**PROPOSAL, SPECIFICATIONS, BOND**
**AND AFFIDAVIT**
**FOR THE CONSTRUCTION OF**

# INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9, (FEAP# 702)

**B2010-14**

REGISTERED PROFESSIONAL ENGINEER
ELIZABETH OVERSTREET
No. 63944
Exp. 09-30-10
CIVIL
STATE OF CALIFORNIA

**Elizabeth Overstreet**
**City Engineer**

**July 2010**

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## SECTION A

# NOTICE INVITING BIDS

# CITY OF TORRANCE, CALIFORNIA

## NOTICE INVITING BIDS

Notice is hereby given that sealed bids for performing the following described work will be received at the Office of the City Clerk of the City of Torrance, California, **until 2:00 p.m. on Thursday, August 12, 2010,** after which time they will be publicly opened and read at 2:15 p.m. in the Council Chambers of said City:

**INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702)**

**B2010-14**

Plans, Specifications and form of Proposal may be obtained at the Office of the City Clerk (310) 781-7530, City Hall, 3031 Torrance Boulevard, Torrance, California, upon payment of $25 if picked up at City Hall, or payment of $30 if requested by mail. Both amounts include tax. Neither amount is refundable. If requesting by mail, please send check to the following:

**CITY OF TORRANCE**
**OFFICE OF THE CITY CLERK**
**3031 TORRANCE BLVD**
**TORRANCE, CA 90503**
**ATTN: B2010-14**

The Engineer's estimate of the contract total is between $108,000 and $120,000. All work shall be completed within 90 (ninety) working days from the date of the Notice to Proceed (NTP). The work consists of installation of 2 skid mounted fluoride feed systems including chemical feed pumps and drive motors, power and control panels, SCADA capability, as shown on City of Torrance Plan No. WP-290.

Per Division 2, Chapter 2 of the Torrance Municipal Code, the Torrance City Council may reject any and all bids, waive any informality or irregularity in such bids, and determine the lowest responsible bidder. No facsimile bids shall be accepted by the City.

Bidders are advised that, as required by the federal law, the State has established a statewide overall Disadvantage Business Enterprise (DBE). To provide assistance in meeting the statewide goal, the Agency is including a DBE availability of 9% in this contract. Although bidders need not achieve this DBE Availability Advisory as a condition of award, they are encouraged to solicit bids from DBE subcontractors and suppliers. All bidders must submit the required DBE information with their bid. (See Section D4 on page B-3)

The City has determined that a Class **A** or Class **B** Contractor's license is necessary to bid this project, but reserves the right to accept another Class at the sole discretion of either the Public Works Director or City Engineer.

Pursuant to Section 1770 et seq. of California Labor Code, the minimum prevailing rate of per diem wages for each craft, classification, or type of workman needed to execute the Contract shall be those determined by the Director of Industrial Relations of the State of California and is available in the Office of the City Clerk of the City of Torrance. Certified payrolls shall be submitted monthly by the contractor hired for this project.

By order of the City Council of the City of Torrance, California.

For further information, please contact Key Ebarle in the Public Works Department at (310) 781-6900

# SECTION B

# INSTRUCTIONS TO BIDDERS

**CITY OF TORRANCE,**
**CALIFORNIA**

# INSTRUCTIONS TO BIDDERS

## A. QUALIFICATION OF BIDDERS

### 1. Competency of Bidders

The Bidder shall be thoroughly competent and capable of satisfactorily performing the Work covered by the Bid.

A bidder, in order to qualify, shall have designed and manufactured equipment or shall offer to furnish equipment of a manufacturer who has designed and manufactured equipment which is in successful operation for a period of not less than five years in North America and which is comparable in size and severity of duty to the equipment required to be furnished.

Bidder or bidder's subcontractors shall be a certified Underwriter Laboratories (UL) panel shop.

Qualification information shall be made available to the City upon request and shall include a bidder's experience in the design and manufacture of equipment comparable to that proposed to be furnished or, in the event he proposes to furnish equipment not manufactured by himself, information regarding the manufacturer's or manufacturers' experience in the design and manufacture of equipment comparable to that proposed to be furnished. Equipment presented as comparable shall be comparable both in size and severity of duty.

### 2. Contractor's License

At the time of submitting the Bid, the Bidder shall be licensed as a contractor in accordance with the provisions of Chapter 9, Division 3, of the California Business and Professions Code. The required prime contractor license class for the Work is shown in the project Notice Inviting Bids. However, the City reserves the right to award the Contract to a contractor with another class if the City determines that the license is proper for the work.

## B. BIDDER RESPONSIBILITY

A responsible Bidder is a Bidder who has demonstrated the attribute of trustworthiness, as well as ability, fitness, capacity and experience to satisfactorily perform the work.

Bidders are notified that, in accordance with Division 2, Chapter 2 of the Torrance Municipal Code, the City Council may determine whether the Bidder is responsible based on a review of the Bidder's performance on other contracts.

If, based on the provision and criteria in Division 2, Chapter 2 of the Torrance Municipal Code, the Public Works Director proposes not to recommend the award of contract to the apparent low bidder, the Director shall notify the Bidder in writing of its intention to recommend to the City Council that the Council award the contract to the 2nd lowest responsible bidder. If the Bidder presents evidence in rebuttal to the recommendation, the Director shall evaluate the merits of such evidence, and based on that evaluation, make a recommendation to the City Council.

C. ADDENDA TO THE CONTRACT DOCUMENTS

The City may issue Addenda to the Contract Documents during the period of advertising for any reason. The Bidder shall acknowledge the receipt of the Addenda in their Bid. Failure of the Bidder to do so may result in the rejection of the Bid as non-responsive.

D. PREPARATION OF THE BID

1. Examination of Site, Plans and Specifications

Prior to submitting a Bid, the Bidder shall examine the Plans and the Work site, carefully read the Specifications, and satisfy itself that it has the abilities and resources to complete the Work. The Bidder agrees that if it is awarded the Contract, no claim will be made against the City based on ignorance or misunderstanding of the provisions of the Contract Documents, the nature and amount of the work, and the physical and climatic conditions of the work site.

2. Estimated Quantities

The quantities shown in the Bid are approximate only. The Contractor will be paid for the actual quantities of work based on field measurements as provided for in these Specifications. The City reserves the right to increase or decrease the amount of any item or portion of work to be performed or materials furnished, or to delete any item, in accordance with the Specifications.

3. Bid Instructions and Submissions

The Bid shall be submitted on the Bid Proposal forms included with the Specifications. All Bid Documents must be completed, executed and submitted with the Bid by the Bidder.

Required nine (9) Bid Proposal Documents:

1) Bidder's Proposal
2) Addenda Acknowledgment
3) Contractor's Affidavit
4) Bid Bond (10%)
5) List of Subcontractors
6) References (2 pages)
7) DBE Bidders List
8) Violations of Federal or State Law
9) Disqualification or Debarment

All prices submitted will be considered as including any and all sales or use taxes.

In the case of discrepancy between unit bid price and total bid, the unit price shall prevail.

4. Disadvantaged Business Enterprise (DBE) Requirements

The City requires that Disadvantaged Business Enterprise (DBE) have the opportunity to participate in public works projects. To assist the City in establishing DBE goals, all proposing prime bidders are required to submit a DBE Bidder's List form for each subcontractor and supplier, whether DBE or not, contacted during preparation of the Bid. However, this Bid has no set goal, as it is not a Federal-aid project.

E. BID BOND

The Bid must be accompanied by either cash, a certified or cashier's check or a surety bond (bid bond) payable to the City of Torrance. Bids must be submitted on the proposal forms furnished by the Public Works Department. The Bid Guaranty shall be in an amount equivalent to at least 10% of the Total Contract Bid Price.

F. NONRESPONSIVE BIDS AND BID REJECTION

1. A Bid in which any one (1) of the required nine (9) Bid proposal documents are not completed, executed and submitted may be considered non-responsive and be rejected.

2. A Bid in which the Contract Unit Prices are unbalanced, which is incomplete or which shows alteration of form or irregularities of any kind, or which

contains any additions or conditional or alternate Bids that are not called for, may be considered non-responsive and be rejected.

G. AWARD OF CONTRACT

In accordance with Division 2, Chapter 2 of the Torrance Municipal Code, the City Council reserves the right to reject any and all bids received, to take all bids under advisement for a period not-to-exceed sixty (60) days after date of opening thereof, to waive any informality or irregularity in the Bid, and to be the sole judge of the merits of material included in the respective bids received.

H. EXECUTION OF CONTRACT

After the Contract is awarded, the awardee shall execute the following eight (8) documents:

1) Performance Bond (100% of Bid)
2) Labor and Material Bond (100% of Bid)
3) Contract - Public Works Agreement
4) Verification of Insurance Coverage (Certificates and Endorsements)
5) Construction or Service Contract Endorsement
6) Workers' Compensation Insurance Certificate
7) Construction Permit Application Form
8) Business License Application Form

I. APPRENTICESHIP EMPLOYMENT STANDARDS

The Contractor is directed to the provisions in Sections 1776, 1777.5 and 1777.6 of the California Labor Code concerning the employment of apprentices by the contractor or any subcontractor under them.

J. PERMITS, LICENSES AND PUBLIC WORKS AGREEMENT

The Contractor shall procure and execute all permits, licenses, pay all charges and fees, and give all notices necessary and incidental to the completion of the Work. The Contractor shall execute a Public Works Agreement. No fee is charged for a Construction-Excavation Permit issued by the City of Torrance for a public works project. The Contractor shall obtain a City of Torrance Business License.

K. INSURANCE

The Contractor shall maintain Automobile Liability, General Liability and Workers' Compensation Insurance as specified in the Public Works Agreement included in the Project Specifications.

L. PRE-BID INQUIRIES

A Bidder with a Pre-Bid Inquiry must fax their question(s) in writing to Key Ebarle of the Torrance Public Works Department at (310) 781-6902 or may e-mail to ‘KEbarle@TorranceCA.gov. All questions must be received no later than 5:00 p.m. on the Thursday, one week prior to the date for opening the bids. Questions received after this date may not be considered. For general questions or regarding the bidding process, a bidder may call Key Ebarle directly at (310) 618-3061.

# SECTION C

# BID DOCUMENTS

**BIDDER'S PROPOSAL**

Company: _____

**B2010-14;** Total Bid: _____

**PROPOSAL, SPECIFICATIONS, BOND AND AFFIDAVIT**
**FOR THE**
**INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702)**

---

Honorable Mayor and Members
of the Torrance City Council
Torrance, California

Members of the Council:

In accordance with the Notice Inviting Bids pertaining to the receiving of sealed proposals by the City Clerk of the City of Torrance for the above titled improvement, the undersigned hereby proposes to furnish all Work to be performed in accordance with the City of Torrance Plan No. WP-290, Specifications, Standard Drawings, and the Contract Documents, for the unit price or lump sum set forth in the following schedule.

**INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702)**

**BID SCHEDULE**

| Item No. | Approx. Qty | Unit of Measure | Item Description | Unit Price | Total Bid |
|---|---|---|---|---|---|
| **SITE CONSTRUCTION** | | | | | |
| **1** | 480 | LF | **Saw cut 3" thick asphalt pavement for new chemical injection line** | $ | $ |
| **2** | 40 | SF | **Remove 3" asphalt pavement** | $ | $ |
| **3** | 5 | CY | **Hand excavate to 3 ft. depth** | $ | $ |
| **4** | 5 | CY | **Hand backfill and compact 90% to 3 ft. depth** | $ | $ |
| **5** | 40 | SF | **Replace 3" asphalt pavement** | $ | $ |
| **6** | 1 | LS | **Provide and install 8' x 10' Shed for feed equipment at Well No. 9** | $ | $ |

| Item No. | Approx. Qty | Unit of Measure | Item Description | Unit Price | Total Bid |
|---|---|---|---|---|---|
| **7** | 1 | LS | **Provide and install 8' x 10' equipment Canopy shade at Robert W. Goldsworthy Desalter** | $ | $ |
| **8** | 1 | LS | **Disposal Costs** | $ | $ |
| | | | **SUBTOTAL: SITE CONSTRUCTION** | $ | |
| | | | **CONCRETE** | | |
| **9** | 1 | LS | **8' x10' Concrete Equipment Pad at Well No. 9** | $ | $ |
| **10** | 1 | LS | **8' x 10' Concrete Equipment Pad at Robert M. Goldsworthy Desalter** | $ | $ |
| | | | **SUBTOTAL: CONCRETE** | $ | |
| | | | **MECHANICAL** | | |
| **11** | 2 | EA | **Skid-mounted Fluoride Saturator system; FOB to Torrance, CA** | $ | $ |
| **12** | 2 | EA | **Install Skid and fasten to equipment pad** | $ | $ |
| **13** | 2 | EA | **Install new piping to injection point and to skid** | $ | $ |
| **14** | 20 | LF | **Zinc plated steel pipe and conduit support** | $ | $ |
| **15** | 30 | EA | **¾" Zinc plated steel pipe hangers** | $ | $ |
| **16** | 80 | LF | **¾" sch. 80 PVC piping to skid** | $ | $ |
| **17** | 60 | LF | **¾" sch. 80 PVC piping from chemical feed skid to injection point** | $ | $ |
| **18** | 1 | LS | **New 1" NPT pipe fitting and fluoride injector on existing reservoir effluent line** | $ | $ |
| **19** | 1 | LS | **Misc. fittings** | $ | $ |
| | | | **SUBTOTAL:MECHANICAL** | $ | |
| | | | **ELECTRICAL** | | |
| **20** | 125 | LF | **1" rigid conduit from existing power panel to chemical feed area** | $ | $ |
| **21** | 20 | LF | **1" flexible conduit from electrical junction box to skids** | $ | $ |

| Item No. | Approx. Qty | Unit of Measure | Item Description | Unit Price | Total Bid |
|---|---|---|---|---|---|
| **22** | 2 | EA | **NEMA 4 x termination boxes** | $ | $ |
| **23** | 125 | LF | **12 GA. Standard copper wire** | $ | $ |
| **24** | 1 | LS | **Misc. fittings and liquid tight connectors** | $ | $ |
| **25** | 2 | EA | **Add additional circuits to ex. 120VAC panel. Install conduit, termination boxes, pull wires, connect at panel and skids** | $ | $ |
| | | | **SUBTOTAL: ELECTRICAL** | $ | |
| | | | **INSTRUMENTATION AND CONTROL** | | |
| **26** | 100 | LF | **1" rigid conduit from existing PLC to chemical feed area** | $ | $ |
| **27** | 20 | LF | **1" flexible conduit from instrument signal junction box to skid** | $ | $ |
| **28** | 2 | EA | **NEMA 4 x termination boxes** | $ | $ |
| **29** | 175 | LF | **8 shielded pair, 18 GA. Instrument cable and multi-conductor cable pulled in conduit** | $ | $ |
| **30** | 2 | EA | **Install conduit, junction boxes, pull signal wires, and connect at existing PLC and skids** | $ | $ |
| **31** | 1 | LS | **Misc. PVC conduit fittings and liquid tight connectors** | $ | $ |
| | | | **SUBTOTAL: INSTRUMENTATION AND CONTROL** | $ | |

**TOTAL BID PRICE $**_____
(Figures)*

**TOTAL BID PRICE**: _____
(Words)*

_____

***<u>BID MAY BE REJECTED IF TOTAL IS NOT SHOWN IN FIGURES AND WORDS</u>.**

**B2010-14**

The undersigned furthermore agrees to enter into and execute a contract, with necessary bonds, at the unit prices set forth herein and in case of default in executing such contract, with necessary bonds, the check or bond accompanying this bid and the money payable thereon shall be forfeited thereby to and remain the property of the City of Torrance.

The above unit prices include all work appurtenant to the various items as outlined in the Specifications and all work or expense required for the satisfactory completion of said items. In case of discrepancies between unit prices and totals, the unit prices shall govern.

The undersigned declares that it has carefully examined the Plans, Specifications, and Contract Documents, and has investigated the site of the work and is familiar with the conditions thereon.

_____
Contractor

Date: _____ By: _____

Contractor's State License Address: _____

No. _____ _____

Class _____ Phone: _____

## ACKNOWLEDGMENT OF ADDENDA RECEIVED – B2010-14

The Bidder shall acknowledge the receipt of addenda by placing an "X" by each addendum received.

Addendum No. 1 _____

Addendum No. 2 _____

Addendum No. 3 _____

Addendum No. 4 _____

Addendum No. 5 _____

Addendum No. 6 _____

Addendum No. 7 _____

Addendum No. 8 _____

If an addendum or addenda have been issued by the City and not noted above as being received by the Bidder, the Bid Proposal may be rejected.

_____ _____

Bidder's Signature Date

**CONTRACTOR'S AFFIDAVIT**

STATE OF CALIFORNIA }
}
COUNTY OF _____} **B2010-14**

_____, being first duly sworn, deposes and says:

1. That he is the _____
Title

of _____
**(Name of Partnership, Corporation, or Sole Proprietorship)**

hereinafter called "Contractor," who has submitted to the City of Torrance a proposal for the INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702), B2010-14;

2. That said proposal is genuine; that the same is not sham; that all statement of facts therein are true;

3. That such proposal was not made in the interest or behalf of any person, partnership, company, association, organization or corporation not named or disclosed;

4. That the Contractor did not, directly or indirectly, induce, solicit or agree with anyone else to submit a false or sham bid, to refrain from bidding, or to withdraw the bid, to raise or fix the bid price of the Contractor or anyone else, or to raise or fix any overhead, profit or cost element of the Contractor's price or the price of anyone else; and did not attempt to induce action prejudicial to the interest of the City of Torrance, or of any other bidder, or anyone else interested in the proposed contract;

5. That the Contractor has not in any manner sought by collusion to secure for itself an advantage over any other bidder or to induce action prejudicial to the interests of the City of Torrance, or of any other bidder or of anyone else interested in the proposed contract;

6. That the Contractor has not accepted any bid from any subcontractor or materialman through any bid depository, the bylaws, rules or regulations of which prohibit or prevent the Contractor from considering any bid from any subcontractor or materialman, which is not processed through said bid depository, or which prevent any subcontractor or materialman from bidding to any contractor who does not use the facilities of or accept bids from or through such bid depository;

**<u>CONTRACTOR'S AFFIDAVIT</u> (CONTINUED)**

7. That the Contractor did not, directly or indirectly, submit the Contractor's bid price or any breakdown thereof, or the contents thereof, or divulge information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, or to any individual or group of Individuals, except to the City of Torrance, or to any person or persons who have a partnership or other financial interest with said Contractor in its business.

Dated this _____ day of _____, 20___.

Subscribed and Sworn to
before me this _____ day
of _____, 20___.

_____
Notary Public in and for said
County and State.
(Seal)

_____
(Contractor)

_____
(Title)

**BID BOND**

**B2010-14**

**KNOW ALL MEN BY THESE PRESENTS:** That we, _____

_____

as principal, and _____

as sureties, are held and firmly bound unto the City of Torrance, State of California, in the penal sum of _____ dollars ($_____), for the payment whereof we hereby bind ourselves, our successors, heirs, executors or administrators jointly and severally, firmly by these presents.

The condition of this obligation is such that, whereas the above bounded principal is about to file with and submit to the City of Torrance a bid or proposal for the performance of certain work as required in the City of Torrance, No. B2010-14, said work being: the INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702), and in compliance with the Specifications therefore under an invitation of said City contained in a notice or advertisement for bids or proposals; now if the bid or proposal of the said principal shall be accepted and if the said work be thereupon awarded to the principal by said City and if the said principal shall enter into a contract with the said City in accordance with said bid or proposal, or if the bid or proposal of the said principal is rejected, then this bond shall be void and of no effect and otherwise in full force and effect.

**WITNESS** our hands this _____ day of _____, 20___.

_____
Principal

_____
Surety/Attorney-in-Fact

_____
Signature

Name: _____
Local Address: _____
_____
Phone No.: _____
Fax No.: _____

## LIST OF SUBCONTRACTORS

The Bidder is required to fill in the following blanks in accordance with the provisions of the Subletting and Subcontracting Fair Practices Act (Chapter 2 of Division 5, Title 1 of the Government Code of the State of California) and should familiarize itself with Section 2-3 of the Standard Specifications.

Name Under Which Subcontractor is Licensed: _____

License Number: _____

Address of Office, Mill or Shop: _____

Specific Description of Sub-Contract: _____

Name Under Which Subcontractor is Licensed: _____

License Number: _____

Address of Office, Mill or Shop: _____

Specific Description of Sub-Contract: _____

Name Under Which Subcontractor is Licensed: _____

License Number: _____

Address of Office, Mill or Shop: _____

Specific Description of Sub-Contract: _____

Name Under Which Subcontractor is Licensed: _____

License Number: _____

Address of Office, Mill or Shop: _____

Specific Description of Sub-Contract: _____

Subcontractors listed in accordance with the provisions of Section 2-3 must be properly licensed under the laws of the State of California for the type of work which they are to perform. Do not list alternate subcontractors for the same work.

# REFERENCES

(Work similar in magnitude and degree of difficulty completed by Contractor within the past three [3] years.)

1. Name (Firm/Agency): _____

   Address: _____

   Contact Person: _____ Telephone No.: _____

   Title of Project: _____

   Project Location: _____

   Date of Completion: _____ Contract Amount: $_____

2. Name (Firm/Agency): _____

   Address: _____

   Contact Person: _____ Telephone No.: _____

   Title of Project: _____

   Project Location: _____

   Date of Completion: _____ Contract Amount: $_____

3. Name (Firm/Agency): _____

   Address: _____

   Contact Person: _____ Telephone No.: _____

   Title of Project: _____

   Project Location: _____

   Date of Completion: _____ Contract Amount: $_____

4. Name (Firm/Agency): _____

   Address: _____

   Contact Person: _____ Telephone No.: _____

   Title of Project: _____

   Project Location: _____

   Date of Completion: _____ Contract Amount: $_____

## REFERENCES

If Contractor has not performed work for the City of Torrance within the last five (5) years, list all work done within said five years (attach additional sheets if necessary). Note if work was done as subcontractor [include only subcontract amount]:

| Work Description & Contract Amount | Agency | Date Completed |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

Contractor's License No.: _____ Class: _____

a. Date first obtained: _____ Expiration _____

b. Has License ever been suspended or revoked? _____

If yes, describe when and why: _____

c. Any current claims against License or Bond? _____

If yes, describe claims: _____

Principals in Company (List all – attach additional sheets if necessary):

| NAME | TITLE | LICENSE NO. (If Applicable) |
|---|---|---|
| | | |
| | | |
| | | |

**DBE BIDDERS LIST**
**B2010-14**

All bidders are required to provide the following information for each DBE and non-DBE subcontractor or subconsultant who provided a proposal, bid, quote, or were contacted by the proposed prime bidder. This information is required from the proposed prime bidder and must be submitted with their bid/proposal. The City of Torrance will use this information to maintain and update a "Bidders" List to assist in the overall annual DBE goal-setting process.

**Firm Name:** _____ **Phone:** _____

**Address:** _____ **Fax:** _____

**Contact Person:** _____ **No. of years in business:** _____

**Is the firm currently certified as a DBE under 49 CFR Part 26: YES:** ____ **NO:** ____

**Type of work/services/materials provided by firm?** _____

_____

**What was your firm's Gross Annual receipts for last year?**

**Less than $1 Million**
**Less than $5 Million**
**Less than $10 Million**
**Less than $15 Million**
**More than $15 Million**

This form can be duplicated if necessary to report all bidders (DBEs and non-DBEs) information.

## VIOLATIONS OF FEDERAL, STATE OR LOCAL LAWS

1. Has your firm or its officers been assessed any penalties by an agency for noncompliance or violations of Federal, State or Local labor laws and/or business or licensing regulations within the past five (5) years relating to your construction projects?

   Yes/No: _____Federal/State:_____

   If "yes," identify and describe, (including agency and status): _____

   _____

   _____

   _____

   Have the penalties been paid? Yes/No: _____

2. Does your firm or its officers have any ongoing investigations by any public agency regarding violations of the State Labor Code, California Business and Professions Code or State Licensing Laws?

   Yes/No: _____ Code/Laws: _____ Section/Article: _____

   If "yes," identify and describe, (including agency and status): _____

   _____

   _____

   _____

## DISQUALIFICATION OR DEBARMENT

Has your firm, any officer of your firm, or any employee who has a proprietary interest in your firm ever been disqualified, removed, or otherwise prevented from bidding on, performing work on, or completing a federal, state or local project because of a violation of law or a safety regulation? Yes/No: _____. If yes, provide the following information (if more than once, use separate sheets):

Date: _____ Entity: _____

Location: _____

Reason: _____

_____

_____

_____

_____

Provide Status and any Supplemental Statement: _____

_____

_____

_____

_____

Has your firm been reinstated by this entity? Yes/No: _____

# SECTION D

## DOCUMENTS TO BE COMPLETED AND DELIVERED TO CITY PRIOR TO AWARD OF CONTRACT

## PERFORMANCE BOND

**KNOW ALL MEN BY THESE PRESENTS:**

That we, _____as Principal(s) and _____a corporation, incorporated, organized, and existing under the laws of the State of _____, and authorized to execute bonds and undertakings and to do a general surety business in the State of California, as Surety, are jointly and severally held and firmly bound unto the City of Torrance, a municipal corporation, located in the County of Los Angeles, State of California, in the full and just sum of: _____ Dollars ($_____), lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves and our respective heirs, executors, administrators, representative, successors and assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH,** that: **WHEREAS,** said Principal(s) have/has entered into, or are/is about to enter into, a certain written contract or agreement, dated as of the _____ day of _____, 20____, with the said City of Torrance for the **INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702), B2010-14***,* all as is more specifically set forth in said contract or agreement, a full, true and correct copy of which is hereunto attached, and hereby referred to and by this reference incorporated herein and made a part hereof;

**NOW, THEREFORE,** if the said Principal(s) shall faithfully and well and truly do, perform and complete, or cause to be done, performed and complete, each and all of the covenants, terms, conditions, requirements, obligations, acts and things, to be met, done or performed by said Principal(s), including any guarantee period as set forth in, or required by, said contract or agreement, all at and within the time or times, and in the manner as therein specified and contemplated, then this bond and obligation shall be null and void; otherwise it shall be and remain in full force, virtue and effect.

The said Surety, for value received, hereby stipulates and agrees that no amendment, change, extension of time, alteration or addition to said contract or agreement, or of any feature or item or items of performance required therein or thereunder, shall in any manner affect its obligations on or under this bond; and said Surety does hereby waive notice of any such amendment, change, extension of time, alteration, or addition to said contract or agreement, and of any feature or item or items of performance required therein or thereunder.

**PERFORMANCE BOND (CONTINUED)**

In the event any suit, action or proceedings is instituted to recover on this bond or obligation, said Surety will pay, and does hereby agree to pay, as attorney's fees for said City, such sum as the Court in any such suit, action or proceeding may adjudge reasonable.

**EXECUTED, SEALED AND DATED** this _____ day of _____, 20____.

CORPORATE SEAL

PRINCIPAL(S):

BY _____

BY _____

CORPORATE SEAL

SURETY:

BY _____

## LABOR AND MATERIAL BOND

**KNOW ALL MEN BY THESE PRESENTS:**

That we, _____
As Principal(s) and
_____ a corporation,
incorporated, organized, and existing under the laws of the State of _____,
and authorized to execute bonds and undertakings and to do a general surety business in the State of California, as Surety, are jointly and severally held and firmly bound unto:

(a) The State of California for the use and benefit of the State Treasurer, as ex-officio Treasurer and custodian of the Unemployment Fund of said State; and

(b) The City of Torrance, California; and

(c) Any and all persons who do or perform or who did or performed work or labor upon or in connection with the work or improvement referred to in the contract or agreement hereinafter mentioned; and

(d) Any and all materialmen, persons, companies, firms, association, or corporations, supplying or furnishing any materials, provisions, provender, transportation, appliances or power, or other supplies used in, upon, for or about or in connection with the performance of the work or improvement contracted to be executed, done, made or performed under said contract or agreement; and

(e) Any and all persons, companies, firms, associations, or corporations furnishing, renting, or hiring teams, equipment, implements or machinery for, in connection with, or contributing to, said work to be done or improvement to be made under said contract or agreement; and

(f) Any and all persons, companies, firms, associations, or corporations who supply both work and materials;

and whose claim has not been paid by said Principal(s), in full and just sum of _____ Dollars ($_____), lawful money of the United States of America, for the payment of which will and truly to be made, said Principal(s) and said Surety do hereby bind themselves and their respective heirs, executors, administrators, representatives, successors and assigns, jointly and severally, firmly by these presents.

**LABOR AND MATERIAL BOND (CONTINUED)**

**THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH, THAT: WHEREAS,** said Principal(s) have/has entered into or are/is about to enter into a certain written contract or agreement, dated as of the _____ day of _____20 ___, with the City of Torrance for the **INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702), B2010-14**, all as is more specifically set forth in said contract or agreement, a full, true and correct copy of which is hereunto attached, and hereby referred to and by this reference incorporated herein and made a part hereof;

**NOW, THEREFORE,** if the said Principal(s) (or any of his/her, its, or their subcontractors) under said contract or agreement fails or fail to pay:

(1) For any materials, provisions, provender, transportation, appliances, or power, or other supplies; or

(2) For the hire of any teams, equipment, implements, or machinery; or

(3) For any work or labor; supplies, furnished, provided, used, done or performed in, upon, for or about or in connection with the said work or improvement; or

(4) For amounts due under the Unemployment Insurance Act of the State of California with respect to such work or improvement;

the Surety on this bond will pay the same in an amount not exceeding the sum hereinabove specified in this bond; and, also, in case suit is brought upon this bond, said Surety will (and does hereby agree to) pay a reasonable attorney's fee, to be fixed and taxed as costs, and included in the judgment therein rendered.

This bond shall (and it is hereby made to) insure to the benefit of any and all persons entitled to file claims under Section 1192.1 of the Code of Civil Procedure of the State of California, so as to give a right of action to them or their assigns in any suit brought upon this bond, all as contemplated under the provisions of Section 4205 of the Government Code, and of Chapter 1 of Title 4 of Part 3 of the Code of Civil Procedure, of the State of California.

This bond is executed and filed in connection with said contract or agreement hereunto attached to comply with each and all of the provisions of the laws of the State of California above mentioned or referred to, and of all amendments thereto, and the obligors so intend and do hereby bind themselves accordingly.

**LABOR AND MATERIAL BOND (CONTINUED)**

The said Surety, for value received, hereby stipulates and agrees that no amendment, change, extension of time, alteration, or addition to said contract or agreement, or of any feature or item or items of performance required therein or thereunder, shall in any manner affect its obligations on or under this bond; and said Surety does hereby waive notice of any such amendment, change, extension of time, alteration, or addition to said contract or agreement, and of any feature or item or items of performance required therein or thereunder.

**EXECUTED, SEALED AND DATED** this _____ day of _____, 20____

CORPORATE SEAL

PRINCIPAL:

BY_____

CORPORATE SEAL

SURETY:

BY_____

**PUBLIC WORKS AGREEMENT**

This PUBLIC WORKS AGREEMENT ("Agreement") is made and entered into as of _____, 20___ (the "Effective Date"), by and between the CITY OF TORRANCE, a municipal corporation ("CITY"), and _____ ("CONTRACTOR").

**RECITALS:**

A. The CITY wishes to retain the services of an experienced and qualified CONTRACTOR to install the **SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702)**;

B. In order to obtain the desired services, The CITY has circulated a Notice Inviting Bids for the **INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702)**, Notice Inviting Bids No. **B2010-14** (the "NIB"); and

C. CONTRACTOR has submitted a Bid (the "Bid") in response to the NIB. CONTRACTOR represents that it is qualified to perform those services requested in the Plans and Specifications. Based upon its review of all Bids submitted in response to the NIB, The CITY is willing to award the contract to CONTRACTOR.

**AGREEMENT:**

**1. <u>SERVICES TO BE PERFORMED BY CONTRACTOR</u>**

CONTRACTOR will provide the services and install those materials listed in the Plans and Specifications, which are on file in the Public Works Department. The NIB and the Plans and Specifications are made a part of this Agreement. A copy of the Bid is attached as Exhibit A.

**2. <u>TERM</u>**

Unless earlier terminated in accordance with Paragraph 4 below, this Agreement will continue in full force and effect for one year from the Effective Date.

**3. <u>COMPENSATION</u>**

A. CONTRACTOR's Fee.

For services rendered pursuant to this Agreement, CONTRACTOR will be paid in accordance with CONTRACTOR's Bid; provided, however, that in no event will the total amount of money paid the CONTRACTOR, for services initially contemplated by this Agreement, exceed the sum of

$_____ ("Agreement Sum"), unless otherwise first approved in writing by the CITY.

B. Schedule of Payment.

Provided that the CONTRACTOR is not in default under the terms of this Agreement, upon presentation of an invoice, CONTRACTOR will be paid monthly, within 30 days after the date of the monthly invoice.

**4. <u>TERMINATION OF AGREEMENT</u>**

A. Termination by CITY for Convenience.

1. CITY may, at any time, terminate the Agreement for CITY's convenience and without cause.

2. Upon receipt of written notice from CITY of such termination for CITY's convenience, CONTRACTOR will:

   a) cease operations as directed by CITY in the notice;
   b) take actions necessary, or that CITY may direct, for the protection preservation of the work; and
   c) except for work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

3. In case of such termination for CITY's convenience, CONTRACTOR will be entitled to receive payment for work executed; and costs incurred by reason of such termination, along with reasonable overhead and profit on the work not executed.

B. Termination for Cause.

1. If either party fails to perform any term, covenant or condition in this Agreement and that failure continues for 15 calendar days after the nondefaulting party gives the defaulting party notice of the failure to perform, this Agreement may be terminated for cause; provided, however, that if during the notice period the defaulting party has promptly commenced and continues diligent efforts to remedy the default, the defaulting party will have such additional time as is reasonably necessary to remedy the default.

2. In the event this Agreement is terminated for cause by the default of the CONTRACTOR, the CITY may, at the expense of the CONTRACTOR and its surety, complete this Agreement or cause it to be completed. Any check or bond delivered to the CITY in connection with this Agreement, and the money payable thereon, will be forfeited to and remain the property of the CITY. All moneys due the CONTRACTOR under the terms of this Agreement will be retained by the CITY, but the retention will not release the CONTRACTOR and its surety from liability

for the default. Under these circumstances, however, the CONTRACTOR and its surety will be credited with the amount of money retained, toward any amount by which the cost of completion exceeds the Agreement Sum and any amount authorized for extra services.

3. Termination for cause will not affect or terminate any of the rights of the CITY as against the CONTRACTOR or its surety then existing, or which may thereafter accrue because of the default; this provision is in addition to all other rights and remedies available to the CITY under law.

C. Termination for Breach of Law.

In the event the CONTRACTOR or any of its officers, directors, shareholders, employees, agents, subsidiaries or affiliates is convicted (i) of a criminal offense as an incident to obtaining or attempting to obtain a public or private contract or subcontract, or in the performance of a contract or subcontract; (ii) under state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, or any other offense indicating a lack of business integrity or business honesty which currently, seriously, and directly affects responsibility as a public consultant or contractor; (iii) under state or federal antitrust statutes arising out of the submission of bids or proposals; or (iv) of violation of Paragraph 19 of this Agreement; or for any other cause the CITY determines to be so serious and compelling as to affect CONTRACTOR's responsibility as a public consultant or contractor, including but not limited to, debarment by another governmental agency, then the CITY reserves the unilateral right to terminate this Agreement or to impose such other sanctions (which may include financial sanctions, temporary suspensions or any other condition deemed appropriate short of termination) as it deems proper. The CITY will not take action until CONTRACTOR has been given notice and an opportunity to present evidence in mitigation.

## 5. FORCE MAJEURE

If any party fails to perform its obligations because of strikes, lockouts, labor disputes, embargoes, acts of God, inability to obtain labor or materials or reasonable substitutes for labor or materials, governmental restrictions, governmental regulations, governmental controls, judicial orders, enemy or hostile governmental action, civil commotion, fire or other casualty, or other causes beyond the reasonable control of the party obligated to perform, then that party's performance shall be excused for a period equal to the period of such cause for failure to perform.

## 6. RETENTION OF FUNDS

CONTRACTOR authorizes the CITY to deduct from any amount payable to CONTRACTOR (whether or not arising out of this Agreement) any amounts the payment of which may be in dispute or that are necessary to compensate the CITY for any losses, costs, liabilities, or damages suffered by the CITY, and all amounts for which the CITY may be liable to third parties, by reason of CONTRACTOR's negligent acts or omissions or willful misconduct in performing or failing to perform CONTRACTOR's obligations under this Agreement. In the event that any claim is made by a third party, the amount or validity of which is disputed by CONTRACTOR, or any indebtedness exists that appears to be the basis for a claim of lien, the CITY may withhold from any payment due, without liability for interest because of the withholding, an amount sufficient to cover the claim. The failure of the CITY to exercise the right to deduct or to withhold will not, however, affect the obligations of CONTRACTOR to insure, indemnify, and protect the CITY as elsewhere provided in this Agreement.

## 7. THE CITY'S REPRESENTATIVE

The Public Works Director is designated as the "City Representative," authorized to act in its behalf with respect to the work and services specified in this Agreement and to make all decisions in connection with this Agreement. Whenever approval, directions, or other actions are required by the CITY under this Agreement, those actions will be taken by the City Representative, unless otherwise stated. The City Manager has the right to designate another City Representative at any time, by providing notice to CONTRACTOR.

## 8. CONTRACTOR REPRESENTATIVE(S)

The following principal(s) of CONTRACTOR are designated as being the principal(s) and representative(s) of CONTRACTOR authorized to act in its behalf with respect to the work specified in this Agreement and make all decisions in connection with this Agreement:

_____

_____

_____

## 9. INDEPENDENT CONTRACTOR

The CONTRACTOR is, and at all times will remain as to the CITY, a wholly independent contractor. Neither the CITY nor any of its agents will have control over the conduct of the CONTRACTOR or any of the CONTRACTOR's employees, except as otherwise set forth in this Agreement. The CONTRACTOR may not, at any time or in any manner, represent that it or any of its agents or employees are in any manner agents or employees of the CITY.

## 10. BUSINESS LICENSE

The CONTRACTOR must obtain a City business license prior to the start of work under this Agreement, unless CONTRACTOR is qualified for an exemption.

## 11. OTHER LICENSES AND PERMITS

CONTRACTOR warrants that it has all professional, contracting and other permits and licenses required to undertake the work contemplated by this Agreement.

## 12. FAMILIARITY WITH WORK

By executing this Agreement, CONTRACTOR warrants that CONTRACTOR (a) has thoroughly investigated and considered the scope of services to be performed, (b) has carefully considered how the services should be performed, and (c) fully understands the facilities, difficulties and restrictions attending performance of the services under this Agreement. If the services involve work upon any site, CONTRACTOR warrants that CONTRACTOR has or will investigate the site and is or will be fully acquainted with the conditions there existing, prior to commencement of services set forth in this Agreement. Should CONTRACTOR discover any latent or unknown conditions that will materially affect the performance of the services set forth in this Agreement, CONTRACTOR must immediately inform the CITY of that fact and may not proceed except at CONTRACTOR's risk until written instructions are received from the CITY.

## 13. CARE OF WORK

CONTRACTOR must adopt reasonable methods during the life of the Agreement to furnish continuous protection to the work, and the equipment, materials, papers, documents, plans, studies and other components to prevent losses or damages, and will be responsible for all damages, to persons or property, until acceptance of the work by the CITY, except those losses or damages as may be caused by the CITY's own negligence.

## 14. CONTRACTOR'S ACCOUNTING RECORDS; OTHER PROJECT RECORDS

Records of the CONTRACTOR's time pertaining to the project, and records of accounts between the CITY and the CONTRACTOR, will be kept on a generally recognized accounting basis. CONTRACTOR will also maintain all other records, including without limitation specifications, drawings, progress reports and the like, relating to the project. All records will be available to the CITY during normal working hours. CONTRACTOR will maintain these records for three years after final payment.

## 15. INDEMNIFICATION

CONTRACTOR will indemnify, defend, and hold harmless CITY, the City Council, each member thereof, present and future, its officers, agents and employees from and against any and all liability, expenses, including defense costs and legal fees, and claims for damages whatsoever, including, but not limited to, those arising from breach of contract, bodily injury, death, personal injury, property damage, loss of use, or property loss however the same may be caused and regardless of the responsibility for negligence. The obligation to indemnify, defend and hold harmless includes, but is not limited to, any liability or expense, including defense costs and legal fees, arising from the negligent acts or omissions, or willful misconduct of CONTRACTOR, its officers, employees, agents, subcontractors or vendors. It is further agreed, CONTRACTOR's obligations to indemnify, defend and hold harmless will apply even in the event of concurrent negligence on the part of CITY, the City Council, each member thereof, present and future, or its officers, agents and employees, except for liability resulting solely from the negligence or willful misconduct of CITY, its officers, employees or agents. Payment by CITY is not a condition precedent to enforcement of this indemnity. In the event of any dispute between CONTRACTOR and CITY, as to whether liability arises from the sole negligence of the CITY or its officers, employees, agents, subcontractors or vendors, CONTRACTOR will be obligated to pay for CITY's defense until such time as a final judgment has been entered adjudicating the CITY as solely negligent. CONTRACTOR will not be entitled in the event of such a determination to any reimbursement of defense costs including but not limited to attorney's fees, expert fees and costs of litigation.

## 16. NON-LIABILITY OF THE CITY'S OFFICERS AND EMPLOYEES

No officer or employee of the CITY will be personally liable to CONTRACTOR, in the event of any default or breach by the CITY or for any amount that may become due to CONTRACTOR.

## 17. INSURANCE

A. CONTRACTOR must maintain at its sole expense the following insurance, which will be full coverage not subject to self insurance provisions:

1. Automobile Liability, including owned, non-owned and hired vehicles, with at least the following limits of liability:

    a. Combined single limits of $2,000,000 per occurrence.

2. General Liability including coverage for premises, products and completed operations, independent contractors, personal injury and contractual obligations with combined single limits of coverage of at least $3,000,000 per occurrence, with an annual aggregate of no less than $5,000,000.

3. Workers' Compensation with limits as required by the State of California and Employers Liability with limits of at least $1,000,000.

B. The insurance provided by CONTRACTOR will be primary and non-contributory.

C. The CITY of Torrance, the City Council and each member thereof, members of boards and commissions, every officer, agent, official, employee and volunteer must be named as additional insureds under the automobile and general liability policies.

D. CONTRACTOR must provide certificates of insurance and/or endorsements to the City Clerk of the City of Torrance before the commencement of work.

E. Each insurance policy required by this Paragraph must contain a provision that no termination, cancellation or change of coverage can be made without thirty days notice to the CITY.

F. CONTRACTOR must include all subcontractors as insureds under its policies or must furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors will be subject to all of the requirements of this Paragraph 17.

**18. <u>SUFFICIENCY OF INSURERS</u>**

Insurance required by this Agreement will be satisfactory only if issued by companies admitted to do business in California, rated "B+" or better in the most recent edition of Best's Key Rating Guide, and only if they are of a financial category Class VII or better, unless these requirements are waived by the Risk Manager of the CITY ("Risk Manager") due to unique circumstances. In the event the Risk Manager determines that the work or services to be performed under this Agreement creates an increased or decreased risk of loss to the CITY, the CONTRACTOR agrees that the minimum limits of any insurance policies and/or the performance bond required by this Agreement may be changed accordingly upon receipt of written notice from the Risk Manager; provided that CONTRACTOR will have the right to appeal a determination of increased coverage by the Risk Manager to the City Council of the CITY within 10 days of receipt of notice from the Risk Manager.

## 19. CONFLICT OF INTEREST

A. No officer or employee of the CITY may have any financial interest, direct or indirect, in this Agreement, nor may any officer or employee participate in any decision relating to the Agreement that effects the officer or employee's financial interest or the financial interest of any corporation, partnership or association in which the officer or employee is, directly or indirectly interested, in violation of any law, rule or regulation.

B. No person may offer, give, or agree to give any officer or employee or former officer or employee, nor may any officer or employee solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any way pertaining to any program requirement, contract or subcontract, or to any solicitation or proposal.

## 20. NOTICE

A. All notices, requests, demands, or other communications under this Agreement will be in writing. Notice will be sufficiently given for all purposes as follows:

1. Personal delivery. When personally delivered to the recipient: notice is effective on delivery.

2. First Class mail. When mailed first class to the last address of the recipient known to the party giving notice: notice is effective three mail delivery days after deposit in an United States Postal Service office or mailbox.

3. Certified mail. When mailed certified mail, return receipt requested: notice is effective on receipt, if delivery is confirmed by a return receipt.

4. Overnight delivery. When delivered by an overnight delivery service, charges prepaid or charged to the sender's account: notice is effective on delivery, if delivery is confirmed by the delivery service.

5. Facsimile transmission. When sent by fax to the last fax number of the recipient known to the party giving notice: notice is effective on receipt. Any notice given by fax will be deemed received on the next business day if it is received after 5:00 p.m. (recipient's time) or on a non-business day.

6. Addresses for purpose of giving notice are as follows:

CONTRACTOR: _____
_____
_____
_____
Fax: _____

CITY: City Clerk
City of Torrance
3031 Torrance Boulevard
Torrance, CA 90503-2970
Fax: (310) 618-2931

B. Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified, will be deemed effective as of the first date the notice was refused, unclaimed or deemed undeliverable by the postal authorities, messenger or overnight delivery service.

C. Either party may change its address or fax number by giving the other party notice of the change in any manner permitted by this Agreement.

**21. PROHIBITION AGAINST ASSIGNMENT AND SUBCONTRACTING**

This Agreement and all exhibits are binding on the heirs, successors, and assigns of the parties. The Agreement may not be assigned or subcontracted by either the CITY or CONTRACTOR without the prior written consent of the other.

**22. INTEGRATION; AMENDMENT**

This Agreement represents the entire understanding of the CITY and CONTRACTOR as to those matters contained in it. No prior oral or written understanding will be of any force or effect with respect to the terms of this Agreement. The Agreement may not be modified or altered except in writing signed by both parties.

**23. INTERPRETATION**

The terms of this Agreement should be construed in accordance with the meaning of the language used and should not be construed for or against either party by reason of the authorship of this Agreement or any other rule of construction that might otherwise apply.

## 24. SEVERABILITY

If any part of this Agreement is found to be in conflict with applicable laws, that part will be inoperative, null and void insofar as it is in conflict with any applicable laws, but the remainder of the Agreement will remain in full force and effect.

## 25. TIME OF ESSENCE

Time is of the essence in the performance of this Agreement.

## 26. GOVERNING LAW; JURISDICTION

This Agreement will be administered and interpreted under the laws of the State of California. Jurisdiction of any litigation arising from the Agreement will be in Los Angeles County, California.

## 27. COMPLIANCE WITH STATUTES AND REGULATIONS

CONTRACTOR will be knowledgeable of and will comply with all applicable federal, state, county and city statutes, rules, regulations, ordinances and orders.

## 28. WAIVER OF BREACH

No delay or omission in the exercise of any right or remedy by a nondefaulting party on any default will impair the right or remedy or be construed as a waiver. A party's consent or approval of any act by the other party requiring the party's consent or approval will not be deemed to waive or render unnecessary the other party's consent to or approval of any subsequent act. Any waiver by either party of any default must be in writing and will not be a waiver of any other default concerning the same or any other provision of this Agreement.

## 29. ATTORNEY'S FEES

Except as provided for in Paragraph 15, in any dispute, litigation, arbitration, or other proceeding by which one party either seeks to enforce its rights under this Agreement (whether in contract, tort or both) or seeks a declaration of any rights or obligations under this Agreement, the prevailing party will be awarded reasonable attorney's fees, together with any costs and expenses, to resolve the dispute and to enforce any judgment.

## 30. EXHIBITS

All exhibits identified in this Agreement are incorporated into the Agreement by this reference.

**31. CONTRACTOR'S AUTHORITY TO EXECUTE**

The persons executing this Agreement on behalf of the CONTRACTOR warrant that (i) the CONTRACTOR is duly organized and existing; (ii) they are duly authorized to execute this Agreement on behalf of the CONTRACTOR; (iii) by so executing this Agreement, the CONTRACTOR is formally bound to the provisions of this Agreement; and (iv) the entering into this Agreement does not violate any provision of any other Agreement to which the CONTRACTOR is bound.

CITY OF TORRANCE,
a Municipal Corporation

_____

_____

_____
Frank Scotto, Mayor

By: _____

ATTEST:

_____
Sue Herbers, City Clerk

APPROVED AS TO FORM:

JOHN L. FELLOWS III
City Attorney

By: _____
Patrick Sullivan
Deputy City Attorney

Attachments: Exhibit A: Bid

**EXHIBIT A**

**Bid**

**[To be attached]**

**CITY OF TORRANCE**
**CONSTRUCTION OR SERVICE CONTRACT ENDORSEMENT**

To be attached to and made a part of all policies insuring the liability of any person, form or corporation performing services under contract for the City of Torrance.

Not withstanding any inconsistent expression in the policy to which this endorsement is attached, or in any other endorsement now or hereafter attached thereto, or made a part thereof, the protection afforded by said policy shall:

1. Include the City of Torrance as an additional insured. (To include the elected officials, appointed officials, and employees.)

2. Indemnify and save harmless the City of Torrance against any and all claims resulting from the undertaking specified in the contract known as:

**PROPOSAL, SPECIFICATIONS, BOND AND AFFIDAVIT**
**FOR THE**
**INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702)**

**B2010-14**

This hold harmless assumption on the part of the underwriters shall include all costs of investigation and defense, including claims based on damage to substructures not shown, not located on the plans, or shown incorrectly.

3. Not be cancelled except by notice to the City Attorney of the City of Torrance at least thirty (30) days prior to the date of cancellation.

4. Provide single limit for Bodily Injury Liability and Property Damage Liability combined, $3,000,000 each Occurrence, and $5,000,000 Aggregate.

5. Limited classifications, restricting endorsements, exclusions or other special provisions contained in the policy shall not act to limit the benefits of coverage as they shall apply to the City of Torrance as enumerated in this endorsement. However, nothing herein contained shall affect any rights of the insurer against the insured.

6. It is further expressly agreed by and between the parties hereto that the following two provisions, (a) and (b), are a part of this contract:

   (a) That the Contractor specifically agrees to comply with applicable provisions of Section 1777.5 of the Labor Code relating to the employment

by contractor or subcontractor under it, of journeyman or apprentices, or workmen, in any apprenticeable craft or trade.

(b) By my signature hereunder, as Contractor, I certify that I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

The limits of liability as stated in this endorsement apply to the insurance afforded by this endorsement notwithstanding that the policy may have lower limits of liability applying elsewhere in the policy.

_____
Duly Authorized Agent

Attached to and forming part of
Policy No._____
of the _____

Date: _____ _____
Expiration Date: _____

## WORKERS' COMPENSATION INSURANCE CERTIFICATION

In compliance with Section 7-4 of the Standard Specifications, the Contractor shall complete and submit the following certification with a Certificate of Insurance before execution of the contract.

I am aware of, and will comply with, Section 3700 of the Labor Code, requiring every employer to be insured against liability for Workers' Compensation or to undertake self-insurance before commencing any of the work.

_____
CONTRACTOR

By: _____

Title:_____

# SECTION E

# SPECIAL PROVISIONS

**The following Special Provisions supplement and amend the Standard Specifications for Public Works Construction (latest edition). These Special Provisions have been arranged into a format that parallels the Standard Specifications for Public Works Construction.**

# SECTION "E" - SPECIAL PROVISIONS

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**APPENDIX I CITY OF TORRANCE PERMIT AND BUSINESS LICENSE**

# PART 1 - GENERAL PROVISIONS

## SECTION 1 - TERMS, DEFINITIONS, ABBREVIATIONS, UNITS OF MEASURE, AND SYMBOLS

**1-2 DEFINITIONS.**

Add or redefine the following:

**AGENCY – THE CITY OF TORRANCE, HEREIN REFERRED TO AS, CITY.**

**Board** – The City Council of the City of Torrance, herein referred to as City Council.

**Engineer** –The Public Works Director and/or City Engineer of the City of Torrance, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

**Claim** -- 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 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 Agency.

**1-3 ABBREVIATIONS.**

**1-3.2 Common Usage:**

Add the following abbreviations:

| | |
|---|---|
| Approx | Approximate |
| Exist. | Existing |
| Temp. | Temporary |
| Theo. | Theoretical |
| WM | Wire mesh or water meter |
| PLC | Programmable Logic Controller |
| SCADA | Supervisory Control and Data Acquisition |
| HMI | Human Machine Interface |
| F | Fluoride |
| FOB | Freight on Board |

## SECTION 2 - SCOPE AND CONTROL OF THE WORK

**2-1 AWARD AND EXECUTION OF CONTRACT.** Replace the entire subsection with the following:

Within ten (10) working days after the date of the CITY'S award of contract, the Contractor shall execute and return all Contract Documents required by the CITY. The CITY reserves the right to terminate the award if the above requirement is not met. Such termination will result in the forfeiture of the Proposal Guaranty.

The Contract shall not be considered binding upon the CITY until executed by the authorized CITY officials.

**2-4 CONTRACT BONDS.** Revise the second sentence of the fourth paragraph to read as follows:

The "Performance Bond" shall remain in effect for one year following the date specified in the Notice of Completion or, if no Notice of Completion is recorded, for one year following the date of final acceptance by the Engineer.

**2-5. PLANS AND SPECIFICATIONS.**

**2-5.1 General.** Add the following sentence to the first paragraph to read as follows:

The Contractor shall maintain a control set of Plans and Specifications on the Work site at all times. All final locations determined in the field, and any deviations from the Plans and Specifications, shall be marked in red on this control set to show as-built conditions. Upon completion of the Work, the Contractor shall submit the control set to the Engineer for approval. Final payment will not be made until this requirement is met.

Add the following subsections:

**2-5.1.1 Plans.** Included as part of the Contract Documents are the following, which show the location, character, dimensions or details of the Work:

1) Project Plans

The plans and data provided with the Contract Documents are based on existing plans and documents. The plans and data are provided for information only. The Owner does not guarantee their accuracy and correctness. If the Bidder in preparing the Bid Proposal uses this information, the Bidder assumes all risks resulting from conditions differing from the information shown. The Bidder, in consideration for the information being provided, hereby releases the Owner and Consulting Engineer from any responsibility of obligation as to the accuracy of such information or for any additional compensation for work performed due to assumptions based on the use of such information.

2) Standard Plans

a. Standard Plans for Public Works Construction, latest edition, promulgated by Public Works Standards, Inc.

b. American Water Works Association Standards, latest edition.

**2-5.1.2 Specifications.** The Work shall be performed or executed in accordance with these Special Provisions and the following:

**A.** General

1. The publications listed below form a part of this specification to the extent referenced herein.
2. The latest publication revision and addendum in effect on the date of award shall be used.

**B. Standard Specifications for Public Works Construction**, latest edition and supplements thereto, hereinafter referred to as the Standard Specifications, as written and promulgated by Public Works Standards, Inc. The Standard Specifications are published by BNi Building News, Inc., 1612 South Clementine Street, Anaheim, CA 92802, Phone: (800) 873-6397.

**C. AMERICAN WATER WORKS ASSOCIATION (AWWA)**:

1. **B701** (2006) Sodium Fluoride

**D. ASME INTERNATIONAL** (ASME)

1. **ASME A13.1** (2007) Scheme for the Identification of Piping Systems
2. **ASME B16.5** (2009) Standard for Pipe Flanges and Flanged Fittings: NPS 1/2 Through NPS 24

**E. ASTM INTERNATIONAL** (ASTM)

1. **ASTM D 1785** (2006) Standard Specification for Poly(Vinyl Chloride) (PVC), Plastic Pipe, Schedules 40, 80, and 120
2. **ASTM D 1998** (2006) Polyethylene Upright Storage Tanks
3. **ASTM F 441/F 441M** (2009) Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80

**F. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION** (NEMA)

1. **NEMA 250** (2008) Enclosures for Electrical Equipment (1000 Volts Maximum)
2. **NEMA ICS 1** (2000; R 2005; R 2008) Standard for Industrial Control and Systems General Requirements
3. **NEMA ICS 2** (2000; R 2005; Errata 2008) Standard for Industrial Control and Systems: Controllers, Contactors, and Overload Relays Rated Not More than 2000 Volts AC or 750 Volts DC: Part 8 – Disconnect Devices for Use In Industrial Control Equipment

**G. NATIONAL FIRE PROTECTION ASSOCIATION** (NFPA)

**1. NFPA 70** (2008; AMD 1 2008) National Electrical Code - 2008 Edition

**H. NSF INTERNATIONAL** (NSF)

**1. NSF 60** (2009) Drinking Water Treatment Chemicals- Health Effects

**I. PLUMBING-HEATING-COOLING CONTRACTORS NATIONAL ASSOCIATION** (PHCC)

**1. NAPHCC NSPC** (2003) National Standard Plumbing Code

**J. UNDERWRITERS LABORATORIES** (UL)

**1.** UL 50 (2007) Standard for Enclosures for Electrical Equipment

**2-5.2 Precedence of Contract Documents.** Replace the entire subsection with the following:

If there is a conflict between any of the Contract Documents, the document highest in precedence shall control. The order of precedence shall be as follows:

1) Permits issued by other agencies.
2) Change Orders (including Plans and Specifications attached thereto).
3) Public Works Agreement
4) Addenda
5) Technical Specifications
6) Special and General Provisions
7) Plans
8) City Standard Plans
9) Other Standard Plans
10) Standard Specifications for Public Works Construction
11) Reference Specifications

With reference to the Plans/Drawings, the order of precedence is as follows:

1) Change Order plans govern over Addenda and Contract plans
2) Addenda plans govern over Contract plans
3) Contract plans govern over standard plans
4) Detail plans govern over general plans
5) Figures govern over scaled dimensions

Within the Specifications, the order of precedence is as follows:

1) Change Orders
2) Permits from other agencies/Supplemental Agreements
3) Technical Specifications

4) Special Provisions
5) Instruction to Bidders
6) Referenced Standard Plans
7) Referenced Standard Specifications

If the Contractor, in the course of the Work, becomes aware of any claimed errors or omissions in the Contract Documents or in the CITY's fieldwork, the Contractor shall immediately inform the Engineer. The Engineer shall promptly review the matter, and if the Engineer finds an error or omission has been made the Engineer shall determine the corrective actions and advise the Contractor accordingly. If the corrective work associated with an error or omission increases or decreases the amount of work called for in the Contract, the CITY shall issue an appropriate Change Order in accordance with 3-3. After discovery of an error or omission by the Contractor, any related work performed by the Contractor shall be done at the Contractor's risk unless authorized by the Engineer.

**2-5.3 Submittals**

**2-5.3.3 Shop Drawings.** Add the following:

Submittals are required for the following:

1) PLASTIFAB Guardian Shelter GS-081 or equiv.
2) Canopy shed from Shade-N-Net of Arizona or
   Sun Ports International., Inc. of Dallas TX or equiv.

In addition to the above, submittals may be required for any product, manufactured item, or system not specifically listed above.

**A.** The Contractor shall submit to the City for approval, two copies of drawings and data for all of the equipment to be furnished. Equipment test reports shall be submitted within 14 calendar days after testing, or 14 calendar days prior to shipment, whichever is sooner.

**B.** Required documents shall be submitted in complete sets so that sufficient information will be available for checking. Documentation shall be in the English language and shall include English units. Documents shall also include Tag number (if applicable), equipment manufacturer, model number, capacity, size, and weight. Drawings and data submitted without complete information will be returned without approval.

**C.** Within 10 calendar days after receipt of drawings and data, the City will transmit one copy of each to the Contractor, marked either "Returned for Revision", “Reviewed – No Corrections Noted”, "Approved", or "Approved as Revised". In

the last case, all revisions will be shown on the returned copy, which shall be considered as an approved drawing, and only approved drawings shall be used for fabrication.

**D.** Within 10 calendar days after receipt of drawings and data marked “Returned for Revision” or “Approved as Revised”, the Contractor shall resubmit the documents incorporating the comments.

**E.** Revisions shown on the drawings and data necessary to meet the requirements of the specifications shall not be taken as the basis of claims for extra charges. The Contractor shall accept such revisions or submit others for approval. When delay is caused by the resubmission of details, the Contractor shall not be entitled to any damages or extension of time on account of such delay.

**F.** Electronic Submittal. Two weeks prior to shipment, one clear, legible, PDF (or other approved format) output file of each document shall be forwarded to the City. Each file name shall include the drawing # and drawing name. The files may be transmitted either by copying to CD-ROM or transmitted electronically to the Engineer by an agreed upon method (e-mail, FTP, etc.).

**G.** Approved or As-built printed copies of drawings shall be provided with equipment.

**H.** Receipt of complete and satisfactory documentation is required before the City can consider the submittals to be complete.

**2-6 WORK TO BE DONE.** Add the following:

The Work generally consists of furnishing a complete and operable skid-mounted sodium fluoride chemical feed system (Average feed chemical concentration of 18,000 mg/L as F). The system shall include chemical feed pumps and drive motors, power and control panels, SCADA capability, and all piping and appurtenances required for a complete operating installation as shown in the contract drawing, City of Torrance Plan No. WP-290. All wearing parts and items requiring adjustment or service shall be easily accessible for maintenance and shall not require removal of adjacent equipment or piping to provide said access. The skid-mounted sodium fluoride chemical feed systems shall be provided and installed by the bidder at the following City of Torrance Facilities:

a. Robert W. Goldsworthy Desalter
b. Well # 9 Site

## GENERAL REQUIREMENTS

**A.** It is required that there be furnished to the City, equipment and documentation in accordance with these specifications and attachments. Types and quantities are set forth in the Bidder's Proposal. Installation of feed equipment at two (2) sites is a part of this contract.

**B.** Two (2) sodium fluoride feed systems shall be provided.

**C.** The sodium fluoride feed systems shall be a fully-integrated, skid-mounted system.

**D.** The sodium fluoride feed system for each site shall consist a chemical feed pump, sodium fluoride saturation tank, day tank, valves, instrumentation, piping, and a programmable logic controller.

**E.** The contractor shall provide an equipment pad and utility connections to equipment installed at each site.

**F.** The contractor shall provide a sunshade canopy and shed enclosure for feed equipment installed at the Goldsworthy Desalter and Well #9.

### 2-9 SURVEYING.

**2-9.2 Survey Service.** Replace the entire subsection with the following:

All construction surveying necessary to complete the Work shown on the Plans and provided in these Contract Documents shall be the responsibility of the Contractor. The CITY reserves the right to direct additional construction survey work be performed at no additional cost when the City determines it is required to adequately construct the Work.

The Contractor shall notify the Engineer in writing at least 2 working days prior to the actual survey

Stakes shall be set by the Contractor for the finish floor line and building footprint of the equipment concrete pad and other items as necessary. If any construction survey stakes are lost or disturbed and need to be replaced, such replacement shall be by the Contractor at its expense.

All costs for construction survey staking including construction staking, professional services, office calculations, furnishing all labor, materials, equipment, tools and incidentals, and for doing all work involved shall be considered as included in the price for which such work is appurtenant thereto, and no additional allowance will be made

therefore.

**2-10 AUTHORITY OF BOARD AND ENGINEER.** Add the following:

Failure of the Contractor to comply with the requirements of the Contract Documents, or to follow the directions of the Engineer, and/or to immediately remedy such noncompliance or to follow directions, may, upon notice from the Engineer, result in the suspension of the Contract monthly progress payments. Any monthly progress payments so suspended may remain in suspension until the Contractor is in compliance with the Contract Documents and the directions of the Engineer, as determined by the Engineer.

**2-11 INSPECTION.** Replace the entire subsection with the following:

The Work is subject to inspection and approval by the Engineer. The Contractor shall notify the Engineer a minimum of 48 hours in advance of the required inspection.

The Engineer will make, or have made, such inspections and tests as he deems necessary to see that the Work is in conformance with the Contract Documents. In the event such inspections or tests reveal noncompliance with the Contract Documents, the Contractor shall bear the cost of such corrective measures as deemed necessary by the Engineer, as well as the cost of subsequent re-inspection and re-testing.

Work done in the absence of inspection by the Engineer may be required to be removed and replaced under the inspection of the Engineer, and the entire cost of removal and replacement, including the cost of all materials which may be furnished by the CITY and used in the work thus removed, shall be borne by the Contractor, regardless of whether the work removed is found to be defective or not. Work covered without the approval of the Engineer shall, if so directed by the Engineer, be uncovered to the extent required by the Engineer, and the Contractor shall similarly bear the entire cost of performing all the work and furnishing all the materials necessary for the removal of the covering and its subsequent replacement, including all costs for additional inspection.

The Engineer and any authorized representatives shall at all times have access to the Work during its construction at shops and yards as well as the Work site. The Contractor shall provide every reasonable facility for ascertaining that the materials and workmanship are in accordance with the Contract Documents.

Inspection of the Work shall not relieve the Contractor of the obligation to fulfill all conditions of the Contract.

Add the following subsections:

**2-11.1 Special Inspection Fees.** If the Contractor elects to work under this Contract more than 8 hours/day or more than 40 hours/week, Saturday, Sunday, or CITY holidays, the Contractor shall arrange with the Engineer for the required inspection

service and pay the Special Inspection Fees which will be charged at the following rates:

| | | |
|---|---|---|
| Mondays through Fridays | - | $100.00 per hour |
| Saturdays, Sundays, Holidays | - | $1,000.00 per day |

Fees may be deducted from payments due to the Contractor at the discretion of the Engineer.

If the Contractor works under this contract at times other than within the allowed working hours without permission from or prior arrangement with the Engineer, the Contractor will be charged a lump sum amount of $500.00 for each occurrence, in addition to the above fees. The amount will be deducted from a Progress Payment.

**2-11.2 Inspections by Regulatory Agencies.** During the construction, the Contractor shall make the Work site available for periodic inspections by the regulatory agencies. These agencies may include: Los Angeles County Department of Health Services, Los Angeles Regional Water Quality Control Board, the State of California Department of Health Services Drinking Water Field Operations Branch, and CITY Water Department.

**2-11.3 Material Inspection/Testing and other City Expenses.**

(a) If a City subcontractor hired to perform material inspection and/or testing is required to work additional time to perform inspection and testing as a result of an action or delay caused by the Contractor, except for specific work allowed by the Engineer, the City subcontractor may charge the City an additional fee. The Engineer may deduct the additional fee for said inspection and testing from a Progress Payment to the Contractor. The Engineer also may deduct the cost to perform additional testing when an initial test fails to meet the requirements of this Contract. The typical rates for material testing and inspection are available upon request from the Public Works Department.

(b) If the Contractor does not comply with a requirement of these Special Provisions or if it does not respond, after being informed, to a request by the Engineer to amend a site condition that jeopardizes the public health, safety or welfare, the Engineer may direct City crews to perform the work. For each occurrence, the City may charge the Contractor a base charge in the amount of $750 in addition to all costs incurred by City crews for labor, equipment and materials. The standard rates for City crews are available upon request from the Public Works Department.

## SECTION 3 – CHANGES IN WORK

### 3-3 EXTRA WORK

**3-3.1 General.** Add the following:

Payment for additional work and all expenditures in excess of the Contract Price must be authorized in writing by the Engineer. Such authorization shall be obtained by the Contractor prior to engaging in additional work. It shall be the Contractor's sole responsibility to obtain written approval from the Engineer for any change(s) in material or in the work proposed by suppliers or subcontractors. No payment shall be made to the Contractor for additional work which has not been approved in writing, and the Contractor hereby agrees that it shall have no right to additional compensation for any work not so authorized.

The Contractor shall be responsible to provide all data and to obtain all approvals required by the Specifications, including submittal of Daily Extra Work Reports. No claims or extras shall be approved by the Engineer unless all work was done under the direction of and subject to the approval of the Engineer. Disputed work claims shall comply with 3-3 as modified herein.

**3-3.2.2 Basis for Establishing Costs.** Replace the second paragraph of part (c) with the following:

The Contractor will be paid for the use of equipment at the lower of the actual rental rates paid by the Contractor or the rental rates listed for such equipment in either the "Rental Rate Blue Book" published by Dataquest, Inc., 1290 Ridder Park Drive, San Jose, California 95131; telephone (408) 971-9000 or the California Department of Transportation publication entitled “Labor Surcharge and Equipment Rates” available at the Caltrans web site, www.dot.ca.gov/hq/eqsc/inforesources.htm , which is in effect on the date upon which the work is accomplished, and that hereby is made a part of the Contract, regardless of ownership or any rental or other agreement, if such may exist, for the use of such equipment entered into by the Contractor. If it is deemed necessary by the Engineer to use equipment not listed in the said publication, a suitable rental rate will be established by the Engineer. The Contractor may furnish any cost data that might assist the Engineer in the establishment of such rental rate.

**3-3.2.3 Markup.** Replace the entire subsection with the following:

The markups mentioned hereinafter shall include, but are not limited to, all costs for the services of superintendents, project managers, timekeepers and other personnel not working directly on the change order, and pickup or yard trucks used by the above personnel. These costs shall not be reported as labor or equipment elsewhere except when actually performing work directly on the change order and then shall only be reported at the labor classification of the work performed.

**(a) Work by Contractor.** The following percentages shall be added to the Contractor’s costs and shall constitute the mark-up for all overhead and profit, which shall be deemed to include all items of expense not specifically designated as cost or equipment rental in Subsections 3-3.2.2(a), 3-3.2.2(b), and 3-3.2.2(c).

| | |
|---|---|
| Labor | 20 |
| Materials | 15 |
| Equipment Rental | 15 |
| Other Expenditures | 15 |

To the sum of the costs and markups provided for in this subsection, one (1) percent shall be added as compensation for bonding.

**(b) Work by Subcontractor.** When any part of the extra work is performed by a subcontractor, the markup established in 3-3.2.3(a) shall be applied to the subcontractor's actual cost of such work. A markup of ten (10) percent on the first $5,000 of the subcontracted portion of the extra work and a mark-up of 5 percent on work added in excess of $5,000 of the subcontracted portion of the extra work may be added by the Contractor.

The markups specified in parts (a) and (b) above shall be considered as including, but not limited to, the Contractor's labor costs for personnel not working directly on the extra work, including the cost of any tools and equipment that they may use. Such costs shall not be reported as labor or equipment costs elsewhere except when they are actually used in the performance of the extra work. Labor costs shall in that case be reported for the labor classification corresponding to the type and nature of extra work performed.

### 3-4 CHANGED CONDITIONS.

Add the following:

This subsection does not apply to utilities.

## SECTION 4 – CONTROL OF MATERIALS

### 4-1 MATERIAL AND WORKMANSHIP.

#### 4-1.1 General.

Add the following paragraph after the second paragraph:

If the work, or any portion thereof, shall be damaged in any way, or if any defective materials or faulty workmanship shall be discovered at any time prior to the final payment, the Contractor shall forthwith, at its own cost and expense, repair said damage, or replace such defective materials, or remedy such faulty workmanship in a manner satisfactory to the Engineer.

#### 4-1.2 Protection of Work and Materials.

Add the following:

The Contractor shall assume all risks and expense of interference and delay in his operations, and the protection from or the repair of damage to improvements being built under the contract, as may be caused by water of whatever quantity from floods, storms, industrial waste, irrigation, underground or other sources. However, the Contractor shall be entitled to an extension of time in accordance with the provisions of Subsection 6-6. The Contractor shall also assume full responsibility and expense of protecting, or removing and returning to the site of Work, all equipment or materials under his care endangered by any action of the elements.

Furthermore, the Contractor shall indemnify and hold the City harmless from all claims or suits for damages arising from his operations in dewatering the Work and control of water.

**4-1.3 Inspection Requirements.**

**4-1.3.3 Inspection by the Agency.**

Add the following:

**A.** Upon request by the City, the Contractor shall submit a manufacturing schedule.

**B.** The Contractor shall give the City or its representative access to all Contractor and sub-Contractor facilities, during working hours, as is reasonable and necessary to determine the equipment to be supplied conforms to design, including specifications and drawings. The City or its representative shall be allowed to observe all manufacturing processes. The contractor and sub-Contractors shall furnish all the necessary apparatus, labor, and other facilities for the safe and convenient performance of inspections without cost to the City.

**C.** When requested by City, the Contractor shall furnish the City additional information as may reasonably be required regarding the character of the materials and the progress of their procurement, including copies of invoices, bills of lading, and shipping lists on all articles and materials for use on the work.

**D.** Unidentified materials shall not be used in Contractor's work, including work by sub-Contractors.

**E.** If witness testing is required, the Contractor shall notify the City of planned testing a minimum of two (2) weeks prior to the test. If equipment is not ready

at time of scheduled testing, the City reserves the right to charge the Contractor for any additional cost incurred.

**F.** Neither inspection, waiving of inspection, nor City's acceptance of the equipment shall relieve the Contractor of his obligation to furnish equipment in accordance with the specifications and drawings.

**4-1.5 Certification.**

Add the following:

**4-1.5.1 Marking.**

**A.** All parts subject to disassembly prior to shipment shall be marked for identification and match marked.

**B.** Each individual piece of equipment shall bear a stainless steel nameplate attached with stainless steel screws, upon which there shall be engraved the following information:

a. Manufacturer's name or trademark
b. Manufacturer's serial number
c. Equipment size and pressure rating

**C.** Stainless steel warning plates shall be attached with stainless steel screws to the equipment at all locations where metric bolting is used. Each plate shall have engraved on it a warning that metric bolting is used at the location identified on the plate.

**D.** After the equipment has been prepared for shipping, each shipping unit shall be plainly marked by stencil or equivalent with the purchase order number, the item number, the tag mark number, and the weight.

**4-1.5.2 Delivery, Storage, and Handling.**

**A.** The Contractor shall prepare all equipment for shipment in such manner as to protect it from damage in transit, and shall be responsible for and make good any and all damage due to improper preparation or loading for shipment.

**B.** All equipment shall be securely boxed or crated, or mounted on pallets and supported in a manner, which will prevent damage during shipment and subsequent storage. Equipment shall be packaged so as not to rub or contact other equipment.

**C.** Equipment subject to deterioration due to moisture and dust shall be enclosed in heavy-duty, polyethylene envelopes together with dehumidifiers, to provide complete protection.

**D.** All threaded openings shall be plugged or capped with adequate thread protectors. All exposed process flanges shall have a plywood or equivalent type shipping cover, fabricated to match flange size and firmly attached to flange, to exclude foreign matter and prevent flange face damage.

**E.** The bill of lading and complete shipping list shall be forwarded to the City, immediately upon shipment of each lot of equipment.

**F.** In addition to the shipping list, the Contractor shall securely attach one packing list to each shipping container.

**G.** On the day a shipment is made, the Contractor shall notify the City by fax of the shipment, giving the routing number, the bill of lading number, the freight bill number, the name of the carrier or shipping agency, the number of the car or trailer, a list of items shipped, the total weight of the shipment, and the weight of the heaviest box, crate, or skid. The list of items shipped shall include the purchase order item number, serial number, and tag number for each item.

**4-1.6 Trade Names or Equals.**

Add the following to the first paragraph:

Any substitutions or deviations in equipment or arrangement from that shown in the drawings specified herein shall be the responsibility of the Manufacturer or Contractor. Any deviations must be accompanied by detailed structural, mechanical, electrical drawings and data for review by the Engineer. All costs associated with review of the substitutions or deviations and costs associated with project drawing changes as a result of approval shall be borne by the Manufacturer or Contractor. There shall be no additional costs to the City due to substitutions or deviations.

## SECTION 5 – UTILITIES

**5-1 LOCATION.** Add the following:

The Contractor shall provide coordination with all the utility companies involved and shall provide protection from damage to their facilities. The Contractor shall be responsible for repair or replacement to said facilities made necessary by its failure to provide required protection. The Contractor is required to include utility requirements in the Construction Schedule per Section 6-1.

The Contractor shall be solely responsible to check all utility record maps, books, and/or other data in the possession of the CITY, other agencies, and/or all utility companies, and no allowance shall be made for any failure to have done so.

The Contractor shall utilize the services of "Underground Service Alert-Southern California" for utility locating in all public right-of-ways by calling 1-800-227-2600 at least 48 hours prior to any excavation.

Underground lines that are potentially hazardous such as oil company lines, natural gas mains, and electrical conduits will be carefully located by the owner as provided in the Standard Specifications. The Contractor shall take special precautions in determining the precise location and depth of these structures to insure that they will not be damaged by its operations.

Substitute the following for the last paragraph:

Prior to starting construction, the Contractor shall be responsible to determine the location and depth of all utilities which have been marked by the respective owners and which may affect or be affected by its operations. The Contractor also shall determine the location and depth of each service connection, whether or not marked. Full compensation for such work shall be considered as included in the prices bid for other items or work. If a utility which was marked or a service connection is found to interfere with the work after construction has commenced, the Contractor shall be solely responsible for all costs of any delay and for any costs which could have been avoided if the Contractor had located the utility prior to start of construction.

**5-2 PROTECTION.** Add the following:

Add the following after the final paragraph:

As noted in subsections 5-2.1, 5-2.2 and 5-2.3 utilities are classified and are to be handled in one of three ways by the Contractor in the course of performing the contract.

**5-2.1 Noninterfering Utilities**

Utilities that are not abandoned by the owner and do not physically interfere with the permanent work in its final location shall be supported, protected and maintained in place by the Contractor, and the Contractor shall be solely responsible for any damage, loss or injury, or death resulting from his/her failure to do so and the Contractor shall indemnify and hold harmless the City from any and all such consequences. Noninterfering utilities may, with the permission of the owner and the Public Works Director, be relocated still farther from the permanent work in its final locations, but the Contractor shall not so consider, in submitting his bid, unless the relocation is shown on the plans.

**5-2.2 Abandoned Utilities**

Abandoned utilities are those portions of any utility which are no longer needed or desired by the owner and whose destruction is consented to by the owner and/or is permitted by notation on the plans. Abandoned utilities which physically interfere with the permanent work or with the construction thereof shall be removed by the Contractor and the Contractor shall be solely responsible for any damage, loss or injury, or death resulting from the removal and the Contractor shall indemnify and hold harmless the City from any and all such consequences.

**5-2.3 Interfering Utilities**

Any utility shall be deemed an interfering utility (1) which physically occupies any part of the space to be occupied by the permanent work in its final locations, or (2) whose length within the theoretical width of excavation for the permanent work exceeds five times the width of said theoretical excavation whether or not the utility physically interferes with the permanent work. Interfering utilities that are not abandoned by the owner shall be relocated so as not to interfere with the permanent work in its final location. Such relocation will be performed by the owner or the City unless otherwise shown on the plans.

The Contractor shall exercise caution to prevent damage to or movement of the utilities while constructing the permanent work along and adjacent to the utilities.

**5-2.4 Protection of Underground Hazardous Utilities.** This Subsection shall apply to projects where there are underground utilities within the Work area which may be potentially hazardous if damaged. A hazardous substance shall be defined as one having the potential for an immediate disaster such as, but not limited to, gasoline, electricity, fuel oil, butane, propane, natural gas, chlorine or other chemicals.

Abandoned or inoperative utilities designed to carry hazardous substances and unidentified or unknown utilities shall be considered hazardous until determined otherwise. Whenever the Contractor is directed by the Engineer to tap these lines, the Contractor shall provide personnel specialized in this work and payment therefore will be considered as extra work per 3-3 of these Special Provisions.

The Contractor shall comply with the following requirements when working

around underground hazardous utilities:

1) The Contractor shall not trench or excavate within the area where a utility known to carry a hazardous substance exists until its location has been determined by excavation or other proven methods acceptable to the Engineer. The intervals between exploratory excavations or location points shall be sufficient to determine the exact location of the line. Unless otherwise directed by the Engineer, excavation for underground hazardous utilities shall be performed by the Contractor and paid for as specified per 5-1 of these Special Provisions.

2) If it is determined that the horizontal or vertical clearance between the utility known to carry hazardous substances and the construction limit is less than 300 mm (12 inches) (450mm (18 inches) if scarifying), the Contractor shall confer with its owner. Unless the owner elects to relocate the line or take it out of service, the Contractor shall not excavate until the line has been completely exposed within the limits of construction.

3) Once the physical location of the utility known to carry hazardous substances has been determined, the Contractor, in cooperation with and with the concurrence of the utility owner, shall determine how to protect and/or support the utility from damage before proceeding with the Work.

4) During excavation, the Contractor shall exercise extreme caution and protect the utilities from damage.

5) The Contractor shall notify the Engineer, the public agency maintaining records for the jurisdiction in which the Project is located and the owner, if known, whenever previously unidentified or unknown underground utilities are encountered so that the location can be accurately established and made a part of permanent substructure records.

Full compensation for protecting underground hazardous utilities as specified or noted on the Plans shall be considered as included in the prices bid for the various items of work.

**5-3 REMOVAL.**

Add the following:

It shall be the Contractor's responsibility irrespective of the notations on the plans to confirm or determine that a utility is to be abandoned before treating the same as an abandoned utility and shall assume all risks in so determining.

**5-5 DELAYS.**

Substitute the following:

The Contractor is responsible for notifying the City in time to prevent delays attributable to utility relocations or alterations. The Contractor shall not be entitled to damage or additional payment, nor shall it be entitled to standby time for men or equipment if such delay does occur. The Engineer will determine the extent of the delay attributable to such interferences, the affect of the delay on the project as a whole, and any commensurate extension of time.

Any failure of the City and/or utility company to accomplish relocations in a reasonable manner in light of the Contractor's operations (to the extent such operations would otherwise be feasible and in accordance with the contract and as disclosed to the City prior to the Contractor encountering any such utility) shall entitle the Contractor to an extension of contract time to the extent that, in the judgment of the Engineer, the Contractor's completion of the overall contract work has been delayed; however, the Contractor shall be entitled to no other remedy and, in submitting its bid, thereby waives such other remedies, if any, unless the relocation delay is the result of arbitrary, capricious or malicious conduct by the City.

## SECTION 6 - PROSECUTION, PROGRESS AND ACCEPTANCE OF THE WORK

**6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF WORK.** Replace the entire subsection with the following:

**6-1.1 General.** Within ten (10) working days after the date of the CITY's execution of the Contract, the Contractor shall submit a proposed construction schedule to the Engineer for approval. The schedule shall be in accordance with 6-1.2 and 6-1.3 and shall be in sufficient detail to show chronological relationship of all activities of the Work. These include, but are not limited to: estimated starting and completion dates of various activities, submittal of shop drawings to the Engineer for approval, procurement of materials and scheduling of equipment.

Prior to issuing the Notice to Proceed, the Engineer will schedule a Pre-Construction Meeting with the Contractor to review the proposed construction schedule and delivery dates, arrange utility coordination and clarify inspection procedures.

Notwithstanding any other provisions of the Contract, the Contractor shall not be obligated to perform any work and the CITY shall not be obligated to accept or pay for any work performed by the Contractor prior to delivery of a Notice to Proceed. The CITY's knowledge of work being performed prior to delivery of the Notice to Proceed shall not obligate the CITY to accept or pay for such work. The Contractor shall provide all required Contract bonds and evidences of insurance prior to commencing work at the site.

**6-1.2 Criteria.** The construction schedule shall conform to the following criteria:

1) The schedule shall be prepared using the latest version of Primavera, Microsoft Project or approved equal.

2) Work activities shall be based on the items of work per 2-6, and the following:

   a) Contract Unit Price items shall be subdivided into those portions to be constructed during each stage or phase of construction.

   b) Lump sum items shall be subdivided into those portions to be constructed during each stage or phase of construction.

3) Utility relocations, if any, in coordination with the Contractor per 5-4 of these Special Provisions shall be considered as activities.

4) Required submittals, and shop drawings shall be included as activities.

5) The procurement of construction materials and equipment with long lead times for deliveries shall be included as activities.

6) Work to be performed by subcontractors shall be identified and shown as work activities.

7) Start and completion dates of each activity shall be illustrated.

8) Completion of all Work under the Contract shall be within the time specified in 6-7 of these Special Provisions and in accordance with the Plans and Specifications.

**6-1.3 Requirements.** In preparing the construction schedule, the following items shall be considered:

Sequence of Construction - The Contractor shall sequence the Work in a manner to expeditiously complete the project with a minimum of inconvenience to the adjacent facilities and to conform to the following:

1) Subsection 307-1.3 regarding the ordering of materials.

**2) All Work shall only be performed between the hours of 7:30 a.m. and 4:30 p.m. unless otherwise approved by the Engineer.**

3) A move-in period of not less than 10 calendar days will be allowed starting on the date in the Notice to Proceed.

4) Pavement Removal – all pavement removed as a result of excavation shall be hauled off the worksite no later than the same day that the removal is performed.

**6-1.4 Updates.** The Contractor shall submit 2 paper copies of the updated construction schedule to the Engineer on the first working day of each month.

If the Contractor decides to make a major change in the method of operations after commencing construction, or if the schedule fails to reflect the actual progress, the Contractor shall submit to the Engineer a revised construction schedule in advance of beginning revised operations.

If the Contractor fails to submit an updated Construction Schedule to the Engineer on the first working day of each month, the CITY will deduct one-fifth the amount of the Contract Unit Price for each work day after the due date, up to maximum of $300, that each monthly schedule update is not submitted.

**6-7 TIME OF COMPLETION.**

**6-7.1 General.** Replace the first sentence with the following:

Time shall be of the essence in the Contract. The Contractor shall begin Work after the mailing by the Engineer to the Contractor, first class mail, postage prepaid, a Notice to Proceed and shall diligently prosecute the same to completion within **90 (ninety)** working days from the start date specified in the Notice to Proceed. The work shall be completed and operational on or before February 18, 2011.

**Comment [mdw1]:** Key,

I think that we should extend this to 120 days;

**6-8 COMPLETION, ACCEPTANCE AND WARRANTY.** Replace the second paragraph with the following:

If, in the Engineer's judgment, the Work has been completed and is ready for acceptance, the Engineer will so certify and will determine the date when the Work was completed. This will be the date when the Contractor is relieved from responsibility to protect the Work. The Engineer may cause a Notice of Completion to be filed and recorded with the Los Angeles County Recorder's Office. At the Engineer's option, the Engineer may certify acceptance to the City Council who may then cause a Notice of Completion to be filed and recorded with the Los Angeles County Recorder's Office.

Add the following subsection:

**6-8.1 Guarantee.**

**A.** The Contractor shall guarantee that the complete assemblies furnished hereunder shall be free from defects in material and workmanship and in all respects satisfactory for the service required. The City will test the equipment under actual operating conditions, and the Contractor further guarantees the satisfactory performance thereof under such conditions for a minimum period of one year of service, but not to extend beyond two years, after completion of delivery of the equipment.

**B.** Equipment found to be defective during the guaranty period will be returned to the Contractor for replacement or repair. A satisfactory replacement or repaired unit, free of defects, shall be returned to the City within 60 days.

**C.** Equipment failing to meet any requirement of the specification shall be considered defective. The City reserves the right to make reasonable use of such equipment, provided it can be operated without injury to the City, until it can be removed from service for replacement or correction of defects

**6-8.2 Manufacturer's Warranties.** Manufacturer's warranties shall not relieve the Contractor of liability under these Specifications. Such warranties only shall supplement the Contractor's responsibility.

The Engineer may, at his option, require a manufacturer's warranty on any product offered for use.

**6-9 LIQUIDATED DAMAGES.** In each of the two paragraphs, substitute "$ **1,200** in place of "$250" as the amount of the liquidated damages per each consecutive calendar day.

## SECTION 7 - RESPONSIBILITIES OF THE CONTRACTOR

### 7.2 LABOR

Add the following subsections:

### 7-2.3 Payrolls and Payroll Records

Any payroll and payroll records required for this project shall be submitted, for each week in which any contract work is performed, to the Engineer. A retention of $5,000 per report per pay period will be withheld from a progress payment for a late or missing report. A report shall be deemed as late or missing when not submitted to the Engineer within 10 calendar days from the close of the pay period for which the report applies. In addition, a non-refundable deduction of $100 per report per day will be deducted from payments due the Contractor for each late or missing report. The $100 non-refundable deduction per day will be incurred beginning on the first day the report is late or missing.

### 7-2.4 Subcontractor and DBE Records

At the completion of the contract if the Contractor does not submit its Subcontractor and DBE Records to the Engineer a retention in the amount of $10,000 per record will be withheld from a progress payment for a late or missing record. A record shall be

deemed as late or missing when not submitted to the Engineer within 15 calendar days from the completion of the contract. In addition, a non-refundable deduction of $300 per record per day will be deducted from payments due the Contractor for each late or missing record. The $300 non-refundable deduction per day will be incurred beginning on the first day the record is late or missing.

**7-3 LIABILITY INSURANCE.** Replace the second sentence of the second paragraph with the following:

The Contractor must maintain at its sole expense the following insurance, which will be full coverage not subject to self-insurance provisions:

1) Automobile Liability, including owned, non-owned and hired vehicles, with at least the following limits of liability:

   a). Combined single limits of $2,000,000 per occurrence.

2) General Liability including coverage for premises, products and completed operations, independent contractors, personal injury and contractual obligations with combined single limits of coverage of at least $3,000,000 per occurrence, with an annual aggregate of no less than $5,000,000.

Add the following:

The Contractor must include all subcontractors as insureds under its policies or must furnish separate certificates and endorsements for each subcontractor.

**7-4 WORKER'S COMPENSATION INSURANCE.** Add the following after the first sentence of the second paragraph:

Worker's Compensation Insurance shall be with limits as required by the State of California and Employer's Liability with limits of $1,000,000 per accident.

**7-5 PERMITS.** Replace the second paragraph with the following:

The Contractor shall obtain a City of Torrance Business License and a no-fee Construction Excavation Permit before commencing construction. The Contractor shall obtain no-fee Electrical permits from the Building and Safety Department before commencing installation of new electrical services.

Full compensation for complying with the above requirements shall be considered as included in the prices bid for the appropriate items of work.

**7-6 THE CONTRACTOR'S REPRESENTATIVE**

Add a third paragraph to the section stating the following:

The Contractor's Representative shall be approved by the CITY prior to the start of the Work. If the designated representative is rejected, the Contractor shall immediately designate another representative in writing and submit to the City for consideration. The CITY shall have the authority to require the Contractor to remove its representative and/or alternate representative at any time and at no cost to the CITY.

## 7-8 PROJECT SITE MAINTENANCE

Add the following:

**7-8.6.1 Best Management Practices (BMPs).** Best Management Practices shall be defined as any program, technology, process, siting criteria, operating method, measure, or device which controls, prevents, removes, or reduces pollution. The Contractor shall obtain and refer to the California Storm Water Best Management Practice Handbooks, Volume 3 Construction BMP Handbook and the Los Angeles County Department of Public Works Best Management Practices Handbook for Construction Activities. These publications are available from:

Los Angeles County
Department of Public Works
Cashier's Office
900 S. Fremont Avenue
Alhambra, CA 91803
Telephone (626) 458-6959

The Contractor shall have a minimum of two (2) readily accessible copies of each publication on the Work site at all times.

The Contractor shall implement BMPs in conjunction with the following construction operation and activities:

| | |
|---|---|
| CONSTRUCTION PRACTICES | Clearing, Grading and Excavating |
| | Water Conservation Practices |
| | Dewatering |
| | Structure Construction and Painting |
| | |
| MATERIAL MANAGEMENT | Material Delivery and Storage |
| | Material Use |
| | Spill Prevention and Control |
| | |
| WASTE MANAGEMENT | Hazardous Waste Management |
| | Contaminated Soil Management |
| | Concrete Waste Management |
| | |
| VEHICLE AND EQUIPMENT MANAGEMENT | Vehicle and Equipment Cleaning |
| | Vehicle and Equipment Maintenance |

The Contractor shall implement the following BMPs in conjunction with the previously listed construction operation activities:

| | |
|---|---|
| VEGETATIVE STABILIZATION | Preservation of Existing Vegetation |
| | |
| PHYSICAL STABILIZATION | Soil Stabilizer/Dust Control |
| | |
| RUNOFF DIVERSION | Earth Dikes, Drainage Swales, and Lined Ditches |
| | Slope Drains and Subsurface Drains |

| | |
|---|---|
| SEDIMENT TRAPPING | Straw Bale Barrier |
| | Sand Bag Barrier |
| | Brush or Rock Filter |
| | Storm Drain Inlet Protection |
| | Sediment Traps |
| | Sediment Basin |

Additional BMPs may be required as a result of a change in actual field conditions, contractor activities, or construction operations. When more than one BMP is listed under each specific BMP category, the Contractor shall select the appropriate and necessary number of BMPs within each category in order to achieve the BMP objective.

BMPs for contractor activities shall be continuously implemented throughout the year. BMPs for erosion control and sedimentation shall be implemented during the period from October 15 to April 15, and whenever the National Weather Service predicts rain within 24 hours. BMPs for erosion control and sedimentation shall also be implemented prior to the commencement of any contractor activity or construction operation that may produce run-off, and whenever run-off from other sources may occur.

The CITY, as a permittee, is subject to enforcement actions by the State Water Resources Control Board, the Environmental Protection Agency and private citizens. The CITY may assess the Contractor a penalty of $1,000 for each calendar day that the Contractor has not fully implemented the appropriate BMPs and/or is otherwise in noncompliance with these provisions. In addition, the CITY will deduct, from the final payment due the Contractor, the total amount of any fines levied on the CITY, plus legal and staff costs, as a result of the Contractor's lack of compliance with these provisions and/or less than complete implementation of the appropriate BMPs.

Full compensation for the implementation of BMPs, including the construction, removal, and the furnishing of all necessary labor, equipment, and materials, shall be considered as included in the price bid for various items of work.

**7-8.8 Graffiti Removal.** The Contractor shall maintain the Work, all of its equipment, and all traffic control devices, including signage, free of graffiti throughout the duration of the Contract. The Contractor shall respond to any request from the Engineer to remove graffiti within 4 hours of notification. Should the Contractor fail to respond to

such request, the CITY reserves the right to make other arrangements for the requested graffiti removal and deduct the cost from any monies due the Contractor.

### 7-10 PUBLIC CONVENIENCE AND SAFETY

**7-10.1 Traffic and Access.** Replace the fourth paragraph with the following:

Vehicular access shall be maintained to the site except when necessary construction precludes such access. Unless otherwise permitted by this Contract or authorized by the Engineer, all roadways, driveways, travel and turning lanes, sidewalks and access ramps shall remain open at all times.

a) At least three (3) days prior to starting work in any location, the Contractor shall distribute written notices to all abutting facilities and residents that will be impacted by the work. **The City will provide the notice.**

b) The Contractor shall provide a minimum 1-inch thick temporary asphalt surface for a temporary access ramp if it is not able to install the permanent improvement within 5 working days following the removal of the existing material at any location. The offset at any transverse or longitudinal joint shall not be more than one-half (1/2) inch. On the temporary asphalt surface: the running slope shall not exceed 1:20; the cross slope shall not exceed 1:50. The Contractor shall not be allowed any additional compensation for the installation and removal of temporary asphalt.

c) At his option, the Contractor may provide adequate steel plating to cover and protect unfinished work.

Should any change in these requirements be necessitated by extraordinary occurrences or requirements during the execution of the Work, the Contractor shall obtain prior written approval of the Engineer.

## SECTION 9 - MEASUREMENT AND PAYMENT

### 9-1 MEASUREMENT OF QUANTITIES FOR UNIT PRICE WORK.

Add the following sections:

**9-1.2.1 Payment for Labor and Materials.**

The Contractor shall pay and cause the subcontractors to pay any and all accounts for labor, including Worker's Compensation premiums, State Unemployment and Federal Social Security payments and all other wage and salary deductions required by law. The Contractor also shall pay and cause the subcontractors to pay any and all

accounts for services, equipment and materials used by it and the subcontractors during the performance of work under this contract. All such accounts shall be paid as they become due and payable. If requested by the Engineer, the Contractor shall immediately furnish the City with proof of payment of such accounts.

**9-1.2.2 Measurement and Payment**

Payment of each item will include full compensation for furnishing all labor, materials, tools, equipment and backup equipment; transportation and technical competence for performing all work necessary to complete each item as indicated on the plans and as specified in these Contract Documents, including but not limited to obtaining all applicable certifications necessary for specialty personnel and major equipment in conformance with Subsection 7-5, and all other applicable permits; securing a storage yard to store all equipment and materials to be used on the job, disposal of waste materials, restoration of the site, etc. The storage yard may also be used as a temporary storage for excavated materials, and traffic control items. No separate payment will be made for mobilization and demobilization. Costs for mobilization/demobilization shall be included in the unit prices bid for each work item.

**9-2 LUMP SUM WORK.** Replace the second paragraph with the following:

The Contractor shall, within five (5) working days of receipt of a request from the Engineer, submit a complete breakdown of lump sum bid prices showing the value assigned to each part of the work, including an allowance for profit and overhead. In submitting the breakdown, the Contractor certifies that it is not unbalanced and that the value assigned to each part of the work represents its estimate of the actual cost, including profit and overhead, of performing that part of the work. The breakdown shall be sufficiently detailed to permit its use by the Engineer as one of the bases for evaluating requests for payment. No extra costs shall be allowed for providing these breakdowns.

**9-3 PAYMENT.**

**9-3.2 Partial and Final Payment.** Replace the third paragraph with the following:

For each progress estimate, 10 percent will be deducted and retained by the CITY, and the remainder less the amount of all previous payments will be paid. In addition, 125% of the amount of outstanding “Stop Notices” shall be withheld.

Add the following:

The Contractor shall submit all requests for payment on a Progress Payment Invoice to be provided by the CITY.

Prior to submittal of said invoice, all items for which payment is requested shall be checked and approved in writing by the Engineer. No payments will be made unless all back-up data is submitted with the payment request and the Progress Payment Invoice is signed by both Contractor and Engineer.

**9-3.4 Mobilization.** Replace the entire subsection with the following:

Mobilization shall include the provisions of the Construction Schedule, site review; obtaining all permits, insurance, and bonds; moving onto the site all plant and equipment; furnishing and erecting plants, temporary buildings, and other construction facilities, and removal of same at completion of the Work; and other work, all as required for the proper performance and completion of the Work.

There shall be no separate payment for mobilization. Payment for such costs shall be considered as included in the other items of work.

**9-3.5 Noncompliance with Plans and Specifications.** Add the following section:

Failure of the Contractor to comply with any requirement of the Plans and Specifications, and/or to immediately remedy any such noncompliance upon notice from the Engineer, may result in suspension of Contract Progress Payments. Any Progress Payments so suspended shall remain in suspension until the Contractor's operations and/or submittals are brought into compliance to the satisfaction of the Engineer. No additional compensation shall be allowed as a result of suspension of Progress Payments due to noncompliance with the plans or specifications. The Contractor shall not be permitted to stop work due to said suspension of Progress Payments.

**9-4 CLAIMS.**

The Contractor shall not be entitled to the payment of any additional compensation for any cause, including any act, or failure to act, by the CITY, or the happening of any event, thing or occurrence, unless the Contractor shall have given the CITY due written notice of potential claim as hereinafter specified.

The written notice of potential claim shall set forth the reasons for which the Contractor believes additional compensation will or may be due, the nature of the costs involved, and, insofar as possible, the amount of the potential claim. Said notice shall be submitted on a form approved by the CITY at least forty-eight (48) hours (two working days) in advance of performing said work, unless the work is of an emergency nature, in which case the Contractor shall notify and obtain approval from the Engineer prior to commencing the work. The Engineer may require the Contractor to delay construction involving the claim, but no other work shall be delayed, and the Contractor shall not be allowed additional costs for any said delay but may be allowed an extension of time if the Engineer agrees that the work delayed is a controlling element of the Construction Schedule. The Contractor shall be required to submit any supporting data (or a detailed written explanation justifying further delay) within five (5) work days of a request from the Engineer and shall be responsible for all costs associated with any delays resulting from late and/or incomplete submittals. By submitting a Bid, the Contractor hereby agrees that this subsection shall supersede 6-6.3 and 6-6.4 of the Standard Specifications.

It is the intention of this subsection that differences between the parties arising under and by virtue of the Contract be brought to the attention of the Engineer at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. The Contractor hereby agrees that it shall have no right to additional compensation for any claim that may be based on any such act, failure to act, event, thing or occurrence for which no written notice of potential claim as herein required was timely filed.

# SECTION F
# TECHNICAL SPECIFICATIONS

# INSTALLATION OF SODIUM FLUORIDE CHEMICAL FEED SYSTEMS FOR THE ROBERT W. GOLDSWORTHY DESALTER AND WELL No. 9 (FEAP# 702):

Prepared for:

**CITY OF TORRANCE PUBLIC WORKS DEPARTMENT**

water process engineering

5175 Pacific Coast Highway, Suite 402
Long Beach, CA 90804
Tel. 1.562.597.0400
Fax.1.562.684.0789

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## PRODUCTS

### CHEMICALS

Materials used in the feed system shall be compatible with solid sodium fluoride granules and a saturated sodium fluoride solution (approximately 18,000 mg/L). Sodium fluoride used in saturator shall conform to the following specification:

**AWWA B701**: sodium fluoride

### RESTRAINT

All equipment furnished by the Contractor shall be designed to adequately resist static loading as well as loading due to system operations and vertical and lateral dynamic forces imposed by wind or seismic events. All equipment shall be designed and installed to resist seismic and wind forces which are determined in accordance with the CBC.

**A.** The total design vertical seismic force for anchorage of equipment shall not be less than (2/3) of the design horizontal force, acting vertically in either direction.

**B.** Horizontal and vertical seismic forces shall be considered to act concurrently. Seismic Load Restraint System:
Seismic Design Criteria: SMS = 1.5
SM1 = 0.6
Site Class B
Occupancy category IV

**C.** Wind Load Restraint System:
Wind Load Design Criteria: Wind Speed = 90 MPH
Exposure Category C
Occupancy category IV

## CHEMICAL METERING PUMPS

The following metering pumps shall be supplied (no substitutions):

| Site | Chemical Metering Pump Manufacturer | Model | Max Capacity (gph) | Max Pressure (psi) |
|---|---|---|---|---|
| Goldsworthy Desalter: | Grundfos | DME 48-3 | 12.7 | 44 |
| Well #9: | Grundfos | DME 19-6 | 4.9 | 87 |

Metering pumps shall meet the following requirements:

a) Concentration: Nominal 18,000 mg/L as F;
b) Number of pumps on each skid: 1;
c) Type of pump: Mechanically-actuated diaphragm;
d) Configuration: Simplex;
e) Controls: Built-in automatic microprocessor control;
f) Back pressure at point of injection: 20 psig. Back pressure regulating valve shall be installed on the skid near the pump discharge and shall be factory adjusted to crack open at 20 psig; Regulators shall be of polyvinyl chloride other non-metallic; and shall have fluorocarbon diaphragms;
g) Suction valve cartridge: Double ball check;
h) Discharge valve cartridge: Single ball check and;
i) Materials of construction allowed for wetted parts:
    i. Hastelloy
    ii. Super Duplex Stainless Steels
    iii. PVC
    iv. Polyethylene/Polypropylene
    v. Fluorocarbon resins
    vi. Other non-metallics compatible with saturated sodium fluoride solution as approved by the Engineer

## CONTROLS

**A.** All control system design, fabrication, and wiring shall conform to the standards of Underwriter's Laboratories, National Electric Code, and any other applicable federal, state, or local codes.

**B.** The control panel enclosure shall be constructed of stainless steel and shall be rated NEMA 4x. The hinged door shall have two latches and shall be capable of locking using a padlock. The enclosure shall be mounted on a stand so it is convenient to access by operators.

**C.** All switches, pilot lights, HMI screen, and panel-mounted controllers shall be located on the panel door. Remote display transmitters, which are not-panel mounted, shall be mounted adjacent to the control panel enclosure.

**D.** The skid shall have an integrated Programmable Logic Controller (PLC) with the following capabilities:

- **i.** Touch-screen Human Machine Interface (HMI) panel mounted on the skids electrical and instrumentation enclosure;
- **ii.** Provide operator screen with system operating data and alarm status;
- **iii.** Monitor and store data collected from pressure transducers and flow meters;
- **iv.** Closed-loop control of metering pump dose based on external, 4-20 mA flow meter signal;
- **v.** Accept external signals for starting and stopping chemical dosing pump;
- **vi.** Provide local alarms and alarms to plant SCADA based leak detection, high/low flow rates and tank levels and;
- **vii.** Report instrumentation data to plant SCADA system.

**E.** Automatic metering pump control shall have the capability to vary feed rate based on signals from an external flow meter, which measures water discharge rate. The chemical dosage shall vary in proportion to the measured flow. The chemical metering pump shall be controlled by a 4-20 mA input signal supplied by the PLC.

**F.** The PLC shall control dosing based on an operator-defined dose (as mg/L F) set point and external flow meter input signal. The skid shall have the ability to operate in manual mode where the metering pump dose rate may be set using

the pump's controller; flow pacing will not be provided in manual mode—only in automatic mode with PLC control.

## INSTRUMENTATION

### CALIBRATION STAND PIPES

**A.** Chemical metering equipment shall be provided with a calibration standpipe for measuring pump output.

**B.** The standpipe shall allow convenient observation of the change of fluid level for at least 1 minute (approx. 1000 mL capacity) at full stroke and maximum speed settings, and shall be Schedule 80, clear PVC pipe or equivalent.

**C.** The standpipe shall have a clear, observable length of at least 12 inches and shall be permanently calibrated in gallons and fractions thereof, to allow reading of the fluid contents with an accuracy of 1 percent.

### PRESSURE

**A.** Pressure gauges shall conform to ASME Grade B; have a 2.5 in. diameter stainless steel case, and a ¼" NPT lower connection.

**B.** The gauges shall have type 316 SS, bourdon tubes, tips, and sockets. Pressure gages shall be mounted to the process connection using a diaphragm process connection.

**C.** Diaphragm compartments shall be filled completely with oil, and shall be made of materials suitable for the application. Diaphragm seals shall be installed at each gauge connection to isolate gauges from corrosion, sludge or other hazards of the process fluid.

**D.** Seal material shall be compatible with the oil in the gauge and the process fluid.

**E.** Pressure transducers shall be isolated with diaphragm seals in the same manner as the analog pressure gages.

### FLOW

**A.** Flow meters shall be magnetic type with remote display transmitter.

**B.** Transmitters shall have the capacity to display instantaneous flow rate, average flow rate, or cumulative flow based on an operator set-point.

**C.** Transmitters shall have, at minimum, a 4-20 mA output with a liner correspondence to flow rate. Magnetic flow meters shall have the capacity for a 1-ft/sec minimum flow velocity and 40-ft/sec maximum flow velocity with average flow velocities in the range of 3-10 ft/sec.

**D.** Magnetic flow meters and flow meter display/transmitters shall be Krohne or equivalent.

**E.** Flow meter sizing shall conform to the mechanical equipment schedule provided in the attached design drawings.

### VALVES

**A.** Hand valves within the system shall provide safety isolation, operational functionality, and isolation of pump components for inspection, repair, or maintenance.

**B.** Valve sizing and materials shall conform to the mechanical equipment schedule provided in the attached design drawings.

## SOLUTION TANKS

**A.** Tanks shall be fully resistant to the effects of the full-strength and fully diluted solution concentrations. Tanks shall be pressure rated for 1.5 times the weight of solution at full capacity.

**B.** Each tank shall have the capacity listed in the specification drawings. Tanks shall be reinforced to withstand all forces when full of solution.

**C.** Tanks shall be completely shop fabricated with no field assembly permitted. Drain connections shall provide complete drainage of the tank. All gaskets shall be fluorocarbon elastomer; nuts and bolts shall be Type 316 stainless steel; and steel supports shall be Type 304 stainless steel or better.

**D.** A permanent plastic sign indicating the tank contents shall be attached to the front of each tank. Polyethylene tanks shall be manufactured in accordance with ASTM D 1998.

**E.** All edges where openings are cut into the vessel must be trimmed smooth.

**F.** Plastic fittings installed in tank shall be Bulk-head or Two-flange style and shall be constructed of PVC. Bolted fittings are allowed on tank lids and must be bolted with a minimum four (4) Type 316 SS bolts.

The chemical storage tanks for the sodium fluoride feed system shall have the following capacity and approximate dimensions:

| Tank | Capacity (Gallons) | Approximate Tank Height (in.) | Approximate Tank Diameter (in.) |
|---|---|---|---|
| Sodium Fluoride Saturator Tank: | 350-400 | 48 | 48 |
| Saturated Sodium Fluoride Solution Day Tank: | 150-200 | 48 | 31 |

## PIPING

**A.** Rigid chemical solution piping smaller than 3” inch diameter shall be standard schedule 80 PVC pipe conforming to ASTM D.

**B.** Saturated sodium fluoride piping shall be standard ½”, UV-resistant polypropylene tubing.

**C.** All Fittings for the saturator water supply line, saturator tank internals, saturator tank overflow, and drains shall be standard schedule 80 PVC.

**D.** All PVC fittings shall be socket-welded or threaded.

**E.** All tubing fittings shall be no-flared compression-type tube fittings.

**F.** All chemical feed seals shall be compatible with a 18,000-mg/L sodium fluoride solution.

**G.** Saturator water supply line on skid-mounted piping shall be terminated at a 1" flanged connection.

**H.** Sufficient chemical feed tubing shall be supplied to reach the chemical injection point at each site.

## TANK LEVEL INDICATION SYSTEM AND LEAK DETECTION

**A.** Day-tank level measurement shall use a non-contact sensor with an approximate 6' level span. Leak detection will utilize a non-contact leak detector. A local display will be provided, which displays tank level and has a minimum of two (2) 4-20 mA output signals.

## ELECTRICAL

**A.** A disconnecting means shall be provided to permit servicing system or control components. Where all power to a packaged unit is supplied by one main feeder, a means of main-disconnection shall be provided so that the entire package may be de-energized at one location.

**B.** All electrical enclosures, including pull-boxes, wire ways, and cable trays shall be NEMA 4X.

## SKID CONSTRUCTION AND SECONDARY CONTAINMENT

**A.** Skid mounting tabs, tank supports, equipment supports, electrical enclosure support, and other structural skid components shall be constructed from welded stainless steel (Type 304L or better).

**B.** Fasteners shall either be non-metallic or type 304 SS or better.

**C.** Secondary containment shall be provided for the sodium fluoride saturator tank, sodium fluoride solution day tank, metering pump, and skid-mounted piping.

**D.** Secondary containment shall have a capacity of 120" of the combined total capacity of the sodium fluoride saturator tank and sodium fluoride solution day tank.

## INJECTORS

**A.** Injectors for chemical solution shall be introduced into the pipeline mains by means of a hard plastic injection nozzle inserted through a corporation cock so that the injector may be removed without taking the pipeline out of service.

**B.** Chemical injectors shall have a safety restraint cable to prevent injector assembly from being ejected under high pressure if the corporation cock is opened.

**C.** The device for introducing the solution into a pressure main shall be constructed in such a way that accidental breakage of discharge hose or tubing will not cause water to escape from the pipeline, and will allow disassembling of the unit without leakage.

## EQUIPMENT ENCLOSURES

### WELL #9 SITE

**A.** Products manufactured or supplied by the following, and meeting these Specifications, shall be installed at the Well #9 site:

- **i.** Equivalent construction to Plastifab/Gaurdian Shelter GS-081
- **ii.** 8' x 10' Minimum
- **iii.** Bolted to pad
- **iv.** Capable of being lifted
- **v.** Composite fiber-reinforced polymer (FRP) construction
- **vi.** Thermostat controlled vent fan 10" or greater in diameter
- **vii.** Interior electrical convenience outlet
- **viii.** 25 year corrosion failure guarantee

### GOLDSWORTHY SITE

**A.** Products manufactured or supplied by the following, and meeting these Specifications, shall be installed at the Goldsworthy Desalter site:

i. Shade-N-Net of Arizona, Phoenix, AZ. Website: www.shade-n-net.com.
ii. Sun Ports International, Inc., Dallas, TX. Website: www.sunports.com.
iii. Or approved equal.

## EXTRA MATERIALS

Concurrent with delivery and installation of the specified equipment, furnish auxiliary equipment and spare parts as follows:

1. Two (2) spare sets of metering pump check valves (3 check valve assemblies per pump)
2. Two (2) spare diaphragm check valve assemblies
3. Two (2) spare injector back-pressure valves
4. Two (spare) saturator feed valves

## NAMEPLATES

**A.** Each individual piece of equipment shall bear a nameplate attached with stainless steel screws, upon which there shall be engraved the following information:

-Manufacturer's name or trademark
-Model number
-Manufacturer's serial number
-Rated flow and head of the pump

**B.** A stainless steel nameplate shall be attached with stainless steel screws to the equipment at all locations where metric bolting is used. Each plate shall be engraved with a warning that metric bolting is used at the location identified on the plate.

**C.** Externally visible, permanent nameplates shall be provided for each control panel to identify each instrument, switch, meter, relay, control switch, indicating light, and circuit breaker. Equipment and terminal blocks within the control panel shall be suitably identified. Nameplates shall be laminated plastic, with black engraved characters on a white background.

## EXECUTION

### FIELD MEASUREMENTS

Contractor shall be responsible for all field measurements required to estimated piping, conduit, and wire quantities necessary to install equipment. Lengths shown on the drawings attached to this specification are approximate, however, may be used for a preliminary-estimate of material quantities.

### INSTALLATION

The sodium fluoride feed equipment shall be installed and secured to a foundation as shown in the attached drawings. The following utilities shall be provided to the equipment skid as shown on the drawings for each site:

**A.** Electrical: one 120 VAC, 60 Hz, 15-amp single-phase electrical service shall be required

**B.** Concrete equipment pad

**C.** 1 in. water supply line from existing potable water connection to: (1) mixed-bed softening resin tanks (supplied by the City and installed by the Contractor) and (2) 1 in. water supply line from the mixed-bed resin vessels to the sodium fluoride feed equipment.

**D.** Instrument signal from existing PLC at site to the sodium fluoride feed skid

**E.** Equipment shelter: (1) sunshade canopy at the Goldsworthy Desalter site and (2) enclosure shed at the Well #9 site; equipment shelters shall be fastened to the concrete equipment pad at each site.

### FIELD TESTING

#### TANKS

Tanks shall be cleaned of loose debris and dried prior to testing. Tanks shall be field tested for leaks or damage in shipment. Tanks shall be tested on for a period of 24 hours at which time no visible leakage shall be evident. Supply all pipes, hoses, pumps,

water, power and other equipment required to convey the test liquids and to carry out the tests. Damage or leaks in tanks shall be repaired or tanks shall be replaced.

## CONTROLLED VOLUME PUMPS

Pumps shall be tested to demonstrate that the pumps are capable of operating without vibration or leakage. Testing shall be performed at the maximum design flow rate and at half the design flow rate. Testing shall be demonstrated while controlled and operated in all feasible modes. The pump response shall be plotted on curves for the various operating pressures encountered and the results shall be compared to the curves shown on the manufacturer's published pump data. If control characteristic curves are not available at the time of testing, the pump manufacturer's service engineer shall generate such curves for each pump. Pump curves shall graphically depict the pump displacement at 25, 50, 75, and 100 percent of motor speed for SCR equipped pumps, and at 25, 50, 75, and 100 percent of maximum stroke position for all pumps. Curves shall be generated only for the specified back pressure.

## TEST PRESSURE

Tests shall be carried out at 20 psig. Back pressure valves shall be manually controlled for this testing, and shall be reset as necessary after testing. The time to deliver a given quantity of chemical at a given stroke and speed setting shall be the same at all pressures.

## CHEMICAL WASTE

Chemicals wasted during testing procedures shall be neutralized to achieve a pH value between 6.5 and 9.5 and a chlorine concentration of not more than 1 percent (10,000 mg/L). All chemicals wasted during testing procedures shall be routed to the sanitary sewer at a rate that the process can assimilate without upset.

## MANUFACTURER’S SERVICES

Contractor shall provide the services of a manufacturer's representative who is experienced in the installation, adjustment, and operation of the equipment specified. Manufacturer’s representative shall be onsite for two (2) days to provide support and troubleshooting as needed during equipment startup and operation. The City or its representative shall supervise and direct equipment shakedown and startup once installed.

## FIELD TRAINING

The City or its representative shall conduct a field training course for designated operating, maintenance and supervisory staff members. Training shall be provided for a total period 8 hours of normal working time and shall start after the system is functionally complete but prior to final acceptance tests.