

SET NO: \_\_\_\_\_



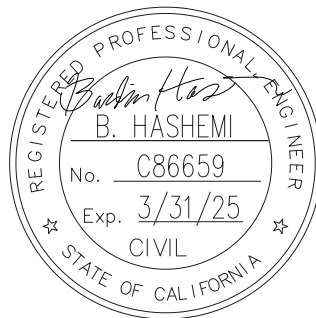
Municipal Water District

San Diego County, California

**FINAL CONTRACT DOCUMENTS  
FOR THE CONSTRUCTION OF:**

**UNIT A - RANCHO SANTA FE ROAD POTABLE WATER PIPELINE  
REPLACEMENT PROJECT  
(D120093)**

**OCTOBER 2023**



(BLANK)

**OLIVENHAIN MUNICIPAL WATER DISTRICT**

San Diego County California

FINAL CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

**UNIT A - RANCHO SANTA FE ROAD POTABLE WATER PIPELINE  
REPLACEMENT PROJECT**

OCTOBER 2023

*LARS*

10/10/2023

---

Lindsey Stephenson, P.E.  
Engineering Manager

(BLANK)



## BID FORM CHECKLIST

(To be placed in the Bidder's Contract Documents in front of the Table of Contents)

Bid Form Page	Requirement	Initial
1 of 14	<b>BID FORM-</b> Fill out the form and acknowledge <u>all</u> addenda in the spaces provided at the end of the first paragraph	
2 of 14	<b>BIDDING INSTRUCTIONS-</b> Examination of the site and review of the Contract Documents has been completed	
2 of 14	<b>BIDDING INSTRUCTIONS-</b> Bid Schedule and all Bid forms are to be submitted with this Bid Form Checklist	
4 of 14	<b>BID SCHEDULE-</b> Fill out all items in the Bid Schedule, including dollar amounts in words and in numbers for each item	
5 of 14	<b>DESIGNATION OF SUBCONTRACTORS-</b> Fill in all information required on the form	
6 of 14	<b>LISTING OF MANUFACTURERS-</b> Fill in all information required on the form	
7 of 14	Fill in the type of Bid Bond enclosed in the first paragraph, and list all principals of the company in the third paragraph	
8 of 14	Fill in Bidder's license classification, license number, and all other information required in the fourth paragraph, including signature and date	
9 of 14	<b>CERTIFICATE OF DRUG-FREE WORKPLACE-</b> Fill in Bidder's name at the top and Certification section at the bottom of the page, including signature and date	
10 of 14	<b>CERTIFICATE OF NONDISCRIMINATION-</b> Fill in all information required on the form, including signature and date	
11 of 14	<b>NONCOLLUSION AFFIDAVIT-</b> Fill in all information required on the form including signature and date and provide notarization	
12 of 14	<b>BIDDER'S EXPERIENCE-</b> Fill in all information required on the form and provide signature and date at the bottom	
13 of 14	<b>INSURANCE ACKNOWLEDGEMENT-</b> Fill in all information required on the form and provide signature and date where indicated	
1 of 2	<b>BID BOND-</b> Fill in all required information including dollar amount	
2 of 2	<b>BID BOND-</b> Fill in all required information, provide signatures of the bidder and surety where indicated, provide notarization for principal of bidder and surety, and attach a certified Power of Attorney for surety	
Bid Notice 2 of 4	<b>MARKING AND ADDRESSING BID ENVELOPE-</b> Contract Documents are sealed in an envelope marked and addressed as required in this section	

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

(BLANK)

## TABLE OF CONTENTS

### **PART I BIDDING AND CONTRACT REQUIREMENTS**

#### **DIVISION 0 BIDDING AND CONTRACT REQUIREMENTS**

NOTICE INVITING SEALED BIDS-----	1 to 4 White
BID FORM-----	1 to 14 Yellow
BID BOND-----	1 to 2 Yellow
AGREEMENT-----	1 to 3 Blue
PERFORMANCE BOND-----	1 to 2 Blue
PAYMENT BOND-----	1 to 2 Blue
CONTRACTOR'S CERTIFICATE REGARDING	
WORKERS' COMPENSATION-----	1 to 2 Blue
CERTIFICATE OF INSURANCE (WORKERS' COMPENSATION)-----	1 to 2 Blue
INSURANCE ENDORSEMENT (WORKERS' COMPENSATION)-----	1 to 2 Blue
CERTIFICATE OF INSURANCE (LIABILITY)-----	1 to 5 Blue
INSURANCE ENDORSEMENT (LIABILITY)-----	1 to 2 Blue
CERTIFICATE OF INSURANCE (BUILDERS' RISK "ALL RISK")-----	1 to 4 Blue
INSURANCE ENDORSEMENT (BUILDERS' RISK "ALL RISK")-----	1 to 2 Blue
GENERAL PROVISIONS	
TABLE OF CONTENTS-----	1 to 3 Goldenrod
MAIN BODY-----	1 to 46 Goldenrod
SHOP DRAWING SUBMITTAL FORM-----	1 to 1 Goldenrod
PROGRESS ESTIMATE AND PAYMENT FORM-----	1 to 1 Goldenrod
CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT-----	1 to 1 Goldenrod
CONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT-----	1 to 1 Goldenrod
PROPOSED CHANGE ORDER-----	1 to 1 Goldenrod
PUBLIC CONTRACT CODE SECTION 20104, ET SEQ-----	1 to 4 Goldenrod
SECTION 00810 SPECIAL PROVISIONS-----	1 to 16 Gray

### **PART II TECHNICAL SPECIFICATIONS**

#### **DIVISION 1 GENERAL REQUIREMENTS**

SECTION 01010 SUMMARY OF WORK-----	1 to 3
SECTION 01043 COORDINATION WITH OWNER'S OPERATIONS-----	1 to 4
SECTION 01045 CUTTING AND PATCHING-----	1 to 2
SECTION 01070 ABBREVIATION AND SYMBOLS-----	1 to 3
SECTION 01080 DEFINITIONS-----	1 to 4
SECTION 01090 REFERENCE STANDARDS-----	1 to 4
SECTION 01150 MEASUREMENT AND PAYMENT-----	1 to 5
SECTION 01201 PRECONSTRUCTION CONFERENCE-----	1 to 2
SECTION 01202 PROGRESS MEETING-----	1 to 2
SECTION 01310 PROGRESS SCHEDULE-----	1 to 3
SECTION 01370 SCHEDULE OF VALUES-----	1 to 2

## CONTENTS OF VOLUME I

CONTRACT DOCUMENTS	PAGE
SECTION 01400 QUALITY CONTROL -----	1 to 2
SECTION 01410 TESTING LABORATORY SERVICES -----	1 to 3
SECTION 01510 TEMPORARY CONSTRUCTION FACILITIES-----	1 to 2
SECTION 01545 PROTECTION OF THE WORK AND PROPERTY -----	1 to 4
SECTION 01550 WORK RESTRICTIONS -----	1 to 2
SECTION 01620 TEMPORARY CONTROLS -----	1 to 2
SECTION 01620 STORAGE OF MATERIAL -----	1 to 2
SECTION 01630 SUBSTITUTION-----	1 to 2
SECTION 01700 PROJECT CLOSEOUT -----	1 to 1
SECTION 01710 CLEANING -----	1 to 2
SECTION 01720 RECORD DOCUMENTS -----	1 to 3

### DIVISION 2 SITE WORK

SECTION 02743 AC PAVING -----	1 to 23
-------------------------------	---------

### DIVISION 3 CONCRETE (NOT USED)

### DIVISION 4 MASONRY (NOT USED)

### DIVISION 5 METALS (NOT USED)

### DIVISION 6 WOOD AND PLASTICS (NOT USED)

### DIVISION 7 THERMAL AND MOISTURE PROTECTION (NOT USED)

### DIVISION 8 DOORS AND WINDOWS (NOT USED)

### DIVISION 9 FINISHES (NOT USED)

### DIVISION 10 SPECIALTIES (NOT USED)

### DIVISION 11 EQUIPMENT (NOT USED)

### DIVISION 12 FURNISHINGS (NOT USED)

### DIVISION 13 SPECIAL CONSTRUCTION (NOT USED)

CONTRACT DOCUMENTS	CONTENTS OF VOLUME I	PAGE
--------------------	----------------------	------

---

DIVISION 14 CONVEYING SYSTEMS (NOT USED)

DIVISION 15 MECHANICAL (NOT USED)

DIVISION 16 ELECTRICAL (NOT USED)

DIVISION 17 OTHER (NOT USED)

APPENDIX A: GEOTECHNICAL REPORT

APPENDIX B: POTHOLING REPORT

#### REFERENCE STANDARDS

Olivenhain Municipal Water District, Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities, Current Edition.

Standard Specifications for Public Works Construction, "Greenbook", Current Edition.

San Diego Regional Standard Drawings (Current Edition).

#### PROJECT PLANS

Unit A – Rancho Santa Fe Road Potable Water Pipeline Replacement (17 Sheets, bound separately).

END TABLE OF CONTENTS

(BLANK)

## **PART I**

### **BIDDING AND CONTRACT REQUIREMENTS**

(BLANK)



**NOTICE INVITING SEALED BIDS**  
**FOR THE CONSTRUCTION OF**  
**UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT**  
**PROJECT**  
**FOR THE**  
**OLIVENHAIN MUNICIPAL WATER DISTRICT**

**NOTICE IS HEREBY GIVEN** that the Board of Directors of said District invites and will receive sealed bids up to the hour of **2 p.m. on November 9, 2023** for the furnishing to said District of all transportation, labor, materials, tools, equipment, services, permits, utilities, and other items necessary to construct said work. At said time, said bids will be publicly opened and read aloud at the office of the Olivenhain Municipal Water District, 1966 Olivenhain Road, Encinitas, CA 92024, (760) 753-6466.

The District will conduct a Non-Mandatory Pre-Bid Conference at the Olivenhain Municipal Water District, 1966 Olivenhain Road, Encinitas, CA 92024 at **11 a.m. on October 19, 2023**.

All questions relative to this project prior to the opening of bids shall be directed to the District. It shall be understood that no specification interpretations will be made by telephone nor will any “or equal” products be considered for approval prior to award of the contract. Bidders are encouraged to submit their pre-bid questions as early as possible, in writing via email, so they can be answered in writing through an addendum if necessary. Pre-bid questions will be received, in writing to [prebid@olivenhain.com](mailto:prebid@olivenhain.com), up to **5:00 p.m. on October 27, 2023**, after which they will not be answered.

Bids shall conform to and be responsive to the Contract Documents for the work. Contract Documents can be downloaded from the “Upcoming Projects and Planning Resources” link under “Construction Projects” on the home page of the District’s website at [www.olivenhain.com](http://www.olivenhain.com). Contract documents are not available at the District. It will be the Bidder’s responsibility to download and acknowledge receipt of all addenda. If you wish to be placed on the plan holders list, please send your company name, contact person, contact phone number and email to [prebid@olivenhain.com](mailto:prebid@olivenhain.com).

Each bid shall be submitted on the bid form furnished as part of the Contract Documents and must state the Contractor’s applicable license classification, license number, license expiration date, name of license holder, and relationship to Bidder. The license classification required for this project is Class A General Engineering. Each bid must be accompanied by cash, a cashier’s check, a certified check, or a bidder’s bond executed by an admitted surety insurer. This bid guarantee shall be in an amount of not less than 10 percent of the amount of the bid and made payable to the order of or for the benefit of the District.

Said cash, check, or bond shall be given as guarantee that the Bidder will enter into a contract with the District and furnish the required payment and performance bonds and insurance

certificates and endorsements if awarded the work, and will be declared forfeited if the Bidder refuses to timely enter into said contract or furnish the required bonds or insurance certificates and endorsements if his bid is accepted.

Each bid shall be sealed and delivered to District personnel at 1966 Olivenhain Road, Encinitas, CA 92024 on or before the day and hour set for the opening of bids. Bids shall be sealed in an envelope marked and addressed in accordance with Section 00810. Whether the bidder submits by mail or in-person, it is the sole responsibility of the bidder to see that his/her bid is received as specified by personnel of the Owner on or before the day and hour of bid opening. Bids not marked as being received by personnel of the Owner on or before the day and hour of bid opening will be rejected.

Each bid shall be sealed and delivered to District personnel at 1966 Olivenhain Road, Encinitas, CA 92024 on or before the day and hour set for the opening of bids. Bids shall be sealed in an envelope marked and addressed as follows:

**BID FOR CONSTRUCTION OF:**

**UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT  
PROJECT**

**OLIVENHAIN MUNICIPAL WATER DISTRICT**  
Attention: Prebid, Engineering Department  
1966 Olivenhain Road  
Encinitas, California 92024

IN-PERSON bids must be sealed and received as specified above by the district front office before the day and hour set for the opening of the bids.

MAILED BIDS shall be in sealed envelopes, shall be sent at bidder's risk via certified mail (or equivalent trackable delivery) with postage prepaid, shall be marked and addressed as indicated above, and received before the day and hour set for the opening of the bids. Any bidder electing to submit a bid by mail must notify the district prior to the bid opening at [prebid@olivenhain.com](mailto:prebid@olivenhain.com) of a mailed bid and provide the tracking number so the District can validate receipt.

ELECTRONICALLY transmitted bids are not considered sealed bids and will not be accepted.

Whether the bidder submits by mail or in-person, it is the sole responsibility of the bidder to see that his/her bid is received as specified by personnel of the Owner on or before the day and hour of bid opening. Bids not marked as being received by personnel of the Owner on or before the day and hour of bid opening will be rejected.

Bidders shall have successfully completed a minimum of five (5) similar projects as the Prime Contractor during the last five (5) years performing the type and value of work required by this contract on public potable water systems. Where the Bidder is a corporation or partnership, the entity must demonstrate at least five (5) years of successful experience with the work required

by the contract. Bidders failing to demonstrate this experience may be rejected as nonresponsive at the option of the District.

Under the provisions of the California Public Works Apprenticeship Standards, Sections 1777.5, 1777.6, and 1777.7 of the Labor Code, a copy of the "Extract of Public Works Contract Award" has been included. This document will be filed with the California Department of Industrial Relations at the time of the award of the Contract.

The Board of Directors has obtained from the Director of the California Department of Industrial Relations a determination of the general prevailing rate of per diem, wages, and the general prevailing rate for legal holiday and overtime work in the locality in which said work is to be performed for each craft, classification, or type of worker needed. Not less than the determined rates shall be paid to all workers employed in the performance of the contract. Such rates of wages are on the file with the Department of Industrial Relations and in the office of the District and are available to any interested party upon request.

Pursuant to Public Contract Code Section 22300, the Contractor may substitute equivalent securities for retention amounts which this Contract requires. However, the District reserves the right to solely determine the adequacy of the securities being proposed by the Contractor and the value of those securities. The District shall also be entitled to charge an administrative fee, as determined by the District in its sole discretion, for substituting equivalent securities for retention amounts.

The Contractor agrees that the District's decision with respect to the administration of the provisions of Public Contract Code Section 22300 shall be final and binding and not subject to subsequent litigation or arbitration of any kind as to acceptance of any securities being proposed, the value of these securities, the costs of administration and the determination of whether or not the administration should be accomplished by an independent agency or by the District. The District shall be entitled, at any time, to request the deposit of additional securities of a value designated by the District, in the District's sole discretion, to satisfy this requirement. If the District does not receive satisfactory securities within 12 calendar days of the date of the written request, the District shall be entitled to withhold amounts due Contractor until securities of satisfactory value to the District have been received.

Pursuant to Section 995.710 of the Code of Civil Procedures, the Contractor may substitute any of the instruments specified in Code of Civil Procedure Section 995.710 for the performance and payment bonds required by the Contract Documents. All such substitutions shall be subject to review and approval by the District. Contractor agrees to pay all attorney's fees and all other fees, costs, and expenses incurred by the District in reviewing substitutes proposed by the Contractor and in preparing and implementing any agreements determined appropriate by the District to adequately protect District.

All bidders shall agree to obtain and maintain in full effect all required insurance with limits not less than the amounts indicated. Bidders who fail to comply with the insurance requirements of this contract may have their bids rejected as nonresponsive at the election of the District.

Pursuant to California Labor Code Section 6705, the cost of sheeting, shoring, and bracing of trenches, or equivalent method, where part of the job, shall constitute a separate bid item under these contract documents.

District shall award the contract for the Project to the lowest responsive, responsible Bidder as determined by the District based on the total Bid price for the Bid Schedule. District reserves the right to award any or all Bid Schedules, reject any and all bids, to waive any irregularity in the bids received and to award the Contract on the basis of the responsive bids

The Board of Directors of the District reserves the right to select the schedule(s) under which the bids are to be compared and contract(s) awarded, to reject any and all bids, and to waive any and all irregularities or defects in any bid.

OLIVENHAIN MUNICIPAL WATER DISTRICT

Dated: 10/10/2023



\_\_\_\_\_  
LINDSEY STEPHENSON, P.E.  
ENGINEERING MANAGER

**BID FORMS**

**BID TO  
OLIVENHAIN MUNICIPAL WATER DISTRICT  
SAN DIEGO COUNTY, CALIFORNIA**

**FOR THE CONSTRUCTION OF**

**UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT  
PROJECT**

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

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

\_\_\_\_\_ Phone No.: \_\_\_\_\_

**TO THE GOVERNING BODY OF THE OLIVENHAIN MUNICIPAL WATER DISTRICT**

Pursuant to and in compliance with your Notice Inviting Sealed Bids and the other documents relating thereto, the undersigned Bidder, being fully familiar with the terms of the Contract Documents, local conditions affecting the performance of the Contract, the character, quality, quantities, and scope of the work, and the cost of the work at the place where the work is to be done, hereby proposes and agrees to perform within the time stipulated in the Special Provisions Section 00810 of the Contract, including all of its component parts and everything required to be performed, and to furnish any and all of the labor, material, tools, equipment, transportation, services, permits, utilities, and all other items necessary to perform the Contract and complete in a workmanlike manner, all of the work required in connection with the construction of said work all in strict conformity with the Plans and Specifications and other Contract Documents, including the Addenda for the prices hereinafter set forth.

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents:

Addendum No. _____	Date Issued _____
Addendum No. _____	Date Issued _____
Addendum No. _____	Date Issued _____

The undersigned as Bidder, declares that the only persons or parties interested in this bid as principals are those named herein; that this bid is made without collusion with any person, firm, or corporation; and he proposes and agrees, if the bid is accepted, that he will execute a Contract with the Owner in the form set forth in the Contract Documents and that he will accept in full payment thereof the following prices, to wit:

BIDDING INSTRUCTIONS  
FOR THE CONSTRUCTION OF

**UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

Prior to the opening of bids, all questions relative to this project **shall be directed to Olivenhain Municipal Water District, Attn: Pre-bid. Bidders** are encouraged to submit their pre bid questions as early as possible, in writing to [prebid@olivenhain.com](mailto:prebid@olivenhain.com), so they can be answered in writing through addendum, if necessary. **Pre bid questions will be received up to 5:00 p.m., on October 27, 2023 after which no questions will be taken or answered.**

Bidders shall submit information demonstrating relevant project experience, on public water or recycled water systems, on the Bid Forms included within these Contract Documents performing the type of work and magnitude required by this Contract. Bidders failing to demonstrate this experience may be rejected as nonresponsive at the option of the Owner.

Bidders agree to obtain and maintain in full effect all required insurance with limits not less than the amounts indicated. Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company. Bidders who fail to comply with the insurance requirements of this Contract may have their bids rejected as nonresponsive at the election of the Owner.

The Bidder's attention is directed to General Provisions Article 3-1 "Award of Contract or Rejection of Bids" in the General Provisions concerning the above conditions.

The complete contract includes all the contract documents set forth herein, to wit: Notice Inviting Sealed Bids, Bid Form, Bid Bond, Agreement, Performance Bond, Payment Bond, Contractor's Certificate Regarding Workers' Compensation, Certificate of Insurance (Workers' Compensation and Employer's Liability), Insurance Endorsement (Workers' Compensation and Employer's Liability), Certificate of Insurance (Liability), Insurance Endorsement (Liability), Certificate of Insurance (Builders' Risk "All Risk"), Insurance Endorsement (Builders' Risk "All Risk"), General Provisions, Special Provisions, Appendices, Standard Specifications, Standard Drawings, Drawings, Technical Specifications, Plans, and also addenda thereto and supplemental agreements.

Bidders must satisfy themselves of the character of the work to be performed by examination of the site and review of the Contract Documents. After bids have been submitted, the Bidder expressly waives the right to assert that there was a misunderstanding concerning the nature of the work to be done. Any bid protests must be submitted within three (3) calendar days of the bid due date.

The Contract Documents contain the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other personnel shall not affect the risks or obligations assumed by the Contractor, or relieve him from fulfilling any of the conditions of the Contract.

Bids shall be made on the Bid Form and Bid Bond included within these Contract Documents. Bidders shall designate the subcontractors and list the manufacturers of materials to be used in the Project on the Designation of Subcontractors form included with these Contract Documents. All subcontractors listed to perform any of the work must be licensed in the State of California. No single subcontractor may perform more than 25% of the work listed in the Bid Schedule unless specifically approved in advance

by the District prior to the submission of bids. The Owner reserves the right to find a bid non-responsive in the sole discretion Owner if a Bidder lists any unlicensed subcontractors to perform any of the work.

Submit with the bid the completed Bid Forms included within these Contract Documents. Completely fill out the one page Bid Form Checklist included in front of the Table of Contents and include it with the bid.

The Owner reserves the right to find a bid non-responsive in its sole discretion of a Bidder fails to complete or include any of the aforementioned certificates or acknowledgements.

The pay items listed in the Bid Schedules are described in Specification Section 01150 – Measurement and Payment.

In order for the Owner to consider a Bidder's bid and for a bid to be considered responsive, the bid schedule must be completed. If the bid schedule is not filled in, the bid will be determined to be non-responsive and will be rejected. The Owner reserves the right to reject any and all bids, to waive any irregularity in the bids received, and to award the Contract on the basis of the responsive bids.

Basis for the award shall be based on the total Bid price for the Bid Schedule.

**BID SCHEDULE**  
**For**  
**UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT**

Item	Description	Quantity	Unit	Unit Cost	Total Amount
1	Mobilization, Demobilization, Bonds, Permits, Insurance <sup>1</sup>	1	LS	\$ _____	\$ _____
2	Dewatering	1	LS	\$ _____	\$ _____
3	Water Main (12 Inch, PVC)	1606	LF	\$ _____	\$ _____
4	Water Main (8 Inch, PVC)	145	LF	\$ _____	\$ _____
5	Blowoff Valve (2 Inch)	2	EA	\$ _____	\$ _____
6	Gate Valve (12 Inch)	7	EA	\$ _____	\$ _____
7	Gate Valve (8 Inch)	2	EA	\$ _____	\$ _____
8	Manual Air Release Valve	3	EA	\$ _____	\$ _____
9	Fire Hydrant Assembly (6 Inch)	4	EA	\$ _____	\$ _____
10	Connections to the Existing System (8 Inch through 12 Inch)	4	EA	\$ _____	\$ _____
11	Surface Restoration	1	LS	\$ _____	\$ _____
12	Pipeline Abandonment	1043	LF	\$ _____	\$ _____
13	Potholing	1	LS	\$ _____	\$ _____
14	Traffic Control	1	LS	\$ _____	\$ _____

**TOTAL AMOUNT OF BID SCHEDULE ITEMS 1 THROUGH 14:** **\$ \_\_\_\_\_**

**TOTAL AMOUNT OF BID SCHEDULE ITEMS (IN WORDS):**

---



---

Amounts shall be shown in both words and figures, where indicated. In case of discrepancy, the amount shown in words will govern.

The above prices shall include all labor, materials, removal, overhead, profit, insurance, and incidentals required to complete the work.

<sup>1</sup>Mobilization is limited to 5% of the total bid price.

Note: By submission of this Bid, the Contractor acknowledges the two year guarantee as outlined in Section 5-14 of the General Provisions and has included said expenses as a part of this Bid.



## DESIGNATION OF SUBCONTRACTORS

In compliance with the provisions of Section 4100 4114 of the Public Contract Code of the State of California, and any amendments thereof, each Bidder shall set forth below, the name, license number, and location of the mill, shop or office of each subcontractor who will perform work or labor, or render service to the Contractor in an amount in excess of one half (1/2) of one percent (1%) of the total bid, and the portion of the work which will be done by each subcontractor. All subcontractors listed must be licensed to perform the subcontract work in the State of California. No single subcontractor may perform work in excess of 25% of the total work listed in the Bid Schedule unless specifically approved by the District in advance of submission of the Bid. Bidders who list any unlicensed subcontractors on this form may have their bid rejected as non-responsive in the sole discretion of Owner.

If the Bidder fails to specify a subcontractor for any portion of the work in excess of one half (1/2) of one percent (1%) of the total bid to be performed under the Contract, he shall be deemed to have agreed to perform such portion himself, and he shall not be permitted to subcontract that portion of the work except under conditions permitted by law.

Subletting or subcontracting any portion of the work as to which no subcontractor was designated in the original bid shall only be permitted in case of public emergency or necessity, or otherwise permitted by law, and then only after a finding reduced to writing as a public record of the Owner.

Trade	% of Work To Be Done	Name of Subcontractor	License Number	Address

## LISTING OF MANUFACTURERS

The Contractor shall submit this sheet with his bid, completed, to list the manufacturers of materials he intends to use. It shall be understood that where the Contractor elects to not use the material manufacturers called for in the Specifications, he will substitute only items of equal quality, durability, functional character, and efficiency as determined by the Owner.

Substitutions shall be allowed only if requested in accordance with Article 5-10 of the General Provisions within 35 calendar days of the date the Contract is awarded. Should a substitution not be allowed, there will be no increase in the amount of the bid originally submitted.

The Contractor shall identify intended manufacturers in table below.

[illegible]

**ACCOMPANYING THIS BID IS**

(insert the words "cash", "a cashier's check", "a certified check", or "a Bidder's bond" as the case may be) in an amount equal to at least 10 percent of the total amount of the Bid, payable to the

**OLIVENHAIN MUNICIPAL WATER DISTRICT**

The undersigned deposits the above named security as a bid guarantee and agrees that it shall be forfeited to the Owner as liquidated damages in case this bid is accepted by the Owner and the undersigned fails to execute a contract with the Owner as specified in the Contract Documents or fails to furnish the required payment and performance bonds, and insurance certificates and endorsements. Should the Owner be required to engage the services of an attorney in connection with the enforcement of this bid, Bidder promises to pay Owner's reasonable attorneys' fees, incurred with or without suit.

The names of all persons interested in the foregoing bids as principals are as follows: (NOTICE If Bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a general partnership, state true name of firm, also names of all individual partners composing firm; if a limited partnership, the names of all general partners and limited partners; if Bidder or other interested person is an individual, state first and last names in full; if the Bidder is a joint venture, state the complete name of each venturer).

---

---

---

---

---

The Owner has determined the license classification necessary to bid and perform the subject contract. In no case shall this Contract be awarded to a specialty contractor whose classification constitutes less than a majority of the project. When a specialty contractor is authorized to bid a portion of the work of this contract, all work to be performed outside of the contractor's license specialty, except work specifically authorized by the Owner, shall be performed by a licensed subcontractor in compliance with the Subletting and Subcontracting Fair Practices Act commencing with Section 4100 et seq., of the Public Contract Code. See Business and Professions Code Section 7059.

The Contractor's license classification(s) required for this project are as follows:

CLASS A – GENERAL ENGINEERING

---

---

It is the Owner's intent that "plans," as used in Public Contract Code Section 3300, is defined as the construction Contract Documents, which include both the Plans and the Specifications.

Bidder warrants and represents that it has the required experience performing the type of work required by this Contract.

Bidder warrants and represents, under penalty of perjury, that license(s) required by California State Contractor's License Law for the performance of the subject project are in full effect and proper order. Bidders must state, under penalty of perjury, the Contractor's applicable license classification, license number, license expiration date, name of license holder, and relationship to Bidder. Any bid not containing this information may be considered nonresponsive and may be rejected by the Owner.

Bidders relying upon licenses of Responsible Managing Employees (RME) or Responsible Managing Officers (RMO) agree to provide the Owner with all information it determines necessary to verify that the Bidder complies with California State Contractor's License Law.

DIR Registration Number: \_\_\_\_\_

License Classification: \_\_\_\_\_

License Number: \_\_\_\_\_

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

Name of License Holder: \_\_\_\_\_

Relationship to Bidder: \_\_\_\_\_

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

Signatures: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Dated: \_\_\_\_\_, 20 \_\_\_\_\_

**NOTE:** If Bidder is a corporation, the legal name of the corporation shall be set forth above, together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation and the corporate seal; if Bidder is a partnership, the true name of the firm shall be set forth above, together with the signature of the partner or partners authorized to sign contracts on behalf of the partnership; if the Bidder is an individual, his signature shall be placed above; if the Bidder is a joint venture, the name of the joint venture shall be set forth above with the signature of an authorized representative of each venturer.

## CERTIFICATE OF DRUG-FREE WORKPLACE

**BIDDER:** \_\_\_\_\_

The Bidder named above hereby certifies compliance with Government Code Section 8355 in matters relating to providing a drug-free workplace. The above named Bidder will:

1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a).
2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees about all of the following:
  - (a) The dangers of drug abuse in the workplace,
  - (b) The person's or organization's policy of maintaining a drug-free workplace,
  - (c) Any available counseling, rehabilitation and employee assistance programs, and
  - (d) Penalties that may be imposed upon employees for drug abuse violations.
3. Provide as required by Government Code Section 8355(c), that every employee who works on the proposed contract or loan:
  - (a) Will receive a copy of the company's drug-free policy statement, and
  - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract or loan.

---

### CERTIFICATION

I, the official named below, hereby swear that I am duly authorized legally to bind the Bidder to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME: \_\_\_\_\_

DATE EXECUTED: \_\_\_\_\_ EXECUTED IN COUNTY OF: \_\_\_\_\_

OFFICIAL'S SIGNATURE: \_\_\_\_\_

TITLE: \_\_\_\_\_

## CERTIFICATE OF NONDISCRIMINATION

1. During the performance of this contract, Bidder and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age (over 40) or sex. Bidders and subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. Bidder and subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of Division 4 of Title 2 or the California Administrative Code are incorporated into this contract by reference and made a part hereof as if set forth in full. Bidder and its subcontractor shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
2. This Bidder shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

THE UNDERSIGNED CERTIFIES THAT THE BIDDER WILL COMPLY WITH THE ABOVE REQUIREMENTS.

BIDDER NAME: \_\_\_\_\_

CERTIFIED BY:

NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

**NONCOLLUSION AFFIDAVIT**

State of \_\_\_\_\_ )  
 ) ss.  
County of \_\_\_\_\_ )

I, \_\_\_\_\_, being duly sworn, deposes  
and says that he or she is \_\_\_\_\_ of

\_\_\_\_\_, the party making the foregoing  
bid, that the bid is not made in the interest of, or on behalf of, any undisclosed person,  
partnership, company, association, organization, or corporation; that the bid is genuine and not  
collusive or sham; that the bidder has not directly or indirectly colluded, conspired, connived, or  
agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from  
bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement,  
communication, or conference, with anyone to fix the bid price of the bidder or any other bidder,  
or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to  
secure any advantage against the public body awarding the contract of anyone interested in the  
proposed contract; that all statements contained in the bid are true; and, further, that the bidder  
has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the  
contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any  
fee to any corporation, partnership, company association, organization, bid depository, or to any  
member or agent thereof the effectuate a collusive or sham bid.

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

Subscribed and sworn to before me on this \_\_\_\_\_ day of \_\_\_\_\_  
\_\_\_\_\_, 20\_\_.

\_\_\_\_\_

## BIDDER'S EXPERIENCE

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

License Number: \_\_\_\_\_

DIR Registration  
Number: \_\_\_\_\_

List a minimum of five (5) similar projects successfully completed by the Bidder as the **Prime Contractor** during the last five (5) years on public potable water systems. Provide all information required below for each project. Additional sheets may be provided, as needed. Projects not similar in scope, fee, and complexity will not be considered as representative of this project.

**Project Name  
and Location**

**Confirm Prime  
Contractor on  
Project (Y/N)**

**Project Owner.  
Provide Contact  
Reference and  
Phone No.**

**Cost of Bidder's  
Work**

**Date Completed**

---

I declare, under penalty of perjury, that the foregoing is true and correct.

Dated: \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
(Signature of Bidder)



## INSURANCE ACKNOWLEDGMENT

On behalf of the Bidder making this bid, the undersigned warrants and represents that the Bidder has carefully read and understood all of the insurance requirements of the Contract Documents and has included the full cost of providing insurance meeting all requirements of the Contract Documents in the bid. The minimum insurance coverage shall be set forth in the Special Provisions Section 00810.

Upon request by Owner prior to the time of Award, the Bidder agrees to promptly provide Owner with letters from insurance companies meeting the requirements of the Contract Documents verifying that they are prepared to issue insurance to Bidder meeting all requirements of the Contract Documents. The failure of Bidder to provide Owner with this proof of insurance prior to the time of Award shall entitle Owner to reject the Bidder's bid as nonresponsive and to Award the bid to the next lowest Bidder at the sole discretion of Owner.

The failure of Bidder to provide Owner with insurance meeting all requirements of the Contract Documents within 15 calendar days after the Award, shall constitute a material breach of the Contract, entitling Owner to terminate the Contract and call the bid bond.

By dating and executing this Insurance Acknowledgment, Bidder hereby accepts all terms and conditions of this Insurance Acknowledgment and agrees to be bound by all of its terms.

Dated: \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
(Name of Bidder)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Typed Name and Title)

(BLANK)

## **BID BOND**

We, \_\_\_\_\_ as Principal, and  
\_\_\_\_\_ as Surety, jointly and severally, bind  
ourselves, our heirs, representatives, successors and assigns, as set forth herein, to the

### **OLIVENHAIN MUNICIPAL WATER DISTRICT**

(herein called Owner) for payment of the penal sum of \_\_\_\_\_ Dollars  
(\$ \_\_\_\_\_), lawful money of the United States. Principal has submitted the accompanying  
bid for the construction of

### **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT**

If the Principal is awarded the Contract and enters into a written contract, in the form prescribed by the Owner, at the price designated by his bid, and files two bonds with the Owner, one to guarantee payment for labor and materials and the other to guarantee faithful performance, in the time and manner specified by the Owner, and carries all insurance in type and amount which conforms to the Contract Documents and furnishes required certificates and endorsements thereof, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Forfeiture of this bond, or any deposit made in lieu thereof, shall not preclude the Owner from seeking all other remedies provided by law to cover losses sustained as a result of the Principal's failure to do any of the foregoing.

Principal and Surety agree that if the Owner is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay Owner's reasonable attorney's fees incurred with or without suit.

Executed on \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
PRINCIPAL

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

(Seal if Corporation)

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

(Attach Acknowledgment of Authorized Representative of Principal)

Any claims under this bond may be addressed to:

\_\_\_\_\_ (name and address of Surety)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (name and address of Surety's  
agent for service of process in  
California, if different from above)

\_\_\_\_\_

\_\_\_\_\_ (telephone number of Surety's  
agent in California)

\_\_\_\_\_

(Attach Acknowledgment)

\_\_\_\_\_  
SURETY

By: \_\_\_\_\_  
(Attorney-in-Fact)

#### NOTICE:

No substitution or revision to this bond form will be accepted. Sureties must be authorized to do business in and have an agent for service of process in California. A certified copy of the Power of Attorney must be attached.

## AGREEMENT

**THIS AGREEMENT**, made and entered into by and between the

### **OLIVENHAIN MUNICIPAL WATER DISTRICT**

hereinafter referred to as "OWNER" and

\_\_\_\_\_ ;

a corporation under the laws of the state of \_\_\_\_\_

;

a partnership composed of \_\_\_\_\_

\_\_\_\_\_ ;

a joint venture composed of \_\_\_\_\_

\_\_\_\_\_ ;

an individual doing business as \_\_\_\_\_ ;

hereinafter referred to as "CONTRACTOR."

OWNER and CONTRACTOR agree as follows:

- (1) **SCOPE OF WORK:** CONTRACTOR will furnish all materials and will perform all of the work for the construction of the

#### **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

in accordance with the plans and specifications and other contract documents therefor.

- (2) **TIME OF COMPLETION:** The work shall be completed within the times set forth in the Special Provisions Section 00810. Time is of the essence.
- (3) **CONTRACT SUM:** OWNER will pay CONTRACTOR in accordance with the prices shown in the Bid Form.
- (4) **PAYMENTS:** Monthly progress payments and the final payment will be made in accordance with the General Provisions as modified by the Special Provisions. The filing of the notice of completion by OWNER shall be preceded by acceptance of the work made only by an action of the Governing Body of OWNER in session.
- (5) **COMPLIANCE WITH PUBLIC CONTRACTS LAW:** OWNER is a public agency in the State of California and is subject to the provisions of law relating to public contracts. It is

agreed that all provisions of law applicable to public contracts are a part of this Contract to the same extent as though set forth herein and will be complied with by CONTRACTOR.

- (6) **CONTRACT DOCUMENTS:** The complete contract includes all the contract documents set forth herein, to wit: Notice Inviting Sealed Bids, Bid Form, Bid Bond, Agreement, Performance Bond, Payment Bond, Contractor's Certificate Regarding Workers' Compensation, Certificate of Insurance (Workers' Compensation and Employer's Liability), Insurance Endorsement (Workers' Compensation and Employer's Liability), Certificate of Insurance (Liability), Insurance Endorsement (Liability), Certificate of Insurance (Builders' Risk "All Risk"), Insurance Endorsement (Builders' Risk "All Risk"), General Provisions, Special Provisions, Standard Specifications, Standard Drawings, Referenced Permits, Drawings, Plans, and also Addenda thereto and supplemental agreements.

This Agreement is executed by the OWNER pursuant to an action of its Governing Body in session on \_\_\_\_\_, 20\_\_\_\_, authorizing the same, and CONTRACTOR has caused this Agreement to be duly executed.

Dated: \_\_\_\_\_, 20\_\_\_\_ By: \_\_\_\_\_  
(Authorized Representative of Owner)

Title: \_\_\_\_\_ GENERAL MANAGER

Dated: \_\_\_\_\_, 20\_\_\_\_ \_\_\_\_\_  
(Contractor)

By: \_\_\_\_\_  
(Authorized Representative of Contractor)

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

(Seal if Corporation)

(Attach Acknowledgment for Authorized Representative of Contractor)

**APPROVED:**

\_\_\_\_\_  
(Attorney for OWNER) Date \_\_\_\_\_

## CERTIFICATE OF CONTRACTOR

I, \_\_\_\_\_, certify that I am a/the

\_\_\_\_\_  
[designate sole proprietor, partner in partnership, or specify corporate office, e.g., secretary] in the entity named as CONTRACTOR in the foregoing contract.

I hereby expressly certify that the name of the entity to which I am associated is \_\_\_\_\_

\_\_\_\_\_;

that this entity is in good standing and has complied with all applicable laws and regulations, and that I have been expressly authorized by the proper parties in this entity to execute this contract on behalf of the above-named entity.

\_\_\_\_\_  
(Signature)

ATTEST:

\_\_\_\_\_

Name: \_\_\_\_\_  
(Please Print)

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

(BLANK)



**PERFORMANCE BOND**

We, \_\_\_\_\_ as Principal,  
and \_\_\_\_\_ as Surety, jointly and  
severally, bind ourselves, our heirs, representatives, successors and assigns, as set forth herein,  
to the

**OLIVENHAIN MUNICIPAL WATER DISTRICT**

(herein called Owner) for payment of the penal sum of \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_ Dollars (\$ \_\_\_\_\_  
) ,

lawful money of the United States. Owner has awarded Principal a contract for the construction  
of

**UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT  
PROJECT**

**THE CONDITION OF THIS OBLIGATION IS SUCH** that if the Principal shall in all things abide  
by and well and truly keep and perform the covenants, and agreements in the said contract, and  
any alteration thereof made as therein provided, on his part to be kept and performed at the time  
and in the manner therein specified, including all guarantees of workmanship and/or materials  
for a two (2) year period, and shall indemnify and save harmless the Owner, District, the  
Engineer/Architect, the Owner's Representative, and their consultants, and each of their  
directors, officers, employees, and agents, as therein stipulated, this obligation shall become  
null and void, otherwise, it shall be and remain in full force and effect.

Surety agrees that no change, extension of time, alteration, or addition to the terms of the  
contract, or the work to be performed thereunder, or the plans and specifications shall in any  
wise affect its obligation on this bond, and it does hereby waive notice thereof.

Principal and Surety agree that if the Owner is required to engage the services of an attorney in  
connection with the enforcement of this bond, each shall pay Owner's reasonable attorney's fees  
incurred, with or without suit, in addition to the above sum.

Executed in three original  
counterparts on

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

\_\_\_\_\_  
PRINCIPAL

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

(Seal if Corporation)

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

(Attach Acknowledgment of Authorized Representative of Principal)

Any claims under this bond may be addressed to:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (name and address of Surety)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (name and address of Surety's  
agent for service of process in  
California, if different from above)

\_\_\_\_\_  
\_\_\_\_\_ (telephone number of Surety's  
agent in California)

(Attach Acknowledgment)

\_\_\_\_\_  
SURETY

By: \_\_\_\_\_  
(Attorney-in-Fact)

**APPROVED:**

\_\_\_\_\_  
(Attorney for OWNER)                      Date

**NOTICE:**

No substitution or revision to this bond form will be accepted. Sureties must meet all requirements of Code of Civil Procedure Section 995.660(a). A certified copy of the Power of Attorney must be attached.

## PAYMENT BOND

We, \_\_\_\_\_ as Principal,  
and \_\_\_\_\_ as Surety, jointly and  
severally, bind ourselves, our heirs, representatives, successors and assigns, as set forth herein, to the

### OLIVENHAIN MUNICIPAL WATER DISTRICT

(herein called Owner) for payment of the penal sum of \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_ ),

lawful money of the United States. Owner has awarded Principal a contract for the construction of

### UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT

If Principal or any of his subcontractors fails to pay any of the persons named in Section 3181 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract or during the two-year guarantee period, or for any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, then Surety will pay the same in an amount not exceeding the sum specified above, and also will pay, in case suit is brought upon this bond, such reasonable attorney's fees as shall be fixed by the court.

This bond shall inure to the benefit of any of the persons named in Section 3181 of the California Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

Surety agrees that no change, extension of time, alteration, or addition to the terms of the contract, or the work to be performed thereunder, or the plans and specifications shall in any wise affect its obligation on this bond, and it does hereby waive notice thereof.

Principal and Surety agree that should Owner become a party to any action on this bond that, each will also pay Owner's reasonable attorney's fees incurred therein in addition to the sum above set forth.

Executed in three original  
counterparts on

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

\_\_\_\_\_  
PRINCIPAL

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

(Seal if Corporation)

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

(Attach Acknowledgment of Authorized Representative of Principal)

Any claims under this bond may be addressed to:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (name and address of Surety)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (name and address of Surety's  
agent for service of process in  
California, if different from above)

\_\_\_\_\_  
\_\_\_\_\_ (telephone number of Surety's  
agent in California)

(Attach Acknowledgment)

\_\_\_\_\_  
SURETY

By: \_\_\_\_\_  
(Attorney-in-Fact)

**APPROVED:**

\_\_\_\_\_  
(Attorney for OWNER)

\_\_\_\_\_  
Date

**NOTICE:**

No substitution or revision to this bond form will be accepted. Sureties must meet all requirements of Code of Civil Procedure Section 995.660(a). A certified copy of the Power of Attorney must be attached.

CONTRACTOR'S CERTIFICATE  
REGARDING WORKERS' COMPENSATION

Name of Contract: **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Labor Code Section 3700:

"Every employer except the State shall secure the payment of compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this State.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his employees.
- (c) For all political subdivisions of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702."

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

Dated: \_\_\_\_\_, 20\_\_\_\_  
\_\_\_\_\_  
(Contractor)

By: \_\_\_\_\_  
(Authorized Representative of Contractor)

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

(Seal if Corporation)

(Labor Code Section 1861 provides that the above certificate must be signed and filed by the Contractor with the Owner prior to performing any work under this Contract.)

### CERTIFICATE OF INSURANCE

Name of Contract: **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY INSURANCE**

**THIS IS TO CERTIFY** that the following policy has been issued by the below-stated company in conformance with the requirements of Articles 8-1 and 8-2 of the General Provisions and is in force at this time.

The Company will give at least 30 days' written notice by certified mail to the Owner and Engineer/Architect prior to any material change or cancellation of said policy.

<u>POLICY NUMBER</u>	<u>EXPIRATION DATE</u>	<u>TYPE OF INSURANCE</u>	<u>LIMITS OF LIABILITY</u>	
_____		<b>A. WORKERS' COMPENSATION</b>	Statutory Limits Under the Laws of the State of California	
_____		<b>B. EMPLOYER'S LIABILITY</b>	Each Employee	Each Accident
		Bodily Injury By Accident	\$	\$
		Bodily Injury By Disease	\$	\$

_____ Named Insured (Contractor)	_____ Insurance Company
_____ Street Number	_____ Street Number
_____ City and State	_____ City and State

By: \_\_\_\_\_  
(Company Representative)  
**(SEE NOTICE ON PAGE 3 OF 3)**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

On \_\_\_\_\_ before me, \_\_\_\_\_  
Date Here Insert Name and Title of the Officer

Personally appeared \_\_\_\_\_  
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

\_\_\_\_\_  
NOTARY PUBLIC

Insurance Company Agent for Service  
of Process in California:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Agency

\_\_\_\_\_  
Street Number

\_\_\_\_\_  
Street Number

\_\_\_\_\_  
City and State

\_\_\_\_\_  
City and State

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Telephone Number

This certificate or verification of insurance is not an insurance policy and does not amend, extend, or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions, and conditions of such policies.



**NOTICE:**

No substitution or revision to the above certificate form will be accepted. If the insurance called for is provided by more than one insurance company, a separate certificate in the exact above form shall be provided for each insurance company.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

(BLANK)

**INSURANCE ENDORSEMENT**

Name of Contract: **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY INSURANCE**

This endorsement forms a part of Policy No. \_\_\_\_\_.

**ENDORSEMENT:**

It is agreed that with respect to such insurance as is afforded by the policy, the Company waives any right of subrogation it may acquire against the Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents by reason of any payment made on account of injury, including death resulting therefrom, sustained by any employee of the insured, arising out of the performance of the above-referenced contract.

This endorsement does not increase the Company's total limits of liability.

_____ Named Insured (Contractor)	_____ Insurance Company
_____ Street Number	_____ Street Number
_____ City and State	_____ City and State

By: \_\_\_\_\_  
(Company Representative)

**(SEE NOTICE ON PAGE 2 OF 2)**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

On \_\_\_\_\_ before me, \_\_\_\_\_  
Date Here Insert Name and Title of the Officer

Personally appeared \_\_\_\_\_  
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

\_\_\_\_\_  
NOTARY PUBLIC

**NOTICE:**

No substitution or revision to the above endorsement form will be accepted. If the insurance called for is provided by more than one policy, a separate endorsement in the exact above form shall be provided for each policy.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

## CERTIFICATE OF INSURANCE

Name of Contract: **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **LIABILITY INSURANCE**

**THIS IS TO CERTIFY** that the following policies have been issued by the below-stated company in conformance with the requirements of Articles 8-1 and 8-3 of the General Provisions and are in force at this time. The policy shall be an occurrence policy with a deductible not to exceed \$5,000.

<u>POLICY NUMBER</u> <u>EXPIRATION DATE</u>	<u>TYPE OF INSURANCE</u>	<b>LIMITS OF LIABILITY</b> In Thousands (000)	
		Occurrence	Aggregate
_____	<b>A. GENERAL LIABILITY</b>		
	Bodily Injury, Personal Injury, and Property Damage Combined	\$	\$
_____	<b>B. EXCESS GENERAL LIABILITY</b>	\$	\$
_____	<b>C. AUTOMOBILE LIABILITY</b>		
	Bodily Injury and Property Damage Combined	\$	\$
_____	<b>D. EXCESS AUTOMOBILE LIABILITY</b>	\$	\$

The following types of coverage are included in said policies (indicate by "X" in space):

**A. GENERAL LIABILITY**

Comprehensive Form -----YES\_\_\_ NO\_\_\_

Premises-Operations-----YES\_\_\_ NO\_\_\_

Explosion and Collapse Hazard ----- YES\_\_\_ NO\_\_\_

Underground Hazard-----YES\_\_\_ NO\_\_\_

Products/Completed Operations Hazard-----YES\_\_\_ NO\_\_\_

Contractual Insurance -----YES\_\_\_ NO\_\_\_

Broad Form Property Damage Including Completed Operations -----YES\_\_\_ NO\_\_\_

Independent Contractors-----YES\_\_\_ NO\_\_\_

Personal Injury-----YES\_\_\_ NO\_\_\_

**B. EXCESS GENERAL LIABILITY**

Umbrella Form -----YES\_\_\_ NO\_\_\_

Other Than Umbrella Form-----YES\_\_\_ NO\_\_\_

If other than Umbrella Form, please explain below:

**C. AUTOMOBILE LIABILITY**

Comprehensive Form Including Loading and Unloading -----YES\_\_\_ NO\_\_\_

Owned -----YES\_\_\_ NO\_\_\_

Hired-----YES\_\_\_ NO\_\_\_

Non-Owned-----YES\_\_\_ NO\_\_\_

**D. EXCESS AUTOMOBILE LIABILITY**

Umbrella Form -----YES\_\_\_ NO\_\_\_

Other Than Umbrella Form-----YES\_\_\_ NO\_\_\_

If other than Umbrella Form, please explain below:

The Company will give at least 30 days' written notice by certified mail to the Owner and the Engineer/Architect prior to any material change or cancellation of said policies.

**(SEE NOTICE ON PAGE 5 OF 5)**

3 OF 5

County of \_\_\_\_\_)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

On \_\_\_\_\_ before me, \_\_\_\_\_  
Date Here Insert Name and Title of the Officer

Personally appeared \_\_\_\_\_  
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

\_\_\_\_\_  
NOTARY PUBLIC



Insurance Company Agent for Service  
of Process in California:

\_\_\_\_\_

Name

\_\_\_\_\_

Agency

\_\_\_\_\_

Street Number

\_\_\_\_\_

Street Number

\_\_\_\_\_

City and State

\_\_\_\_\_

City and State

\_\_\_\_\_

Telephone Number

\_\_\_\_\_

Telephone Number

**NOTICE:**

No substitution or revision to the above certificate form will be accepted. If the insurance called for is provided by more than one insurance company, a separate certificate in the exact above form shall be provided for each insurance company.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

**(BLANK)**

## INSURANCE ENDORSEMENT

Name of Contract: **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **LIABILITY INSURANCE**

This endorsement forms a part of Policy No. \_\_\_\_\_.

### ENDORSEMENT:

The Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents are included as additional insureds under said policies but only while acting in their capacity as such and only as respects operations of the named insured, his contractors, any subcontractor, any supplier, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable in the performance of the above-referenced contract. This insurance shall not apply if the loss or damage is ultimately determined to be the result of the sole and exclusive negligence (including any connected with the preparation or approval of maps, drawings, opinions, reports, surveys, designs, or specifications) of one or more of the aforesaid additional insureds. The insurance afforded to these additional insureds is primary insurance. If the additional insureds have other insurance which might be applicable to any loss, the amount of this insurance shall not be reduced or prorated by the existence of such other insurance.

The Contractual Liability Insurance afforded is sufficiently broad to insure all of the matters set forth in the article entitled "Indemnity" in the General Provisions of the above-referenced contract except those matters set forth in the third paragraph thereof.

This endorsement does not increase the Company's total limits of liability.

\_\_\_\_\_  
Named Insured (Contractor)

\_\_\_\_\_  
Insurance Company

\_\_\_\_\_  
Street Number

\_\_\_\_\_  
Street Number

\_\_\_\_\_  
City and State

\_\_\_\_\_  
City and State

By: \_\_\_\_\_  
(Company Representative)

**(SEE NOTICE ON PAGE 2 OF 2)**

State of \_\_\_\_\_)

County of \_\_\_\_\_ ) ss.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

On \_\_\_\_\_ before me, \_\_\_\_\_  
Date Here Insert Name and Title of the Officer

Personally appeared \_\_\_\_\_  
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

\_\_\_\_\_  
NOTARY PUBLIC

**NOTICE:**

No substitution or revision to the above endorsement form will be accepted. If the insurance called for is provided by more than one policy, a separate endorsement in the exact form shall be provided for each policy.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

## CERTIFICATE OF INSURANCE

Name of Contract:           **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

Name of Owner:             **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance:         **BUILDERS’ RISK “ALL RISK” INSURANCE**

**THIS IS TO CERTIFY** that the following policy has been issued by the below-stated company in conformance with the requirements of Articles 8-1 and 8-4 of the General Provisions and is in force at this time:

<b>POLICY NUMBER</b>	<b>EXPIRATION DATE</b>	<b>LIMITS OF LIABILITY</b>
		\$
		(Not Less Than Contract Amount)
		Deductible:
		\$
	(Not Sooner Than Contract Completion Date)	(Not More Than \$100,000)

This certificate or verification of insurance is not an insurance policy and does not amend, extend, or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate or verification of insurance may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions, and conditions of such policies.

The Company will give at least 30 days' written notice by certified mail to the Owner and the Engineer/Architect prior to any material change or cancellation of said policy.

\_\_\_\_\_  
Named Insured (Contractor)

\_\_\_\_\_  
Insurance Company

\_\_\_\_\_  
Street Number

\_\_\_\_\_  
Street Number

\_\_\_\_\_  
City and State

\_\_\_\_\_  
City and State

By: \_\_\_\_\_  
(Company Representative)

**(SEE NOTICE ON PAGE 3 OF 3)**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

On \_\_\_\_\_ before me, \_\_\_\_\_  
Date Here Insert Name and Title of the Officer

Personally appeared \_\_\_\_\_  
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

\_\_\_\_\_  
NOTARY PUBLIC

Insurance Company Agent for Service

**OLIVENHAIN MWD**

**CERTIFICATE OF INSURANCE (BUILDERS' RISK "ALL RISK")**

UNIT A - RANCHO SANTA FE RD PW PIPELINE REPLACEMENT

2 OF 3

of Process in California:

_____ Name	_____ Agency
_____ Street Number	_____ Street Number
_____ City and State	_____ City and State
_____ Telephone Number	_____ Telephone Number

**NOTICE:**

No substitution or revision to the above certificate form will be accepted. If the insurance called for is provided by more than one insurance company, a separate certificate in the exact above form shall be provided for each insurance company.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

(BLANK)



## INSURANCE ENDORSEMENT

Name of Contract: **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

Name of Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Type of Insurance: **BUILDERS' RISK "ALL RISK" INSURANCE**

This endorsement forms a part of Policy No. \_\_\_\_\_.

### ENDORSEMENT:

The Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents are included as additional insureds under said policy but only while acting in their capacity as such with respect to the above-referenced contract.

The insurance afforded to these additional insureds is primary insurance. If the additional insureds have other insurance which might be applicable to any loss, the amount of this insurance shall not be reduced or prorated by the existence of such other insurance.

This endorsement does not increase the Company's total limits of liability.

\_\_\_\_\_  
Named Insured (Contractor)

\_\_\_\_\_  
Insurance Company

\_\_\_\_\_  
Street Number

\_\_\_\_\_  
Street Number

\_\_\_\_\_  
City and State

\_\_\_\_\_  
City and State

By: \_\_\_\_\_  
(Company Representative)

**(SEE NOTICE ON PAGE 2 OF 2)**

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss.

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

On \_\_\_\_\_ before me, \_\_\_\_\_  
Date Here Insert Name and Title of the Officer

Personally appeared \_\_\_\_\_  
Name(s) of Signer(s)

Who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the withing instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal

\_\_\_\_\_  
NOTARY PUBLIC

**NOTICE:**

No substitution or revision to the above endorsement form will be accepted. If the insurance called for is provided by more than one policy, a separate endorsement in the exact above form shall be provided for each policy.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.



# **TABLE OF CONTENTS** **GENERAL PROVISIONS**

<b>SECTION</b>	<b>ARTICLE</b>	<b>PAGE</b>
<b>1</b>	<b>DEFINITIONS, TERMS, AND ABBREVIATIONS -----</b>	<b>1</b>
	1-1 DEFINITIONS-----	1
	1-2 TERMS -----	2
	1-3 ABBREVIATIONS -----	2
<b>2</b>	<b>BID REQUIREMENTS AND CONDITIONS -----</b>	<b>2</b>
	2-1 CONTRACT DOCUMENTS-----	2
	2-2 LICENSE AND BIDDER'S EXPERIENCE-----	3
	2-3 BIDS-----	3
	2-4 WITHDRAWAL OF BID -----	3
	2-5 BIDDERS INTERESTED IN MORE THAN ONE BID-----	4
	2-6 INTERPRETATION OF PLANS AND OTHER CONTRACT DOCUMENTS -----	4
	2-7 ADDENDA -----	4
	2-8 EXISTING CONDITIONS AND EXAMINATION OF CONTRACT DOCUMENTS -----	4
<b>3</b>	<b>AWARD AND EXECUTION OF CONTRACT -----</b>	<b>5</b>
	3-1 AWARD OF CONTRACT OR REJECTION OF BIDS -----	5
	3-2 EXECUTION OF CONTRACT-----	6
	3-3 BONDS -----	6
	3-4 INSURANCE REQUIREMENTS -----	7
	3-5 FAILURE TO EXECUTE CONTRACT -----	7
<b>4</b>	<b>SCOPE OF WORK -----</b>	<b>7</b>
	4-1 WORK TO BE DONE -----	7
	4-2 CHANGES IN THE WORK -----	7
	4-3 OBSTRUCTIONS-----	8
	4-4 UTILITIES-----	8
	4-5 PLANS AND SPECIFICATIONS FURNISHED BY THE OWNER -----	9
	4-6 FINAL CLEANUP -----	9
<b>5</b>	<b>QUALITY OF THE WORK -----</b>	<b>9</b>
	5-1 AUTHORITY OF THE OWNER'S REPRESENTATIVE-----	9
	5-2 SUPPLEMENTAL DRAWINGS -----	10
	5-3 CONFORMITY WITH CONTRACT DOCUMENTS AND ALLOWABLE DEVIATIONS-----	10
	5-4 MANUFACTURER'S INSTRUCTIONS-----	10
	5-5 COORDINATION OF PLANS AND SPECIFICATIONS-----	10
	5-6 INTERPRETATION OF PLANS AND SPECIFICATIONS-----	10

SECTION	ARTICLE	PAGE
	5-7 ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR-----	11
	5-8 SUPERVISION AND SUPERINTENDENCE -----	11
	5-9 SHOP DRAWINGS-----	12
	5-10 QUALITY AND SAFETY OF MATERIALS AND EQUIPMENT-----	13
	5-11 STANDARDS, CODES, SAMPLES, AND TESTS -----	14
	5-12 OBSERVATION OF WORK BY OWNER'S REPRESENTATIVE-----	14
	5-13 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK -----	15
	5-14 TWO-YEAR GUARANTEE -----	15
<b>6</b>	<b>PROSECUTION AND PROGRESS -----</b>	<b>16</b>
	6-1 CONTRACTOR'S LIABILITY -----	16
	6-2 ASSIGNMENT -----	16
	6-3 CONTRACTOR'S CONSTRUCTION SCHEDULE AND COST BREAKDOWN-----	17
	6-4 TIME FOR COMPLETION AND FORFEITURE DUE TO DELAY-----	17
	6-5 EXTENSION OF TIME -----	18
	6-6 USE OF COMPLETED PORTIONS -----	19
<b>7</b>	<b>LEGAL RELATIONS AND RESPONSIBILITIES-----</b>	<b>19</b>
	7-1 OBSERVING LAWS AND ORDINANCES -----	19
	7-2 PERMITS AND LICENSES -----	19
	7-3 INVENTIONS, PATENTS AND COPYRIGHTS-----	20
	7-4 PUBLIC CONVENIENCE AND SAFETY -----	20
	7-5 RESPONSIBILITY FOR LOSS, DAMAGE, OR INJURIES-----	21
	7-6 CONTRACTOR'S RESPONSIBILITY FOR THE WORK -----	22
	7-7 PRESERVATION OF PROPERTY-----	22
	7-8 REGIONAL NOTIFICATION CENTER CONTACT-----	23
	7-9 EXCAVATION PLANS FOR WORKER PROTECTION REQUIRED BY LABOR CODE SECTION 6705-----	24
	7-10 SAFETY -----	24
	7-11 PERSONAL LIABILITY -----	25
	7-12 DEFENSE AND INDEMNITY -----	25
	7-13 HOURS OF LABOR-----	26
	7-14 PREVAILING WAGE-----	26
	7-15 TRAVEL AND SUBSISTENCE PAYMENTS -----	27
	7-16 APPRENTICES -----	27
	7-17 WARRANTY OF TITLE -----	27
	7-18 PROPERTY RIGHTS IN MATERIALS -----	28
	7-19 MUTUAL RESPONSIBILITY OF CONTRACTORS-----	28
	7-20 TERMINATION FOR BREACH -----	29
	7-21 NOTICE AND SERVICE THEREOF -----	30
	7-22 PARTIAL INVALIDITY -----	30

<b>SECTION</b>	<b>ARTICLE</b>	<b>PAGE</b>
	7-23 ATTORNEYS' FEES -----	30
	7-24 LANDS AND RIGHTS-OF-WAY -----	31
	7-25 NO WAIVER OF RIGHTS OR REMEDIES -----	31
	7-26 TAXES -----	31
	7-27 ASSIGNMENT OF ANTI-TRUST ACTIONS -----	32
	7-28 PAYROLL RECORDS -----	32
	7-29 MODIFICATION -----	33
	7-30 JURISDICTION AND VENUE -----	33
	7-31 HAZARDOUS WASTE -----	33
	7-32 EXCAVATIONS BELOW FOUR (4) FEET -----	33
	7-33 ARBITRATION -----	34
<b>8</b>	<b>CONTRACTOR'S INSURANCE -----</b>	<b>34</b>
	8-1 GENERAL -----	34
	8-2 WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY INSURANCE -----	35
	8-3 LIABILITY INSURANCE -----	35
	8-4 BUILDERS' RISK "ALL RISK" INSURANCE -----	36
	8-5 CONTRACTOR'S LIABILITY NOT LIMITED BY INSURANCE -----	36
<b>9</b>	<b>ESTIMATES AND PAYMENTS -----</b>	<b>36</b>
	9-1 PAYMENT FOR CHANGES IN THE WORK -----	36
	9-2 PROGRESS PAYMENTS -----	38
	9-3 FINAL ESTIMATE AND PAYMENT -----	39
	9-4 OWNER'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF -----	39
	9-5 WITHHELD CONTRACT FUNDS -----	40
	9-6 REQUIRED RELEASES -----	41
	9-7 AB 626 -----	41
<b>10</b>	<b>AUTHORITY AND STATUS OF OWNERS REPRESENTATIVES -----</b>	<b>41</b>
	10-1 STATUS OF OWNERS REPRESENTATIVES -----	41
	10-2 AUTHORITY OF OWNERS REPRESENTATIVES -----	41
<b>11</b>	<b>FORMS -----</b>	<b>42</b>
	11-1 SHOP DRAWING SUBMITTAL FORM -----	42
	11-2 PROGRESS ESTIMATE AND PAYMENT FORM -----	42
	11-3 RELEASE FORM -----	42

(BLANK)

## **GENERAL PROVISIONS**

### **SECTION 1 DEFINITIONS, TERMS, AND ABBREVIATIONS**

#### **1-1 DEFINITIONS**

Whenever the following terms occur in the Contract Documents, the meaning shall be interpreted as follows:

**ACCEPTANCE, FINAL ACCEPTANCE** - The formal action by the Owner accepting the work as being complete.

**ACCEPTED BID** - The bid accepted by the Owner.

**ATTORNEY FOR OWNER** – Alfred E. Smith, Nossaman, LLP, 777 S. Figueroa Street, 34<sup>th</sup> Floor, Los Angeles, CA. 90017, (213) 612-7831

**BIDDER** - Any individual, partnership, corporation, joint venture, or other combination thereof submitting a bid for the work contemplated, acting directly or through an authorized representative.

**CALENDAR DAY** - Means all days of the week including Saturdays, Sundays and Holidays with the first day counted being the first day following the date specified.

**CONTRACT** - The written agreement executed between the Owner and the Contractor covering the performance of the work.

**CONTRACTOR** - The individual, partnership, corporation, joint venture, or other combination thereof who has entered into the contract with the Owner for the performance of the work. The term "Contractor" means the Contractor or his authorized representative.

**CONTRACT DOCUMENTS** - The Contract Documents set forth in the Agreement; also any and all supplemental agreements amending or extending the work contemplated. Supplemental agreements are written agreements covering alterations, amendments, or extensions to the contract and include contract change orders.

**DAYS** - Unless otherwise specified, days shall mean calendar days.

**ENGINEER/ARCHITECT** – The term "Engineer/Architect" means the Engineer/Architect or his authorized representative.

**OWNER** - The public entity identified as such in the Agreement. The term "Owner" means the Owner or his authorized representative.

**OWNER'S REPRESENTATIVE** - The person or firm authorized by the Owner to represent it during the performance of the work by the Contractor. The term "Owner's Representative" means the Owner's Representative or his assistants.



**PLANS, DRAWINGS** - The Plans (drawings), or reproductions thereof, which show the location, character, dimensions, and details of the work to be done.

**SPECIAL PROVISIONS** - Additions, deletions, and changes to the General Provisions and Standard Specifications.

**SPECIFICATIONS** - The directions, provisions, and requirements contained in the General Provisions and Standard Specifications as supplemented by the Special Provisions.

**STANDARD SPECIFICATIONS** - The Contract Documents identified or referenced as such.

**SUBCONTRACTOR** - An individual, partnership, corporation, joint venture, or other combination thereof who has a contract with the Contractor to perform any of the work at the site. Subcontractor also means an individual, partnership, corporation, joint venture, or other combination thereof who has a contract with another subcontractor to perform any of the work at the site.

**STANDARD DRAWINGS, STANDARD PLANS** - That portion of the Plans identified or referenced as such.

**UTILITY** - Public or private fixed works for the transportation of fluids, gases, power, signals, or communications.

**WORK** - Any and all obligations, duties, and responsibilities necessary to complete the construction assigned to, or undertaken by, the Contractor pursuant to the Contract Documents including all materials, equipment, and supplies incorporated or to be incorporated in the construction. Also, the completed construction or parts thereof required to be provided under the Contract Documents.

## 1-2 TERMS

Wherever the terms "required," "permitted," "ordered," "designated," "directed," "prescribed," or terms of like import are used, it shall be understood that the requirements, permission, order, designation, direction, or prescription of the Owner's Representative is intended. Similarly, the terms "acceptable," "satisfactory," "or equal," or terms of like import shall mean acceptable to or satisfactory to the Owner's Representative, unless otherwise expressly stated. The word "provide" shall be understood to mean furnish and install.

## 1-3 ABBREVIATIONS

Wherever abbreviations are used, they shall have the meanings as set forth in the Special Provisions.

# SECTION 2 BID REQUIREMENTS AND CONDITIONS

## 2-1 CONTRACT DOCUMENTS

The Contract Documents are set forth in the Agreement form and the definition of "Contract Documents" is in Article 1-1 DEFINITIONS.

## 2-2 LICENSE AND BIDDER'S EXPERIENCE

No bid will be accepted from a bidder who is not licensed to conduct business in the state of California and licensed to perform the class of work defined by the Contract Documents. All bidders shall complete the Bidder's Experience form as part of their bid. Bidders failing to complete and submit the Bidder's Experience form with their bid may be treated as nonresponsive at the option of the Owner. Bidders unable to demonstrate five (5) years of successful prior experience performing the type and magnitude of work required by this contract may also be rejected as nonresponsive.

## 2-3 BIDS

Bids shall be made upon the Bid Form furnished by the Owner and a part of the Contract Documents. The Bid Form Checklist, Bid Form and Bid Bond must be submitted with the bid. All bids shall be properly executed and with all items filled in; the signatures of all persons signing shall be in longhand. Erasures, interlineations, or other corrections shall be authenticated by affixing in the margin immediately opposite the correction the initials of a person signing the bid. Written amounts shall govern in case of discrepancy between the amounts stated in writing and the amounts stated in figures. If the unit price and the total amount named by a bidder for any item are not in agreement, the unit price alone shall be considered as representing the bidder's intention, and the totals shall be corrected to conform thereto.

Bids shall not contain any recapitulation of the work to be done. Alternative bids will not be considered, except as called for. No oral, telegraphic, or telephonic bids or modifications will be considered.

Bids shall be accompanied by a "Bid Guarantee" in the form of cash, a cashier's check, a certified check, or bidder's bond executed by an admitted surety insurer, in an amount not less than 10% of the amount of bid, and made payable to or for the benefit of the Owner. Said cash, check, or bond shall be given as a guarantee that the bidder will enter into a contract and furnish the required bonds or substitutes and insurance certificates and endorsements if awarded the contract, and in case of refusal or failure to enter into said contract and furnish the required bonds or substitutes and insurance certificates and endorsements within 15 calendar days after notice of award by the Owner in writing, the cash or the check and the money represented by said check shall be forfeited to the Owner, or in the event that a bond is deposited, said security shall be forfeited. Forfeiture does not preclude the Owner from seeking all other remedies provided by law to recover losses sustained as a result of the Contractor's failure to enter into the contract or to furnish the required bonds or insurance certificates and endorsements.

Bids shall be sealed in an envelope marked and addressed as set forth in the Notice Inviting Sealed Bids. Bids shall be delivered to personnel of the Owner at the location designated in the Notice Inviting Sealed Bids on or before the day and hour set for the opening of bids.

## 2-4 WITHDRAWAL OF BID

A bidder may withdraw his bid by a signed written request any time prior to the day and hour for receiving bids designated in the Notice Inviting Sealed Bids. Thereafter the Bid may be withdrawn only as permitted in accordance with Public Contract Code Section 5100, et seq., regarding relief of Bidders.

The withdrawal of a bid does not prejudice the right of a bidder to file a new bid so long as the new bid is delivered as set forth in Article 2-3 BIDS prior to the closing time specified for all bids.

## **2-5 BIDDERS INTERESTED IN MORE THAN ONE BID**

No person, partnership, or corporation shall be allowed to make or file, or be interested in more than one bid for the work, unless alternative bids are called for. A person, partnership, or corporation submitting a subproposal to a bidder, or who has quoted prices on material to a bidder, is not thereby disqualified from submitting a subproposal or quoting prices to other bidders.

## **2-6 INTERPRETATION OF PLANS AND OTHER CONTRACT DOCUMENTS**

If any person or entity contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of the Plans, Specifications, or other Contract Documents, or finds discrepancies in, or omissions from the Plans and Specifications or other Contract Documents, he may submit to the Owner a written request for an interpretation or correction thereof. The person submitting the request will be responsible for its prompt delivery. An interpretation or correction of the Contract Documents will be made only by Addendum duly issued by the Owner and made available on the District website at [www.olivenhain.com](http://www.olivenhain.com). The Owner and the Engineer/Architect will not be responsible for any other explanation or interpretation of the documents.

## **2-7 ADDENDA**

Addenda issued before the time in which to submit bids expires shall be included in the bid and shall be made a part of the contract.

## **2-8 EXISTING CONDITIONS AND EXAMINATION OF CONTRACT DOCUMENTS**

The bidder represents that he has carefully examined the Contract Documents and the site where the work is to be performed and that he has familiarized himself with all local conditions and federal, state and local laws, ordinances, rules, and regulations that may affect in any manner the performance of the work. The bidder further represents that he has studied all surveys and investigation reports about subsurface and latent physical conditions pertaining to the jobsite, that he has performed such additional surveys and investigations as he deems necessary to complete the work at his bid price, and that he has correlated the results of all such data with the requirements of the Contract Documents. The submittal of a bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered, including locality, uncertainty of weather and all other contingencies, and as to the character, quality, quantities, and scope of the work.

The Plans and Specifications for the work show subsurface conditions or otherwise hidden conditions as they are supposed or believed by the Engineer/Architect to exist; but it is not intended or to be inferred that the conditions as shown thereon constitute a representation that such conditions are actually existent. Except as otherwise specifically provided in the Contract Documents, the Owner, the Engineer/Architect, and their consultants shall not be liable for any loss sustained by the Contractor as a result of any variance of such conditions as shown on the Plans and the actual conditions revealed during the progress of the work or otherwise.

Where the Owner or the Engineer/Architect or their consultants have made investigations of subsurface conditions in areas where the work is to be performed, such investigations were made only for the purpose of study and design. The conditions indicated by such investigations apply only at the specific location of each boring or excavation at the time the borings or excavations were made. Where such investigations have been made, bidders or Contractors may inspect the records as to such investigations subject to and upon the conditions hereinafter set forth. The inspection of the records shall be made at the office of the Engineer/Architect.

The records of such investigations are not a part of the contract and are shown solely for the convenience of the bidder or Contractor. It is expressly understood and agreed that the Owner, the Engineer/Architect, and their consultants assume no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations; the records thereof; or of the interpretations set forth therein or made by the Owner's consultants, the Engineer/Architect or his consultants in the use thereof by the Engineer/Architect, and there is no warranty or guarantee, either express or implied, that the conditions indicated by such investigations or records thereof are representative of those existing throughout such areas, or any part thereof, or that unlooked-for developments may not occur, or that materials other than, or in proportions, densities, or other characteristics different from, those indicated may not be encountered.

When a log of test borings showing a record of the data obtained by the investigation of subsurface conditions by the Owner, the Engineer/Architect, or their consultants is included with the Plans or other documents, it is expressly understood and agreed that said log of test borings does not constitute a part of the contract, represents only the opinion of the Owner or the Engineer/Architect or their consultants as to the character of the materials encountered by them in the test borings, is included in the Plans or other documents only for the convenience of bidders, and its use is subject to all of the conditions and limitations set forth in this article.

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

No information derived from such inspection of records of investigations or compilation thereof made by the Owner, the Engineer/Architect, or their consultants will in any way relieve the bidder or Contractor from any risk or from properly fulfilling the terms of the contract nor entitle the Contractor to any additional compensation.

### **SECTION 3 AWARD AND EXECUTION OF CONTRACT**

### 3-1 AWARD OF CONTRACT OR REJECTION OF BIDS

The award of the contract, if it be awarded, will be to the lowest responsible responsive bidder complying with the instructions contained in the Contract Documents. The Owner, however, reserves the right to select the schedules under which the bids are to be compared; to delete certain bid items from the Bid Schedule, to reject any and all bids, and to waive any irregularity in bids received. If, in the judgment of the Owner, a bid is unbalanced or if the bidder is not responsible, it shall be considered sufficient grounds for rejection of the entire bid.

The Owner shall have the period of time set forth in the Special Provisions after the opening of bids within which to accept or reject the bids. No bidder may withdraw his bid during said period. The Owner will return the bid guarantees, except any guarantees which have been forfeited, and except bidders' bonds, to the respective bidders whose bids they accompanied after the execution of the contract by the successful bidder or rejection of all bids or upon receipt of a written request therefor received after said period of time set forth in the Special Provisions.

Before award of the contract, any bidder shall furnish upon request proof of required insurance, a recent statement of his financial condition, and previous construction experience or such other evidence of his qualifications as may be requested by the Owner. If a bidder fails to furnish in a timely manner the information requested, it shall be considered sufficient grounds for rejection of such bidder's entire bid.

### 3-2 EXECUTION OF CONTRACT

The form of agreement, bonds, and other documents which the successful bidder, as Contractor, will be required to execute are included as a part of the Contract Documents.

The contract shall be signed by the successful bidder and returned to the Owner, together with the bonds or substitutes and insurance certificates and endorsements, within 15 calendar days or such additional time as may be allowed by the Owner from the date of the mailing of notice from the Owner to the bidder or from the date of personal delivery of notice from the Owner to the bidder that the agreement is ready for signature. The agreement, bonds or substitutes, insurance certificates and endorsements, and other documents to be executed by the Contractor shall be executed in original-quadruplicate, one each of which shall be filed with the Owner and one each with the Attorney for the Owner and the Engineer/Architect for the Owner.

### 3-3 BONDS

The successful bidder, simultaneously with execution of the Contract Documents, shall either furnish a Payment Bond and Performance Bond each in an amount equal to 100% of the contract amount, or equivalent cash or securities in lieu of these bonds in accordance with Code of Civil Procedure Section 995.710. The failure of Contractor to make a written request to Owner to use alternative securities meeting the requirements of Code of Civil Procedure Section 995.710 at the time the Contract Documents are signed shall be deemed a waiver of the right of Contractor to subsequently substitute these alternative securities. Alternative securities proposed by the Contractor shall be subject to review and approval by Owner. Contractor agrees to provide Owner with a deposit in a sum determined adequate by the Owner to cover all attorney's fees and all other fees, costs, and expenses incurred by the Owner in reviewing Contractor's request

to use alternative securities in lieu of the required bonds and to prepare all agreements determined necessary by Owner to adequately protect Owner's interest. Performance and Payment Bonds shall be furnished by surety companies meeting the requirements of Code of Civil Procedure Section 995.660(a) and shall be completed on the forms furnished as part of the Contract Documents. Surety companies, to be acceptable to Owner, must meet all requirements of Code of Civil Procedure Section 995.660(a).

If at any time a surety on any such bond fails to comply with Code of Civil Procedure Section 995.660(a), the Contractor shall, within 10 calendar days after notice from the Owner, substitute new bonds with surety companies meeting all requirements of Code of Civil Procedure Section 995.660(a). All premiums on these new bonds shall be paid solely by the Contractor. No further progress payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished new bonds to Owner meeting all requirements of Code of Civil Procedure Section 995.660(a).

The Performance Bond and the Payment Bond, or alternative securities meeting the requirements of Code of Civil Procedure Section 995.710 approved by the Owner, must remain in full effect throughout the period of the Work and for a period of two-year thereafter as required by Article 5-14 TWO-YEAR GUARANTEE.

### **3-4 INSURANCE REQUIREMENTS**

The successful bidder will be required to furnish the Owner proof of full compliance with all insurance requirements as specified in SECTION 8 CONTRACTOR'S INSURANCE. The forms of Certificate of Insurance and Endorsement which the successful bidder, as Contractor, will be required to furnish are included as a part of the Contract Documents.

### **3-5 FAILURE TO EXECUTE CONTRACT**

Failure by a bidder to whom the contract is awarded to execute the contract or to furnish the required bonds or insurance certificates and endorsements within the period of time required by Section 3-2 Execution of Contract shall be just cause for the annulment of the award and the forfeiture of the bid guarantee.

A bidder who is awarded the contract and fails to execute the contract or furnish the required bonds or substitutes, or insurance certificates and endorsements shall be liable to the Owner for all damages resulting therefrom including reasonable attorneys' fees. The bid guarantee forfeited shall not be a limitation thereon.

## **SECTION 4 SCOPE OF WORK**

### **4-1 WORK TO BE DONE**

The work to be done consists of furnishing all transportation, labor, materials, tools, equipment, services, permits, utilities and all other items which are necessary or appurtenant to construct and complete the entire project and construct the project designated in the Contract Documents, and to leave the grounds in a neat and presentable condition.

#### 4-2 CHANGES IN THE WORK

The Owner may require changes in, additions to, or deductions from the work, including complete termination thereof. Adjustment, if any, in the amounts to be paid to the Contractor by reason of any such change, addition, or deduction shall be determined as set forth in SECTION 9 ESTIMATES AND PAYMENTS.

The Owner's Representative may order minor changes in the work not involving an increase or decrease in the contract amount, not involving a change in the time for completion, and not inconsistent with the purposes for which the work is being constructed. **If the Contractor believes that any order for minor changes in the work for which the contract amount or time for completion should be changed, he shall not proceed with the changes in the work so ordered and shall within seven calendar days of the receipt of such order notify the Owner's Representative in writing of his estimate of the changes in the contract amount and time for completion he believes to be appropriate.**

No payment for changes in the work will be made and no changes in the time for completion by reason of changes in the work will be made, unless the changes are covered by a written change order approved by the Owner in advance of the Contractor's proceeding with the changed work.

#### 4-3 OBSTRUCTIONS

The Contractor shall remove and dispose of all structures, debris, or other obstructions of any character necessary to accommodate the work. Where such obstructions consist of improvements not required by law to be removed by the owner thereof, all such improvements shall be removed, maintained, and permanently replaced by the Contractor at his expense except as otherwise specifically provided in the Contract Documents.

#### 4-4 UTILITIES

The Engineer/Architect has endeavored to determine the existence of utilities at the site of the work from the records of the owners of known utilities in the vicinity of the work. The positions of these utilities as derived from such records are shown on the Plans. The service connections to these utilities are not shown on the Plans.

The Contractor shall make his own investigations, including exploratory excavations, to determine the locations and type of existing service laterals or appurtenances when their presence can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of the work. If the Contractor discovers utility facilities not identified in the Plans or Specifications or in a position different from that shown in the Plans and Specifications, he shall immediately notify in writing the Owner's Representative and the owner of the utility facility.

The Owner shall have the responsibility for the timely removal, relocation, protection, and temporary maintenance of existing main or trunkline utility facilities which are not indicated in the Plans and Specifications with reasonable accuracy.

In case it should be necessary to remove, relocate, protect, or temporarily maintain a utility because of interference with the work, the work on such utility shall be performed and paid for as follows:

When it is necessary to remove, relocate, protect, or temporarily maintain an existing main or trunkline utility facility not indicated in the Plans and Specifications with reasonable accuracy, the Owner will compensate the Contractor for the costs of locating, for the costs of repairing damage not due to the failure of the Contractor to exercise reasonable care, for the costs of removing, relocating, protecting, or temporarily maintaining such utility facilities, and for the costs for equipment on the site necessarily idled during such work. These costs, the work to be done by the Contractor in locating, removing, relocating, protecting, or temporarily maintaining such utility facilities shall be covered by a written change order conforming to the provisions of Article 4-2 CHANGES IN THE WORK and Article 9-1 PAYMENT FOR CHANGES IN THE WORK. The Owner may make changes in the alignment and grade of the work to obviate the necessity to remove, relocate, protect, or temporarily maintain such utility facilities or to reduce the costs of the work involved in removing, relocating, protecting, or temporarily maintaining such utility facilities. Changes in alignment and grade will be ordered in accordance with Article 4-2 CHANGES IN THE WORK.

When it is necessary to remove, relocate, protect, or temporarily maintain a utility (other than [1] existing main or trunkline utility facilities not indicated in the Plans and Specifications with reasonable accuracy, or [2] existing service laterals or appurtenances when their presence cannot be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of the work) the cost of which is not required to be borne by the owner thereof, the Contractor shall bear all expenses incidental to the work on the utility or damage thereto. The work on the utility shall be done in a manner satisfactory to the owner thereof; it being understood that the owner of the utility has the option of doing such work with his own forces, or permitting the work to be done by the Contractor. No representations are made that the obligations to remove, relocate, protect, or temporarily maintain any utility and to pay the cost thereof is or is not required to be borne by the owner of such utility, and it shall be the responsibility of the Contractor to investigate to find out whether or not said cost is required to be borne by the owner of the utility.

The right is reserved to governmental agencies and to owners of utilities to enter at any time upon any street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the work and for the purpose of maintaining and making repairs to their property.

#### 4-5 PLANS AND SPECIFICATIONS FURNISHED BY THE OWNER

The Owner will furnish to the Contractor PDF copies of Plans and Specifications necessary for the execution of the work. The Contractor shall keep one set of Plans and Specifications in good order with red line changes available to the Owner's Representative at the site of the work.

#### 4-6 FINAL CLEANUP



Upon completion and before making application for acceptance of the work, the Contractor shall clean all rights-of-way, streets, borrow pits, and all other grounds occupied by him in connection with the work of all rubbish, excess materials, temporary structures, and equipment, and all parts of the work and grounds occupied by him shall be left in a neat and presentable condition.

## **SECTION 5 QUALITY OF THE WORK**

### **5-1 AUTHORITY OF THE OWNER'S REPRESENTATIVE**

The Owner's Representative shall decide any and all questions which may arise as to the interpretation of the Plans and Specifications and shall have authority to disapprove or reject materials and equipment furnished and work performed which, in his opinion, is not in accordance with the Contract Documents. The Owner's Representative shall also have the authority to require the Contractor or any subcontractor to replace any workman or supervisor who, in his opinion, is not performing the work in a safe manner, fails to follow the instructions of the Owner's Representative, fails to perform work in accordance with the Contract Documents, fails to properly supervise the work, or demonstrates lack of competence to perform the particular work assigned to the workman or supervisor. The failure of the Contractor or any subcontractor to replace a worker or supervisor as directed by the Owner's Representative shall constitute a material breach of this agreement. Neither the Owner's Representative nor the Owner shall be liable to Contractor, any subcontractor, or any other person or entity for removing a workman or supervisor in accordance with the terms of this article.

### **5-2 SUPPLEMENTAL DRAWINGS**

The Plans shall be supplemented by such drawings as are necessary to better define the work. All such drawings delivered to the Contractor by the Owner's Representative shall be deemed written instructions to the Contractor. If the Contractor believes that any supplemental drawings call for changes in the work for which the contract amount or time for completion should be changed, he shall not proceed with the changes in the work so called for and shall within seven calendar days of the receipt of the supplemental drawings notify the Owner's Representative in writing of his estimate of the changes in the contract amount and time for completion he believes to be appropriate.

No payment for changes in the work will be made and no change in the time for completion by reason of changes in the work will be made, unless the changes are covered by a written change order approved by the Owner in advance of the Contractor's proceeding with the changed work.

### **5-3 CONFORMITY WITH CONTRACT DOCUMENTS AND ALLOWABLE DEVIATIONS**

The work shall conform to the lines, grades, dimensions, tolerances, and material and equipment requirements shown on the Plans or set forth in the Specifications. Although measurement, sampling, and testing may be considered evidence as to such conformity, the Owner's Representative shall be the sole judge as to whether the work or materials deviate from the Plans and Specifications, and his decision as to any allowable deviations therefrom shall be final.

If specific lines, grades, and dimensions are not shown on the Plans, those furnished by the Owner's Representative shall govern.

#### 5-4 MANUFACTURER'S INSTRUCTIONS

All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier, or distributor, except as otherwise specifically provided in the Contract Documents.

#### 5-5 COORDINATION OF PLANS AND SPECIFICATIONS

The Plans, Specifications, and other Contract Documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for the complete work. In the event of an apparent difference between Plans and Specifications, reference shall be made to the Owner's Representative whose decision thereon shall be final.

Special Provisions shall govern over General Provisions and Standard Specifications.

#### 5-6 INTERPRETATION OF PLANS AND SPECIFICATIONS

Figured dimensions on drawings shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Large-scale details shall take precedence over smaller scale drawings as to shape and details of construction. Specifications shall govern as to materials and workmanship. Plans and Specifications are intended to be fully complementary and to agree. The Specifications calling for the higher quality material or workmanship shall prevail. Materials or work described in words which so applied have a well known technical or trade meaning shall be deemed to refer to such recognized standards. In the event of any discrepancy between any drawings and the figures thereon, the figures shall be taken as correct. In the event of any doubt or question arising respecting the true meaning of the Plans or Specifications, reference shall be made to the Owner's Representative whose decision thereon shall be final.

#### 5-7 ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR

It is the duty of the Contractor to promptly notify the Owner's Representative in writing of any design, materials, or specified method that the Contractor believes may prove defective or insufficient. If the Contractor believes that a defect or insufficiency exists in design, materials, or specified method and fails to promptly notify the Owner's Representative in writing of this belief, the Contractor waives any right to assert that defect or insufficiency in design, materials, or specified method at any later date in any legal or equitable proceeding against Owner, or in any subsequent mediation, arbitration, or settlement conference between the Owner and the Contractor. The Owner's Representative, on receipt of any such notice, will promptly investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, any work done by the Contractor after he comes to the belief that a defect or insufficiency exists in design, materials, or specified method which is directly or indirectly affected by such alleged defect or insufficiency in design, materials, or specified method will be at his own risk and he shall bear all cost arising therefrom.

If the Contractor, either before commencing work or in the course of the work, finds any discrepancy between the Plans and the Specifications or between either of them and the physical conditions at the site of the work or finds any error or omission in any of the Plans or in any survey, he shall promptly notify the Owner's Representative of such discrepancy, error, or omission. If the Contractor observes that any Plans or Specifications are at variance with any applicable law, ordinance, regulation, order, or decree, he shall promptly notify the Owner's Representative in writing of such conflict. The Owner's Representative, on receipt of any such notice, will promptly investigate the circumstances and give appropriate instructions to the Contractor. Until such instructions are given, any work done by the Contractor after his discovery of such error, discrepancy, or conflict which is directly or indirectly affected by such error, discrepancy, or conflict will be at his own risk and he shall bear all cost arising therefrom.

## **5-8 SUPERVISION AND SUPERINTENDENCE**

The Contractor shall supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents.

The Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction, but the Contractor shall not be solely responsible for the negligence of others in the design or selection of a specific means, method, technique, sequence, or procedure of construction which is indicated in and required by the Contract Documents except as otherwise provided in Article 5-7 ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR.

The Contractor shall be responsible to see that the completed work complies with the Contract Documents.

The Contractor shall designate and keep on the work at all times during its progress a competent superintendent who shall not be replaced without written notice to the Owner's Representative. The superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor. During periods when the work is suspended, the Contractor shall make appropriate arrangements for any emergency work which may be required.

Whenever the superintendent is not present on any particular part of the work where the Owner's Representative may desire to inform the Contractor relative to interpretation of the Plans and Specifications or to the disapproval or rejection of materials or work performed, the Owner's Representative may so inform the foreman or other worker in charge of the particular part of the work in reference to which the information is given. Information so given shall be as binding as if given to the superintendent.

## **5-9 SHOP DRAWINGS**

Shop drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data which are prepared by the Contractor or any subcontractor, manufacturer, supplier, or distributor and which illustrates some portion of the work.

The Contractor shall review, mark with his approval, and submit for review by the Owner's Representative shop drawings as called for in the Special Provisions and Standard Specifications or requested by the Owner's Representative. Shop drawings shall be submitted by email as a PDF to the Owner's Representative and be accompanied by the Shop Drawing Submittal Form included at the end of the General Provisions. Shop drawings shall show the name of the project, the name of the Contractor, and, if any, the names of suppliers, manufacturers, and subcontractors. Shop drawings shall be submitted with promptness and in orderly sequence so as to cause no delay in prosecution of the work.

Shop drawings shall be complete in all respects. If the shop drawings show any deviations from the requirements of the Plans and Specifications because of standard shop practices or other reasons, the deviations and the reasons therefor shall be set forth in the Shop Drawing Submittal Form.

By submitting shop drawings, the Contractor represents that material, equipment, and other work shown thereon conforms to the Plans and Specifications, except for any deviations set forth in the Shop Drawing Submittal Form. A log shall be maintained by the Contractor showing the following information: sequential shop drawings number brief description, date submitted, date approved, any other data relevant to the shop drawings.

Within 30 calendar days after receipt of said shop drawings, the Owner's Representative will return via electronic mail (email), of the shop drawings to the Contractor with any comments noted thereon.

If so noted by the Owner's Representative, the Contractor shall correct the drawings and resubmit them in the same manner as specified for the original submittal. The Contractor in the Shop Drawing Submittal Form accompanying resubmitted shop drawings shall direct specific attention to revisions other than the corrections requested by the Owner's Representative on previous submittals.

The review by the Owner's Representative is only of general conformance with the design concept of the project and general compliance with the Plans and Specifications and shall not be construed as relieving the Contractor of the full responsibility for: providing materials, equipment, and work required by the contract; the proper fitting and construction of the work; the accuracy and completeness of the shop drawings; selecting fabrication processes and techniques of construction; and performing the work in a safe manner.

No portion of the work requiring a shop drawing submittal shall be commenced until the submittal has been reviewed by the Owner's Representative and returned to the Contractor with a notation indicating that resubmittal is not required.

**If the Contractor believes that any shop drawing or communication relative thereto calls for changes in the work for which the contract amount or time for completion should be changed, he shall not proceed with the changes in the work so called for and shall within seven calendar days of the receipt of the shop drawings notify the Owner's Representative in writing of his estimates of the changes in the contract amount and time for completion he believes to be appropriate.**

No payment for changes in the work will be made and no change in the time for completion by reason of changes in the work will be made, unless the changes are covered by a written change order approved by the Owner in advance of the Contractor's proceeding with the changed work.

## 5-10 QUALITY AND SAFETY OF MATERIALS AND EQUIPMENT

All equipment, materials, and supplies to be incorporated in the work shall be new, unless otherwise specified. All equipment, materials, and supplies shall be produced in a good and workmanlike manner. When the quality of a material, process, or article is not specifically set forth in the Plans and Specifications, the best available quality of the material, process, or article shall be provided.

Whenever any material, process, or article is indicated or specified by grade, patent or proprietary name, or by name of manufacturer, such Specification shall be deemed to be used for the purpose of facilitating description of the materials, process, or articles desired and shall be deemed to be followed by the words "or equal", and the Contractor may offer any material, process, or article which shall be substantially equal or better in every respect to that so indicated or specified; provided, however, that if the material, process, or article offered by the Contractor is not, in the opinion of the Owner's Representative, equal or better in every respect to that specified, then the Contractor must furnish the material, process, or article specified or one that in the opinion of the Owner's Representative is the substantial equal or better in every respect. In the event that the Contractor furnishes material, process, or article more expensive than that specified, the difference in cost of such material, process, or article so furnished shall be borne by the Contractor.

In accordance with Public Contract Code Section 3400, the Contractor shall submit data substantiating requests for substitution of "equal" items within 35 calendar days after award of the contract. This 35-day period of time is included in the number of days allowed for the completion of the work.

All materials, equipment, and supplies provided shall, without additional charge to Owner, fully conform with all applicable state and federal safety laws, rules, regulations, and orders, and it shall be Contractor's responsibility to provide only such materials, equipment, and supplies notwithstanding any omission in the Contract Documents therefor or that a particular material, equipment, or supply was specified.

All machinery and equipment provided by the Contractor for the work shall include locking mechanisms capable of locking any shut-down devices on the machinery and equipment before commencement of any repairs or other work. Any machinery or equipment provided by the Contractor, which does not have this locking ability, shall be altered at the expense of the Contractor to provide these locking mechanisms without compromising any safety features on the equipment or machinery prior to the commencement of any repairs or work on the equipment or machinery. The Contractor shall not commence any work or repairs on any machinery or equipment which has been shut down until the locking mechanism has been activated and the Contractor has tagged the applicable machinery or equipment with a tag stating "Danger Do Not Operate." This tag shall include the name of the employee who locked the equipment prior to the commencement of any work or repairs. The Contractor shall insure that all equipment and

machinery fully complies with Title 8 of California Administrative Code Sections 3202, 3314, 6003, 2320.4-2320.6, 2530.43, and 2530-86 at all times during performance of the work.

#### 5-11 STANDARDS, CODES, SAMPLES, AND TESTS

Whenever reference is made to a standard, code, Specification, or test and the designation representing the date of adoption or latest revision thereof is omitted, it shall mean the latest revision of such standard, code, Specification, or test in effect on the day the Notice Inviting Sealed Bids is dated.

Tests shall be made in accordance with commonly recognized procedures of technical organizations and such special procedures as may be prescribed elsewhere in the Plans and Specifications. The Contractor shall furnish without charge such samples for testing as may be required by the Owner's Representative.

#### 5-12 OBSERVATION OF WORK BY OWNER'S REPRESENTATIVE

The Owner's Representative shall at all times have access to the work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, workmanship, and character of materials and equipment used and employed in the work.

Whenever the Contractor varies the normal period during which work or any portion of it is carried on each day, he shall give timely notice to the Owner's Representative so that the Owner's Representative may, if he wishes, be present to observe the work in progress. If the Contractor fails to give such timely notice, any work done in the absence of the Owner's Representative will be subject to rejection.

The Contractor shall give timely notice to the Owner's Representative in advance of backfilling or otherwise covering any part of the work so that the Owner's Representative may, if he wishes, observe such part of the work before it is concealed.

The observation, if any, by the Owner's Representative of the work shall not relieve the Contractor of any of his obligations to fulfill the contract as prescribed. Defective work shall be made good, and materials and equipment furnished and work performed which is not in accordance with the Contract Documents may be rejected notwithstanding the fact that such materials, equipment, and work have been previously observed by the Owner's Representative or that payment therefor has been included in an estimate for payment.

## 5-13 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

Any work which does not conform the requirements of the Contract Documents or which is found unacceptable or deficient by the Owner or the Owner's Representative shall be remedied or removed and replaced by the Contractor at the Contractor's sole cost and expense, together with any other work which may be displaced in so doing, and no compensation will be allowed the Contractor for such removal, replacement, or remedial work. All materials found inadequate or deficient by the Owner or the Owner's Representative shall be immediately removed from the site.

Any work done beyond the lines and grades shown on the Plans or established by the Owner or any changes in, additions to, or deductions from the work done without written authority from the Owner will be considered as unauthorized and will not be paid for. Work so done will be ordered remedied, removed, or replaced by the Owner or the Owner's Representative at the Contractor's sole cost and expense.

Upon failure on the part of Contractor to comply promptly with any order of the Owner or Owner's Representative made under the provisions of this article the Owner or Owner's Representative shall have authority to cause all non-conforming materials, rejected work, or unauthorized work to be remedied, removed, or replaced at the Contractor's sole cost and expense and to deduct all fees and costs incurred by the Owner including staff time from any monies due or to become due the Contractor under this contract.

## 5-14 TWO-YEAR GUARANTEE

Besides guarantees required elsewhere, the Contractor shall and hereby does guarantee all work, materials, parts, equipment and supplies to be free from all defects due to faulty materials or workmanship for a period of two-years after the date of formal acceptance of the work by the Board of Directors of Owner except for any portion of the work that is utilized or placed into service by the Owner in accordance with the provisions of Article 6-6 USE OF COMPLETED PORTIONS. The guarantee period for portions of the work so utilized or placed into service shall be two-years commencing on the date of the written notification to the Contractor described in Article 6-6 USE OF COMPLETED PORTIONS. The Contractor shall repair or remove and replace any and all such work, together with any other work which may be displaced in so doing, that is found to be defective by Owner in workmanship and/or materials, equipment, parts or supplies within the two-year period, at the Contractor's sole cost and expense, ordinary wear and tear and unusual abuse or neglect excepted. In the event the Contractor fails to correct all defects identified by the Owner within seven (7) consecutive days after written notice of the defects from Owner, the Owner is hereby authorized to proceed to have the defects remedied and made good at the sole expense of the Contractor who hereby agrees to pay the cost and charges therefore immediately on demand. Such action by the Owner will not relieve the Contractor of the guarantees required by this article or elsewhere in the Contract Documents.

The Performance Bond and the Payment Bond shall continue in full force and effect for the guarantee period.

If, in the opinion of the Owner, defective work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the Owner or to prevent interruption of operations of the Owner, the Owner may require the Contractor to correct the defects in a shorter period of time determined solely by Owner. If the Contractor does not correct the defects within the time specified by Owner, Owner may proceed to make such corrections or provide such attention; and all fees and costs of such correction or attention shall be charged against the Contractor. Such action by the Owner will not relieve the Contractor of the guarantees required by this article or elsewhere in the Contract Documents.

This article does not in any way limit the guarantee on any items for which a longer guaranty is specified or on any items for which a manufacturer or supplier gives a guarantee for a longer period. The Contractor agrees to act as a co-guarantor with such manufacturer or supplier and shall furnish the Owner all appropriate guarantee or warranty certificates upon completion of the project. No guarantee period whether provided for in this article or elsewhere in this contract shall in any way limit the liability of the Contractor or his subcontractors, materialmen, suppliers, sureties or insurers for the full statutory periods provided by California law.

## **SECTION 6 PROSECUTION AND PROGRESS**

### **6-1 CONTRACTOR'S LIABILITY**

The Contractor shall be solely liable and responsible to the Owner for all acts and omissions of the Contractor's directors, officers, agents, owners, and employees and for all acts and omissions of all subcontractors, materialmen and suppliers and their respective directors, officers, managers, members, agents, owners and employees performing any of the work or providing any materials or supplies included as part of the work. The Owner, the Engineer/Architect and the Owner's Representative shall not be liable in any way for any acts or omissions of the Contractor, any subcontractors, any materialmen, any suppliers, or any of their respective directors, officers, managers, members, agents, employees or owners. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor materialman, or supplier and the Owner. The Contractor shall bind all subcontractors to all terms of the Contract Documents for all work being performed by those subcontractors.

The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the work among subcontractors.

### **6-2 ASSIGNMENT**

The performance of the contract may not be assigned, except upon the written consent of the Owner. Consent will not be given to any proposed assignment which would relieve the original Contractor or his sureties or insurers of their responsibilities under the contract, nor will the Owner consent to any assignment of a part of the work under the contract.

Upon obtaining a prior written consent of the Owner, the Contractor may assign moneys due or to become due him under the contract, to the extent permitted by law, but any assignment of moneys shall be subject to all proper setoffs in favor of the Owner and to all deductions provided for in the contract, and particularly all money withheld, whether assigned or not, shall be subject



to being used by the Owner for the completion of the work in the event that the Contractor should be in default therein.

No assignment of this contract will be approved unless it shall contain a provision that the funds to be paid to the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for performance of the work called for under the contract in favor of all persons, firms, or corporations rendering such services or supplying such materials and that the Owner may withhold funds due until all work required by the Contract Documents is completed to the Owner's satisfaction.

In the event of bankruptcy of the Contractor, whether voluntary or involuntary, this Agreement may be automatically terminated at the election of the Owner. The election to terminate in accordance with this provision shall be deemed effective as of the date the Owner mails notice of termination in accordance with this section to the Contractor at the Contractor's last known address without any further action of any party. Upon termination in accordance with this provision, the Contractor shall be entitled to no further payments over and above the reasonable value of the actual Work completed as of the date the termination notice is mailed.

#### **6-3 CONTRACTOR'S CONSTRUCTION SCHEDULE AND COST BREAKDOWN**

Within fourteen (14) days after Notice to Proceed, the Contractor shall deliver to the Owner's Representative a construction progress schedule and cost breakdown in bar chart form showing the proposed dates of commencement and completion and cost of each of the various parts of the work and the anticipated amount of each monthly payment that will become due the Contractor in accordance therewith. The Owner shall be entitled to terminate this Contract if, in the Owner's opinion, the Contractor is failing to carry on the work diligently or in accordance with the approved construction schedule and breakdown. The Contractor has been advised and understands that time is of the essence with respect to completion of all phases of the work in accordance with the approved construction schedule.

#### **6-4 TIME FOR COMPLETION AND FORFEITURE DUE TO DELAY**

The Contractor shall complete all or any designated portion of the work called for under the contract within the time set forth in Special Provisions Section 00810. Time is of the essence in this contract.

Failure of the Contractor to perform any covenant or condition contained in the Contract Documents within the time period specified shall constitute a material breach of this contract entitling the Owner to terminate the contract unless the Contractor applies for, and receives, an extension of time in accordance with the procedures set forth in this article and Article 6-5 EXTENSION OF TIME.

Failure of the Owner to insist upon the performance of any covenant or condition within the time period specified in the Contract Documents shall not constitute a waiver of the Contractor's duty to complete performance within the designated periods unless the waiver is in writing.

The Owner's agreement to waive a specific time provision or to extend the time for performance shall not constitute a waiver of any other time provisions contained in the Contract Documents.

Failure of the Contractor to complete performance promptly within the additional time authorized in the waiver or extension of time agreement shall constitute a material breach of this contract entitling the Owner to terminate.

In accordance with Government Code 53069.85, Contractor agrees to forfeit and pay Owner the amount per day set forth in the Special Provisions for each and every day of delay which shall be deducted from any payments due or to become due the Contractor.

The Contractor shall not be deemed in breach of this contract and no forfeiture due to delay shall be made because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor provided the Contractor requests an extension of time in accordance with the procedures set forth in this article and Article 6-5 EXTENSION OF TIME. Unforeseeable causes of delay beyond the control of Contractor shall include acts of God, acts of a public enemy, acts of the government, acts of the Owner, or acts of another contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and weather, or delays of subcontractors due to such causes, or delays caused by failure of the Owner or the owner of a utility to provide for removal or relocation of existing utility facilities. Delays caused by actions or neglect of Contractor or his agents, servants, employees, officers, subcontractors, directors, or of any party contracting to perform part or all of the work or to supply any equipment or materials shall not be excusable delays. Excusable delays (those beyond Contractor's control) shall not entitle the Contractor to any additional compensation. The sole remedy of the Contractor shall be to seek an extension of time.

#### 6-5 EXTENSION OF TIME

The Contractor shall not be entitled to any increase in the contract price as a result of the Owner's approval of any extension of time except to the extent that the Owner approves an increase in the contract price on a properly executed Change Order.

The time specified for completion of all of the work or any part of the work may be extended only by a written change order executed by the Owner or other written form executed by the Owner.

Requests for an extension of time must be delivered to the Owner's Representative within ten consecutive calendar days following the date of the occurrence which caused the delay. The request must be submitted in writing and must state the cause of the delay, the date of the occurrence causing the delay, and the amount of additional time requested. Requests for extensions of time shall be supported by all evidence reasonably available or known to the Contractor which would support the extension of time requested. Requests for extensions of time failing to include the information specified in this article and requests for extensions of time which are not received within the time specified above shall result in the forfeiture of the Contractor's right to receive any extension of time requested.

If the Contractor is requesting an extension of time because of weather, he shall supply daily written reports to the Owner's Representative describing such weather and the work which could not be performed that day because of such weather or conditions resulting therefrom and which he otherwise would have performed.

The Owner's acceptance of the daily reports shall not be deemed an admission of the Contractor's right to receive an extension of time or a waiver of the Owner's right to strictly enforce the time provisions contained in the Contract Documents.

When the Contractor has submitted a request for an extension of time in accordance with the procedures of this article and Article 6-4 TIME FOR COMPLETION AND FORFEITURE DUE TO DELAY, the Owner will ascertain the facts and extent the delay and extend the time for completing the work if, in its judgment, the findings of fact justify such an extension, and its findings of facts thereon shall be final and conclusive. An extension of time may be granted by the Owner after the expiration of the time originally fixed in the contract or as previously extended, and the extension so granted shall be deemed to commence and be effective from the date of such expiration.

Any extension of time shall not release the sureties upon any bond required under the contract.

## **6-6 USE OF COMPLETED PORTIONS**

When the work or any portion of it is sufficiently complete to be utilized or placed into service, the Owner shall have the right upon written notification to the Contractor to utilize such portions of the work and to place the operable portions into service and to operate same.

Upon said notice and commencement of utilization or operation by the Owner, the Contractor shall be relieved of the duty of maintaining the portions so utilized or placed into operation; provided, however, that nothing in this article shall be construed as relieving the Contractor of the full responsibility for completing the work in its entirety, for making good defective work and materials, for protecting the work from damage, and for being responsible for damage and for the work as set forth in the General Provisions and other Contract Documents nor shall such action by the Owner be deemed completion and acceptance, and such action shall not relieve the Contractor, his sureties, or insurers of the provisions of SECTION 8 CONTRACTOR'S INSURANCE, of Article 7-12 INDEMNITY, and of Article 5-14 TWO-YEAR GUARANTEE.

## **SECTION 7 LEGAL RELATIONS AND RESPONSIBILITIES**

### **7-1 OBSERVING LAWS AND ORDINANCES**

The Contractor shall keep himself fully informed of all existing and future laws, ordinances, and regulations which in any manner affect those engaged or employed to perform any of the work or providing any materials or supplies or which in any way affect the conduct of the work and of all statutes, laws, rules, regulations, orders, decisions, and decrees of any court or governmental agency having any jurisdiction or authority over all or any of the work or the conduct of the work, including all federal, state and local safety rules, regulations, and orders. This shall expressly include all ordinances, rules, regulations, and requirements applying to the work or the conduct of the work enacted by the Owner. If any discrepancy or inconsistency is discovered in the Plans, Specifications, or contract for the work the relation to any such law, rule, regulation, ordinance, order or decree, the Contractor shall forthwith report the same to the Owner's Representative in writing and cease operations on that part of the work until the Owner's Representative has given him appropriate instructions as provided for Article 5-7 ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR.

The Contractor shall at all times observe and comply with and shall cause all of his directors, officers, agents, managers, members, owners, employees, subcontractors, materialmen and suppliers to observe and comply with all existing and future laws, ordinances, regulations, orders, and decrees, and shall hold harmless, indemnify, and defend the Owner, the Water Authority, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents from and against any and all liability, claims, causes of action, damages, losses, claim fees and costs, staff time, expenses, fees, and costs, including all costs of defense and attorneys' fees, arising from or based on the violation any such law, ordinance, regulation, order, or decree by the Contractor, any subcontractor, any materialman or supplier or any of their respective directors, officers, agents, managers, members, owners, or employees.

## **7-2 PERMITS AND LICENSES**

The Contractor shall be solely liable and responsible for securing all permits and licenses necessary to perform all of the work, for paying all fees and charges necessary to secure any such permit, license, or approval, and for giving all notices which are appropriate or necessary to the proper and safe prosecution of the work. The Owner shall have no obligation to procure any permit, license, or approval necessary to perform all or any portion of the work. The Contractor shall also be solely liable and responsible for fully complying with all requirements of any permits, licenses or approvals pertaining to all or any of the work. The failure of Contractor to strictly comply with all requirements of any permits, licenses, or approvals applying to all or any of the work shall constitute a material breach of the contract.

## **7-3 INVENTIONS, PATENTS, AND COPYRIGHTS**

The Contractor shall pay all royalties and assume all costs arising from the use of any invention, design, process, materials, equipment, product, or device which is the subject of patent rights or copyrights.

The Contractor shall hold harmless, indemnify, and defend the Owner, the Water Authority, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents from and against all claims, damages, losses, expenses, and other costs, including costs of defense and attorneys' fees, arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work or resulting from the incorporation in the work of any invention, design, process, materials, equipment, product or device, and shall defend all such claims in connection with any alleged infringement of such rights.

## **7-4 PUBLIC CONVENIENCE AND SAFETY**

The Contractor shall conduct his operations at all times in a manner that creates the least possible obstruction and inconvenience to the public, and he shall have under construction no greater length or amount of work than he can prosecute properly with due regard to the rights of the public and all property owners in the area of the work. The Contractor shall be solely liable and responsible for ensuring that all of the work is conducted at all times in a safe manner that does not injure or damage any workers, members of the public or private or public property.

Convenient access to driveways, houses, and buildings along the line of work shall be maintained and temporary crossings shall be provided and maintained in good condition at all times during performance of the work. Not more than one crossing or intersecting street or road shall be closed at any one time.

The Contractor shall provide and maintain such fences, barriers, directional signs, lights, and flagmen as are necessary to give adequate warning to the public at all times of any conditions to be encountered as a result of the work and to give directions to the public. The Contractor shall ensure that all unsafe conditions created by the work are promptly remedied and that any unsafe conditions created by the work are protected by barriers, safeguards and warnings preventing vehicular, bicycle or walking access in any unsafe areas.

It shall also be the sole responsibility of the Contractor to ensure that the work is performed at all times in a manner that does not injure or harm any person or injure or damage any real or personal property of any person or entity.

The Contractor shall perform the work only the areas expressly identified in the Contract Documents. The Contractor must operate entirely within the limits of the project site. No equipment or materials may be parked, stockpiled, or stored outside the project site or designated Contractor staging areas. The Contractor shall not enter onto, occupy, or disturb any privately owned land or any public or private habitat not scheduled for removal in the approved plans with any men, tools, materials, dirt, or equipment except with the prior express written consent of the Owner and all owners of any privately-owned land. The Contractor has been advised, and understands, that any request to enter onto, occupy, or disturb any privately-owned land or habitat must be submitted to the general manager of the Owner for written approval prior to entering onto, occupying, or disturbing any privately-owned land or public or private habitat for any purpose. The violation of this section by Contractor shall constitute a material breach of this contract.

The Contractor and any subcontractors, materialmen, or suppliers shall not, at any time, conduct any of the work in any manner that creates any public or private nuisance or trespass on the land of any private party or public agency. It shall be the sole responsibility of Contractor to conduct the work at all times in a manner that avoids creating any nuisance or trespass on any real or personal property owned by any private party or public agency.

The Contractor hereby agrees to indemnify, defend, and hold harmless the Owner, , City of Carlsbad, City of Encinitas, Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents from and against any and all liability, claims, causes of action, actions, damages, losses, fees, costs, or expenses, of whatever type or nature, including all costs of defense, attorneys' fees, and claim fees or costs, arising out of or resulting from performance of any of the work by the Contractor, its subcontractors, materialmen, or suppliers, or their respective directors, officers, agents, managers, members, owners, or employees which results in any injury or damage to persons or property including wrongful death regardless of whether or not such claim, cause of action, damage, loss or expense is caused in whole or in part by the negligence, active or passive, of Owner, the Engineer/Architect, or the Owner's Representative excepting only those claims and causes of action caused by the sole active negligence or intentional misconduct of the Owner,

the Engineer/Architect, or the Owner's Representative. From and after the date of submission of any claim or demand to Owner, the indemnified parties shall recover from the Contractor all attorneys fees, expert fees and costs, claim costs, and staff time involved in handling the claim or any subsequent action on the claim at the standard hourly rates for staff handling the claim or action.

#### **7-5 RESPONSIBILITY FOR LOSS, DAMAGE, OR INJURIES**

The Contractor shall be solely responsible for all liability, claims, causes of action, demands, losses, costs, fees, expenses, and damages, of whatever type or nature, from any cause arising out of or resulting from or in connection with the performance of any of the work, excepting only those claims and causes of action caused solely and exclusively by the active negligence or intentional misconduct of the Owner, the Engineer/Architect, the Owner's Representative, or their consultants, directors, officers, employees, and agents. This exclusive responsibility shall extend to all liability, claims, causes of action, demands, losses, costs, fees, and expenses, of whatever type or nature, after completion of the work as well as during the progress of the work.

In the event any hazardous or toxic materials, including but not limited to asbestos, are utilized in construction or hazardous or toxic materials are otherwise encountered during construction, the Contractor shall take all appropriate precautions to protect persons and property and shall comply with all applicable regulations for the installation and handling of such hazardous or toxic materials. The Contractor is solely responsible for protection of all persons and property that could be affected by any construction or work and for the proper handling and disposal of all such hazardous or toxic materials.

Contractor has been advised that the Owner has Material Safety Sheets (hereinafter "MSS") available for review on any hazardous chemical they may be exposed to while working in or around Owner facilities. It shall be the sole responsibility of Contractor to request and inspect these MSS forms prior to commencement of any work and to alert all employees and agents of Contractor of potential hazardous waste exposure from Owner facilities. It shall be the sole responsibility of Contractor to provide the Owner's Representative with completed MSS forms for all hazardous or toxic substances that the Contractor utilizes as part of the work prior to the use of any hazardous or toxic substances and to provide these MSS forms to the Contractor's agents and employees prior to their exposure to any hazardous or toxic substance utilized by the Contractor. Further, Contractor shall comply with all provisions contained in General Industry Safety Orders Section 5194 of Title 8 of the California Administrative Code (the California Hazardous Communication Regulation) at all times during performance of the work.

#### **7-6 CONTRACTOR'S RESPONSIBILITY FOR THE WORK**

Until formal acceptance of the work by action of the Board of Directors of Owner, the Contractor shall be solely liable and responsible for all aspects of the work and all equipment materials and supplies to be provided as part of the work (including materials for which he has received partial payment or materials which have been furnished by the Owner) and shall bear the sole risk of injury, loss, or damage to any of the work, or any materials, supplies, or equipment being used or provided in conjunction with the work from any act of nature or the elements and from all other causes, whether arising from the execution or from the non-execution of the work.

The Contractor, at the Contractor's sole cost and expense, shall rebuild, repair, restore, and make good all injuries, losses, or damages whatsoever to any portion of the work or to any materials, equipment, or supplies from any cause before completion and formal acceptance of the work by formal action of the Board of Directors of Owner and shall solely bear the expense thereof. Where the Owner or the Owner's Representative determines it is necessary to protect the work or materials from any damage or injury, the Contractor shall at his sole expense provide suitable drainage and erect any additional structures and take all additional protective actions determined necessary or appropriate by either the Owner or the Owner's Representative to protect the work or materials from further damage or injury. The suspension of the work or the granting of an extension of time from any cause whatsoever shall not relieve the Contractor of his sole responsibility for the work, materials, or equipment as specified herein.

In an emergency affecting the safety of life or property, including any adjoining property, the Contractor, without special instructions or authorizations, shall promptly act to prevent such threatened loss or injury. The Contractor shall also promptly implement any and all directions given by the Owner or the Owner's Representative to protect the safety of life or property during any emergency as determined by Owner.

Notwithstanding the foregoing provisions of this section, the Contractor shall not be responsible for the cost of repairing or restoring damage to the work where the damage has been determined to have been caused solely by an Act of God in excess of 5% of the contract and amount provided that the work damaged is built in accordance with accepted and applicable building standards and in strict compliance with the Plans and Specifications. For the purpose of this paragraph, "Acts of God" shall include only earthquakes in excess of a magnitude of 3.5 on the Richter Scale and tidal waves. No other actions of the elements, nature, or man shall be treated as Acts of God under this paragraph.

## **7-7 PRESERVATION OF PROPERTY**

The Contractor shall be solely liable and responsible for avoiding injury or damage or interfering with the construction or operation of any and all existing improvements or facilities, all utility facilities, all personal and real property whether owned by any public agency or private party, and any and all trees, shrubbery, landscaping and habitat that are not to be removed. The Contractor shall be solely liable and responsible for any and all damage and injury to any real or personal property of any person or entity both during and after performance of the work.

All trees, shrubbery, and landscaping that are not to be removed, and all lines, fences, signs, survey markers and monuments, buildings and structures, conduits, pipelines both under or above ground, all sewer and water pipelines or facilities, all highway or street facilities, and any and all other improvements, facilities, habitat, trees, or landscaping within or adjacent to the work not to be removed in the approved plans shall be protected by the Contractor from all injury or damage and the Contractor shall provide and install suitable safeguards to protect all such objects from any injury or damage. If any of the foregoing objects are injured or damaged either during or after performance of the work, they shall be promptly replaced or restored to a condition as good as when the Contractor commenced work or as good as required by the Plans and Specifications if any such objects or are part of the work being performed, at the Contractors sole cost and expense. The Owner, the Engineer/Architect and the Owners Representative and

their respective Directors, officers, agents and employees shall have no liability whatsoever for any injury or damage caused in whole or in part by the actions or omissions of the Contractor, any subcontractor, any materialmen or supplier, or any of their respective directors, officers, agents, employees, managers, or members except where the injury or damage is caused by the sole and exclusive active negligence or intentional misconduct of the Owner, the Engineer/Architect, the Owners Representative, or their consultants, directors, officers, employees, and agents. The Contractor shall also be solely liable and responsible for any and all damage or injury to any landscaping or habitat caused in whole or in part by the actions or omissions of the Contractor, any subcontractor, any materialmen or supplier, or their respective directors, officers, agents, employees, managers, owners, or members.

The fact that any pipeline or other underground facility is not shown on the Plans, shall not relieve the Contractor of his responsibility under this section.

In addition to any requirements imposed by law, the Contractor shall shore up, brace, underpin, and protect all foundations, structures, or improvements adjacent to or adjoining the site of the work which are in any way affected by the excavations or by any of the work. Whenever any notice is required to be given by the Owner or the Contractor at any adjacent or adjoining landowner or other party before commencement of any work, this notice shall be given by the Contractor.

#### **7-8 REGIONAL NOTIFICATION CENTER CONTACT**

The Contractor, except in an emergency, shall contact the appropriate regional notification center prior to commencing any excavation work. Notify the center at least two working days in advance or up to a maximum of 14 calendar days in advance of any excavation work. The Contractor shall delineate the proposed excavation site with white paint on paved surfaces or with markings such as flags or stakes in unpaved areas. The Contractor shall provide the regional notification center with all job site location information. The regional notification center will assign to the Contractor a Dig Alert Number which validates the Contractor's excavation permit and will notify all of its members having subsurface installations in the area. No excavation shall be commenced and carried out by the Contractor until all existing subsurface installations have been field marked and the Owner has been given the Dig Alert Number by the Contractor.

Emergency shall be defined as a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. Emergency includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage (Government Code Section 4216).

Subsurface installation means any underground pipeline, conduit, duct, wire, or other structure operated or maintained in or across a public street or public right-of-way (Government Code Section 4216).

#### **7-9 EXCAVATION PLANS FOR WORKER PROTECTION REQUIRED BY LABOR CODE SECTION 6705**



If the total amount of the contract is in excess of \$25,000, the Contractor shall submit to the Owner for acceptance, in advance of excavation, a detailed Plans showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches 5 feet or more in depth. The Plans shall be prepared by a registered civil or structural engineer. As a part of the Plans, a note shall be included stating that the registered civil or structural engineer certifies that the Plans complies with all CAL-OSHA Construction Safety Orders and regulations, or that the registered civil or structural engineer certifies that the Plans is not less effective than the shoring, bracing, sloping, or other provisions of the Safety Orders and regulations.

The Owner or the Engineer/Architect or their consultants may have made investigations of subsurface conditions in areas where the work is to be performed. If so, these investigations are identified in the Special Provisions and the records of such investigations are available for inspection at the office of the Engineer/Architect. The detailed Plans showing the design of shoring, etc., which the Contractor is required to submit to the Owner for acceptance in advance of excavation will not be accepted by the Owner if the Plans are based on subsurface conditions which are more favorable than those revealed by the investigations made by the Owner or the Engineer/Architect or their consultants; nor will the Plans be accepted if it is based on soils-related design criteria which is less restrictive than the criteria set forth in the report on the aforesaid investigations of subsurface conditions.

The detailed Plans showing the design of shoring, etc., shall include surcharge loads for nearby embankments and structures, for spoil banks, and for construction equipment and other construction loadings.

The Plans shall indicate for all trench conditions the minimum horizontal distances from the side of the trench at its top to the near side of the surcharge loads.

Nothing contained in this article shall be construed as relieving the Contractor of the full responsibility for providing shoring, bracing, sloping, or other provisions which are adequate for worker protection.

## **7-10 SAFETY**

In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the jobsite, including safety of all persons and property during performance of the work, and the Contractor shall fully comply with all state, federal and other laws, rules, regulations, and orders relating to safety of the public and workers.

The right of the Engineer/Architect or the Owner's Representative to conduct construction review or observation of the Contractor's performance will not include review or observation of the adequacy of the Contractor's safety measures in, on, or near the construction site.

## **7-11 PERSONAL LIABILITY**

No director, officer, employee, or agent of the Owner, the Engineer/Architect, the Owner's Representative, or their consultants shall be personally responsible for any liability arising under or by virtue of the contract.

## 7-12 DEFENSE AND INDEMNITY

The Contractor hereby agrees to indemnify, defend, and hold harmless the Owner, the Engineer/Architect, and the Owner's Representative and their respective directors, officers, agents, employees and consultants from and against any and all liability, claims, demands, causes of action, actions, damages, losses, fees, costs, or expenses, of whatever type or nature, including all costs of defense and attorneys' fees, caused in whole or in part, or claimed to be caused in whole or in part, by any act or omission of the Contractor, any subcontractor, any supplier or materialman or any of their respective directors, officers, agents, employees, managers, members, or owners except only those claims and causes of action caused by the sole active negligence or intentional misconduct of the Owner, the Engineer/Architect or the Owner's Representative or their respective agents or employees. This indemnification shall extend to all claims, demands, causes of action, actions, or liability occurring after completion of the project as well as during the progress of the Work.

The Contractor further agrees to indemnify, defend, and hold harmless the Owner, the Engineer/Architect, and Owner's Representative and their respective directors, officers, agents, employees, and consultants from and against any and all liability, claims, causes of action, actions, losses, fees, costs, expenses, or damages, of whatever type or nature, including all costs of defense and attorneys' fees, as a result of the failure of or claimed failure of the Contractor to strictly comply with any of the Contractor's obligations under this contract. This indemnity shall expressly include claims by the Owner for any injury, damages, losses, costs, fees or expenses arising from or related to the failure of the Contractor or any of his subcontractors, materialmen, or suppliers to strictly comply with all terms of this contract or as a result of any improper workmanship or defective supplies or materials.

The Contractor's indemnity obligations as contained in this section shall remain in full force and effect and shall apply whether or not the claim, cause of action, damage, cost, fee, or expense is covered by any applicable insurance policy and regardless of any position that may be taken by any insurance company regarding a defense or coverage for any claim or cause of action asserted. From and after the date any claim or demand is submitted to Owner covered by these indemnity provisions, the indemnified parties shall be entitled to recover from Contractor all fees and costs incurred in investigating the claim, all staff time involved in handling the claim or any subsequent action on the claim at staff's ordinary hourly rates, all expert fees and costs, all attorneys' fees, and all court costs. The Contractor shall also be solely liable and responsible for paying any and all damages, fees or costs awarded to the claimant as a result of any settlement or final judgment of any cause of action or action covered by these indemnity provisions. This indemnity shall expressly include all wrongful death actions as well as any actions asserting any damage or injury to any persons or real or personal property.

From and after submission of any claim or demand to any of the indemnified parties, the indemnified party shall be entitled to appoint their own independent counsel to represent them and the Contractor shall pay all fees, costs, and expenses of whatever type or nature (including all staff time) incurred by each of the indemnified parties within thirty (30) consecutive days of receipt of a demand for reimbursement of these costs, fees, or expenses by each of the indemnified parties. A breach of this indemnity provision by Contractor shall constitute a material breach of the contract.

## 7-13 HOURS OF LABOR

The Contractor shall forfeit as a penalty to the Owner \$25 for each worker employed in the execution of the contract by the Contractor or any subcontractor under him for each calendar day during which such worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of the Labor Code and, in particular, Section 1810 to Section 1815 thereof, inclusive, except that work performed by employees of Contractors in excess of 8 hours per day and 40 hours during any one week shall be permitted upon compensation for all hours worked in excess of 8 hours per day at not less than one and one-half times the basic rate of pay as provided in said Section 1815.

## 7-14 PREVAILING WAGE

The Contractor shall comply with Labor Code Section 1775. In accordance with said Section 1775, the Contractor shall forfeit as a penalty to the Owner \$50 for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed for any work done under the contract by him or her or by any subcontractor under him or her in violation of the provisions of the Labor Code and in particular, Labor Code Sections 1770 to 1780, inclusive. In addition to said penalty and pursuant to said Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor. Pursuant to Labor Code Section 1775, to the extent there is insufficient money due a contractor to cover all penalties forfeited and amounts due, the Division of Labor Standards Enforcement shall be notified of the violation and the Division of Labor Standards Enforcement shall be entitled to maintain an action in any court of competent jurisdiction to recover the penalties and the amounts due pursuant to Labor Code Section 1775.

Section 1776 of the Labor Code requires each contractor and its subcontractors to keep accurate payroll records showing the name, address, social security number, work classification, straight time, and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the work required by these Contract Documents. These payroll records shall be made available for inspection or furnished to all employees, any representative of the Owner, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations. Contractor shall provide a certified copy of these payroll records to any of the aforementioned parties within 10 calendar days after receipt of a written request for these records. Contractor understands that it is the responsibility of the Contractor to ensure that these payroll records are maintained by Contractor and all subcontractors performing the work in accordance with Labor Code Section 1776(h). The payroll records shall be on forms provided by the Division of Labor Standard Enforcement or provide the same information as the information required by this form.

Pursuant to Labor Code Section 1777.1, whenever any contractor or subcontractor performing a public works project is found by the Labor Commissioner or the Owner to be in violation of Labor Code Section 1770 et seq., except Section 1775, the contractor or subcontractor or any

firm, corporation, partnership, or association of which the contractor or any subcontractor has a substantial interest, shall be ineligible to bid on or to receive any public works contract for a period of not less than one-year or more than three years. The period of debarment shall run from the date the determination of the violation is made by the Labor Commissioner.

The Owner shall be entitled to withhold wages and penalties due as a result of any violation of the Labor Code from Payments due the Contractor in accordance with Labor Code Section 1726. These withheld amounts shall be paid to the Labor Commissioner for disbursement in accordance with Labor Code Section 1730. The Contractor's right to recover these wages and penalties shall be limited as provided in the Labor Code.

#### 7-15 TRAVEL AND SUBSISTENCE PAYMENTS

Each worker needed to execute the work must be paid travel and subsistence payments as defined in the applicable collective bargaining agreements filed in accordance with Labor Code Section 1773.8.

#### 7-16 APPRENTICES

Attention is directed to the provisions in Sections 1777.5, 1777.6, and 1777.7 of the Labor Code concerning the employment of apprentices by the Contractor or any subcontractor under him.

The Contractor and any subcontractor under him shall comply with the requirements of Sections 1777.5 and 1777.6 of the Labor Code in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

Willful violations of Section 1777.5 will result in the Contractor, and the business entity under which the Contractor is doing business, being denied the right to bid on, or to receive, any public works contract for a period of up to one year for the first violation and for a period of up to three years for the second and subsequent violations commencing from the date the determination of noncompliance by the Administrator of Apprenticeship Council. In addition, if the Contractor violates Section 1777.5, he will forfeit as a civil penalty the sum of \$50 for each calendar day of non-compliance which shall be withheld from progress payments by Owner upon notice from the Department of Industrial Relations. (Labor Code Section 1777.7.)

#### 7-17 WARRANTY OF TITLE

No materials, supplies, or equipment for the work under this contract shall be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein or any part thereof is retained by the seller or supplier. The Contractor warrants clear and good title to all materials, supplies, and equipment installed and incorporated in the work and agrees upon completion of all work to deliver the premises together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens, encumbrances, or charges and further agrees that neither he nor any person,

firm, or corporation furnishing any material or labor for any work covered by the contract shall have any right to a lien upon the premises or any improvement or appurtenance thereon, provided that this shall not preclude the Contractor from installing metering devices or other equipment of utility companies or of municipalities, the title of which is commonly retained by the utility company or the municipality. Nothing contained in this article, however, shall defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection or any right under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this article shall be inserted in all subcontracts and material contracts, and notices of its provision shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

#### **7-18 PROPERTY RIGHTS IN MATERIALS**

Nothing in the contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil. All such materials shall become the property of the Owner upon being so attached or affixed. Soil, stone, gravel, and other materials found at the site of the work and which conform to the Plans and Specifications for incorporation into the work may be used in the work. No other use shall be made of such materials except as may be otherwise described in the Plans and Specifications.

#### **7-19 MUTUAL RESPONSIBILITY OF CONTRACTORS**

Nothing in the contract shall be interpreted as granting to the Contractor exclusive occupancy of the site of the project. The Contractor must ascertain to his own satisfaction the scope of the project and the nature of any other contracts that have been or may be awarded by the Owner in the construction of the project, to the end that the Contractor may perform this contract in the light of such other contracts, if any.

The Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the project. If the performance of any contract for the project is likely to be interfered with by the simultaneous performance of some other contract or contracts, the Owner's Representative shall decide which contractor shall cease work temporarily and which contractor shall continue or whether the work under the contracts can be coordinated so that the contractors

may proceed simultaneously. On all questions concerning conflicting interest of contractors performing related work, the decision of the Owner's Representative shall be binding upon all contractors concerned and the Owner, the Engineer/Architect, the Owner's Representative, and their consultants shall not be responsible for any damages suffered or extra costs incurred by the Contractor resulting directly or indirectly from the award or performance or attempted performance of any other contract or contracts on the project or caused by a decision or omission of the Owner's Representative respecting the order of precedence in the performance of the contracts.

If through acts of neglect on the part of the Contractor, any other contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other contractor or subcontractor by agreement or arbitration, if such other contractor or subcontractor will so settle. If such other contractor or subcontractor shall assert any claim against the Owner,

the Engineer/Architect, the Owner's Representative, or their consultants or any of their directors, officers, employees, or agents on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor who shall hold harmless, indemnify, and defend the Owner, the City of Carlsbad, City of Encinitas, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents against any such claim, including all attorneys' fees and any other costs incurred by the indemnified parties relative to any such claim.

## 7-20 TERMINATION FOR BREACH

If the Contractor refuses or fails to prosecute the work or any separable part thereof with such diligence as will ensure its completion within the time specified herein, or any extension thereof, or fails to complete such work within such time, or if the Contractor should be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he files a petition to take advantage of any debtor's act, or if he or any of his subcontractors should violate any of the provisions of the contract, or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials to complete the work in the time specified, or if he should fail to make prompt payment to subcontractors or for material or labor, or if he should persistently disregard laws, ordinances, or instructions given by the Owner or Owner's Representative, the Owner may, without prejudice to any other right or remedy, serve written notice upon the Contractor and his surety of his intention to terminate the contract, said notice to contain the reasons for such intention to terminate the contract, and unless within ten days after the service of such notice such violations shall cease and satisfactory arrangements for the corrections thereof be made, the contract shall upon the expiration of said ten days cease and terminate. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished.

In the event of any such termination, the Owner shall immediately serve written notice thereof upon the surety and the Contractor, and the surety shall have the right to take over and perform the contract; provided, however, that if the surety within 15 calendar days after the serving upon it of a notice of termination does not give the Owner written notice of its intention to take over and perform the contract or does not commence performance thereof within 30 calendar days from the date of serving said notice, the Owner may take over the work and prosecute the same to completion by contract or by any other method it may deem advisable for the account and at the expense of the Contractor, and his surety shall be liable to the Owner for any excess cost or other damage occasioned the Owner thereby, and in such event the Owner may, without liability for so

doing, take possession of and utilize in completing the work such materials, appliances, plants, and other property belonging to the Contractor that may be on the site of the work and be necessary therefor. For any portion of such work that the Owner elects to complete by furnishing its own employees, materials, tools, and equipment, the Owner shall be compensated for such in accordance with the schedule of compensation for force account work in Article 9-1 PAYMENT FOR CHANGES IN THE WORK.

If the unpaid balance of the contract price exceeds the direct and indirect costs of completing the work, including, but not limited to, all costs to Owner arising from professional services and

attorneys' fees and all costs generated to insure or bond the work of substituted contractors or subcontractors utilized to complete the work, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner promptly upon demand; on failure of Contractor to pay, the surety shall pay on demand by Owner. Any portion of such difference not paid by Contractor or surety within 30 calendar days following the mailing of a demand for such costs by Owner shall earn interest at the rate of 10% per annum or the maximum rate authorized by California law, whichever is lower.

The foregoing provisions are in addition to and not in limitation of any other rights or remedies available to the Owner.

#### **7-21 NOTICE AND SERVICE THEREOF**

Any notice required or given under the contract shall be in writing, be dated, and signed by the party giving such notice or his duly authorized representative, and be served as follows:

If to the Owner, by personal delivery or by deposit in the United States mail.

If to the Contractor, by personal delivery to the Contractor or to his authorized representative at the site of the project or by deposit in the United States mail.

If to the surety or any other person, by personal delivery to said surety or other person or by deposit in the United States mail.

All mailed notices shall be in sealed envelopes, shall be sent by certified mail with postage prepaid, and shall be addressed to the addresses in the Contract Documents or such substitute addresses which a party designates in writing and serves as set forth herein.

#### **7-22 PARTIAL INVALIDITY**

If any provision of this contract is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.

#### **7-23 ATTORNEYS' FEES**

In the event any arbitration proceeding, administrative proceeding or litigation in law or in equity, including an action for declaratory relief, is brought to invalidate, enforce, or interpret any term or provision of this contract, the prevailing party shall recover all attorneys' fees, all expert fees and costs, and all costs of the proceeding which shall be determined by the Court or the presiding officer at the proceeding authorized to make a determination of the issues or in a separate action brought for that purpose, in addition to any other relief provided by California law.

If any party to this agreement becomes a party to any litigation, administrative proceeding or arbitration concerning the invalidation, enforcement or interpretation of the provisions of this

agreement or the performance of this agreement by reason of any act or omission of another party or authorized representative of another party to this agreement and not by any act or omission of a party that becomes a party to that proceeding or any act or omission of its authorized representatives, the party that causes another party to become involved in the proceeding shall be liable to that party for all expert fees and costs, all attorneys' fees, and all costs of the proceeding. The award of these expert fees and costs, attorneys' fees, and costs shall be determined as provided above.

From and after any date of submission of any demand or claim to Owner or any of the other indemnified parties covered by any indemnity provisions of this contract, the indemnified party shall be entitled to appoint their own independent counsel to represent them and the Contractor shall pay all fees and costs incurred by the indemnified parties to investigate and evaluate the claim or cause of action, for all staff time at the hourly rates of each staff member handling the claim or cause of action, all attorneys' fees, all expert fees and costs, and all court costs when and as these fees and costs are incurred by each of the indemnified parties. The Contractor agrees to pay all of these fees, costs, and expenses to each of the indemnified parties not later than thirty (30) days following a demand for reimbursement of these fees, costs, and expenses by each of the indemnified parties. Amounts not paid by the Contractor within this thirty (30) day period shall earn interest at the rate of one percent (1%) per month until paid by Contractor in full.

In the event opposing parties have each prevailed on one or more cause of action actually contested or admitted by pleadings or pre-hearing documents on file, the presiding officer may offset such fees and costs between prevailing parties after considering the necessity of the proceeding and the importance of the issue or issues upon which a party has prevailed. However, the court or presiding officer shall have no authority to relieve the Contractor of the Contractor's obligation to pay all damages, fees, costs, and expenses of each of the indemnified parties as provided in the indemnity provisions of this contract.

The term "prevail" as used in this section shall include any action at law, in equity, or pursuant to arbitration in which either party has been successful including, but not limited to, demurrers, motions to strike, judgments on the pleadings, summary judgments or summary adjudications of issues, any other motion of whatever type or nature, or any trial proceeding or motion.

#### **7-24 LANDS AND RIGHTS-OF-WAY**

The lands and rights-of-way for the facility to be constructed will be provided by the Owner. The Contractor shall make his own arrangements and pay all expenses for additional area required by him outside the limits of the Owner's lands and rights-of-way.

Work in public right-of-way shall be done in accordance with the requirements of the permit issued by the public agency in whose right-of-way the work is located in addition to conforming to the Plans and Specifications. If a permit is not required, the work shall conform to the standards of the public agency involved in addition to conforming to the Plans and Specifications.

#### **7-25 NO WAIVER OF RIGHTS OR REMEDIES**



No action or failure to act by the Owner, Engineer/Architect, or Owner's Representative shall constitute a waiver of any right or duty afforded any of them under the Contract Documents, nor shall any such action or failure to act constitute an approval of or acquiescence in a breach of this contract by Contractor. No oral waiver of any rights or remedies granted to the Owner, Engineer/Architect, or Owner's Representative shall be effective for any purpose. To be effective, the waiver must be in writing and executed by an authorized representative of Owner, the Engineer/Architect, or the Owner's Representative. Contractor has been informed, and understands, that the Engineer/Architect and Owner's Representative have no authority whatsoever to waive any rights or remedies granted to the Owner by this contract or to alter any term or provision of the Contracts Documents or the approved Plans and Specifications. Any such purported waiver shall be void and unenforceable.

## 7-26 TAXES

The Contractor shall pay all sales, consumer, use, and other taxes.

**NOTICE OF TAXABLE POSSESSORY INTEREST** - The terms of this document may result in the creation of a possessory interest. If such a possessory interest is vested in a private party to this document, the private party may be subjected to the payment of personal property taxes levied on such interest.

## 7-27 ASSIGNMENT OF ANTI-TRUST ACTIONS

In entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

In submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the purchasing body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the bidder.

Contractor shall insure that a comparable provision is included in all subcontracts at all tier levels which are executed pursuant to this Agreement.

## 7-28 PAYROLL RECORDS

It shall be the responsibility of the Contractor to maintain an accurate payroll record showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each employee in

accordance with Labor Code Section 1776, and to ensure that each subcontractor also complies with all provisions of Labor Code Section 1776 and this contract provision.

All payroll records shall be certified as accurate by the applicable contractor or subcontractor or its agent having authority over such matters.

The Contractor shall ensure that all payroll records are available for inspection at the Contractor's principal office during normal business hours and shall notify the Owner, in writing, of the place where all payroll records are located from time to time.

The Contractor shall furnish a copy of all payroll records, upon request, to employees or their authorized agents, to the Owner, to the Division of Labor Standards Enforcement, and to the Division of Apprenticeship Standards of the Department of Industrial Relations. The Contractor shall also furnish a copy of payroll records to the general public upon request provided the public request is made through the Owner, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement of the Department of Industrial Relations. In no event shall members of the general public be given access to payroll records at the Contractor's principal office.

Records made available to the general public in accordance with the prior paragraph shall be marked or obliterated in such a manner that the name and address of the Contractor and/or subcontractor and the name, address, and telephone number of all employees does not appear on the modified record.

The Contractor shall file a certified copy of any requested payroll records with the entity that requested such records within ten days of the date a written request for payroll records has been received.

Failure of the Contractor to comply with any provisions of this article or Labor Code Section 1776 within ten days of the date of a written request for compliance is received shall result in a forfeiture of up to \$50 per calendar day or portion thereof, for each worker, until strict compliance is obtained. Upon notification by the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement of the Department of Industrial Relations, the Owner shall withhold penalties under this article or Labor Code Section 1776 from the Contractor's payments then due.

#### **7-29 MODIFICATION**

This contract may not be altered in whole or in part except by modification in writing and properly executed by all parties hereto or by change as provided herein.

#### **7-30 JURISDICTION AND VENUE**

In the event any legal or equitable proceeding is commenced to invalidate, enforce, or interpret any of the terms or provisions of this contract, the parties expressly agree that jurisdiction and venue shall lie only in the Superior Court located in the North County Judicial District, County of San Diego, State of California. The Contractor acknowledges and agrees that this contract has been executed and requires performance solely within the jurisdiction and venue of the North

County Judicial District and that the contract requires work solely within the jurisdiction and venue of the North County Judicial District.

#### 7-31 HAZARDOUS WASTE

It shall be the responsibility of the Contractor to pay all fees and costs associated with removal and cleanup of any hazardous waste used at or brought to the job site by the Contractor, any subcontractor, or any agent, representative, or employee of the Contractor or any subcontractor.

The Contractor shall identify and remove all such hazardous waste in accordance with all federal, state, and local rules and regulations and shall promptly notify the Owner's Representative of any such hazardous waste. If hazardous waste is discovered during performance of the work which has not been brought to, or used at, the job site by the Contractor, any subcontractor, or any agent, representative, or employee of the Contractor or any subcontractor, the Contractor shall identify and remove this hazardous waste in accordance with all federal, state, and local rules and regulations and in accordance with directions of the Owner and the Contractor shall be entitled to request an increase in compensation due for these removal and cleanup costs in accordance with Article 9-1 PAYMENT FOR CHANGES IN THE WORK.

#### 7-32 EXCAVATIONS BELOW FOUR (4) FEET

If any work required by this contract includes digging trenches or other excavations that extend deeper than four feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the Owner in writing of any:

Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law.

Subsurface or latent physical conditions at the site differing from those indicated.

Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

Nothing in this article is intended to relieve the Contractor of his responsibility to carefully examine the Contract Documents and the site where the work is to be performed in accordance with Article 2-8 EXISTING CONDITIONS AND EXAMINATION OF CONTRACT DOCUMENTS; to familiarize himself with all local conditions and federal, state, and local laws, ordinances, rules, and regulations that may affect the performance of any work; to study all surveys and investigation reports about subsurface and latent physical conditions pertaining to the job site; to perform such additional surveys and investigations as the Contractor deems necessary to complete the work at his bid price; and to correlate the results of all such data with the requirements of the Contract Documents.

If the Owner determines that hazardous waste exists and that conditions exist which Contractor could not discover through the investigations required by the preceding paragraph, the Owner shall notify the Contractor and the Contractor may request a change order in accordance with

Article 9-1 PAYMENT FOR CHANGES IN THE WORK. Nothing in this article shall relieve the Contractor of the obligation to pay all fees and costs associated with removal and cleanup of any hazardous waste used at, or brought to, the job site by the Contractor as specified in Article 7-31 HAZARDOUS WASTE. Nor shall this article relieve the Contractor of responsibility for site conditions discoverable by any investigation required by the preceding paragraph.

In the event that a dispute arises between the Owner and the Contractor involving hazardous waste and whether site conditions differ materially from those the Contractor could or should have discovered by the investigations required by this contract, the Contractor shall not be excused from the scheduled completion date provided in the Contract Documents and shall proceed with all work in the manner and in the time required by the Contract Documents.

### 7-33 ARBITRATION

All public works claims between the Contractor and Owner relating to this contract where the total claims of both parties are equal to or less than \$375,000 shall be submitted to mediation first and then to arbitration in accordance with Public Contract Code Section 20104, et seq. A copy of Public Contract Code Section 20104, et seq stating these arbitration requirements is attached following the General Provisions. When a total payment of the Contractor and the Owner exceed a total of \$375,000, this section shall not apply and neither the Owner nor the Contractor shall have any obligation to arbitrate the claim.

## SECTION 8 CONTRACTOR'S INSURANCE

### 8-1 GENERAL

The Contractor shall not commence or continue to perform any work unless he, at his own expense, has in full force and effect all required insurance. The Contractor shall not permit any subcontractor to perform work on this project unless the Workers' Compensation Insurance requirements have been complied with by such subcontractor.

The types of insurance the Contractor shall obtain and maintain are Workers' Compensation Insurance and Employer's Liability Insurance, Liability Insurance, Builders' Risk "All Risk" Insurance, all as set forth herein.

Workers' Compensation Insurance and Employer's Liability Insurance and Liability Insurance shall be maintained in effect for the full guarantee period.

Insurers must be authorized to do business and have an agent for service of process in California, have an "A" policyholder's rating and a financial rating of at least Class VI in accordance with the most current rating by A.M. Best Company.

As evidence of specified insurance coverage, the Contractor shall provide certificates of insurance and endorsements on the forms provided as a part of the Contract Documents. No alteration or substitution of said forms will be allowed.

### 8-2 WORKERS' COMPENSATION INSURANCE AND EMPLOYER'S LIABILITY INSURANCE

Upon execution of the Agreement, the Contractor shall provide a Certificate(s) of Insurance certifying that he has obtained for the period of the contract full Workers' Compensation Insurance coverage for no less than the statutory limits and Employer's Liability Insurance coverage in limits not less than the amounts set forth in the Special Provisions, for all persons whom he employs or may employ in carrying out the work under the contract. At the same time, the Contractor shall provide the Insurance Endorsement(s) on the forms provided as part of the Contract Documents. This insurance shall be in strict accordance with the requirements of the most current and applicable state Workers' Compensation Insurance laws.

### 8-3 LIABILITY INSURANCE

Upon execution of the Agreement, the Contractor shall provide a Certificate(s) of Insurance showing that he has Liability Insurance coverage in limits not less than the amounts set forth in the Special Provisions. At the same time, the Contractor shall provide the Insurance Endorsement(s) on the forms provided as part of the Contract Documents.

All liability insurance shall include occurrence coverage with a deductible amount not exceeding the amount specified on the liability certificate form.

Included in such insurance shall be a "Cross Liability" or "Severability of Interest" clause.

The Liability Insurance coverage shall include each of the following types of insurance:

#### A. General Liability

- (1) Comprehensive Form.
- (2) Premises-Operations.
- (3) Explosion and Collapse Hazard.
- (4) Underground Hazard.
- (5) Products/Completed Operations Hazard.
- (6) Contractual Insurance.
- (7) Broad Form Property Damage Including Completed Operations.
- (8) Independent Contractors.
- (9) Personal Injury.

#### B. Automobile Liability

- (1) Comprehensive Form Including Loading and Unloading.
- (2) Owned.
- (3) Hired.

(4) Non-Owned.

The Liability Insurance shall include as additional insureds: the Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents. The insurance afforded to these additional insureds shall be primary insurance. If the additional insureds have other insurance which might be applicable to any loss, the amount of the insurance provided under this article on LIABILITY INSURANCE shall not be reduced or prorated by the existence of such other insurance.

#### 8-4 BUILDERS' RISK "ALL RISK" INSURANCE

Upon execution of the Agreement, the Contractor shall provide a Certificate(s) of Insurance showing that he has obtained for the period of the contract Builders' Risk "All Risk" completed value insurance coverage (including any damage attributable directly or indirectly to surface water, runoff, rainfall or flood but excluding earthquake and tidal wave) upon the entire project which is the subject of the contract and including completed work and work in progress. At the same time, the Contractor shall provide the Insurance Endorsement(s) on the forms provided as a part of the Contract Documents. Such insurance shall include as additional insureds: the Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents.

Such insurance may have a deductible clause but not to exceed \$25,000.

#### 8-5 CONTRACTOR'S LIABILITY NOT LIMITED BY INSURANCE

Nothing contained in these insurance requirements is to be construed as limiting the liability of the Contractor or the right of the Owner to secure damages in excess of any insurance which may be provided.

### SECTION 9 ESTIMATES AND PAYMENTS

#### 9-1 PAYMENT FOR CHANGES IN THE WORK

The Contractor shall not be entitled to any increase in the contract price due to any change in the work unless the Contractor submits a written request within seven calendar days from the date of the event which causes the Contractor to request a change in the price.

Changes in, additions to, or deductions from the work, including increases or decreases in the quantity of any item or portion of the work, shall be set forth in a written change order executed by the Owner and by the Contractor which shall specify:

The changes, additions, and deductions to be made.

The increase or decrease in compensation due the Contractor, if any.

Adjustment in the time of completion, if any.

Adjustment in the compensation due the Contractor shall be determined by one or more of the following methods in the order of precedence listed below:

Unit price contained in the contract.

Mutually agreeable lump sum or unit prices. If requested by the Owner's Representative, the Contractor shall furnish an itemized breakdown of the quantities and prices used in computing proposed lump sum and unit prices.

Force account whereby the Contractor is compensated for furnishing labor, materials, tools, and equipment as follows:

Cost of labor plus 15% for workers directly engaged in the performance of the work. Cost of labor shall include actual wages paid including employer payments to or on behalf of the workers for health and welfare, pension, vacation, and similar purposes plus payments imposed on payroll amounts by state and federal laws plus subsistence and travel allowance payments to workers.

Cost of material plus 15%. Cost of material shall include sales tax, freight, and delivery charges. The Owner reserves the right to furnish such materials as he deems advisable and the Contractor shall not be paid the 15% markup on such materials.

For tools and equipment actually engaged in the performance of the work, rental rates plus 15%. The rental rates shall be those prevailing in the area where the work is performed. No rental charge shall be made for the use of tools or equipment having a replacement value of \$500 or less.

Subcontractor invoices to the Contractor plus 5%. Subcontractor invoices shall be based on the above-described cost of labor plus 15%, cost of material plus 15%, and tool and equipment rental rates plus 15%.

No payment shall be made for any item not set forth above, including without limitation, Contractor's overhead, general administrative expense, supervision, or damages claimed for delay in prosecuting the remainder of the work.

For force account work, the Contractor shall submit to the Owner's Representative for his verification, daily work sheets showing an itemized breakdown of labor, materials, tools, and equipment used in performing the work. No payment will be made for work not verified by the Owner's Representative.

## 9-2 PROGRESS PAYMENTS

The Contractor shall, on or before the third day of each calendar month after actual construction work is started, prepare the Progress Estimate and Payment Form included at the end of the General Provisions. The Contractor and the Owner's Representative shall review each work item and agree on the total value of work performed during the previous month. In the event the Contractor and the Owner's Representative cannot agree on the estimated total value of work

during the previous month, the estimated total value of work performed as determined by the Owner's Representative during the previous month shall be used. No progress payment will be processed by the Owner until all information required by the Progress Estimate and Payment Form has been completed and the Contractor has signed the form. By signing the Progress Estimate and Payment Form, the Contractor expressly waives and releases any claims the Contractor may have, of whatever type or nature, for the period specified which is not shown as a retention amount or a disputed claim on the Release Form included at the end of the General Provisions. The Contractor shall submit to the Owner at CIP\_AccountsPayable@olivenhain.com within seven days from signing the Progress Estimate and Payment Form a completed and signed Release Form that corresponds to the same pay estimate work period. The Owner shall have no obligation to pay the Contractor for any work done until the Release Form has been executed by the Contractor and submitted to the Owner for the corresponding pay period in accordance with Article 9-6 REQUIRED RELEASES.

Properly submitted Progress Estimate and Payment Form with corresponding Release Form shall be paid by the Owner within thirty days after receipt. Properly submitted forms not paid within this thirty-day period shall earn interest at the legal rate set forth in subdivision (a) of Section 685.010 of the Code of Civil Procedure. The Contractor and Owner agree that the thirty-day period for payment shall not commence until the Contractor has executed and submitted the Release Form to the Owner for the corresponding pay period.

In preparing any progress payment with the Contractor, the Owner's Representative may use the cost breakdown in by Article 6-3 CONTRACTOR'S CONSTRUCTION SCHEDULE AND COST BREAKDOWN. No allowance shall be made for materials delivered but not installed. In evaluating any progress payment, the Owner's Representative may take into consideration any facts and conditions deemed proper by him or her in his or her sole discretion including, but not limited to, the ratio of the difficulty or cost of the work done to the probable difficulty or cost of the work remaining to be done under the contract, the value of the work actually completed, and the estimated cost to complete all of the work in accordance with the contract price. In the event of any dispute between the Owner and the Contractor on the amount that should be paid for any progress payment, the determination of the Owner or the Owner's Representative shall control and be binding on the Contractor. No dispute between the Contractor and the Owner concerning the amount to be paid for any progress payment shall relieve the Contractor of its continuing obligation to complete all contract work within the time required by the Contract Documents, and to complete the work for the contract price and shall not relieve the Contractor of any other obligations contained in the Contract Documents. Owner shall retain five percent (5%) of each progress payment approved by the Owner's Representative as part security for the fulfillment of the contract by Contractor, unless Contractor has substituted adequate equivalent securities as required by Article 9-5 WITHHELD CONTRACT FUNDS. The total amount retained will equal 5% of the contract price. In the event of a dispute between the Owner and Contractor, the Owner shall have the right to withhold an amount up to 150% of the disputed amount in accordance with Public Contract Code Section 7107(c). As part of any progress payment the Owner shall have the express right to deduct and withhold from any payments due the Contractor any amounts the Owner or the Owner's Representative determines are necessary or appropriate to cover all fees, costs, expenses, and damages incurred or estimated by the Owner as a result of any breach of this contract by the Contractor and to cover any and all damages suffered or estimated by the Owner as a result of the breach of any term or provision of the contract by the



Contractor. Amounts the Owner may withhold also expressly include any and all liquidated damages authorized by the terms of this contract.

### 9-3 FINAL ESTIMATE AND PAYMENT

Contractor shall not make any request for the final payment until all work required by the Plans and Specifications of the Contract Documents has been completed to the satisfaction of the Owner's Representative. Upon receipt of a request from Contractor for final payment, the Owner's Representative will make a final inspection of the work done and advise the Contractor of additional work required before final payment will be processed. All prior progress estimates and payments shall be subject to correction in the final estimate and payment.

The final payment shall not be due and payable until 60 calendar days after the date of filing a Notice of Completion of the accepted work. The date of completion shall be determined in accordance with Public Contract Code Section 7107. In the event of a dispute between the Owner and the Contractor, Owner shall be entitled to withhold an amount up to 150% of the disputed amount.

It is mutually agreed between the parties to the contract that no certificate given or payment made under this contract shall constitute evidence of performance of the contract and no payment by Owner shall be construed as an acceptance of any defective work or improper materials.

Contractor shall not be entitled to payment of the final amount due until Contractor has executed a Release Form in accordance with Article 9-6 REQUIRED RELEASES. Contractor hereby expressly agrees that payment of the final amount due under the contract shall release the Owner, the Engineer/Architect, the Owner's Representative, and their consultants, and each of their directors, officers, employees, and agents, from any and all claims relating to the work for which Contractor is being paid. It is the declared intention of the parties that this provision comply with Public Contract Code Section 7100 and that this section shall be construed as in compliance with Public Contract Code Section 7100 to the maximum feasible extent.

### 9-4 OWNER'S RIGHT TO WITHHOLD CERTAIN AMOUNTS AND MAKE APPLICATION THEREOF

In addition to the amounts which the Owner may retain under Sections 9-2 and 9-3 of this contract, the Owner may withhold a sufficient amount or amounts from any payment otherwise due to the Contractor (including any final payment) as may be necessary or appropriate in Owner's sole and exclusive judgment to cover each of the following:

Payments which are or may be past due and payable for properly filed claims against the Contractor or any subcontractors for any labor, materials, or equipment furnished in or about the performance of the work on the project under this contract including any amounts asserted as attorneys' fees, costs, or interest by the claimant.

All fees, costs, and expenses estimated by the Owner for correcting any work determined to be defective by the Owner.

Any amounts determined appropriate or necessary by the Owner to cover the Owner's estimate of any damages paid or payable as a result of any claim or cause of action on the contract caused, or claimed to be caused by any action or omission of Contractor, any subcontractor, supplier or materialmen or their respective directors, officers, agents, employees, members, managers or consultants and all fees, costs, and expenses, including all attorneys' fees, expert fees and costs, staff time at each staff members' normal hourly rates and all court costs estimated by the Owner in responding to the claim or cause of action.

Any amounts determined necessary or appropriate by Owner to cover all of the indemnity obligations of Contractor under this contract.

Any amounts claimed by the Owner as forfeiture due to delay and any and all other amounts, fees, costs, or expenses estimated by the Owner as offsets.

The Owner has the express authority to withhold any amount or amounts determined appropriate by Owner from time to time from any payments otherwise due Contractor to cover all or any of the preceding items in the Owner's sole and exclusive judgment. The Owner may also apply all or any portion of any such withheld amount or amounts to the payment of any claims in such amounts and at such times as are determined appropriate by Owner, in Owner's discretion. In withholding any sums permitted by this section or in paying any claims, the Owner shall be deemed the agent of the Contractor and any payments made by the Owner on any claim shall be considered as a payment made under the contract by the Owner to the Contractor. The Owner shall not be liable to the Contractor for Owner's withholding of any and all amounts permitted by this section or Owner's payment of any claims as permitted by this section. Such withholdings and payments may be made by Owner at any time without prior judicial determination of the merits of any claims or causes of action. The Owner will render to the Contractor a proper account of any funds withheld or disbursed as permitted by this section.

#### 9-5 WITHHELD CONTRACT FUNDS

Pursuant to Public Contract Code Section 22300, the Contractor may substitute equivalent securities for retention amounts which this Contract requires. However, the Owner reserves the right to solely determine the adequacy of the securities being proposed by the Contractor and the value of those securities. The Owner shall also be entitled to charge an administrative fee, as determined by Owner in its sole discretion, for substituting equivalent securities for retention amounts.

The Contractor agrees that the Owner's decision with respect to the administration of the provisions of Section 22300 shall be final and binding and not subject to subsequent litigation or arbitration of any kind as to acceptance of any securities being proposed, the value of these securities, the costs of administration and the determination of whether or not the administration should be accomplished by an independent agency or by the Owner. The Owner shall be entitled, at any time, to request the deposit of additional securities of a value designated by the Owner, in Owner's sole discretion, to satisfy this requirement. If the Owner does not receive satisfactory securities within 12 calendar days of the date of the written request, Owner shall be

entitled to withhold amounts due Contractor until securities of satisfactory value to Owner have been received.

## 9-6 REQUIRED RELEASES

In accordance with Public Contract Code Section 7100, the Contractor shall not be entitled to any payment specified in this Contract which is undisputed until such time as the Contractor has executed the Release Form(s) included at the end of the General Provisions releasing the Owner from all claims relating to work for which the Contractor is being paid. The Release Form contains space for the Contractor to claim any disputed amount and to designate the retention amount for each pay period associated with the release. Contractor hereby expressly agrees that failure on his part to designate any disputed amount or to designate the correct retention amount for each release period on the Release Form shall constitute an express waiver of the right of the Contractor to claim any disputed amount or any retention amount at any later date. The Owner shall have no obligation to pay the Contractor for any work done until the Release Form at the end of the General Provisions has been executed by the Contractor and submitted to the Owner.

## 9-7 AB 626

State of California Assembly Bill 626 (AB 626) establishes, for contracts entered into on or after January 1, 2017, a claims resolution process that must be applied to any and all claims by contractors in connection with a public works project. AB 626 also creates a process whereby a subcontractor, who may lack legal standing to assert a claim against a public entity, may make a claim through the contractor.

A claim is defined as a separate demand by the contractor for one or more of the following: (i) a time extension for relief from damages or penalties for delay, (ii) payment of money or damages arising from work done pursuant to the contract for a public work, or (iii) payment of an amount disputed by the public entity, as specified.

AB 626 requires a public entity, upon receipt of a claim sent by registered or certified mail, to conduct a reasonable review, within 45 days, provide a written statement identifying the disputed and undisputed portions of the claim. The 45-day period may be extended by mutual agreement or, until after the next meeting of the governing body of the public entity, if the governing body must approve the disputed and undisputed portions of the claim. The Bill also requires any payment due on the undisputed portion of the claim to be processed within 60 days.

If the claimant disputes the public entity's written response or if the public entity fails to respond to a claim within the time prescribed, the claimant must demand, in writing, a meet and confer for settlement of the issues in dispute. The public entity must then schedule a meet and confer conference within 30 days for settlement of the dispute. AB 626 requires any disputed portion of the claim that remains in dispute after the meet and confer conference to be subject to nonbinding mediation, as specified. The public entity can also require arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if the mediation does not resolve the dispute.

If the public entity fails to respond to a claim from a contractor within the time periods prescribed in AB 626, the claim is deemed rejected in its entirety and alternate dispute resolution processes

may be pursued. AB 626 provides that unpaid claim amounts which are not paid in a timely manner shall accrue interest at 7% per annum.

## **SECTION 10 AUTHORITY AND STATUS OF OWNERS REPRESENTATIVES**

### **10-1 STATUS OF OWNERS REPRESENTATIVES**

The Contractor has been informed, and understands, that the Engineer/Architect and the Owner's Representative are not agents or employees of Owner. They are independent contractors retained by Owner to assist in preparation of the design plans for the work and in supervising the work to be performed by the Contractor. Owner does not direct the Engineer/Architect or the Owner's Representative in the performance of their respective duties and obligations. Owner shall not be liable for any errors or omissions of the Engineer/Architect, the Owners Representative or their respective directors, officers, agents or employees.

### **10-2 AUTHORITY OF OWNER'S REPRESENTATIVES**

Contractor has been informed, and understands, that the Engineer/Architect and the Owner's Representative have no authority to alter any of the terms or provisions of the Contract Documents

or to alter any of the requirements contained in the plans and specifications approved by Owner. In the event that Contractor desires to modify any term or provision of the Contract Documents or to modify any of the requirements of the approved plans and specifications, a written request must be submitted with the requested changes to the Owner through the Owner's Representative. Only the general manager of Owner has the authority to alter or modify any of the terms or provisions of the Contract Documents. No modification or change to the Contract Documents shall be effective for any purpose unless the change or modification has been expressly approved, in writing, by the general manager of Owner. Any requested changes by the Contractor to the approved plans and specifications must be submitted to the Owner's Engineer for review and approval through the Owner's Representative. No changes to the approved plans or specifications shall be effective for any purpose unless the Owner's Engineer has expressly approved of the change, in writing. The Contractor is expressly prohibited from entering onto private property, disturbing any habitat, or using private property to stockpile, store, or spread any men, tools, equipment, materials, or dirt without the express prior written consent of the general manager of Owner. The violation of this section by Contractor or any of its subcontractors, materialmen, or suppliers or their respective directors, officers, managers, members, agents, consultants or employees shall constitute a material breach of this Agreement.

## **SECTION 11 FORMS**

### **11-1 SHOP DRAWING SUBMITTAL FORM**

The Contractor shall complete the Shop Drawing Submittal Form included at the end of the General Provisions when submitting Shop Drawings as called for in the Special Provisions and

Standard Specifications or requested by the Owner's Representative. Duplication of this form is permissible to comply with the requirements of the Contract Documents. No substitution or revision to this form will be accepted and approved by the Owner.

#### 11-2 PROGRESS ESTIMATE AND PAYMENT FORM

The Contractor will use the Progress Estimate and Payment Form included at the end of the General Provisions when preparing the monthly progress payment for review. No progress payment will be processed to pay the Contractor until the progress estimate and payment form and the release form included at the end of these general provisions have been fully completed and submitted by the Contractor to the Owner's Representative and approved by the Owner.

#### 11-3 RELEASE FORM(S)

The Contractor shall complete the Conditional and/or Final Release Forms (as appropriate) included at the end of the General Provisions and submit to the Owner for the corresponding pay period in accordance with Article 9-6, REQUIRED RELEASES. Duplication of this form is permissible to comply with the requirements of the Contract Documents. No substitution or revision to this form will be accepted. No payment request to the Contractor will be processed until the Release Form has been fully completed and submitted by the Contractor.

END OF SECTION

## SHOP DRAWING SUBMITTAL FORM

TO: OWNER'S REPRESENTATIVE  
c/o Olivenhain Municipal Water District  
1966 Olivenhain Road  
Encinitas, CA 92024

From: (Contractor)  
(Address)

Contractor Job Number \_\_\_\_\_

Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

OMWD PN: \_\_\_\_\_

Project: **UNIT A – RANCHO SANTA FE ROAD POTABLE  
WATER PIPELINE REPLACEMENT PROJECT**

OWNER'S REP ACCT NO. \_\_\_\_\_

SUBMITTAL NO.: \_\_\_\_\_

RESUBMITTAL: ☐ Yes ☐ No

SPECIFICATION SECTION: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

This Shop Drawing Submittal has been prepared by the Contractor or any subcontractor, manufacturer, supplier, or distributor and illustrates some portion of the work. The Contractor warrants one of the following conditions:

☐ The Contractor has approved this submittal and represents that the material, equipment, and other work shown conforms to the Plans and Specifications.

☐ The Contractor has approved this submittal but represents that this is a deviation from the requirements of the Plans and Specifications and has set forth the reasons for the deviation below.

DEVIATION/REVISIONS:

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

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

(BLANK)

PROGRESS ESTIMATE AND PAYMENT FORM	
------------------------------------	--

Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT** OMWD \_\_\_\_\_

Project: UNIT A – RANCHO SANTA FE ROAD POTABLE WATER  
PIPELINE REPLACEMENT PROJECT Contract End Date \_\_\_\_\_

Contractor: \_\_\_\_\_ Revised Contract End Date \_\_\_\_\_

PAY ESTIMATE NO. \_\_\_\_\_ Contract Job No. \_\_\_\_\_

PERIOD WORK PERFORMED: \_\_\_\_\_

PERIOD WORK PERFORMED: \_\_\_\_\_ Date Created \_\_\_\_\_

Date Created \_\_\_\_\_

[illegible]

Total Project Cost of Work Items			
----------------------------------	--	--	--

Estimated Total Value of Work Performed	

Less Five Percent (5%) of Such Estimated Total Value	
Total Amount Due for Work Performed	

Total Amount Due for work Performed	
Less All Previous Payments	

AMOUNT DUE AND PAYABLE TO THE CONTRACTOR	
--	--

Prepared by Owner's Representative	<input type="checkbox"/> CM has reviewed monthly as-builts and schedule updates
------------------------------------	---

---

Distribution:	<input type="checkbox"/> Owner	<input type="checkbox"/> Contractor	<input type="checkbox"/> Engineer	<input type="checkbox"/> Finance
---------------	--------------------------------	-------------------------------------	-----------------------------------	----------------------------------

---



(BLANK)

**CONDITIONAL WAIVER AND RELEASE ON  
PROGRESS PAYMENT**  
(CA CIVIL CODE §8132) (1)

**NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.**

**Identifying Information:**

Name of Claimant: \_\_\_\_\_

Name of Customer: **Olivenhain Municipal Water District**

Job Location: \_\_\_\_\_

Owner: Olivenhain Municipal Water District

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

**Conditional Waiver and Release**

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job through the Through Date of this document. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: Olivenhain Municipal Water District

Amount of Check: \_\_\_\_\_

Check Payable to: \_\_\_\_\_

This document does not affect any of the following:

- (1) Retentions.
- (2) Extras for which the claimant has not received payment.
- (3) The following progress payments for which the claimant has previously given a conditional waiver and release but has not received payment:  
Date(s) of waiver and release: \_\_\_\_\_  
Amount(s) of unpaid progress payment(s): \$ \_\_\_\_\_
- (4) Contract rights, including:  
(A) a right based on rescission, abandonment, or breach of contract, and  
(B) the right to recover compensation for work not compensated by the payment.

**SIGNATURE**

Claimant's Signature: \_\_\_\_\_

Claimant's Title: \_\_\_\_\_

Date of Signature: \_\_\_\_\_

(BLANK)

**CONDITIONAL WAIVER AND RELEASE ON  
FINAL PAYMENT**  
(CA CIVIL CODE §8136) (3)

**NOTICE: THIS DOCUMENT WAIVES THE CLAIMANT'S LIEN, STOP PAYMENT NOTICE, AND PAYMENT BOND RIGHTS EFFECTIVE ON RECEIPT OF PAYMENT. A PERSON SHOULD NOT RELY ON THIS DOCUMENT UNLESS SATISFIED THAT THE CLAIMANT HAS RECEIVED PAYMENT.**

**Identifying Information:**

Name of Claimant: \_\_\_\_\_

Name of Customer: **Olivenhain Municipal Water District** \_\_\_\_\_

Job Location: \_\_\_\_\_

Owner: \_\_\_\_\_

**Conditional Waiver and Release**

This document waives and releases lien, stop payment notice, and payment bond rights the claimant has for labor and service provided, and equipment and material delivered, to the customer on this job. Rights based upon labor or service provided, or equipment or material delivered, pursuant to a written change order that has been fully executed by the parties prior to the date that this document is signed by the claimant, are waived and released by this document, unless listed as an Exception below. This document is effective only on the claimant's receipt of payment from the financial institution on which the following check is drawn:

Maker of Check: Olivenhain Municipal Water District \_\_\_\_\_

Amount of Check: \_\_\_\_\_

Check Payable To: \_\_\_\_\_

**Exceptions**

This document does not affect any of the following:

Disputed claims for extras in the amount of: \$ \_\_\_\_\_

**SIGNATURE**

Claimant's Signature: \_\_\_\_\_

Claimant's Title: \_\_\_\_\_

Date of Signature: \_\_\_\_\_

(BLANK)

## PROPOSED CHANGE ORDER

Owner: **OLIVENHAIN MUNICIPAL WATER DISTRICT**

Project: **UNIT A – RANCHO SANTA FE ROAD POTABLE WATER PIPELINE REPLACEMENT PROJECT**

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

**PROPOSED CHANGE ORDER NO.** \_\_\_\_\_

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

\*A change to the contract documents for the above referenced project is being considered. Please provide cost and schedule impact(s) for the following described work:

**DESCRIPTION OF CHANGE / PCO's**

**Cost Impact**

**Schedule Impact**

\$ \_\_\_\_\_

\_\_\_\_\_ Day(s)

**TOTAL**

\$ \_\_\_\_\_

\_\_\_\_\_ **Calendar Day(s)**

**NOTE: Attention is called to the sections in the General Provisions on Scope of Work and Estimates and Payments.**

**THIS PROPOSED CHANGE ORDER IS NOT EFFECTIVE UNTIL A CONTRACT CHANGE ORDER HAS BEEN APPROVED BY OWNER.**

This PCO was initiated by \_\_\_\_\_ On \_\_\_\_\_

Submitted \_\_\_\_\_ On \_\_\_\_\_  
Contractor

**(BLANK)**

## Article 1.5

### RESOLUTION OF CONSTRUCTION CLAIMS

Section	Section
20104. Application of article; provisions included in plans and specifications.	20104.6. Payment on undisputed portion of claim; interest on arbitration awards or judgments
20104.2. Claims; requirements; tort claims excluded.	20104.8. Repealed.
20104.4. Civil action procedures; mediation and arbitration; trial de novo; witnesses.	

*Article 1.5 was added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.*

*Former Article 1.5, Resolution of Construction Claims, consisting of §§20104 to 20104.8, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, was repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994.*

#### **§ 20104. Application of article; provisions included in plans and specifications**

(a) (1) This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and local agency.

(2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.

(b) (1) “Public work” has the same meaning as in Sections 3100 and 3106 of the Civil Code, except that “public work” does not include any work or improvement contracted for by the state or the Regents of the University of California.

(2) “Claim” means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.

(c) The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.

(d) This article applies only to contracts entered into on or after January 1, 1991.

(Added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.)

#### **Historical and Statutory Notes**

##### **1990 Legislation**

Former § 20104 was renumbered Public Contract Code § 20103.5 and amended by Stats. 1990, c. 1414 (A.B. 4165), § 1.  
Former § 20104, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, relating to application of article regarding resolution

of construction claims, was repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994. See, now, this section.

**Derivation:** Former § 20104, added by Stats. 1990, c. 1414, § 2.



**§ 20104.2 Claims; requirements; tort claims excluded**

For any claim subject to this article, the following requirements apply:

(a) The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

(b) (1) For claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 80 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the claimant in producing the additional information, whichever is greater.

(c) (1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

(3) The local agency's written response to the claim, as further documented, shall be submitted to the claimant within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the claimant in producing the additional information or requested documentation, whichever is greater.

(d) If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of the Government Code. For purposes of those provisions, the running of the period of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

(f) This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title 1 of Government Code.

(Added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.)

#### Historical and Statutory Notes

##### 1990 Legislation

Former § 20104.2, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, amended by Stats. 1991, c. 1029 (A.B. 1086), § 1, relating to requirements for claims filed under the article,

was repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994. See, now, this section.

**Derivation:** Former § 20104.2, added by Stats. 1990, c. 1414, § 2, amended by Stats. 1991, c. 1029, § 1.

#### Library Reference

California Practice Guide: Alternative Dispute Resolution, Knight, Fannin & Disco, see Guide's Table of Statutes for chapter paragraph number references to paragraphs discussing this section.

Civil Procedure Before Trial, Well & Brown, Guide's Table of Statutes for chapter paragraph number references to paragraphs discussing this section.

### § 20104.4 Civil action procedures, mediation and arbitration; trial de novo; witnesses

The following procedures are established for all civil actions filed to resolve claims subject to the article:

(a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b) (1) If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

(c) The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

(Added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.)

#### Historical and Statutory Notes

##### 1990 Legislation

Former § 20104.4, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, amended by Stats. 1991, c. 1029 (A.B. 1086), § 2, relating to procedures for civil actions filed to resolve construction claims, was repealed by Stats. 1990, c. 1414

(A.B. 4165), § 2, operative Jan. 1, 1994. See, now, this section.

**Derivation:** §20104.4, added by Stats. 1990, c. 1414, § 2, amended by Stats. 1991, c. 1029, § 2.

#### Library Reference

California Practice Guide: Alternative Dispute Resolution,  
Knight, Fannin & Disco, see Guide's Table of Statutes

for chapter paragraph number references to paragraphs  
discussing this section.

### **§ 20104.6 Payment on undisputed portion of claim; interest on arbitration awards or judgments**

(a) No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

(b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

(Added by Stats. 1994, c. 726 (A.B. 3069), § 22, eff. Sept. 22, 1994.)

#### Historical and Statutory Notes

##### 1990 Legislation

Former § 20104.6, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, relating to payment of undisputed portion of claims, was repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994. See, now, this section.

**Derivation:** Former § 20104.6, added by Stats. 1990, c. 1414, § 2.

### **§ 20104.8 Repealed by Stats. 1990, c. 1414 (A.B. 4165), § 2, operative Jan. 1, 1994**

#### Historical and Statutory Notes

The repealed section, added by Stats. 1990, c. 1414 (A.B. 4165), § 2, related to application of the article to specified

contracts and provided for repeal of the article on Jan 1, 1994.

## SECTION 00810 – SPECIAL PROVISIONS

### 1.01 DEFINITIONS

Whenever the following terms occur in the Contract Documents, the meaning shall be interpreted as follows:

ATTORNEY FOR Owner – Alfred E. Smith, Nossaman LLP, 777 South Figueroa Street, 34<sup>th</sup> Floor, Los Angeles, CA 90017, (213) 612-7831

BOARD OF DIRECTORS – Board of Directors of the Olivenhain Municipal Water District.

CITY – City of Encinitas, 505 South Vulcan Ave. Encinitas, CA 92024

CONTRACT TIME – The number of consecutive days stated in the contract documents commencing from the date of the notice of award, for completion of the Work.

DATE OF AWARD OF CONTRACT – The date of the District Resolution (formal action of the Board of Directors of the District) awarding the Contract.

DISTRICT – Olivenhain Municipal Water District (OMWD), 1966 Olivenhain Road, Encinitas, California 92024, (760) 753-6466.

DISTRICT'S REPRESENTATIVE – The Owner's Representative.

DRAWINGS or PLANS - Construction drawings entitled, **“Unit A – Rancho Santa Fe Road Potable Water Pipeline Replacement”** and referenced Standard Drawings or Regional Standard Drawings

ENGINEER/ARCHITECT – Parsons, 525 B Street, Suite 1600, San Diego, CA 92101, Tel: (619) 515-5100

OWNER – Olivenhain Municipal Water District (OMWD), 1966 Olivenhain Road, Encinitas, California 92024, Tel: (760) 753-6466; Fax: (760) 753-1578.

OWNER'S REPRESENTATIVE – The person or engineering/architectural firm authorized by the District to represent it during the performance of the work and until final acceptance. The Owner's Representative is referred to throughout the Contract Documents as if singular in number and masculine in gender. The Owner's Representative means the Owner's Representative and his assistants.

PUBLIC WORKS SPECIFICATIONS – Standard Specifications for Public Works Construction Current Edition by APWA/AGC, the “GREENBOOK”, Current Edition.

REGIONAL STANDARD DRAWINGS – Standard Drawings for Agencies in the San Diego Region as recommended by the Regional Standards Committee and published by the San Diego County Department of Public Works, Current Edition.

SPECIAL PROVISIONS – Section 00810 of the specifications.

SPECIFICATIONS – Division 1 to 15 of the technical specifications contained in these Contract Documents, and those technical specifications contained in the Drawings.

STANDARD DRAWINGS – Drawings A-1.1 through G-15 of the Olivenhain Municipal Water District, Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities, Current Edition.

STANDARD SPECIFICATIONS – Divisions 1 through 15 of the Olivenhain Municipal Water District, Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities, Current Edition.

STATE STANDARD SPECIFICATIONS – State of California, Department of Transportation, Standard Specifications, Current Edition, Caltrans.

STATE STANDARD PLANS – State of California, Department of Transportation, Standard Plans, Current Edition, Caltrans.

WATER AUTHORITY – San Diego County Water Authority

Whenever the following terms appear in the State Standard Specifications or Public Works Specifications, the meaning shall be interpreted as follows:

AGENCY, BOARD or DEPARTMENT – The Owner.

ENGINEER – The Owner's Representative.

## 1.02 TERMS

- A. Command type sentences used in the Contract Documents refer to and are directed to the Contractor.

## 1.03 ABBREVIATIONS

- A. Interpret abbreviations used on the Drawings and in the Specifications as explained on the Drawings.

## 1.04 MARKING AND ADDRESSING BID ENVELOPE

- A. Bids shall be sealed in an envelope marked and addressed as set forth in the Notice Inviting Sealed Bids.

## 1.05 AWARD OF CONTRACT OR REJECTION OF BIDS

- A. Within a period of 60 calendar days after the opening of bids, the District will accept or reject the bids.

## 1.06 CONTRACTOR'S LICENSING REQUIREMENTS

- A. The District has determined the license classification necessary to bid and perform the subject contract. In no case shall this contract be awarded to a specialty contractor whose classification constitutes less than a majority of the portion of the work of this contract, all work to be performed outside of the contractor's license specialty, except work specifically authorized by District, shall be performed by a licensed subcontractor in compliance with the Subletting and Subcontractor Fair Practices Act commencing with Section 4100 et seq., of the Public Contract Code. See Business and Professions Code Section 7059.
- B. The Contractor's license classification required for this project is a California State Contractor's License A – General Engineering.
- C. It is the District's intent that "plans", as used in Public Contract Code Section 3300, is defined as the construction Contract Documents, which include both the Drawings and the Specifications

#### 1.07 TIME FOR COMPLETION AND FORFEITURE DUE TO DELAY

- A. All work shall be completed within **THREE HUNDRED (300) CONSECUTIVE CALENDAR DAYS** from and after the date of the Notice to Proceed.
- B. The Contractor will not be permitted to begin work until the agreement, bonds or substitutes, insurance certificates and endorsements are acceptable to the District and Attorney for District. This period of time is set forth in Paragraph 3-2 Execution of Contract in the General Provisions. Time is of the essence in this contract.
- C. The Contractor shall complete all work in its entirety as specified in the Contract Documents within these time periods. Time of completion shall also include time for all submittals and coordination required to satisfy the requirements of these Contract Documents.
- D. The Contractor agrees that the work shall be prosecuted regularly, diligently, and uninterruptedly and at such rate of progress as will ensure full completion thereof within the Time for completion stated above including minimizing Construction Highline and customer interruption of water service. It is expressly understood and agreed, by and between Contractor and District that the Time for completion is reasonable for the completion of the WORK, taking into consideration the average climatic range, usual industrial conditions prevailing in this locality, and lead time required to procure equipment.
- E. The Contractor shall provide proof of delays caused from equipment or material procurement outside of his/her control for approval by the Owner. Approved delays shall be remedied by additional time to the contract and shall not include additional compensation.
- F. The Contractor shall provide submittals to the Owner for long-lead items seven (7) working days after issuance of the Notice to Proceed. Delays to the contract time for completion as a result of the Contractors failure to provide submittals for long-lead items within this time period will not be considered by the Owner for requests for additional time.

## 1.08 LIQUIDATED DAMAGES

- A. Pursuant to Government Code 53069.85, forfeiture for each day project completion is delayed beyond the time allowed shall be at the rate of \$2,500.00 per day in liquidated damages.

## 1.09 PERMITS

- A. The Contractor shall obtain and pay for all required permits and provide copies of all permits to the District's Representative prior to starting work, including jurisdictional Right of Way, encroachment, and the San Diego County Air Pollution Control District's permits for construction and operation of diesel generators, if used. The Contractor shall comply with the ordinances, directives, and regulations of the respective agencies with jurisdiction over the area of the work. All work not specifically covered in the required permits shall conform to the requirements of these Specifications. The cost of all permits and plan check review shall be borne by the Contractor and included in the Contractor's bid.
- B. The Contractor shall be responsible for developing haul routes for the importing or exporting of materials or equipment for the project and obtaining and paying for all required permits from the affected agencies of jurisdiction, i.e., City of Encinitas and City of Carlsbad. The Contractor shall provide copies of all required permits to the District's Representative prior to starting work. The Contractor shall comply with the ordinances, directives, and regulations of the respective agencies with jurisdiction over the area of the work. All costs for transport fees, dump fees, plan or haul route reviews, permits, and related incidentals shall be borne by the Contractor and included in the Contractor's bid.

## 1.10 USE OF ASBESTOS PRODUCTS NOT PERMITTED

The intent of the Contract Documents is to provide asbestos-free components throughout the project in accordance with the recent Environment Protection Agency stated policy seeking a ban on the use of all products containing asbestos. Where the Contract Documents or the referenced specifications, standards, codes, or tests refer to products containing asbestos, the Contractor shall provide acceptable alternatives under those documents, or in the absence of such referenced alternatives, he shall submit a proposed substitute to the District's Representative for review and acceptance.

## 1.11 ABATEMENT OF AIR POLLUTION

- A. Comply with all applicable Federal, State, County, and City laws and regulations concerning the prevention and control of air pollution.
- B. Conduct construction activities and equipment in a manner so as to minimize atmospheric emissions or discharges of air contaminants. Equipment or vehicles that show excessive emissions of exhaust gases shall not be operated on the site.

## 1.12 NOISE CONTROL REQUIREMENTS

- A. The Contractor shall comply with all local sound control and noise level rules, regulations and ordinances which apply to any work performed pursuant to the Contract.
- B. The Contractor shall familiarize themselves with the City or County Zoning Performance Standards applicable to night work and day work.
- C. Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.
- D. Each vehicle equipped with a back-up alarm shall use a white noise back-up alarm Brigade BBS-97 or equal at all times.
- E. Noise level requirements shall apply to all equipment on the job or related to the job, including but not limited to trucks and transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety for the protection of personnel.

#### 1.13 AMOUNT OF LIABILITY INSURANCE

##### A. Employer's Liability Insurance:

- 1. Bodily injury coverage by accident shall be for not less than \$1,000,000 for each employee and \$1,000,000 for each accident.
- 2. Bodily injury coverage by disease shall be for not less than \$1,000,000 for each employee and \$1,000,000 for each disease.

##### B. General Liability:

- 3. Bodily injury, personal injury, and property damage coverage shall be in a combined single limit of not less than \$1,000,000 for each occurrence and \$3,000,000 aggregate.

##### C. Automobile Liability:

- 1. Bodily injury and property damage coverage shall be in a combined single limit of not less than \$1,000,000 for each occurrence.

##### D. Builder's Risk Insurance:

- 1. Builder's Risk Insurance shall be provided for the full contract amount.

##### E. Earthquake and Tidal Wave Insurance:

- 1. Earthquake and Tidal Wave Insurance is not required for this project.

##### F. Additional Insured:



1. In addition to the additional insureds required for Liability insurance in the General Provisions, 8-3 LIABILITY INSURANCE, and 8-4 BUILDER'S RISK "ALL RISK" INSURANCE, the District and each of its directors, officers, employees, and agents and its Design Engineer shall be named as additional insureds for all Liability insurance and Builders' Risk Insurance provided herein.

#### 1.14 USE OF THE STANDARD DRAWINGS

- A. Where the Drawings or Specifications make reference to the Standard Drawings, construct the item in accordance with the details and materials as specified in the Contract Documents. For items not included in the Standard Drawings that are part of the Contract Documents, construct the item in accordance with the Olivenhain Municipal Water District, Standard Specifications and Drawings for the Construction of Water, Recycled Water, and Sewer Facilities , current edition. These District Standard Drawings and Standard Specifications are available on the District website.

#### 1.15 CONSTRUCTION SCHEDULE AND BID BREAKDOWN

- A. The Contractor shall conform to the requirements of Article 6-3 Contractor's CONSTRUCTION SCHEDULE AND COST BREAKDOWN of the General Provisions within 15 days after the date of award of contract. Submit to the District's Representative a construction progress schedule and bid breakdown in bar chart form. Divide each lump sum bid item into its major elements of work and show separately labor, materials and equipment costs. The District's Representative will use this cost breakdown as a basis for the monthly progress estimate and payment. The schedule shall specifically include and identify the construction sequence requirements defined on the plans.

#### 1.16 STORM DRAIN PROTECTION

- A. The Contractor shall comply with all local ordinances, County of San Diego Ordinance No. 9424, National Pollutant Discharge Elimination Permit Number CAS 0108758 and State Water Resources Control Board NPDES Permit No. CAS000002. The Contractor shall install and maintain Best Management Practices (BMPs) to the Maximum Extent Practicable (MEP) to prevent or reduce pollutant discharges to local storm drain/storm water conveyance systems and/or receiving waters from construction activities. The Contractor shall manage the Work to prevent or reduce pollutant discharges to local storm drain/storm water conveyance systems and/or receiving waters. BMPs to be implemented are detailed in the County of San Diego "Stormwater Standards Manual" and shall be applied in the following areas, if applicable to the project:

- (1) Erosion control on slopes;
- (2) Erosion control on flat areas; or BMPs to desilt runoff from flat areas;
- (3) Runoff velocity reduction;

- (4) Sediment control;
- (5) Offsite sediment tracking control;
- (6) Materials management;
- (7) Waste management;
- (8) Vehicle and equipment management;
- (9) Water conservation;
- (10) Structure construction and painting;
- (11) Paving operations;
- (12) Dewatering operations;
- (13) Planned construction operations;
- (14) Downstream erosion control;
- (15) Prevention of non-stormwater discharges;
- (16) Management of run-on discharges;
- (17) Protection of ground water; and

BMPs shall include post-construction BMPs for permanent control of erosion from slopes. These BMPs can include structures to convey runoff safely from the tops of slopes, vegetation or alternative stabilization of all disturbed slopes and/or the use of natural drainage systems to the MEP.

#### 1.17 PROTECTION OF EXISTING UTILITIES

- A. The Contractor shall coordinate their efforts with the District and shall take every precaution to protect all existing utilities and structures at the project site. The Contractor shall be responsible for all Underground Service Alert notification and mark outs prior to the beginning of work.

#### 1.18 COORDINATION WITH DISTRICT OPERATIONS

- A. The Contractor shall coordinate all work with the District sufficiently ahead of time so as to not interfere with the District's operations. The Contractor shall submit a detailed sequence of work to the District for all work in accordance with Section 01043. This proposed sequence of work shall be reviewed and approved with the District prior to construction for consistency with the Sequence of Work as described in these Contract Documents and the District's required operation. .

- B. The District will occupy the site and existing adjacent buildings during the entire construction period and construction shall be phased to maintain site access and employee and customer parking. The Work shall be completed in 3 phases per Section 01043.
- C. The jobsite is located within a secured facility. Access to the site shall be provided by the District to allow work to commence in accordance with the contract documents. Contractor shall abide by the District's terms of site access at all times including but not limited to abiding by approved working hours, restrictions to access, and maintaining designated laydown areas. The Contractor shall follow the District's safety protocols or the Contractor's safety protocols (whichever is more restrictive) at all times while on District Property.
- D. District Driveway Access/Entrance Gates shall be accessible at all times, unless specifically approved in writing and coordinated with the District not less than 5 business days in advance.

#### 1.19 PRE-CONSTRUCTION CONFERENCE AND PROGRESS MEETINGS

- A. A Pre-Construction Conference shall be scheduled prior to start of project as described in Section 01201 Preconstruction Conference. The District, the Contractor, and the District's Construction Manager shall be present. The Contractor's detailed sequence of work and a list of labor, material and equipment rates for additional work shall be established and maintained throughout the project. Contractor shall identify all personnel assigned to the project and a complete set of approved submittal data for use by inspection personnel. Contractor shall have a designated representative for this project.
- B. The Contractor shall also attend project progress meetings as described in Specification Section 01202, Progress Meetings.

#### 1.20 TRAFFIC CONTROL

- A. The Contractor is responsible for maintaining one lane of traffic for public access around the work zone. The Contractor is responsible for preparing traffic control plans and obtaining a traffic control permit from both the City of Carlsbad and City of Encinitas. Provide appropriate signage and fencing around the work area. Sidewalk closure and detour will be required.

#### 1.21 HOURS OF WORK

Hours of work shall be 8:30 A.M. to 3:30 P.M. unless otherwise specified in writing and agreed to by the District. **Absolutely no equipment shall be started or warmed up prior to 8:30 AM or after 3:30 PM.** Overtime and shift work may be established as short-term procedure by Contractor with written notice to and written permission from District. No work other than overtime and shift work approved by District shall be done between the hours of 4:30 P.M. and 8:00 A.M., nor on weekends, or District recognized holidays, except such work as is necessary for the proper care and protection of the work already performed, except in case of emergency, or as otherwise specified by the District, and as specified herein. Special

consideration may be given outside of these established working ours to minimize impact to District Staff and normal business operations. Any special work hours or dates must be arranged and approved by the District in advance of the planned work in writing. The District reserves the right to require any work that interferes with normal scheduled business to be rescheduled. The District recognized holidays are as follows:

- New Year's Day
- Martin Luther King, Jr. Day
- Presidents' Day
- Memorial Day
- Independence Day
- Labor Day
- Veterans Day
- Thanksgiving Day And The Following Friday
- Christmas Day

In the event that a national holiday falls on a Saturday, the previous Friday shall be Considered a holiday. If a national holiday falls on a Sunday, the following Monday shall be considered a holiday.

## 1.22 CONSTRUCTION SURVEYS

### A. LAND MONUMENTS

The Contractor shall notify the District and the District's Representative of any existing Federal, State, City, County, and private land monuments encountered. All monuments shall be preserved, or if necessary to be destroyed during performance of the Work, shall be replaced by a licensed surveyor under contract to the Contractor. Appropriate record of survey drawings shall be filed with the City of Encinitas and County of San Diego for all replaced monuments. When government monuments are encountered, the Contractor shall notify the District's Representative at least two (2) weeks in advance of the proposed construction and provide for surveying of the existing monument before it is disturbed or destroyed.

## 1.23 GEOTECHNICAL WORK

### A. SUBSURFACE INVESTIGATIONS

1. A Geotechnical report has been prepared for the project and is provided in Appendix A.
2. The Contractor shall make independent geotechnical investigations of the project site in order to satisfy himself of the subsurface conditions that may be encountered. No additional compensation will be made for additional geotechnical investigations.

## B. CONSTRUCTION TESTING

1. The District shall furnish compaction testing for all bedding, backfill, and soil compaction testing.
2. The District shall furnish all materials testing and special inspections called for in the Contract Documents, including, but not limited to concrete and asphalt pavement.
3. When any work is determined to be unsatisfactory, faulty or defective, or does not conform to the requirements of the Contract Documents, the costs incurred by the District for additional tests or inspections shall be reimbursed by the Contractor. Said costs shall be paid by the District and deducted from progress payments to the Contractor.
4. Contractor shall provide at least 72-hour written notice of its readiness for all special inspection and testing.
5. When tests or inspections cannot be performed after such notice, the Contractor shall reimburse the District for laboratory personnel and travel expenses incurred due to the Contractor's negligence.

## 1.24 CONSTRUCTION WATER

- A. The Contractor shall obtain and pay deposit for a temporary construction water meter from the District and shall be responsible for all highlines and other temporary equipment and facilities necessary to provide adequate construction water to the project site. The Contractor shall be responsible for all highlines and other temporary equipment and facilities necessary to provide adequate construction water to the project site. The Contractor shall coordinate the locations of water supply with the District. The following conditions must also be met:
  1. Excess water must be available in the pipeline at the connection point.
  2. The Contractor shall submit a construction water service connection plan a minimum of two weeks prior to the need for water. This plan shall indicate all piping, valves, and other materials necessary to connect to District owned piping at designated blow-off, air vacuum, and air release structures located within the project site. Do not install piping, meter, or valves until the District's Representative has approved the water service plan.
  3. Accurately measure all water use and submit meter readings to the District's Representative when the meter is installed, at the end of each month and when the meter is removed.
  4. Securely lock the installed valve in the closed position at the end of each workday and during all times of inactivity. Avoid wasting water and prevent unauthorized use. Do not use water from the District on any other project.

5. Coordinate all use of water, flushing of pipelines and filling of pipelines with the District's representative. All requests for use of water and for increases or decreases in quantity shall be made in writing to the District's Representative two working days in advance.

#### 1.25 POWER AND LIGHTING

- A. The Contractor shall provide all power required for construction operations, and shall provide and maintain all temporary power facilities required to perform the work in a safe and satisfactory manner. All electrical facilities shall conform to the requirements of the the requirements of Title 8, Industrial Relations, Subchapter 5, Electrical Safety Orders, of the California Code of Regulation; and Subpart K of the OSHA Safety and Health Standards for Construction.
- B. The Contractor shall provide adequate light for work conducted at night or under low light conditions to provide adequate facilities for inspection and safe working conditions and to insure proper work.
- C. Temporary connections for electricity shall be subject to approval of the District's Representative and the power company representative. Remove temporary electrical connections in like manner prior to final acceptance of the work.

#### 1.26 CONTRACTOR STAGING AND LAYDOWN AREA

- A. The Contractor shall be responsible for returning all areas used to their original conditions. A location for laydown and temporary facilities within the District headquarters' parking lot has been identified in Specification Section 01510.

#### 1.27 SANITATION AND DRINKING WATER

- A. The Contractor shall provide toilet and wash-up facilities for his work force at the site of work. They shall comply with applicable laws, ordinances, and regulations pertaining to the public health and sanitation of dwellings and camps. The facilities shall be stored within the staging areas overnight and on weekends. The Contractor shall maintain the sanitary facilities in an acceptable condition from the beginning of work to completion and shall remove the facilities and disinfect the premises.
- B. The Contractor shall provide safe drinking water at all times at the jobsite.

#### 1.28 SAFETY

- A. District and its inspectors, consultants, agents and other representatives are in no way responsible for safety and are there only to observe the work compliance with plans and specifications.
- B. As an informational submittal, Contractor shall prepare and submit a general company Health and Safety Plan (HSP), modified or supplemented to include job-specific considerations.

- C. The Contractor acknowledges responsibility for jobsite and acknowledges that the District, Engineer and their agents, employees, consultants and representatives will not have any such responsibility. To the fullest extent permitted by law the Contractor shall indemnify, defend and hold harmless the District, Engineer, their present companies, subsidiaries, agents, and employees from and against all claims, damages, losses and expenses, including but not limited to attorney fees and claim costs, arising out of or resulting from performance of work by the Contractor, its subcontractors, or their agents and employees, which results in damage, loss or expense is caused in whole or in part by the negligence, active or passive, of District, Engineer, their parent and subsidiary companies, as well as their agents and employees, excepting only the sole negligence of District, Engineer, their parent or subsidiary companies and their agents and employees.

#### 1.29 INDEMNIFICATION

- A. Contractor hereby releases and agrees to indemnify, defend, hold harmless the District, the City, Engineer, their parent and subsidiary companies, agents, employees, consultants and representatives for any and all damage to persons or property or wrongful death regardless of whether or not such claim, damage, loss or expense is caused in whole or in part by the negligence, active or passive, of District, Engineer, their parent and subsidiary companies, as well as their agents and employees, excepting only the sole negligence of District, Engineer, their parent or subsidiary companies and their agents and employees to the fullest extent permitted by law. Such indemnification shall extend to all claims, demands, actions, or liability for injuries, death or damages occurring after completion of the project, as well as during the work's progress. Contractor further agrees that it shall accomplish the above at its own cost, expense and risk exclusive of and regardless of any applicable insurance policy or position taken by any insurance company regarding coverage.
- B. Contractor shall defend, indemnify and hold the District, the City, Engineer, its employees, officers, or agents, harmless against any and all claims by any parties arising from, or related to, any and all damages, including legal costs and attorney's fees, resulting from interference with, interruption of, damage to, or any and all injuries which result from damage caused to subsurface installation, which is unforeseen and despite Engineer's/Architect's effort during the design process was not located, excepting only the gross negligence or willful misconduct of Engineer in providing its services.

#### 1.30 AUDIO-VIDEO DOCUMENTATION OF PROJECT SITE

- A. A minimum of two (2) weeks prior to start of construction and delivery of any equipment, materials or supplies to the site, the Contractor shall provide pre-construction digital color audio-video documentation as specified herein for the purpose of establishing the surface conditions existing in all of the areas to be affected by the construction and to avoid potential construction repair disputes. The Contractor shall be responsible for repairing any damage or defect not documented as existing prior to construction. The Contractor shall coordinate with the District a minimum of two (2) weeks in advance of the intended audio-

video documentation and accommodate a joint walkthrough of each area by all interested stakeholders, which may include but is not limited to the Engineer, Cities, District, and Construction Manager.

- B. Digital color audio-video documentation shall consist of the recordation of surface features taken along the entire length of the project, including all work, storage, and staging areas and all intersecting roadways. Prior to audio-video taping of the project, all areas to be documented shall be investigated visually with notations made of items not readily visible by taping methods.
- C. Coverage of the digital color audio-video documentation shall include, but not be limited to: all existing driveways, sidewalks, curbs, streets, access roads, signs, landscaping, trees, catch basins, fences, monuments, visible utilities and all buildings located within the zone of influence. Of particular concern are any existing faults, fractures, cracks, defects or other features. Audio description shall be made simultaneously with and support the video coverage.
- D. One (1) copy of the digital color audio-video documentation shall be provided to the Owner's Representative on DVD, USB Flash Drive or other electronic data storage device suitable or transferred electronically to the Owner prior to the start of construction. Utility mark out (USA) shall be completed prior to the audio-video documentation and shall be included in the pre-construction audio-video documentation. Any project areas not fully documented shall be re-shot as directed by the Owner's Representative.
- E. Construction work shall not commence until audio-video documentation has been delivered to the Owner's Representative.

#### 1.31 JURISDICTIONAL COORDINATION

- A. The Contractor shall coordinate construction activities with the operations of the jurisdictional agency where work is to occur, including the City of Encinitas and the City of Carlsbad. Coordination shall include communication with the agency representative and the agency's project contractor.

#### 1.32 MEASUREMENT AND PAYMENT

- A. General:
  - 1. The measurement and payment provisions of these Contract Documents shall govern over those of referenced standards, if any.
  - 2. The price set forth in the Bid Form for the work shall include all costs and expenses incidental to completing the work, and payment of the price bid will be payment in full under this contract, except as provided by Article 9-1 PAYMENT FOR CHANGES IN THE WORK of the General Provisions.



3. As a condition precedent to approval of the Contractor's monthly payment application by the District's Representative, the Contractor shall attend all progress or issue resolution meetings scheduled by the District's Representative. In addition, the Contractor shall submit a monthly construction schedule properly updated and accurately showing the work completed to date and the work yet to be performed in the remaining Contract time. The Contractor agrees failure to comply with the foregoing to the satisfaction of the District's Representative shall delay the monthly progress payment to the Contractor without penalty to the District.

B. Lump Sum Work Items Listed in the Bid Schedule:

1. The lump sum prices include full compensation for furnishing the labor, materials, tools, and equipment and doing all the work involved to complete the work included in lump sum work items listed in the Bid Schedule and defined by the Contract Documents.
2. The application for payment for a lump sum payment item will be for that specific work item based on the percentage completed. The percentage complete will be based on the value of partially completed work relative to the value of the item when entirely completed and ready for service. The application for payment will be in accordance with Article 9-2 PROGRESS PAYMENTS of the General Provisions.

C. Unit Price Work Items Listed in the Bid Schedule:

1. The unit prices include full compensation for furnishing the labor, materials, tools, and equipment and doing all the work involved to complete the work included in the unit price work items listed in the Bid Schedule and defined by the Contract Documents.
2. The application for payment for a unit price payment item will be for that specific work item based on the units of work that are entirely completed and ready for service. The application for payment will be in accordance with Article 9-2 PROGRESS PAYMENTS of the General Provisions.

D. Work Items Not Listed in the Bid Schedule:

1. The General Provisions and items in the Special Provisions which are not listed in the Bid Schedule of the Bid Form are, in general, applicable to more than one listed work item, and no separate work item is provided therefor. Include the cost of work not listed but necessary to complete the project designated in the Contract Documents in the various listed work items of the Bid Form.
2. The bids for the work are intended to establish a total cost for the work in its entirety. Should the Contractor feel that the cost for the work has not been established by specific items in the Bid Form, he shall include the cost for that work in some related bid item so that his bid for the project does reflect his total cost for completing the work in its entirety.

### 1.33 NOTICE OF COMPLETION

- A. Contractor shall apply for acceptance of the work encompassed in the Bid Schedules. Upon substantial completion of the work encompassed in the Bid Schedule, the District, at the District's sole discretion, will issue a Notice of Substantial Completion for this work.
- B. Upon completion of all work in the Bid Schedules in accordance with the Contract documents, Contractor shall apply for acceptance of the work. Upon acceptance of the work encompassed in the Bid Schedules, the District, at the District's sole discretion, will prepare a Notice of Completion for consideration and approval by the District Board of Directors.

#### 1.34 LABOR COMPLIANCE PROGRAM AND CONTRACTOR REGISTRATION WITH STATE OF CALIFORNIA

- A. In accordance with requirements defined by the California State Legislature via Senate Bill 854, all contractors and subcontractors involved with public works project shall be registered with the State Department of Industrial Relations. Registration is completed through an on-line application process and the payment of a fee to the State. The registration process requires contractors and subcontractors to provide workers' compensation coverage to its employees, hold a valid Contractors State Board License, have no delinquent unpaid wage or penalty assessments, and not be subject federal or state debarment. The registration form is located on the State Department of Industrial Relations website:

<http://www.dir.ca.gov/DLSE/dlsepublicworks.html>

- B. Prior to start of construction, the Contractor shall submit to the District evidence of completing this registration for the prime firm and all subcontracting firms. Failure to submit the requested documentation shall be cause for delay of the project and subject to forfeiture due to delay in accordance with paragraph 1.08 of the Supplement to General Provisions.

#### 1.35 SITE RESTORATION

- A. Contractor shall return all disturbed areas to pre-construction conditions including, but not limited to topographic elevations, grade and material of existing surface, slopes, curb and gutter, sidewalks, driveways, striping, seal coatings, landscaping, sod grass, fences, irrigation lines and facilities, railroad ties, District facilities, and structures.

#### 1.36 TREE AND LANDSCAPE PROTECTION

- A. Contractor shall protect trees and existing landscape in place in accordance with the Contract Documents. No tree shall be cut or trimmed without approval of a certified arborist and a District Representative. The cutting of roots greater than 2-inches in diameter shall not be allowed and hand-digging will be required.

END OF SECTION

(BLANK)

## **PART II**

### ***TECHNICAL SPECIFICATIONS***

(BLANK)

## **PART II**

### ***TECHNICAL SPECIFICATIONS***

(BLANK)



## **SECTION 01010 - SUMMARY OF WORK**

### **PART 1 - GENERAL**

#### **1.1 LOCATION AND DESCRIPTION OF WORK**

- A. The Work for this project will consist of the construction of approximately 2,000 linear feet of 12-, 8-, and 6-inch diameter Polyvinyl Chloride (PVC) for water distribution service together with all valves, fire hydrants, and appurtenances and connections to existing systems; abandonment, removal and/or disposal of portions of asbestos cement, steel or ductile iron pipelines; restoration of landscape; site restoration and reconstruction of existing pavements, concrete gutters, curb, medians, sidewalks, and driveways, striping and markings, traffic loops and improvements damaged during construction or ordered for replacement; and all incidental work necessary for a complete and operable distribution piping system in accordance with the Contract Documents.
- B. The site of Work is generally located along Rancho Santa Fe Road within the City of Encinitas and City of Carlsbad, California in the County of San Diego, California. Refer to the Drawings for vicinity and project location maps.

#### **1.2 CONTRACTS**

- A. The Work shall be constructed under one prime contract.

#### **1.3 WORK BY OTHERS**

- A. Work by Franchise Utilities. All costs for coordination with the franchise utilities or for any Work performed by Contractor associated with franchise utilities shall be borne by Contractor at no additional cost to Owner. Costs for compensation to franchise utilities for work performed by their forces shall be paid for by the Contractor.

#### **1.4 SALVAGE**

- A. The Owner may desire to salvage certain items of existing equipment which are to be dismantled and removed during the course of construction. Prior to removal of any existing equipment from the site of the Work, the Contractor shall ascertain from the Engineer whether or not the particular item or items are to be salvaged. Items to be salvaged shall be stockpiled on the site in a location as directed by the Engineer. All other items of equipment shall be disposed of off-site by the Contractor at his own expense.

#### **1.5 CONTRACT METHOD**

- A. The work hereunder will be constructed under a single contract, the total cost of which is a total lump sum.
- B. The Contractor shall include all Contract Documents as a part of all its subcontract agreements.

#### **1.6 NOT USED**

## **SECTION 01010 - SUMMARY OF WORK**

### **1.7 CONTRACTOR'S USE OF PREMISES**

- A. Contractor's use of the premises shall be confined to the areas shown on the Drawings.
- B. Contractor shall:
  - 1. Assume full responsibility for protection and safekeeping of products stored on or off premises.
  - 2. Move stored products that interfere with the operations of Owner or other contractors.
  - 3. Obtain and pay for all additional storage or work areas required for his operations.

### **1.8 Owner's USE OF THE PROJECT**

- A. The Contractor shall cooperate with the Owner to minimize interference with the Owner's operations and to facilitate the Owner's operations in accordance with Section 01043.

### **1.9 NOT USED**

### **1.10 OPERATION OF EXISTING WATER SYSTEM PROHIBITED**

- A. The Contractor shall at no time undertake to close off any lines, open any valves or take any other action which would affect the operation of the existing water system, except as specifically required by the Contract Documents and after approval is granted by the Owner. Request approval two (2) working days in advance of the time that interruption of the existing system is required.
- B. Work on existing structures and facilities shall be performed on a schedule and in a manner that will permit the existing facility to operate continuously, unless otherwise approved in writing by the Owner of the existing utility and/or facility affected.

### **1.11 CONTRACT TERMINATION**

- A. The Owner may terminate this Contract without cause by giving seven (7) days prior written notice to the Contractor. In event of a contract termination the Owner will pay the Contractor for that portion of the Contract completed as of the date of termination, less the aggregate of previous payments already disbursed. The Owner will also reimburse the Contractor for all costs necessarily incurred for organizing and carrying out the stoppage of the work and paid directly by the Contractor, not including overhead, general expenses and profit. Contractor shall not be entitled to profit on any portion of the project which has not been completed.

### **1.12 OWNER'S RIGHT TO STOP WORK**

- A. The Owner reserves the right to stop work for any reason, at any time. The Contractor's claim for compensation shall apply to an adjustment in the completion

## SECTION 01010 - SUMMARY OF WORK

time of the project only. Any additional costs incurred due to any stop work order, shall be incurred by the Contractor.

### 1.13 HAZARDOUS WASTE

- A. The Contractor shall perform work in such a manner that there will be no hazardous wastes (fuel, oil, chemical, etc.) generated or left on the site. Should the generation of hazardous waste be necessary in order to complete the Work, it shall be the Contractor's responsibility to take all necessary steps to legally dispose of the waste and any contaminated soil or material. All hazardous waste and/or contaminated soil found on the site which has been left by the Contractor shall be properly disposed of by the Contractor. All necessary documentation of the disposal shall be obtained by the Contractor and shall be submitted to the Owner.

Note: It is unacceptable to store fuels and/or oils on site. The Contractor and Subcontractors must make provisions to fuel equipment on a mobile basis only.

### 1.14 WATER CONSERVATION

- A. Water resources shall be utilized in a manner that promotes maximum efficiency in the conservation of water. Water storage facilities, transport vehicles or systems shall not be permitted to operate in a faulty/leaky condition. Drop tanks, highlines, and other water handling or water-use facilities shall be kept out of public view, whenever possible. Contractor shall be responsible for making all arrangements for temporary water service with the appropriate agency. All water used on the project during construction shall be paid for by the Contractor.
- B. The Contractor shall coordinate pipeline flushing activities with the Owner to ensure clear communication and coordination of those activities.
- C. When "Flushing" new water systems in preparation for agency bacteria testing, a conscientious effort shall be made to recover, store or reuse the water. This may require the use of temporary "High Line" or "Fire Hose" to transport the used water to a temporary holding pond or tank.
- D. Water waste in site preparation, storm drain, sewer, water and miscellaneous operations, is not acceptable in any form. The Contractor shall adjust operations, as required, to meet conservation goals noted herein. If excessive waste occurs, the Owner will direct the Contractor in writing to make the necessary changes within twenty-four (24) hours to conserve water. If water waste continues the Contract may be terminated.

END OF SECTION

(BLANK)

## **SECTION 01043 - COORDINATION WITH OWNER'S OPERATIONS**

### **PART 1 - GENERAL**

#### **1.1 CONTINUATION OF OPERATIONS**

- A. The Contractor will be performing work in the vicinity of existing water transmission and distribution facilities. Under these conditions, precautions will be necessary to assure that no damage or unscheduled shutdowns occur to any facilities, including piping, utilities, roads, and structures that are to remain in operation and are not to be modified or replaced. Any temporary facilities, materials, equipment and labor required to achieve this objective shall be provided by the Contractor at his own expense. At the completion of work, all such temporary facilities, materials and equipment remaining shall be removed from the site.
- B. Regarding connection to existing buried piping and facilities at or adjacent to the site, it shall be the responsibility of the Contractor to uncover and verify their locations; elevations; bearings and inclinations; joint locations relative to connection points; materials; and dimensions prior to beginning construction or fabrication of any new materials or facilities which are dependent on the location of existing facilities.

#### **1.2 ORDER OF THE WORK**

- A. The work shall be carried as described on the phasing plan described in the contract drawings, also in such order or precedence as may be found necessary by the Engineer to expedite the completion of the project. After work has begun on any portion or designated part of the project, it shall be carried forward to its final completion.

#### **1.3 SHUTDOWNS, RECONNECTIONS, TIE-INS, AND ABANDONMENTS**

- A. Any proposed shutdowns must be indicated on the Contractor's preliminary schedule to be submitted for review by the Engineer at the Pre-Construction Conference. The actual allowable durations of the shutdowns will be determined during the preparation of the detailed construction schedule.
- B. No water system shutdowns or tie-ins to existing pipes will be allowed on a Monday or a Friday.
- C. The Contractor shall give the Owner a minimum of fourteen (14) calendar days notice prior to any proposed excavation or shutdown of existing mains or services. Scheduling shall be subject to Owner approval.
- D. The Contractor shall compile a detailed list of all items of work which must be accomplished during any shutdown. The Contractor shall coordinate his work to minimize the required number of shutdowns by accomplishing as many tasks as possible during each shutdown period. The Contractor shall submit this list of items to the District Representative for his review as a part of the construction schedule defined within Section 01310. The schedule shall indicate all periods and duration of each proposed shutdown and the items of work which will be accomplished. The Contractor shall make specific written requests for all shutdowns fourteen (14) calendar days in

## SECTION 01043 - COORDINATION WITH OWNER'S OPERATIONS

advance of the proposed shutdown for review and approval by the District Representative. The written request shall include a complete detailed plan of the Contractor's proposed activities including schedule, manpower, equipment, materials and methods which will be utilized to perform the required work during the proposed shutdown. If, in the opinion of the District Representative, the Contractor's proposed plan is insufficient to successfully complete the required work during the period of the shutdown, the Contractor shall make the appropriate revisions in his proposed plan to the satisfaction of the District Representative. The District reserves the right, at its sole discretion, to cancel any planned shutdown at any time for safety or operational reasons. A canceled shutdown will not constitute the basis for an increase in compensation due the Contractor.

For work at Las Olas Ct., including tie-ins, contractor shall submit shut down plan. Pipeline at Las Olas Ct. shall be ready for tie-in in two (2) working days prior to shut down and completion of phase 2. Phase 2 shut down shall be limited to one (1) 8 hour work window.

- E. All water services shall remain in service for the duration of construction except when performing reconnections and tie-ins. The existing watermain shall remain in service at all times except during approved shut downs for tie-ins until the new watermain is in service.
- F. Abandonment of the existing 12-inch may be staggered following the completion of each phase as approved by the District.

### 1.4 SEQUENCE OF CONSTRUCTION

- A. Work under the Contract shall be scheduled and performed in such a manner as to result in the least possible disruption to the operation of the existing District facilities and to the general public. The Contractor shall coordinate all connections to existing meters and mains with the Owner. The Contractor will install all highline piping required by the Owner for continuity of service.
- B. The following construction constraints and requirements must be used as a guideline in preparing the scheduling. At the sole discretion of the District Representative, deviation from these suggested sequences is permitted if techniques and methods known to the Contractor will result in reducing the disruption of the facility operation and upon the concurrence of the District Representative.
  - 1. Potholing shall be performed two (2) weeks in advance of proposed pipeline installation to resolve conflicts and minimize angles and bends in the pipe profile.
  - 2. For the Unit A Rancho Santa Fe Road Water Pipeline Replacement work, the sequencing of the work shall follow Shutdown Phasing in numerical sequence, as shown on the drawings, starting with Phase 1. Final paving shall be completed in each phase as the work progresses.
- C. Phasing of Work Guidelines. The following guidelines shall be used by the Contractor for the scheduling and performance of the Work. Deviations from these guidelines

## **SECTION 01043 - COORDINATION WITH OWNER'S OPERATIONS**

shall be submitted to the Owner per Section 01300 and shall not be carried out until written approval is obtained from the Owner. The Work shall be completed in four Phases.

1. General - The following work shall precede the Work of any given phase.
  - a. Field stake the alignments and notify DigAlert for field mark out of all existing utilities that are crossing or paralleling (within 5 feet horizontally) of the proposed construction.
  - b. A minimum of two (2) weeks prior to start of excavation, pothole all existing utilities that are crossing or paralleling (within 5 feet horizontally) of the proposed pipeline including connection points to existing pipelines and as defined on the Drawings. Provide potholing results to the Owner and inform of any discrepancies at connection points, or at crossing or paralleling utilities, and allow sufficient time for District to make adjustments to the vertical and horizontal alignments, where necessary.
2. Phase 1. The work in Phase 1 shall be substantially complete prior to commencing Phase 2.
  - a. Construct the improvements as described in the Phasing Plan included in the Project Plans.
  - b. During Phase 1, work shall proceed at no more than one location within all areas encompassed by Bid Items I-F through I-L unless prior written approval is obtained from the Owner.
  - c. All pipelines and appurtenances listed in Bid Item I-F through I-L, as described in Specification Section 01150.
3. Phases 2. The work in Phases 2 shall be substantially complete prior to commencing Phase 3.
  - a. Construct the improvements as described in the Phasing Plan included in the Project Plans.
  - b. During Phase 2, work shall proceed at no more than one location within all areas encompassed by Bid Items I-F through I-M unless prior written approval is obtained from the Owner.
  - c. All pipelines and appurtenances listed in Bid Item I-F through I-M, for phases 1 and 2 as described in Specification Section 01150, shall be completed and fully operational and accepted by the Owner prior to the start of the next phase of work.
4. Phase 3. The work in Phase 3 shall be substantially complete prior to commencing Phase 4.
  - a. Construct the improvements as described in the Phasing Plan included in the Project Plans.

## **SECTION 01043 - COORDINATION WITH OWNER'S OPERATIONS**

- b. During Phase 3, work shall proceed at no more than one location within all areas encompassed by Bid Items I-F through I-L unless prior written approval is obtained from the Owner.
- c. All pipelines and appurtenances listed in Bid Item I-F through I-L, as described in Specification Section 01150.

### **5. Phase 4.**

- a. Construct the improvements as described in the Phasing Plan included in the Project Plans.
- b. During Phase 4, work shall proceed at no more than one location within all areas encompassed by Bid Items I-F through I-M unless prior written approval is obtained from the Owner.
- c. All pipelines and appurtenances listed in Bid Item I-F through I-M, for phases 3 and 4 as described in Specification Section 01150, shall be completed and fully operational and accepted by the Owner for final acceptance.

**END OF SECTION**



## **SECTION 01045 - CUTTING AND PATCHING**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. The Section includes all cutting and patching of all Work under construction, completed Work and existing facilities in order to accommodate the coordination of Work, install other Work, uncover Work for access, inspection or testing, or similar purposes. Execute all cutting and patching, including excavation, backfill and fitting required to:
  - 1. Remove and replace defective Work or Work not conforming to requirements of the Contract Documents.
  - 2. Remove samples of installed Work as required for testing.
  - 3. Remove all construction required to provide for specified alteration or addition to existing Work.
  - 4. Uncover Work to provide for the Engineer's inspection of covered Work or inspection by regulatory agencies having jurisdiction.
  - 5. Connect to completed Work that was not accomplished in the proper sequence.
  - 6. Remove or relocate existing utilities and pipes which obstruct the Work to which connections must be made.
  - 7. Make connections or alterations to existing or new facilities.
- B. Restore all existing Work to a state equal to that which it was in prior to cutting and restore new Work to the standards of these Specifications.
- C. Submittals:
  - 1. Prior to cutting which may affect integrity and design function of Project, Owner's operations, or work of another contractor, submit written notice to Engineer, requesting consent to proceed with cutting, including:
    - a. Identification of Project.
    - b. Description of affected Work of Contractor and work of others.
    - c. Necessity for cutting.
    - d. Effect on other work and on structural integrity of Project.
    - e. Description of Proposed Work. Designate:
      - 1) Scope of cutting and patching.
      - 2) Contractor, Subcontractor or trade to execute Work.

## **SECTION 01045 - CUTTING AND PATCHING**

- 3) Products proposed to be used.
- 4) Extent of refinishing.
- 5) Schedule of operations.
- f. Alternatives to cutting and patching, if any.
- g. Designation of party responsible for cost of cutting and patching.
- 2. Should conditions of Work, or schedule, indicate change of materials or methods, submit written recommendation to Engineer, including:
  - a. Conditions indicating change.
  - b. Recommendations for alternative materials or methods.
  - c. Submittals as required for substitutions.
- 3. Submit written notice to Engineer, designating time Work will be uncovered, to provide for observation. Do not begin cutting or patching operations until authorized by the Engineer.
- D. Provide shoring, bracing and support as required to maintain structural integrity of Project and protect adjacent Work from damage during cutting and patching.
- E. Conform to all applicable Specifications for application and installation of materials used for patching.

END OF SECTION

## SECTION 01070 – ABBREVIATIONS AND SYMBOLS

### PART 1 - GENERAL

#### 1.1 ABBREVIATIONS

- A. Interpret abbreviations used on the Contract Documents as defined in ANSI Y1.1.

#### 1.2 ORGANIZATION ABBREVIATIONS

- A. Abbreviations of organizations that may be used in these Specifications are:

AASHTO	American Association of State Highway and transportation Officials
ACS	American Chemical Society
ACI	American Concrete Institute
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AI	The Asphalt Institute
AIA	American Institute of Architects
AIEE	American Institute of Electrical Engineer
AIChE	American Institute of Chemical Engineers
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
APCD	Air Pollution Control District
APHA	American Public Health Association
API	American Petroleum Institute
APWA	American Public Works Association
AREA	American Railway Engineering Association
ASA	American Standard Association (now ANSI)
ASTM	American Society for Testing and Materials
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society of Testing Materials
AWS	American Welding Society
AWWA	American Water Works Association
DIPRA	Ductile Iron Pipe Research Association
CALOSHA	California Occupational Safety and Health Association
CALTRANS	State of California Department of Transportation
CBC	California Building Code
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act

## SECTION 01070 – ABBREVIATIONS AND SYMBOLS

CRSI	Concrete Reinforcing Steel Institute
EBE	Emerging Business Enterprise
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FM	Factory Mutual
HEW	Department of Health, Education and Welfare
HUD	Department of Housing and Urban Development
ICBO	International Conference of Building Officials
IEEE	Institute of Electrical and Electronic Engineers
IRI	Industrial Risk Insurance
ISO	Insurance Services Office
NAAMM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NARUC	National Association of Railroad and Utilities Commissioners
NBFU	National Board of Fire Underwriters
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NEPA	National Environmental Policy Act
NF	National Fire Protection Association
NPDES	National Pollution Discharge Elimination System
NSF	National Sanitation Foundation
OSHA	Occupational Safety and Health Act
OMWD	Olivenhain Municipal Water District
PCA	Portland Cement Association
PCI	Precast Concrete Institute
SDRS	San Diego Regional Standards
SMACNA	Sheet Metal and Air Conditioning National Association
SSPC	Steel Structures Painting Council
SSPWC	Standard Specifications for Public Works Council
UL or U/L	Underwriters Laboratories, Inc.
USACE	United States Army Corp of Engineers
USASI	United States of American Standard Institute (now ANSI)
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USPHS	United States Public Health Service
WAS	Water Agencies' Standard
WWEMA	Water and Wastewater Equipment Manufacturers Association
WPCF	Water Pollution Control Federation

## **SECTION 01070 – ABBREVIATIONS AND SYMBOLS**

### **1.3 LEGEND**

- A. Legends of symbols used are shown on the contract drawings, and in general, use of symbols is confined to the contract drawings.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

(BLANK)

## **SECTION 01080 - DEFINITIONS**

### **PART 1 - GENERAL**

#### **1.1 PURPOSE**

- A. Wherever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof.

#### **1.2 DEFINITIONS**

- A. **ADDENDA** - Written or graphic instruments issued prior to the opening of Bids that make additions, deletions, or revisions to the Contract Documents.
- B. **AGREEMENT** - The written contract between the Owner and the Contractor covering the Work to be performed; other documents are attached to the Agreement and made a part thereof as provided therein.
- C. **APPLICATION FOR PAYMENT** - The form furnished by the Construction Manager which is to be used by the Contractor to request progress or final payment and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- D. **BID** - The offer or proposal of the Bidder submitted on the prescribed form setting forth the price or prices for the Work.
- E. **BONDS** - Bid, Performance, and Payment Bonds and other instruments that protect against loss due to inability or refusal of the Contractor to perform its Contract.
- F. **CHANGE ORDER** - A document recommended by the Construction Manager, which is signed by the Contractor and the Owner and authorizes an addition, deletion, or revision in the Work, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.
- G. **CONSTRUCTION MANAGER** - The individual, partnership, corporation, joint venture or other legal entity named as such by written notice from the Owner.
- H. **CONTRACT DOCUMENTS** - The Notice Inviting Bids, Instructions to Bidders, Bid Forms (including the Bid, Bid Schedule(s), Information Required of Bidder, Bid Bond, and all required certificates and affidavits), Agreement, Performance Bond, Payment Bond, General Conditions, Supplementary General Conditions, Technical Specifications, Drawings, and all addenda, and change orders executed pursuant to the provisions of the Contract Documents.
- I. **CONTRACT PRICE** - The total monies payable by the Owner to the Contractor under the terms and conditions of the Contract Documents.
- J. **CONTRACT TIME** - The number of successive calendar days stated in the Contract Documents for the completion of the Work.

## **SECTION 01080 - DEFINITIONS**

- K. CONTRACTOR - The individual, partnership, corporation, joint venture or other legal entity with whom the Owner has executed the Agreement.
- L. DAY - A calendar day of 24 hours measured from midnight to the next midnight.
- M. DEFECTIVE WORK - Work that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents; or Work that has been damaged prior to the Construction Manager's recommendation of final payment.
- N. DESIGN CONSULTANT - The individual, partnership, corporation, joint venture or other legal entity named as such in the Contract Documents.
- O. DRAWINGS - The drawings, plans, maps, profiles, diagrams, and other graphic representations which indicate the character, location, nature, extent, and scope of the Work and which have been prepared by the Design Consultant and are referred to in the Contract Documents. Shop Drawings are not Drawings as so defined.
- P. EFFECTIVE DATE OF THE AGREEMENT - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- Q. ENGINEER - Wherever the word "Engineer" is found in these Contract Documents or in any referenced document, it shall mean the Construction Manager.
- R. FIELD ORDER - A written order issued by the Construction Manager that does not involve a change in the Work.
- S. GENERAL REQUIREMENTS - Division 1 of the Technical Specifications.
- T. HAZARDOUS WASTE - As defined in Section 25117 of the Health and Safety Code, which is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law, whichever is more restrictive.
- U. LAWS AND REGULATIONS; LAWS OR REGULATIONS - Any and all applicable laws, rules, regulations, ordinances, codes, and/or orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.
- V. MECHANIC'S LIEN - A form of security, an interest in real property which is held to secure the payment of an obligation. When referred to in these Contract Documents, "Mechanic's Lien" or "lien" means "Stop Notice".
- W. MILESTONE - A principal event specified in the Contract Documents relating to an intermediate completion date of a portion of the Work, or a period of time within which the portion of the Work should be performed prior to Substantial Completion of all the Work.



## SECTION 01080 - DEFINITIONS

- X. NOTICE OF AWARD - The written notice by the Owner to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein within the time specified, the Owner will enter into an Agreement.
- Y. NOTICE OF COMPLETION - A form signed by the Design Consultant, the Construction Manager and the Contractor recommending to the Owner that the Work is Substantially Complete and fixing the date of Substantial Completion. After acceptance of the Work by the Owner's governing body, the form is signed by the Owner and filed with the County Recorder. This filing starts the 60-day lien-filing period on the Work.
- Z. NOTICE TO PROCEED - The written notice issued by the Owner to the Contractor authorizing the Contractor to proceed with the Work and establishing the date of commencement of the Contract Time.
- AA. OWNER – The Owner shall be Olivenhain Municipal Water District, 1966 Olivenhain Road, Encinitas, CA 92024, acting through its legally designated officials, officers, or employees.
- AB. PARTIAL UTILIZATION - Use by the Owner of a substantially completed part of the Work for the purpose for which it is intended prior to Substantial Completion of all the Work.
- AC. PROJECT - The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.
- AD. RESIDENT PROJECT REPRESENTATIVE - The authorized representative of the Construction Manager who is assigned to the site or any part thereof.
- AE. SHOP DRAWINGS - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the Contractor and submitted by the Contractor to illustrate some portion of Work and all illustrations, brochures, standard schedules, performance charts, instructions, and diagrams to illustrate material or equipment for some portion of the Work.
- AF. SPECIFICATIONS - (Same definition as for Technical Specifications hereinafter).
- AG. STOP NOTICE - A legal remedy for subcontractors and suppliers who contribute to public works, but who are not paid for their work, which secures payment from construction funds possessed by the Owner.  
  
For public property, the Stop Notice remedy is designed to substitute for mechanic's lien rights.
- AH. SUB-CONSULTANT - The individual, partnership, corporation, joint-venture or other legal entity having a direct contract with Design Consultant, the Construction Manager or with any of their Consultants to furnish services with respect to the Project and who is identified as such in the Supplementary General Conditions.

## **SECTION 01080 - DEFINITIONS**

- AI. SUBCONTRACTOR - An individual, partnership, corporation, joint-venture or other legal entity having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the site.
- AJ. SUBSTANTIAL COMPLETION - Refers to when the Work has progressed to the point where, in the opinion of the Construction Manager as evidenced by Notice of Completion as applicable, it is sufficiently complete, in accordance with the Contract Documents, so that the Work can be utilized for the purposes for which it is intended; or if no such notice is issued, when final payment is due in accordance with Paragraph 14.8. The terms "substantially complete" and "substantially completed" as applied to any work refer to substantial completion thereof.
- AK. SUPPLEMENTARY GENERAL CONDITIONS - The part of the Contract Documents that make additions, deletions, or revisions to these General Conditions.
- AL. SUPPLIER - A manufacturer, fabricator, supplier, distributor, materialman, or vendor.
- AM. TECHNICAL SPECIFICATIONS - Divisions 1 through 17 of the Contract Documents consisting of the General Requirements and written technical descriptions of products and execution of the Work.
- AN. UTILITIES - All pipelines, conduits, ducts, cables, wires, tracks, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities which have been installed underground or above the ground to furnish any of the following services or materials: water, sewage and drainage removal, electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, traffic, or other control systems.
- AO. WORK - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing, or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents.
- AP. GOVERNING BODY - Owner's Board of Directors.

END OF SECTION

## SECTION 01090 - REFERENCE STANDARDS

### PART 1 - GENERAL

#### 1.1 GENERAL

- A. Applicable Publications: Whenever in these specifications references are made to published specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the Work is advertised for bids shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the drawings shall be waived because of any provision of, or omission from, said standards or requirements.
- B. When a reference standard is specified, comply with requirements and recommendations stated in that standard, except when they are modified by the Contract Documents, or when applicable laws, ordinances, rules, regulations or codes establish stricter standards. The latest provisions of applicable standards shall apply to the Work.
- C. Reference standards include, but are not necessarily limited to, the following:
  - 1. American Association of State Highway and Transportation Officials.
  - 2. American Concrete Institute.
  - 3. American Gear Manufacturers Association.
  - 4. American Institute of Steel Construction.
  - 5. American Iron and Steel Institute.
  - 6. American National Standards Institute.
  - 7. American Society of Heating, Refrigerating and Air Conditions Engineers.
  - 8. American Society of Mechanical Engineers.
  - 9. American Society for Testing and Materials.
  - 10. American Water Works Association.
  - 11. American Welding Society.
  - 12. City of Carlsbad Standard Drawings
  - 13. City of Encinitas Standard Drawings
  - 14. Concrete Reinforcing Steel Institute.
  - 15. Factory Mutual Association.

## SECTION 01090 - REFERENCE STANDARDS

16. Institute of Electrical and Electronics Engineers.
17. National Electrical Manufacturer's Association
18. National Fire Protection Association.
19. Prestressed Concrete Institute.
20. Underwriter's Laboratories, Inc.
21. Standard Specifications for Public Works Construction (SSPWC), Current Edition (Greenbook).
22. San Diego Area Regional Standard Drawings, Current Edition
23. State of California, Department of Transportation Standard Specifications (Standard Specifications), Current Edition.
24. All other applicable standards listed in the Specifications, and the standards of utility service companies, where applicable.

### 1.2 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Without limiting the generality of other requirements of the specifications, all Work specified herein shall conform to or exceed the requirements of all applicable codes and the applicable requirements of the following documents to the extent that the provisions of such documents are not in conflict with the requirements of these Specifications nor the applicable codes.
- B. References herein to "Building Code" or CBC shall mean the California Building Code. The latest edition of the code as approved and used by the local agency as of the date of award, as adopted by the agency having jurisdiction, shall apply to the Work herein, including all addenda, modifications, amendments, or other lawful changes thereto. The CBC is hereby incorporated in and made a part of these Contract Documents, to the extent of the applicable references thereto.
- C. No provisions of any referenced standard specification, manual or code, whether or not specifically incorporated by reference in the Contract Documents, shall be effective to change the duties and responsibilities of the Owner, Engineer, or Contractor from those set forth in the Contract Documents. Nor shall they be effective to assign to the Engineer any duty of authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of the Contract Documents.
- D. In case of conflict between codes, reference standards, drawings and the other Contract Documents, the most stringent requirements shall govern. All conflict shall be brought to the attention of the Engineer for clarification and directions prior to ordering or providing any materials or labor. The Contractor shall bid the most stringent requirements.

## SECTION 01090 - REFERENCE STANDARDS

- E. Applicable Standard Specifications: The Contractor shall construct the Work specified herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and specifications listed herein.
- F. References herein to "SSPWC" or "Green Book" shall mean "Standard Specifications for Public Works Construction," latest edition, including the County of San Diego Regional and City of San Diego Supplement Amendments.
- G. References to "Standard Drawings" shall mean the "San Diego Area Regional Standard Drawings, Current Edition" including all current supplements, addenda, and revisions thereof.
- H. Reference herein to "OMWD Standard Specifications" shall mean the "Olivenhain Municipal Water District Standard Specifications" dated February 2017, and including all current supplements, addenda, and revisions thereof. The specifications and standard drawing details contained in these Contract Documents shall take precedence over the "OMWD Standard Specifications".
- I. References herein to "Cal-OSHA" shall mean State of California, Department of Industrial Relations, Construction Safety Orders, as amended to date, and all changes and amendments thereto which are effective as of the date of construction.
- J. References herein to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
- K. References herein to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

### 1.3 TRADE NAMES AND ALTERNATIVES

- A. For convenience in designation in the Contract Documents, materials to be incorporated in the Work may be designated under a trade name or the name of a manufacturer and its catalog information. The use of alternative material which is equivalent in quality and of the required characteristics for the purpose intended will be permitted, subject to the following requirements:
  - 1. The burden of proof as to the quality and suitability of such alternative equipment, products, or other materials shall be upon the Contractor.
  - 2. The Engineer will be the sole judge as to the comparative quality and suitability of such alternative equipment, products, or other materials and its decision shall be final.
- B. Wherever in the Contract Documents the name or the name and address of a manufacturer or distributor is given for a product or other material, or if any other source of a product or material is indicated therefore, such information is given for the convenience of the Contractor only, and no limit, restriction, or direction is

## SECTION 01090 - REFERENCE STANDARDS

indicated or intended thereby, nor is the accuracy or reliability of such information guaranteed. It shall be the responsibility of the Contractor to determine the accurate identity and location of any such manufacturer, distributor, or other source of any product or material called for in the Contract Documents.

- C. The Contractor may offer any material, process or equipment which it considers equivalent to that indicated. Unless otherwise authorized in writing by the Engineer, submission of data substantiating a request for a substitution of "an equal" item shall be submitted after bid opening and prior to 60 days after award of the Contract. The Contractor, at its sole expense, shall furnish data concerning items it has offered as equivalent to those specified. The Contractor shall provide any materials as required by the Engineer to determine that the quality, strength, physical, chemical, or other characteristics, including durability, finish, efficiency, dimensions, service, and suitability are such that the items will fulfill its intended function.

Installation and use of a substitute item shall not be made until approved by the Engineer. If a substitute offered by the Contractor is found to be not equivalent to the specified material, the Contractor shall furnish and install the specified material.

- D. The Contractor's attention is further directed to the requirement that its failure to submit data substantiating a request for a substitution of an "equivalent" item within said period prior to and after the award of the contract, shall be deemed to mean that the Contractor intends to furnish one of the specific brand-named products named in the specification, and the Contractor does hereby waive all rights to offer or use substitute products in each such case. Wherever a proposed substitute product has not been submitted within said period, or wherever the submission of a proposed substitute product fails to meet the requirements of the specifications and an acceptable resubmittal is not received by the Engineer within said period, the Contractor shall furnish only one of the products originally named in the Contract Documents.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION

## **SECTION 01150 – MEASUREMENT AND PAYMENT**

### **PART 1 - GENERAL**

#### **1.1 DESCRIPTION**

- A. The items described below in Paragraph 1.4 - Pay Items refer to and are the same pay items listed in the Bid Form. They constitute all of the pay items for the completion of the Work. No direct or separate payment will be made for providing miscellaneous temporary or accessory works, plant, services, Contractor's or Engineer's field offices, layout surveys, job signs, sanitary requirements, testing, safety devices, shop drawings, record drawings, water supplies, power, maintaining traffic, removal of waste, watchmen, bonds, insurance, and all other requirements of the Contract Documents. Compensation for all such services, materials, and items shall be included in the prices stipulated for the lump sum or unit price pay items listed herein.
- B. The lump sum bid prices and unit cost bid prices will be deemed to include an amount considered by the Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

#### **1.2 SCOPE**

- A. Payment shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies and manufactured articles and for all labor, operations and incidentals that are appurtenant to the items of Work and necessary to complete the various items of Work in accordance with the requirements of the Contract Documents. This shall include all appurtenances and the costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA).
- B. Payment shall include all measures necessary to comply with all applicable State and Federal requirements for handling, transporting and disposal of asbestos containing materials (i.e., asbestos cement) including special handling these materials in a manner that will preclude their classification as regulated asbestos containing material and worker protection to reduce health and safety risks resulting from exposure to asbestos containing materials.

#### **1.3 BREAKDOWN OF CONTRACT PRICE OF LUMP SUM CONTRACTS**

- A. Prior to the execution of a lump sum contract, the Contractor shall submit a detailed price breakdown showing the allocated portion of the total bid price to the various items of Work. Contractor must submit a preliminary price breakdown for the review and approval of the Engineer. The Owner reserves the right to reject any breakdown submitted by the Contractor which the Owner judges insufficient to allow for the preparation of accurate monthly progress payment estimates or extra work similar in nature to the Work included in the Contractor's bid. The detailed price breakdown shall be listed by specification section number and shall include a separate cost item for all items of equipment or work. The price breakdown shall typically be a unit price type breakdown and shall include quantities, unit prices and total bid cost for each cost item. Where a unit price breakdown is judged

## SECTION 01150 – MEASUREMENT AND PAYMENT

impractical, the Owner may allow a breakdown by lump sum for certain cost items. This information will be used by the Owner in preparing monthly progress payment estimates.

### 1.4 PIPELINE PAY ITEMS

- A. The following requirements, as applicable, shall apply to pipeline pay items listed in this Section, with the additional requirements listed under each pay item. Payment shall include, but is not limited to, field surveying and staking; pavement saw cutting; excavation; removal of abandoned structures from within trench excavations; surplus material disposal; recessed trench plating; imported bedding and backfill material and compaction; pipe and fittings; concrete thrust blocks and/or restraint devices; isolation valves; combination air valve or manual air release assemblies, blow off assemblies; and backflow preventer assemblies; polyethylene encasement; valve stem extensions; valve wells and covers; tubing; corporation stops; linings and coatings for metallic pipe; cathodic protection anodes and test stations; fusion services for fusible PVC pipe if necessary; temporary highlining; connections to existing pipelines; abandonment of existing pipelines; removal and replacement of vegetation or trees; record of survey and replacement of monuments; traffic control services, equipment or permits not included in any other bid item; subgrade preparation and compaction; aggregate base; temporary asphalt concrete pavement; pressure testing; disinfection (of potable water pipelines); site restoration and replacement of existing improvements including curbs, gutters, medians, driveways, sidewalks, retaining and block walls, landscaping, and irrigation; and all incidental work, complete in place, in accordance with the Contract Documents. No adjustment to the Contract Price will be made for variations in trench width, pavement removal width, pavement material, or pavement thickness.

The pipeline payment shall also include, but not be limited to, furnishing all labor, materials, tools, and equipment and performing all work required for restoration of pavement striping and markings and traffic detector loops to existing conditions.

The pipeline payment shall also include, but not be limited to, furnishing all labor, materials, tools, and equipment and performing all work required for over-excavation, placement of fabric in accordance with product manufacturer's recommendations, and placement of crushed rock below the design trench subgrade elevation in accordance with the Contract Documents.

### 1.5 PAY ITEMS

#### A. SCHEDULE I

##### I-1. Mobilization, Demobilization, Bonds, Permits, and Insurance

Payment shall include compensation for all labor, materials, tools and equipment including, but not limited to, the following principal items: obtaining and complying with permits not included in any other bid item; mobilizing labor force, equipment and construction facilities; providing Contractor field offices and storage yard; securing construction water supply; providing all temporary construction fencing



## **SECTION 01150 – MEASUREMENT AND PAYMENT**

and safety barriers; providing on-site sanitary facilities; obtaining groundwater discharge permits or waivers; posting OSHA requirements and establishing safety programs; daily cleanup; preparing the Schedule of Values prior to the pre-construction meeting; preconstruction/progress video and photographs; work not specified for payment in any other bid item; and all incidentals for the mobilization, demobilization, and permitting for construction of the project as described in the Contract Documents.

Payment shall also include bonds, insurance (including the City of Carlsbad and City of Encinitas as additional insured with \$1,000,000 coverage limits), permit applications and fees for City of Carlsbad and Encinitas Right-of-Way Construction Permit and Traffic Control Permit and incidentals thereto to construct the project in its entirety in accordance with the Contract Documents. City of Carlsbad and Encinitas construction inspection fees will be paid for by the Owner. Earthquake & Tidal Wave Insurance is not required.

Payment for this item shall be limited to five (5) percent of the total contract price.

### **I-2. Dewatering**

Payment for dewatering for each Pipeline Segment shall include, but is not limited to, all labor, materials, tools, equipment, supplies, supervision, and incidentals required for obtaining groundwater discharge permit(s) and performing dewatering as necessary to complete the Work in accordance with the Contract Documents. Payment for this bid item shall include compliance with the Regional Water Quality Control Board (RWQCB) requirements for groundwater discharge to the environment including, but not limited to, sampling, volumetric measurement, temporary containment, treatment, testing for clarity and constituents as required, monitoring and reporting. Payment shall include all coordination, submittals, insurance, construction means and methods, and incidentals to comply with RWQCB requirements.

### **I-3. Water Main, 12 inch PVC**

Payment shall include all labor, materials, tools, equipment and incidentals required to install 12" C900 PVC pipeline along Rancho Santa Fe Road, remove conflicting portions of existing pipe and salvage as required, and to tie-back into the existing system.

### **I-4. Water Main, 8 inch PVC**

Payment shall include all labor, materials, tools, equipment and incidentals required to install 8" C900 PVC pipeline along Rancho Santa Fe Road, Las Olas Court, and Calle Acervo, remove conflicting portions of existing pipe and salvage as required, and to tie-back into the existing system.

### **I-5. Blowoff Valve**

Payment shall include all labor, materials, tools, equipment and incidentals to install blowoff valves as described in the plans, specifications, and contract documents.

## **SECTION 01150 – MEASUREMENT AND PAYMENT**

### **I-6. Gate Valve, 12-inch**

Payment shall include all labor, materials, tools, equipment and incidentals to install 12-inch gate valves as described in the plans, specifications, and contract documents.

### **I-7. Gate Valve, 8-inch**

Payment shall include all labor, materials, tools, equipment and incidentals to install 8-inch gate valves as described in the plans, specifications, and contract documents.

### **I-8. Manual Air Release Valve**

Payment shall include all labor, materials, tools, equipment and incidentals to install manual air release valves as described in the plans, specifications, and contract documents.

### **I-9. Fire Hydrant Assembly (6-inch)**

Payment shall include all labor, materials, tools, equipment and incidentals for the installation of 6-inch fire hydrant assemblies, including removal of existing fire hydrant and removal or abandonment of existing fire hydrant lateral pipe, construction of all new fire hydrant pipe laterals, valves, and all other associated equipment and incidentals as described in the plans, specifications, and contract documents.

### **I-10. Connections to the Existing System (8-inch through 12-inch):**

Payment for Final Connections to the Existing System (8-inch through 12-inch) shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for shutting down existing pipelines, saw cutting, removal, and disposal of existing pavement or hardscape; disconnecting and removal of existing piping and appurtenances; installation of final connection pieces and materials; replacement of backfill and trench; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents.

### **I-11. Surface Restoration**

Payment for Surface Restoration shall include, but not be limited to, furnishing all labor, materials, tools and equipment necessary for the surface restoration of pavement, concrete cross-gutter, curb and gutter, and raised stamped median that are disturbed as a result of the installation of pipeline, fire hydrants, valves, final connections, appurtenances, pipeline removal or abandonment, or as a result of Contractor's operations for work along Rancho Santa Fe Road, Las Olas Court, Calle Acervo, and Avenida La Cima; and all other incidental work necessary to complete this item of work in its entirety in accordance with the Contract Documents.

## **SECTION 01150 – MEASUREMENT AND PAYMENT**

### **I-12. Pipeline Abandonment**

Payment for pipeline abandonment shall include, but not limited to, cutting pipe to abandoned, fill remaining pipe with slurry, and plugging abandoned ends with concrete plugs.

### **I-13. Potholing**

Payment for potholing for each Pipeline Segment shall include full compensation for all labor, materials, tools, equipment and incidentals for the potholing of utilities two (2) weeks in advance of propose pipeline installation that join, cross, or parallel the work (within 5 feet) prior to construction including surveying and staking, excavation, shoring, bracing, backfill, site restoration and incidental work necessary to verify the sizes, material types, elevations, inclinations and bearings of existing utilities within the work areas whether shown on the plans or located in the field in accordance with the Contract Documents. Potholing shall be conducted for the proposed pipelines and lateral piping for appurtenances. Potholing of existing utilities that parallel the proposed pipelines shall be conducted at an interval sufficient to establish their locations with respect to the centerline of the proposed construction. Payment for this bid item shall include costs for traffic control, permits and related drawings for potholing activities that are not included in any other bid item, if necessary, prepared to the satisfaction of the governing jurisdiction.

### **I-14 Traffic Control**

Payment for traffic control shall include all work associated with temporary traffic control as shown on the plans and as directed by the Engineer. The work associated with the bid item for traffic control shall include, but not limited to furnishing all labor (including flagging costs), materials (including construction area signs), tools and equipment, traffic control working drawings, engineering traffic control plans.

**END OF SECTION**

(BLANK)

## **SECTION 01201 - PRECONSTRUCTION CONFERENCE**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. Date, Time and Location: Conference will be held after execution of the Contract and before construction is started at the site. Owner's Representative will fix the date, time and location of the meeting in accordance with requirements of the General Conditions.
- B. Owner's Representative shall prepare agenda, preside at meeting, and prepare and distribute a transcript of proceedings to all parties.
- C. Contractor(s) shall provide any data requested by the Owner or required by the Contract Documents, contribute appropriate items for discussion, and be prepared to discuss all items on agenda. All shop drawings are required to be submitted prior to or at the Conference unless otherwise agreed to in writing by the Owner.

#### **1.2 REQUIRED ATTENDANCE**

- A. Contractor(s) and major Subcontractors.
- B. Owner's representative.
- C. Representatives of government agencies having any degree of control or responsibility, if available.

#### **1.3 AGENDA**

- A. Agenda will include, but will not necessarily be limited to, the following:
  - 1. Designation of responsible personnel.
  - 2. Subcontractors.
  - 3. Coordination with other contractors.
  - 4. Coordination with SDG&E or other utility companies
  - 5. Construction schedule.
  - 6. Processing of Shop Drawings.
  - 7. Processing of field decisions and Change Orders.
  - 8. Requirements for copies of Contract Documents.
  - 9. Insurance in force.
  - 10. Schedule of Values.
  - 11. Schedule of Payments.

## **SECTION 01201 - PRECONSTRUCTION CONFERENCE**

12. Use of premises.
13. Contractor(s) responsibility for safety and first aid procedures.
14. Security.
15. Housekeeping.
16. Field Offices.
17. Record Drawings.
18. Staging
19. Communications
20. Contacts
21. All items listed in the Contract Documents that have been identified for discussion during pre-construction conference.

**END OF SECTION**

## **SECTION 01202 - PROGRESS MEETINGS**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. During performance of the Work, regular weekly meetings shall be convened at a day and time as mutually agreed upon by the Owner's Representative and Contractor. When no construction Work is being performed, meetings shall be held as appropriate and as mutually agreed upon by the Owner's Representative and Contractor.
- B. Meetings shall be convened at the District office at the project site or other mutually agreed upon location.
- C. The Owner's representative shall prepare agenda, preside at meetings, and prepare and distribute a transcript of proceedings to all parties.
- D. Contractor shall provide data required and be prepared to discuss all items on agenda.

#### **1.2 MINIMUM ATTENDANCE**

- A. Contractor and Owner's representative.
- B. Subcontractors and suppliers as appropriate or as mutually agreed upon.
- C. Others as appropriate.
- D. Representatives present for each party shall be authorized to act on their behalf.

#### **1.3 AGENDA**

- A. Agenda will include, but will not necessarily be limited to, the following:
  - 1. Transcript of previous meeting.
  - 2. 3-week lookahead.
  - 3. Safety.
  - 4. Progress since last meeting.
  - 5. Planned progress for next period.
  - 6. Problems, conflicts and observations.
  - 7. Change Orders and Potential Change Orders.
  - 8. Applications for payment.
  - 9. Quality standards and control.

## **SECTION 01202 - PROGRESS MEETINGS**

10. Schedules, including off-site fabrication and delivery schedules. Corrective measures required.
11. Coordination between parties.
12. Other business.
13. Other correspondence

END OF SECTION



## SECTION 01310 – PROGRESS SCHEDULES

### PART 1 – GENERAL

- A. The Contractor shall provide a construction schedule which conforms to the requirements below, unless otherwise approved by the Engineer.

#### 1.1 SECTION INCLUDES

- A. Format.
- B. Content.
- C. Revisions to schedules.
- D. Submittals.

#### 1.2 RELATED SECTIONS

- A. Section 01010: Summary of Work
- B. Section 01043: Coordination with Owner's Operations
- B. Section 01150: Measurement and Payment
- C. Section 01720: Record Documents

#### 1.3 FORMAT

- A. Prepare network analysis system using the critical path method, as outlined in The Associated General Contractors of America (AGC) publication "The Use of CPM in Construction - A Manual for General Contractors".
- C. Hard Copy: Sheet size shall be 11 inches by 17 inches.
- D. Electronic Copy: The latest project schedule shall be made available in MS Project format.
- E. Time Scale: Indicate first date in each work week.
- E. Organization:
  - 1. Group Shop Drawing submittals and reviews into a separate sub-schedule.
  - 2. Group product deliveries into a separate sub-schedule.
  - 3. Group construction Work into a separate sub-schedule by Bid Schedule and by activity within each Bid Schedule.

## **SECTION 01310 – PROGRESS SCHEDULES**

4. Group critical activities which dictate the rate of progress into a separate sub-schedule.
5. Organize each subschedule by Specification Section number.

### **1.4 CONTENT**

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by Specification Section number.
- C. Arrange construction Work into logically grouped activities for each Bid Schedule identified in Section 01150.
- D. Provide sub-schedules for each stage of Work identified in Section 01150, including dates for work in each street in each Bid Schedule per Sections 01043 and 01150.
- E. Provide sub-schedules to define critical portions of the entire Schedule.
- F. For work in each street in each Bid Schedule per Sections 01043 and 01150, provide the following details for any work that is to be performed outside the standard working hours:
  1. Dates when work during modified hours is planned.
  2. The number of consecutive days of work with modified hours.
  3. The frontage length of residential properties for segments near residential properties/subdivisions.
  4. Name any schools in the vicinity of the work.
  5. The nature of the work to be performed.
- G. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the first day of each month.
- H. Provide separate schedule of submittal dates for Shop Drawings, product data, factory and field testing dates, and dates reviewed submittals will be required from the Engineer.
- I. Indicate delivery dates for any Owner furnished items.
- J. Coordinate content with Schedule of Values specified in Section 01370.

### **1.5 REVISIONS TO SCHEDULES**

- A. Indicate progress of each activity to date of submittal, and projected completion date of each activity.

## **SECTION 01310 – PROGRESS SCHEDULES**

- B. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- C. Provide narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including the effect of changes on schedules of separate contractors, if any.

### **1.6 SUBMITTALS**

- A. Submit initial Schedules within 14 days after date of Notice to Proceed. After review, resubmit required revised data within ten days.
- B. Submit revised Progress Schedules monthly, or as directed by the Owner's Representative with the Progress Payment Form. Failure to submit an updated Progress Schedule will delay processing of Progress Pay Estimate until such time as a satisfactory Progress Schedule has been received and reviewed for adequacy by the Owner's Representative.
- C. Submit all documents electronically.
- D. Attach a letter of transmittal to each submittal and include the following information in the letter:
  - 1. A listing of items which have changed since the last submittal.
  - 2. Discussion of problems causing delays, anticipated length of delays, and proposed countermeasures.
- E. Three (3) week look ahead at each progress meeting.

### **1.7 DISTRIBUTION**

- A. Distribute copies of reviewed Schedules to project site file, Subcontractors, suppliers, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in Schedules.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION

(BLANK)

## **SECTION 01370 – SCHEDULE OF VALUES**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. The Schedule of Values is an itemized list that establishes the value or cost of each part of the Work. It shall be used as the basis for preparing progress payments and may be used as a basis for negotiations concerning additional Work or credits which may arise during the construction. Quantities and unit prices may be included in the schedule when approved by or required by the Owner's Representative.

#### **1.2 PREPARATION**

- A. Schedule shall show breakdown of labor, materials equipment and other costs used in preparation of the Bid.
- B. Costs shall be in sufficient detail to indicate separate amounts for each Section of the Specifications.
- C. Contractor may include an item for bond, insurance, temporary facilities and job mobilization. Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings and other facilities necessary for Work on the project; and for all other Work and operations which must be performed or costs incurred prior to the beginning Work on the various contract items on the project site. Superintendent's salary shall be paid in equal monthly allocations over the duration of the job. Mobilization will be included for payment at a rate of 50 percent per month for the first two months.
- D. Schedule of Values shall be prepared on 8-1/2-inch by 11-inch white paper.
- E. Use Table of Contents of the Specifications as basis for Schedule format and identify each item with number and title in the Table of Contents. List sub-items of major products or systems as appropriate or when requested by Engineer.
- F. When requested by Engineer, support values with data that will substantiate their correctness.
- G. The sum of the individual values shown on the Schedule of Values must equal the total Contract Price.
- H. Each item shall include a directly proportional amount of the Contractor's overhead and profit.
- I. Schedule shall show the purchase and delivery costs for materials and equipment that the Contractor anticipates he shall request payment for prior to their installation.

## **SECTION 01370 – SCHEDULE OF VALUES**

### **1.3 SUBMITTAL**

- A. A tentative schedule of values shall be submitted prior to or at the pre-construction conference in accordance with Section 01201 of this specification.
- B. Submit three copies of the final schedule to the Owner's Representative for approval at least 20 days prior to submitting first application for a progress payment. After review by Owner's Representative, revise and resubmit schedule as required until it is approved.

END OF SECTION

## **SECTION 01400 – QUALITY CONTROL**

### **PART 1 - GENERAL**

#### **1.1 QUALITY ASSURANCE/CONTROL OF INSTALLATION**

- A. The Contractor shall verify all dimensions in the field and shall check field conditions continuously during construction. The Contractor shall be solely responsible for any inaccuracies built into the Work due to its failure to comply with this requirement.
- B. The Contractor shall inspect related and appurtenant Work and shall report in writing to the Owner's Representative any conditions which will prevent proper completion of the Work. Failure to report any such conditions shall constitute acceptance of all site conditions, and any required removal, repair, or replacement caused by unsuitable conditions shall be performed by the Contractor at its sole cost and expense.
- C. Points of connections to any existing pipelines must be accurately located by the Contractor. Information such as vertical elevations, pipe outside diameters, joints, materials of construction, shape, and pipe conditions must be obtained prior to beginning Work in the affected area and this information shall be transmitted to the Owner's Representative. The Owner's Representative shall make any necessary adjustments to the Drawings to reflect the actual field conditions. No additional payments will be made to the Contractor for any required adjustments in the Drawings at the points of connection to existing pipelines. No payment will be allowed for special transition couplings or jointing materials required for connections to existing pipelines.

#### **1.2 INSPECTION OF THE WORK**

- A. The Work shall be conducted under the general observation of the Owner's Representative and shall be subject to inspection by representatives of the Owner to ensure strict compliance with the requirements of the Contract Documents. Such inspection may include mill, plant, shop, or field inspection, as required. The Owner's Representative shall be permitted access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.

#### **1.3 SAMPLING AND TESTING**

- A. When not otherwise specified, all sampling and testing shall be in accordance with the methods prescribed in the current standards of the ASTM, as applicable to the class and nature of the article or materials considered; however, the Owner's Representative reserves the right to use any generally-accepted system of inspection which, in the opinion of the Owner's Representative will ensure that the quality of the workmanship is in full accord with the Contract Documents.

## **SECTION 01400 – QUALITY CONTROL**

- B. Any waiver of any specific testing or other quality assurance measures, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the specified testing or other quality assurance requirements as originally specified, and whether or not such guarantee is accompanied by a performance bond to assure execution of any necessary corrective or remedial Work, shall not be construed as a waiver of any technical or qualitative requirements of the Contract Documents.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION



## **SECTION 01410 – TESTING LABORATORY SERVICES**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. The Owner will employ and pay for an independent testing laboratory to perform the specified services.
- B. Inspection, sampling and testing shall be as specified in the individual Sections. These include, but are not limited to:
  - 1. Standard Specification Section 02200: Earthwork
  - 2. Section 02743 - Asphalt Concrete Paving
  - 4. Standard Specification Section 03000: General Concrete Construction
- C. The Owner will pay for the testing listed above except for repeat testing which results from the Contractor's failure to meet Specification requirements.
- D. Contractor shall pay for:
  - 1. Tests not listed above.
  - 2. Tests made for the Contractor's convenience.
  - 3. Repeat tests required because of the Contractor's failure to meet Specification requirements.
- E. The testing laboratory is not authorized to approve or accept any portion of the Work; rescind, alter or augment the requirements of the Contract Documents; or perform any duties of the Contractor.

#### **1.2 QUALIFICATIONS OF LABORATORY**

- A. Where applicable, the testing laboratory will meet "Recommended Requirements for Independent Laboratory Qualification", latest edition, published by American Council of Independent Laboratories and the basic requirements of ASTM E329 "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction".
- B. Testing equipment used by the laboratory will be calibrated at maximum 12-month intervals by devices of accuracy traceable to either National Bureau of Standards or accepted values of natural physical constants.

#### **1.3 LABORATORY DUTIES**

- A. The testing laboratory will:
  - 1. Cooperate with Owner's Representative and Contractor and provide qualified personnel promptly on notice.

## **SECTION 01410 – TESTING LABORATORY SERVICES**

2. Perform specified inspections, sampling and testing of materials and methods of construction; comply with applicable standards; ascertain compliance with requirements of Contract Documents.
3. Promptly notify Owner's Representative and Contractor of irregularities or deficiencies of Work which are observed during performance of services.
4. Promptly submit 5 copies of reports of inspections and tests to Owner's Representative, including:
  - a. Date issued.
  - b. Project title and number.
  - c. Testing laboratory name and address.
  - d. Date of inspection or sampling.
  - e. Record of temperature and weather.
  - f. Date of test.
  - g. Identification of product and Specification Section.
  - h. Location in Project.
  - i. Type of inspection or test.
  - j. Results of tests and observations regarding compliance with Contract Documents.
5. Perform additional tests and services as required by Owner.

### **1.4 CONTRACTOR'S RESPONSIBILITIES**

- A. The Contractor shall:
  1. Cooperate with laboratory personnel; provide access to Work and to manufacturer's operations.
  2. Provide preliminary representative samples of materials to be tested to the laboratory in the required quantities.
  3. Furnish copies of product test reports.
  4. Provide the preliminary design mix proposed for concrete and other material mixes to the laboratory that require testing by the testing laboratory.
  5. Furnish labor and facilities:
    - a. To provide access to Work to be tested.

## **SECTION 01410 – TESTING LABORATORY SERVICES**

- b. To obtain and handle samples at the site.
  - c. To facilitate inspections and tests.
  - d. For the laboratory's exclusive use for storage and curing of test samples.
  - e. Forms for preparing concrete test beams and cylinders.
- 6. Notify laboratory and Owner's Representative sufficiently three (3) business days in advance of operations to allow for assignment of personnel and scheduling of tests.
  - 7. Arrange with laboratory and pay for additional samples and tests required for Contractor's convenience.

END OF SECTION

(BLANK)

## **SECTION 01510 – TEMPORARY CONSTRUCTION FACILITIES**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. Contractor shall be responsible for all temporary construction facilities required for the Work. Contractor shall make all arrangements with utility service companies for temporary services and shall pay all costs associated therewith.
- B. Temporary construction facilities include:
  - 1. Water.
  - 2. Sanitary and First Aid Facilities.
- C. Contractor shall abide by all rules and regulations of the utility service company or authority having jurisdiction.
- D. Provide all materials, equipment and power required for temporary electricity and lighting. Include continuous power for construction site offices. Provide all outlets with circuit breaker protection and comply with ground fault protection requirements of NEC.
- E. Suitably enclosed chemical or self-contained toilets shall be provided for the use of the men employed on the Work. Toilets shall be located near the Work site and secluded from observation insofar as possible. Toilets shall be serviced at regular intervals, kept clean and supplied throughout the course of the Work.
- F. Contractor shall furnish and maintain a safe drinking water supply readily available to all workers.
- G. Contractor shall be responsible for all utility service costs until the Work is substantially complete. Included are all fuel, power, light, heat and other utility services necessary for execution, completion, testing and initial operation of the Work.
- H. Contractor shall:
  - 1. Comply with applicable requirements specified in Divisions 15.
  - 2. Maintain and operate systems to assure continuous service.
  - 3. Modify and extend systems as Work progress requires.
  - 4. Completely remove temporary materials and equipment when their use is no longer required.
  - 5. Clean and repair damage caused by temporary installations or use of temporary facilities.
  - 6. Restore existing facilities used for temporary services to the specified condition or to the original condition.

## SECTION 01510 – TEMPORARY CONSTRUCTION FACILITIES

- I. The District will make available a 100'x12' section of the southwest portion of the District's Headquarters parking lot available for the Contractor's use for laydown and temporary construction facilities. This area is shown in the photo below.



END OF SECTION

## **SECTION 01545 – PROTECTION OF THE WORK AND PROPERTY**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. Contractor shall be responsible for taking all precautions, providing all programs, and taking all actions necessary to protect the Work and all public and private property and facilities from damage as specified in the General Conditions and herein.
- B. In order to prevent damage, injury or loss, Contractor's actions shall include but not be limited to, the following:
  - 1. Store apparatus, materials, supplies, and equipment in an orderly safe manner that will not unduly interfere with the progress of the Work or the Work of any other contractor or utility service company.
  - 2. Provide suitable storage facilities for all materials which are subject to injury by exposure to weather, theft, breakage, or otherwise.
  - 3. Place upon the Work or any part thereof only such loads as are consistent with the safety of that portion of the Work.
  - 4. Clean up daily all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the Work shall present a safe, orderly and workmanlike appearance. Perform major cleaning every Friday, or Thursday if Friday is a holiday.
  - 5. Provide barricades and guard rails around openings, for scaffolding, for temporary stairs and ramps, around excavations, elevated walkways and other hazardous areas.
- C. Contractor shall not, except after written consent from proper parties, enter or occupy privately-owned land with men, tools, materials or equipment, except on easements provided herein.
- D. Contractor shall assume full responsibility for the preservation of all public and private property or facility on or adjacent to the site. If any direct or indirect damage is done by or on account of any act, omission, neglect or misconduct in the execution of the Work by the Contractor, it shall be restored by the Contractor, at his expense, to a condition equal to that existing before the damage was done.

#### **1.2 PROTECTION OF EXISTING STRUCTURES**

- A. Underground Structures:
  - 1. Underground structures are defined to include, but not be limited to, all sewer, water, gas, storm drains, and other piping, and manholes, chambers, electrical conduits, tunnels and other existing subsurface work located within or adjacent to the limits of the Work.

## **SECTION 01545 – PROTECTION OF THE WORK AND PROPERTY**

2. All underground structures known to Engineer except water, sewer, electric, and telephone service connections are shown. This information is shown for the assistance of Contractor in accordance with the best information available, but is not guaranteed to be correct or complete.
3. Contractor shall explore ahead of his trenching and excavation Work and shall uncover and pothole all obstructing underground structures a minimum of two (2) weeks prior to start of excavation per Section 01043 to determine their location, to prevent damage to them and to prevent interruption to the services which such structures provide. If Contractor damages an underground structure, he shall restore it to original condition at his expense.
4. Necessary changes in the location of the Work may be made by Engineer, to avoid unanticipated underground structures.
5. If permanent relocation of an underground structure or other subsurface facility is required and is not otherwise provided for in the Contract Documents, Engineer will direct Contractor in writing to perform the Work, which shall be paid for under the provisions of the General Conditions.
6. The Contractor shall call U.S.A. Dig Alert at 811 a minimum of two working days prior to any excavation.

### **B. Surface Structures:**

1. Surface structures are defined as all existing buildings, structures and other facilities above the ground surface. Included with such structures are their foundations or any extension below the surface. Surface structures include, but are not limited to, buildings, tanks, walls, bridges, roads, dams, channels, open drainage, piping, poles, wires, posts, signs, markers, curbs, walks and all other facilities that are visible above the ground surface.

### **C. Protection of Underground and Surface Structures:**

1. Contractor shall sustain in their places and protect from direct or indirect injury all underground and surface structures located within or adjacent to the limits of the Work. Such sustaining and supporting shall be done carefully and as required by the party owning or controlling such structure. Before proceeding with the Work of sustaining and supporting such structure, Contractor shall satisfy the Engineer that the methods and procedures to be used have been approved by the party owning same.
2. Contractor shall assume all risks attending the presence or proximity of all underground and surface structures within or adjacent to the limits of the Work. Contractor shall be responsible for all damage and expense for direct or indirect injury caused by his Work to any structure. Contractor shall repair immediately all damage caused by his Work, to the satisfaction of the Owner of the damaged structure.



## **SECTION 01545 – PROTECTION OF THE WORK AND PROPERTY**

- D. All other existing surface facilities, including but not limited to, guard rails, posts, guard cables, signs, poles, markers, and curbs which are temporarily removed to facilitate installation of the Work shall be replaced and restored to their original condition at Contractor's expense.

### **1.3 PROTECTION OF INSTALLED PRODUCTS**

- A. Provide protection of installed products to prevent damage from subsequent operations. Remove protection facilities when no longer needed, prior to completion of Work.
- B. Control traffic to prevent damage to equipment, materials and surfaces.

### **1.4 PROTECTION OF SURVEY OR ROADWAY MARKERS**

- A. The Contractor shall not destroy, remove, or otherwise disturb any existing survey markers or other existing street or roadway markers without proper authorization. No pavement breaking or excavation shall be started until all survey or other permanent marker points that will be disturbed by the construction operations have been properly referenced for easy and accurate restoration. It shall be the Contractor's responsibility to notify the proper representatives of the Owner of the time and location that Work will be done. Such notification shall be sufficiently in advance of construction so that there will be no delay due to waiting for survey points to be satisfactorily referenced for restoration. All survey markers or points disturbed without proper authorization by the Engineer will be accurately restored by the Owner at the Contractor's expense after all street or roadway resurfacing has been completed.

### **1.5 RESURFACING**

- A. The Contractor shall promptly place temporary surfacing on all areas where existing surfacing has been disturbed and shall maintain such surfacing for the period of time required by the Engineer. Temporary resurfacing shall be constructed in accordance with the following requirements.
  - 1. The subgrade shall be uniformly watered sufficiently to eliminate all dust, but not to such extent as to form mud or pools of water. The street and surrounding area shall be cleared of rubbish and debris. The street shall be swept and the surrounding area shall be cleaned thoroughly.
  - 2. The temporary resurfacing shall then be spread over the prepared foundation material and rolled with an 8-ton tandem roller in such a manner that after rolling, the temporary resurfacing shall present a smooth surface for traffic, shall not be less than 1-1/2-inches in compacted thickness and shall be maintained free from bumps and depressions until permanent resurfacing is placed. The finished surface of said temporary resurfacing shall be flush with the adjoining pavement grade.
  - 3. The Contractor shall have immediate access enough temporary resurfacing material on the job to ensure a ready supply at all times for necessary repairs to the temporary resurfacing already placed.

## **SECTION 01545 – PROTECTION OF THE WORK AND PROPERTY**

4. The temporary resurfacing shall be left in place until permanent resurfacing is constructed.
5. No separate payment will be allowed for temporary resurfacing and all costs therefore shall be included with the associated items of contract work.

### **1.6 PROTECTION OF TREES AND LANDSCAPING**

- A The Contractor shall exercise all necessary precautions so as not to damage or destroy any trees or shrubs or other existing landscaping, including those lying within or beyond street rights-of-way and project limits, and shall not trim or remove any trees unless such trees have been approved for trimming or removal as described on the Plans, or by the Owner's Representative and the jurisdictional agency. All existing trees and landscaping which are damaged during the construction shall be trimmed or replaced by the Contractor or a certified landscape maintenance company under permit from the jurisdictional Owner and to the satisfaction of said agency and/or the Owner. All costs shall be borne by the Contractor.

END OF SECTION

## SECTION 01550 – WORK RESTRICTIONS

### PART 1 - GENERAL

#### 1.1 HIGHWAY LIMITATIONS

- A. The Contractor shall make its own investigation of the condition of available public and private roads and of clearances, restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress to the site of the Work. It shall be the Contractor's responsibility to construct and maintain, at its own expense, any haul roads required for its construction operations.

#### 1.2 TEMPORARY CROSSING

- A. Not Used.
- B. Street Use: Nothing herein shall be construed to entitle the Contractor to the exclusive use of any public street, alleys, ways, parking area or private road during the performance of the Work hereunder, and it shall so conduct its operations as not to interfere unnecessarily with the authorized work of utility companies or other agencies in such street, alley ways, or parking areas. No street shall be closed to the public without first obtaining permission of the Engineer and the jurisdictional authority. Where excavation is being performed in primary streets or highways, one lane in each direction shall be kept open to traffic at all times unless otherwise provided or shown. Tow boards shall be provided to retain excavated material if required by the Engineer or the agency having jurisdiction over the street or highway. Fire hydrants on or adjacent to the Work shall be kept accessible to fire-fighting equipment at all times. Temporary provisions shall be made by the Contractor to assure the use of sidewalks and the proper functioning of all gutters, sewer inlets, and other drainage facilities. Pedestrians shall be safely routed around active construction zones.
- C. Traffic Control: For the protection of traffic in public or private streets and ways, the Contractor shall provide, place, and maintain all necessary barricades, traffic cones, warning signs, lights, and other safety devices in accordance with the requirements of the "Manual of Uniform Traffic Control Devices, Part IV - Traffic Controls for Street and Highway Construction and Maintenance Operation", published by U.S. Department of Transportation, Federal Highway Administration (ANSI D6.1-1978). The Contractor shall take all necessary precautions for the protection of the Work and the safety of the public. All barricades and obstructions shall be illuminated at night, and all lights shall be kept burning from sunset until sunrise. The Contractor shall station such guards or flaggers and shall conform to such special safety regulations relating to traffic control as may be required by the public authorities within their respective jurisdictions. All signs, signals, and barricades shall conform to the requirements of Cal-OSHA and Subpart G, Part 1926, of the OSHA Safety and Health Standards for Construction. Contractor shall prepare, apply for, pay associated fees, and obtain all necessary permits and approvals from the respective cities of Carlsbad and Encinitas for traffic control. The Drawings include suggested traffic control plans for construction work at selected locations that the Contractor may use as part of his application to the City of Carlsbad. The Contractor shall be responsible for the preparation and implementation of all traffic control plans and requirements as defined by the City of Carlsbad, including all requirements for areas where night work is required.

## SECTION 01550 – WORK RESTRICTIONS

- D. Traffic Message Boards: Message boards shall be placed not less than 14 calendar days prior to the commencement of work in the referenced streets and the message shall be approved by the District. Locations for all message boards shall be approved by the City of Encinitas as part of the traffic control permit acquired by the Contractor.
- E. Street Closure: If closure of any street is required during construction, a formal application for a street closure shall be made to the authority having jurisdiction at least 30 days prior to the required street closure in order to determine necessary signing and detour requirements.
- F. School: The Contractor shall be made aware of Olivenhain's Pioneer Elementary School and Diegueno Middle School hours. Olivenhain's Pioneer Elementary School hours are 8:00 AM to 2:20 PM Monday through Thursday and 8:00 AM to 12:45 PM on Friday. Diegueno Middle School hours are 7:00 AM to 3:05 PM Monday through Friday.
- G. For work at Las Olas Ct., including tie-ins, contractor shall submit shut down plan. Pipeline at Las Olas Ct. shall be ready for tie-in in two (2) working days prior to shut down and completion of phase 2. Phase 2 shut down shall be limited to one (1) 8 hour work window.

PART 2 - NOT USED

PART 3 - NOT USED

END OF SECTION

## **SECTION 01560 – TEMPORARY CONTROLS**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. The Contractor shall provide and maintain methods, equipment, and temporary construction, as necessary to provide controls over environmental conditions at the construction site and adjacent areas. Remove physical evidence of temporary facilities at completion of Work.

#### **1.2 NOISE CONTROL**

- A. Vehicles and equipment shall be such as to minimize noise to the greatest degree practicable. Noise levels shall conform to the latest OSHA standards and in no case will noise levels be permitted which interfere with the work of the Owner or others.

#### **1.3 DUST CONTROL**

- A. Control objectionable dust caused by the operation of vehicles and equipment, clearing or any reason whatsoever. Apply water and calcium chloride or use other dust control methods subject to the Engineer's approval.

#### **1.4 PEST AND RODENT CONTROL**

- A. Provide rodent and pest control as necessary to prevent infestation of construction or storage area. Employ methods and use materials which will not adversely affect conditions at the site or on adjoining properties.

#### **1.5 WATER CONTROL**

- A. Provide methods to control surface water and water from excavations and structures to prevent damage to the Work, the site, or adjoining properties.
  - 1. Control fill, grading and ditching to direct water away from excavations, pits, tunnels and other construction areas; and to direct drainage to proper runoff courses so as to prevent any erosion, damage or nuisance.
- B. Provide, operate and maintain equipment and facilities of adequate size to control surface water.
- C. Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to any portion of the site or to adjoining areas and in conformance with all environmental requirements.

## **SECTION 01560 – TEMPORARY CONTROLS**

### **1.6 POLLUTION CONTROL**

- A. Provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.
- B. Provide equipment and personnel, and perform emergency measures required to contain any spillages, and to remove soils or liquids contaminated as a result of Contactor's activities.
  - 1. Excavate and dispose offsite any contaminated soil or liquid and replace with suitable compacted fill and topsoil.
- C. Take special measures to prevent harmful substances from entering public waters.
  - 1. Prevent disposal of wastes, effluents, chemicals, or other such substances adjacent to streams, or in sanitary or storm sewers.
- D. Provide systems for control of atmospheric pollutants.
  - 1. Prevent toxic concentrations of chemicals.
  - 2. Prevent harmful dispersal of pollutants into the atmosphere.
- E. Equipment used during construction shall conform to all current federal, state and local laws and regulations.

### **1.7 EROSION CONTROL**

- A. Plan and execute construction and earthwork by methods to control surface drainage from cuts and fills and from borrow and waste disposal areas, and to prevent erosion and sedimentation.
  - 1. Hold the areas of bare soil exposed at one time to a minimum.
  - 2. Provide temporary control measures such as berms, dikes and drains.
- B. Construct fills and waste areas by selective placement to eliminate surface silts or clays which will erode.
- C. Periodically inspect earthwork to detect any evidence of the start of erosion, apply corrective measures as required to control erosion.

**END OF SECTION**

## SECTION 01620 – STORAGE OF MATERIAL

### PART 1 - GENERAL

#### 1.1 GENERAL

- A. The Contractor shall store and protect materials in accordance with manufacturer's recommendations and the requirements of specifications.
- B. Make all arrangements and provisions necessary for the storage of materials and equipment. All excavated materials, construction equipment, and materials and equipment to be incorporated into the Work shall be placed so as not to injure any part of the Work or existing facilities and so that free access can be had at all times to all parts of the Work and to all public utility installations in the vicinity of the Work. Materials and equipment shall be kept neatly and compactly stored in locations that will cause a minimum of inconvenience to other contractors, public travel, adjoining owners, tenants and occupants. Arrange storage in a manner to provide easy access for inspection.
- C. Areas available on the construction site for storage of material and equipment shall be as shown or approved by the Owner's Representative.
- D. Materials and equipment which are to become the property of the Owner shall be stored to facilitate their inspection and ensure preservation of the quality and fitness of the Work, including proper protection against damage by freezing and moisture. They shall be placed in enclosed storage areas unless otherwise acceptable to Owner.
- E. The Contractor is responsible for identifying and obtaining necessary permits and permissions for any and all staging and storage areas needed for this project. For any area to be used by the Contractor, the Contractor shall coordinate with the property owner, obtain written permission from the property owner for use of the area, coordinate with any resource or permitting agency that may have jurisdiction over the area, obtain and pay for any permits or agreements and provide any environmental mitigation required, and pay any fees or rental charges required for use of the area. The Contractor shall provide to the District Representative a copy of the letter from the property owner giving permission to use their property as a staging/laydown area. The Contractor shall be responsible for returning all areas used to their original conditions. At least 14 days prior to moving onto any site, the Contractor shall submit to the District Representative a copy of the written permission letter from the property owner of that area, and a description of any permits and mitigation actions that are required for use of the area. Submittals shall be in accordance with Section 01720. All requests for the use of privately-owned land must be submitted to the District for written approval prior to its use. The District may deny use of any privately owned property for this project in its sole discretion.
- F. Contractor shall be fully responsible for loss or damage to stored materials and equipment.
- G. Do not open manufacturer's containers until time of installation unless recommended by the manufacturer or otherwise specified.

## **SECTION 01620 – STORAGE OF MATERIAL**

- H. Do not store products in the structures being constructed unless approved in writing by the Owner's Representative.

### **1.2 UNCOVERED STORAGE**

- A. The following types of materials may be stored out-of-doors without cover:
  - 1. Reinforcing steel.
- B. Store the above materials on wood blocking so there is no contact with the ground.

### **1.3 COVERED STORAGE**

- A. The following types of materials may be stored outdoors if covered with material impervious to water:
  - 1. Valves.
- B. Contractor shall tie down covers with rope and slope covers to prevent accumulation of water on covers.
- C. Contractor shall store materials on wood blocking.

### **1.4 FULLY PROTECTED STORAGE**

- A. Protect mechanical and electrical equipment from being contaminated by dust, dirt and moisture.
- B. Maintain humidity at levels recommended by manufacturers for electrical and electronic equipment.

### **1.5 MAINTENANCE OF STORAGE**

- A. Maintain a periodic system of inspection of stored products on a regularly scheduled basis to assure that:
  - 1. State of storage facilities is adequate to provide required conditions.
  - 2. Required environmental conditions are maintained on continuing basis.
  - 3. Products exposed to elements are not adversely affected.

**END OF SECTION**



## SECTION 01630 – SUBSTITUTIONS

### PART 1 - GENERAL

#### 1.1 GENERAL

- A. Requests for review of a substitution shall contain complete data substantiating compliance of the proposed substitution with the Contract Documents.

#### 1.2 CONTRACTOR'S OPTIONS

- A. For materials or equipment (hereinafter products) specified only by reference standard, select product meeting that standard, by any manufacturer, fabricator, supplier or distributor (hereinafter manufacturer). To the maximum extent possible, provide products of the same generic kind from a single source.
- B. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named which complies with Specifications.
- C. For products specified by naming one or more products or manufacturers and stating "equivalent", submit a request for a substitution for any product or manufacturer which is not specifically named.
- D. For products specified by naming only one product or manufacturer and followed by words indicating that no substitution is permitted, there is no option and no substitution will be allowed.
- E. Where more than one choice is available as a Contractor's option, select product which is compatible with other products already selected or specified.

#### 1.3 SUBSTITUTIONS

- A. During a period of 60 days after date of commencement of Contract Time, Engineer will consider written requests from Contractor for substitution of products or manufacturers, and construction methods (if specified).
  - 1. After end of specified period, requests will be considered only in case of unavailability of product or other conditions beyond control of Contractor.
- B. Contractor shall submit one (1) electronic copy (PDF format) request for substitution. Submit separate request for each substitution. Include in each request the following:
  - 1. For products or manufacturers:
    - a. Product identification, including manufacturer's name and address.
    - b. Manufacturer's literature with product description, performance and test data, and reference standards.
    - c. Samples, if appropriate.

## **SECTION 01630 – SUBSTITUTIONS**

- d. Name and address of similar projects on which product was used, and date of installation.
  - 2. For construction methods (if specified):
    - a. Detailed description of proposed method.
    - b. Drawings illustrating method.
  - 3. Such other data as the Engineer may require to establish that the proposed substitution is equivalent to the product, manufacturer or method specified.
- C. In making request for substitution, Contractor represents that:
- 1. Contractor has investigated proposed substitution, and determined that it is equivalent to or superior in all respects to the product, manufacturer or method specified.
  - 2. Contractor will provide the same or better guarantees or warranties for proposed substitution as for product, manufacturer or method specified.
  - 3. Contractor waives all claims for additional costs or extension of time related to proposed substitution that subsequently may become apparent.
- D. A proposed substitution will not be accepted if:
- 1. Acceptance will require changes in the design concept or a substantial revision of the Contract Documents.
  - 2. It will delay completion of the Work, or the work of other contractors.
  - 3. It is indicated or implied on a Shop Drawing and is not accompanied by a formal request for substitution from Contractor.
- E. If the Engineer determines that a proposed substitute is not equivalent to that specified, Contractor shall furnish the product, manufacturer or method specified at no additional cost to Owner.
- F. Approval of a substitution will not relieve Contractor from the requirement for submission of Shop Drawings as set forth in the Contract Documents.

END OF SECTION

## **SECTION 01700 – PROJECT CLOSEOUT**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. The Contractor shall thoroughly clean the project site, as described in Section 01710, prior to final acceptance of the Work by the Owner.
- B. The Contractor shall conduct Performance Tests for each element of the Work as described in the individual Sections. Where no performance test is specified, the Contractor shall demonstrate satisfactory performance for a period of one week prior to final acceptance.
- C. The Contractor shall establish dates for equipment testing and acceptance periods. The times shall be within the Contract time.

#### **1.2 FINAL SUBMITTALS**

- A. The Contractor, prior to requesting final payment, shall obtain and submit the following items to the Engineer for transmittal to the Owner:
  - 1. Written guarantee, where required.
  - 2. Operating manuals and instructions.
  - 3. Maintenance stock items; spare parts, special tools.
  - 4. Completed record drawings shall be submitted on the original signed mylars. All construction changes shall be hand drafted onto the original signed mylar and approved by the Owner prior to project completion. Approved Record Drawings shall be scanned and submitted to the Owner.
  - 5. Releases from all parties who are entitled to claims against the subject project, property, or improvement pursuant to the provisions of law.

**END OF SECTION**

(BLANK)

## **SECTION 01710 – CLEANING**

### **PART 1 - GENERAL**

#### **1.1 GENERAL**

- A. The Contractor shall execute cleaning during progress of the Work, at completion of the Work, and as required by General Conditions.
- B. Requirements of Regulatory Agencies:
  - 1. In addition to the requirements herein, maintain the cleanliness of the Work and surrounding premises within the Work limits so as to comply with federal, state, and local fire and safety laws, ordinances, codes and regulations.
  - 2. Comply with all federal, state and local anti-pollution laws, ordinances, codes and regulations when disposing of waste materials, debris and rubbish.
- C. Scheduling of Cleaning and Disposal Operations:
  - 1. Schedule all cleaning and disposal operations so that dust, wash water or other contaminants generated during such operations do not damage or mar painted or finished surfaces.
  - 2. Prevent accumulation of dust, dirt, debris, rubbish and waste materials on or within the Work or on the premises surrounding the Work.
- D. Waste Disposal:
  - 1. Dispose of all waste materials, surplus materials, debris and rubbish off the site.
  - 2. Do not burn or bury rubbish and waste materials on the site.
  - 3. Do not dispose of volatile or hazardous wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
  - 4. Do not discharge wastes into streams or waterways.
- E. Cleaning Materials:
  - 1. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
  - 2. Use each type of cleaning material on only those surfaces recommended by the cleaning material manufacturer.
  - 3. Use only materials, which will not create hazards to health or property.

## **SECTION 01710 – CLEANING**

### **F. During Construction:**

1. Keep the Work and surrounding premises within work limits free of accumulations of dirt, dust, waste materials, debris and rubbish.
2. Keep dust generating areas wetted down.
3. Provide suitable containers for storage of waste materials, debris and rubbish until time of disposal.
4. Dispose of waste, debris and rubbish off site at legal disposal areas.

### **G. At Project Completion:**

1. Remove and dispose of all excess or waste materials, debris, rubbish, and temporary facilities from the site, structures and all facilities.
2. Repair pavement, roads, sod, and all other areas affected by construction operations and restore them to original condition or to minimum condition specified.
3. Remove spatter, grease, stains, fingerprints, dirt, dust, labels, tags, packing materials and other foreign items or substances from interior and exterior surfaces, equipment, signs and lettering.
4. Repair, patch and touch up chipped, scratched, dented or otherwise marred surfaces to match specified finish.
5. Remove paint, clean and restore all equipment and material nameplates, labels and other identification markings.
6. Wash and shine mirrors, glazing and polished surfaces.
7. Clean all floors, slabs, pavements, and ground surfaces.
8. Maintain cleaning until acceptance of the Project by the Owner.

**END OF SECTION**

## SECTION 01720 – RECORD DOCUMENTS

### PART 1 - GENERAL

#### 1.1 GENERAL

- A. Contractor shall maintain and provide the Engineer with Record Documents as specified below, except where otherwise specified or as modified in this specification.
- B. Maintenance of Documents:
  - 1. The Contractor shall maintain, in Contractor's field office in clean, dry, legible condition, complete sets of the following: Drawings, Specifications, Addenda, approved Shop Drawings, Samples, photographs, Change Orders, other modifications of Contract Documents, test records, survey data, Field Orders, and all other documents pertinent to Contractor's Work.
  - 2. The Contractor shall provide files and racks for proper storage and easy access. The filing format shall be in accordance with the format of the Construction Specification Institute (CSI), unless otherwise approved by Owner's Representative.
  - 3. The Contractor shall make documents available at all times for inspection by the Engineer, Owner's Representative and Owner.
  - 4. The Contractor shall not use Record Documents for any other purpose and shall not remove them from the Contractor's office without Owner's Representative approval.
- C. Marking System: The Contractor shall provide colored pencils or felt tipped pens for marking changes, revisions, additions and deletions, to the record set of Drawings. Use following color code unless otherwise approved by the Owner's Representative:
  - 1. Process and Mechanical: Red
  - 2. Architectural: Blue
  - 3. Structural: Purple
  - 4. Plumbing: Brown
  - 5. Other Printed Notations: Black
- D. Recording:
  - 1. The Contractor shall label each document "PROJECT RECORD" in 2-inch high printed letters.
  - 2. The Contractor shall keep record documents current.

## **SECTION 01720 – RECORD DOCUMENTS**

3. The Contractor shall not permanently conceal any Work until required information has been recorded.
  4. Drawings: The Contractor shall legibly mark to record actual construction the following items:
    - a. Depths of various elements of foundation in relation to datum.
    - b. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
    - c. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
    - d. Field changes of dimensions and details.
    - e. Changes made by Change Order or Field Order.
    - f. Details not on original Drawings.
  5. Specifications and Addenda: The Contractor shall legibly mark up each Section to record:
    - a. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
    - b. Changes made by Change Order or Field Order.
    - c. Other matters not originally specified.
- E. Submittal:
1. Upon Substantial Completion of the Work, the Contractor shall deliver record documents to Owner's Representative. Final payment will not be made until satisfactory record documents are received by Owner's Representative.
  2. The Contractor shall accompany the submittal with transmittal letter containing:
    - a. Date.
    - b. Project title and number.
    - c. Contractor's name and address.
    - d. Title and number of each record document.



## **SECTION 01720 – RECORD DOCUMENTS**

- e. Certification that each document as submitted is complete and accurate.
- f. Signature of Contractor, or his authorized representative.

END OF SECTION

(BLANK)

## **SECTION 02743 – ASPHALT CONCRETE PAVING**

### **PART 1 - GENERAL**

#### **1.1 DESCRIPTION**

This Section describes the requirements for materials, testing and placement of aggregate base; asphalt concrete paving and overlays; slurry seal; seal coat for miscellaneous areas; pavement striping, markers and markings and all incidental work.

#### **1.2 RELATED WORK SPECIFIED ELSEWHERE**

- A. Standard Specification Section 01300: Record Drawings and Submittals
- B. Section 01545: Protection of Work and Property
- C. Section 01550: Site Access
- D. Standard Specification Section 02223: Trenching, Backfilling, and Compacting

#### **1.3 DEFINITIONS**

Whenever the terms “Public Works Specifications”, “Standard Specifications” or “Greenbook” are used in this Section, the meaning shall be interpreted as Standard Specifications for Public Works Construction by APWA/AGC, The “Greenbook”, latest edition with Regional Supplement Amendments.

Whenever the term “State Standard Specifications” or “Caltrans Standard Specifications” are used in this Section, the meaning shall be interpreted as the Standard Specifications of the State of California, Department of Transportation, latest edition.

#### **1.4 SUBMITTALS**

- A. Submit shop drawings in accordance with the Section 01720.
- B. For all paving and sealing work within City of Carlsbad or Encinitas public streets, submittals shall be subject to the written approval of the City through the project submittal process.
- C. Mix design of all bituminous mixtures (asphalt concrete, slurry seal, seal coat for miscellaneous areas).
- D. Submit report from a testing laboratory verifying that aggregate material is asbestos-free and conforms to the specified gradations and other physical characteristics specified herein. Submit test results a minimum of 20 working days prior to placement of aggregate base materials.
- E. Delivery tickets for each load of aggregates, aggregate base, asphalt concrete, slurry seal.
- F. For work in or adjacent to private driveways, describe the method of protection of existing pavements from damage by the Contractor’s activities.

## SECTION 02743 – ASPHALT CONCRETE PAVING

- G. Comply with the submittal requirements contained in referenced specifications.
- H. At the pre-construction meeting, the Contractor shall submit Certificates of Compliance for all Aggregate Base, Asphalt Concrete mixtures (including Tire Rubber Modified), Slurry Seal (including Rubber Polymer Modified), Traffic Loop Wire and Sealant, and materials for pavement striping, markings and markers.
- I. Prior to the time of delivery of each shipment of any materials to be used in the project, the Contractor shall deliver to the Owner certified copies of all the test results as required by these specifications for those materials to be used (emulsified asphalt, mineral filler, aggregate, etc.). The test reports shall indicate the name of the materials supplier, type and grade of materials to be delivered, date and point of delivery, quantity to be delivered, delivery ticket number, purchase order number and the results of the specified tests. The test reports shall be signed by an authorized representative of the material testing agency and shall certify that the product delivered conforms to these specifications. In addition, the Owner will select three samples of the materials shipped for conformance testing. The testing for these samples shall be provided at no cost to the Contractor, except if the material samples fail any of the tests. In this case, the Contractor shall bear the cost of the testing of those failed samples. No material from that shipment shall be utilized or employed in the performance of the work until certified test reports and samples of the material have been furnished to, checked by and approved by the Owner's Representative. Cost of all testing shall be included in the bid item for the appurtenant item of work and no additional compensation will be made therefor.

### 1.5 TESTING FOR COMPACTION

- A. The Owner or its testing firm will provide testing for compaction as described herein.
- B. Determine the density of soil in place by the sand cone method, ASTM D1556.
- C. Determine laboratory moisture-density relations of soils by ASTM D1557.
- D. Determine the relative density of cohesionless soils by ASTM D4253 and D4254.
- E. Sample backfill materials by ASTM D75.
- F. "Relative compaction" is the ratio, expressed as a percentage, of the in-place dry density to the laboratory maximum dry density for soils and aggregate. "Relative compaction" of asphalt concrete is the ratio, expressed as a percentage, of the in-place density to the laboratory maximum density per ASTM D2041.
- G. Compaction shall be deemed to comply with the Specifications when no more than one test of any three consecutive tests falls below the specified relative compaction. The one test shall be no more than three percentage points below the specified compaction. The Contractor shall pay the costs of any retesting of work not conforming to the Specifications.

## SECTION 02743 – ASPHALT CONCRETE PAVING

### 1.6 PAVEMENT CONSTRUCTION IN PUBLIC RIGHT OF WAY

The following requirements shall supplement the San Diego Regional Standards for pavement restoration and shall govern other requirements of this Section.

- A. For work within County of San Diego jurisdiction, comply with the Department of Public Works pavement cut policies and conform to the County of San Diego, Department of Public Works Special Provisions or excavation permits.
- B. Paving or sealing operations in public streets in the City of Carlsbad and/or Encinitas shall comply with the permit requirements of the City.
- C. Paving of the trench excavations shall be in accordance with details provided on the approved Drawings.

### 1.7 PAVEMENT CONSTRUCTION IN PRIVATE STREETS AND DRIVEWAYS

Paving or sealing operations in private driveways shall conform to the details provided on the approved Drawings and as specified herein.

## PART 2 - PRODUCTS

### 2.1 AGGREGATE BASE

Aggregate base shall be Crushed Aggregate Base that conforms to Greenbook Section 200-2.2 or Class 2 Aggregate Base (not recycled base) per the gradation and quality requirements of Section 26-1.02A of the Caltrans Standard Specifications.

**Recycled base (made of reclaimed asphalt concrete, Portland cement concrete, lean concrete base, cement treated base, etc.) shall not be used. Furthermore, crushed miscellaneous base as called out in Greenbook Section 200-2.4 shall not be used.**

### 2.2 ASPHALT CONCRETE

#### A. GENERAL

- 1. Materials shall meet the requirements and approval of the City of Encinitas and Carlsbad, respectively.
- 2. Asphalt concrete for public streets, unless designated otherwise, shall conform to C2-PG 64-10 per Greenbook Section 203-6 and the additional requirements of this Section.
- 3. Thickness of the new pavement shall be equal to the thickness of the existing pavement plus 1 inch.

## SECTION 02743 – ASPHALT CONCRETE PAVING

4. Control of Materials: Materials to be incorporated in the work shall be manufactured, handled and used in a satisfactory manner.
5. Job Mix Formula: The Contractor shall furnish the Owner's Representative with the Job Mix Formula (JMF) for the asphalt concrete no later than two weeks prior to placement of the material. The JMF shall indicate the percentage passing each specified sieve size and the percent asphalt to be used for each asphalt concrete mixture to be incorporated in the work. The JMF (gradation) with allowable tolerance for a single test shall be used for job control. Single test variation tolerance is shown below. In no event shall there be more than 2 percent passing the No. 200 sieve.

JOB MIX FORMULA GRADING TOLERANCE (SINGLE TEST)	
<u>Sieve Size</u>	<u>Percent</u>
No. 4 or larger	+6
No. 30	+5
No. 200	+2
Asphalt, % by weight of dry aggregate	+0.3

6. Samples: The Owner shall have the right to obtain samples of all such materials to be used in the work and to test such samples for the purpose of determining specification compliance. The Owner reserves the right to obtain said samples at the point of delivery and/or at the point of manufacture. The Owner shall also have the right to inspect sources of materials to be used for the work to determine acceptability of procedures used by the materials supplier.

### B. MATERIALS

1. Only materials conforming to these specifications shall be incorporated in the work.
2. Asphalt: The asphalt to be mixed with the mineral aggregate shall be PG64-10 conforming to Greenbook Section 203-6 for all streets as specified on the Drawings.

The amount of liquid asphalt, by weight of dry aggregate, shall be within the range of percentages of the total mixed material as shown in Greenbook Table 203-6.4.3 (A) for Class C1 grading, or Table 400-4.3 (C) for Type III Class C2 grading. The actual amount will be determined through a complete asphalt concrete mix design and laboratory testing performed on materials intended for use on the project.

## SECTION 02743 – ASPHALT CONCRETE PAVING

The allowable tolerance in percentage of asphalt content from that percentage specified shall be +/- 0.3 percent.

The asphalt content of the asphalt mixture shall be determined by extraction tests in accordance with California Test 379 or ASTM D2172.

3. Aggregate: Aggregate for asphalt concrete shall conform to Greenbook Section 203-6.3.2 except as modified herein.

**Coarse aggregate used in the production of all Hot Mix Asphalt (HMA), excluding RAP, must be mined only from a hard rock- blasted quarry. All coarse aggregates used in the production of Hot Mix Asphalt shall also have a minimum Durability Index (California Test 229) of 35.**

Coarse aggregate is material retained on the No. 4 sieve. Fine aggregate is material passing the No. 4 sieve.

Blending sand shall be clean, hard and sound material either naturally occurring sand or crushed fines which will readily accept asphalt coating.

Tests shall be performed on the material retained on the No. 8 sieve from each bin and shall not be a combined or averaged result.

Each test specimen shall be prepared by hand shaking for 30 seconds, a single loading of the entire sample on a 12-inch diameter, No. 4 sieve nested on top of a 12-inch diameter, No. 8 sieve.

Where a coarse aggregate bin contains material which will pass a 3/8-inch sieve and be retained on a No. 8 sieve, the test specimen weight and wash water volume specified for 1/2-inch maximum will be used.

Where a coarse aggregate bin contains material which will pass the maximum size specified and be retained on a 3/8-inch sieve, the test specimen weight and volume of wash water specified for a 1-inch x No. 4 aggregate size will be used.

The Cleanness Value of the test sample from each of the bins shall be separately computed and reported.

4. Mineral Filler: Mineral filler shall conform to Greenbook Section 203-6.3.3. The amount of mineral filler to be used shall conform to the requirements of the combined aggregate grading. The method of adding the mineral filler shall be such that the aggregate is uniformly coated and the mineral filler is uniformly distributed without loss or waste within the material prior to adding the asphalt to the mixture.
5. Anti-Strip Agents: When aggregate is found to be subject to stripping via prescribed test procedures, dry hydrated lime conforming to the requirements of ASTM C207, or Type N Portland Cement conforming to applicable requirements, or other approved anti-strip agents shall be added.

## SECTION 02743 – ASPHALT CONCRETE PAVING

6. Combined Aggregates: The combined aggregates sampled after all processing, except the adding of asphalt and mineral filler, shall conform to the following requirements:
  - a. The ratio of the percentage of aggregate by weight passing the No. 30 sieve to that passing the No. 8 sieve shall not exceed 65 percent in all dense graded asphalt concrete mixes.
  - b. At least 80 percent by weight of the aggregate retained on the No. 8 sieve shall consist of particles which have at least one rough, angular surface produced by crushing.
7. Composition and Grading: The grading of the combined aggregates shall conform to Greenbook Section 203-6.4.3 for Class C1 (Type III C2 for Section 400-4.3) Asphalt Concrete.
8. Additional Requirements:

The aggregate and mix to be incorporated into the work must also meet the following requirements:

INDIVIDUAL TEST REQUIREMENTS	
<u>Test</u>	<u>Results</u>
Loss in L.A. Rattler, California Test 211 (after 500 revolutions)	45% max.
Sand Equivalent, California Test 217	50 min.
Stabilometer Value, California Test 366	35 min.
Swell, California Test 305	0.030" max.
Moisture Vapor Susceptibility, California Test 307	25 min.
Air Voids Content (mix)	3% - 5%
Index of Retained Strength, ASTM D1075	60% min.

### 2.3 PAVEMENT REINFORCEMENT MEMBRANE

Pavement reinforcement membrane shall be per City of Encinitas and City of Carlsbad standards, respectively.

### 2.4 SLURRY SEAL

Slurry seal shall be Rubber Polymer Modified Slurry (RPMS) as described in this Section.



## SECTION 02743 – ASPHALT CONCRETE PAVING

### 2.5 EMULSION AGGREGATE SLURRY (EAS)

Not used

### 2.6 RUBBER POLYMER MODIFIED SLURRY (RPMS)

#### A. GENERAL

This work shall consist of preparation of existing surfaces to receive RPMS, mixing asphaltic emulsions, aggregate, set-control additives, specially produced and graded crumb rubber, and water and spreading the mixture on the pavement in accordance with these specifications.

#### B. MATERIALS

Materials for RPMS immediately prior to mixing shall conform to the following requirements:

1. Asphaltic Emulsion. Asphaltic Emulsion shall be quick setting Type CQS-1h grade conforming to the requirements of these special provisions. Quick Setting CQS-1h Asphaltic Emulsions shall conform to the following requirements when tested in accordance with the specified test method:

<u>Test</u>		<u>Requirements</u>
Residue from Distillation	AASHTO T59 ASTM D244	60% minimum
Penetration at 77°F (25°C)	AASHTO T49 ASTM D2397	40%-90%

In addition, quick setting Type CQS-1h Asphaltic Emulsion shall test Positive for Particle Charge when tested in accordance with AASHTO T59. If the Particle Charge Test result is inconclusive the Asphaltic Emulsion shall meet a pH requirement of 6.7 minimum.

2. Aggregate. The mineral aggregate used shall be the type and grade specified for Type II RPMS surfacing. The aggregate shall be manufactured crushed stone such as granite, slag, limestone, chat, or other high quality aggregate, or combination thereof. Aggregate shall consist of rock dust except that 100 percent of any aggregate of combination of aggregates, larger than the No. 50 sieve size, used in the mix shall be obtained by crushing rock. The material shall be free from vegetable matter and other deleterious substances. All aggregate shall be free of caked lumps, and oversized particles.
3. Quality Tests. The percentage composition by weight of the aggregate shall conform to the following gradings when determined by California Test 202, modified by California Test 105 when there is a difference in specific gravity of 0.20 or more between blends of different aggregates.

## SECTION 02743 – ASPHALT CONCRETE PAVING

TYPE II RPMS GRADATION		
<u>Sieve Size</u>	<u>Percent Passing</u>	<u>Stockpile Tolerance</u>
No. 3/8	100	5%
No. 4	90-100	5%
No. 8	65-90	5%
No. 16	45-70	5%
No. 30	30-50	5%
No. 50	18-36	4%
No. 100	10-24	3%
No. 200	5-15	2%

The job mix (target) gradation shall be within the gradation band for the Type II RPMS. After the target gradation has been submitted, the percent passing each sieve shall not vary by more than the stockpile tolerance.

The aggregate shall also conform to the following requirements:

<u>Test</u>	<u>California Test</u>	<u>Requirements</u>
Sand Equivalent	217	45 min.
Durability Index	229	55 min.

The aggregate will be accepted at the job location or stockpile. The stockpile shall be accepted based on five gradation tests according to California Test 202, modified by California Test 105 when there is a difference in specific gravity of 0.2 or more between blends of different aggregates. If the average of the five tests is within the gradation tolerance, then the material will be accepted. If the test shows the material to be out of gradation tolerances, the Contractor shall be given the choice to either remove the material or blend other aggregates with the stockpile material to bring it into specifications. Materials used in blending must meet the quality test before blending and must be blended in a manner to produce consistent gradation.

When the results of either the Aggregate Grading or the Sand Equivalent test do not conform to the requirements specified, the aggregate shall be removed. No single aggregate grading or sand equivalent tests shall represent more than 300 tons or one day's production, whichever is smaller.

4. Water. Water shall be potable and of such quality that the asphalt will not separate from the emulsion before the slurry seal is in place in the work. If necessary for workability, a set-control agent that will not adversely affect the RPMS material may be used. Pre-wetting of streets will not be required unless streets are subject to high temperatures and/or dust.

## SECTION 02743 – ASPHALT CONCRETE PAVING

5. Crumb Rubber. Crumb rubber shall be ambient granulated or ground from whole passenger and/or truck tires only. Uncuring or devulcanized rubber shall not be acceptable and shall not be used. Rubber tire buffing from either recapping or manufacturing processes shall not be used as a supplement to the crumb rubber mixture.

In order to remove steel and fabric, an initial separation stage which subjects the rubber to freezing temperatures may be used. The crumb rubber shall not be elongated or hair-like in shape and individual particles shall not be greater than 1/20 of an inch in length. The crumb rubber shall be free of contaminants including fiber, metal and mineral matter to the following tolerances:

- a. The fiber content shall be less than 0.30% by weight.
- b. The crumb rubber shall be free of metal particles. Metal imbedded in rubber particles shall not be allowed. The amount of mineral contaminants allowed shall not exceed 0.10% by weight.
- c. The crumb rubber shall be dry with a moisture content of less than 0.75%.

CRUMB RUBBER CHEMICAL PROPERTIES	
<u>Property</u>	<u>Specification Limits</u>
Specific Gravity, ASTM D1817	1.15 +/- .05
Percent Carbon Black, ASTM D297	35.0 Maximum
Percent of Rubber Hydrocarbon, ASTM D297	55.0 Maximum
Percent Ash, ASTM D297	6.0 Maximum
Percent of Acetone Extract, ASTM D297	10.0 Maximum
Percent of Chloroform Extract, ASTM D297	3.0 Maximum
Percent Natural Rubber, ASTM D297	40 Minimum

## SECTION 02743 – ASPHALT CONCRETE PAVING

CRUMB RUBBER GRADATION REQUIREMENTS (ASTM D1511 or C136)	
<u>Sieve Size</u>	<u>Percent Passing</u>
No. 30	100
No. 40	90-100
No. 50	75-85
No. 100	25-35
No. 200	0-10

6. Properties. The Polymer additive shall be SBR Latex or approved equal, which is added at a minimum of 2.0 percent by weight of the asphaltic emulsion.
7. Carbon Black. The carbon black solution shall be non-ionic in charge and liquid in form. The carbon black shall be compatible with the emulsion system, polymers and additives being used.

<u>Property</u>	<u>Tolerances</u>
Total Solids	40-44
% Black by Weight	35-37
Type Black	Medium Furnace Color
Type Dispersing	Non-ionic

8. Mineral Filler. Portland Cement, hydrated lime, limestone dust, fly ash or other approved filler meeting the requirements of ASTM D242 shall be used if required by the mix design and may be used to facilitate set times as needed. Any cement used shall be considered as part of the dry aggregate weight for mix design purposes.
9. Additive. Additives may be used to accelerate or retard the break-set of the RPMS. The use of additives shall be in quantities specified in the mix design.
10. Laboratory Evaluation. Before work begins, the Contractor shall submit a mix design covering the specific materials to be used on the project. The design shall be performed by a laboratory that has at least two years' experience in designing RPMS. After the mix design has been approved, no substitution will be permitted unless approved by the Owner's Representative.
11. Mix Design. The proposed RPMS mix design shall verify compatibility of the aggregate, emulsion, mineral filler, set-control additive and rubber blend. Recommend tests and values are as follows:

## SECTION 02743 – ASPHALT CONCRETE PAVING

<u>Test</u>	<u>Description</u>	<u>Specification</u>
ISSA T-106	Slurry Seal Consistency	Pass
ISSA TB-109	Excess Asphalt	50 grams per square foot maximum
ISSA TB-100 (Type II)	Wet Track Abrasion	60 grams per square foot maximum
ISSA TB-113	Mixing Time	Controllable to 150 seconds minimum
ISSA TB-114	Wet Stripping	Pass

The Mixing Time test shall be done at the highest temperatures expected during construction. The original lab report shall be signed by the laboratory that performed the mix design and shall show the results of tests on individual materials. The report shall clearly show the proportions of aggregate, mineral filler (minimum and maximum), water (minimum and maximum), additive(s) (usage), asphaltic emulsion and asphalt rubber blend based on the dry weight of the aggregate.

All of the component materials used in the mix design shall be representatives of the materials proposed by the Contractor to be used on the project. The percentage of each individual material required shall be shown in the laboratory report. Adjustments may be required during the construction, based on field conditions.

The component materials shall be within the following limits:

Residual Asphalt Type II	7.5%-13.5% Based on dry weight of aggregate
Crumb Rubber	The crumb rubber will be added to the Rubberized Slurry mix at a rate of 5% by volume to the asphalt cement.
Polymer	Polymer Additive shall be added at 2% of finished emulsion.
Carbon Black	Carbon Black shall be added at 1.3% to 2% of the finished emulsion
Mineral Filler	0.5%-2.0% (if required by mix design). Based on dry weight of aggregate.

## SECTION 02743 – ASPHALT CONCRETE PAVING

Additives	As needed.
Water	As needed to achieve proper mix consistency. (Total mix liquids should not exceed the loose aggregate voids).

### C. PRODUCTION AND APPLICATION

1. Proportioning. Aggregates, asphaltic emulsion, water, polymers, additives, including set-control agent, if used, and crumb rubber shall be proportioned by volume utilizing the mix design approved by the Owner's Representative. If more than one kind of aggregate is used, the correct amount of each kind of aggregate to produce the required grading shall be proportioned separately, prior to the other materials of the mixture, in a manner that will result in a uniform and homogeneous blend.
2. The complete mixture, after addition of water and any set-control agent used, shall be such that the mixture has proper workability, and (a) will permit traffic flow, without pilot-car-assisted traffic slurry seal within one hour after placement (at 78°F) without the occurrence of bleeding separation or other distress, and (b) will prevent development of bleeding, excessive raveling, separation or other distress within 7 calendar days after placing the rubberized asphalt surfacing.
3. Spread rate for Type II RPMS shall be placed at 13.33 pounds per square yard based on dry aggregate weight.
4. Asphaltic emulsion shall be added at a rate within the following ranges of percent by weight of the dry aggregate. The exact weight will be determined by the mix design and the asphalt solids content of the asphaltic emulsion furnished.

<u>Type of Aggregate</u>	<u>Asphaltic Emulsion, % of Dry Aggregate Wt.</u>
Type II	14-17

5. Pneumatic rolling is required on all streets receiving RPMS. Rolling will commence as soon as the RPMS has set sufficiently to prevent any material from adhering to tires. The RPMS surface shall be rolled by two to five coverages, or as directed by the Owner's Representative. Pneumatic rollers shall be operated at a minimum tire pressure of 60 psi.
6. Aggregate shall be proportioned by a belt feeder operated with an adjustable cutoff gate. The height of the gate opening shall be readily determinable. The emulsion shall be introduced into the mixer by a positive-displacement pump. Water shall be introduced into the mixer through an adjustable pugmill

## SECTION 02743 – ASPHALT CONCRETE PAVING

bar (**Pugmill process is acceptable for RPMS**). Water volume shall be displayed by an electric digital meter registering in gallons delivered.

7. The bitumen ratio, (pounds of asphalt per 100 pounds of dry aggregates), shall not vary more than 1.5 pounds of asphalt above or 0.6 pound asphalt below the amount designated by the mix design and approved by the Owner's Representative.
8. The aggregate belt feeder shall deliver aggregate to the pugmill mixed with such volumetric consistency that the deviation for any individual aggregate delivery rate check-run shall be within 2 percent of the mathematical average of 3 runs of at least 300 gallons each in duration.
9. Each Rubberized Slurry surfacing unit shall be designed to store and deliver the various required materials to a twin-shafted, multi-paddle pugmill in the following manner.
10. Each Rubberized Slurry surfacing unit shall be equipped with a computer controlled automatic sequencing system that initiates each material delivery at the precise moment necessary to ensure proper proportioning.
11. Each Rubberized Slurry surfacing unit shall be equipped with independent storage capabilities for the aggregate, emulsion, crumb rubber, polymer, set-control additives and the carbon black.
12. The polymer additive and the carbon black shall be delivered to the mixer in the relative proportions required by means of a common shaft, dual pump system. The polymer additive and the carbon black flow rates shall be independently adjustable by means of diaphragm valves and shall be sequenced through the computer controlled automatic sequencing system. The polymer additive and the carbon black shall be blended and mixed prior to their introduction into the pugmill. Introduction into the twin-shafted pugmill shall be done through an injection system, which delivers the blended material to the apex of each mixing shaft immediately prior to the introduction of the asphalt emulsion. The polymer additive and the carbon black delivery system shall each be equipped with digital electronic flow metering devices that can read in gallons per minute.
13. The crumb rubber delivery system shall be equipped with an air suspension unit designed to prevent clumping or bridging of the rubber material. The air discharges shall be sequenced to avoid over-suspension of the rubber. The rubber shall be delivered to the pugmill by a hydraulically driven auger and shall be initiated through the computer controlled auto-sequencing system.
14. The rubberized asphalt slurry surfacing shall be mixed in a continuous, twin shaft, multi-paddle pugmill mixer. The pugmill shall be equipped with a hydraulically controlled steel pugmill gate for positive discharge operations. No dripping slurry shall be allowed.

## **SECTION 02743 – ASPHALT CONCRETE PAVING**

15. The emulsion shall be introduced into the mixer by a positive displacement pump. The emulsion storage shall be equipped with a device which will automatically shut down the power to the emulsion pump and aggregate belt feeder when the level of stored emulsion is lowered to within two inches of the suction line.
16. A temperature-indicating device shall be installed in the emulsion storage tank at the pump suction level.
17. The aggregate shall be proportioned using a belt feeder operated with an adjustable cutoff gate. The height of the gate opening shall be readily determinable.
18. The aggregate feeder shall be directly connected to the drive on the emulsion pump. The drive shaft of the aggregate feeder shall be equipped with an electronic digital belt. The belt delivering the aggregate to the pugmill shall be equipped with a device to monitor the depth of the aggregate being delivered to the pugmill. The device for monitoring depth of aggregate shall automatically shut down the power to the aggregate belt feeder whenever the depth of the aggregate is less than 70 percent of the target depth of flow. An additional device shall monitor movement of the aggregate belt by detecting revolutions of the belt feeder. The devices for monitoring no flow or belt movement, as the case may be, shall automatically shut down the power to the aggregate belt when the aggregate belt movement is interrupted.
19. To avoid shutdown caused by normal fluctuations in delivery rates, a delay of three seconds between sensing less than desirable storage levels of aggregate or emulsion shall be permitted.
20. Water delivery shall be adjusted through a diaphragm valve. Water flow rate shall be electronically displayed through a digital meter.
21. The mixer unit shall not be operated unless all electronic display and revolution counters are in good working condition and functioning and all metal guards are in place. All indicators required by these specifications shall be operational at all times.
22. The RPMS mixture shall be spread by means of a controlled spreader box. The spreader box shall be capable of spreading traffic lane width and shall have strips of flexible rubber belting or similar material on each side of the spreader box and in contact with the pavement to positively prevent loss of slurry from the ends of the box. All spreader boxes shall be equipped with reversible motor-driven augers when placing the RPMS. Rear flexible strike-off blades shall make close contact with the pavement, and shall be capable of being adjusted to the various crown shapes so as to apply a uniform surfacing coat. Flexible drags, to be attached to the rear of the spreader box, shall be provided as directed by the Owner's Representative. All drags and strike-off blades (rubbers) shall be cleaned daily if problems with cleanliness



## SECTION 02743 – ASPHALT CONCRETE PAVING

and longitudinal scouring occur. The spreader box shall be clean, free of all slurry and emulsion, at the start of each workday.

### 2.8 ASPHALT RUBBER CRACK SEALANT

#### A. GENERAL

Crack sealant shall be applied to all cracks in existing paving that are 1/4-inch in width or wider in areas to receive a paving overlay or slurry seal.

#### B. MATERIALS

1. The crack sealant shall consist of a mixture of paving grade asphalt and vulcanized granulated crumb rubber. The mixture shall contain not less than 25% granulated reclaimed rubber, by weight. Rubber gradation shall conform to the following requirements:

<u>Sieve Size</u>	<u>Percent Passing</u>
No. 8	100
No. 10	98-100
No. 30	--
No. 40	0-10

The sealant shall conform to the following requirements:

Cone Penetration, 77 °F, 0.1 mm, ASTM D5329	40 max.
Softening Point, °F, ASTM D36	175 min.
Resilience, 77 °F, % Rebound, ASTM D5329	30 min.

The sealant shall be capable of being melted and applied to cracks at temperatures below 400 °F. When heated, the material shall readily penetrate cracks 1/4-inch in width or wider.

Modifiers may be used to facilitate blending.

2. Control of Materials: Each lot of sealant shipped to the job site shall be accompanied by a Certificate of Compliance as provided in Section 6-1.07 of the State Standard Specifications (2010 edition), and shall be accompanied by storage instructions, heating instructions, and caution instructions.
3. Accelerator or Retardant: The retardant shall be the type stated in the job mix formula and shall be approved by the Owner's Representative before use. The amount of accelerator to be included in the mixture shall be that amount necessary to ensure the applied crack seal can support vehicular traffic within four (4) hours after the last application.

## **SECTION 02743 – ASPHALT CONCRETE PAVING**

### **2.9 PRIME COAT**

All areas to be paved shall receive a prime coat of SC 250 liquid asphalt conforming to Greenbook Section 203-2 or as otherwise required by City with jurisdiction.

### **2.10 TACK COAT**

Tack coat shall consist of SS-1h emulsified asphalt per Greenbook Section 203-3.4.2 shall be applied in conformance with the applicable requirements of the Greenbook to all exposed asphalt surfaces and gutter front face or as otherwise required by City with jurisdiction.

### **2.11 TRAFFIC STRIPING, PAVEMENT MARKINGS AND RAISED MARKERS**

#### **A. GENERAL**

1. New Striping and Legends: Materials (paint and thermoplastic), equipment, mixing (paint), surface preparation, application and tolerances, shall conform to Sections 84-1 and 84-3 of the State of California, Department of Transportation's Standard Specifications (2010 edition) except as modified herein.
2. Pavement markers shall conform to Section 85 of the State of California, Department of Transportation's Standard Specifications (2010 edition).
3. All details and dimensions for pavement markings shall conform to City approved stencils.
4. All details and dimensions for traffic striping shall conform to the least edition of the State of California, Department of Transportation's Traffic Design Manual and Maintenance Manual.
5. Contractor must obtain City approval from the City's Traffic Engineer on the striping layout prior to applying and permanent striping.
6. All traffic stripes and pavement markings shall be reflectorized. The Contractor shall apply two coats on all traffic striping.
7. The Contractor shall be responsible to mark and/or document the types and limits of existing striping, pavement markings and pavement markers in a manner adequate to ensure their replacement in original location, alignment, color size, and/or type. Control of alignment and layout shall be the responsibility of the Contractor and subject to approval by the Owner's Representative. Raised markings for fire hydrants shall be replaced in kind at all locations.

#### **B. MATERIALS**

1. Paint: Traffic line paint shall be rapid dry paint and shall contain reflective material conforming to Section 84-1 and 84-3 of the Caltrans Standard

## **SECTION 02743 – ASPHALT CONCRETE PAVING**

Specifications. Paint shall comply with all application of local air pollution control regulations.

2. Glass spheres for traffic paint shall conform to State Material Specifications 751-80-34.
3. Samples of traffic striping and pavement marking materials shall be submitted to the Owner's Representative at least two weeks prior to application.
4. Markers: Pavement marker height shall be 0.70-inch minimum. "Low profile" type markers will not be acceptable. Markers shall be of the type and colored to match the existing pavement markers.

### **PART 3 - EXECUTION**

#### **3.1 GENERAL**

- A. Comply with the ordinances, directives, and regulations of the respective agencies having jurisdiction over the area of the work. Pavement removal and replacement shall be in accordance with Greenbook Section 302-5, these Specifications and the issued permit.
- B. Pavements shall be protected from damage by the Contractor's operations by the use of trench plates, protective mats, rubber-tired equipment, and/or reduced payloads for exported or imported materials. The Contractor shall submit the proposed method for the protection of pavements prior to mobilization onto the site, shall document the existing pavement conditions by video and inform the Owner of distressed pavement areas that exist prior to mobilization, and shall not commence excavation activities until the method of pavement protection is accepted, in writing, by the Owner. Acceptance by the Owner does not relieve the Contractor from the responsibility to implement measures to protect existing pavements from damage, and pavements that are damaged because of the Contractor's failure to implement reasonable measures for their protection, in the sole opinion of the Owner, shall be replaced by the Contractor at no additional expense to the Owner.

#### **3.2 PAVEMENT REMOVAL**

- A. Initially cut asphalt concrete pavement with a pavement saw, hydrohammer, or pneumatic pavement cutter at the limits of the excavation and remove the pavement regardless of the thickness. After backfilling the excavation, saw cut asphalt concrete pavement to a minimum depth of 2 inches at a point not less than 12 inches outside the limits of the excavation or the previous pavement cut, whichever is greater, and remove the additional pavement.
- B. Saw cut concrete pavement, including cross gutters, curbs and gutters, sidewalks, and driveways, to a minimum depth of 1-1/2 inches and 12 inches beyond the edge of the excavation and remove the pavement. The concrete pavement may initially be cut at the limits of the excavation by other methods prior to removal and then saw cut

## **SECTION 02743 – ASPHALT CONCRETE PAVING**

after backfilling the excavation. If the saw cut falls within 3 feet of a concrete joint or pavement edge, remove the concrete to the joint or edge.

- C. Make arrangements for and dispose of the removed pavement.
- D. Pavement saw cuts shall be straight along both sides of trenches, parallel to the pipeline alignment, and provide clean, solid, vertical faces free from loose material. Saw cut and remove damaged or disturbed adjoining pavement. Final pavement saw cuts shall be parallel to the roadway centerline or lane striping or perpendicular to same.
- E. Removed pavements shall be taken to a local Class C or Class D Recycling Facility. The Contractor shall provide the Owner with a report that documents the place of disposal and the amount of recycled material that was diverted to the facility.

### **3.3 PREPARATION OF SUBGRADE**

- A. Compact the top 12 inches of subgrade to 95 percent relative compaction. Remove all soft material disclosed by the compacting and replace with suitable material and recompact.
- B. The finished subgrade shall be within a tolerance of +/-0.08-foot and shall be smooth and free from irregularities and at the specified relative compaction. The subgrade shall be considered to extend over the full width of the base course.

### **3.4 PLACING AGGREGATE BASE**

- A. Place aggregate base course to a thickness of 6 inches or to the standards of the agency having jurisdiction over the area of the work in accordance with Greenbook Section 301-2. Compact to 95 percent relative compaction.
- B. Apply water uniformly throughout the material and prior to placement and compaction to provide moisture for obtaining the specified compaction.
- C. Compaction and rolling shall begin at the outer edges of the surfacing and continue toward the center. Compact each layer to the specified relative compaction before placing the next layer.

### **3.5 APPLYING PRIME COAT**

Apply prime coat to the compacted surface of the aggregate base course per Greenbook Section 302-5.3.

### **3.6 APPLYING TACK COAT**

Apply tack coat to all exposed asphalt or concrete surfaces, including gutter front face, to receive asphalt concrete pavement per Greenbook Section 302-5.4.

## **SECTION 02743 – ASPHALT CONCRETE PAVING**

### **3.7 SURFACE PREPARATION OF AREAS TO RECEIVE PAVING OVERLAY OR SLURRY SEAL**

- A. Prior to the placement of crack sealant, asphalt concrete pavement or slurry seal, the Contractor shall have a company or person who is licensed by the State of California in herbicide application apply herbicide to all cracks and lips of gutter which have vegetation in them. The herbicide shall consist of Roundup or approved equal with a color dye in it on all cracks and lips of gutter on streets to receive overlay or slurry seal. In addition, apply the approved herbicide along the entire stretch between the lip of gutter and pavement on all streets to receive overlay or slurry seal. The herbicide shall be applied in accordance with the manufacturer's recommendations and at least ten (10) working days prior to crack sealing.
- B. At least five (5) working days after application of the herbicide, the Contractor shall remove all dead vegetation from the cracks and between the lip of gutter and pavement of all streets.
- C. Existing pavement markers shall be removed from areas to receive slurry seal or paving overlays and disposed of.
- D. Cracks of 3/8-inch or greater in width shall be cleaned and sealed with a rubberized crack sealant conforming to the requirements of this Section. Cracks shall be cleaned to a minimum depth of 3/4-inches prior to the crack sealant application to provide an intact bonding surface which is free from all dust, moisture or other contaminants. Cracks shall be cleaned by blast-cleaning or by hand methods and then cleaned with high pressure air jets to remove all residue and foreign materials. Exposed surfaces shall be dry at the time the crack sealant is applied.
- E. Rubberized crack sealant shall be heated and placed in conformance with the manufacturer's written instructions. Joint sealant materials shall not be placed when the pavement surface temperature is below 50°F.
- F. The Contractor shall sweep and clean the existing pavement surface prior to application of the SS-1h tack coat for asphalt concrete overlay or prior to application of slurry seal.

### **3.8 PLACING ASPHALT CONCRETE PAVING**

- A. Producing, hauling, placing, compacting, and finishing of asphalt concrete shall conform to Greenbook Section 302-5.
- B. Place asphalt concrete to a total thickness of 4 inches or 1 inch thicker than adjacent pavement section, whichever is greater or to the standards of the agency having jurisdiction over the area of the work.
- C. New asphalt concrete shall be placed against existing asphalt concrete along neat, solid surfaces of pavement saw cuts. Placement of new asphalt concrete along a previous saw cut which has been roughened by cold milling or otherwise surface shall not be permitted.

## **SECTION 02743 – ASPHALT CONCRETE PAVING**

- D. Compact until roller marks are eliminated and minimum relative compaction of 95 percent has been attained per ASTM D2041.
- E. Backfill, compaction, and the permanent paving, except for the final asphalt surface course, shall be complete at all times to a point not to exceed 420 feet behind pipelaying unless otherwise specified or approved by the Owner.
- F. After the base course of asphalt concrete pavement has been completed, place temporary striping in the same configuration as the existing permanent striping so that traffic can be returned to normal patterns. This striping shall be considered temporary and is the Contractor's responsibility to place and maintain.
- G. The final asphalt surface course shall be 1-1/2 inches thick and shall extend 12 inches beyond the trench width per the City of Encinitas or City of Carlsbad standards, as applicable. A pavement reinforcement membrane shall be placed underneath the final asphalt surface course per the manufacturers' recommendations and in accordance with the City of Encinitas or City of Carlsbad standards, as applicable. Do not place final surface course until all pipelines and appurtenances have been installed within the roadway or as directed by the Owner's Representative to maintain traffic safety.

### **3.9 PLACING TYPE C2-PG 64-28TR ASPHALT CONCRETE**

- A. Type C2-PG 64-28TR shall be placed on the following streets: Rancho Santa Fe Road, Las Olas Court, and Avenida La Cima.
- B. Asphalt paving machines shall be furnished with a minimum of two screed operators and one machine operator.
- C. When the compacted thickness of any individual asphalt layer to be placed is 0.09 foot or less, the 3/8-inch maximum grading shall be used. When the compacted thickness being placed is between 0.09 foot and 0.17 foot, the 1/2-inch maximum, medium grading shall be used.
- D. Prior to spreading Type C1-PG64-28TR asphalt concrete, SS-1h tack coat shall be furnished and applied uniformly to the pavement to be surfaced and to contact surfaces of all cold pavement joints, curbs, and gutters. If paving asphalt is furnished, it shall be applied at a temperature between 285°F and 350°F.
- E. Asphalt concrete shall be spread with a self-propelled spreader ready for compaction without further shaping, unless otherwise specified.
- F. The compaction after rolling shall be 95 percent of the density obtained with the California Kneading Compactor per California Test 304.

The field density of compacted asphalt concrete shall be determined by:

- 1. A properly calibrated nuclear asphalt testing device in the field, or

## SECTION 02743 – ASPHALT CONCRETE PAVING

2. ASTM D1188 when slabs or cores are taken for laboratory testing. Zinc stearate may be substituted for paraffin.

In case of dispute, Method 2 above shall be used.

- G. At road connections and private drives, additional asphalt concrete surfacing material shall be placed and hand-raked, if necessary, and compacted to form smooth, tapered connections. The edges of asphalt concrete shall be feathered so as to provide a smooth transition on the shoulder areas and next to concrete gutters and cross-gutters.
- H. The completed surfacing shall be true to grade and cross sections, of uniform smoothness and texture, compacted firmly, and free from depressions, humps or irregularities.
- I. Shoulders or median borders adjacent to a lane being paved shall be surfaced prior to opening the lane to traffic.
- J. Asphalt concrete surfacing shall be placed on all existing surfacing, including curve widening, chain control lanes, turnouts, left turn pockets, and public and private road connections shown on the plans, unless otherwise directed by the Owner's Representative.
- K. Asphalt concrete surfacing shall be placed from edge of pavement to edge of pavement of the traveled way each work shift. At the end of each work shift, the ends of the asphalt concrete surfacing on all lanes and shoulders shall match. Additional asphalt concrete shall be placed along the transverse edge at the end of each lane between adjacent lanes, hand raked, and compacted to form temporary conforms. Kraft paper, or other approved bond breaker, may be placed under the conform tapers to facilitate the removal of the taper when paving operations resume.
- L. In the event placement of asphalt concrete dike is not completed within the time specified in this contract, the Owner may suspend or cease paving operations until such time as all required placement of asphalt concrete dike is completed to the satisfaction of the Owner's Representative.

### 3.10 APPLYING PAVEMENT STRIPING, MARKINGS AND RAISED MARKERS

- A. Two coats of striping paint shall be applied for all street striping. The first coat shall be applied a minimum of seven days after paving is complete. The second coat shall be applied seven days after the first coat is applied. The maximum thickness of the two coats combined shall not be greater than 18 mils when completely dried.
- B. All crosswalks, legends and stop bars shall be thermoplastic. **At each intersection the contractor shall be responsible for applying thermoplastic to all crosswalks in that intersection including those in the intersection which are on side streets that will not receive overlay.**

## **SECTION 02743 – ASPHALT CONCRETE PAVING**

- C. Pavement marking shall commence a minimum of seven days after the overlay is complete. Any new pavement overlay must receive immediate temporary markings (i.e., temporary tabs, etc.) as directed by the Owner's Representative after any portion of the overlay work is completed. All temporary striping and/or markings shall be maintained by the Contractor until the permanent striping is done.
- D. The Contractor shall remove any temporary tabs remaining at the application of the second coat of paint.
- E. Pavement Markers: After the application of all pavement striping and markings, install markers on new paved surfaces and existing surfaces that were damaged by construction. Use markers that match the color or combination of colors of the existing markers within the area of work. Install markers along the alignment and match spacing of the existing.
- F. Hydrant Markers: Install a blue reflective marker opposite each new or relocated fire hydrant. Place the marker on the pavement and locate 6 inches off the centerline of the traffic striping or pavement markers and towards the hydrant. Where existing fire hydrants have been relocated or removed from service, dislodge the existing blue marker from the pavement and dispose.

### **3.11. TRAFFIC CONTROL**

- A. Contractor shall be responsible for maintaining safe traffic operation through the work area. Traffic control shall conform to Section 01550 – Work Restrictions and City of Encinitas and City of Carlsbad requirements.
- B. In addition to access restrictions required by Section 01550 – Work Restrictions and City of Encinitas and City of Carlsbad approved traffic control plans, the following restrictions shall also apply:
  - 1. Access to fire hydrants shall be maintained at all times.
  - 2. If it is necessary to restrict access to roadside properties, the Contractor shall first obtain written authorization from the Owner's Representative and the City of Encinitas or City of Carlsbad Engineer. Upon approval, Contractor shall notify affected property owners a minimum of 72 hours prior to the restriction. Access to all properties shall be restored after the work is completed or at the close of the working day, whichever is first. Restricted access shall not exceed 1 hour for work adjacent to businesses that are open and adjacent to residences at any time of day. This restricted access limit does not apply during night work adjacent to businesses that are closed.
  - 3. The Contractor shall exercise care to prevent public traffic from tracking or smearing freshly painted areas. The Owner's Representative shall have the option of requiring the Contractor to remove, by wet sandblast method, and repaint all tracked or smeared areas at Contractor's expense.



**SECTION 02743 – ASPHALT CONCRETE PAVING**

END OF SECTION

# APPENDICES

# APPENDIX A – GEOTECHNICAL REPORT

**GEOTECHNICAL DESKTOP STUDY  
RANCHO SANTA FE ROAD  
POTABLE WATER PIPELINE  
REPLACEMENT OR REHABILITATION  
OLIVENHAIN MUNICIPAL WATER DISTRICT**

Submitted to:

PARSONS  
525 B Street, Suite 1600  
San Diego, CA 92101

Prepared By:

ALLIED GEOTECHNICAL ENGINEERS, INC.  
9500 Cuyamaca Street, Suite 102  
Santee, California 92071-2685

AGE Project No. 25C3

February 22, 2022



February 22, 2022

Mr. Bardia Hashemi, P.E.  
Parsons  
525 B Street, Suite 1600  
San Diego, CA 92101

**Subject: GEOTECHNICAL DESKTOP STUDY  
RANCHO SANTA FE ROAD POTABLE WATER PIPELINE  
REPLACEMENT OR REHABILITATION  
OLIVENHAIN MUNICIPAL WATER DISTRICT  
AGE Project No. 25C3**

Dear Bardia,

In accordance with your request, Allied Geotechnical Engineers, Inc. is pleased to submit the accompanying geotechnical desktop study that was performed to assist Parsons with their design of the subject pipeline for the Olivenhain Municipal Water District.

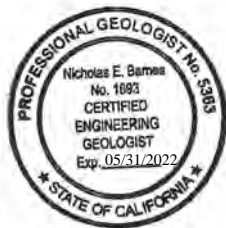
We appreciate the opportunity to be of service on this project. If you have any questions regarding the contents of this report or need further assistance, please feel free to contact our office.

Sincerely,

**ALLIED GEOTECHNICAL ENGINEERS, INC.**

Nicholas E. Barnes, P.G., C.E.G.  
Senior Geologist

NEB/SS:cal  
Distr. (1 electronic) Addressee



Sani Sutanto, P.E.  
Principal



**GEOTECHNICAL DESKTOP STUDY  
RANCHO SANTA FE ROAD POTABLE WATER PIPELINE  
REPLACEMENT OR REHABILITATION  
OLIVENHAIN MUNICIPAL WATER DISTRICT**

**TABLE OF CONTENTS**

	Page No.
1.0 INTRODUCTION. ....	1
2.0 SITE AND PROJECT DESCRIPTION.....	2
3.0 OBJECTIVE AND SCOPE OF INVESTIGATION. ....	3
3.1 Information Review. ....	3
3.2 Geologic Reconnaissance. ....	4
4.0 GEOLOGIC CONDITIONS. ....	5
4.1 Geologic Setting and Site Physiography. ....	5
4.2 Tectonic Setting.....	5
4.3 Geologic Units.....	6
4.3.1 Fill Materials (Qaf). ....	6
4.3.2 Young Alluvial Flood-Plain Deposits (Qya). ....	7
4.3.3 Torrey Sandstones (Tt).....	7
4.3.4 Delmar Formation (Td). ....	8
4.4 Groundwater. ....	9

## TABLE OF CONTENTS (Continued)

	Page No.
5.0 DISCUSSIONS, OPINIONS, AND RECOMMENDATIONS.....	10
5.1 Potential Geologic Hazards. ....	10
5.1.1 Faulting. ....	10
5.1.2 Fault Ground Rupture & Ground Lurching. ....	11
5.1.3 Soil Liquefaction. ....	11
5.1.4 Landslides. ....	11
5.1.5 Lateral Spread Displacement. ....	12
5.1.6 Differential Seismic-Induced Settlement.....	12
5.1.7 Secondary Hazards.....	12
5.2 Soil Corrosivity. ....	13
5.3 Expansive Soil. ....	13
5.4 Environmental Considerations.....	13
5.5 Cut-and Cover Pipeline Construction. ....	14
5.5.1 General Reuirements. ....	14
5.5.2 Soil Excavation Characteristics.....	14
5.5.3 Fill Materials. ....	15
5.5.4 Pipe Loads and Settlement.....	15
5.5.5 Trench Backfill. ....	16
5.6 Conclusions. ....	17
6.0 UNCERTAINTIES AND LIMITATIONS. ....	18
7.0 REFERENCES. ....	19

**TABLE OF CONTENTS  
(Continued)**

Page No.

**Figures**

Figure 1	Location Map
Figure 2	Generalized Geologic Map



## 1.0 INTRODUCTION

Allied Geotechnical Engineers, Inc. (AGE) is pleased to submit this desktop geotechnical study that was conducted to assist Parsons with their the design of the subject project for the Olivenhain Municipal Water District (Water District). The project consists of the replacement or rehabilitation of a 12-inch diameter water pipeline along Rancho Santa Fe Road between Avenida La Posta and Las Olas Court in Encinitas, California.

This report has been prepared for the exclusive use of Parsons and its design team and the Water District in their design of the subject project. The information presented in this report is not sufficient for any other uses or the purposes of other parties.

**2.0 SITE AND PROJECT DESCRIPTION**

Based on the information provided to us, it is our understanding that the Water District intends to replace or rehabilitate approximately 1,600 lineal feet of existing 12-inch diameter water pipeline along Rancho Santa Fe Road between Avenida La Posta and Las Olas Court in Encinitas, California (see Figure 1).

The existing water pipeline was constructed of cement-mortar lined and coated steel (CMLC), and reportedly dates to the early 1960s (Water District, 2021). The embedment depth of the pipeline is unknown. We understand that the existing pipeline alignment is located in the southbound lanes of Rancho Santa Fe Road. The existing roadway is provided with two traffic and one bike lane in each direction, with a raised center median. Sidewalks and greenscape are present on both sides of the roadway. We further understand that the Water District will rely on Parsons experience, evaluation, expertise and recommendations regarding whether the existing 12-inch CMLC steel pipeline is to be rehabilitated or replaced.

Site elevations along the project alignment vary from approximately 125 feet above mean sea level (msl) to 175 feet msl (Google Earth, 2021). Surrounding areas include a mix of residential developments and open space.

Southern California Soil & Testing, Inc. (SCS&T, 2019) performed four (4) soil borings for Water District's 386 Pressure Zone Expansion project. The borings were located approximately 1,100 to 4,000 feet southeast of the Project alignment. The SCS&T borings were extended to depths ranging from about 11.5 feet to 20 feet below the ground surface (bgs).

**3.0 OBJECTIVE AND SCOPE OF INVESTIGATION**

The objectives of this study are to evaluate potential geologic and geotechnical hazards which may potentially affect or be impacted by the currently proposed project. The scope of our investigation included several tasks which are described in more detail in the following sections.

**3.1 Information Review**

For this task we have reviewed information pertaining to the proposed project that was readily available from a variety of sources which include:

- AGE's in-house references;
- Published geologic literature and maps, including geologic and fault maps published by the California Geological Survey and the United States Geological Survey;
- Pertinent project related information, including preliminary project plans and topographic maps; and
- Aerial photography available at Google Earth.

A listing of references that were reviewed is presented in Section 7.0.

**3.2 Geologic Reconnaissance**

The information obtained from our literature review was supplemented with visual observations gathered during a geologic reconnaissance of the study area that was conducted on February 16, 2022.

The existing asphaltic concrete (A.C.) roadway paving is in good condition, displaying minor cracking damages due to normal aging of the A.C. paving. A review of historic aerial photographs indicates that this portion of Rancho Santa Fe Road was originally one-lane in each direction. The roadway was widened to its current configuration in the early 2000's, in conjunction with the construction of nearby residential subdivisions.

Several saw-cut areas in the A.C. pavement were observed in the vicinity of utility manholes, and at the location of a utility trench crossing across the roadway. The perimeter sidewalk paving and stamped concrete center medians were generally in good condition.

In the project study area Rancho Santa Fe Road was developed along the southwest side of a small canyon which descends to Encinitas Creek. At the northwest end of the alignment a fill slope approximately 10 feet in height descends from the northeast side of the roadway to the Encinitas Creek valley. Along the remainder of the project alignment slopes up to 40 feet in height ascend from the roadway. Slopes along the southwest side of the roadway are both natural and fill over natural, whereas the slopes along the northeast side of the roadway are predominantly fill. The graded slopes were constructed at gradients of 2:1 (horizontal : vertical).

**4.0 GEOLOGIC CONDITIONS****4.1 Geologic Setting and Site Physiography**

The Rancho Santa Fe Road Project alignment is located in a tributary canyon on the south side of Encinitas Creek. Mapped geologic units in the study area include the Delmar Formation and Torrey Sandstone of Eocene age, with young alluvial flood-plain deposits of Holocene and late Pleistocene age present in the Encinitas Creek valley. Man-made fill is also present at various locations in the study area.

**4.2 Tectonic Setting**

Tectonically, the San Diego region is situated in a broad zone of northwest-trending, predominantly right-slip faults that span the width of the Peninsular Ranges and extend offshore into the California Continental Borderland Province west of California and northern Baja California. At the latitude of San Diego, this zone extends from the San Clemente fault zone, located approximately 60 miles to the west, and the San Andreas fault located about 95 miles to the east.

Major active regional faults of tectonic significance include the Coronado Bank, San Diego Trough, San Clemente, and Newport Inglewood/Rose Canyon fault zones which are located offshore; the faults in Baja California, including the San Miguel - Vallecitos and Agua Blanca fault zones; and the faults located further to the east in Imperial Valley which include the Elsinore, San Jacinto and San Andreas fault zones.

**4.3 Geologic Units**

For site characterization purposes, the subsurface soil materials in the project study area can be categorized into four geologic units which include (in order of increasing age): fill materials; young alluvial flood-plain deposits; Torrey Sandstone; and Delmar Formation. A brief description of each unit is presented below. A generalized geologic map of the project study area and surrounding areas is shown on Figure 2.

**4.3.1 Fill Materials (Qaf)**

Fill materials associated with roadway development of Rancho Santa Fe Road likely exist in the study area. Field observations indicate that fill materials up to an estimated 10-feet in thickness are present at the northwest end of the alignment, where Rancho Santa Fe Road crosses into the south side of the Encinitas Creek valley. The fill was likely placed to raise the roadway above the elevation of the creek valley. Field observations also suggest that varying amounts of fill are present below the remainder of the project alignment, with the fill thickness likely increasing from southwest to northeast across the roadway.

The fill materials encountered in SCS&T (2019) borings were generally described as fine to medium-grained silty sand and lean clayey sand in a medium dense/medium stiff to locally loose condition.

#### 4.3.2 Young Alluvial Flood-Plain Deposits (Qya)

Young alluvial-flood plain deposits of Holocene and late Pleistocene age (Kennedy & Tan, 2007) are mapped in the Encinitas Creek valley. The deposits are generally described as poorly consolidated, poorly sorted, permeable, flood-plain deposits of sandy, silty or clay-bearing alluvium. Young alluvial flood-plain deposits can generally be easily excavated with conventional heavy duty construction equipment. However, difficult excavation conditions may be encountered in areas where these deposits contain abundant cobbles and boulders.

Young alluvial flood-plain deposits may be encountered below fill materials in the northwesterly portion of the project alignment, where Rancho Santa Fe Road crosses into the south side of the Encinitas Creek valley. It is anticipated that the alluvial deposits would be relatively shallow at this location, and underlain by the Delmar Formation.

SCS&T (2019) encountered young alluvial flood-plain deposits below fill materials at one of their boring locations. The deposits are generally described as medium dense, fine to medium-grained silty sand. Oversize materials was not encountered. The boring was extended to a depth of 20 feet bgs and was terminated within the deposits.

#### 4.3.3 Torrey Sandstone (Tt)

The Torrey Sandstone is a barrier beach deposit of middle Eocene age that is now considered a formation of the La Jolla Group (Kennedy and Tan, 2007). The formation consists of a white to light brown, medium to coarse-grained, moderately well-indurated, massive and broadly cross-bedded, arkosic sandstone. Locally strong cementation may pose difficult excavation conditions even for heavy duty construction equipment.

The geologic map by Kennedy & Tan (2007) indicates that the Torrey Sandstone is present in the southeasterly portion of the project alignment in the vicinity of Avenida La Posta/Calle Ecervo.

SCS&T (2019) encountered the Torrey Sandstone below fill materials at one of their boring locations, and reported that the formation consisted of strongly cemented clayey sandstone. The boring was extended to a depth of 20 feet bgs and was terminated within the sandstone.

#### 4.3.4 Delmar Formation (Td)

The Delmar Formation is a lagoonal deposit of middle Eocene age that is gradationally overlain by the Torrey sandstone and is now considered a formation of the La Jolla Group (Kennedy and Tan, 2007). The formation consists of a dusky yellowish-green, sandy claystone interbedded with medium-gray coarse-grained sandstone. Locally strong cementation may pose difficult excavation conditions even for heavy-duty construction equipment.

The geologic map by Kennedy & Tan (2007) indicates that the Delmar Formation will likely be encountered in the central to northwesterly portion of the project alignment. Several outcrops of the Delmar Formation were observed in a natural hillside along the southwest side of Rancho Santa Fe Road between Las Osas Court and Avenida La Cima. The exposed formational soils consist of deeply weathered claystone.

SCS&T (2019) encountered the Delmar Formation below fill materials at two of their boring locations, and described the formation as a weakly to well-indurated, weathered claystone. The borings were extended to depths of 20 feet bgs and were terminated in the claystone.



### 4.4 Groundwater

SCS&T (2019) did not encounter groundwater at any of there boring locations. Review of the Geotracker website ([www.Geotracker.com](http://www.Geotracker.com)) did not reveal any nearby water monitoring wells.

It is anticipated that the regional groundwater table in the study area is below the anticipated depth of excavation for the proposed project. It must be noted, however, that localized perched water conditions may be encountered, particularly during the wet (rainy) season.

**5.0 DISCUSSIONS, OPINIONS AND RECOMMENDATIONS****5.1 Potential Geologic Hazards****5.1.1 Faulting**

The project alignment is not crossed by any known (mapped) faults. For the purpose of this project we consider the Rose Canyon fault zone (RCFZ) to represent the most significant seismic hazard. The RCFZ is a complex set of anastomosing and en-echelon, predominantly strike slip faults that extend from off the coast near Carlsbad to offshore south of downtown San Diego (Treiman, 1993). In San Diego Bay, this fault zone is believed to splay into multiple, subparallel strands; the most pronounced of which are the Silver Strand, Spanish Bight and Coronado Bank faults.

Previous geologic investigations on the RCFZ in the Rose Creek area (Rockwell et. al., 1991) and in downtown San Diego (Patterson et. al., 1986) found evidence of multiple Holocene earthquakes. A study by Kleinfelder (2017) at the San Diego International Airport identified two zones of active faulting. One of these faults was named the East Bay fault and the second fault was determined to be a northward extension of the Spanish Bight fault. A study by Ninyo & Moore (2018) at Seaport Village found evidence of recent movement along a fault that was determined to be a northward extension of the active Coronado Bank fault.

Based on these studies, several fault strands within the RCFZ have been classified as active faults, and are included in Alquist-Priolo Special Studies Zones. The project study area is not located within an Alquist-Priolo Earthquake Study Zone.

**5.1.2      Fault Ground Rupture & Ground Lurching**

There are no known (mapped) active or potentially active faults crossing the project study area (Kennedy and Tan, 2007). Therefore, the potential for fault ground rupture and ground lurching is considered insignificant.

**5.1.3      Soil Liquefaction**

Seismically-induced soil liquefaction is a phenomenon in which loose to medium dense, saturated granular materials undergo matrix rearrangement, develop high pore water pressure, and lose shear strength due to cyclic ground vibrations induced by earthquakes.

Mapped geologic materials in the project study area consist of dense to very dense/stiff to very stiff sandstone/claystone deposits that are considered to have a very low to negligible liquefaction potential. Potentially liquefiable young alluvial flood-plain deposits may be encountered below fill materials at the northwest end of the alignment.

**5.1.4      Landslides**

A review of the published geologic maps and site geologic observations indicate that there are no known (mapped) ancient landslides in the project study area (Kennedy and Tan, 2007). Therefore, landsliding is not considered a significant risk.

**5.1.5      Lateral Spread Displacement**

The project study area is underlain by competent geologic units which are not considered susceptible to seismic-induced lateral spreading.

**5.1.6      Differential Seismic-Induced Settlement**

Differential seismic settlement occurs when seismic shaking causes one type of soil to settle more than another type. It may also occur within a soil deposit with largely homogeneous properties if the seismic shaking is uneven due to variable geometry or thickness of the soil deposit. Based on the results of our study, it is our opinion that there is a slight potential of differential settlement in mechanically placed man-made fills in the study area.

**5.1.7      Secondary Hazards**

Given the elevation of the project alignment and absence of large bodies of water, it is our opinion that the potential of property damage from seismic-induced tsunamis and/or seiches is remote. The City of Encinitas (2016) estimates that a magnitude 7.5 earthquake on the Elsinore fault could result in a failure of the hydraulic fill dam at Lake Wohlford, which would result in inundation along Escondido Creek and San Elijo Lagoon. The dam failure inundation would not be expected to affect the project alignment. The project alignment is not located within the 100- and 500-year flood zone (FEMA Flood Insurance Rate Map, 2012).

**5.2            Soil Corrosivity**

Silty sands belonging to the young alluvial flood-plain deposits and Torrey Sandstone are typically not considered aggressive to concrete. However, fine-grained claystone of the Delmar Formation may be aggressive to concrete.

SCS&T (2019) performed corrosivity testing on two samples of fill material encountered in their test borings. The testing did not reveal significant corrosion potential. In the event that corrosion sensitive facilities are planned, we recommend that a corrosion engineer be retained to perform the necessary corrosion protection evaluation and design.

**5.3            Expansive Soil**

Sandy soils derived from Torrey Sandstone are typically non-expansive. However, clayey soils derived from the Delmar Formation may be moderately to highly expansive.

**5.4            Environmental Considerations**

The scope of AGE's investigation did not include the performance of a Phase I Environmental Site Assessment (Phase I ESA) to evaluate the possible presence of soil and/or groundwater contamination beneath the project study area.

### 5.5 Cut-and-Cover Pipeline Construction

#### 5.5.1 General Requirements

It is our understanding that construction of underground utilities for the proposed project will be primarily performed using conventional open cut excavation methods. Since no changes are planned to the existing ground surface along the pipeline alignment, the net stress change in the underlying soils is considered negligible.

Furthermore, the existing soil materials are expected to provide a stable trench bottom under static conditions. In the event that loose or disturbed soils are encountered at the trench bottom, it is recommended that they be over-excavated and replaced with pipe bedding or other approved materials. The actual limits/extent of over-excavation of loose or soft materials at the bottom of the trench excavations should be evaluated by Water District's Resident Engineer during construction.

#### 5.5.2 Soil Excavation Characteristics

Based on our experience with similar geologic units, we anticipate that excavations in the majority of the on-site soil materials can be easily accomplished using conventional heavy-duty excavation equipment. Difficult excavation conditions may be encountered within the highly cemented zones of the Delmar Formation and Torrey Sandstone, and may require the use of a rock breaker and/or jackhammer.

**5.5.3      Fill Materials**

Soil materials generated from excavation in the Delmar Formation may be highly plastic and expansive, and are not considered suitable for use as compacted fill. The remainder of soil materials generated from excavations within the project study area are generally considered suitable for use and placement as trench backfill. Fill materials should be free of biodegradable materials, hazardous substance contamination, other deleterious debris, and shall have no rock and/or cobbles larger than 6 inches in any dimensions. If the fill materials contain rocks or hard lumps, at least 70 percent (by weight) of its particles shall pass a U.S. Standard 3/4-inch sieve. Fill materials should consist of predominantly granular soil (less than 30 percent passing the U.S. Standard #200 sieve) with Expansion Index of less than 30.

**5.5.4      Pipe Loads and Settlement**

Pipes should be designed for all loads applied by surrounding soils including dead load from soils, loads applied at the ground surface, uplift loads, and earthquake loads. Soil loading may be estimated assuming a density of 120 pcf for the backfill materials. Where a pipe changes direction abruptly, resistance to thrust forces can be provided by means of thrust blocks. For design purposes, the passive resistance against thrust blocks embedded in properly compacted fill and undisturbed formational soil may be estimated using an equivalent fluid density of 200 pcf and 300 pcf, respectively. Thrust blocks should be embedded a minimum of 3 feet beneath the ground surface.

Simplified (non finite element analysis) analysis methods for estimation of the additional soil pressure that will act on pipes during earthquake loading are not available. In general, unless the pipeline is located in a zone with potential for high differential movement such as a fault zone crossing, liquefiable zone, shear plane, or transition zone where the pipe enters a structure, flexible pipelines will conform to the ground movement during a seismic event without failure. To further reduce the risk of pipe damage that could occur as a result of earthquake loading, we recommend that design vertical and horizontal loads on pipes that result from soil dead loads be increased by 50 percent.

Buried flexible pipes are generally designed to limit deflections caused by applied loads. The deflections can be estimated using the Modified Spangler equation. A modulus of soil reaction,  $E'$ , equal to 1,000 and 3,000 psi may be used to represent a minimum of 6 inches of compacted pipe bedding materials of low plasticity ( $LL < 50$ ) with less than 12 percent fines passing the #200 standard sieve and crushed rock materials, respectively.

#### 5.5.5 Trench Backfill

It is recommended that installation of the pipelines be performed in accordance with Water District Standard Specifications. Prior to placement, all backfill materials should be moisture- conditioned, spread and placed in lifts (layers) not-to-exceed 6 inches in loose (uncompacted) thickness, and uniformly compacted to at least 90 percent relative compaction. During backfilling, the soil moisture content should be maintained at or within 2 percent above the optimum moisture content of the backfill materials. It is recommended that the upper 24 inches directly beneath proposed paved areas be compacted to at least 95 percent relative compaction. The maximum dry density and optimum moisture content of the backfill materials should be determined in the laboratory in accordance with the ASTM D1557 testing procedure.



Small hand-operated compacting equipment should be used for compaction of the backfill materials to an elevation of at least 3 feet above the top (crown) of the pipes. Flooding or jetting should not be used to densify the backfill.

## **5.6 Conclusions**

Based on the results of our study, it is our opinion that there are no known significant geologic hazards within the project study area which cannot be avoided or mitigated provided that the project is designed and constructed in accordance with the Water District's standard specifications.

It is also our opinion that the proposed improvements are not anticipated to destabilize or result in settlement of adjacent properties, nor will the proposed improvements add surcharge on existing improvements or structures.

**6.0 UNCERTAINTIES AND LIMITATIONS**

The information presented in this report is intended for the sole use of Parsons and other members of the project design team and the Water District for their design of the Project. The report does not provide sufficient data for a final design and/or to prepare an accurate bid. Our firm did not perform an investigation to evaluate the subsurface conditions along the project alignment. This report is based solely on a review and evaluation of readily available information, various assumptions to bridge over data gaps, and our previous experience in the general project areas.

The findings of this desktop study are based on a cursory evaluation of readily available information which is generally very limited and contain data gaps in many areas. The project study area is underlain by fill materials of variable depths. Therefore, we recommend that subsurface geotechnical borings be performed to evaluate the limits and condition of the underlying fill materials.

This study was performed in accordance with the authorized scope of work for this project. The findings and professional opinions presented in this report were developed in general conformance with the current practices and standard of care exercised by other local geotechnical engineering consultants performing similar tasks at the present time. No other warranty, either expressed or implied, is made with regard to the findings and opinions presented in this report.

### 7.0 REFERENCES

City of Encinitas, “Identified Hazards”, available online at <https://encinitasca.gov>.

Department of Conservation, California Geological Survey Regulatory Hazard Zones Maps for Earthquake Faults, Liquefaction and Landslide Zones, 2009.

Department of Conservation, California Geological Survey Tsunami Inundation Map for Emergency Planning, 2009.

Geotracker Data Base - (<http://geotracker.waterboards.ca.gov>).

International Conference of Building Officials, 1997, Maps of Known Active Fault Near Source Zones in California and Adjacent Portions of Nevada.

Kennedy, M.P., 1975, Geology of the San Diego Metropolitan Area, California: California Division of Mines & Geology, Bulletin 200.

Kennedy, M.P., et.al., 1975, Character and Recency of Faulting, San Diego Metropolitan Area, California: California Division of Mines and Geology, Special Report 123.

Kennedy, M.P, and Tan, S.S, 2007, “Geologic Map of the Oceanside 30' x 60' Quadrangle, California”, Digital Preparation by U.S. Geological Survey.

Kleinfelder, “Fault Hazard study, CIP 400002B ADP - Programmatic Document - ADC San Diego International Airport, San Diego, California”, prepared for San Diego County Regional Airport Authority, dated May 22, 2017.

- Lindvall, S.C., and Rockwell, T.K., 1995, "Holocene Activity of the Rose Canyon fault zone in San Diego, California" in Journal of Geophysical Research, v. 100, No. B12, pp. 24,121 - 124,132.
- Marshall, M., 1989, "Detailed Gravity Studies and the Tectonics of the Rose Canyon--Point Loma--La Nacion Fault System, San Diego, California" in Proceedings of Workshop on "The Seismic Risk in the San Diego Region: Special Focus on the Rose Canyon Fault System" (Glenn Roquemore, et.al, Editors).
- Ninyo & Moore, "Fault Hazard Evaluation, World Class Waterfront Development, San Diego, California" report dated February 26, 2018.
- Olivenhain Municipal Water District, "Request for Proposals, Preliminary and Final Design of the Unit A North, Rancho Santa Fe Road Potable Water Pipeline Replacement or Rehabilitation", dated September, 2021.
- Olivenhain Municipal Water District, "Standard Specifications and drawings for the Construction of Water, Recycled water and Sewer Facilities", dated February, 2017.
- Patterson, R.H., D.L. Schug, and B.E. Ehleringer, 1986, "Evidence of Recent Faulting in Downtown San Diego, California" in Geological Society of America, Abstracts With Programs, v. 18, No. 2, p. 169.
- Rockwell, T.K., et.al., 1991, "Minimum Holocene Slip Rate for the Rose Canyon Fault in San Diego, California" in Environmental Perils in the San Diego Region (P.L. Abbott and W.J. Elliott, editors): San Diego Association of Geologists, pp. 37-46.

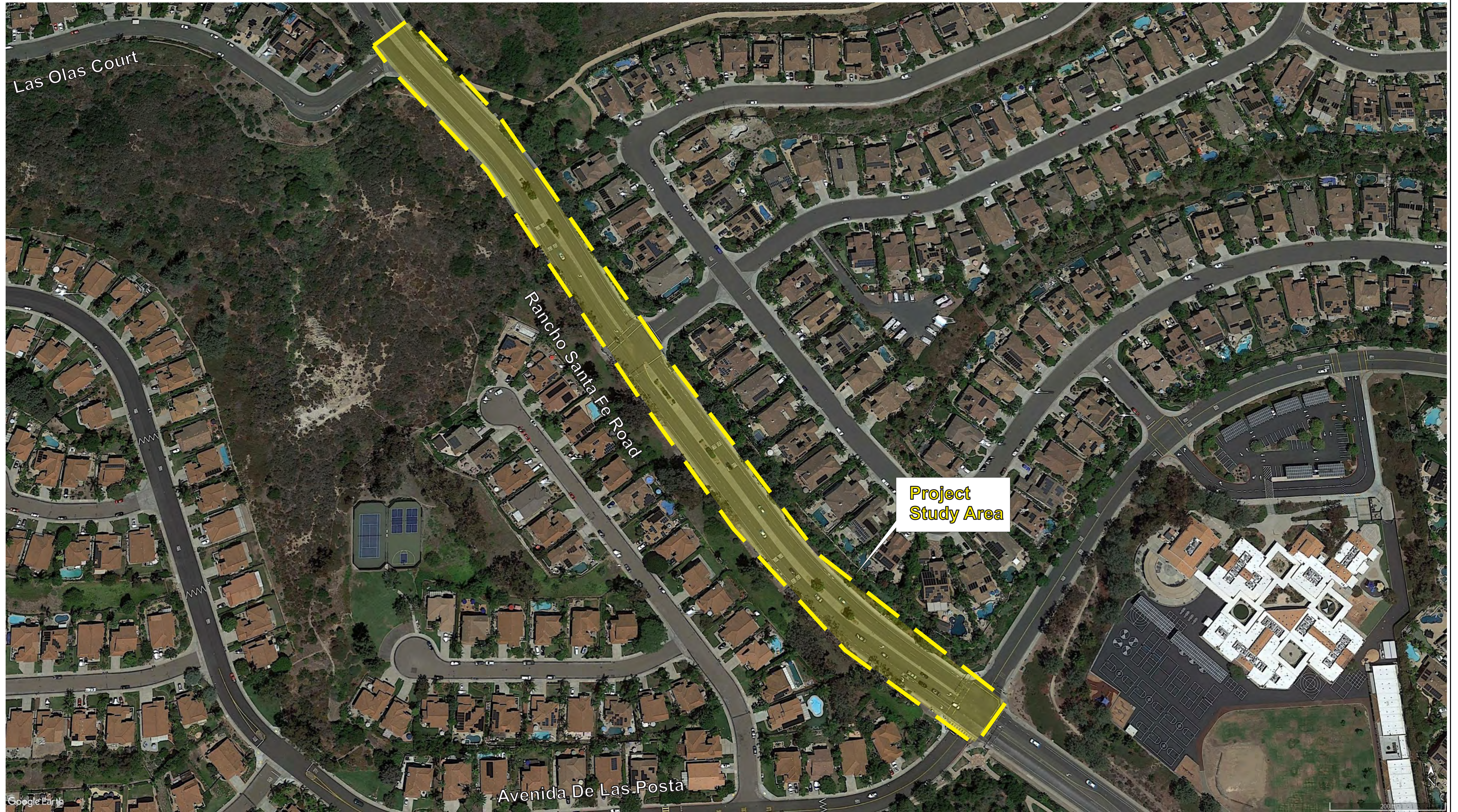
Southern California Soil & Testing, Inc., “Geotechnical Investigation, Olivenhain Municipal Water District, 386 pressure Zone Expansion, Encinitas, California”, dated March 25, 2019.

Treiman, J.A., 1993, “The Rose Canyon Fault Zone, Southern California”, California Division of Mines and Geology Open File Report No. 93-02.

Standard Specifications for Public Works Construction ("Green Book"), including the Regional Standards, 2010 Edition.

U. S. Geologic Survey, 2019, “Quaternary Fault Database”.





RANCHO SANTA FE ROAD POTABLE WATER PIPELINE

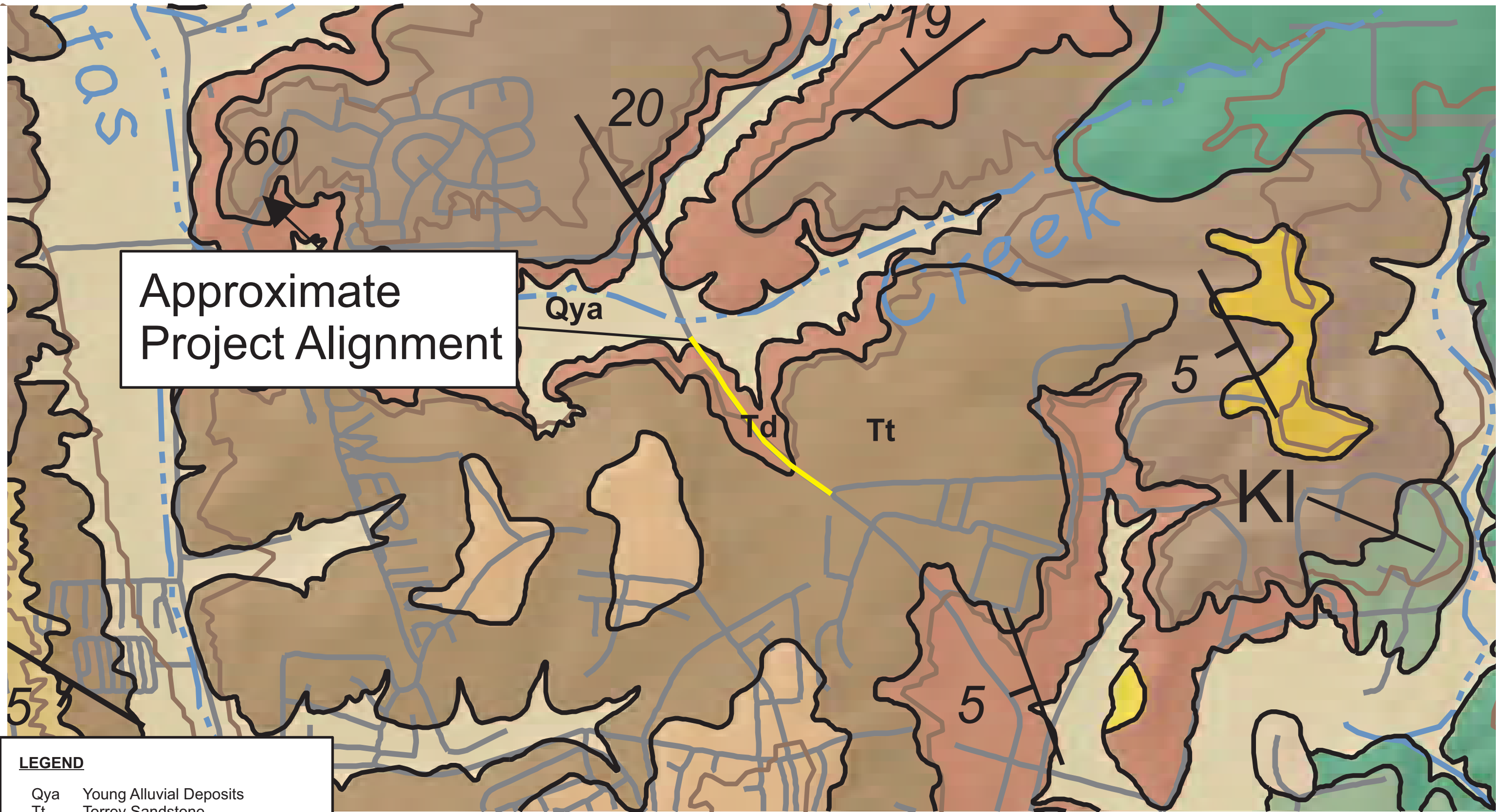
LOCATION MAP

PROJECT NO.  
25C3

ALLIED GEOTECHNICAL ENGINEERS, INC.

FIGURE 1





Approximate  
Project Alignment

Qya

Td

Tt

KI

**LEGEND**

Qya Young Alluvial Deposits  
Tt Torrey Sandstone  
Td Delmar Formation

**RANCHO SANTA FE ROAD POTABLE WATER PIPELINE**

**GENERALIZED GEOLOGIC MAP**

**PROJECT NO.  
25C3**

**ALLIED GEOTECHNICAL ENGINEERS, INC.**

**FIGURE 2**

# APPENDIX B – POTHOLING REPORT



Utility Locating  
Radiography  
Potholing  
Mapping  
GPR



# BELOW

SUBSURFACE IMAGING  
*An **RMA** Company*

Date:  
Technician:  
Project Name:  
Project Address:  
C Below Project No.

January 26, 2023  
Joe Martinez  
Olivehain MWD Utility Map  
Rancho Sante Fe Rd & Las Olas Ct Carlsbad, CA 92009  
21-4449

Pothole Report

[www.cbelow.com](http://www.cbelow.com)

**1-888-90-BELOW**

1385 Old Temescal Rd., STE 100  
Corona, CA 92881

Date: **January 26, 2023**  
 Technician: **Joe Martinez**  
 Project Name: **Olivehain MWD Utility Map**  
 Project Address: **Rancho Sante Fe Rd & Las Olas Ct Carlsbad, CA 92009**  
 C Below Project No. **21-4449**

### Project Summary

No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
1	Water	Unknwon	Concrete	7.54	NW-SE	Center Median Planter of Rancho Santa Fe Rd, North of Intersectiong with Las Olas Ct.	Soil
1.1	Unknown	6	Plastic	2.50	NW-SE	Center Median Planter of Rancho Santa Fe Rd. North of Intersection with Las Olas CT	Soil
2	Reclaimed Water	6	PVC	5.04	NE-SW	Center Median Planter of Rancho Santa Fe Rd. North of Intersection with Las Olas CT	Asphalt
3	Water	Unknown	Unknown	2.36	Unknown	South East Bound on Rancho Santa Fe Rd. Intersection With Las Olas Ct	Asphalt
4	Water	12	Concrete	7.12	NW-SE	South East Bound on Rancho Santa Fe Rd, Lane #1. North West of 8041 Camino Montego	Asphalt
5	Water	12	Concrete	4.80	NW-SE	South East Bound on Rancho Santa Fe Rd, Lane #1. North West of Avenida LA Cima	Asphalt
6	Electric	Unknown	Encasement	4.26	NW-SE	South East Bound on Rancho Santa Fe Rd. North West of Avenida La Cima Intersection.	Soil
7	Reclaimed Water	8	Plastic	6.94	NW-SE	North West Bound on Rancho Santa Fe Rd. In the Bike Lane, at Avenida La Cima	Asphalt
8	Dry Hole	N/A	N/A	N/A	N/A	South East Bound on Rancho Santa Fe Rd. on Lane #2, North East of 1141 Avenida Esteban	Asphalt

Comments: Top depth is measured from ground surface to top of utility. Potholes were performed at locations specified by the client. Utility size and material are based on visual estimates and may vary. Approximate coordinates (Lat/Long) are provided to show a general area of pothole location and are for information purposes only.





14280 Euclid Ave  
Chino, CA 91710  
1-888-90-BELOW

Date: **January 26, 2023**  
Technician: **Joe Martinez**  
Project Name: **Olivehain MWD Utility Map**  
Project Address: **Rancho Sante Fe Rd & Las Olas Ct Carlsbad, CA 92009**  
C Below Project No. **21-4449**

#### Project Summary

No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
9	Electric	Unknown	Encasement	5.32	NW-SE	South East Bound on Rancho Santa Fe Rd, North East of 1125 Avenida Esteban. On Shoulder	Soil
10	Water	12	Concrete	6.86	NW-SE	South East Rancho Santa Fe Rd. on Right Turning Lane, North of 2070 Avenida La Posta	Asphalt

Comments: Top depth is measured from ground surface to top of utility. Potholes were performed at locations specified by the client. Utility size and material are based on visual estimates and may vary. Approximate coordinates (Lat/Long) are provided to show a general area of pothole location and are for information purposes only.



Technician Name Joe Martinez		Date 01-26-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 1	Location Center Median Planter of Rancho Santa Fe Rd, North of Intersection with Las Olas Ct.		

Surface Type:  Profile View (not to scale)  
Measured Distance from Finished Surface

Thickness:  (feet)

Notes:

Approximate Coordinates: 33.0648795, -117.2442668  
Multiple Utilities Were Exposed.  
Cannot confirm actual water line possibly encased or its covered in Concrete/thurstblock due to line being at angle point.

Top:  (feet)

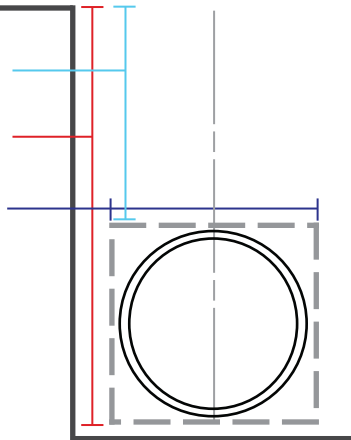
Bottom:  (feet)

Size:  (in)

Utility:

Material:

Direction:



### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	5.00	NE	Face of Curb	2	6.80	SW	Face of Curb	3	56.00	NW	Water Valve

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
1	Water	Unknown	Concrete	7.54	NW-SE	Center Median Planter of Rancho Santa Fe Rd, North of Intersectiong with Las Olas Ct.	Soil



Photo 1



Photo 2



Photo 3



Photo 4

Comments:





Technician Name Joe Martinez		Date 01-26-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 1.1	Location Center Median Planter of Rancho Santa Fe Rd. North of Intersectiong with Las Olas Ct.		

Surface Type:  Profile View (not to scale)

Thickness:  (feet) Measured Distance from Finished Surface

Notes:

Top:  (feet)

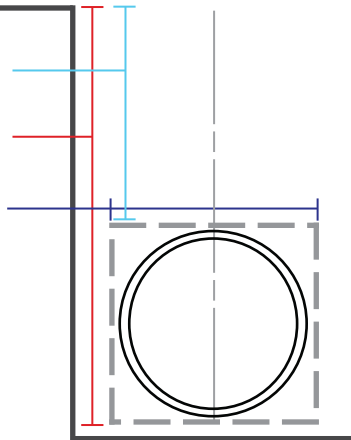
Bottom:  (feet)

Size:  (in)

Utility:

Material:

Direction:



### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	4.10	NE	Face of Curb	2	7.80	SW	Face of Curb	3	56.00	NW	Water Valve

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
1.1	Unknown	6	Plastic	2.50	NW-SE	Center Median Planter of Rancho Santa Fe Rd. North of Intersectiong with Las Olas Ct.	Soil



Photo 1



Photo 2



Photo 3



Photo 4

Comments:



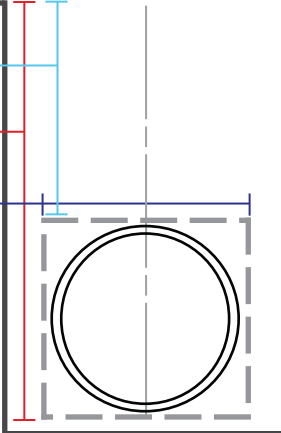


Technician Name Joe Martinez		Date 01-26-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 2	Location South East Bound on Rancho Santa Fe Rd. Intersecting with Las Olas Ct.		

Surface Type:  Profile View (not to scale)

Thickness:  (feet) Measured Distance from Finished Surface

Top:	<input type="text" value="5.04"/>	(feet)
Bottom:	<input type="text" value="5.54"/>	(feet)
Size:	<input type="text" value="6"/>	(in)
Utility:	<input type="text" value="Reclaimed Water"/>	
Material:	<input type="text" value="PVC"/>	
Direction:	<input type="text" value="NE-SW"/>	



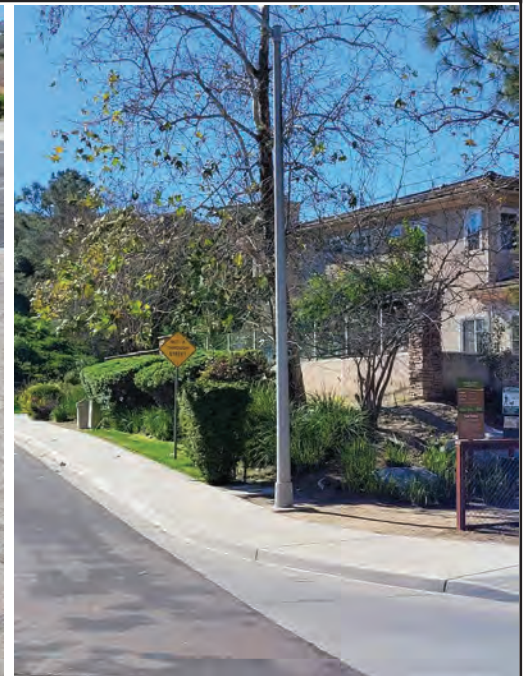
Notes:

Approximate Coordinates: 33.0647584, -117.2441907

### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	19.50	NW	Water Valve	2	13.20	W	Water Valve #2	3	58.70	E	Street Light

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
2	Reclaimed Water	6	PVC	5.04	NE-SW	South East Bound on Rancho Santa Fe Rd. Intersecting with Las Olas Ct.	Asphalt



Photo 1



Photo 2



Photo 3



Photo 4

Comments:





Technician Name Joe Martinez		Date 01-26-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 3	Location South East Bound on Rancho Santa Fe Rd. In the Intersection with Las Olas Ct.		

Surface Type:  Profile View (not to scale)

Thickness:  (feet) Measured Distance from Finished Surface

Notes:

Approximate Coordinates: 33.0647326, -117.2441652  
 Was not able to exposed water line on USA markings, encountered a layer of asphalt at 2.36 ft. Deep, possibly part of an old road, cannot confirm.  
 Located Water line from Valve and get some positive indications about 6.00 ft. Deep.

Top:  (feet)

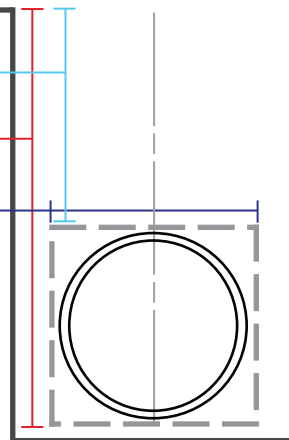
Bottom:  (feet)

Size:  (in)

Utility:

Material:

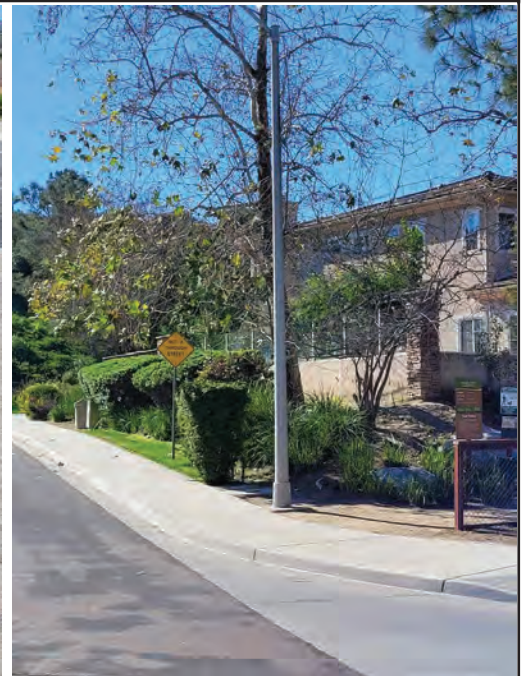
Direction:



### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	9.90	SW	Water Valve	2	17.60	S	Water Valve #2	3	65.60	E	Street Light

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
3	Water	Unknown	Unknown	2.36	Unknown	South East Bound on Rancho Santa Fe Rd. In the Intersecting with Las Olas Ct.	Asphalt



Photo 1



Photo 2



Photo 3



Photo 4

Comments:



Technician Name Joe Martinez		Date 01-27-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 4	Location South East Bound on Rancho Santa Fe Rd, Lane #1. North West of 8041 Camino Montego		

Surface Type:  Profile View (not to scale)  
Measured Distance from Finished Surface

Thickness:  (feet)

Notes:

Approximate Coordinates: 33.0640740, -117.2434716  
Encountered about 2:00 ft hard base under asphalt.

Top:  (feet)

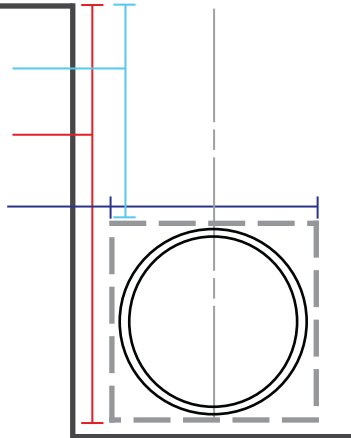
Bottom:  (feet)

Size:  (in)

Utility:

Material:

Direction:



### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	32.20	NE	Comm. Pedestal	2	9.60	SW	Face of Curb	3	63.30	N	Storm Drain MH

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
4	Water	12	Concrete	7.12	NW-SE	South East Bound on Rancho Santa Fe Rd, Lane #1. North West of 8041 Camino Montego	Asphalt



Photo 1



Photo 2



Photo 3



Photo 4

Comments:





Technician Name Joe Martinez		Date 01-26-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 5	Location South East Bound on Rancho Santa Fe Rd, Lane #1. North West of Avenida LA Cima		

Surface Type:       Intersection      Profile View (not to scale)

Thickness:  (feet)      Measured Distance from Finished Surface

Top:  (feet)

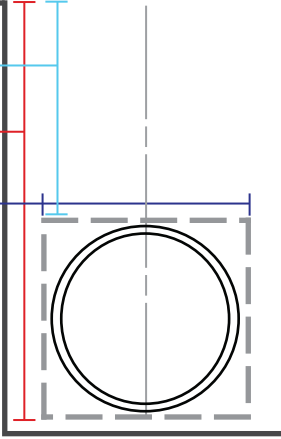
Bottom:  (feet)

Size:  (in)

Utility:

Material:

Direction:



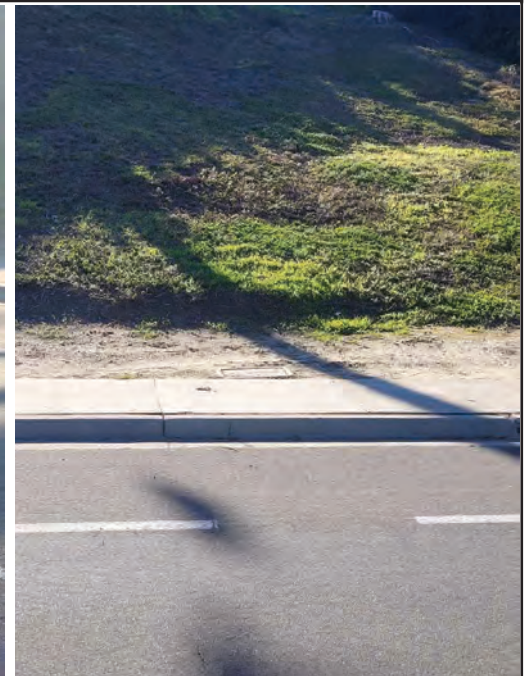
Notes:

Approximate Coordinates 33.0633959, -117.2429472

### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	8.30	SW	Monument Structure	2	24.20	N	Sewer MH	3	37.40	E	Electric Box

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
5	Water	12	Concrete	4.80	NW-SE	South East Bound on Rancho Santa Fe Rd, Lane #1.North West of Avenida LA Cima Intersection	Asphalt



Photo 1



Photo 2



Photo 3



Photo 4

Comments:





Technician Name Joe Martinez		Date 01-27-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 6	Location South East Bound on Rancho Santa Fe Rd. North West of Avenida La Cima Intersection.		

Surface Type:  Profile View (not to scale)  
Measured Distance from Finished Surface

Thickness:  (feet)

Notes:

Approximate Coordinates: 33.0632251, -117.2429472  
Multiple utilities were exposed.  
Encasement documented as Electric and conduits as Communication.  
South West edge of encasement exposed.

Top:  (feet)

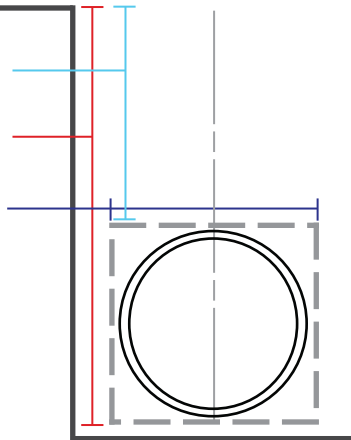
Bottom:  (feet)

Size:  (in)

Utility:

Material:

Direction:



### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	5.10	SW	Face of Curb	2	24.00	SE	Sewer MH	3	68.80	NW	Traffic Signal

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
6	Electric	Unknown	Encasement	4.26	NW-SE	South East Bound on Rancho Santa Fe Rd. North West of Avenida La Cima Intersection.	Soil



Photo 1



Photo 2



Photo 3



Photo 4

Comments:





Technician Name Joe Martinez		Date 01-27-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 7	Location North West Bound on Rancho Santa Fe Rd. In the Bike Lane, at Avenida La Cima		

Surface Type:  Profile View (not to scale)

Thickness:  (feet) Measured Distance from Finished Surface

Top:  (feet)

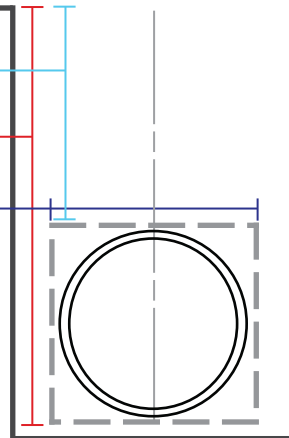
Bottom:  (feet)

Size:  (in)

Utility:

Material:

Direction:



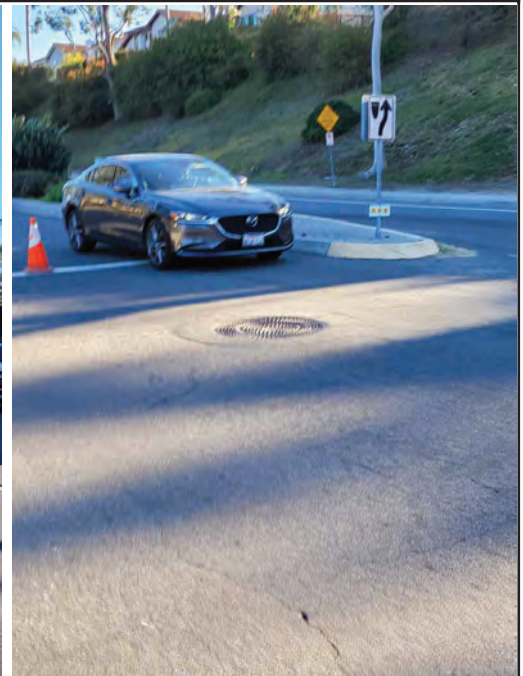
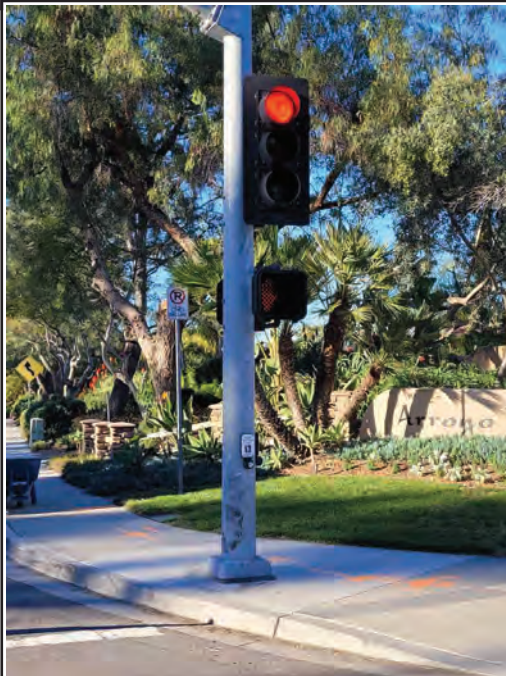
Notes:

Approximate Coordinates: 33.0631689, -117.2425666

### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	34.80	S	Traffic Signal	2	50.00	NW	Traffic Signal #2	3	34.70	N	Storm Drain MH

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
7	Reclaimed Water	8	Plastic	6.94	NW-SE	North West Bound on Rancho Santa Fe Rd. In the Bike Lane, at Avenida La Cima	Asphalt



Photo 1



Photo 2



Photo 3



Photo 4

Comments:





Technician Name Joe Martinez		Date 01-27-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 8	Location South East Bound on Rancho Santa Fe Rd. on Lane #2, North East of 1141 Avenida Esteban		

Surface Type:  Profile View (not to scale)

Thickness:  (feet) Measured Distance from Finished Surface

Notes:

Approximate Coordinates: 33.0620098, -117.2417885  
 Dry Hole. No Utilities Were Found at Pothole Location.  
 at 11.04.ft. deep no Water exposed on USA markings. Undermine about  
 2 ft. On either side of markings.

Top:  (feet)

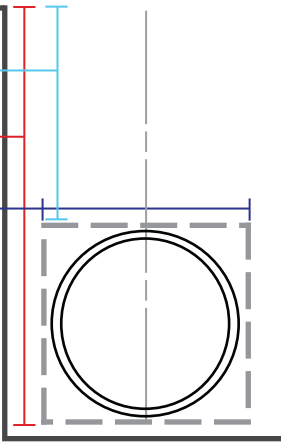
Bottom:  (feet)

Size:  (in)

Utility:

Material:

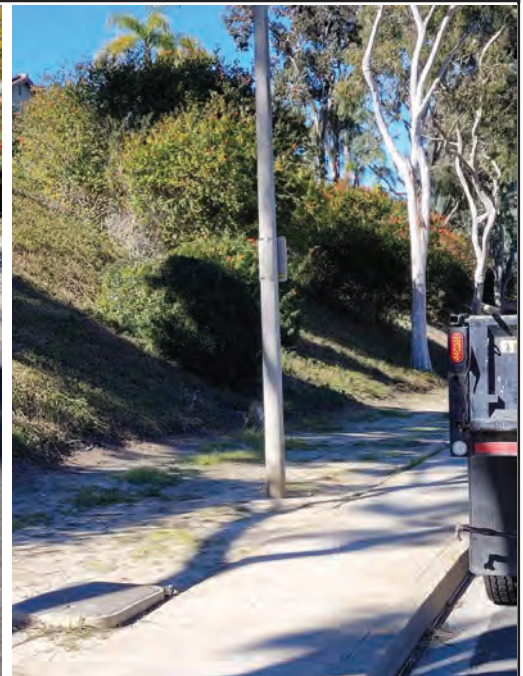
Direction:



## PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	13.50	NE	Electric Vault	2	20.80	SW	Face of Curb	3	42.80	SE	Street Light

## LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
8	Dry Hole	N/A	N/A	N/A	N/A	South East Bound on Rancho Santa Fe Rd. on Lane #2, North East of 1141 Avenida Esteban	Asphalt



Photo 1



Photo 2



Photo 3



Photo 4

Comments:





Technician Name Joe Martinez		Date 01-27-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 9	Location South East Bound on Rancho Santa Fe Rd, North East of 1125 Avenida Esteban. On Shoulder		

Surface Type:  Profile View (not to scale)  
 Measured Distance from Finished Surface

Thickness:  (feet)

Notes:

Approximate Coordinates: 33.0616356, -117.2414304  
 Multiple utilities were exposed.  
 Based on USA markings joint trench Electric, Comm., Gas  
 South West edge of encasement exposed.

Top:  (feet)

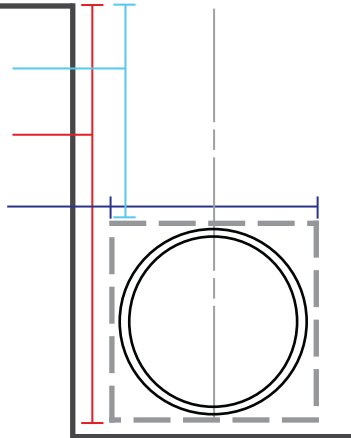
Bottom:  (feet)

Size:  (in)

Utility:

Material:

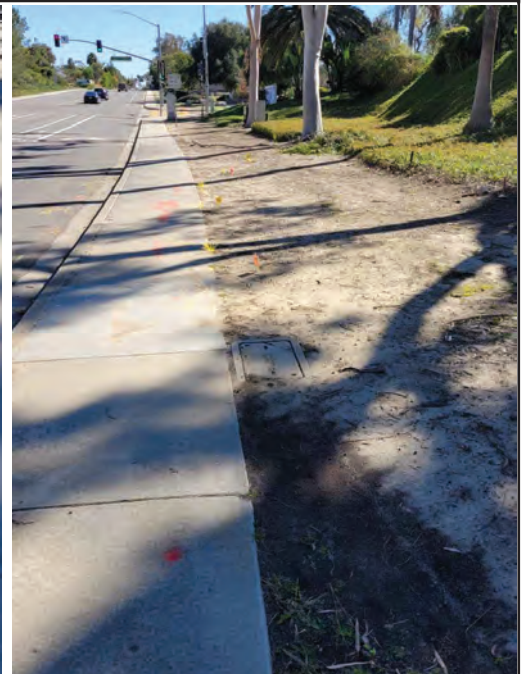
Direction:



### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	5.30	SW	Face of Curb	2	42.60	SE	Traffic Signal Box	3	58.90	NW	Traffic Signal Box #2

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
9	Electric	Unknown	Encasement	5.32	NW-SE	South East Bound on Rancho Santa Fe Rd, North East of 1125 Avenida Esteban. On Shoulder	Soil



Photo 1



Photo 2



Photo 3



Photo 4

Comments:





Technician Name Joe Martinez		Date 01-27-2023	C Below Project No. 21-4449
Project Name Olivenhain MWD Utility Locating & Potholing Investigation		Project Address Rancho Santa Fe Rd & Las Olas Ct Carlsbad, CA 92009	
Client Company Parsons   San Diego		Contact Bardia Hashemi	
Pothole No. 10	Location South East Rancho Santa Fe Rd. on Right Turning Lane, North of 2070 Avenida La Posta		

Surface Type:       Profile View (not to scale)

Thickness:  (feet)      Measured Distance from Finished Surface

Top:  (feet)

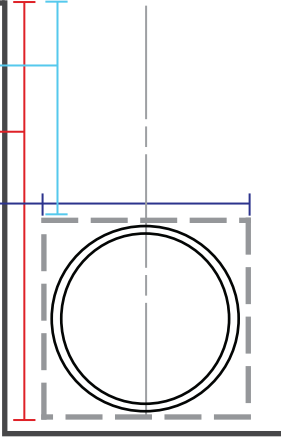
Bottom:  (feet)

Size:  (in)

Utility:

Material:

Direction:



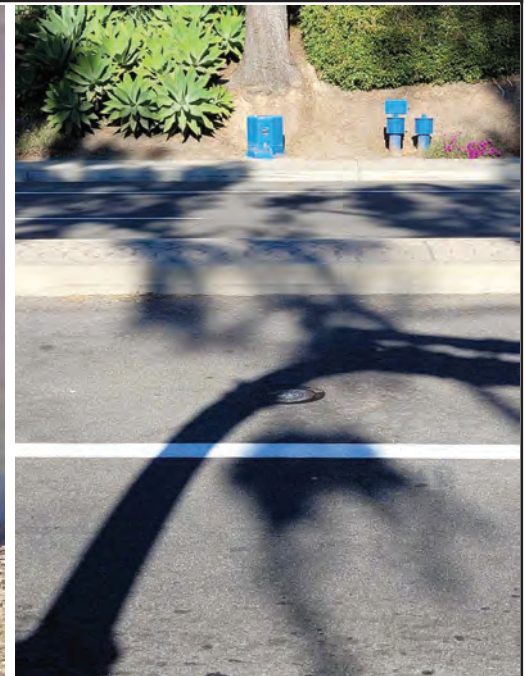
Notes:

Approximate Coordinates: 33.0614630, -117.2410737  
Exposed at angle point to valves, cannot cut slurry to actually look at tee.

### PHYSICAL SWING TIE INFORMATION

No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture	No.	Distance (ft)	Dir.	From Permanent Existing Fixture
1	19.90	E	Storm Drain MH	2	34.80	NE	Transformer	3	22.50	SW	Water Valve

### LOCATION DETAIL





No.	Utility	Size (in)	Material	Top Depth (ft)	Direction	Location	Surface
10	Water	12	Concrete	6.86	NW-SE	South East Rancho Santa Fe Rd. on Right Turning Lane, North of 2070 Avenida La Posta	Asphalt



Photo 1



Photo 2



Photo 3



Photo 4

Comments:

