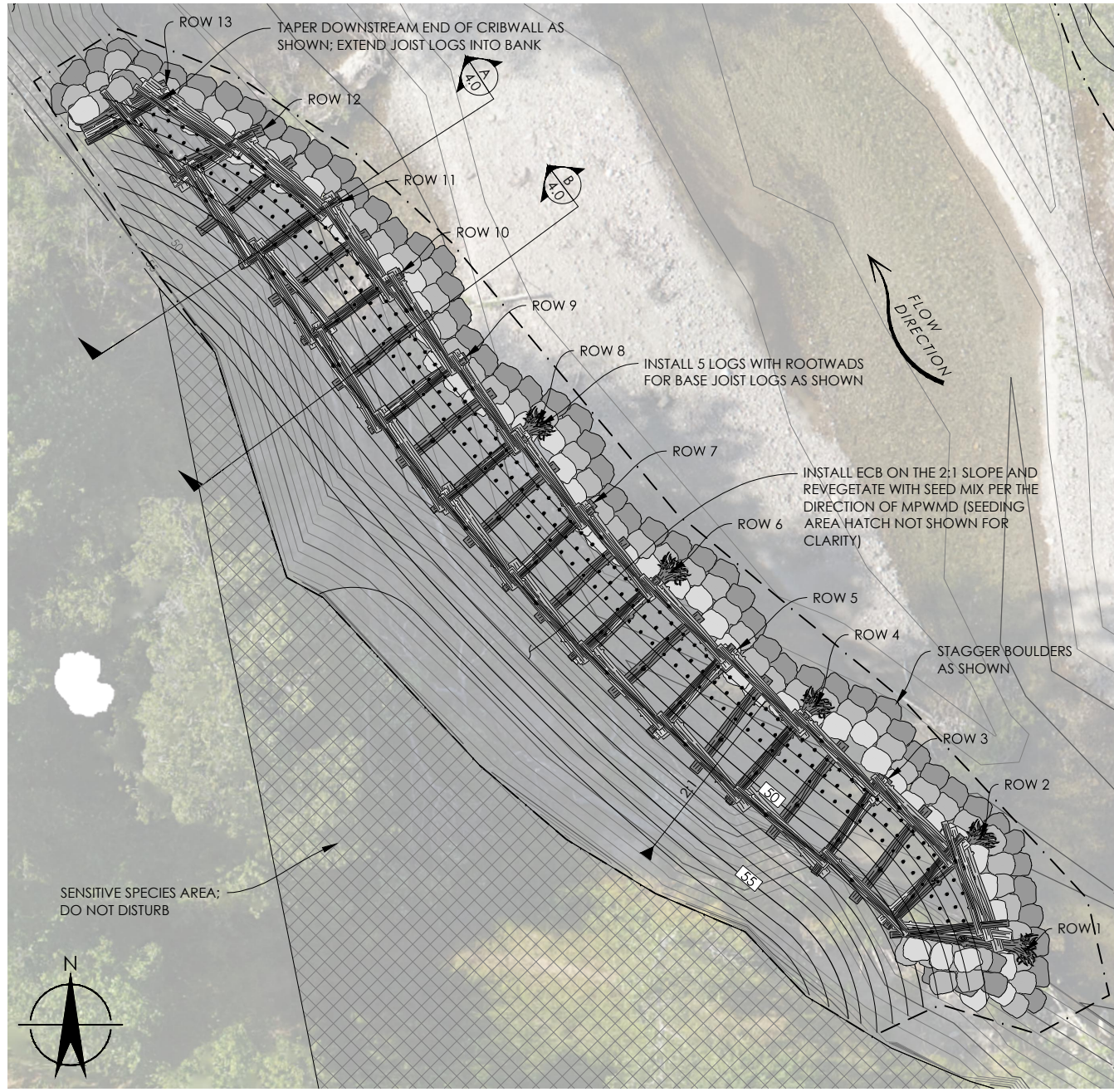
 865 Bryant Way, Suite 107
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DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
P. KULCHAWIK			
DRAWN BY	20170706	PK	DRAFT DESIGN
P. KULCHAWIK	20170718	PK	FINAL DESIGN
CHECKED BY	20180302	PK	FINAL DESIGN (REVISED)
E. BALLMAN			
IN CHARGE			
P. KULCHAWIK			
DATE	20180302		

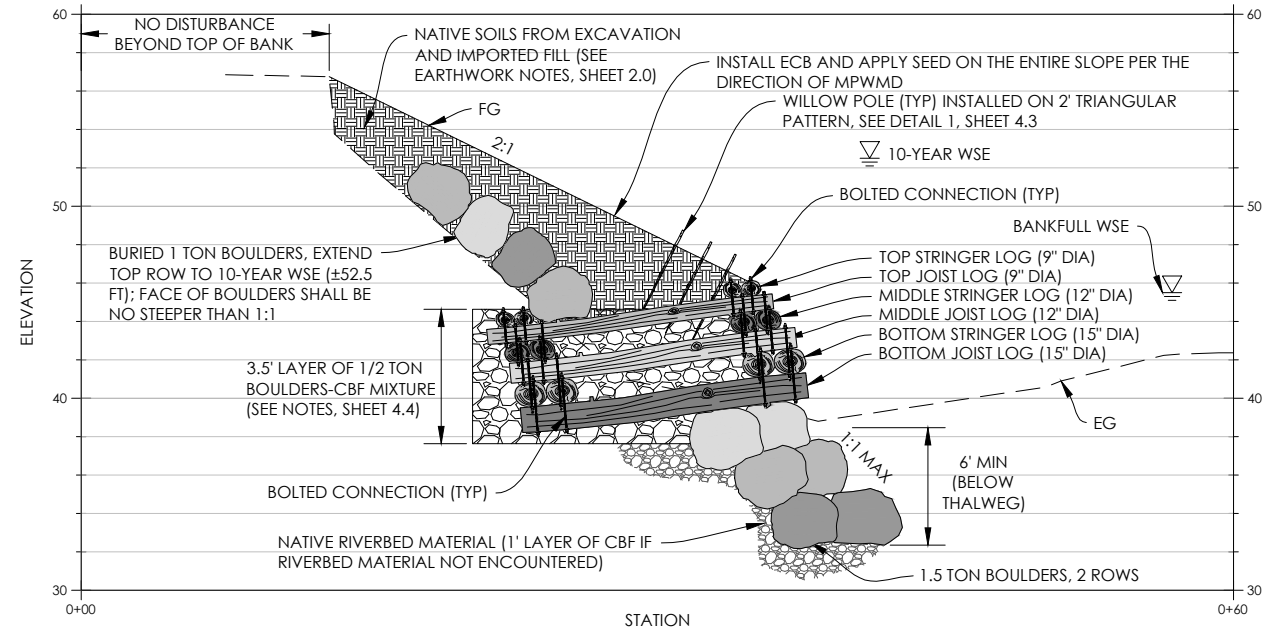


BANK STABILIZATION PLAN
 CARMEL RIVER BANK STABILIZATION
 AT RANCHO SAN CARLOS ROAD
 MONTEREY COUNTY, CALIFORNIA
 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

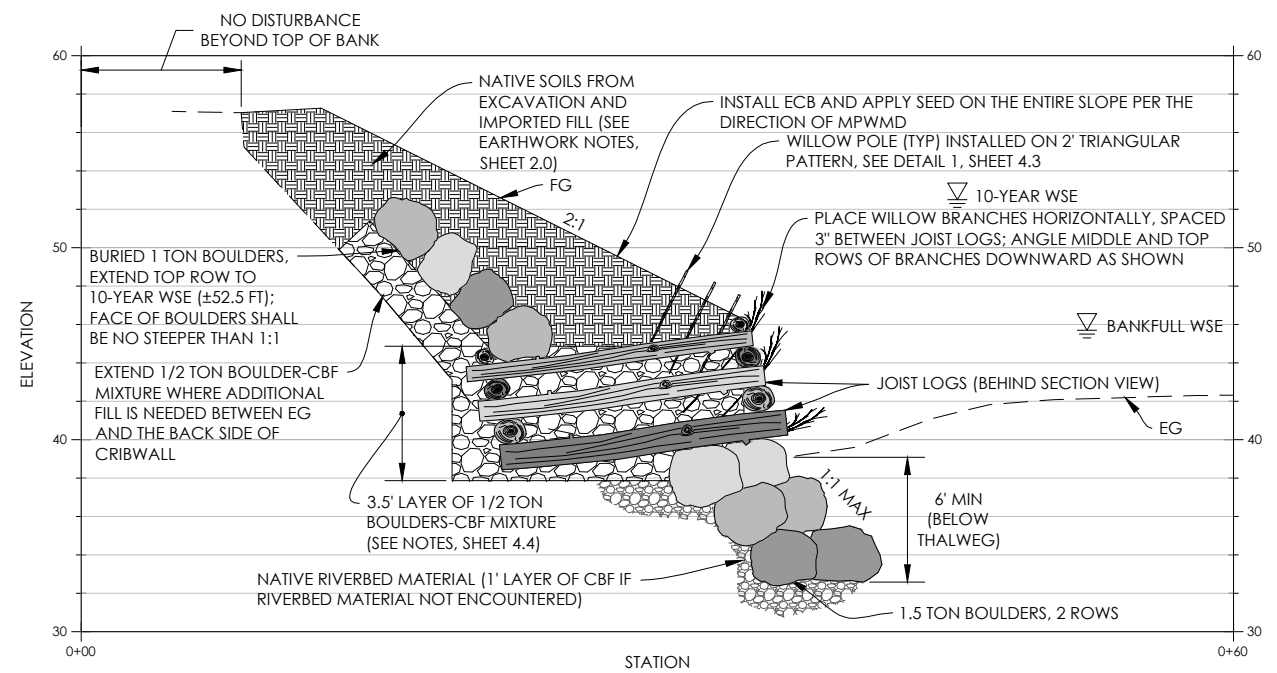
PROJECT NUMBER	217107
SCALE	1" = 20'
SHEET	



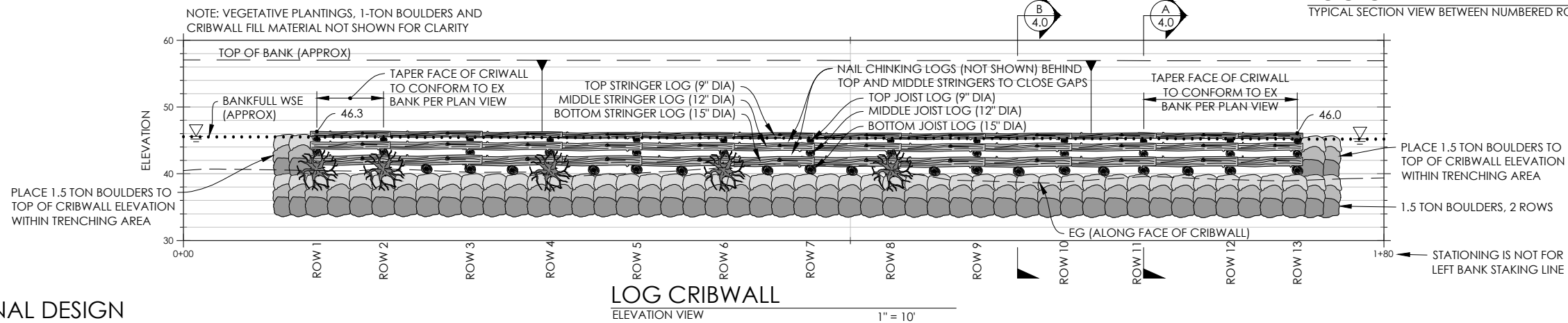
LOG CRIBWALL
PLAN VIEW
1" = 10'



LOG CRIBWALL
TYPICAL SECTION VIEW AT NUMBERED ROWS
1" = 5' (H & V) 4.0



LOG CRIBWALL
TYPICAL SECTION VIEW BETWEEN NUMBERED ROWS
1" = 5' (H & V) 4.0



LOG CRIBWALL
ELEVATION VIEW
1" = 10'

NOTES:

1. SEE SHEET 4.2 FOR LOG CRIBWALL STAKING AND ASSEMBLY PLAN.
2. SEE SHEET 4.4 FOR ADDITIONAL NOTES ON LOG CRIBWALL MATERIALS AND EXECUTION.

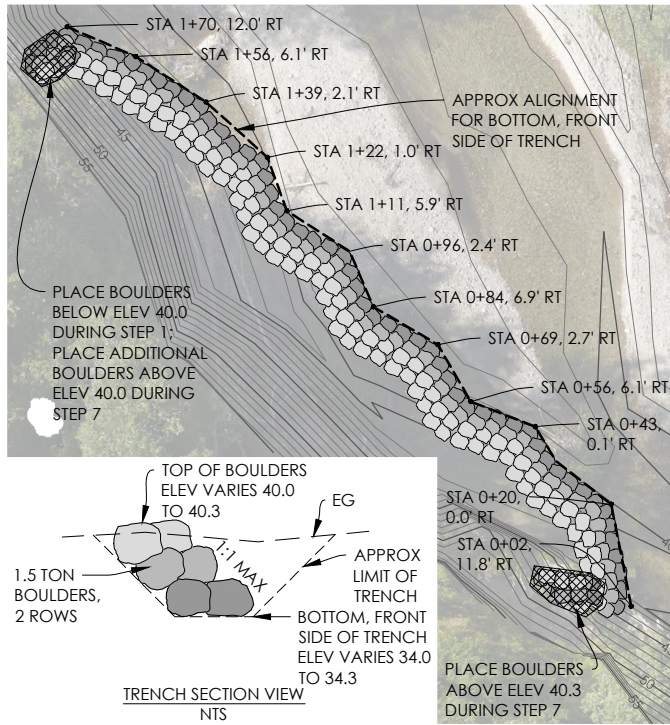
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
P. KULCHAWIK	20170706	PK	DRAFT DESIGN
P. KULCHAWIK	20170718	PK	FINAL DESIGN
E. BALLMAN	20180302	PK	FINAL DESIGN (REVISED)
P. KULCHAWIK			



LOG CRIBWALL DETAIL
CARMEL RIVER BANK STABILIZATION
AT RANCHO SAN CARLOS ROAD
MONTEREY COUNTY, CALIFORNIA
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

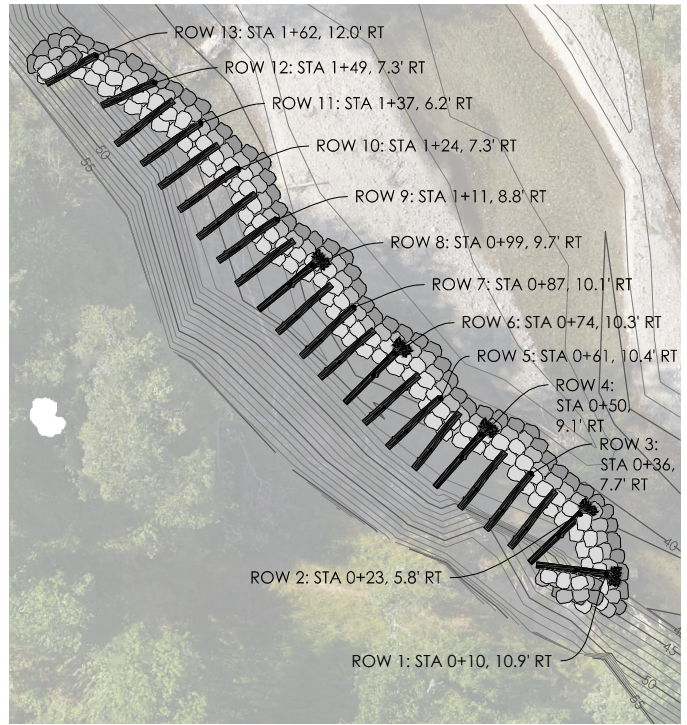
PROJECT NUMBER 217107
SCALE AS SHOWN
SHEET

4.0



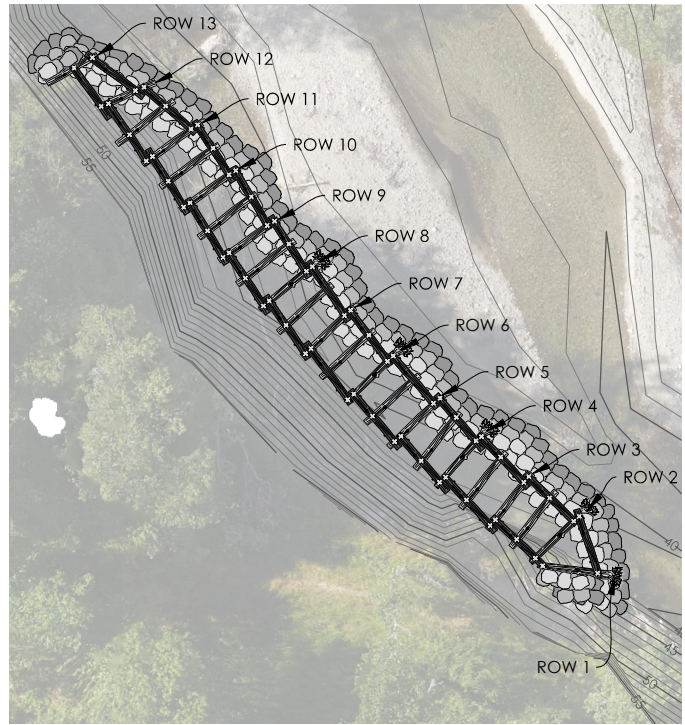
STEP 1:

- EXCAVATE TRENCH AND INSTALL 1.5 TON BOULDERS AS SHOWN.
- STATIONING AND OFFSET INFORMATION FOR STEP 1 REFERS TO THE BOTTOM, FRONT SIDE OF TRENCH
- BACKFILL TRENCH WITH RIVERBED MATERIAL GENERATED DURING TRENCH EXCAVATION.



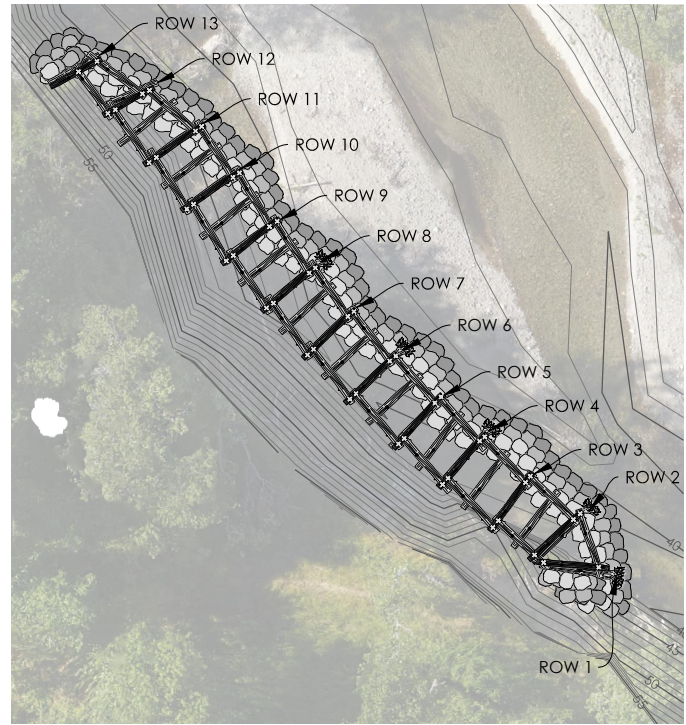
STEP 2:

- PLACE 18 BOTTOM JOIST LOGS AND 5 BOTTOM JOIST LOGS WITH ROOTWADS.
- STAKING INFORMATION FOR LOGS BETWEEN NUMBERED ROWS NOT PROVIDED; INSTALL LOGS MIDWAY BETWEEN NUMBERED ROWS.



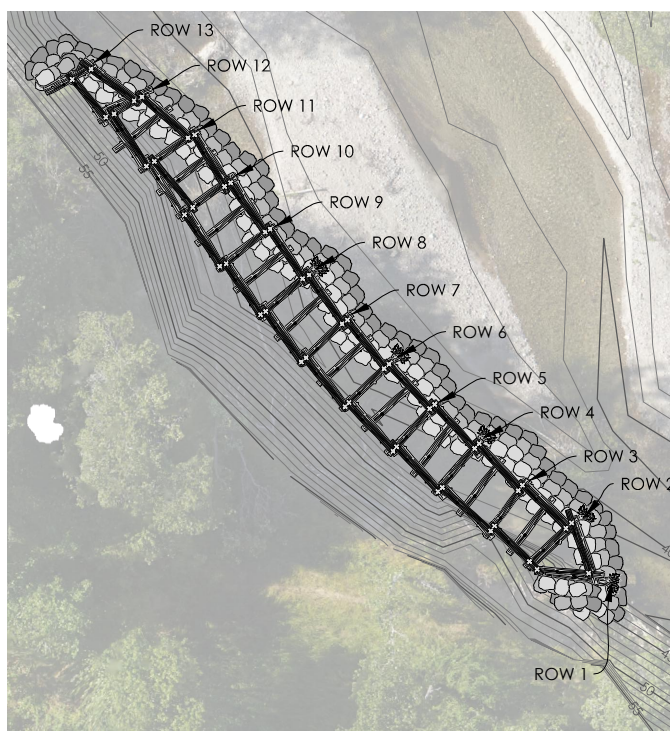
STEP 3:

- PLACE 23 BOTTOM STRINGER LOGS.
- CONNECT BOTTOM STRINGER LOGS TO BOTTOM JOIST LOGS FROM STEP 2 AT THE LOCATIONS SHOWN.



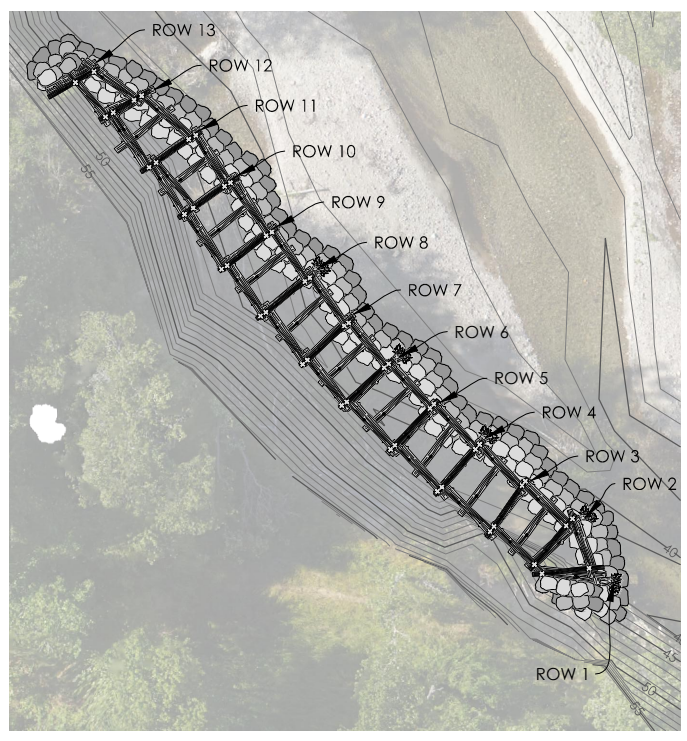
STEP 4:

- PLACE 13 MIDDLE JOIST LOGS.
- CONNECT MIDDLE JOIST LOGS TO BOTTOM STRINGER LOGS FROM STEP 3 AT THE LOCATIONS SHOWN.



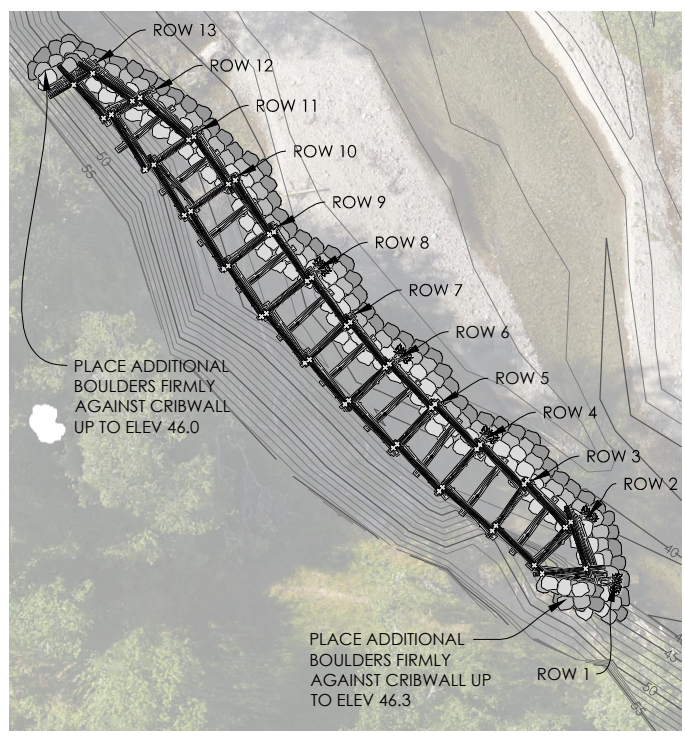
STEP 5:

- PLACE 23 MIDDLE STRINGER LOGS.
- CONNECT MIDDLE STRINGER LOGS TO MIDDLE JOIST LOGS FROM STEP 4 AT THE LOCATIONS SHOWN.



STEP 6:

- PLACE 13 TOP JOIST LOGS.
- CONNECT TOP JOIST LOGS TO MIDDLE STRINGER LOGS FROM STEP 5 AT THE LOCATIONS SHOWN.



STEP 7:

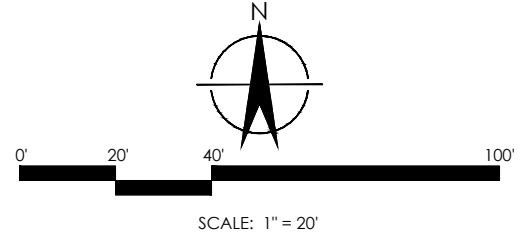
- PLACE 23 TOP STRINGER LOGS.
- CONNECT TOP STRINGER LOGS TO TOP JOIST LOGS FROM STEP 6 AT THE LOCATIONS SHOWN.
- PLACE ADDITIONAL BOULDERS AT ENDS OF CRIBWALL AS SHOWN.
- FINISH CRIBWALL PER DETAIL, SHEET 4.0.

NOTES:

- ALL STATIONING AND OFFSET INFORMATION SHOWN ON THIS SHEET IS IN REFERENCE TO THE LEFT BANK STAKING LINE (NOT SHOWN FOR CLARITY). REFER TO SHEET 3.1 FOR LEFT BANK STAKING LINE LAYOUT.
- LOGS TO BE PLACE DURING A GIVEN STEP ARE SHOWN AS DARKER. LOGS PLACED DURING A PREVIOUS STEP ARE SHOWN AS LIGHTER.
- BOLTED CONNECTIONS ARE ONLY SHOWN FOR THOSE TO BE PLACED DURING A GIVEN STEP. BOLTED CONNECTIONS FROM PREVIOUS STEPS ARE NOT SHOWN.
- IF NEEDED, NOTCHING OF LOGS IS ALLOWED, HOWEVER, THE DEPTH OF NOTCHES SHALL BE NO GREATER THAN 10 PERCENT OF THE LOG DIAMETER.

LEGEND:

- ⊗ BOLTED CONNECTION
- LOG PLACED IN CURRENT STEP
- LOG PLACED IN PREVIOUS STEP



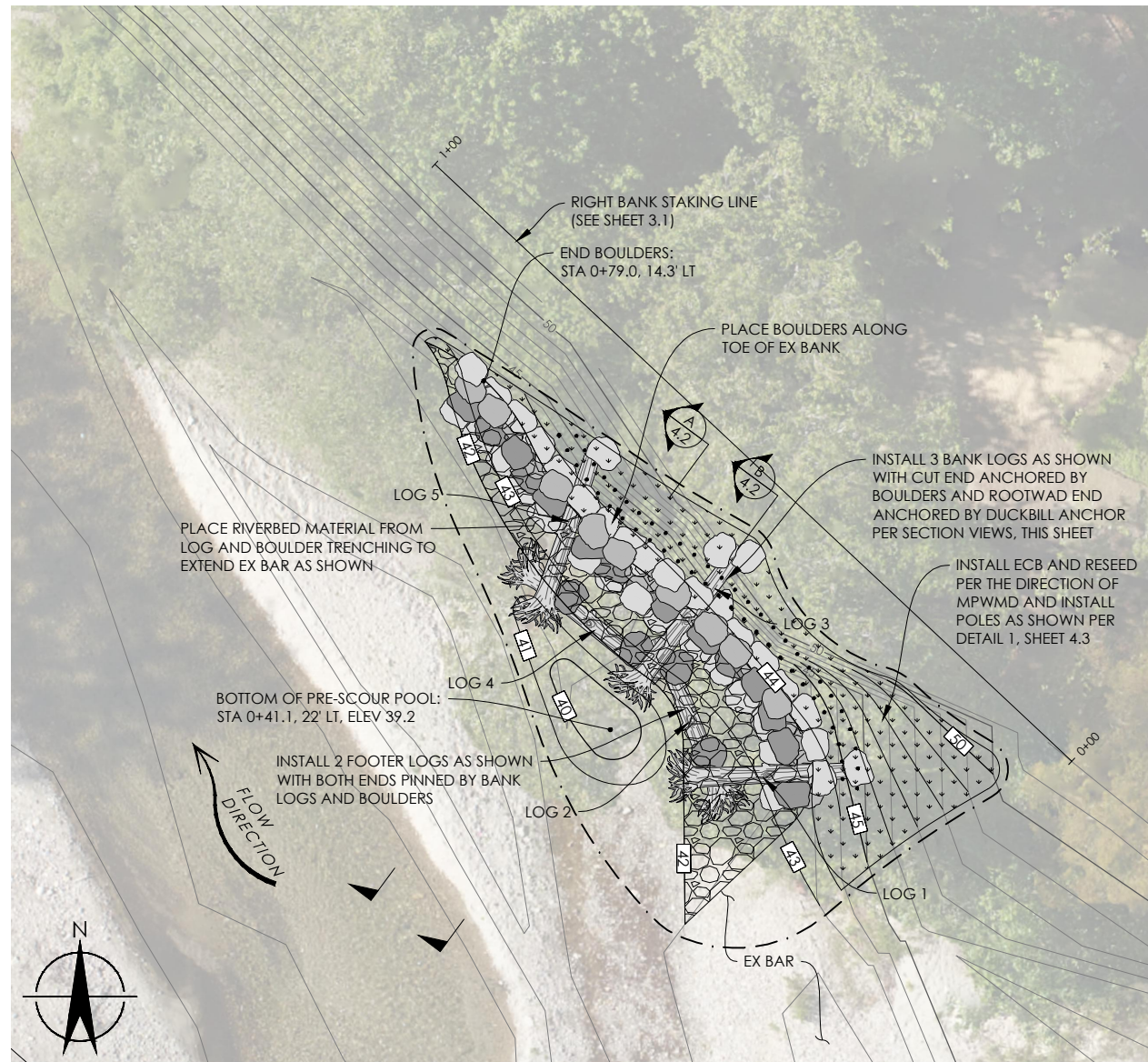
Y:\PROJECTS\217107 CARMEL RIVER - SAN CARLOS STREAMBANK RESTORATION\217107 CAD\217107-SHEETS\217107-041-CRIB SEQU.DWG

DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
P KULCHAWIK	20170706	PK	DRAFT DESIGN
P KULCHAWIK	20170718	PK	FINAL DESIGN
E BALLEMAN	20180302	PK	FINAL DESIGN (REVISED)
P KULCHAWIK			DATE
	20180302		



LOG CRIBWALL STAKING AND ASSEMBLY PLAN
CARMEL RIVER BANK STABILIZATION AT RANCHO SAN CARLOS ROAD
MONTEREY COUNTY, CALIFORNIA
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

PROJECT NUMBER
217107
SCALE
1" = 20'
SHEET

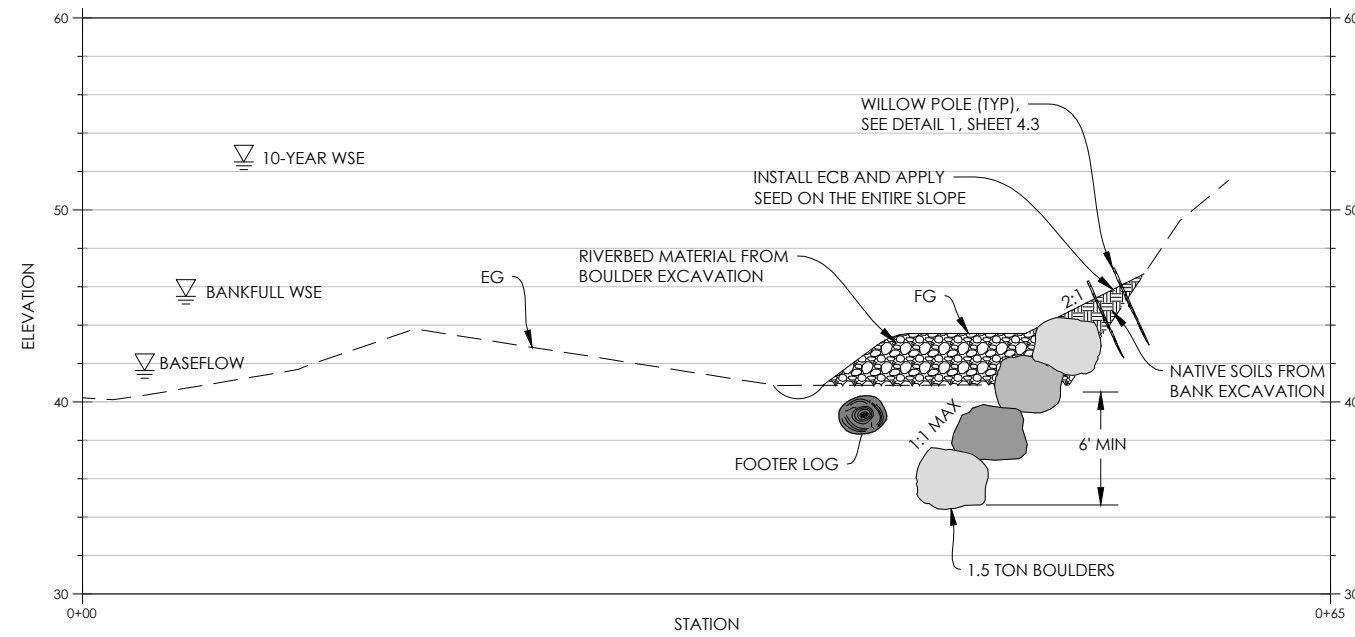


RIGHT BANK STABILIZATION
PLAN VIEW
1" = 10'

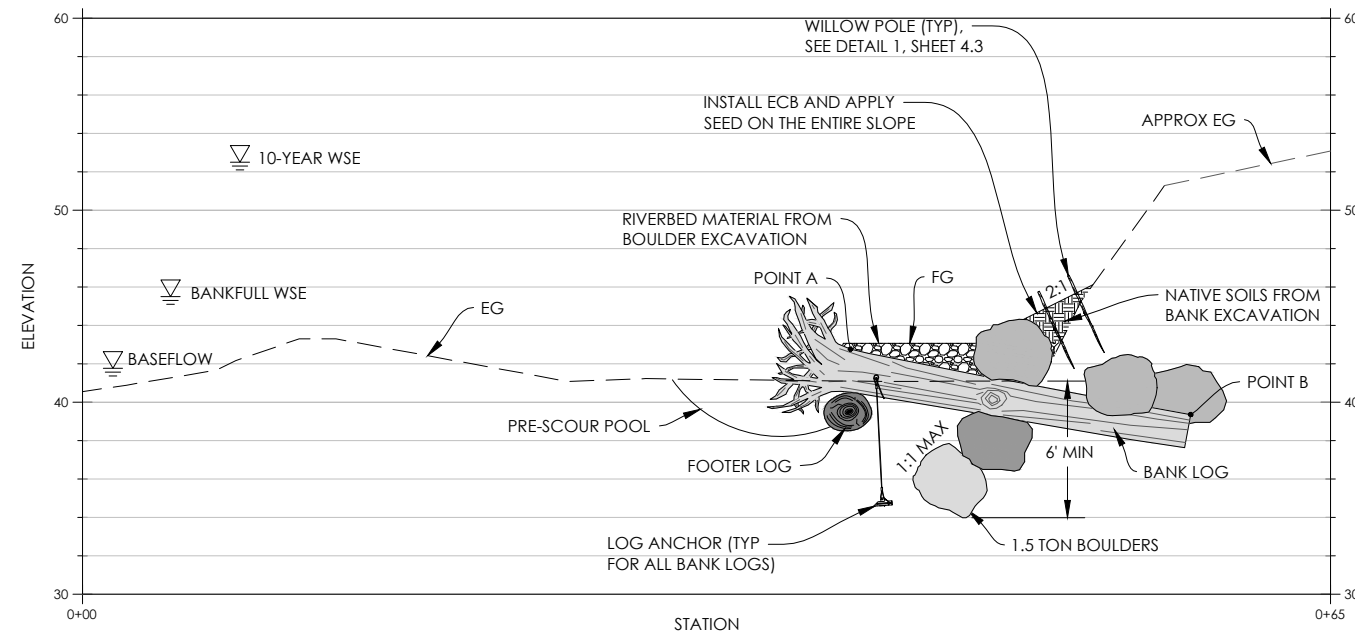
LOG #	POINT A (ROOTWAD END)			POINT B (CUT END)			NOTES
	STATION	OFFSET	ELEVATION	STATION	OFFSET	ELEVATION	
1	0+30.0	30.8 LT	SEE NOTE	0+17.2	17.5 LT	39.5	LOG 1 RESTS ON LOG 2, ELEV A IS DETERMINED BY THIS RELATION
2	0+27.5	29.8 LT	40.7	0+44.3	22.1 LT	40.4	
3	0+42.4	26.3 LT	SEE NOTE	0+44.4	8.1 LT	39.3	LOG 3 RESTS ON LOGS 2 AND 4, ELEV A IS DETERMINED BY THIS RELATION
4	0+59.4	26.8 LT	40.3	0+40.9	25.4 LT	40.5	
5	0+56.7	27.7 LT	SEE NOTE	0+64.5	11.0 LT	39.1	LOG 5 RESTS ON LOG 4, ELEV A IS DETERMINED BY THIS RELATION

RIGHT BANK STABILIZATION NOTES:

1. STATIONING AND OFFSET INFORMATION IN PLAN VIEW IS IN REFERENCE TO THE RIGHT BANK STAKING LINE.
2. SEE SHEET 4.4 FOR ADDITIONAL NOTES ON RIGHT BANK STABILIZATION MATERIALS AND EXECUTION.



RIGHT BANK
SECTION VIEW
1" = 5' (H & V)
A
4.2



RIGHT BANK
SECTION VIEW
1" = 5' (H & V)
B
4.2

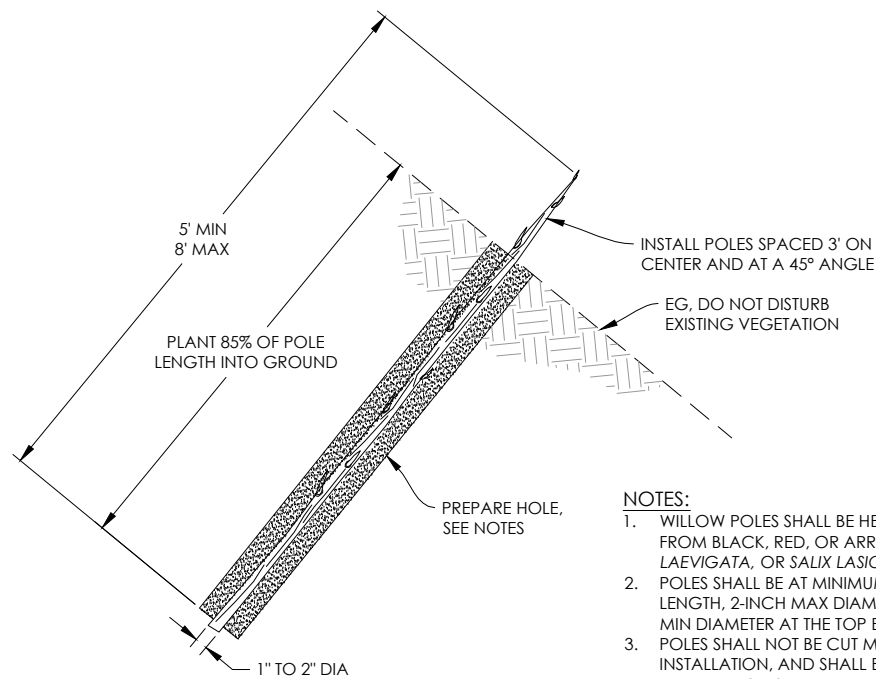
DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
P. KULCHAWIK	20170706	PK	DRAFT DESIGN
P. KULCHAWIK	20170718	PK	FINAL DESIGN
E. BALLMAN	20180302	PK	FINAL DESIGN (REVISED)
P. KULCHAWIK			
P. KULCHAWIK			

IN CHARGE	DATE
P. KULCHAWIK	20180302



RIGHT BANK STABILIZATION DETAIL
CARMEL RIVER BANK STABILIZATION
AT RANCHO SAN CARLOS ROAD
MONTEREY COUNTY, CALIFORNIA
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

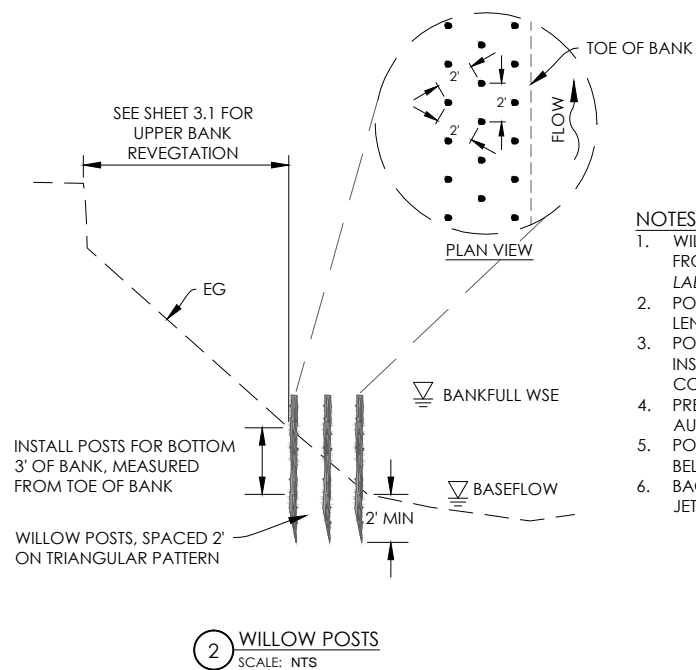
PROJECT NUMBER	217107
SCALE	AS SHOWN
SHEET	



NOTES:

1. WILLOW POLES SHALL BE HEALTHY, LIVE, DORMANT BRANCHES CUT FROM BLACK, RED, OR ARROYO WILLOWS (*SALIX NIGRA*, *SALIX LAEVIGATA*, OR *SALIX LASIOLEPIS*).
2. POLES SHALL BE AT MINIMUM FIVE (5) TO MAXIMUM EIGHT (8) FEET IN LENGTH, 2-INCH MAX DIAMETER AT THE BOTTOM END, AND 1/2-INCH MIN DIAMETER AT THE TOP END.
3. POLES SHALL NOT BE CUT MORE THAN SEVEN (7) DAYS PRIOR TO INSTALLATION, AND SHALL BE STORED IN COOL, SHADED CONDITIONS. KEEP ALL POLES IN WATER FILLED BUCKET
4. PREPARE HOLE USING AN IRON BAR, POST HOLE DIGGER, POWERED AUGER, METAL RAM ON A BACKHOE, OR SIMILAR EQUIPMENT.
5. POLES SHOULD EXTEND INTO MOIST SOIL. AT LEAST 85% OF THE POLE SHOULD BE BELOW THE GROUND.
6. BACKFILL HOLES BY HAND-PLACING SOIL FOLLOWED BY WATER JETTING UNTIL FILLED TO THE EXISTING GROUND ELEVATION.

1 WILLOW POLE
SCALE: NTS



NOTES:

1. WILLOW POSTS SHALL BE HEALTHY, LIVE, DORMANT BRANCHES CUT FROM BLACK, RED, OR ARROYO WILLOWS (*SALIX NIGRA*, *SALIX LAEVIGATA*, OR *SALIX LASIOLEPIS*).
2. POSTS SHALL BE AT MINIMUM SIX (6) TO MAXIMUM NINE (9) FEET IN LENGTH, 5-INCH MAX DIAMETER, AND 3-INCH MIN DIAMETER.
3. POSTS SHALL NOT BE CUT MORE THAN SEVEN (7) DAYS PRIOR TO INSTALLATION, AND SHALL BE STORED IN COOL, SHADED CONDITIONS. KEEP ALL POSTS IN WATER FILLED BUCKET
4. PREPARE HOLE USING AN IRON BAR, POST HOLE DIGGER, POWERED AUGER, METAL RAM ON A BACKHOE, OR SIMILAR EQUIPMENT.
5. POSTS SHOULD EXTEND INTO MOIST SOIL, AT LEAST TWO (2) FEET BELOW THE BASEFLOW WSE.
6. BACKFILL HOLES BY HAND-PLACING SOIL FOLLOWED BY WATER JETTING UNTIL FILLED TO THE EXISTING GROUND ELEVATION.

PLANTING DETAILS

CARMEL RIVER BANK STABILIZATION
AT RANCHO SAN CARLOS ROAD
MONTEREY COUNTY, CALIFORNIA
MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

PROJECT NUMBER
217107
SCALE
AS SHOWN
SHEET

4.3

DESIGNED BY	DATE	BY	SUBMITTALS / REVISIONS
P KULCHAWIK	20170706	PK	DRAFT DESIGN
P KULCHAWIK	20170718	PK	FINAL DESIGN
E BALLMAN	20180302	PK	FINAL DESIGN (REVISED)
P KULCHAWIK			
P KULCHAWIK			
IN CHARGE			
DATE	20180302		



PREPARED FOR:
MONTEREY PENINSULA
WATER
MANAGEMENT DISTRICT

Balance
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tel (415) 764-1000 fax (415) 764-1001
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LOG CRIBWALL NOTES:

1. DEFINITIONS
 - 1.1. STRINGER LOGS: CRIBWALL LOGS ORIENTED PARALLEL TO THE FLOW DIRECTION. THERE ARE TWO ROWS OF STRINGER LOGS (FRONT AND BACK) AND THREE LEVELS (BOTTOM, MIDDLE, AND TOP).
 - 1.2. JOIST LOGS: CRIBWALL LOGS ORIENTED PERPENDICULAR TO THE FLOW DIRECTION. THERE ARE THREE LEVELS OF JOIST LOGS (BOTTOM, MIDDLE, AND TOP).
 - 1.3. CHINKING LOGS: CRIBWALL LOGS ORIENTED PARALLEL TO THE FLOW DIRECTION AND INSTALLED BEHIND THE FRONT ROW OF STRINGER LOGS TO CONTAIN THE 1/2 TON ROCK AND CBF. CHINKING LOGS ARE NOT STRUCTURAL MEMBERS OF THE CRIBWALL.
 - 1.4. BOLTED CONNECTIONS: EACH LOG SHALL BE ANCHORED TO ADJACENT LOGS VIA HOT-DIPPED GALVANIZED THREADED RODS WITH DOUBLE NUTS AS SPECIFIED HEREIN.
2. MATERIALS
 - 2.1. LOGS
 - 2.1.1. THE SPECIES OF TREE FROM WHICH THE LOGS ARE TAKEN SHALL BE REDWOOD, EUCALYPTUS, OR AN EQUIVALENT SPECIES APPROVED BY THE ENGINEER'S REPRESENTATIVE. LOGS SHALL NOT BE PINE OR SOFTWOOD, UNLESS SPECIFIED BY THE ENGINEER'S REPRESENTATIVE.
 - 2.1.2. LOGS SHALL NOT HAVE WEAKNESSES SUCH AS CRACKS AND SPLITS THROUGH MORE THAN 25 PERCENT OF THE LOG DIAMETER.
 - 2.1.3. CUTS SHALL BE SMOOTH, WITHOUT BREAKS OR JAGGED EDGES.
 - 2.1.4. UNLESS OTHERWISE NOTED, LOGS SHALL BE GENERALLY STRAIGHT, AND SHALL BE TRIMMED SO THAT BRANCHES PROTRUDE NO MORE THAN 6 INCHES FROM THE TRUNK.
 - 2.1.5. ALL LOGS SHALL BE 15' LONG UNLESS NOTED OTHERWISE, AND SHALL CONFIRM TO THE FOLLOWING TYPES:
 - 2.1.5.1. BOTTOM STRINGER AND BOTTOM JOIST LOGS SHALL AVERAGE 15" IN DIAMETER.
 - 2.1.5.2. MIDDLE STRINGER AND MIDDLE JOIST LOGS SHALL AVERAGE 12" IN DIAMETER.
 - 2.1.5.3. TOP STRINGER AND TOP JOIST LOGS SHALL AVERAGE 9" IN DIAMETER.
 - 2.1.5.4. CHINKING LOGS SHALL AVERAGE 6" IN DIAMETER.
 - 2.1.6. WHERE LOGS ARE SPECIFIED TO HAVE THEIR ROOTWAD ATTACHED, THE DIAMETER OF THE ROOTWAD FAN SHALL BE NO LESS THAN 4 FEET, AND TRIMMED TO BE NO GREATER THAN 8 FEET. ROOTWADS SHALL BE THOROUGHLY CLEANED OF ADHERED DIRT, LITTER, OR OTHER MATERIAL PRIOR TO DELIVERY TO THE PROJECT SITE.
 - 2.2. BOULDERS
 - 2.2.1. BOULDERS CAN BE COMPOSED OF A VARIETY OF ROCK TYPES TYPICALLY USED IN CONSTRUCTION SUCH AS IGNEOUS ROCKS (GRANITE, DIORITE, BASALT, ANDESITE). BOULDERS SHOULD HAVE NO CRACKS, BEDDING PLANES, OR OTHER WEAKNESSES. BOULDERS SHOULD NOT HAVE CRACKS FILLED, OR HEALED, WITH CALCITE. 1.5 TON BOULDERS SHALL NOT BE RIPRAP AND ROUNDED EDGES ARE PREFERRED. BOULDERS SHALL NOT BE MONTEREY SHALE.
 - 2.2.2. BOULDERS SHALL BE THE SIZES INDICATED ON THE PLANS.
 - 2.2.3. THE CONTRACTOR SHALL SUBMIT SAMPLE PHOTOS OF THE 1.5 TON BOULDERS TO THE ENGINEER'S REPRESENTATIVE FOR APPROVAL PRIOR TO PLACING ANY 1.5 TON BOULDERS. THE PHOTOS SHALL SHOW ALL SIDES OF AT LEAST THREE BOULDERS AND SHALL INCLUDE A PERSON FOR SCALE.
 - 2.3. CHANNEL BED FILL (CBF)
 - 2.3.1. IT IS ANTICIPATED THAT EXCAVATED MATERIAL FROM THE RIVERBED (STOCKPILE RIVERBED MATERIAL SEPARATELY FROM MATERIAL OF THE UPPER BANKS) WILL CONSTITUTE MOST, IF NOT ALL, OF THE CBF NEEDED TO COMPLETE THE PROJECT. THE ENGINEER'S REPRESENTATIVE SHALL APPROVE THE EXCAVATED RIVERBED MATERIAL FOR USE AS CBF PRIOR TO ANY PLACEMENT (NO OTHER TESTING REQUIRED).
 - 2.3.2. IF IN THE OPINION OF THE ENGINEER'S REPRESENTATIVE THE RIVERBED MATERIAL IS NOT SATISFACTORY FOR USE AS CBF, THE CONTRACTOR SHALL OFF-HAUL THE RIVERBED MATERIAL AT NO EXTRA COST TO THE CLIENT, AND SHALL IMPORT CBF THAT COMPLIES WITH THE FOLLOWING:
 - 2.3.2.1. THE CBF SHALL BE CLEAN AND SUBANGULAR TO SUBROUNDED ROCK AND GENERALLY CONSISTING OF A MIXTURE OF COBBLES, GRAVELS, AND SANDS.
 - 2.3.2.2. THE CBF SHALL NOT CONTAIN EXCESSIVE FINES, AND SHALL HAVE THE FOLLOWING GRADATION:

SIEVE OPENING	% PASSING, BY WEIGHT
6"	100
2"	84
3/4"	50
NO. 10	16
NO. 40	5
 - 2.3.2.3. UNSATISFACTORY CBF SHALL INCLUDE OR BE EQUIVALENT TO ASTM D2487 SOIL CLASSIFICATION GROUPS GM, GC, SW, SP, SM, SC, ML, CL, OL, MH, CH, OH, AND PT. OTHER UNACCEPTABLE SOILS WOULD INCLUDE RIP-RAP UNLESS OTHERWISE SPECIFIED HEREIN.
 - 2.3.2.4. THE CBF SHALL BE WELL MIXED PRIOR TO PLACEMENT.
 - 2.4. BOLTED CONNECTIONS
 - 2.4.1. CRIB WALL LOG BOLTED CONNECTIONS SHALL BE 3/4-INCH HOT-DIPPED GALVANIZED THREADED ROD OR EQUIVALENT APPROVED BY THE ENGINEER'S REPRESENTATIVE.
 - 2.4.2. BOLTED CONNECTIONS SHALL INCLUDE A 3-INCH GALVANIZED WASHER.
 - 2.4.3. BOLTED CONNECTIONS SHALL INCLUDE HOT-DIPPED GALVANIZED NUTS.
 - 2.5. NAILS SHALL BE 12" GALVANIZED STEEL SPIKE NAILS.
 - 2.6. WILLOW BRANCHES: LIVE BRANCHES DESIGNATED FOR WILLOW BRANCHES SHALL BE SIX (6') LONG (MIN) AND ONE (1") TO TWO INCHES (2") IN DIAMETER. THE STAKES SHALL BE STRIPPED OF LEAVES AND IMMEDIATELY STORED IN BUCKETS FILLED WITH NON-CHLORINATED WATER. THE STAKES SHALL BE STORED WITH THE BUDS ORIENTED UP AND THE ROOTING-END SUBMERGED IN WATER.

- 2.7. EROSION CONTROL BLANKET (ECB): NORTH AMERICAN GREEN SC150 BN OR EQUIVALENT PRODUCT APPROVED BY THE ENGINEER'S REPRESENTATIVE THAT IS BIODEGRADABLE, CAPABLE OF WITHSTANDING SHEAR STRESS OF 2.1 POUNDS/SQUARE FOOT AND DESIGNED FOR SLOPES OF 2:1 OR STEEPER. STAKES SHALL BE ECO-STAKES OR EQUIVALENT PRODUCT APPROVED BY THE ENGINEER'S REPRESENTATIVE THAT IS BIODEGRADABLE AND MANUFACTURED FROM A HARDWOOD.
3. EXECUTION
 - 3.1. LAY OUT THE WORK, ESTABLISH ALL NECESSARY MARKERS, BENCHMARKS, GRADING STAKES, AND OTHER STAKES AS REQUIRED. THE ENGINEER'S REPRESENTATIVE SHALL APPROVE THE STAKING FOR THE LOG CRIBWALL AND MAKE FIELD ADJUSTMENTS, IF NECESSARY.
 - 3.2. EXCAVATE TO THE SUBGRADE ACCORDING TO THE GRADES AND DIMENSIONS INDICATED ON THE DRAWINGS. MINIMIZE EXCAVATION DISTURBANCE FOR THE FOOTER BOULDERS BY DIGGING A TRENCH JUST LARGE ENOUGH TO ACCEPT THE BOULDERS. THE ENGINEER'S REPRESENTATIVE SHALL APPROVE THE SUBGRADE MATERIAL AS A SUITABLE BEDDING COURSE FOR THE 1.5-TON BOULDERS BEFORE ANY BOULDERS ARE INSTALLED. IF IN THE OPINION OF THE ENGINEER'S REPRESENTATIVE THE SUBGRADE MATERIAL IS NOT A SUITABLE BEDDING COURSE, INSTALL CBF AS SHOWN ON THE DRAWINGS AT NO EXTRA COST TO THE CLIENT.
 - 3.3. INSTALL THE 1.5-TON BOULDERS TO THE GRADES AND DIMENSIONS INDICATED ON THE DRAWINGS. PLACE THE 1.5-TON BOULDERS ONE-BY-ONE, CAREFULLY SELECTING EACH BOULDER FOR BEST FIT BASED ON SITE CONDITIONS, AND TO MAXIMIZE CONTACT AMONG ADJACENT BOULDERS. DUMPING SHALL NOT BE AN ALLOWABLE MEANS OF PLACEMENT. BACKFILL THE TRENCH FOR THE BOULDERS WITH CBF (OR RIVERBED MATERIAL GENERATED DURING TRENCHING IF APPROVED BY THE ENGINEER'S REPRESENTATIVE). THE ENGINEER'S REPRESENTATIVE SHALL APPROVE THE INSTALLATION OF THE 1.5-TON BOULDERS BEFORE PROCEEDING.
 - 3.4. THE CONTRACTOR SHALL INVOLVE THE ENGINEER'S REPRESENTATIVE DURING PLACEMENT OF THE FIRST SECTION OF JOIST AND STRINGER LOGS SUCH THAT SPECIFIC CONSTRUCTION METHODS AND TOLERANCES ARE AGREED UPON. NO FURTHER JOIST OR STRINGER LOGS SHALL BE CONSTRUCTED WITHOUT APPROVAL BY THE ENGINEER'S REPRESENTATIVE OF THE FIRST SECTION.
 - 3.5. LOGS SHALL BE PLACED ON TOP OF THE SUBGRADE AND CRIBWALL FILL BY MECHANICAL MEANS OR HAND PLACEMENT. DUMPING SHALL NOT BE AN ALLOWABLE PLACEMENT METHOD. EACH LOG SHALL MAKE FIRM CONTACT WITH ADJACENT BOULDERS OR LOGS AS SHOWN IN THE DRAWINGS.
 - 3.6. EACH LOG SHALL BE BOLTED TO ALL ADJACENT LOGS AT ALL CONTACT POINTS BETWEEN THE LOGS AS INDICATED ON THE DRAWINGS.
 - 3.7. BACKFILL THE CRIBWALL WITH APPROXIMATELY EQUAL AMOUNTS (BY VOLUME) OF 1/2-TON BOULDERS AND CBF. BACKFILLING SHALL BE DONE BY PLACING ONE COURSE OF 1/2-TON BOULDERS TO FILL AS MUCH OF THE CRIBWALL AS POSSIBLE. PLACE THE BOULDERS CAREFULLY TO AVOID DAMAGING LOG MEMBERS OF THE CRIBWALL. IF IN THE OPINION OF THE ENGINEER'S REPRESENTATIVE LOG MEMBERS OF THE CRIBWALL ARE DAMAGED DURING BACKFILLING, THOSE LOG MEMBERS SHALL BE REPLACED PRIOR TO PROCEEDING AND AT NO ADDITIONAL COST TO THE CLIENT. POUR CBF OVER THE FIRST COURSE OF 1/2-TON BOULDERS TO FILL INTERSTITIAL SPACES. TAMP AND/OR STIR THE BOULDER-CBF MIXTURE TO ENCOURAGE CBF TO PACK AROUND ALL SIDES OF THE BOULDERS. INSTALL ADDITIONAL LIFTS OF BACKFILL AS DESCRIBED ABOVE UNTIL THE TOP ELEVATION OF THE CRIBWALL IS REACHED.
 - 3.8. INSTALL COURSES OF WILLOW BRANCHES CONCURRENT WITH THE RESPECTIVE COURSES OF LOGS (BOTTOM, MIDDLE, AND TOP) AND BACKFILL. THE CUT ENDS OF THE WILLOW BRANCHES SHALL BE INSTALLED AS DEEP AS PRACTICABLE; THE ELEVATION OF THE EXISTING THALWEG IS AN IDEAL MINIMUM TARGET ELEVATION FOR THE CUT ENDS OF THE WILLOW BRANCHES.
 - 3.9. ONCE ALL LOGS ARE IN PLACE, INSTALL THE 1-TON BOULDERS BY THE SAME MEANS AND METHODS AS DESCRIBED FOR THE 1.5-TON BOULDERS, AND TO THE GRADES AND DIMENSIONS SHOWN ON THE DRAWINGS.
 - 3.10. PERFORM FINISH GRADING AS SHOWN ON THE DRAWINGS AND AS DESCRIBED IN THE EARTHWORK NOTES. MATERIAL EXCAVATED FROM THE UPPER BANK (AND STOCKPILED SEPARATELY FROM THE RIVERBED MATERIAL) SHALL BE USED FOR GRADING THE UPPER PORTION OF THE BANK.
 - 3.11. INSTALL ECB AND STAKES PER THE MANUFACTURER'S INSTRUCTIONS.
 - 3.12. INSTALL WILLOW POLES AND RESEED AS SHOWN ON THE DRAWINGS.

RIGHT BANK STABILIZATION NOTES:

1. DEFINITIONS
 - 1.1. BANK LOG: LOGS WITH ROOTWADS ORIENTED NEAR-PERPENDICULAR TO THE DIRECTION OF FLOW. BANK LOGS REST ON TOP OF FOOTER LOGS.
 - 1.2. FOOTER LOG: MOSTLY BURIED LOGS WITH ROOTWADS ORIENTED NEAR-PARALLEL TO THE DIRECTION OF FLOW.
2. MATERIALS
 - 2.1. LOGS
 - 2.1.1. BANK LOGS AND FOOTER LOGS SHALL BE AS DESCRIBED IN THE LOG CRIBWALL NOTES AND SHALL COMPLY WITH THE FOLLOWING:
 - 2.1.1.1. LOGS SHALL BE 18' LONG (AS MEASURED FROM THE ROOTWAD BOLE TO THE CUT END) AND 18" AVERAGE DIAMETER.
 - 2.1.1.2. LOGS SHALL HAVE THEIR ROOTWAD ATTACHED.
 - 2.1.2. BOULDERS SHALL BE AS DESCRIBED IN THE LOG CRIBWALL NOTES. ALL BOULDERS FOR THE RIGHT BANK STABILIZATION SHALL BE 1.5 TONS.

- 2.3. LOG ANCHORS SHALL BE FORESIGHT DUCKBILL ANCHOR 138-DBD OR AN EQUIVALENT ANCHOR PROVIDING NO LESS THAN 5,000 LBS HOLDING FORCE IN NORMAL SOIL. CABLE TO ATTACH THE ANCHOR TO THE LOG SHALL BE FLEXIBLE WIRE ROPE HAVING A MINIMUM DIAMETER OF 7/16 INCHES AND A MINIMUM BREAKING STRENGTH OF 9,800 POUNDS.
- 2.4. EROSION CONTROL BLANKET (ECB) SHALL BE AS DESCRIBED IN THE LOG CRIBWALL NOTES.
3. EXECUTION
 - 3.1. LAY OUT THE WORK, ESTABLISH ALL NECESSARY MARKERS, BENCHMARKS, GRADING STAKES, AND OTHER STAKES AS REQUIRED.
 - 3.2. EXCAVATE TO THE SUBGRADE ACCORDING TO THE GRADES AND DIMENSIONS INDICATED ON THE DRAWINGS. MINIMIZE EXCAVATION DISTURBANCE FOR THE FOOTER BOULDERS AND LOGS BY DIGGING A TRENCH JUST LARGE ENOUGH TO ACCEPT THE MATERIALS.
 - 3.3. INSTALL THE BOULDERS TO THE GRADES AND DIMENSIONS INDICATED ON THE DRAWINGS. PLACE THE BOULDERS ONE-BY-ONE, CAREFULLY SELECTING EACH BOULDER FOR BEST FIT BASED ON SITE CONDITIONS, AND TO MAXIMIZE CONTACT AMONG ADJACENT BOULDERS. DUMPING SHALL NOT BE AN ALLOWABLE MEANS OF PLACEMENT. BACKFILL THE TRENCH FOR THE BOULDERS WITH CBF.
 - 3.4. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER'S REPRESENTATIVE TO ASSURE THAT THEY ARE AVAILABLE DURING PLACEMENT OF THE FIRST SECTION OF FOOTER AND BANK LOGS SUCH THAT SPECIFIC CONSTRUCTION METHODS AND TOLERANCES ARE AGREED UPON. NO FURTHER FOOTER OR BANK LOGS SHALL BE CONSTRUCTED WITHOUT APPROVAL BY THE ENGINEER'S REPRESENTATIVE OF THE FIRST SECTION.
 - 3.5. SECURE THE ROOTWAD ENDS OF BANK LOGS WITH LOG ANCHORS USING 7/16-INCH CABLE LOOPED THROUGH 1/2-INCH HOLES (MINIMUM) DRILLED THROUGH THE CENTER OF EACH LOG. HOLES SHALL BE DRILLED AND LOGS SHALL BE PLACED SUCH THAT THE CABLES AND ANCHORS ARE NOT VISIBLE WHEN FINISH GRADING IS COMPLETE.
 - 3.6. SECURE THE CUT ENDS OF BANK LOGS WITH BOULDERS AS SHOWN IN THE DRAWINGS.
 - 3.7. PERFORM FINISH GRADING AS SHOWN ON THE DRAWINGS AND AS DESCRIBED IN THE EARTHWORK NOTES. MATERIAL EXCAVATED FROM THE UPPER BANK (AND STOCKPILED SEPARATELY FROM THE RIVERBED MATERIAL) SHALL BE USED FOR GRADING THE UPPER PORTION OF THE BANK. RIVERBED MATERIAL SHALL BE USED TO EXTEND THE EXISTING BAR; BLEND THE GRADING OF THE EXTENDED BAR WITH THE EXISTING BAR.
 - 3.8. INSTALL ECB AND STAKES PER THE MANUFACTURER'S INSTRUCTIONS.
 - 3.9. INSTALL WILLOW POLES AND RESEED AS SHOWN ON THE DRAWINGS.



DESIGNED BY	BY	DATE	SUBMITTALS / REVISIONS
P. KULCHAWIK		20170706	DRAFT DESIGN
DRAWN BY		20170718	FINAL DESIGN
P. KULCHAWIK		20180302	FINAL DESIGN (REVISED)
CHECKED BY			
E. BALLMAN			
IN CHARGE			
P. KULCHAWIK			
DATE		20180302	



BANK STABILIZATION NOTES
 CARMEL RIVER BANK STABILIZATION
 AT RANCHO SAN CARLOS ROAD
 MONTEREY COUNTY, CALIFORNIA
 MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

PROJECT NUMBER	217107
SCALE	-
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