

**CONTRACT DOCUMENTS  
& SPECIAL PROVISIONS**

for

**TREASURE ISLAND MAIN REPLACEMENTS**

**APTOS, CA**

**CWO 03-117**

TO BE USED IN CONJUNCTION WITH  
SCWD STANDARD SPECIFICATIONS AND STANDARD PLANS  
DATED AUGUST 2, 1994.



October 2003

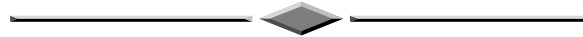
SOQUEL CREEK WATER DISTRICT  
5180 Soquel Drive, Soquel CA 95073

**BID OPENING: October 28, 2003 at 2:00 PM**

# SOQUEL CREEK WATER DISTRICT SANTA CRUZ COUNTY, CALIFORNIA

## BOARD OF DIRECTORS

|                  |                |
|------------------|----------------|
| Daniel F. Kriege | President      |
| John W. Beebe    | Vice President |
| Bruce Daniels    | Director       |
| Dr. Bruce Jaffe  | Director       |
| Dr. Thomas LaHue | Director       |



|  |  |
|--|--|
| Laura D. Brown   | General Manager                        |
| Robert E. Bosso  | District Counsel                       |
| Bosso, Williams,<br>Sachs, Atack, and Gallagher,<br>A Professional Corporation |  |
| Jeffery N. Gailey  | Engineering Manager/<br>Chief Engineer |
| Denise Alexander   | Board Clerk                            |

These contract documents and specifications were approved and adopted by the Soquel Creek Water District, Santa Cruz County, California by Resolution on October 7, 2003.

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## **Special Provisions**

*Division One through Four for these contract documents are located in the Soquel Creek Water District Standard Specifications and Standard Plans, adopted by the Board of Directors on August 2, 1994.*

*SCWD Standard Specifications and Standard Plans are available for purchase at the SCWD Office for an additional \$25 per set. (For more information, please call 831-475-8500.)*

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## **DIVISION FIVE-SPECIAL PROVISIONS**

**Division Five contains the Special Provisions and conditions that relate to this project. The sections relating to Special Provisions and their page locations in this contract document are listed in the "Special Provisions Table of Contents."**

**PUBLIC NOTICE  
SOQUEL CREEK WATER DISTRICT  
SANTA CRUZ COUNTY, CALIFORNIA**

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**NOTICE INVITING SEALED PROPOSALS  
TREASURE ISLAND MAIN REPLACEMENTS  
APTOS, CALIFORNIA  
CWO 03-117**

NOTICE IS HEREBY GIVEN that sealed Bids will be publicly opened, examined, and announced by the Soquel Creek Water District, Santa Cruz County, California, on October 28, 2003 at the hour of 2:00 PM and reported at the next regular District Board Meeting.

Bids may be delivered or mailed to the Secretary of the Board, 5180 Soquel Drive, Post Office Box 158, Soquel, CA 95073.

Bids shall be made in accordance with the prevailing hourly rate of per diem wages for this locality and project as determined by the Director of Industrial Relations pursuant to Labor Code §1770 et seq., a copy of which is on file at the District Office, 5180 Soquel Drive. Labor Code §1770 et seq. is made a part of this Notice by reference as though fully set forth herein.

The work will consist of installing 2,770 LF  $\pm$  of 6-inch PVC C900 Class 200 water main, 74 service replacements, 5 new James Jones J-3740 hydrant installations, 6 tie-ins to existing pipelines, and 12,000 SF of type II slurry seal.

Work will be done and progress payments made in cash in accordance with the plans and specifications approved by the Board of Directors on October 7, 2003 and the Standard Specifications and Standard Plans adopted by the Board of Directors August 2, 1994.

The Board of Directors reserves the privilege of rejecting any and all bids or to waive any irregularities or informalities in any bid, or in the bidding process.

No bidder may withdraw his bid for a period of thirty (30) days after bids are opened, within which time an award will be made.

Bids shall be submitted in sealed envelopes clearly marked on the outside,  
**“BID TO CONSTRUCT TREASURE ISLAND MAIN REPLACEMENTS  
BID OPENING: OCTOBER 28, 2003 @ 2:00 PM”**

**THE BID DOCUMENTS ARE NOT TO BE REMOVED FROM THE BOUND SPECIFICATIONS.**

Plans and Specifications may be obtained at the Office of the Soquel Creek Water District, 5180 Soquel Drive, P.O. Box 158, Soquel, CA 95073 upon deposit of \$25.00 per set, **NON-REFUNDABLE.**

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Dated: October 7, 2003

Jeffery N. Gailey  
Engineering Manager/Chief Engineer

**REVISED PROPOSAL  
TREASURE ISLAND MAIN REPLACEMENTS  
CWO 03-117**



**Bid Date: October 28, 2003 @ 2:00 PM**

**SOQUEL CREEK WATER DISTRICT**

All of the proposal items below shall include all labor, materials, tools, equipment, and incidental costs for each item complete, in place, in accordance with the Standard Specifications and Standard Plans, and for the Project Special Provisions and Project Plans.

| Item No. | Description | Quantity | Unit | Unit Cost<br>(In Figures) | Total Amount<br>(In Figures) |
|----------|-------------|----------|------|---------------------------|------------------------------|
|----------|-------------|----------|------|---------------------------|------------------------------|

**PIPE CONSTRUCTION**

|   |  |       |    |  |  |
|---|--|-------|----|--|--|
| 1 | <b>Install 6" C900 PVC Class 200 Pipeline and all related gate valves and fittings on Creek Dr. (from Glen Dr. to end), Glen Dr. (from Creek Dr. to Creek Dr.), Forest Dr. (from Spreckles Dr. to end), Claus Ct. (from Spreckles Dr. to end), Spreckles Dr. from Claus Ct. to Treasure Island Ave.), and Treasure Island Ave. (from Aptos Beach Drive to end)</b> | 2,860 | LF |  |  |
| 2 | <b>Install 2" Permanent Blow-off Assembly</b>  | 4     | EA |  |  |
| 3 | <b>Installation of Chlorination Tap</b>  | 2     | EA |  |  |

**WATER SERVICE INSTALLATIONS**

|   |   |    |    |  |  |
|---|---|----|----|--|--|
| 4 | <b>Replace 1" Domestic Service</b>                    | 65 | EA |  |  |
| 5 | <b>Reconnect 1" Domestic Service</b>                  | 3  | EA |  |  |
| 6 | <b>Install 1" Air &amp; Vacuum Release Valve</b>      | 3  | EA |  |  |
| 7 | <b>Reconnect 2" Combination Domestic/Fire Service</b> | 3  | EA |  |  |

**FIRE HYDRANT INSTALLATIONS**

|   |  |   |    |  |  |
|---|--|---|----|--|--|
| 8 | <b>Installation of James Jones J-3740 6-inch Steamer Fire Hydrant and all appurtenances.</b> | 5 | EA |  |  |
|---|--|---|----|--|--|

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**REVISED PROPOSAL  
TREASURE ISLAND MAIN REPLACEMENTS  
CWO 03-117**



**Bid Date: October 28, 2003 @ 2:00 PM**

**SOQUEL CREEK WATER DISTRICT**

All of the proposal items below shall include all labor, materials, tools, equipment, and incidental costs for each item complete, in place, in accordance with the Standard Specifications and Standard Plans, and for the Project Special Provisions and Project Plans.

| Item No. | Description | Quantity | Unit | Unit Cost (In Figures) | Total Amount (In Figures) |
|----------|-------------|----------|------|------------------------|---------------------------|
|----------|-------------|----------|------|------------------------|---------------------------|

**TIE-INS TO EXISTING WATER MAINS**

|    |  |   |    |  |  |
|----|--|---|----|--|--|
| 9  | Tie-In at Creek Dr. and Glen Dr.                   | 1 | EA |  |  |
| 10 | Tie-In at Glen Dr. and Creek Dr.                   | 1 | EA |  |  |
| 11 | Tie-In at Forest Dr. and Spreckles Dr.             | 1 | EA |  |  |
| 12 | Tie-In at Spreckles Dr. and Treasure Island Ave.   | 1 | EA |  |  |
| 13 | Tie-In at Treasure Island Ave. and Aptos Beach Dr. | 2 | EA |  |  |
| 14 | Tie-In at Spreckles Dr. (east of Claus Ct.)        | 1 | EA |  |  |

**SLURRY SEAL REQUIREMENT**

|    |  |        |    |  |  |
|----|--|--------|----|--|--|
| 15 | Application of road width Type II Slurry Seal per Cal-Trans Standard Specification 37-2. | 13,650 | SF |  |  |
|----|--|--------|----|--|--|

**PROJECT TOTAL \$** \_\_\_\_\_  
For Comparison Only

**Submitted By:**

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Address

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Phone Number

Number of Addendums Attached to Proposal: \_\_\_\_\_

The undersigned has examined the location of the proposed work and is familiar with the plans, specifications and the conditions existing at the site of the work and its environs.

The undersigned has checked carefully all the above figures and understands that the District will not be responsible for any errors or omissions on the part of the undersigned in preparing this proposal.

The undersigned understands that the quantities as set forth under the foregoing units are approximate only and are for the purpose of comparing bids and fixing the amounts of bonds and agrees that these quantities may be increased or decreased, or the relative amounts of the various items varied without claim for damage or loss of anticipated profit, and the payment will only be made on the basis of the actual quantities of work performed.

The undersigned understands that the District reserves the right to reject any and all bids and to waive any informality in bids received and may at its option make the award that in the judgment of the district is to the best interest of the District.

It is agreed that this proposal may not be withdrawn within a period of thirty (30) days after the date set for the opening thereof.

Enclosed herewith is a Certificate of Fair Employment Practices, a Certificate of Security for Compensation and a (bidder's bond, certified check, cashier's check) for an amount equal to ten percent (10%) of the amount bid (\$\_\_\_\_\_

\_\_\_\_\_ dollars being not less than ten percent (10%) of the total amount of this proposal. The undersigned agrees that, in case he defaults in executing and/or furnishing the necessary bonds after award and due notice thereof, the said check or bond and the money payable thereon shall become and remain the property of the District as liquidated damages, because the actual damages in such events are difficult and impracticable to fix.

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 commended within ten (10) days after execution of the contract by the District and the effective date of the Notice to Proceed issued by the District and shall be completed on or before the expiration of **fifty five (55) working-days** after said notifications as provided for in the contract documents.

The undersigned agrees, if awarded the contract, that there shall be paid by the undersigned and by all subcontractors under him, to all laborers, workers 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 ascertained and determined pursuant to the State Statute thereto applicable, by the District the schedule thereof being set forth in the specifications for said work.

Name under which business is conducted \_\_\_\_\_

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

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

If SOLE OWNER, sign below:

I sign as sole owner of the business named above.

If PARTNERSHIP, sign below:

The undersigned certify that we are partners in the business named above and that we sign this contract proposal with full authority so to do. (One or more partners sign.)

If CORPORATION, execute below:

The undersigned certify that they sign this contract proposal with full and proper authorization so to do:

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

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

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

Incorporated under the laws of the State of \_\_\_\_\_

Attachments(3): Fair Employment Practices Certificates, security for Compensation Certificate, Bidder's Statement of Subcontractors, (Bidder's Bond, Cashier's Check or Certified Check).

Date: \_\_\_\_\_ Contractor's License No.: \_\_\_\_\_

## **SPECIAL PROVISIONS AND NOTICE – FAIR EMPLOYMENT PRACTICES**

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

- (1) The Contractor will not willfully discriminate against any employee or applicant for employment because of race, color, religion, ancestry or national origin. The Contractor will take affirmative action to ensure the applicants are employed and that employees are treated during employment, without regard to their race, color religion, ancestry, national origin, physical disability, mental disability, medical condition, marital status, or sex. Such action shall include, but not limited to, the following employment, upgrading, demotion or transfer; 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 to be provided by awarding authority setting forth the provisions of this Fair Employment Practices section.
- (2) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the awarding authority, advising the said labor union or workers' representative of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (3) The Contractor will permit access to his records of employment, employment advertisements, application forms and other pertinent data and records by the Fair Employment and Housing Commission, the awarding authority or any other appropriate agency of the State of California designated by the awarding authority, for purposes of investigation to ascertain compliance with the Fair Employment Practices section of this contract.
- (4) 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 contracts for which such Contractor may submit bids, for revoking the Contractor's pre-qualification rating, if any, and for refusing to establish, reestablish, or renew pre-qualification 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 and Housing Commission that it has investigated and determined that the Contractor has violated the Fair Employment Practices Act and has issued an order under Government Code §12970 or obtained a judicial order under Government Code §12973.

Upon receipt of such written notice from the Fair Employment and Housing 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 pre-qualification rating will be revoked at the expiration of such period.

- (5) 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 day, or portion thereof, for each person who was denied employment as a result of non-compliance, the penalties provided in the Labor Code for violation of prevailing wage rates. Such monies may be recovered from the Contractor. The awarding authority may deduct any such damage from any monies due the Contractor.
  - a. Nothing contained in this Fair Employment Practices section shall be construed in any manner or fashion so as to prevent the awarding authority of the State of California from pursuing any other remedies that may be available at law.
  
- (6) Prior to award of 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:
  - a. 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.
  - b. The Contractor shall provide evidence, as required by the awarding authority, that he has notified all sources of employee referrals (including unions, employment agencies, advertisements, Department of Employment) of the content of this anti-discrimination clause.
  - c. 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 workforce and who has the responsibility for determining whom to hire and whether to hire.
  - d. Personally, or through his representative, the Contractor shall, through negotiations with the unions with whom he has agreements, attempt to develop an agreement which will:
    - 1. Spell out responsibilities for non-discrimination in hiring, referral, upgrading and training.
    - 2. 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 will be available and given equal opportunity for employment.

- e. The Contractor shall notify the contracting agency of opposition to the anti-discrimination clause by individuals, firms, or organizations during the period of its pre-qualification.
8. The Contractor will include the provisions of the foregoing Paragraphs 1-7 in every first tier subcontract, so that such provisions will be binding each subcontractor.

# FAIR EMPLOYMENT PRACTICES CERTIFICATION

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

\_\_\_\_\_

The undersigned in submitting a bid for performing the following work by contract, hereby certifies that he has or will meet the standards of affirmative compliance with the Fair Employment Practices requirements of the Special Provisions contained herein.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*(Fill in description of contract)*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

*(Signature of Bidder(s))*

\_\_\_\_\_

Business Address

\_\_\_\_\_

Residence Address

***(This certification must be executed by the successful bidder  
prior to the award of contract.  
The bidder shall execute the certification on the page  
at the time of submitting this bid.)***

## **BIDDER'S STATEMENT OF SUBCONTRACTORS**

The undersigned submits herewith a list of subcontractors whom he proposes to employ on the work, with the proper firm name and business address of each, together with a statement of the portion of the work to be done by each.

| <u><b>NAME OF SUBCONTRACTOR</b></u> | <u><b>ADDRESS</b></u> | <u><b>PORTION OF WORK</b></u> |
|-------------------------------------|-----------------------|-------------------------------|
| 1. _____                            | _____                 | _____                         |
| 2. _____                            | _____                 | _____                         |
| 3. _____                            | _____                 | _____                         |
| 4. _____                            | _____                 | _____                         |
| 5. _____                            | _____                 | _____                         |
| 6. _____                            | _____                 | _____                         |

If none proposed, please check here: \_\_\_\_\_

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

## SECURITY FOR COMPENSATION CERTIFICATE

To: \_\_\_\_\_  
\_\_\_\_\_

I am aware of the provisions of Section 3700 of the Labor Code of the State of California which requires 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.

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

Business Address:

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

Residence Address:

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

***(This certification must be executed by the successful bidder  
prior to the award of contract.  
The bidder shall execute the certification on the page at  
the time of submitting his bid)***

## CONTRACT

**THIS AGREEMENT**, made and entered into this \_\_\_\_\_ day of \_\_\_\_\_ 2003, by and between \_\_\_\_\_ hereinafter called "Contractor", and the **Soquel Creek Water District**, hereinafter called "District".

### WITNESSETH:

**WHEREAS**, the District has awarded a contract to Contractor for performing the work hereinafter mentioned in accordance with the sealed proposal of said Contractor.

### NOW THEREFORE, IT IS AGREED AS FOLLOWS:

1. **SCOPE OF WORK:** The Contractor shall perform all the work, and furnish all the labor, materials, equipment and all utility and transportation services required to complete all of the work of construction and installation of the improvements more particularly described in the plans and specifications entitled, "**Treasure Island Main Replacements**", and adopted by the district on October 7, 2003, items and quantities of which are more particularly set forth in the Contractor's bid therefore on file in the Office of the District.
2. **TIME OF PERFORMANCE:** After the contract has been executed by the District, the Contractor shall begin work within ten (10) calendar days after receiving from the District written notice to proceed, and shall diligently prosecute the same to completion before the expiration of **55 working-days** from the day of said notification, except as provided in the Standard Specifications and Special Provisions.
3. **CONTRACT PRICE:** Contractor shall perform the work for the sum of \$ \_\_\_\_\_ payable by the District to Contractor at the time and in the manner provided in the Specifications and at the unit prices stated in Contractor's bid.
4. **COMPONENT PARTS.** This contract shall consist of the following documents, each of which is on file in the Office of the District and all of which are incorporated herein and made a part hereof by reference thereto.
  - a) This Agreement
  - b) Notice Inviting Sealed Proposals
  - c) Accepted Proposal
  - d) Standard Specifications and Standard Plans
  - e) Special Provisions
  - f) Technical Specifications
  - g) Faithful Performance Bond
  - h) Payment Bond
  - i) Plans, Profiles and Detailed Drawings
  - j) Resolution of Intention and Related Procedures
  - k) Special Provisions-Fair Employment Practices
  - l) Certificate of Fair Employment Practice
  - m) Certificate of Security for Compensation
  - n) Bidder's Statement of Subcontractors

5. **WAGE SCALE:** Reference is hereby made to the rate of prevailing scale established by the District and contained in the Standard Specifications, the provisions of which are hereby specified as the rate of prevailing wage to be paid workers on this project. The Contractor also agrees to comply with the requirements of Section 1777.5, Chapter 1 of Division 2 of the California Labor Code with respect to Apprenticeship Standards.
6. **HOURS OF LABOR:** The Contractor shall forfeit, as penalty to the District, Fifty Dollars (\$50.00) for each worker employed in execution of the contract by him or by any subcontractor for each day during which any worker is required or permitted to labor more than eight (8) hours in any one (1) day and forty (40) hours in any one (1) week in violation of the provisions of §1811 of the Labor Code of the State of California and all amendments thereto.
7. **SECURITY FOR PAYMENT OF COMPENSATION:** The Contractor shall 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 and all amendments thereto. (Required by Labor Code Sections 1860-61).

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

\_\_\_\_\_

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

By: \_\_\_\_\_  
Soquel Creek Water District

Countersigned: \_\_\_\_\_

## BOND OF FAITHFUL PERFORMANCE

**KNOW ALL MEN BY THESE PRESENTS:** that **WHEREAS Soquel Creek Water District; State** of California, hereinafter designated as District, by Resolution Number \_\_\_\_\_ passed on \_\_\_\_\_, has awarded to \_\_\_\_\_, hereinafter designated as the "Principal" a contract for the **Treasure Island Main Replacements Project**; and;

**WHEREAS**, said- Principal is required under the terms of said contract and the specifications therefore to furnish a bond of faithful performance of said contract.

**NOW, THEREFORE**, we, the Principal, and \_\_\_\_\_ as Surety, are held and firmly bound unto the said District, in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_) lawful money of the United States, being a sum equal to the total amount payable by the terms of said contract, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH THAT** if the above bounded Principal, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by and well and truly keep and perform the covenants, conditions and agreements in the said contract and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and virtue.

As a condition precedent to satisfactory completion of the said contract, the above obligation to the amount of \_\_\_\_\_ Dollars (\$\_\_\_\_) being not less than ten percent (10%) of the estimated contract cost, shall hold good for a period of two (2) years after the completion and acceptance of said work, during which time if the above bounden principal, his or its heirs, executors, administrators, successors, or assigns shall fail to make full, complete and satisfactory repair and replacement or totally protect the District from loss of damage made evident during said period of two years from the date of acceptance of said works, and resulting from or caused by defective materials or faulty workmanship in the prosecution of the work done, the above obligations in the said sum of \_\_\_\_\_ Dollars (\$\_\_\_\_), shall remain in full force and virtue; otherwise the above obligation shall be void.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

In the event that the said District, or its successors or assigns, shall be the prevailing party in an action brought upon this bond, then, in addition to the penal sum herein above specified, we agree to pay to said District, or its successors or assigns, a reasonable sum on account of attorney's fees in such action, which sum shall be fixed by the court.

**IN WITNESS WHEREOF**, the above bounden parties have executed this instrument under their seals this \_\_\_\_ day of \_\_\_\_\_, 2003, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by this undersigned representative, pursuant to authority of its governing body.

**NOTE:** To be signed by Principal and Surety and acknowledgment and notarial seal attached.  
The above bond is accepted and approved this \_\_\_\_ day of \_\_\_\_\_, 2003.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Principal

By: \_\_\_\_\_  
Attorney for the District

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

## PAYMENT BOND

**KNOW ALL MEN BY THESE PRESENTS:** that WHEREAS, the **Soquel Creek Water District**, State of California, hereinafter designated as District, by Resolution Number \_\_\_\_\_ to be passed on \_\_\_\_\_, has been awarded to \_\_\_\_\_, hereinafter designated as "Principal" a contract for **Treasure Island Main Replacement**, and;

**WHEREAS**, said Principal is required to furnish a bond in connection with said contract, providing that if said Principal, or any of his or its contractors, shall fail to pay for any materials, provision, provender, or other supplies or teams used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, the Surety of this bond will pay the same to the extent hereinafter set forth.

**NOW, THEREFORE**, we, the Principal and \_\_\_\_\_ as surety, are held and firmly bound unto the District in the penal sum of \_\_\_\_\_ Dollars (\$) lawful money of the United States not less than 100 percent of the estimated contract cost of the work, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH** that if said principal, his or its heirs, executors or administrators, successors or assigns, shall fail to pay for any materials, provisions, provender, or other supplies or teams used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind or for amounts due under the Unemployment Insurance Code with respect to such work or labor, then said Surety will pay the same in or to an amount not exceeding the amount hereinabove set forth, and also will pay in case suit is brought upon this bond a reasonable attorney's fee in such suit, which fee shall be fixed by the Court.

### **AS FURTHER TERMS OF THIS BOND, IT IS UNDERSTOOD AS FOLLOWS:**

- (1) This bond and all of its provisions shall inure to the benefit of any and all persons entitled to file claims under California Civil Code §3129 so as to give a right of action to such persons or their assigns in any suit brought upon this bond.
- (2) This bond is given to comply with the provisions of California Public Contract Code Div. 2 Part 1 Ch. 4 (§4100 et seq.). This liability of the principal and surety hereunder is governed by the provisions of said Chapter, all acts amendatory thereof, and all other statutes referred to therein.

And the said Surety, for value received, hereby stipulates and agrees that no charge, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specification.

**IN WITNESS WHEREOF**, the above bounded parties have executed this instrument under their seals this \_\_\_\_\_ day of \_\_\_\_\_ 2003, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

**NOTE:** To be signed by Principal and Surety and acknowledgment and notarial seal attached.

(SEAL)

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

\_\_\_\_\_

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

The above bond is accepted and approved this \_\_\_\_\_ day of \_\_\_\_\_, 2003.

By: \_\_\_\_\_  
Attorney for the District

DIVISION FIVE  
SPECIAL PROVISIONS & TECHNICAL SPECIFICATIONS  
FOR  
TREASURE ISLAND MAIN REPLACEMENTS  
PROJECT

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## SECTION 500. DESCRIPTION OF WORK

The Contractor shall furnish, in accordance with the Soquel Creek Water District (SCWD) Standard Specifications and Standard Plans, these Special Provisions, and the Contract Documents, all labor, materials, tools, and equipment and perform all work required in:

- Installation of two thousand seven hundred seventy (2,770)  $\pm$  lineal feet (LF) of 6-inch PVC C900 Class 200 water main on Creek Dr. from Glen Dr. to the end of Creek Dr., Glen Dr. from Creek Dr. to Creek Dr., Forest Dr., from Spreckles Dr. to the end of Forest Dr., Spreckles Dr. from Treasure Island Ave. to Claus Ct., Claus Ct from Spreckles Dr. to the end of Claus Ct., and Treasure Island Ave, from Aptos Beach Dr. to the end of Treasure Island Ave.
- Replacement of sixty five (65) existing standard water services.
- Reconnection of three (3) existing standard water services.
- Installation of three (3) 1" air & vacuum release valves.
- Reconnection of three (3) existing 2-inch combination domestic water and fire services from the abandoned main to the new water main.
- Installation of five (5) 6-inch James Jones 3740 Steamer Fire Hydrants and all related valves and appurtenances.
- Tie-in to existing 6-inch AC water main at the intersection of Creek Dr. and Glen Dr. (South end)
- Tie-in to existing 6-inch AC water main at the intersection of Creek Dr. and Glen Dr. (North end)
- Tie-in to existing 6-inch AC water main at the intersection of Forest Dr. and Spreckles Dr.
- Tie-in to existing 8-inch AC water main at the intersection of Spreckles Dr. and Treasure Island Ave.
- Tie-in to existing 8-inch AC water main at the intersection of Treasure Island Ave. and Aptos Beach Dr.
- Tie-in to existing 4-inch AC water main at the intersection of Treasure Island Ave. and Aptos Beach Dr.
- Installation of four (4) Chlorination Taps.
- Application of twelve thousand (12,000)  $\pm$  square feet (SF) road width Type II Slurry Seal per Cal-Trans Standard Specifications, Section 37-2.
- All other incidental work.

The work site is located in Aptos, Santa Cruz County, CA.

## **SECTION 501. SPECIFICATIONS & PLANS**

The Contractor shall perform the work specified herein in accordance with the SCWD Standard Specifications and Standard Plans adopted by the Board of Directors on August 2, 1994, Standard Specifications and Standard Plans of the California Department of Transportation and Standard Specifications & Standard Plans of the County of Santa Cruz, California.

SCWD Standard Specifications and Standard Plans are available for purchase at the SCWD Office for an additional \$25 per set. (For more information, please call 831-475-8500.)

In case of conflict between the SCWD Standard Specifications and Standard Plans and these special provisions, the special provisions shall take precedence and be used in lieu of such conflicting portions.

## **SECTION 502. CHECKLIST FOR BIDDERS**

- Bid Opening is scheduled for October 28, 2003 at 2:00 PM in the SCWD Board Room, 5180 Soquel Drive, Soquel, CA 95073.
- **DO NOT REMOVE BID DOCUMENTS FROM THESE BOUND SPECIFICATIONS.** Unbound bid documents will result in immediate disqualification.
- **SIGN & INCLUDE ALL ADDENDUM(S) WITH THE BID DOCUMENTS.** Bid Documents with missing addendums will result in immediate disqualification.
- Include a bidder's bond, certified check, or cashier's check for the amount equal to 10% of the bid amount.
- Complete and Fill-Out the Yellow Sheets and Proposal in the Bid Documents. The lowest competitive bidder shall complete the green sheets after the project has been awarded.

If you have any questions, please contact the Engineering Department at 831-475-8500.

## **SECTION 503. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES**

It is estimated that a maximum of 30 days shall pass from the date

sealed bids are opened until the "Notice to Proceed" is issued.

The Contractor shall return the executed contract accompanied by bonds and insurance certificates following the award of the contract. The District shall issue a letter and Purchase Order authorizing the Contractor to begin construction. The Contractor shall begin work per the Start Date set on the "Notice to Proceed," unless the District has approved a time extension. The District may delay the start of work due to such factors as inclement weather, material availability, and other unforeseen factors.

**SECTION 503.1 CONTRACT TIME OF COMPLETION**

Contract Time of Completion shall be **55-working** days following the effective date of the Notice to Proceed.

The Contractor shall not perform work before 8:00 AM or after 5:00 PM each workday except for emergencies as defined in the SCWD Standard Specifications and Standard Plans. The Contractor shall not work on Saturdays, Sundays or holidays. For the purposes of this section the word "work" shall mean all noise producing activities including but not limited to starting of trucks or equipment, haulage, erection, construction, demolition, and transiting the access roads.

**SECTION 503.2 LIQUIDATED DAMAGES**

The District shall enforce Liquidated Damages per Section 108.09, "Assessment of Damages for Delay" of SCWD Standard Specifications if the Contractor fails to complete the in the time specified herewith.

| <b>SCHEDULE OF LIQUIDATED DAMAGES</b> |                            |  |
|---------------------------------------|----------------------------|--|
| <b>ORIGINAL AMOUNT OF CONTRACT</b>    |                            | <b>PER DIEM AMOUNT OF LIQUIDATED DAMAGES</b> |
| <b>FOR MORE THAN</b>                  | <b>UP TO AND INCLUDING</b> |  |
| \$0.00                                | \$100,000.00               | \$250.00                                     |
| \$100,000.00                          | \$500,000.00               | \$500.00                                     |
| \$500,000.00                          | \$1,000,000.00             | \$750.00                                     |
| \$1,000,000.00                        | \$2,000,000.00             | \$1,000.00                                   |
| OVER \$2,000,000.00                   |                            | AS SPECIFIED                                 |

The Contractor should refer to Division One, Sections 101-108, "General Conditions," of the SCWD Specifications for additional provisions.

**SECTION 503.3 PRECONSTRUCTION CONFERENCE**

The Contractor shall meet with the District at the District Office following award of contract, but prior to commencement of site work. The

Contractor shall furnish to the District at the preconstruction meeting the following items:

- A list of names, titles, addresses and telephone numbers of the Contractor's personnel related to the project. Emergency and after-hours telephone numbers are to be included.
- A construction schedule setting forth the sequence in which construction will proceed. The schedule shall be a time-scale critical path type. Refer to Section 106.06, "Schedule" of SCWD Standard Specifications.
- Material submittals (5 copies minimum) per Section 107.10, "Submittals" of SCWD Standard Specifications.
- A Traffic Control Plan per Section 203, "Traffic Control" of SCWD Standard Specifications and these Special Provisions.
- A general notice describing the construction project and the expected impact on nearby residences. The Contractor shall also outline the Contractors' willingness to minimize inconveniences to local residences. The Contractor shall deliver (not mail) the notice to local businesses and residents in the area 5 days prior to the Start of Construction. The Contractor shall include on the notice the Contractor's telephone number and the contact person's name. The Contractor shall submit the notice to the District for approval prior to distribution.

#### ***SECTION 503.4 PUBLIC MEETING***

The Contractor shall, if requested by the District, attend a public meeting prior to the start of construction. The time commitment for the public meeting shall be no more than 2 hours.

#### ***SECTION 503.5 INSURANCE REQUIREMENTS***

The Contractor shall provide and maintain the following commercial general liability and automobile liability insurance:

##### **Coverage**

Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:

1. Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 0001)
2. Insurance Services Office (ISO) Business Auto Coverage (Form CA 0001), covering Symbol 1 (any auto)

##### **Limits**

The Contractor shall maintain limits no less than the following:

1. General Liability - One million dollars (\$1,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit or products-completed operations aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided to the Soquel Creek Water District) or the general aggregate limit and products-completed operations aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability - One million dollars (\$1,000,000) for bodily injury and property damage each accident limit.

### **Required Provisions**

The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

1. The Soquel Creek Water District, its directors, officers, employees, and authorized volunteers are to be given insured status (via ISO endorsement CG 2010, CG 2033, or insurer's equivalent for general liability coverage) as respects: liability arising out of activities performed by or on behalf of the Contractors; products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; and automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Soquel Creek Water District, its directors, officers, employees, or authorized volunteers.
2. For any claims related to this project, the Contractor's insurance shall be primary insurance as respects the Soquel Creek Water District, its directors, officers, employees, or authorized volunteers. Any insurance, self-insurance, or other coverage maintained by the Soquel Creek Water District, its directors, officers, employees, or authorized volunteers shall not contribute to it.
3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the Soquel Creek Water District, its directors, officers, employees, or authorized volunteers.

4. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. Each insurance policy required by this agreement shall state, or be endorsed to state, that the insurance carrier or the Contractor shall not cancel coverage, except after thirty (30) days (10 days for non-payment of premium) prior written notice by U.S. mail has been given to the Soquel Creek Water District.

Such liability insurance shall indemnify the Contractor and his/her sub-contractors against loss from liability imposed by law upon, or assumed under contract by, the Contractor or his/her sub-contractors for damages on account of such bodily injury (including death), property damage, personal injury, completed operations, and products liability.

The general liability policy shall cover bodily injury and property damage liability, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, underground excavation, and removal of lateral support.

The automobile liability policy shall cover all owned, non-owned, and hired automobiles.

All of the insurance shall be provided on policy forms and through companies satisfactory to the Soquel Creek Water District.

#### **Deductibles and Self-Insured Retentions**

Any deductible or self-insured retention must be declared to and approved by the Soquel Creek Water District. At the option of the Soquel Creek Water District, the insurer shall either reduce or eliminate such deductibles or self-insured retentions.

#### **Acceptability of Insurers**

Insurance is to be placed with insurers having a current A.M. Best rating of no less than A:VII or equivalent or as otherwise approved by the Soquel Creek Water District.

#### **Workers' Compensation and Employer's Liability Insurance**

The Contractor and all sub-contractors shall insure (or be a qualified self-insured) under the applicable laws relating to workers' compensation insurance, all of their employees working on or about the construction site, in accordance with the "Workers' Compensation and Insurance Act", Division IV of the Labor Code of the State of California and any Acts amendatory thereof.

The Contractor shall provide employer's liability insurance with limits of no less than \$1,000,000 each accident, \$1,000,000 disease policy limit, and \$1,000,000 disease each employee.

### **Responsibility for Work**

Until the completion and final acceptance by the Soquel Creek Water District of all the work under and implied by this agreement, 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.

The Contractor shall provide and maintain builder's risk insurance (or installation floater) covering all risks of direct physical loss, damage or destruction to the work in the amount specified in the General Conditions, to insure against such losses until final acceptance of the work by the Soquel Creek Water District. Such insurance shall insure at least against the perils of fire and extended coverage, theft, vandalism and malicious mischief, and collapse. The Soquel Creek Water District, its directors, officers, employees, and authorized volunteers shall be named insured on any such policy. The making of progress payments to the Contractor shall not be construed as creating an insurable interest by or for the Soquel Creek Water District or be construed as relieving the Contractor or his/her subcontractors of responsibility for loss from any direct physical loss, damage or destruction occurring prior to final acceptance of the work by the Soquel Creek Water District.

The Contractor shall waive all rights of subrogation against the Soquel Creek Water District, its directors, officers, employees, or authorized volunteers.

### **Evidences of Insurance**

Prior to execution of the agreement, the Contractor shall file with the Soquel Creek Water District a certificate of insurance (Acord Form 25-S or equivalent) signed by the insurer's representative evidencing the coverage required by this agreement. Such evidence shall include an additional insured endorsement signed by the insurer's representative and evidence of waiver of rights of subrogation against the Soquel Creek Water District (if builder's risk insurance is applicable). Such evidence shall also include confirmation that coverage includes or has been modified to include Required Provisions 1-5.

The Contractor shall, upon demand of the Soquel Creek Water District, deliver to the Soquel Creek Water District such policy or policies of insurance and the receipts for payment of premiums thereon.

### **Continuation of Coverage**

If any of the required coverages expire during the term of this agreement, the Contractor shall deliver the renewal certificate(s) including the general liability additional insured endorsement and evidence of waiver of rights of

subrogation against the Soquel Creek Water District (if builder's risk insurance is applicable) to the Soquel Creek Water District at least ten (10) days prior to the expiration date.

### **Sub-Contractors**

In the event that the Contractor employs other contractors (sub-contractors) as part of the work covered by this agreement, it shall be the Contractor's responsibility to require and confirm that each sub-contractor meets the minimum insurance requirements specified above.

### ***SECTION 503.6 HOLD HARMLESS AND INDEMNIFICATION***

To the fullest extent permitted by law, Contractor shall indemnify and hold harmless and defend Soquel Creek Water District, its directors, officers, employees, or authorized volunteers, and each of them from and against:

- a. Any and all claims, demands, causes of action, damages, costs, expenses, losses or liabilities, in law or in equity, of every kind or nature whatsoever for, but not limited to, injury to or death of any person including Soquel Creek Water District and/or Contractor, or any directors, officers, employees, or authorized volunteers of Soquel Creek Water District or Contractor, and damages to or destruction of property of any person, including but not limited to, Soquel Creek Water District and/or Contractor or their directors, officers, employees, or authorized volunteers, arising out of or in any manner directly or indirectly connected with the work to be performed under this agreement, however caused, regardless of any negligence of Soquel Creek Water District or its directors, officers, employees, or authorized volunteers, except the sole negligence or willful misconduct or active negligence of Soquel Creek Water District or its directors, officers, employees, or authorized volunteers;
- b. Any and all actions, proceedings, damages, costs, expenses, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of Contractor;
- c. Any and all losses, expenses, damages (including damages to the work itself), attorneys' fees, and other costs, including all costs of defense, which any of them may incur with respect to the failure, neglect, or refusal of Contractor to faithfully perform the work and all of the Contractor's obligations under the agreement. Such costs, expenses, and damages shall include all costs, including attorneys' fees, incurred by the indemnified parties in any lawsuit to which they are a party.

Contractor shall defend, at Contractor's own cost, expense and risk, any and all such aforesaid suits, actions, or other legal proceedings of every kind that may be brought or instituted against Soquel Creek Water District or its directors, officers, employees, or authorized volunteers.

Contractor shall pay and satisfy any judgment, award or decree that may be rendered against Soquel Creek Water District or its directors, officers, employees, or authorized volunteers, in any and all such suits, actions, or other legal proceedings.

Contractor shall reimburse Soquel Creek Water District or its directors, officers, employees, or authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Soquel Creek Water District, or its directors, officers, employees, or authorized volunteers.

## **SECTION 504. GENERAL CONSTRUCTION**

### ***SECTION 504.1 REFERENCED SPECIFICATIONS***

The Contractor shall perform the work specified herein in accordance with Soquel Creek Water District Standard Specifications and Plans, adopted by the Board of Directors on August 2, 1994, periodic updates that have been approved by the Chief Engineer and distributed to Specification holders, applicable provisions of the State of California Standard Specifications (CALTRANS) current edition, and the current edition of the County of Santa Cruz Design Criteria Manual when applicable.

### ***SECTION 504.2 ORDER OF WORK***

The District reserves the right to determine, in sequential order of priority, the streets in which the Contractor shall replace the water mains.

### ***SECTION 504.3 EXISTING CONDITIONS***

Existing utilities, structures and natural features, where known, have been indicated at their approximate locations on the Contract Plans. The locations of such features are intended only as an aid to the Contractor and in no way relieves him of the responsibility of determining and verifying the size and locations of all potential conflicts which might be encountered in the performance of the work, whether indicated on the plans or not.

The Contractor shall restore drainage patterns and facilities to pre-existing conditions.

**SECTION 504.4 COUNTY REQUIREMENTS**

The District is in the process of securing a County Encroachment Permit. The Contractor shall review said permits prior to construction and shall comply with all requirements as stated in the permits. The District shall pay all fees associated with necessary permits for this project.

The District may not accept the contract work until the Contractor has submitted a written statement (specifically referencing relative compaction and road surface restoration requirements) issued by the County of Santa Cruz, advising that the Contractor has complied with all County requirements and that the completed work is acceptable.

**SECTION 504.5 TRAFFIC CONTROL**

**Description**

The Contractor shall provide the District with a traffic control plan 5 days prior to the start of construction. The District and County of Santa Cruz shall approve the plan prior to beginning construction. The Contractor shall provide a plan in compliance with the State of California, Department of Transportation “Manual of Traffic Controls for Construction and Maintenance Work Zones,” latest edition. The Contractor shall ensure the plan be in general conformance with the provisions of Standard Plan No. T12, “Traffic Control System for Lane Closure on Multilane Conventional Highways” and/or Standard Plan No. T13, “Traffic Control System for Lane Closure on Two Lane Conventional Highways” of the Cal-Trans Standard Plans.

The Contractor shall install “Construction Zone, Speed Limit 15 MPH” signs on semi-permanent posts prior to construction along the proposed construction area. The Contractor shall maintain the signs throughout construction of the project and shall not remove the signs until directed by the District. The Contractor shall cover other speed limit signs along the pipeline alignment. The Contractor shall ensure the covers remain until the “Construction Zone, Speed Limit 15 MPH” signs are removed.

The Contractor shall install informational warning signs and project signs on streets affected by the main installation and shall remain in place during the entire construction period. The Contractor shall maintain sign security and reinstall the signs if they fall or are knocked over.

The Contractor shall install the following signage along the pipeline alignment:

- Two (2) 30"x30" (C23) orange-background signs stating "ROAD WORK AHEAD."
- Two (2) 42"x18" (C14) rectangular orange-background signs stating "END ROAD WORK."

The Contractor shall be responsible for furnishing, mounting, installing, and maintaining all signage during duration of the project. The District Inspector shall determine the exact sign locations in the field. The Contractor shall install signs prior to the start of construction, and ensure the signs remain posted during the entire duration of the project.

The Contractor shall inspect traffic control signs, barricades, and delineators and shall maintain them in accordance with the approved traffic control plan throughout each workday.

The Contractor shall post "No Parking" signs as required 72 hours prior to construction at 50' maximum spacing. The Contractor shall check and maintain said signs on a daily basis. The Contractor shall ensure "No Parking" signs clearly state the enforced dates and shall update them as necessary.

**Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for other items of work, all costs associated with "Traffic Control." The District will not consider any additional compensation.

***SECTION 504.6 DUST SUPPRESSION***

The Contractor shall implement a dust suppression plan if requested by the District Engineer. If a mechanical broom sweeper is used, it shall be equipped with water nozzles to minimize dust. At the end of each workday, the Contractor shall clean construction debris from the roadway.

**Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for other items of work, all costs associated with "Dust Suppression." The District will not consider any additional compensation.

***SECTION 504.7 PROTECTION OF PROPERTY & MATERIAL***

**Description**

The Contractor shall contact each property and business owner having access along project corridor with a District approved letter (submitted to and approved by the District) and shall keep area residents informed of the plan of operation throughout the course of this contract.

The Contractor shall protect the road surface and shall restore said surface to an equivalent or better condition upon completion of all work. The Contractor shall make any interim repairs or maintenance that may be requested by the District Engineer or Inspector during the course of work.

The Contractor shall replace traffic striping and pavement markings destroyed or damaged during construction with temporary striping or markings acceptable to the District. The Contractor shall install temporary striping prior to reopening streets to traffic.

The Contractor shall permanently restore all traffic striping and pavement markings within seven days of final paving at the District's direction.

The Contractor shall protect in place or remove and replace all existing utilities and public or private improvements (whether they are specifically noted on the Contract Plans or not) including but not limited to all berms, curbs, gutters, walkways, sidewalks, driveways, trail-ways, storm drains, landscaping materials, landscape irrigation, landscape electrical systems, walls and fences in place. The Contractor shall correct or replace any damaged utilities or improvements as part of the contract work. No additional compensation will be considered.

The Contractor shall not disturb existing survey monuments or benchmarks. The Contractor shall contact a registered civil engineer or land surveyor to remove or replace monuments. The Contractor shall ensure monument ties be established prior to removal.

The Contractor shall replace complete concrete panels or between existing concrete joints during replacement of any concrete work. The Contractor shall replace colored concrete with colored concrete to match when concrete is removed.

#### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for other items of work, all costs associated with "Protection of Property and Materials." The District will not consider any additional compensation.

#### ***SECTION 504.8 SAFETY PLAN***

##### **Description**

In carrying out his/her work, the Contractor shall at all times exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed, and be in compliance with all applicable federal, state and local

statutory and regulatory requirements including California Department of Industrial Relations (Cal/OSHA) regulations; and the U.S. Department of Transportation Omnibus Transportation Employee Testing Act. The Contractor shall prepare a Safety Plan in accordance with the provisions of Section 202.03.02, "Safety Plan" of SCWD Standard Specifications. The Contractor shall include in the Safety Plan provisions for handling hazardous and toxic materials, and the protection of all persons having access, authorized or not, to the work site. Such plan shall be submitted to and accepted by SCWD prior to starting excavation.

#### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for other items of work, all costs associated with "Safety Plan." The District will not consider any additional compensation.

### ***SECTION 504.9 HAZARDOUS MATERIAL HANDLING***

#### **Description**

The Contractor shall be responsible for all safety issues related to this work including but not limited to site security, ventilation, lifesaving equipment, product security, and fire safety.

The Contractor shall be responsible for all hazardous and toxic material handling requirements of California Occupational Safety and Health Act (Cal-OSHA), the California Department of Environmental Quality, the United States Department of Environmental Protection, and local and state fire and health agencies. These provisions apply to the handling and disposal of all products used or created by the Contractor.

The Contractor shall provide a lockable storage facility on site for all hazardous materials.

#### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for other items of work, all costs associated with "Hazardous Material Handling." The District will not consider any additional compensation.

### ***SECTION 504.10 UTILITIES***

#### **Description**

Existing utility locations shown on Contract Plans are based on field survey and records furnished by utility companies. Where underground main conductors or conduits such as water, gas, sewer, telephone, electric power, or cable television are shown on the Contract Plans, the Contractor shall

assume that a service lateral from each conductor or conduit extends to every parcel or property whether or not a service lateral is shown.

The Contractor shall verify sewer invert elevations prior to the start of construction. In locations where the water main crosses over the existing sewer main, the Contractor shall ensure a minimum vertical clearance of one foot exists between pipes.

The Contractor shall contact Underground Service Alert and nonmember companies or utilities at least two (2) working days prior to excavating any segment of the work. The Contractor shall be prepared to produce USA ticket number at the request of the District.

The Contractor shall provide utility offsets after the first marking has occurred. The Contractor shall deliver one copy of offset markings to the District no later than seven days after first marking occurred.

The Contractor shall excavate, expose, and determine ("Pothole") the location and depth of each potential interference at least two (2) days in advance, or a minimum of 500 feet ahead of trenching. Changes or delays caused by the Contractor's failure to perform "Potholing" and interference location work shall not be eligible for extra work, compensation, or time extension.

The Contractor shall immediately notify the District Engineer in writing, upon learning of the existence or location of any utility facility omitted from or shown incorrectly on the Contract Plans, or improperly marked or otherwise indicated. The Contractor shall provide full details as to depth, location, size, and function of the utility.

The Contractor shall not interrupt or disturb any utility facility without authority from the utility or order from the District. The Contractor shall furnish and place the necessary protection around the utility when protection is called for on the Contract Plans, visible to the Contractor, or marked as such. The Contractor shall install the utility protection at no additional expense to the District.

The proposed pipeline will be constructed adjacent to existing utilities including gas lines, water lines, sewer lines, electrical conduit, telephone conduit, and TV cable. The District has no information about the depth or compaction of trench backfill for said utilities. The Contractor shall remove and replace the failing trench backfill, compact the new backfill to 95% Relative Compaction, remove and replace any asphalt concrete pavement and other existing improvements, as required at no additional expense to the District.

The Contractor shall construct pipelines to avoid existing utilities. The Contractor shall increase cover to a maximum of 60 inches for the distance required to eliminate high spots if the minimum pipeline cover conflicts with an existing utility. The Contractor shall notify the District Engineer in writing within two (2) days to schedule a meeting and discuss the extra cost necessary to install an air relief valve when high spots are unavoidable.

## **SECTION 505. TRENCHING, BACKFILL & PAVING**

### ***SECTION 505.1 GENERAL***

The Contractor shall perform trenching, backfill & paving in compliance with the SCWD Standard Plans S-14, S-15, & S-22, the current edition of the County of Santa Cruz Standards and Specifications, and the project specific County of Santa Cruz Department of Public Works Encroachment Permit when work is performed within the county right-of-way.

In the event that archaeological remains are found during excavation, the Contractor shall stop excavation in that area and contact the District Inspector or the District Engineer immediately. In the event that human remains are discovered, the Contractor shall stop excavation at that location and mobilize to a different portion of the project. The District shall then notify the County Coroner at (831) 454-2520 and treat any remains according to applicable State Law, including California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097. If there is doubt as to whether the remains are human or not, the District should first contact the Sheriff Dispatch office at (831) 471-1121 and request a Patrol Deputy be dispatched to the site to assess the remains. If needed, the Patrol Deputy will contact the County Coroner.

The Contractor shall install 4” minimum sand bedding beneath the pipe and 12” minimum sand cover above the pipe on all trenches. The Contractor shall install bedding as stated in Section 309.05.03 “Bedding” of SCWD Standard Specifications. The Contractor shall install 2-sack sand/cement slurry backfill for cross trenches.

The Contractor shall install 4” minimum sand bedding beneath the pipe and 12” minimum sand cover above the pipe on longitudinal trenches. The Contractor shall install sand or crushed aggregate backfill compacted to 95% Relative Compaction (RC) over the sand envelope. The Contractor should refer to SCWD Standard Plan S-14, “Longitudinal Trench Sand Backfill” for a graphical illustration.

The Contractor shall remove unacceptable trench backfill material and discard it at a legal disposal site at no additional expense to the District.

**SECTION 505.2 TRENCHING**

The Contractor shall perform pipeline excavations using open-cut trenches, unless otherwise shown on the Contract Plans or directed by the District. The Contractor shall install the minimum specified pipe cover and trench width as follows:

| PIPE SIZE    | MINIMUM PIPE COVER | TRENCH WIDTH |
|--------------|--------------------|--------------|
| 6" dia. pipe | 36 inches          | 18 inches    |

The Contractor shall saw-cut the pavement to produce a straight vertical face. Jackhammers or wheel cutters will not be allowed. The Contractor shall cut concrete to the nearest score mark or expansion joint if trenching and/or installation of piping and appurtenances require removal of existing concrete.

The Contractor shall backfill trenches at the end of each day. The Contractor may use heavy steel plates to cover trenches if the District Inspector has granted prior approval. The Contractor shall adequately brace the steel plates and apply cold mix at plate joints and edges. The Contractor shall shim plate edges, if necessary, to prevent plates from rocking and shifting with vehicular traffic. The Contractor shall be responsible for providing plates capable of supporting vehicular traffic and with dimensions conforming to OSHA requirements.

**SECTION 505.3 BACKFILL**

The Contractor is advised that rock or unacceptable backfill material may be encountered during trenching operations. The Contractor shall furnish and install suitable bedding and backfill material in accordance with these contract documents when such material is encountered. The Contractor shall furnish and install bedding and backfill material at no additional expense to the District.

**Sand Envelope**

The Contractor shall install a sand envelope around the pipe per SCWD Standard Plans S-14 and S-15. The envelope shall include a minimum 4-inches of sand bedding with 12-inches of sand cover compacted to 95% RC. The Contractor shall compact backfill material to not less than 90% RC when the trench is located outside a paved area or a road right-of-way.

**Lateral Trench Backfill**

The Contractor shall install 2-sack sand/cement slurry over a 12-inch sand envelope while performing work on lateral trenches or when specified on the Contract Plans. The Contractor shall install backfill material in

accordance with SCWD Standard Plan S-15, "Trench Backfill-Lateral Trenches-Sand/Cement Slurry."

### **Longitudinal Trench Backfill**

The Contractor shall install sand or crushed aggregate over a 12-inch sand envelope compacted to 95% RC while performing work on longitudinal trenches. The Contractor shall install backfill material in accordance with SCWD Standard Plan S-14, "Longitudinal Trench Sand Backfill" and Section 309.05.03, "Sand and Crushed Aggregate Backfill."

### **Compaction Testing**

The District shall administer all compaction testing. The Contractor shall assist the District during compaction testing at no additional expense to the District.

If additional compaction testing is required due to failing tests, the additional testing expense will be charged to the Contractor. If the Contractor requests testing of native material, additional testing expenses will be charged to the Contractor. A soils engineer shall prepare the compaction report.

### ***SECTION 505.4 PAVING***

The Contractor shall refer to Section 310, "Paving" of SCWD Specifications and shall also comply with the County of Santa Cruz Department of Public Works Encroachment Permit. Pavement replacement shall be a minimum of 3" Type B asphalt concrete over 9" Class II aggregate base when work is performed within the County maintained right-of-way. Cross trench hot mix patch overlap shall be 36-inch minimum as indicated by the County of Santa Cruz Cross Trench Backfill Detail, Figure EP-2 (Rev 4/02) included in the appendix of these special provisions. Longitudinal trench hot mix patch overlap shall be 12-inch minimum as indicated by the County of Santa Cruz Longitudinal Trench Backfill Detail, Figure EP-1 (Rev 4/03) included in the appendix of these special provisions. Pavement replacement outside the County maintained right-of-way shall be in accordance with Standard Plan S-15.

The Contractor shall restore cross trenches and longitudinal trenches in accordance with the County of Santa Cruz Department of Public Works Figures EP-1 & EP-2, attached herein and made part of these Special Provisions, when construction occurs on county maintained road right-of-ways.

The Contractor is hereby notified that all of Spreckles Drive and Treasure Island Ave. between Spreckles and Aptos Beach Dr. are county maintained roads, and figures EP-1 & EP-2 shall apply.

The Contractor should refer to Figure EP-1 and Figure EP-2 of the County of Santa Cruz Specifications for minimum pavement T-Section distances for paving within the county maintained road right-of-way.

### **Fog Seal**

The Contractor shall apply a fog seal in accordance with Section 311, “Fog Seal” of the Soquel Creek Water District Standard Specifications to all new paving outside the county maintained right-of-way. The Contractor shall apply fog seal SS-1 oil at the rate of 0.05 gallons per square yard. The extents of the fog seal shall be from outer most edges of repaved area.

### **Road Striping**

The Contractor shall permanently restore all traffic striping and pavement markings destroyed or damaged during construction at the direction of the District. The Contractor should refer to Section 504, “Protection of Property and Material” of these Special Provisions.

### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for other items of work, all costs associated with “Trenching, Backfill and Paving.” The District will not consider any additional compensation.

## **SECTION 506. SLURRY SEAL**

### **General**

The Contractor shall apply a Type II Slurry Seal per Section 37-2, “Slurry Seal” of the Cal-Trans Standard Specifications. Slurry Seal shall cover the repaved trench section and the adjacent street pavement resulting in an entire road width slurry seal along all of Spreckles Dr. and Treasure Island Ave. as shown on the contract plans. The Contractor shall restore all existing traffic striping damaged or removed during construction.

### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for “Type II Slurry Seal,” all costs associated with “Application of 12,000 ± square feet entire road width Cal Trans Type II Slurry Seal.” Payment for slurry seal application shall include all costs required in restoring roadway to existing condition. The District will not consider any additional compensation.

## **SECTION 507. CONCRETE WORK**

### **Description**

The Contractor shall refer to Section 308, “Concrete Structures” of SCWD Specifications for direction of repaving trench areas within existing concrete surfaces.

## **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for other items of work, all costs associated with “Concrete Work.” The District will not consider any additional compensation.

# **SECTION 508. DISTRIBUTION PIPING AND APPURTENANCES**

## ***SECTION 508.1 GENERAL***

The Contractor shall supply materials in accordance with the published Standard Specifications and Standard Plans of the Soquel Creek Water District and the American Water Works Association (AWWA).

## ***SECTION 508.2 PIPING***

The Contractor shall install 6-inch diameter C900 Poly Vinyl Chloride (PVC) pipe, pressure class 200 as distribution pipeline material. The Contractor shall provide material conforming to the requirements of AWWA C900 or substitute approved by the District Engineer in writing.

## ***SECTION 508.3 FITTINGS***

The Contractor shall furnish ductile iron fittings in accordance with AWWA C110 and C153.

## ***SECTION 508.4 THRUST RESTRAINTS***

### **Pipe Restraints**

The Contractor shall install restraint harnesses bridging the push-on bell as the thrust restraint for PVC pipe. The Contractor shall use EBAA Iron Megalug<sup>®</sup> Series 1600 or approved substitute subject to prior written approval by the District Engineer.

### **Fittings**

The Contractor shall install Mechanical Joint (MJ) fittings and replace the follower gland with a thrust restraining follower gland assembly. The Contractor shall refer to Section 304, “Thrust Restraint” of SCWD Standard Specifications for District approved materials and installation requirements.

### **PCC Thrust Blocks**

The Contractor shall install Portland Concrete Cement (PCC) thrust blocks only to restrain fittings on existing pipelines. The Contractor shall refer to SCWD Standard Plan S-7, “Thrust Block Details” for graphical illustrations.

## ***SECTION 508.5 INSTALLATION***

### **General**

The Contractor shall inspect pipe and accessories, prior to installation, for damage and defects in materials. The Contractor shall reject damaged and defective materials, mark as such, and remove items from the job site at no additional expense to the District.

The Contractor shall perform subsurface exploration regarding existing utility locations/depths and soil conditions. The Contractor shall expose all utilities at locations where proposed improvements are shown to cross, at all proposed connections, and at intervals not to exceed 250 LF along parallel utilities. The Contractor shall perform exploration in advance of construction operations such that the final location of the proposed improvements may be adjusted prior to construction.

The Contractor shall not be eligible for extra work, compensation, or time extensions caused by the Contractor's failure to perform "Potholing" and interference location work.

The Contractor shall use appropriate fittings to adjust for depth conflicts between the proposed main with other existing utilities. In locations where the water main crosses over the existing sewer main, the Contractor shall ensure a minimum vertical clearance of one foot exists between pipes.

The Contractor shall construct pipelines to have a continuous upgrade or downgrade in order to minimize high spots. The Contractor shall install air and vacuum release valves when specified on the Contract Plans.

The Contractor shall perform main line pressure testing prior to connecting to any existing District main unless noted on Contract Plans. The District will not allow water use of any kind until mains, services, and fire hydrants have passed pressure testing and have been chlorinated, flushed, and a bacteriological report has been approved in writing by the District Engineer.

The District shall operate existing valves for the Contractor and under no circumstances shall the Contractor operate existing system valves.

The Contractor shall raise valve boxes, install extensions, and remove disinfection points to allow the District to activate the system.

### **Locator Wire**

The Contractor shall install a minimum of 12-gauge THW or THWN copper locating wire, continuous for the entire length of pipe laid. The

Contractor shall secure the wire to the pipe by tape at intervals not greater than 12 feet. The Contractor shall install the locator wire in accordance with Section 301.05.06, "Locator Wire" of SCWD Standard Specifications.

#### **Bitumastic Coating**

The Contractor shall field coat all buried nuts, bolts, flanges, and other exposed ferrous metal with a liberal coat of bitumastic type material.

#### **Restrained Pipe Minimum**

The Contractor shall install, as a minimum, 40 LF of restrained pipe on each side of a restrained fitting or joint. Areas that require additional restrained piping will be shown on the Contract Documents or referenced in other sections of these Special Provisions.

### ***SECTION 508.6 AS-BUILT DRAWINGS***

#### **General**

The Contractor shall provide a complete set of As-Built drawings at project completion. As-Built drawings shall include vertical and horizontal location to the nearest foot. As-Built drawings shall show locations of all valves, reductions, and any deviation from design plans.

#### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for other items of work, all costs associated with "As-Built Drawings." The District will not consider any additional compensation.

### ***SECTION 508.7 TESTING AND DISINFECTION***

#### **Hydrostatic Pressure & Leakage Testing**

The Contractor shall refer to Section, 301.05.07, "Hydrostatic Testing" of SCWD Standard Specifications.

The Contractor shall perform pressure testing in compliance with District requirements. The District Inspector shall be present during pressure testing. The Contractor shall notify the District two (2) days in advance of any pressure tests. Test pressure shall be a minimum of 150 psi or 150% of the service pressure for the pipeline, whichever is greater.

The Contractor shall perform all work necessary to locate and repair leaks to allowable levels as stated in Section 301.05.01(a), "Allowable Leakage" of SCWD Standard Specifications. Contractor shall perform repair work at no additional expense to the District. The Contractor shall also correct other defects discovered during such work. Thereafter, the Contractor shall repeat the pressure test until the pipelines meet specified requirements.

### **Chlorination and Bacteriological Testing**

The District shall perform all disinfection procedures. The Contractor shall assist the District as necessary including, but not limited to, providing adequate size piping to the nearest discharge location, labor assistance, and water trucks.

Bacteriological testing shall occur no sooner than 24 hours after pipeline has been flushed of chlorinated water. The District shall take samples. The District laboratory will not accept samples after noon on Thursday of any workweek.

The Contractor shall perform the work necessary to clean the line of any debris or foreign material if the water sample fails the bacteriological test at no additional expense to the District. Thereafter, the Contractor shall provide assistance required for repeated testing, until the pipelines meet specified requirements.

The Contractor shall assist the District in dechlorination of chlorinated water discharged into local streams and storm drains. The District shall furnish all dechlorination equipment and chemicals.

The Contractor shall refer to Section, 301.05.08, "Disinfection" of the SCWD Specifications for further information.

### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for "Distribution Piping and Fittings," all costs associated with "Installation of two thousand seven hundred seventy (2,770) ± lineal feet (LF) of 6-inch PVC C900 Class 200 water main on **Creek Drive, Glen Drive, Forest Dr., Spreckles Dr., Claus Ct., and Treasure Island Ave.**," "Installation of two (4) Chlorination Taps," and "Installation of four (4) 2" Permanent Blow-off Assemblies." Payment for pipeline installation shall include all related gate valves, fittings, and appurtenances as shown on the Contract Plans. The District will not consider any additional compensation.

## **SECTION 509. WATER SERVICES PIPING AND APPURTENANCES**

### ***SECTION 509.1 GENERAL***

For purposes of this section and those of SCWD Standard Specifications, the following terms shall be defined:

## **Replacement**

REPLACEMENT OF EXISTING DOMESTIC SERVICES shall include but not be limited to, tapping the new water main, installation of new polyethylene (PE) service line, reconnection of meters to the new service line, reconnection of customer plumbing to meter, installation of new meter box, and restoration of the area surrounding the meter box to a condition equal to or better than that prior to start of construction.

The Contractor shall relocate meters located outside the Right-of-Way to the Right-of-Way in accordance with the SCWD Standard Specifications and Standard Plans.

Services replaced shall include bringing the meter to the proper elevation in the meter box and making the necessary adjustments to reconnect the customer's plumbing to the meter.

## **Reconnection**

RECONNECTION OF EXISTING DOMESTIC SERVICES shall include but not be limited to, tapping the new main and connecting the existing service line to the new service line. The Contractor shall install a new 2-inch tapping saddle and 2-inch AWWA Gate Valve when a 2-inch Combination Domestic and Fire Service reconnection is specified.

The Contractor should refer to Section 206.03, "Replace Existing Service" and Section 206.04, "Reconnect Existing Service", and Standard Plans S-3, S-4, S-18, and S-20 of SCWD Standard Specifications and Standard Plans for additional guidelines and materials.

## ***SECTION 509.2 MATERIALS***

### **Service Tubing**

The Contractor shall install 1-inch diameter (Copper Tubing Size) PE tubing conforming to AWWA C901 for Pressure Class 200 and Dimension Ratio of 9 as the service pipe from the new main to the customer's water meter when replacing a 1" domestic service with a 5/8" x 3/4" meter or a 1" meter. The Contractor should refer to SCWD Standard Plan S-3 for graphical specifications.

The Contractor shall install 2-inch diameter (Copper Tubing Size) PE tubing conforming to AWWA C901 for Pressure Class 200 and Dimension Ratio of 9 as the service pipe from the new main to the customer's water meter when replacing a 2" fire and domestic combined service with two 5/8" x 3/4" meter. The Contractor should refer to SCWD Standard Plan S-20 for graphical specifications.

### **Service Piping**

The Contractor shall install 2-inch diameter (Copper Tubing Size) PE tubing conforming to AWWA C901 for Pressure Class 200 and Dimension Ratio of 9 as the service pipe from the new main to the customer's water meter when replacing a 2" domestic service. Services larger than 2" in diameter, shall require Ductile Iron or PVC, Class 150 piping. The Contractor should refer to SCWD Standard Plan S-18 and S-20 for graphical specifications.

### **Customer Piping**

The Contractor shall install Schedule 40 PVC Service Piping as the service line between the new meter and the reconnection point to the existing customer service line. The Contractor shall maintain a minimum of 18-inches of cover over the customer service piping.

### **Fittings**

The Contractor shall install a Mueller H-10889 Meter Bushing when a 5/8" x 3/4" meter is installed.

The Contractor shall use fittings that comply with those listed in Section 302, "Service Pipe Materials" of SCWD Standard Specifications.

### **Meters, Boxes, and Lids**

The District shall supply service meters and the Contractor shall install meters. The Contractor shall supply and install high density reinforced concrete Christy B-9 Utility Boxes (or approved equal) with fibrelite FL9D lids (or approved equal) on services with 5/8" x 3/4" meters. Contractor shall supply and install Christy B-16 Utility Boxes (or approved equal) with fibrelite FL16 B-16 lids (or approved equal) on services with 1" meters.

The Contractor shall install a 6-inch crushed rock base and cast iron covers for meter boxes located in shoulder or driveway.

### ***SECTION 509.3 INSTALLATION GUIDELINES***

The Contractor shall relocate meters located outside the Right-of Way to within the Right-of-Way or as directed by the District Inspector.

The Contractor shall install a new meter box for each service unless the District Inspector specifies otherwise. The Contractor shall remove and discard existing meter boxes.

The Contractor shall perform Service Installations in accordance with Section 302, "Service Pipe Materials", Section 206.03, "Replace Existing

Service” and Section 206.04, “Reconnect Existing Service” of SCWD Standard Specifications.

The Contractor should refer to the schematic requirements of service installations illustrated on SCWD Standard Plans S-3 and S-4. The Contractor shall be responsible for verifying all meter box service dimensions in the field. The Contractor shall install meter boxes in the sidewalk and replace the concrete sidewalk square from joint-to-joint on streets with a sidewalk.

### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for “Water Services-Piping and Appurtenances,” all costs associated with “Replacement of sixty five (65) standard water service connections,” “Reconnection of three (3) domestic service connections from the abandoned main to the new water main,” “Installation of three (3) 1” Air & Vacuum Release Valves,” and “Reconnection of three (3) existing 2-inch combination Domestic and Fire Services from the abandoned main to the new water main.” The District will not consider any additional compensation.

## **SECTION 510. FIRE HYDRANT INSTALLATIONS**

### ***SECTION 510.1 GENERAL***

The Contractor shall install 6-inch Steamer fire hydrants as shown on the Contract Plans. The Contractor shall install fire hydrants in conformance with installation requirements listed in Section 307.05, “Fire Hydrants” of SCWD Standard Specifications.

The Contractor shall supply James Jones model J-3740, wet barrel design fire hydrants, in accordance with AWWA C503. The Contractor shall provide bronze protector with a pentagonal nut. Plastic Caps will not be accepted.

The Contractor should refer to Section 307.05, “Fire Hydrants” of SCWD Standard Specifications and Standards S-9 and S-10 for additional installation specifications.

The Contractor shall install traffic barriers made of 4-inch diameter galvanized iron pipe to protect against traffic and break-off conditions when shown on the Contract Plans. Traffic barriers shall be 36 inches in height.

The District Inspector shall field locate fire hydrants and traffic barriers with the Contractor prior to installation.

## ***SECTION 510.2 ABANDONMENT***

The Contractor shall abandon existing wharf head fire hydrants as shown on the Contract Plans. Abandonment shall include removal of all existing hydrant materials including but not limited to, the barrel assembly, break away spool, hydrant bury, and any traffic barriers. Abandonment shall be in accordance with Section 206.08.04, "Fire Hydrant Abandonment" of the Soquel Creek Water District Standard Specifications.

### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for "Fire Hydrant Installations", all costs associated with "Installation of five (5) new 6-inch James Jones 3740 Steamer Fire Hydrant and all related valves and appurtenances, including traffic bollards." Payment for fire hydrant installation shall include all related gate valves, fittings, and appurtenances as shown on the Contract Plans. The District will not consider any additional compensation.

## **SECTION 511. CONNECTIONS TO EXISTING MAINS**

### ***SECTION 511.1 GENERAL***

The Contractor shall notify the District at least five (5) working days in advance of shutdowns that affect commercial areas. Non-Commercial and Residential areas require three (3) working days notice.

The District shall notify surrounding customers affected by the shutdown and operate all valves.

The Contractor shall perform connections per SCWD Standard Specifications and Standard Plans, these Special Provisions, and Contract Plans.

The Contractor shall also refer to Section 206.05, "Tie-Ins" of SCWD Standard Specifications and the Contract Documents for additional guidelines.

### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices for "Connections to Existing Mains", all costs associated with "Tie-in to existing 6-inch AC water main at the south intersection of Creek Dr. and Glen Dr., Tie-in to existing 6-inch AC water main at the north intersection of Creek Dr. and Glen Dr., Tie-in to existing 6-inch AC water main at the intersection of Forest Dr. and Spreckles Dr., Tie-in to existing 8-inch AC

water main at the intersection of Spreckles Dr. and Treasure Island Ave., Tie-in to existing 8-inch AC water main at the intersection of Treasure Island Ave. and Aptos Beach Dr.,” and “Tie-in to existing 4-inch AC water main at the intersection of Treasure Island Ave. and Aptos Beach Dr.” The District will not consider any additional compensation.

## **SECTION 512. ABANDONMENTS**

### ***SECTION 512.1 GENERAL***

The Contractor shall perform abandonments as shown on the Contract Plans following the installation of all replacement piping.

Abandonments shall include, and not be limited to, water mains, services, valves, fire hydrants, and fittings. Work includes, but is not limited to, cutting and capping of abandoned mains.

The Contractor shall perform abandonments in accordance with Section 206.08, “Abandonment” of SCWD Standard Specifications.

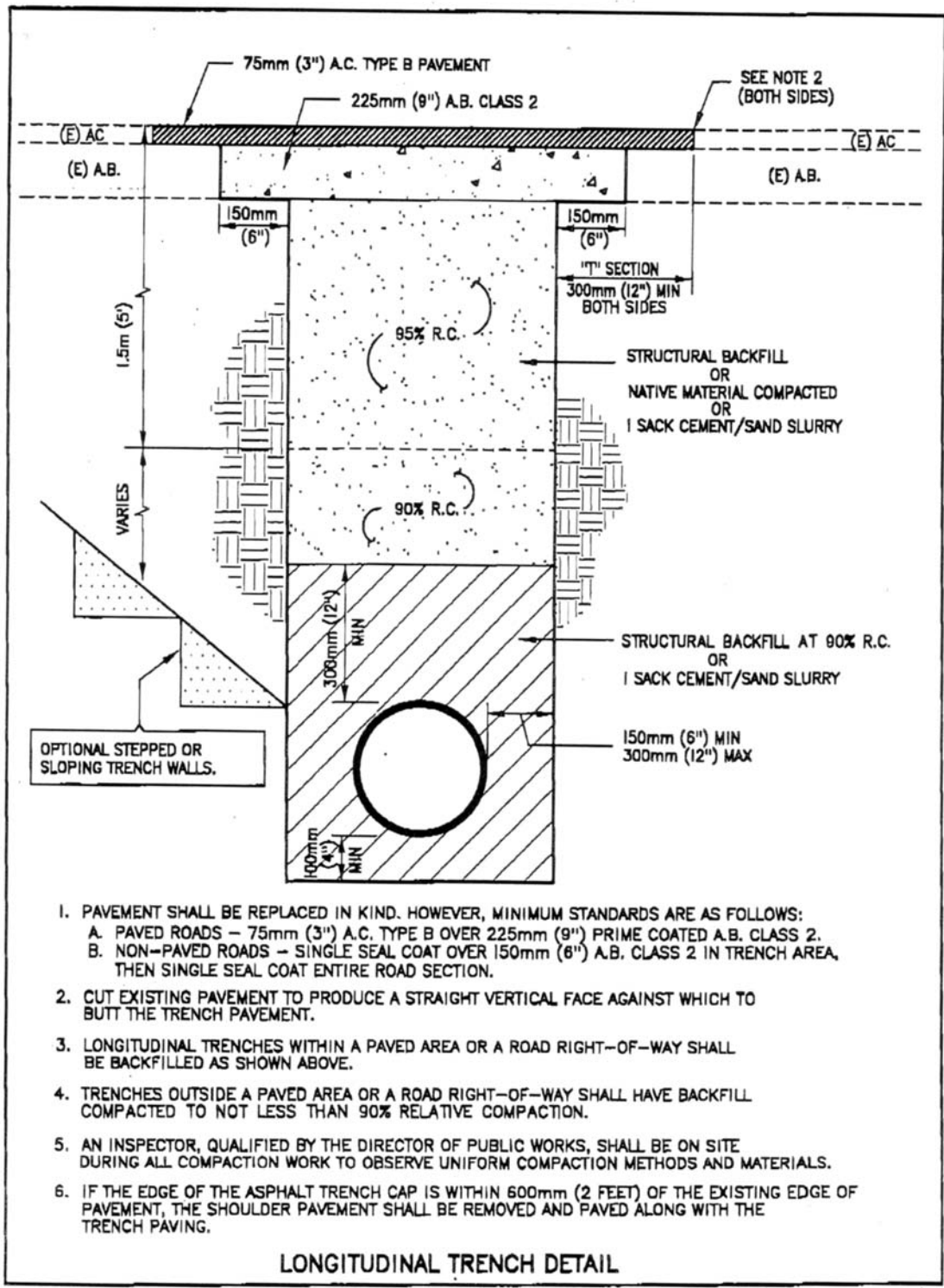
The Contractor shall restore pavement to pre-existing condition or better when abandoned main is in existing AC paved area. The Contractor shall remove and replace existing concrete from joint to joint when abandoned main is in PCC area. The Contractor shall provide dowels between new concrete and existing concrete area.

#### **Measurement and Payment**

The Contractor shall include, in the contract unit or lump sum prices, all costs associated with “Abandonments.” The Contractor shall include, in the contract unit or lump sum prices, all costs associated with “Abandonment of 2-inch steel main and valve boxes on Creek Dr., Glen Dr., Treasure Island Ave., Spreckles Dr., Claus Ct., and Forest Dr. as shown on project plans.” The District will not consider any additional compensation.

**SECTION 513. APPENDIX**

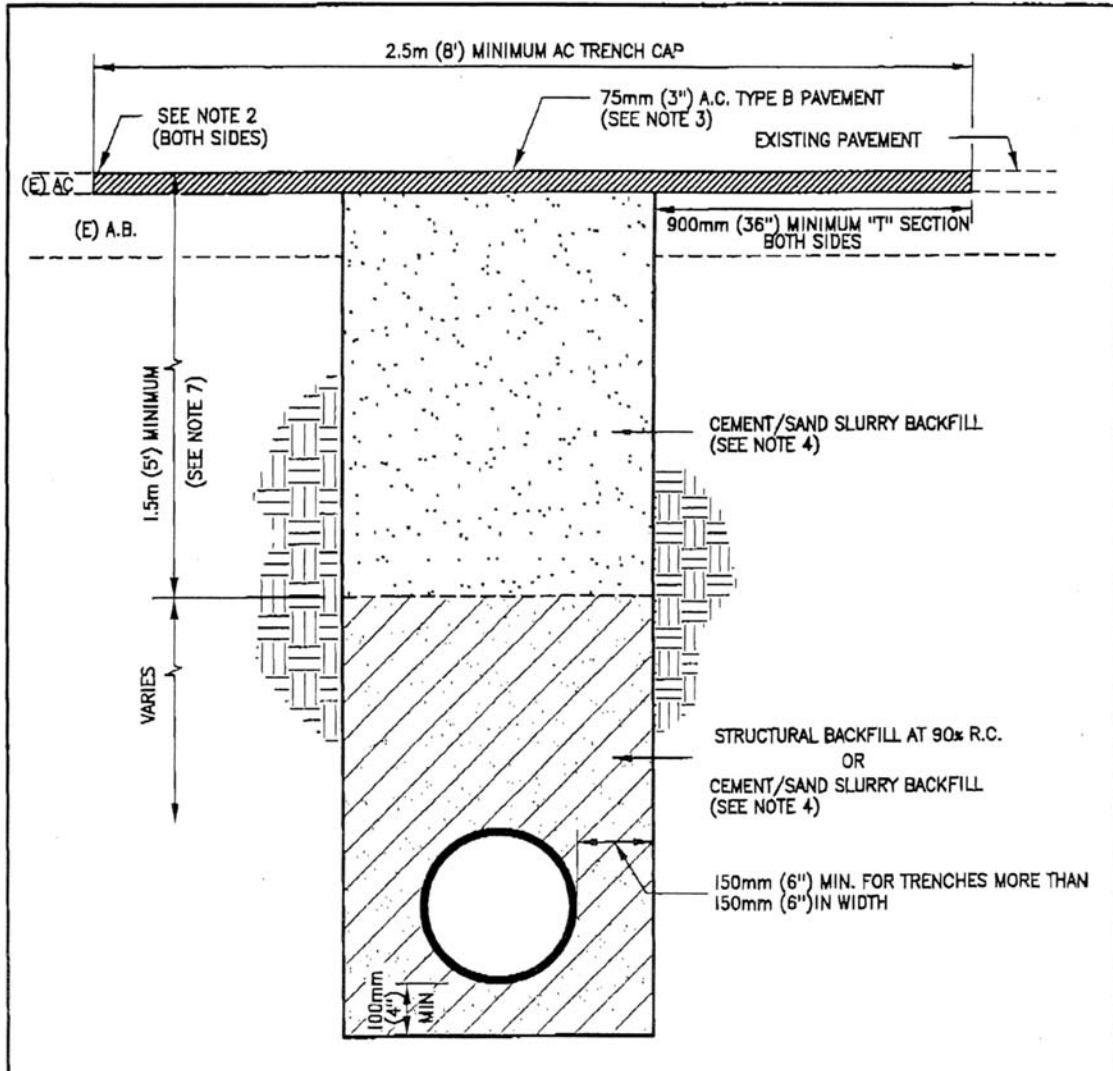
**SECTION 513.1 COUNTY OF SANTA CRUZ DEPARTMENT OF PUBLIC WORKS LONGITUDINAL TRENCH DETAIL, FIGURE EP-1, REV. 4/03**



REV 4/03

FIG EP-1

**SECTION 513.2 COUNTY OF SANTA CRUZ DEPARTMENT OF PUBLIC WORKS CROSS TRENCH DETAIL, FIGURE EP-2, REV. 4/02**



1. OTHER METHODS OF TRENCH BACKFILL MAY BE USED ONLY WITH WRITTEN PERMISSION FROM THE DIRECTOR OF PUBLIC WORKS.
2. CUT EXISTING PAVEMENT TO PRODUCE A STRAIGHT VERTICAL FACE AGAINST WHICH TO BUTT THE TRENCH PAVEMENT.
3. TRENCH SHALL BE CAPPED WITH 75mm (3") A.C. TYPE B MINIMUM. WHERE THE EXISTING PAVEMENT IS GREATER THAN 75mm (3") THICK, IT SHALL BE REPLACED IN KIND.
4. CEMENT/SAND SLURRY SHALL BE MIXED IN A TRANSIT MIXER (CERTIFICATION TAGS REQUIRED), SHALL CONSIST OF 110 kg OF CEMENT FOR EACH CUBIC METER OF MATERIAL (188 LBS/CY), AND SHALL HAVE A 175mm - 225mm (7-9 INCH) SLUMP.
5. PRECAUTION SHALL BE TAKEN TO AVOID FLOATING CONDUITS.
6. OPTIONAL: SHAPED BEDDING OR SAND CRADLE TO 150mm (6") ABOVE PIPE.
7. FOR TRENCHES LESS THAN 1.5m (5') DEEP, SLURRY BACKFILL SHALL EXTEND FROM 150mm (6") ABOVE TOP OF PIPE TO BOTTOM OF AC PAVEMENT.

**CROSS TRENCH DETAIL**

REV 4/02

FIG EP-2