

**SPECIFICATIONS**  
**FOR**  
**TOWN OF PECOS CITY**  
**ELEVATED WATER TANK REHABILITATION**  
**REEVES COUNTY, TEXAS**  
**ENGINEER'S PROJECT NO. E1915EP**

*MAYOR*  
David Flores

*MAYOR PRO-TEM*  
Gerald Tellez

*COUNCIL MEMBERS*  
Valerie Trujillo  
Veronica Baca  
Arthur Orona  
Conrado Saldana

*CITY MANAGER*  
Seth Sorensen

*ASSISTANT CITY MANAGER*  
Howdy lisenbee

*FINANCE DIRECTOR*  
Melanie Purcell

*Prepared by:*

**FXSA**  
www.fxsa.com

**Consulting Civil Engineers & Surveyors**

1130 Montana Ave., El Paso, Texas 79902  
Ph: (915) 533.4600 | F: (915) 533.4673  
TBPLS #100490-00 | TBPE # F-3584



April, 2020

*Francisco Urueta* 04-08-20

**TOWN OF PECOS CITY  
ELEVATED WATER TANK REHABILITATION  
ENGINEER'S PROJECT NO. E1915EP**

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**ADVERTISEMENT AND INVITATION FOR BIDS  
ELEVATED WATER TANK REHABILITATION  
REEVES COUNTY, TEXAS  
TOWN OF PECOS CITY, TEXAS**

The Town of Pecos City will receive bids for work to be performed for **Engineer's Project No. E1915EP, ELEVATED WATER TANK REHABILITATION REEVES COUNTY, TEXAS**, until 3:00 P.M. on the 6<sup>th</sup> day of May 2020, at the office of the City Manager, P.O. Box 929, 115 W. 3<sup>rd</sup> Street, Pecos, Texas 79772, at which time and place all bids will be opened publicly and read aloud.

Bids are invited for the several items and quantities of work as follows:

**A. 500,000 Gallons Elevated Water Tank Rehabilitation**

The work to be done consists of rehabilitating an existing 500,000-gallon water tank, including, sediment removal, cleaning, miscellaneous repairs, surface preparation and coating of all exterior and interior surfaces in accordance with the technical specifications and inspection report. Detailed description of quantities is included in the Bid Proposal.

Bid/Contract Documents, including Technical Specifications are on file at the office of the Engineer, Frank X. Spencer & Associates, Inc., 1130 Montana Ave., El Paso, Texas 79902.

Copies of the Bid/Contract Documents may be obtained at the office of Frank X. Spencer & Associates, Inc., located at 1130 Montana Ave., El Paso, Texas 79902, for a non-refundable payment of \$125.00 for each set. An additional, non-refundable mailing fee of \$90.00 per each set is required to cover costs of shipping and handling.

A bid proposal guaranty is to accompany the bid, thereby guaranteeing the good faith of the bidder and that the bidder will enter the written contract. Bidders must submit a Cashier's Check or Certified Check issued by a bank satisfactory to the Owner, or a Bid Bond from a reliable Surety company, payable without recourse to the order of Town of Pecos City, Texas in the amount not less than five percent (5%) of the largest possible bid submitted as a guaranty that the bidder will enter into a contract and execute bonds and guaranty in the forms provided within ten (10) days after notice of award of contract to him. Bids without the required Check or Bid Bond will not be considered.

The successful bidder will be required to furnish a Performance Bond and a Payment Bond, each in the amount of the contract, if the contract is in excess of \$25,000. The bonds written by a responsible Surety Company, authorized to do business in the State of Texas, and satisfactory to the Owner, as required by Articles 2368a and 5160, V.A.T.C.S., and all related amendments.

All unit prices must be stated in both script and figures. In case of ambiguity or lack of clearness in stating the prices in the bids, the owner reserves the right to consider the most advantageous construction thereof, or to reject the bid. The Owner reserves the right to reject any or all bids, to waive formalities, and to accept the bid, which seems most advantageous to the Owner's interest.

All contractor/subcontractors that are debarred, suspended, or otherwise excluded from or ineligible for participation on federal assistance programs may not undertake any activity in part or in full under this project. Bidders are expected to inspect the site of the work and to inform themselves regarding all local conditions under which the work is to be done.

The successful bidder must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex or national origin.

The Town of Pecos City reserves the right to reject any or all bids or to waive any informalities in the bidding.

Bids may be held by the Town of Pecos City for a period not to exceed 60 days from the date of the bid opening for the purpose of reviewing the bids and investigating the bidder's qualifications prior to the contract award.

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

By: David Flores

Title: Mayor

## **INSTRUCTIONS TO BIDDERS**

1. Use of Separate Bid Forms

These contract documents include a complete set of bid and contract forms which are for the convenience of the bidders and are not to be detached from the contract document, completed or executed. Contractor can make copies of the documents or separate bid forms will be provided for his/her use upon request.

2. Interpretations or Addenda

No oral interpretation shall be made to any bidder. Each request for an interpretation shall be made in writing to Frank X. Spencer & Associates, Inc. no less than seven (7) days prior to the bid opening. Each interpretation made will be in the form of an Addendum to the contract documents and will be distributed to all parties holding contract documents no less than five (5) days prior to the bid opening. It is, however, the bidder's responsibility to make inquiry as to any addenda issued. All such addenda shall become part of the contract documents and all bidders shall be bound by such addenda, whether received by the bidders or not.

3. Inspection of Site

Each bidder should visit the site of the proposed work and fully acquaint himself with the existing conditions there and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the contract. The bidder should thoroughly examine and familiarize himself with the technical specifications and all other contract documents. The contractor by the execution of the contract shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal document or to visit the site or acquaint himself with the conditions there existing. The City will be justified in rejecting any claim based on lack of inspection of the site prior to the bid.

4. Bids

- a. All bids must be submitted on the forms provided and are subject to all requirements of the Contract Documents.
- b. All bids must be regular in every respect and no interlineations, excisions or special conditions may be made or included by the bidder.
- c. Bid documents, including the bid, the bid bond, and the statement of bidders qualifications shall be sealed in an envelope and clearly labeled with the words "Bid Documents", the project number, name of bidder and the date and time of bid opening.
- d. The City may consider as irregular any bid on which there is an alteration of or

departure from the bid form and, at its option, may reject any irregular bid.

- e. If a contract is awarded, it will be awarded to a responsible bidder on the basis of the lowest/best bid and the selected alternate bid items, if any. The contract will require the completion of the work in accordance with the contract documents.

5. Bid Modifications Prior to Bid Opening

- a. Any bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Town of Pecos City prior to the closing time, and provided further, the Town of Pecos City is satisfied that a written confirmation of the telegraphic modification over the signature of the bidder was mailed prior to the closing time. The telegraphic communication should not reveal the bid price but should provide the addition, subtractions or other modifications so that the final prices or terms will not be known by the Town of Pecos City until the sealed bid is open. If written confirmation is not received within two (2) days from the closing time, no consideration will be given to the telegraphic modification.
- b. Likewise, any bidder may modify a bid by submitting a supplemental bid in person prior to the scheduled closing time for receipt of bids. Such supplemental bid should mention only additions or subtractions to the original bid so as to not reveal the final prices or terms to the Town of Pecos City until the sealed bid is open.

6. Bid Bond

- a. A bid bond in the amount of 5% of the bid issued by an acceptable surety shall be submitted with each bid. A certified check or bank draft payable to the City or negotiable U.S. Government Bonds (as par value) may be submitted in lieu of the Bid Bond.
- b. The bid bond or its comparable will be returned to the bidder as soon as practical after the opening of the bids.

7. Statement of Bidders Qualifications

Each bidder shall submit on the form furnished for that purpose a statement of the bidder's qualifications. The City shall have the right to take such steps as it deems necessary to determine the ability of the bidder to perform his obligations under the contract, and the bidder shall furnish the City all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available data does not satisfy the City that the bidder is qualified to carry out properly the terms of the contract.

Bids shall be received only from experienced tank contractors who have furnished and erected at least five ground storage tanks of equal or greater capacity. A letter shall accompany the Contractor's bid listing five such examples including reference contacts and telephone numbers.

8. Unit Price

The unit price for each of the several items in the bid shall include its pro rata share of overhead so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price bid represents the total bid. Any bid not conforming to this requirement may be rejected as informal. Special attention is drawn to this condition, as the unit prices will be used to determine the amount of any change orders resulting from an increase or decrease in quantities.

9. Corrections

Erasures or other corrections in the bid must be noted over the signature of the bidder.

10. Time for Receiving Bids

Any bid received prior to the advertised hour of opening shall be kept securely sealed. The officer appointed to open the bids shall decide when the specified time has arrived and no bid received thereafter will be considered; except that when a bid arrives by mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the City that the late arrival of the bid was solely due to delay in the mail for which the bidder was not responsible, such bid will be received and considered.

11. Opening of Bids

The City shall, at the time and place fixed for the opening of bids, cause each bid to be publicly opened and read aloud, irrespective of any irregularities therein. Bidders and other interested individuals may be present.

12. Withdrawal of Bids

Bidder may withdraw the bid before the time fixed for the opening of bids, by communicating his purpose in writing to the City. Upon receipt of such notice, the unopened bid will be returned to the bidder. The bid guaranty of any bidder withdrawing his/her bid in accordance with the above will be returned promptly.

13. Award of Contract/Rejection of Bids

- a. The Contract will be awarded to the responsive, responsible Bidder submitting the lowest/best bid. The bidder selected will be notified at the earliest possible date. The City reserves the right to reject any or all bids and to waive any informality in bids received where such rejection or waiver is in its interest.

- b. The City reserves the right to consider as unqualified to do the work any bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the improvements embraced in this contract.

14. Execution of Agreement/Performance and Payment Bonds

- a. Performance and Payment Bonds, requires all prime contractors which enter into a formal contract in excess of \$25,000 with the State, any department, board, agency, municipality, City, school district or any division or subdivision thereof to obtain Payment Bond in the amount of the contract before commencing with work and a performance bond for public works contracts in excess of \$100,000.
- b. The failure of the successful bidder to execute the agreement and supply the required bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the City may grant, shall constitute a default and the City may, at its option either award the contract to the next lowest responsible bidder, or re-advertise for bids. In either case, the City may charge against the bidder the difference between the amount of the bid, and the amount for which a contract is subsequently executed irrespective of whether this difference exceeds the amount of the bid bond. If a more favorable bid is received through re-advertisement, the defaulting bidder shall have no claim against the locality for a refund.

15. Wages and Salaries

Attention is particularly called to the requirement of paying not less than the prevailing Davis Bacon Related Acts (DBRA) wage rates specified in the Contract Documents. These rates are minimums to be paid during the life of the contract. It is, therefore, the responsibility of the Bidder to inform themselves as to local labor conditions.

16. Equal Employment Opportunity

Attention is called to the requirements for ensuring that employees and applicants for employment are not discriminated against because of their race, color, creed, sex, or national origin.

17. "Pursuant to recent State legislation enacting House Bill 11, in order for the City to continue to benefit from its status as a State Sales and Use Tax Exempt Organization, after August 14, 1991 construction contracts must be awarded on a "separated contract" basis. A "separated contract" is one that distinguishes the value of the tangible personal property (materials such as pipe, bricks, lumber, concrete, paint, etc.) to be physically incorporated into the project, from the total contract price. Under the "separated contract" format, the contractor in effect becomes a "seller" to the City of materials that are to be physically incorporated into the project realty. As a "seller", the contractor will issue a "Texas Certificate of Resale" to the supplier in lieu of paying the sales tax on materials at the time of purchase. The contractor will also issue a "Certificate of Exemption" to the supplier demonstrating that the personal property is being purchased for resale and that the resale is to a department of the Town of

Pecos City, which is a sales tax-exempt entity. Contractors should be careful to consult the most recent guidelines of the State Comptroller of Public Accounts regarding the sales tax status of supplies and equipment that are used and consumed during project work, but that are not physically incorporated into the project realty. Contractors that have questions about the implementation of this new policy are asked to inquire with the State Comptroller of Public Accounts, Tax administration Division, State of Texas, Austin, Texas 78774 (tel. 1-800-252-5555). Bidders will not include any federal taxes in bid prices since the City is exempt from payment of such taxes. "Texas Certificates of Exemption", "Texas Certificates of Resale" and "Texas Sales Tax Permits" are forms available to the Contractor through the regional offices of the State Comptroller of Public Accounts.

## BID FOR UNIT PRICE

Place: Town of Pecos City

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

Project No. Engineer's Project No. E1915EP

Proposal of \_\_\_\_\_ (hereinafter called Bidder), a corporation, organized and existing under the laws of the State of \_\_\_\_\_, a partnership/an individual doing business as \_\_\_\_\_ (cross out non-applicable references).

To the Town of Pecos City (hereinafter called Owner).

Gentlemen:

The Bidder, in compliance with your invitation for bids for the **ELEVATED WATER TANK REHABILITATION, TOWN OF PECOS CITY, TEXAS, ENGINEER'S PROJECT NO. E1406EP**, having examined the plans and specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the project, including the availability of materials and labor, hereby proposes to furnish all labor, materials and supplies, and to construct the project in accordance with Contract Documents within the time set forth therein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the contract documents, of which this Proposal is a part.

Bidder hereby agrees to commence work under this Contract on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project within 200 days for Bid consecutive calendar days thereafter, as stipulated in the specifications. Bidder further agrees to pay, as liquidated damages, the sum of One-Thousand Dollars (\$1,000.00) for each consecutive calendar day thereafter, as hereinafter provided in the General Conditions.

Bidder acknowledges receipt of the following addenda:

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Item No.	Item Description	Est. Qty.	Unit	Unit Price	Bid Amount
1.	Furnish all materials, equipment, labor, superintendence and incidental work to abrasive blast per SSPC-SP6, clean, prime and coat with Containment and Dust Collection the <b>Exterior</b> of the existing 500,000-gallon EST, all appendages, ladder, vent, hatch, railing, tank piping, valves, etc., as indicated on the drawings and specifications <b>part 2.04.A</b> and <b>part 3.07</b> , except where specifically covered by other bid items.	1	L.S.		
2.	Furnish all materials, equipment, labor, superintendence and incidental work to spot blast for inspection and identification of repairs, abrasive blast per SSPC-SP10, clean, prime, stripe coat and coat with Dehumidification the <b>Interior</b> of the existing 500,000-gallon EST, all appendages, ladder, vent, hatch, weir box, etc., as indicated on the drawings and specifications <b>part 2.04.B</b> and <b>part 3.06</b> , except where specifically covered by other bid items.	1	L.S.		
3.	Furnish all materials, equipment, labor, superintendence and incidental work to perform <b>General Repairs</b> ; grinding, welding and general work to repair corrosion related surfaces, repair the liquid float level gauge and seal weld areas deemed necessary as indicated on the drawings and specifications <b>part 3.01.A</b> and <b>3.01.A.1</b> , except where specifically covered by other bid items.	1	L.S.		
4.	Furnish all materials, equipment, labor, superintendence and incidental work to provide <b>Containment and Dust Collection</b> as indicated on the drawings and specifications <b>part 3.07</b> , except where specifically covered by other bid items.	1	L.S.		
5.	Furnish all materials, equipment, labor, superintendence and incidental work to perform exterior ladder replacement, balcony mid-railing modifications and repositioning electrical conduit and obstacles preventing safe use and rendering all OSHA Compliant as indicated on the drawings and specifications, except where specifically covered by other bid items.	1	L.S.		

**BID SCHEDULE  
TOPC Elevated Tank  
Rehabilitation**

6.	Furnish all materials, equipment, labor, superintendence and incidental work to <b>Dehumidify</b> the interior of the existing 500,000-gallon EST, during surface preparation and coating, including hoses, filters, etc., as indicated on the drawings and specifications <b>part 3.06</b> , except where specifically covered by other bid items.	1	L.S.		
7.	Furnish all materials, equipment, labor, superintendence and incidental work to perform <b>Caulking</b> and or <b>Seam Sealing</b> work to seams and areas as deemed necessary, as indicated on the drawings and specifications <b>part 3.01.A.2</b> , except where specifically covered by other bid items.	50	Per Tube		

**TOTAL BID (Items 1 thru 7):**

**\$ \_\_\_\_\_**

## BID FOR UNIT PRICE CONTRACT

The bidder understands and agrees that the quantities shown on the bid proposal are approximate and intended principally to serve as a guide in determining total bid prices and that the contractor awarded the project will be paid based on actual quantities constructed.

**BIDDER** agrees to perform all the work described in the CONTRACT DOCUMENTS for the preceding unit prices.

Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

The above unit prices shall include all labor, materials, taxes, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for.

**BIDDER** understands that the OWNER reserves the right to reject any or all bids.

The **BIDDER** agrees that this bid shall be good and may not be withdrawn for a period of sixty (60) calendar days after the scheduled closing time for receiving bids.

RESPECTFULLY SUBMITTED:

_____	_____
Signature	Address
_____	_____
Title	Date
_____	_____
License No. (If applicable)	Telephone Number

(SEAL - if BID is by a corporation)

ATTEST \_\_\_\_\_

## BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

\_\_\_\_\_ as Principal, and \_\_\_\_\_ as

Surety, are hereby held and firmly bound unto the Town of Pecos City herein called the

“OWNER” in the penal sum of \_\_\_\_\_ Dollars,

(\$ \_\_\_\_\_), lawful money of the United States, for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the Accompanying Bid, dated \_\_\_\_\_, for \_\_\_\_\_.

NOW, THEREFORE, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified, within sixty (60) days after the said opening, and shall within the period specified therefore, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written contract with the Owner in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the local Public Agency may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

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

(SEAL)

\_\_\_\_\_

(SEAL)

Attest:

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

Affix  
Corporate  
Seal

(SEAL)

Attest:

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

Affix  
Corporate  
Seal

Attest:

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

Countersigned

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

\* Attorney-in-Fact, State of \_\_\_\_\_

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT  
**CERTIFICATION BY PROPOSED CONTRACTOR REGARDING  
 EQUAL EMPLOYMENT OPPORTUNITY**

NAME OF PRIME CONTRACTOR

PROJECT NUMBER

**INSTRUCTIONS**

This certification is required pursuant to Executive Order 11246 (30 F.R. 12319-25). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the contract whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable instructions.

Where the certification indicates that the subcontractor has not filed a compliance report due under applicable instructions, such subcontractor shall be required to submit a compliance report before the owner approves the subcontract or permits work to begin under the subcontract.

**SUBCONTRACTOR'S CERTIFICATION**

NAME AND ADDRESS OF SUBCONTRACTOR (Include ZIP Code)

1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.  
 Yes             No

2. Compliance reports were required to be filed in connection with such contract or subcontract.  
 Yes             No

3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.  
 Yes             No

4. Have you ever been or are you being considered for sanction due to violation of Executive Order 11246, as amended?  
 Yes             No

NAME AND TITLE OF SIGNER (Please Type)

SIGNATURE

DATE

**CERTIFICATION REGARDING LOBBYING FOR  
CONTRACTS, GRANTS, LOANS, AND COOPERATIVE AGREEMENTS**

The undersigned \_\_\_\_\_ of \_\_\_\_\_ certifies, to the best of its knowledge and belief, that:

- 1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of an Federal contract, grant, loan or cooperative agreement.
- 2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form – LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
- 3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Signed: \_\_\_\_\_

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

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

## INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitations for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Included prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.  
  
(b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

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According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503



## SECTION 504 CERTIFICATION

### POLICY OF NON-DISCRIMINATION ON THE BASIS OF DISABILITY

The \_\_\_\_\_ does not discriminate on the basis of disability in the admission or access to, or treatment or employment in, its federally assisted programs or activities.

(Name) \_\_\_\_\_

(Address) \_\_\_\_\_

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

Telephone Number ( ) \_\_\_\_\_ - \_\_\_\_\_ Voice

( ) \_\_\_\_\_ - \_\_\_\_\_ TDD

has been designated to coordinate compliance with the nondiscrimination requirements contained in the Department of Housing and Urban Development's (HUD) regulations implementing Section 504 (24 CFR Part 8. dated June 2, 1988).

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# Agreement Between Owner and General Contractor

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This **AGREEMENT** is made as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by and between the following parties, for services in connection with the Project identified below:

**OWNER:**

Town of Pecos City  
115 W 3<sup>rd</sup> St  
Pecos, TX 79772

**General Contractor:**

*(Name and address)*

**PROJECT:**

*(Include Project name and location as it will appear in the Contract Documents)*

In consideration of the mutual covenants and obligations contained herein, Owner and GENERAL CONTRACTOR agree as set forth herein.

## Article 1

### Scope of Work

- 1.1** GENERAL CONTRACTOR shall perform all construction phase services, and provide all material, equipment, tools and labor, supplies, temporary facilities, and incidentals necessary to complete the Work described in and reasonably inferable from the Contract Documents.
- 1.2** A description of the scope of work is: Rehabilitation of the Elevated Water Tank in accordance with the contract specifications and inspection report provided in the bid package  
\_\_\_\_\_  
\_\_\_\_\_.

## Article 2

### Contract Documents

- 2.1** The Contract Documents are comprised of the following:
- 2.1.1** This Agreement, and all written modifications, amendments, minor changes, and Change Orders to this Agreement issued in accordance with *General Conditions of Contract between Owner and GENERAL CONTRACTOR* (“General Conditions of Contract”);
- 2.1.2** The General Conditions of Contract; and
- 2.1.5** Construction Documents prepared by the Design Engineer.

## Article 3

### Interpretation and Intent

- 3.1** GENERAL CONTRACTOR and Owner, prior to execution of the Agreement shall carefully review all the Contract Documents, including the various documents comprising the Construction Documents, for any conflicts or ambiguities. GENERAL CONTRACTOR and Owner will discuss and resolve any identified conflicts or ambiguities prior to execution of the Agreement.
- 3.2** The Contract Documents are intended to permit the parties to complete the Work and all obligations required by the Contract Documents within the Contract Time(s) for the Contract Price. The Contract Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards. In the event inconsistencies, conflicts, or ambiguities between or among the Contract Documents are discovered after execution of the Agreement, GENERAL CONTRACTOR and Owner shall attempt to resolve any ambiguity, conflict or inconsistency informally, recognizing that the Contract Documents shall take precedence in the order in which they are listed in Section 2.1 herein.
- 3.3** Terms, words and phrases used in the Contract Documents, including this Agreement, shall have the meanings given them in the General Conditions of Contract.

**3.4** The Contract Documents form the entire agreement between Owner and GENERAL CONTRACTOR and by incorporation herein are as fully binding on the parties as if repeated herein. No oral representations or other agreements have been made by the parties except as specifically stated in the Contract Documents.

## **Article 4**

### **Contract Time**

**4.1 Date of Commencement.** The Work shall commence within five (5) days of GENERAL CONTRACTOR's receipt of Owner's Notice to Proceed ("Date of Commencement") unless the parties mutually agree otherwise in writing.

**4.2 Substantial Completion and Final Completion.**

**4.2.1** Substantial Completion of the entire Work shall be achieved no later than \_\_\_\_\_ (\_\_\_\_\_) calendar days after the Date of Commencement ("Scheduled Substantial Completion Date").

**4.2.2** Final Completion of the Work or identified portions of the Work thereof, and resolution of all unresolved claims shall be achieved within \_\_\_\_\_ (\_\_\_\_\_) days from the Substantial Completion date for the entire Work. Final Completion is the date when all Work is complete pursuant to the definition of Final Completion set forth in Section 1.2.6 of the General Conditions of Contract.

**4.2.3** All of the dates set forth in this Article 4 (collectively the "Contract Time(s)") shall be subject to adjustment only in accordance with the General Conditions of Contract.

**4.3 Time is of the Essence.** Owner and GENERAL CONTRACTOR mutually agree that time is of the essence with respect to the dates and times set forth in the Contract Documents.

**4.4 Liquidated Damages.** GENERAL CONTRACTOR understands that if Substantial Completion is not attained by the Scheduled Substantial Completion Date, Owner will suffer damages which are difficult to determine and accurately specify. GENERAL CONTRACTOR agrees that if Substantial Completion is not attained by the Scheduled Substantial Completion Date (the "LD Date"), GENERAL CONTRACTOR shall pay Owner \_\_\_\_\_ (\$\_\_\_\_\_) as liquidated damages for each day that Substantial Completion extends beyond the LD Date.

GENERAL CONTRACTOR understands that if Final Completion is not achieved within \_\_\_\_\_ (\_\_\_\_\_) days of the Substantial Completion Date, Owner will suffer damages which are difficult to determine and accurately specify. GENERAL CONTRACTOR agrees that if Final Completion is not achieved within \_\_\_\_\_ (\_\_\_\_\_) days of Substantial Completion, GENERAL CONTRACTOR shall pay to Owner \_\_\_\_\_ (\$\_\_\_\_\_) as liquidated damages for each calendar day that Final Completion is delayed beyond the above-referenced number of days.

**4.5 Early Completion Bonus.** If Substantial Completion is attained before the Scheduled Substantial Completion Date (the "Bonus Date"), Owner shall pay GENERAL CONTRACTOR at the time of Final Payment under Section 6.1 herein an early completion bonus of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) for each day that Substantial Completion is attained earlier than the Bonus Date. Owner and GENERAL CONTRACTOR agree that the maximum aggregate amount that GENERAL CONTRACTOR shall receive as the early Completion Bonus is \_\_\_\_\_ Dollars (\$\_\_\_\_\_).

## Article 5

### Contract Price

#### 5.1 Contract Price.

**5.1.1** Owner shall pay GENERAL CONTRACTOR in accordance with Article 6 of the General Conditions of Contract a contract price ("Contract Price") of \_\_\_\_\_ Dollars (\$\_\_\_\_\_).

#### 5.2 Change Orders The contract price will be adjusted as follows for any changes in the Work:

**5.2.1** For additive Construction Phase Change Orders, including additive Change Orders arising from both additive and deductive items, it is agreed that GENERAL CONTRACTOR shall receive an additional fee for the additional Costs of the Equipment or Work incurred for that Change Order.

**5.2.2** For deductive Construction Phase Change Orders, including deductive Change Orders arising from both additive and deductive items, it is agreed that GENERAL CONTRACTOR shall receive a contract price reduction for the reduced Costs of the Equipment or Work reduced for that Change Order.

## Article 6

### Procedure for Payment

#### 6.1 Progress Payments.

**6.1.1** GENERAL CONTRACTOR shall submit to Owner on the fifth (5<sup>th</sup>) day of each month, beginning with the first month after the Date of Commencement, GENERAL CONTRACTOR's Application for Payment in accordance with Article 6 of the General Conditions of Contract.

**6.1.2** Owner shall make payment within twenty-one (21) days after Owner's receipt of each properly submitted and accurate Application for Payment in accordance with Article 6 of the General Conditions of Contract, but in each case less the total of payments previously made, and less amounts properly withheld under Section 6.3 of the General Conditions of Contract.

#### 6.2 Retainage on Progress Payments.

**6.2.1** Owner will retain five percent (5%) of each Application for Payment.

**6.2.2** After Substantial Completion of the entire Work or, if applicable, any portion of the Work, pursuant to Section 6.6 of the General Conditions of Contract, Owner may release to GENERAL CONTRACTOR retained amounts relating, as applicable, to the entire Work or completed portion of the Work, less an amount equal to: (a) the reasonable value of all remaining or incomplete items of Work as noted in the Certificate of Substantial Completion; and (b) all other amounts Owner is entitled to withhold pursuant to Section 6.3 of the General Conditions of Contract.

**6.3 Final Payment.** GENERAL CONTRACTOR shall submit its Final Application for Payment to Owner in accordance with Section 6.7 of the General Conditions of Contract. Owner shall make payment on GENERAL CONTRACTOR's properly submitted and accurate Final Application for Payment (less any amount the parties may have agreed to set aside for warranty work) within twenty-one (21) days after Owner's receipt of the Final

Application for Payment, provided that GENERAL CONTRACTOR has satisfied the requirements for final payment set forth in Section 6.7.2 of the General Conditions of Contract.

## Article 7

### Representatives of the Parties

#### 7.1 Owner's Representatives.

**7.1.1** Owner designates the individual listed below as its Senior Representative ("Owner Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Section 10.2.3 of the General Conditions of Contract:

\_\_\_\_\_

**7.1.2** Owner designates the individual listed below as its Owner's Representative, which individual has the authority and responsibility set forth in Section 3.3 of the General Conditions of Contract:

\_\_\_\_\_

#### 7.2 GENERAL CONTRACTOR's Representatives.

**7.2.1** GENERAL CONTRACTOR designates the individual listed below as its Senior Representative ("GENERAL CONTRACTOR's Senior Representative"), which individual has the authority and responsibility for avoiding and resolving disputes under Section 10.2.3 of the General Conditions of Contract:

\_\_\_\_\_

**7.2.2** GENERAL CONTRACTOR designates the individual listed below as its GENERAL CONTRACTOR's Representative, which individual has the authority and responsibility set forth in Section 2.1.1 of the General Conditions of Contract:

\_\_\_\_\_

## Article 8

### Bonds and Insurance

**8.1 Insurance.** GENERAL CONTRACTOR shall procure the insurance coverages set forth in the Insurance Exhibit attached hereto and in accordance with Article 5 of the General Conditions of Contract.

**8.2 Bonds and Other Performance Security.** GENERAL CONTRACTOR shall provide the following performance bond and labor and material payment bond or other performance security:

**Performance Bond.**

Required

Not Required

**Payment Bond.**

X Required

Not Required

**Other Performance Security.**

X Required

Not Required

Required performance security during the two-year warranty period.

## **Article 9**

### **Other Provisions**

**9.1 Other provisions, if any, are as follows:**

Any claims, disputes, or controversies between the parties arising out of or related to the Agreement, or the breach thereof, which have not been resolved in accordance with the procedures set forth in Section 10.2 of the General Conditions of Contract shall be resolved in a court of competent jurisdiction in Taylor County, Texas.

**9.2 Status of GENERAL CONTRACTOR**

The GENERAL CONTRACTOR is an Independent Contractor. GENERAL CONTRACTOR and GENERAL CONTRACTOR's employees are not agents, servants or employees of Owner.

**9.3 Verification of Employment Eligibility**

GENERAL CONTRACTOR must comply with the Immigration Reform and Control Act (IRCA) and may not knowingly obtain labor or services of an unauthorized alien. GENERAL CONTRACTOR -- not Owner -- must verify eligibility for employment as required by IRCA.

**9.4 Indebtedness to Owner**

GENERAL CONTRACTOR agrees that no payments owed by him, of any nature whatsoever, to the Owner, including payment in advance for service charges or any sums of any character whatsoever, shall become delinquent or in arrears.

The Owner will not knowingly award contracts for goods or services to any subcontractor in arrears to the Owner for any debt, claim, demand, or account whatsoever, including taxes, penalty and interest. GENERAL CONTRACTOR is responsible for ensuring that no indebtedness exists.

**9.5 Equal Employment Opportunity**

It is the Owner's policy to recruit, employ, and to provide compensation, promotion, and other conditions of employment without regard to race, color, religion, sex, age, national origin, or disability. The Owner affirms that employment decisions shall be made only on the basis of bona fide occupational qualifications. The Owner shall continually review its employment practices and personnel procedures and take positive steps to assure that equality of employment opportunity in the Town of Pecos City, Texas, is a fact as well as an ideal.

**9.6 Minority and Women Business Enterprises**

The Owner hereby gives notice that Minority and Women Business Enterprises will be afforded equal opportunities to submit bids in for this contract and will not be discriminated against on the grounds of race, ethnicity, color, sex, religion or national origin in awarding the contract. Technical assistance is available to Minority and Women Business Enterprises through the UTPB Small Business Development Center at 1310 N FM 1788, Midland, Texas.

#### **9.7 Sales Tax**

The City qualifies as an exempt agency under the Texas Limited Sales, Excise and Use Tax Act (the Tax Act), and is not subject to any State or City sales taxes on materials incorporated into the project. Labor used in the performance of this contract is also not subject to State or City sales taxes. The City will provide an exemption certificate to the GENERAL CONTRACTOR. The GENERAL CONTRACTOR must have a sales tax permit issued by the Comptroller of Public Accounts and shall issue a resale certificate complying with the Tax Act, as amended, when purchasing said materials. The GENERAL CONTRACTOR is responsible for any sales taxes applicable to equipment purchases, rentals, leases, consumable supplies which are not incorporated into the project, tangible personal property purchased for use in the performance of this contract and not completely consumed, or other taxable services used to perform this contract, or other taxes required by law in connection with this contract.

#### **9.8 Compliance with Laws, Charter, Ordinances**

GENERAL CONTRACTOR, its agents, employees and subcontractors must comply with all applicable federal and state laws, the charter and ordinances of the Town of Pecos City, and with all applicable rules and regulations promulgated by local, state and national boards, bureaus and agencies. GENERAL CONTRACTOR must obtain all necessary permits and licenses that are required in completing the work contracted for in this agreement.

#### **9.9 Counterparts**

This Contract may be executed in two or more counterparts (including fax, email, or electronic PDF counterparts), each of which shall be deemed an original and all of which together shall constitute one and the same instrument.

#### **9.10 Boycott of Israel**

In accordance with Chapter 2270, Texas Government Code, a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract. The signatory executing this contract on behalf of company verifies that the company does not boycott Israel and will not boycott Israel during the term of this contract.

#### **9.11 Sections and other Headings**

Section, paragraph, and other headings contained in this Contract are for reference purposes only and do not affect in any way the meaning or interpretation of this Contract.

#### **9.12 Severability and Waiver**

The partial or complete invalidity of one or more provisions of this Contract shall not affect the validity or continuing force and effect of any other provision. The failure of either party hereto to insist, in any one or more instances, upon the performance of any of the terms, covenants or conditions of this Contract, or to exercise any right herein, shall not be construed as a waiver or relinquishment of such term, covenant, condition or right as respects further performance.

In executing this Agreement, Owner and GENERAL CONTRACTOR each individually represents that it has the necessary financial resources to fulfill its obligations under this Agreement, and each has the necessary corporate approvals to execute this Agreement, and perform the services described herein.

**OWNER:**

Town of Pecos City, Texas  
\_\_\_\_\_  
*(Name of Owner)*

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

Seth Sorensen  
\_\_\_\_\_  
*(Printed Name)*

City Manager  
\_\_\_\_\_  
*(Title)*

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

**GENERAL CONTRACTOR:**

\_\_\_\_\_  
*(Name of GENERAL CONTRACTOR)*

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

\_\_\_\_\_  
*(Printed Name)*

\_\_\_\_\_  
*(Title)*

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

**ATTEST:**

\_\_\_\_\_  
City Secretary

**APPROVED:**

\_\_\_\_\_  
City Attorney

**EXHIBIT A**

**INSURANCE**

A. GENERAL REQUIREMENTS

The GENERAL CONTRACTOR agrees to maintain the type and amounts of insurance required in this contract throughout the term of the agreement. The GENERAL CONTRACTOR is solely responsible for providing the required certificates of insurance. The City may terminate this agreement if the GENERAL CONTRACTOR fails to timely comply with the insurance requirements.

The required insurance must be issued by a company or companies of sound and adequate financial responsibility and authorized to do business in the State of Texas. All policies are subject to examination and approval by the City's Office of Risk Management for their adequacy as to content, form of protection, and providing company.

The required insurance naming the City as additional insured must be primary insurance and not contributing with any other insurance available to City, under any third party liability policy.

Before the City executes the notice to proceed with any work under this agreement, the GENERAL CONTRACTOR must provide the City Secretary with either an original certificate of insurance or a certified copy of the insurance policy evidencing the required insurance. Thereafter, the GENERAL CONTRACTOR must furnish new certificates or copies of the policy before the expiration date.

B. ADDITIONAL REQUIREMENTS

The required liability insurances and their certificates must:

1. Name the City as an additional insured for operations under this contract.
2. Provide for 30 days advance written notice of cancellation or material change.

C. TYPES AND AMOUNTS OF INSURANCE

The following insurance is required under this contract:

	<u>Type</u>	<u>Amount</u>
___ 1.	Workers' Compensation Employer's Liability	Statutory \$100,000 per occurrence
___ 2.	Commercial (Public) Liability including, but not limited to:	\$500,000 combined single limit for bodily injury



## STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered, and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

Name of Bidder: \_\_\_\_\_ Date Organized: \_\_\_\_\_

Address: \_\_\_\_\_ Date Incorporated: \_\_\_\_\_

Number of years in contracting business under present name: \_\_\_\_\_

Are you a Section 3 business? (see below)     Yes     No

Section 3 Business Concerns:

- a) Businesses that are 51 percent or more owned by Section 3 residents.
- b) Businesses whose permanent, full-time employees include persons, at least 30 percent of whom are currently Section 3 residents, or within three years of the date of first employment with the firm were Section 3 residents.
- c) Businesses that provide evidence of a commitment to subcontract in excess of 25 percent of the dollar amount of all subcontracts to be awarded to businesses that meet the qualifications described above; or
- d) Businesses located within the Grant Recipient's jurisdiction that identify themselves as Section 3 Business Concerns because they provide economic opportunities for low- and very low-income persons.

### CONTRACTS ON HAND:

Contract	Amount	Completion Date
----------	--------	-----------------


Type of work performed by your company: \_\_\_\_\_

Have you ever failed to complete any work awarded to you? \_\_\_\_\_

Have you ever defaulted on a contract? \_\_\_\_\_

List the projects most recently completed by your firm (include project of similar importance):

Project	Amount	Mo/Yr Completed
---------	--------	-----------------


Major equipment available for this contract: \_\_\_\_\_

\_\_\_\_\_

Attach resume(s) for the principal member(s) of your organization, including the officers as well as the proposed superintendent for the project.

Credit available: \$ \_\_\_\_\_ Bank reference: \_\_\_\_\_

The undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the \_\_\_\_\_ in

verification of the recitals comprising this Statement of Bidder's Qualifications.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_ .

By: (signature) \_\_\_\_\_ Title: \_\_\_\_\_

(print name) \_\_\_\_\_

## PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

---

(Name of Contractor or Company)

---

(Address)

a \_\_\_\_\_ hereinafter called Principal, and

---

(Name of Surety Company)

---

(Address)

hereinafter called Surety, are held and firmly bound unto

Town of Pecos City

(Name of Recipient)

City Hall, 115 W. 3<sup>rd</sup> St., Pecos, TX. 79772

(Recipient's Address)

hereinafter called OWNER, in the penal sum of \$ \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to be made we bind ourselves, successors, and assigns, jointly and severally, firmly in these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER dated the \_\_\_ day of \_\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

**ELEVATED WATER TANK REHABILITATION, TOWN OF PECOS CITY, TEXAS  
PROJECT, ENGINEER'S PROJECT NO. E1915EP**

(Project Name)

---

NOW THEREFORE, if the Principal shall well, truly and faithfully perform its duties in all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all

costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in \_\_\_\_\_  
counterparts, each one of which shall be deemed an original, this the \_\_\_\_\_  
day of \_\_\_\_\_.

ATTEST: \_\_\_\_\_  
(Principal)

\_\_\_\_\_ By \_\_\_\_\_ (s)  
(Principal Secretary)

(SEAL)

\_\_\_\_\_ (Witness as to Principal) \_\_\_\_\_ (Address)

\_\_\_\_\_ (Address) \_\_\_\_\_

\_\_\_\_\_

ATTEST: \_\_\_\_\_  
(Surety)

\_\_\_\_\_ By \_\_\_\_\_  
(Witness as to Surety) (Attorney in Fact)

\_\_\_\_\_ (Address) \_\_\_\_\_ (Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

## PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor or Company)

\_\_\_\_\_  
(Address)

a \_\_\_\_\_, hereinafter called Principal,  
(Corporation / Partnership)

and \_\_\_\_\_  
(Name of Surety Company)

\_\_\_\_\_  
(Address)

hereinafter called Surety, are held and firmly bound unto

Town of Pecos City  
(Name of Recipient)

City Hall, 115 W. 3<sup>rd</sup> St., Pecos, TX. 79772  
(Recipient's Address)

hereinafter called OWNER, in the penal sum of \$ \_\_\_\_\_ Dollars, \$ \_\_\_\_\_ in lawful money of the United States, for this payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONFIDENTIALITY OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

**ELEVATED WATER TANK REHABILITATION, TOWN OF PECOS CITY, TEXAS.**  
**ENGINEER'S PROJECT NO. E1915EP**

\_\_\_\_\_  
(Project Name)

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUB-CONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such

WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUB-CONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in \_\_\_\_\_ counter-parts, each on of \_\_\_\_\_ (Number) which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_.

ATTEST: \_\_\_\_\_  
(Principal)  
\_\_\_\_\_  
(Principal Secretary) By \_\_\_\_\_ (s)

(SEAL)

\_\_\_\_\_  
(Witness as to Principal) (Address)  
\_\_\_\_\_  
(Address)

ATTEST: \_\_\_\_\_  
(Surety)  
\_\_\_\_\_  
(Witness as to Surety) By \_\_\_\_\_  
(Attorney in Fact)  
\_\_\_\_\_  
(Address) (Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

## CERTIFICATIONS

I \_\_\_\_\_, certify that I am the \_\_\_\_\_ of the corporation named as contractor herein; that \_\_\_\_\_ who signed this Agreement on behalf of the Principal, was then \_\_\_\_\_ of said corporation; that said Agreement was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

\_\_\_\_\_  
Corporate Seal

### PERFORMANCE AND PAYMENT BOND (OR BONDS)

Following the Form of Agreement, inset the approved form of the statutory surety bond, or bonds to insure the performance of the Contract and payment of labor and materials. In addition to the corporation signatures of the surety company(ies) on the bond(s), each bond should be countersigned by the surety company's attorney-in-fact, authorized to act within the state in which the Project is situated.

**ATTORNEY'S REVIEW CERTIFICATION**

I, the undersigned, \_\_\_\_\_, the duly authorized and acting legal representative of the Town of Pecos City, do hereby certify as follows:

I have examined the attached contract(s) and surety bonds and am of the opinion that each of the agreements may be duly executed by the proper parties, acting through their duly authorized representatives; that said representatives have full power and authority to execute said agreements on behalf of the respective parties; and that the agreements shall constitute valid and legally binding obligations upon the parties executing the same in accordance with terms, conditions and provisions thereof.

Attorney's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Print Attorney's Name: \_\_\_\_\_

**NOTICE OF AWARD**

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

Project Description: **ELEVATED WATER TANK REHABILITATION, TOWN OF PECOS CITY, TEXAS, ENGINEER'S PROJECT NO. E1915EP.**

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated \_\_\_\_\_, and information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of \$\_\_\_\_\_.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this \_\_\_\_ day of \_\_\_\_\_.

TOWN OF PECOS CITY

By \_\_\_\_\_

Name DAVID FLORES

Title City Mayor

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE OF AWARD is hereby acknowledged by

---

this the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

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

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

**NOTICE TO PROCEED**

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

\_\_\_\_\_ Project: Town of Pecos City, Texas  
Elevated Water Tank Rehabilitation  
Engineer's Project No. E1915EP

You are hereby notified to commence WORK in accordance with the Agreement dated \_\_\_\_\_ on or before \_\_\_\_\_, 2020 and you are to complete WORK within \_\_\_\_\_ consecutive calendar days thereafter. The date of completion of WORK is therefore \_\_\_\_\_, 2020.

\_\_\_\_\_ Town of Pecos City

By \_\_\_\_\_

Name David Flores

Title City Mayor

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by

\_\_\_\_\_

this the \_\_\_\_\_ day of \_\_\_\_\_ 2020

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

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

# GENERAL CONDITIONS OF CONTRACT BETWEEN OWNER AND GENERAL CONTRACTOR

## Article 1

### General

#### 1.1 Mutual Obligations

**1.1.1** *Owner and GENERAL CONTRACTOR* commit at all times to cooperate fully with each other and proceed on the basis of trust and good faith, to permit each party to realize the benefits afforded under the Contract Documents.

#### 1.2 Basic Definitions

**1.2.1** *Agreement* refers to the executed contract between Owner and GENERAL CONTRACTOR.

**1.2.2** *Construction Documents* are the documents, consisting of Drawings and Specifications, to be prepared or assembled by the Owner's Architect.

**1.2.3** *Day or Days* shall mean calendar days unless otherwise specifically noted in the Contract Documents.

**1.2.4** *GENERAL CONTRACTOR* is comprised of the GENERAL CONTRACTOR, and its Subcontractors.

**1.2.5** *Design Engineer* is a qualified, licensed design professional who is not an employee of GENERAL CONTRACTOR, but is retained by Owner to furnish design services. A Design Sub-Consultant is a qualified, licensed design professional who is not an employee of the Design Engineer, but is retained by the Design Engineer or employed or retained by anyone under contract to Design Engineer, to furnish design services.

**1.2.6** *Final Completion* is the date on which all Work is complete in accordance with the Contract Documents, including but not limited to, any items identified in the punch list prepared under Section 6.1.1 and the submission of all documents set forth in Section 6.2.2.

**1.2.7** *Force Majeure Events* are those events that are beyond the control of both GENERAL CONTRACTOR and Owner, including the events of war, floods, labor disputes, earthquakes, epidemics, adverse weather conditions not reasonably anticipated, and other acts of God.

**1.2.8** *General Conditions of Contract* refer to this Document *General Conditions of Contract Between Owner and GENERAL CONTRACTOR*.

**1.2.9** *Hazardous Conditions* are any materials, wastes, substances and chemicals deemed to be hazardous under applicable Legal Requirements, or the handling, storage, remediation, or disposal of which are regulated by applicable Legal Requirements.

**1.2.10** *Legal Requirements* are all applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over the Project or Site, the practices involved in the Project or Site, or any Work.

**1.2.11** *Owner's Project Criteria* are developed by or for Owner to describe Owner's program requirements and objectives for the Project, including use, space, price, time, site and expandability

requirements, as well as submittal requirements and other requirements governing GENERAL CONTRACTOR's performance of the Work. Owner's Project Criteria may include conceptual documents, design criteria, design performance specifications, design specifications, and LEED® or other sustainable design criteria, Construction documents, and other Project-specific technical materials and requirements.

**1.2.12** *Site* is the land or premises on which the Project is located.

**1.2.13** *Subcontractor* is any person or entity retained by GENERAL CONTRACTOR as an independent contractor to perform a portion of the Work and shall include materialmen and suppliers.

**1.2.14** *Sub-Subcontractor* is any person or entity retained by a Subcontractor as an independent contractor to perform any portion of a Subcontractor's Work and shall include materialmen and suppliers.

**1.2.15** *Substantial Completion* or *Substantially Complete* means the date on which the Work, or an agreed upon portion of the Work, is sufficiently complete in accordance with the Contract Documents so that Owner can occupy and use the Project or a portion thereof for its intended purposes.

**1.2.16** *Work* is comprised of all GENERAL CONTRACTOR's construction and other services required by the Contract Documents, including procuring and furnishing all materials, equipment, services and labor reasonably inferable from the Contract Documents.

## **Article 2**

### **GENERAL CONTRACTOR's Services and Responsibilities**

#### **2.1 General Services.**

**2.1.1** GENERAL CONTRACTOR's Representative shall be reasonably available to Owner and shall have the necessary expertise and experience required to supervise the Work. GENERAL CONTRACTOR's Representative shall communicate regularly with Owner and shall be vested with the authority to act on behalf of GENERAL CONTRACTOR. GENERAL CONTRACTOR's Representative may be replaced only with the mutual written agreement of Owner and GENERAL CONTRACTOR.

**2.1.2** GENERAL CONTRACTOR shall provide Owner with a monthly status report detailing the progress of the Work, including (i) whether the Work is proceeding according to schedule, (ii) whether discrepancies, conflicts, or ambiguities exist in the Contract Documents that require resolution, (iii) whether health and safety issues exist in connection with the Work; (iv) status of the Contingency account to the extent provided for in the Agreement Between Owner and GENERAL CONTRACTOR; and (v) other items that require resolution so as not to jeopardize GENERAL CONTRACTOR's ability to complete the Work for the Contract Price and within the Contract Time(s).

**2.1.3** Unless a schedule for the execution of the Work has been attached to the Agreement as an exhibit at the time the Agreement is executed, GENERAL CONTRACTOR shall prepare and submit, at least three (3) days prior to the meeting contemplated by Section 2.1.4 hereof, a schedule for the execution of the Work for Owner's review and response. The schedule shall indicate the dates for the start and completion of the various stages of Work, including the dates when Owner information and approvals are required to enable GENERAL CONTRACTOR to achieve the Contract Time(s). The schedule shall be revised as required by conditions and progress of the Work, but such revisions shall not relieve GENERAL CONTRACTOR of its obligations to complete the Work within the Contract Time(s), as such dates may be adjusted in accordance with the Contract Documents. Owner's review of, and response to, the schedule shall not be construed as relieving GENERAL CONTRACTOR of its complete and exclusive control over the means, methods, sequences and techniques for executing the Work.

**2.1.4** The parties will meet within seven (7) days after execution of the Agreement to discuss issues affecting the administration of the Work and to implement the necessary procedures, including those relating to submittals and payment, to facilitate the ability of the parties to perform their obligations under the Contract Documents.

## **2.2 Legal Requirements.**

**2.2.1** GENERAL CONTRACTOR shall perform the Work in accordance with all Legal Requirements and shall provide all notices applicable to the Work as required by the Legal Requirements.

**2.2.2** GENERAL CONTRACTOR, its agents, employees, and subcontractors must comply with all federal and state laws, the charter and ordinances of the City of Abilene, and with all applicable rules and regulations promulgated by local, state and national boards, bureaus and agencies. GENERAL CONTRACTOR must obtain all necessary permits and licenses that are required in completing the work contracted for in the Agreement.

**2.2.3** The Contract Price and/or Contract Time(s) shall be adjusted to compensate GENERAL CONTRACTOR for the effects of any changes in the Legal Requirements. Such effects may include, without limitation, revisions GENERAL CONTRACTOR is required to make to the Construction Documents because of changes in Legal Requirements.

**2.2.4** GENERAL CONTRACTOR shall execute the Agreement within fourteen (14) days after receipt of a Notice of Award from the Owner. The Owner shall determine the number of counterparts required.

**2.2.5** GENERAL CONTRACTOR shall procure any required services that are defined as professional services under the Professional Services Procurement Act, Chapter 2254 of the Texas Government Code, using the qualifications based selection process prescribed by that Chapter.

## **2.3 Government Approvals and Permits.**

**2.3.1** Except as identified in an Owner's Permit List attached as an exhibit to the Agreement, GENERAL CONTRACTOR shall obtain and pay for all necessary permits, approvals, licenses, government charges and inspection fees required for the prosecution of the Work by any government or quasi-government entity having jurisdiction over the Project.

**2.3.2** GENERAL CONTRACTOR shall provide reasonable assistance to Owner in obtaining those permits, approvals and licenses that are Owner's responsibility.

## **2.4 GENERAL CONTRACTOR's Construction Phase Services.**

**2.4.1** Unless otherwise provided in the Contract Documents to be the responsibility of Owner or a separate contractor, GENERAL CONTRACTOR shall provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit GENERAL CONTRACTOR to complete construction of the Project and the Work consistent with the Contract Documents.

**2.4.2** GENERAL CONTRACTOR shall perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Contract Documents. GENERAL CONTRACTOR shall at all times exercise complete and exclusive control over the means, methods, sequences and techniques of construction.

**2.4.3** GENERAL CONTRACTOR shall employ only Subcontractors who are duly licensed and qualified to perform the Work consistent with the Contract Documents.

**2.4.4** GENERAL CONTRACTOR assumes responsibility to Owner for the proper performance of the Work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Contract Documents is intended or deemed to create any legal or contractual relationship between Owner and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

**2.4.5** GENERAL CONTRACTOR shall coordinate the activities of all Subcontractors. If Owner performs other work on the Project or at the Site with separate contractors under Owner's control, GENERAL CONTRACTOR agrees to reasonably cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

**2.4.6** GENERAL CONTRACTOR shall keep the Site reasonably free from debris, trash and construction wastes to permit GENERAL CONTRACTOR to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Upon Substantial Completion of the Work, or a portion of the Work, GENERAL CONTRACTOR shall remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit Owner to occupy the Project or a portion of the Project for its intended use.

## **2.5 GENERAL CONTRACTOR's Responsibility for Project Safety.**

**2.5.1** GENERAL CONTRACTOR recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to (i) all individuals at the Site, whether working or visiting, (ii) the Work, including materials and equipment incorporated into the Work or stored on-Site or off-Site, and (iii) all other property at the Site or adjacent thereto. GENERAL CONTRACTOR assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work. GENERAL CONTRACTOR shall, prior to commencing construction, designate a Safety Representative with the necessary qualifications and experience to supervise the implementation and monitoring of all safety precautions and programs related to the Work. Unless otherwise required by the Contract Documents, GENERAL CONTRACTOR's Safety Representative shall be an individual stationed at the Site who may have responsibilities on the Project in addition to safety. The Safety Representative shall make routine daily inspections of the Site and shall hold weekly safety meetings with GENERAL CONTRACTOR's personnel, Subcontractors and others as applicable.

**2.5.2** GENERAL CONTRACTOR and Subcontractors shall comply with all Legal Requirements relating to safety, as well as any Owner-specific safety requirements set forth in the Contract Documents, provided that such Owner-specific requirements do not violate any applicable Legal Requirement. GENERAL CONTRACTOR will immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to Owner's Representative and, to the extent mandated by Legal Requirements, to all government or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.

**2.5.3** GENERAL CONTRACTOR's responsibility for safety under this Section 2.5 is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injuries, losses, damages or accidents resulting from their performance of the Work.

## **2.6 GENERAL CONTRACTOR's Warranty.**

**2.6.1** GENERAL CONTRACTOR warrants to Owner that the construction Work, including all materials and equipment furnished as part of the construction, shall be new unless otherwise specified in the Contract Documents, of good quality, in conformance with the Contract Documents and free of defects in

materials and workmanship. GENERAL CONTRACTOR's warranty obligation excludes defects caused by abuse, alterations, or failure to maintain the Work in a commercially reasonable manner. Nothing in this warranty is intended to limit any manufacturer's warranty which provides Owner with greater warranty rights than set forth in this Section 2.6 or the Contract Documents. GENERAL CONTRACTOR will provide Owner with all manufacturers' warranties upon Substantial Completion.

## **2.7 Correction of Defective Work.**

**2.7.1** GENERAL CONTRACTOR agrees to correct any Work that is found to not be in conformance with the Contract Documents, including that part of the Work subject to Section 2.6 hereof, within a period of one year from the date of Substantial Completion of the Work or any portion of the Work, or within such longer period to the extent required by any specific warranty included in the Contract Documents.

**2.7.2** GENERAL CONTRACTOR shall, within seven (7) days of receipt of written notice from Owner that the Work is not in conformance with the Contract Documents, take meaningful steps to commence correction of such nonconforming Work, including the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If GENERAL CONTRACTOR fails to commence the necessary steps within such seven (7) day period, Owner, in addition to any other remedies provided under the Contract Documents, may provide GENERAL CONTRACTOR with written notice that Owner will commence correction of such nonconforming Work with its own forces. If Owner does perform such corrective Work, GENERAL CONTRACTOR shall be responsible for all reasonable costs incurred by Owner in performing such correction. If the nonconforming Work creates an emergency requiring an immediate response, the seven (7) day period identified herein shall be deemed inapplicable.

**2.7.3** The one-year period referenced in Section 2.7.1 above applies only to GENERAL CONTRACTOR's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies Owner may have regarding GENERAL CONTRACTOR's other obligations under the Contract Documents.

## **2.8 Prevailing Wage Rate**

**2.8.1** GENERAL CONTRACTOR agrees that it, and any subcontractors, must pay any worker employed on the public work project not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed, and not less than the general prevailing rate of per diem wages for legal holiday and overtime work.

**2.8.2** For all purposes, the prevailing wage rate on the public work project are those wages which are attached hereto as Exhibit A.

# **Article 3**

## **Owner's Services and Responsibilities**

### **3.1 Duty to Cooperate.**

**3.1.1** Owner shall, throughout the performance of the Work, cooperate with GENERAL CONTRACTOR and perform its responsibilities, obligations and services in a timely manner to facilitate GENERAL CONTRACTOR's timely and efficient performance of the Work and so as not to delay or interfere with GENERAL CONTRACTOR's performance of its obligations under the Contract Documents.

**3.1.2** Owner shall provide reviews and approvals of interim design submissions and Construction

Documents consistent with the turnaround times set forth in GENERAL CONTRACTOR's schedule.

**3.1.3** Owner shall give GENERAL CONTRACTOR timely notice of any Work that Owner notices to be defective or not in compliance with the Contract Documents.

### **3.2 Furnishing of Services and Information.**

**3.2.1** Unless expressly stated to the contrary in the Contract Documents, Owner shall provide, at its own cost and expense, for GENERAL CONTRACTOR's information and use the following, all of which GENERAL CONTRACTOR is entitled to rely upon in performing the Work:

**3.2.1.1** Surveys describing the property, boundaries, topography and reference points for use during construction, including existing service and utility lines;

**3.2.1.2** Geotechnical studies describing subsurface conditions, and other surveys describing other latent or concealed physical conditions at the Site;

**3.2.1.3** Temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, or necessary to permit the proper design and construction of the Project and enable GENERAL CONTRACTOR to perform the Work;

**3.2.1.4** Construction documents;

**3.2.1.5** To the extent available, record drawings of any existing structures at the Site; and

**3.2.1.6** To the extent available, environmental studies, reports and impact statements describing the environmental conditions, including Hazardous Conditions, in existence at the Site.

**3.2.2** Owner is responsible for securing and executing all necessary agreements with adjacent land or property owners that are necessary to enable GENERAL CONTRACTOR to perform the Work. Owner is further responsible for all costs, including attorneys' fees, incurred in securing these necessary agreements.

### **3.3 Owner's Representative.**

**3.3.1** Owner's Representative shall be responsible for providing Owner-supplied information and approvals in a timely manner to permit GENERAL CONTRACTOR to fulfill its obligations under the Contract Documents. Owner's Representative shall also provide GENERAL CONTRACTOR with prompt notice if it observes any failure on the part of GENERAL CONTRACTOR to fulfill its contractual obligations, including any errors, omissions or defects in the performance of the Work. Owner's Representative shall communicate regularly with GENERAL CONTRACTOR and shall be vested with the authority to act on behalf of Owner.

### **3.4 Government Approvals and Permits.**

**3.4.1** Owner shall obtain and pay for all necessary permits, approvals, licenses, government charges and inspection fees set forth in the Owner's Permit List attached as an exhibit to the Agreement.

**3.4.2** Owner shall provide reasonable assistance to GENERAL CONTRACTOR in obtaining those permits, approvals and licenses set forth in the GENERAL CONTRACTOR's Permit List attached as an exhibit to this agreement that are GENERAL CONTRACTOR's responsibility.

### **3.5 Owner's Separate Contractors.**

**3.5.1** Owner is responsible for all work performed on the Project or at the Site by separate contractors under Owner's control. Owner shall contractually require its separate contractors to cooperate with, and coordinate their activities so as not to interfere with, GENERAL CONTRACTOR in order to enable GENERAL CONTRACTOR to timely complete the Work consistent with the Contract Documents.

## **Article 4**

### **Hazardous Conditions and Differing Site Conditions**

#### **4.1 Hazardous Conditions.**

**4.1.1** Unless otherwise expressly provided in the Contract Documents to be part of the Work, GENERAL CONTRACTOR is not responsible for any Hazardous Conditions encountered at the Site. Upon encountering any Hazardous Conditions, GENERAL CONTRACTOR will stop Work immediately in the affected area and duly notify Owner and, if required by Legal Requirements, all government or quasi-government entities with jurisdiction over the Project or Site.

**4.1.2** Upon receiving notice of the presence of suspected Hazardous Conditions, Owner shall take the necessary measures required to ensure that the Hazardous Conditions are remediated or rendered harmless. Such necessary measures shall include Owner retaining qualified independent experts to (i) ascertain whether Hazardous Conditions have actually been encountered, and, if they have been encountered, (ii) prescribe the remedial measures that Owner must take either to remove the Hazardous Conditions or render the Hazardous Conditions harmless.

**4.1.3** GENERAL CONTRACTOR shall be obligated to resume Work at the affected area of the Project only after Owner's expert provides it with written certification that (i) the Hazardous Conditions have been removed or rendered harmless and (ii) all necessary approvals have been obtained from all government and quasi-government entities having jurisdiction over the Project or Site.

**4.1.4** GENERAL CONTRACTOR will be entitled, in accordance with these General Conditions of Contract, to an adjustment in its Contract Price and/or Contract Time(s) to the extent GENERAL CONTRACTOR's cost and/or time of performance have been adversely impacted by the presence of Hazardous Conditions.

**4.1.5** To the fullest extent permitted by law, Owner shall indemnify, defend and hold harmless GENERAL CONTRACTOR, Design Consultants, Subcontractors, anyone employed directly or indirectly by any of them, and their officers, directors, employees and agents, from and against any and all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from the presence, removal or remediation of Hazardous Conditions at the Site.

**4.1.6** Notwithstanding the preceding provisions of this Section 4.1, Owner is not responsible for Hazardous Conditions introduced to the Site by GENERAL CONTRACTOR, Subcontractors or anyone for whose acts they may be liable. To the fullest extent permitted by law, GENERAL CONTRACTOR shall indemnify, defend and hold harmless Owner and Owner's officers, directors, employees and agents from and against all claims, losses, damages, liabilities and expenses, including attorneys' fees and expenses, arising out of or resulting from those Hazardous Conditions introduced to the Site by GENERAL CONTRACTOR, Subcontractors or anyone for whose acts they may be liable.

#### **4.2 Differing Site Conditions.**

**4.2.1** Concealed or latent physical conditions or subsurface conditions at the Site that (i) materially differ from the conditions indicated in the Contract Documents or (ii) are of an unusual nature, differing

materially from the conditions ordinarily encountered and generally recognized as inherent in the Work are collectively referred to herein as "Differing Site Conditions." If GENERAL CONTRACTOR encounters a Differing Site Condition, GENERAL CONTRACTOR will be entitled to an adjustment in the Contract Price and/or Contract Time(s) to the extent GENERAL CONTRACTOR's cost and/or time of performance are adversely impacted by the Differing Site Condition.

**4.2.2** Upon encountering a Differing Site Condition, GENERAL CONTRACTOR shall provide prompt written notice to Owner of such condition, which notice shall not be later than fourteen (14) days after such condition has been encountered. GENERAL CONTRACTOR shall, to the extent reasonably possible, provide such notice before the Differing Site Condition has been substantially disturbed or altered.

## **Article 5**

### **Insurance and Bonds**

#### **5.1 GENERAL CONTRACTOR's Insurance Requirements.**

**5.1.1** GENERAL CONTRACTOR is responsible for procuring and maintaining the insurance for the coverage amounts all as set forth in the Insurance Exhibit to the Agreement. Coverage shall be secured from insurance companies authorized to do business in the state in which the Project is located, and with a minimum rating set forth in the Agreement.

**5.1.2** Prior to commencing any construction services hereunder, GENERAL CONTRACTOR shall provide Owner with certificates evidencing that (i) all insurance obligations required by the Contract Documents are in full force and in effect and will remain in effect for the duration required by the Contract Documents and (ii) no insurance coverage will be canceled, renewal refused, or materially changed unless at least thirty (30) days prior written notice is given to Owner. If any of the foregoing insurance coverages are required to remain in force after final payment are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the Final Application for Payment. If any information concerning reduction of coverage is not furnished by the insurer, it shall be furnished by the GENERAL CONTRACTOR with reasonable promptness according to the GENERAL CONTRACTOR's information and belief. The City of Abilene (Owner) shall be listed as additional insured on all insurance policies.

#### **5.2 Owner's Liability Insurance.**

**5.2.1** Owner is a self-insured entity. A letter of self-insurance shall be provided to GENERAL CONTRACTOR upon written request.

#### **5.3 Owner's Property Insurance.**

**5.3.1** Owner is a self-insured entity. A letter of self-insurance shall be provided to GENERAL CONTRACTOR upon written request.

#### **5.4 Bonds and Other Performance Security.**

**5.4.1** If Owner requires GENERAL CONTRACTOR to obtain performance and labor and material payment bonds, or other forms of performance security, the amount, form and other conditions of such security shall be as set forth in the Agreement.

**5.4.2** All bonds furnished by GENERAL CONTRACTOR shall be in a form provided by the Owner. The surety shall be a company qualified and registered to conduct business in the state in which the Project is

located.

**5.4.3** If the value of the Agreement exceeds \$50,000, GENERAL CONTRACTOR must furnish and deliver a payment bond. If the value of the Agreement exceeds \$100,000, GENERAL CONTRACTOR must also furnish and deliver a performance bond when the Agreement is executed. The Bonds, for the full amount of the contract, must be executed by a corporate surety company authorized to do business in the State of Texas and be acceptable by the Owner. Bonds for projects using federal dollars must be underwritten by a surety named in the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Department.

**5.4.4** The Owner may require additional security if the initial surety becomes insolvent, bankrupt, or otherwise financially unable to protect the Owner under the terms of the Agreement. Owner's requiring new or additional security does not relieve the original surety or the GENERAL CONTRACTOR of their obligations under the Agreement. Owner may, without incurring any liability, stop work under the Agreement until GENERAL CONTRACTOR furnishes acceptable additional security.

**5.4.5** The GENERAL CONTRACTOR shall deliver the bonds not later than the 15<sup>th</sup> day after the GENERAL CONTRACTOR executes the Agreement unless the GENERAL CONTRACTOR furnishes a bid bond or other financial security acceptable to the Owner to ensure that GENERAL CONTRACTOR will furnish the required performance and payment bonds before construction begins.

## **Article 6**

### **Payment**

#### **6.1 Schedule of Values.**

**6.1.1** Unless required by the Owner upon execution of this Agreement, within ten (10) days of execution of the Agreement, GENERAL CONTRACTOR shall submit for Owner's review and approval a schedule of values for all of the Work. The Schedule of Values will (i) subdivide the Work into its respective parts, (ii) include values for all items comprising the Work and (iii) serve as the basis for monthly progress payments made to GENERAL CONTRACTOR throughout the Work.

**6.1.2** The Owner will timely review and approve the schedule of values so as not to delay the submission of the GENERAL CONTRACTOR's first application for payment. The Owner and GENERAL CONTRACTOR shall timely resolve any differences so as not to delay the GENERAL CONTRACTOR's submission of its first application for payment.

#### **6.2 Monthly Progress Payments.**

**6.2.1** On or before the date established in the Agreement, GENERAL CONTRACTOR shall submit for Owner's review and approval its Application for Payment requesting payment for all Work performed as of the date of the Application for Payment. The Application for Payment shall be accompanied by all supporting documentation required by the Contract Documents and/or established at the meeting required by Section 2.1.4 hereof.

**6.2.2** The Application for Payment may request payment for equipment and materials not yet incorporated into the Project, provided that (i) Owner is satisfied that the equipment and materials are suitably stored at either the Site or another acceptable location, (ii) the equipment and materials are protected by suitable insurance and (iii) upon payment, Owner will receive the equipment and materials free and clear of all liens and encumbrances.

**6.2.3** All discounts offered by Subcontractor, Sub-Subcontractors and suppliers to GENERAL CONTRACTOR for early payment shall accrue one hundred percent to GENERAL CONTRACTOR to the extent GENERAL CONTRACTOR advances payment. Unless Owner advances payment to GENERAL

CONTRACTOR specifically to receive the discount, GENERAL CONTRACTOR may include in its Application for Payment the full undiscounted cost of the item for which payment is sought.

**6.2.4** The Application for Payment shall constitute GENERAL CONTRACTOR's representation that the Work described herein has been performed consistent with the Contract Documents, has progressed to the point indicated in the Application for Payment, and that title to all Work will pass to Owner free and clear of all claims, liens, encumbrances, and security interests upon the incorporation of the Work into the Project, or upon GENERAL CONTRACTOR's receipt of payment, whichever occurs earlier.

### **6.3 Withholding of Payments.**

**6.3.1** On or before the date established in the Agreement, Owner shall pay GENERAL CONTRACTOR all amounts properly due. If Owner determines that GENERAL CONTRACTOR is not entitled to all or part of an Application for Payment as a result of GENERAL CONTRACTOR's failure to meet its obligations hereunder, it will notify GENERAL CONTRACTOR in writing at least five (5) days prior to the date payment is due. The notice shall indicate the specific amounts Owner intends to withhold, the reasons and contractual basis for the withholding, and the specific measures GENERAL CONTRACTOR must take to rectify Owner's concerns. GENERAL CONTRACTOR and Owner will attempt to resolve Owner's concerns prior to the date payment is due. If the parties cannot resolve such concerns, GENERAL CONTRACTOR may pursue its rights under the Contract Documents, including those under Article 10 hereof.

**6.3.2** Notwithstanding anything to the contrary in the Contract Documents, Owner shall pay GENERAL CONTRACTOR all undisputed amounts in an Application for Payment within the times required by the Agreement.

### **6.4 Right to Stop Work and Interest.**

**6.4.1** If Owner fails to pay timely GENERAL CONTRACTOR any amount that becomes due, GENERAL CONTRACTOR, in addition to all other remedies provided in the Contract Documents, may stop Work pursuant to Section 11.3 hereof. All payments due and unpaid shall bear interest at the rate set forth in the Agreement.

### **6.5 GENERAL CONTRACTOR's Payment Obligations.**

**6.5.1** GENERAL CONTRACTOR will pay Subcontractors, in accordance with its contractual obligations to such parties, all the amounts GENERAL CONTRACTOR has received from Owner on account of their work. GENERAL CONTRACTOR will impose similar requirements on Subcontractors to pay those parties with whom they have contracted. GENERAL CONTRACTOR will indemnify and defend Owner against any claims for payment and mechanic's liens as set forth in Section 7.3 hereof.

### **6.6 Substantial Completion.**

**6.6.1** GENERAL CONTRACTOR shall notify Owner when it believes the Work is Substantially Complete. Within five (5) days of Owner's receipt of GENERAL CONTRACTOR's notice, Owner and GENERAL CONTRACTOR will jointly inspect such Work to verify that it is Substantially Complete in accordance with the requirements of the Contract Documents. If such Work is Substantially Complete, Owner shall prepare and issue a Certificate of Substantial Completion that will set forth (i) the date of Substantial Completion of the Work or portion thereof, (ii) the remaining items of Work that have to be completed before final payment, (iii) provisions (to the extent not already provided in the Contract Documents) establishing Owner's and GENERAL CONTRACTOR's responsibility for the Project's security, maintenance, utilities and insurance pending final payment, and (iv) an acknowledgment that warranties commence to run on the date of Substantial Completion, except as may otherwise be noted in the Certificate of Substantial Completion.

**6.6.2** Upon Substantial Completion of the entire Work, Owner shall release to GENERAL CONTRACTOR all retained amounts relating, as applicable, to the entire Work.

**6.6.3** Owner, at its option, may use a portion of the Work which has been determined to be Substantially Complete, provided, however, that (i) a Certificate of Substantial Completion has been issued for the portion of Work addressing the items set forth in Section 6.6.1 above, (ii) GENERAL CONTRACTOR and Owner have obtained the consent of their sureties and insurers, and to the extent applicable, the appropriate government authorities having jurisdiction over the Project, and (iii) Owner and GENERAL CONTRACTOR agree that Owner's use or occupancy will not interfere with GENERAL CONTRACTOR's completion of the remaining Work.

## **6.7 Final Payment.**

**6.7.1** After receipt of a Final Application for Payment from GENERAL CONTRACTOR, Owner shall make final payment by the time required in the Agreement, provided that GENERAL CONTRACTOR has achieved Final Completion.

**6.7.2** At the time of submission of its Final Application for Payment, GENERAL CONTRACTOR shall provide the following information:

**6.7.2.1** An affidavit that there are no claims, obligations or liens outstanding or unsatisfied for labor, services, material, equipment, taxes or other items performed, furnished or incurred for or in connection with the Work which will in any way affect Owner's interests;

**6.7.2.2** A general release executed by GENERAL CONTRACTOR waiving, upon receipt of final payment by GENERAL CONTRACTOR, all claims, except those claims previously made in writing to Owner and remaining unsettled at the time of final payment;

**6.7.2.3** Consent of GENERAL CONTRACTOR's surety, if any, to final payment;

**6.7.2.4** All operating manuals, warranties and other deliverables required by the Contract Documents; and

**6.7.2.5** Certificates of insurance confirming that required coverages will remain in effect consistent with the requirements of the Contract Documents.

**6.7.3** Upon making final payment, Owner waives all claims against GENERAL CONTRACTOR except claims relating to (i) GENERAL CONTRACTOR's failure to satisfy its payment obligations, if such failure affects Owner's interests, (ii) GENERAL CONTRACTOR's failure to complete the Work consistent with the Contract Documents, including defects appearing after Substantial Completion and (iii) the terms of any special warranties required by the Contract Documents.

**6.7.4** Deficiencies in the Work discovered after Substantial Completion, whether or not such deficiencies would have been included on the Punch List if discovered earlier, shall be deemed warranty Work. Such deficiencies shall be corrected by GENERAL CONTRACTOR under Sections 2.9 and 2.10 herein, and shall not be a reason to withhold final payment from GENERAL CONTRACTOR, provided, however, that Owner shall be entitled to withhold from the Final Payment the reasonable value of completion of such deficient work until such work is completed.

## Article 7

### Indemnification

#### **7.1 Patent and Copyright Infringement.**

**7.1.1** GENERAL CONTRACTOR shall defend any action or proceeding brought against Owner based on any claim that the Work, or any part thereof, or the operation or use of the Work or any part thereof, constitutes infringement of any United States patent or copyright, now or hereafter issued. Owner shall give prompt written notice to GENERAL CONTRACTOR of any such action or proceeding and will reasonably provide authority, information and assistance in the defense of same. GENERAL CONTRACTOR shall indemnify and hold harmless Owner from and against all damages and costs, including but not limited to attorneys' fees and expenses awarded against Owner or GENERAL CONTRACTOR in any such action or proceeding. GENERAL CONTRACTOR agrees to keep Owner informed of all developments in the defense of such actions.

**7.1.2** If Owner is enjoined from the operation or use of the Work, or any part thereof, as the result of any patent or copyright suit, claim, or proceeding, GENERAL CONTRACTOR shall at its sole expense take reasonable steps to procure the right to operate or use the Work. If GENERAL CONTRACTOR cannot so procure such right within a reasonable time, GENERAL CONTRACTOR shall promptly, at GENERAL CONTRACTOR's option and at GENERAL CONTRACTOR's expense, (i) modify the Work so as to avoid infringement of any such patent or copyright or (ii) replace said Work with Work that does not infringe or violate any such patent or copyright.

**7.1.3** Sections 7.1.1 and 7.1.2 above shall not be applicable to any suit, claim or proceeding based on infringement or violation of a patent or copyright (i) relating solely to a particular process or product of a particular manufacturer specified by Owner and not offered or recommended by GENERAL CONTRACTOR to Owner or (ii) arising from modifications to the Work by Owner or its agents after acceptance of the Work. If the suit, claim or proceeding is based upon events set forth in the preceding sentence, Owner shall defend, indemnify and hold harmless GENERAL CONTRACTOR to the same extent GENERAL CONTRACTOR is obligated to defend, indemnify and hold harmless Owner in Section 7.1.1 above.

**7.1.4** The obligations set forth in this Section 7.1 shall constitute the sole agreement between the parties relating to liability for infringement of violation of any patent or copyright.

#### **7.2 Tax Claim Indemnification.**

**7.2.1** If, in accordance with Owner's direction, an exemption for all or part of the Work is claimed for taxes, to the fullest extent permitted by law, Owner shall indemnify, defend and hold harmless GENERAL CONTRACTOR from and against any liability, penalty, interest, fine, tax assessment, attorneys' fees or other expenses or costs incurred by GENERAL CONTRACTOR as a result of any action taken by GENERAL CONTRACTOR in accordance with Owner's directive. Owner shall furnish GENERAL CONTRACTOR with any applicable tax exemption certificates necessary to obtain such exemption, upon which GENERAL CONTRACTOR may rely.

#### **7.3 Payment Claim Indemnification.**

**7.3.1** Provided that Owner is not in breach of its contractual obligation to make payments to GENERAL CONTRACTOR for the Work, GENERAL CONTRACTOR shall indemnify, defend and hold harmless Owner from any claims or mechanic's liens brought against Owner or against the Project as a result of the failure of GENERAL CONTRACTOR, or those for whose acts it is responsible, to pay for any services, materials, labor, equipment, taxes or other items or obligations furnished or incurred for or in connection with the Work. Within three (3) days of receiving written notice from Owner that such a claim or mechanic's lien has been filed, GENERAL CONTRACTOR shall commence to take the steps necessary to discharge said

claim or lien, including, if necessary, the furnishing of a mechanic's lien bond. If GENERAL CONTRACTOR fails to do so, Owner will have the right to discharge the claim or lien and hold GENERAL CONTRACTOR liable for costs and expenses incurred, including attorneys' fees.

#### **7.4 GENERAL CONTRACTOR's General Indemnification.**

**7.4.1** GENERAL CONTRACTOR, to the fullest extent permitted by law, shall indemnify, hold harmless and defend Owner, its officers, directors, and employees from and against claims, losses, damages, liabilities, including attorneys' fees and expenses, for bodily injury, sickness or death, and property damage or destruction (other than to the Work itself) to the extent resulting from the negligent acts or omissions of GENERAL CONTRACTOR and Subcontractors, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable.

**7.4.2** If an employee of GENERAL CONTRACTOR or Subcontractors, anyone employed directly or indirectly by any of them or anyone for whose acts any of them may be liable has a claim against Owner, its officers, directors, employees, or agents, GENERAL CONTRACTOR's indemnity obligation set forth in Section 7.4.1 above shall not be limited by any limitation on the amount of damages, compensation or benefits payable by or for GENERAL CONTRACTOR or Subcontractors, or other entity under any employee benefit acts, including workers' compensation or disability acts.

#### **7.5 Owner's General Indemnification.**

**7.5.1** Owner, to the fullest extent permitted by law, shall indemnify, hold harmless and defend GENERAL CONTRACTOR and any of GENERAL CONTRACTOR's officers, directors, and employees, from and against claims, losses, damages, liabilities, including attorneys' fees and expenses, for bodily injury, sickness or death, and property damage or destruction (other than to the Work itself) to the extent resulting solely from the negligent acts or omissions of Owner's separate contractors or anyone for whose acts any of them may be liable.

## **Article 8**

### **Time**

#### **8.1 Obligation to Achieve the Contract Times.**

**8.1.1** GENERAL CONTRACTOR agrees that it will commence performance of the Work and achieve the Contract Time(s) in accordance with Article 4 of the Agreement.

#### **8.2 Delays to the Work.**

**8.2.1** If GENERAL CONTRACTOR is delayed in the performance of the Work due to acts, omissions, conditions, events, or circumstances beyond its control and due to no fault of its own or those for whom GENERAL CONTRACTOR is responsible, the Contract Time(s) for performance shall be reasonably extended by Change Order. By way of example, events that will entitle GENERAL CONTRACTOR to an extension of the Contract Time(s) include acts or omissions of Owner or anyone under Owner's control (including separate contractors), changes in the Work, Differing Site Conditions, Hazardous Conditions, and Force Majeure Events.

**8.2.2** In addition to GENERAL CONTRACTOR's right to a time extension for those events set forth in Section 8.2.1 above, GENERAL CONTRACTOR shall also be entitled to an appropriate adjustment of the Contract Price provided, however, that the Contract Price shall not be adjusted for Force Majeure Events unless otherwise provided in the Agreement.

## **Article 9**

### **Changes to the Contract Price and Time**

#### **9.1 Change Orders.**

**9.1.1** A Change Order is a written instrument issued after execution of the Agreement signed by Owner and GENERAL CONTRACTOR, stating their agreement upon all of the following:

**9.1.1.1** The scope of the change in the Work;

**9.1.1.2** The amount of the adjustment to the Contract Price; and

**9.1.1.3** The extent of the adjustment to the Contract Time(s).

**9.1.2** All changes in the Work authorized by applicable Change Order shall be performed under the applicable conditions of the Contract Documents. Owner and GENERAL CONTRACTOR shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for such changes.

**9.1.3** If Owner requests a proposal for a change in the Work from GENERAL CONTRACTOR and subsequently elects not to proceed with the change, a Change Order shall be issued to reimburse GENERAL CONTRACTOR for reasonable costs incurred for estimating services, design services and services involved in the preparation of proposed revisions to the Contract Documents.

#### **9.2 Work Change Directives.**

**9.2.1** A Work Change Directive is a written order prepared and signed by Owner directing a change in the Work prior to agreement on an adjustment in the Contract Price and/or the Contract Time(s).

**9.2.2** Owner and GENERAL CONTRACTOR shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for the Work Change Directive. Upon reaching an agreement, the parties shall prepare and execute an appropriate Change Order reflecting the terms of the agreement.

#### **9.3 Minor Changes in the Work.**

**9.3.1** Minor changes in the Work do not involve an adjustment in the Contract Price and/or Contract Time(s) and do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents. GENERAL CONTRACTOR may make minor changes in the Work consistent with the intent of the Contract Documents, provided, however, that GENERAL CONTRACTOR shall promptly inform Owner, in writing, of any such changes and record such changes on the documents maintained by GENERAL CONTRACTOR.

#### **9.4 Contract Price Adjustments.**

**9.4.1** The increase or decrease in Contract Price resulting from a change in the Work shall be determined by one or more of the following methods:

**9.4.1.1** Unit prices set forth in the Agreement or as subsequently agreed to between the parties;

**9.4.1.2** A mutually accepted lump sum, properly itemized and supported by sufficient substantiating data to permit evaluation by Owner;

**9.4.1.3** Costs, fees and any other markups set forth in the Agreement; or

**9.4.1.4** If an increase or decrease cannot be agreed to as set forth in items 9.4.1.1 through 9.4.1.3 above and Owner issues a Work Change Directive, the cost of the change of the Work shall be determined by the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit, as may be set forth in the Agreement.

**9.4.2** If unit prices are set forth in the Contract Documents or are subsequently agreed to by the parties, but application of such unit prices will cause substantial inequity to Owner or GENERAL CONTRACTOR because of differences in the character or quantity of such unit items as originally contemplated, such unit prices shall be equitably adjusted.

**9.4.3** If Owner and GENERAL CONTRACTOR disagree upon whether GENERAL CONTRACTOR is entitled to be paid for any services required by Owner, or if there are any other disagreements over the scope of Work or proposed changes to the Work, Owner and GENERAL CONTRACTOR shall resolve the disagreement pursuant to Article 10 hereof. As part of the negotiation process, GENERAL CONTRACTOR shall furnish Owner with a good faith estimate of the costs to perform the disputed services in accordance with Owner's interpretations. If the parties are unable to agree and Owner expects GENERAL CONTRACTOR to perform the services in accordance with Owner's interpretations, GENERAL CONTRACTOR shall proceed to perform the disputed services, conditioned upon Owner issuing a written order to GENERAL CONTRACTOR (i) directing GENERAL CONTRACTOR to proceed and (ii) specifying Owner's interpretation of the services that are to be performed. If this occurs, GENERAL CONTRACTOR shall be entitled to submit in its Applications for Payment an amount equal to fifty percent (50%) of its reasonable estimated direct cost to perform the services, and Owner agrees to pay such amounts, with the express understanding that (i) such payment by Owner does not prejudice Owner's right to argue that it has no responsibility to pay for such services and (ii) receipt of such payment by GENERAL CONTRACTOR does not prejudice GENERAL CONTRACTOR's right to seek full payment of the disputed services if Owner's order is deemed to be a change to the Work.

## **9.5 Emergencies.**

**9.5.1** In any emergency affecting the safety of persons and/or property, GENERAL CONTRACTOR shall act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Contract Price and/or Contract Time(s) on account of emergency work shall be determined as provided in this Article 9.

# **Article 10**

## **Contract Adjustments and Disputes**

### **10.1 Requests for Contract Adjustments and Relief.**

**10.1.1** If either GENERAL CONTRACTOR or Owner believes that it is entitled to relief against the other for any event arising out of or related to the Work or Project, such party shall provide written notice to the other party of the basis for its claim for relief. Such notice shall, if possible, be made prior to incurring any cost or expense and in accordance with any specific notice requirements contained in applicable sections of these General Conditions of Contract. In the absence of any specific notice requirement, written notice shall be given within a reasonable time, not to exceed twenty-one (21) days, after the occurrence giving rise to the claim for relief or after the claiming party reasonably should have recognized the event or condition giving rise to the request, whichever is later. Such notice shall include sufficient information to advise the other party of the circumstances giving rise to the claim for relief, the specific contractual adjustment or relief requested and the basis of such request.

## **10.2 Dispute Avoidance and Resolution.**

**10.2.1** The parties are fully committed to working with each other throughout the Project and agree to communicate regularly with each other at all times so as to avoid or minimize disputes or disagreements. If disputes or disagreements do arise, GENERAL CONTRACTOR and Owner each commit to resolving such disputes or disagreements in an amicable, professional and expeditious manner so as to avoid unnecessary losses, delays and disruptions to the Work.

**10.2.2** GENERAL CONTRACTOR and Owner will first attempt to resolve disputes or disagreements at the field level through discussions between GENERAL CONTRACTOR's Representative and Owner's Representative which shall conclude within fourteen (14) days of the written notice provided for in Section 10.1.1 unless the Owner and GENERAL CONTRACTOR mutually agree otherwise.

**10.2.3** If a dispute or disagreement cannot be resolved through GENERAL CONTRACTOR's Representative and Owner's Representative, GENERAL CONTRACTOR's Senior Representative and Owner's Senior Representative, upon the request of either party, shall meet as soon as conveniently possible, but in no case later than thirty (30) days after such a request is made, to attempt to resolve such dispute or disagreement. Five (5) days prior to any meetings between the Senior Representatives, the parties will exchange relevant information that will assist the parties in resolving their dispute or disagreement.

**10.2.4** If after meeting the Senior Representatives determine that the dispute or disagreement cannot be resolved on terms satisfactory to both parties, the parties shall submit within thirty (30) days of the conclusion of the meeting of Senior Representatives the dispute or disagreement to non-binding mediation. The mediation shall be conducted by a mutually agreeable impartial mediator, or if the parties cannot so agree, a mediator designated by the American Arbitration Association ("AAA") pursuant to its Construction Industry Mediation Rules. The mediation will be governed by and conducted pursuant to a mediation agreement negotiated by the parties or, if the parties cannot so agree, by procedures established by the mediator. Unless otherwise mutually agreed by the Owner and GENERAL CONTRACTOR and consistent with the mediator's schedule, the mediation shall commence within ninety (90) days of the submission of the dispute to mediation.

## **10.3 Duty to Continue Performance.**

**10.3.1** Unless provided to the contrary in the Contract Documents, GENERAL CONTRACTOR shall continue to perform the Work and Owner shall continue to satisfy its payment obligations to GENERAL CONTRACTOR, pending the final resolution of any dispute or disagreement between GENERAL CONTRACTOR and Owner.

## **10.4 CONSEQUENTIAL DAMAGES.**

**10.4.1** NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY (EXCEPT AS SET FORTH IN SECTION 10.4.2 BELOW), NEITHER GENERAL CONTRACTOR NOR OWNER SHALL BE LIABLE TO THE OTHER FOR ANY CONSEQUENTIAL LOSSES OR DAMAGES, WHETHER ARISING IN CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE, INCLUDING BUT NOT LIMITED TO LOSSES OF USE, PROFITS, BUSINESS, REPUTATION OR FINANCING.

**10.4.2** The consequential damages limitation set forth in Section 10.4.1 above is not intended to affect the payment of liquidated damages or lost early completion bonus, if any, set forth in Article 4 of the Agreement, which both parties recognize has been established, in part, to reimburse Owner or reward GENERAL CONTRACTOR for some damages that might otherwise be deemed to be consequential.

## **Article 11**

### **Stop Work and Termination for Cause**

#### **11.1 Owner's Right to Stop Work.**

**11.1.1** Owner may, without cause and for its convenience, order GENERAL CONTRACTOR in writing to stop and suspend the Work. Such suspension shall not exceed sixty (60) consecutive days or aggregate more than ninety (90) days during the duration of the Project.

**11.1.2** GENERAL CONTRACTOR is entitled to seek an adjustment of the Contract Price and/or Contract Time(s) if its cost or time to perform the Work has been adversely impacted by any suspension of stoppage of the Work by Owner.

#### **11.2 Owner's Right to Perform and Terminate for Cause.**

**11.2.1** If GENERAL CONTRACTOR persistently fails to (i) provide a sufficient number of skilled workers, (ii) supply the materials required by the Contract Documents, (iii) comply with applicable Legal Requirements, (iv) timely pay, without cause, Subcontractors, (v) prosecute the Work with promptness and diligence to ensure that the Work is completed by the Contract Time(s), as such times may be adjusted, or (vi) perform material obligations under the Contract Documents, then Owner, in addition to any other rights and remedies provided in the Contract Documents or by law, shall have the rights set forth in Sections 11.2.2 and 11.2.3 below.

**11.2.2** Upon the occurrence of an event set forth in Section 11.2.1 above, Owner may provide written notice to GENERAL CONTRACTOR that it intends to terminate the Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of GENERAL CONTRACTOR's receipt of such notice. If GENERAL CONTRACTOR fails to cure, or reasonably commence to cure, such problem, then Owner may give a second written notice to GENERAL CONTRACTOR of its intent to terminate within an additional seven (7) day period. If GENERAL CONTRACTOR, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then Owner may declare the Agreement terminated for default by providing written notice to GENERAL CONTRACTOR of such declaration.

**11.2.3** Upon declaring the Agreement terminated pursuant to Section 11.2.2 above, Owner may enter upon the premises and take possession, for the purpose of completing the Work, of all materials, equipment, scaffolds, tools, appliances and other items thereon, which have been purchased or provided for the performance of the Work, all of which GENERAL CONTRACTOR hereby transfers, assigns and sets over to Owner for such purpose, and to employ any person or persons to complete the Work and provide all of the required labor, services, materials, equipment and other items. In the event of such termination, GENERAL CONTRACTOR shall not be entitled to receive any further payments under the Contract Documents until the Work shall be finally completed in accordance with the Contract Documents. At such time, if the unpaid balance of the Contract Price exceeds the cost and expense incurred by Owner in completing the Work, such excess shall be paid by Owner to GENERAL CONTRACTOR. Notwithstanding the preceding sentence, if the Agreement establishes a Guaranteed Maximum Price, GENERAL CONTRACTOR will only be entitled to be paid for Work performed prior to its default. If Owner's cost and expense of completing the Work exceeds the unpaid balance of the Contract Price, then GENERAL CONTRACTOR shall be obligated to pay the difference to Owner. Such costs and expense shall include not only the cost of completing the Work, but also losses, damages, costs and expense, including attorneys' fees and expenses, incurred by Owner in connection with the procurement and defense of claims arising from GENERAL CONTRACTOR's default, subject to the waiver of consequential damages set forth in Section 10.4 hereof.

**11.2.4** If Owner improperly terminates the Agreement for cause, the termination for cause will be converted to a termination for convenience in accordance with the provisions of Article 8 of the

Agreement.

### **11.3 GENERAL CONTRACTOR's Right to Stop Work.**

**11.3.1** GENERAL CONTRACTOR may, in addition to any other rights afforded under the Contract Documents or at law, stop the Work for the following reason:

**11.3.1.1** Owner's failure to pay amounts properly due under GENERAL CONTRACTOR's Application for Payment.

**11.3.2** Should any of the events set forth in Section 11.3.1 above occur, GENERAL CONTRACTOR has the right to provide Owner with written notice that GENERAL CONTRACTOR will stop the Work unless said event is cured within seven (7) days from Owner's receipt of GENERAL CONTRACTOR's notice. If Owner does not cure the problem within such seven (7) day period, GENERAL CONTRACTOR may stop the Work. In such case, GENERAL CONTRACTOR shall be entitled to make a claim for adjustment to the Contract Price and Contract Time(s) to the extent it has been adversely impacted by such stoppage.

### **11.4 GENERAL CONTRACTOR's Right to Terminate for Cause.**

**11.4.1** GENERAL CONTRACTOR, in addition to any other rights and remedies provided in the Contract Documents or by law, may terminate the Agreement for cause for the following reasons:

**11.4.1.1** The Work has been stopped for sixty (60) consecutive days, or more than ninety (90) days during the duration of the Project, because of court order, any government authority having jurisdiction over the Work, or orders by Owner under Section 11.1.1 hereof, provided that such stoppages are not due to the acts or omissions of GENERAL CONTRACTOR or anyone for whose acts GENERAL CONTRACTOR may be responsible.

**11.4.1.2** Owner's failure to provide GENERAL CONTRACTOR with any information, permits or approvals that are Owner's responsibility under the Contract Documents which result in the Work being stopped for sixty (60) consecutive days, or more than ninety (90) days during the duration of the Project, even though Owner has not ordered GENERAL CONTRACTOR in writing to stop and suspend the Work pursuant to Section 11.1.1 hereof.

**11.4.1.3** Owner's failure to cure the problems set forth in Section 11.3.1 above after GENERAL CONTRACTOR has stopped the Work.

**11.4.2** Upon the occurrence of an event set forth in Section 11.4.1 above, GENERAL CONTRACTOR may provide written notice to Owner that it intends to terminate the Agreement unless the problem cited is cured, or commenced to be cured, within seven (7) days of Owner's receipt of such notice. If Owner fails to cure, or reasonably commence to cure, such problem, then GENERAL CONTRACTOR may give a second written notice to Owner of its intent to terminate within an additional seven (7) day period. If Owner, within such second seven (7) day period, fails to cure, or reasonably commence to cure, such problem, then GENERAL CONTRACTOR may declare the Agreement terminated for default by providing written notice to Owner of such declaration. In such case, GENERAL CONTRACTOR shall be entitled to recover in the same manner as if Owner had terminated the Agreement for its convenience under Article 8 of the Agreement.

### **11.5 Bankruptcy of Owner or GENERAL CONTRACTOR.**

**11.5.1** If either Owner or GENERAL CONTRACTOR institutes or has instituted against it a case under the United States Bankruptcy Code (such party being referred to as the "Bankrupt Party"), such event may impair or frustrate the Bankrupt Party's ability to perform its obligations under the Contract Documents. Accordingly, should such event occur:

**11.5.1.1** The Bankrupt Party, its trustee or other successor, shall furnish, upon request of the non-Bankrupt Party, adequate assurance of the ability of the Bankrupt Party to perform all future material obligations under the Contract Documents, which assurances shall be provided within ten (10) days after receiving notice of the request; and

**11.5.1.2** The Bankrupt Party shall file an appropriate action within the bankruptcy court to seek assumption or rejection of the Agreement within sixty (60) days of the institution of the bankruptcy filing and shall diligently prosecute such action.

If the Bankrupt Party fails to comply with its foregoing obligations, the non-Bankrupt Party shall be entitled to request the bankruptcy court to reject the Agreement, declare the Agreement terminated and pursue any other recourse available to the non-Bankrupt Party under this Article 11.

**11.5.2** The rights and remedies under Section 11.5.1 above shall not be deemed to limit the ability of the non-Bankrupt Party to seek any other rights and remedies provided by the Contract Documents or by law, including its ability to seek relief from any automatic stays under the United States Bankruptcy Code or the right of GENERAL CONTRACTOR to stop Work under any applicable provision of these General Conditions of Contract.

## **Article 12**

### **Electronic Data**

#### **12.1 Electronic Data.**

**12.1.1** The parties recognize that Contract Documents, including drawings, specifications and three-dimensional modeling (such as Building Information Models) and other Work Product may be transmitted among Owner, GENERAL CONTRACTOR and others in electronic media as an alternative to paper hard copies (collectively "Electronic Data").

#### **12.2 Transmission of Electronic Data.**

**12.2.1** Owner and GENERAL CONTRACTOR shall agree upon the software and the format for the transmission of Electronic Data. Each party shall be responsible for securing the legal rights to access the agreed-upon format, including, if necessary, obtaining appropriately licensed copies of the applicable software or electronic program to display, interpret and/or generate the Electronic Data.

**12.2.2** Neither party makes any representations or warranties to the other with respect to the functionality of the software or computer program associated with the electronic transmission of Work Product. Unless specifically set forth in the Agreement, ownership of the Electronic Data does not include ownership of the software or computer program with which it is associated, transmitted, generated or interpreted.

**12.2.3** By transmitting Work Product in electronic form, the transmitting party does not transfer or assign its rights in the Work Product. The rights in the Electronic Data shall be as set forth in Article 4 of the Agreement. Under no circumstances shall the transfer of ownership of Electronic Data be deemed to be a sale by the transmitting party of tangible goods.

#### **12.3 Electronic Data Protocol.**

**12.3.1** The parties acknowledge that Electronic Data may be altered or corrupted, intentionally or otherwise, due to occurrences beyond their reasonable control or knowledge, including but not limited to

compatibility issues with user software, manipulation by the recipient, errors in transcription or transmission, machine error, environmental factors, and operator error. Consequently, the parties understand that there is some level of increased risk in the use of Electronic Data for the communication of design and construction information and, in consideration of this, agree, and shall require their independent contractors, Subcontractors and Design Consultants to agree, to the following protocols, terms and conditions set forth in this Section 12.3.

**12.3.2** Electronic Data will be transmitted in the format agreed upon in Section 12.2.1 above, including file conventions and document properties, unless prior arrangements are made in advance in writing.

**12.3.3** The Electronic Data represents the information at a particular point in time and is subject to change. Therefore, the parties shall agree upon protocols for notification by the author to the recipient of any changes which may thereafter be made to the Electronic Data, which protocol shall also address the duty, if any, to update such information, data or other information contained in the electronic media if such information changes prior to Final Completion of the Project.

**12.3.4** The transmitting party specifically disclaims all warranties, expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose, with respect to the media transmitting the Electronic Data. However, transmission of the Electronic Data via electronic means shall not invalidate or negate any duties pursuant to the applicable standard of care with respect to the creation of the Electronic Data, unless such data is materially changed or altered after it is transmitted to the receiving party, and the transmitting party did not participate in such change or alteration.

## **Article 13**

### **Miscellaneous**

#### **13.1 Confidential Information.**

**13.1.1** Confidential Information is defined as information which is determined by the transmitting party to be of a confidential or proprietary nature and: (i) the transmitting party identifies as either confidential or proprietary; (ii) the transmitting party takes steps to maintain the confidential or proprietary nature of the information; and (iii) the document is not otherwise available in or considered to be in the public domain. The receiving party agrees to maintain the confidentiality of the Confidential Information and agrees to use the Confidential Information solely in connection with the Project, unless otherwise required by the state public information act or other law.

#### **13.2 Assignment.**

**13.2.1** Neither GENERAL CONTRACTOR nor Owner shall, without the written consent of the other, assign, transfer or sublet any portion or part of the Work or the obligations required by the Contract Documents.

#### **13.3 Successorship.**

**13.3.1** GENERAL CONTRACTOR and Owner intend that the provisions of the Contract Documents are binding upon the parties, their employees, agents, heirs, successors and assigns.

#### **13.4 Governing Law.**

**13.4.1** The Agreement and all Contract Documents, as to both interpretation and performance, shall be governed by the laws of the State of Texas, without giving effect to its conflict of law principles. Venue for

any cause of action arising under the Agreement is Taylor County, Texas.

**13.5 Severability.**

**13.5.1** If any provision or any part of a provision of the Contract Documents shall be finally determined to be superseded, invalid, illegal, or otherwise unenforceable pursuant to any applicable Legal Requirements, such determination shall not impair or otherwise affect the validity, legality, or enforceability of the remaining provision or parts of the provision of the Contract Documents, which shall remain in full force and effect as if the unenforceable provision or part were deleted.

**13.6 No Waiver.**

**13.6.1** The failure of either GENERAL CONTRACTOR or Owner to insist, in any one or more instances, on the performance of any of the obligations required by the other under the Contract Documents shall not be construed as a waiver or relinquishment of such obligation or right with respect to future performance.

**13.7 Headings.**

**13.7.1** The headings used in these General Conditions of Contract, or any other Contract Document, are for ease of reference only and shall not in any way be construed to limit or alter the meaning of any provision.

**13.8 Notice.**

**13.8.1** Whenever the Contract Documents require that notice be provided to the other party, notice will be deemed to have been validly given (i) if delivered in person to the individual intended to receive such notice, (ii) four (4) days after being sent by registered or certified mail, postage prepaid to the address indicated in the Agreement, or (iii) if transmitted by facsimile, by the time stated in a machine generated confirmation that notice was received at the facsimile number of the intended recipient.

**13.9 Amendments.**

**13.9.1** The Contract Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party.

EXHIBIT A

PREVAILING WAGE RATES

General Decision Number: TX180332 06/01/2018 TX332

Superseded General Decision Number: TX20170332

State: Texas

Construction Type: Building

Counties: Callahan, Jones and Taylor Counties in Texas.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number Publication Date

- 0 01/05/2018
- 1 02/09/2018
- 2 06/01/2018

BOIL0074-003 01/01/2017

	Rates	Fringes
BOILERMAKER.....	\$ 28.00	22.35

\* ELEC0681-005 05/01/2018

	Rates	Fringes
ELECTRICIAN (Excludes Low Voltage Wiring).....	\$ 25.04	4%+\$8.80

ENGI0178-005 06/01/2014

Rates	Fringes
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POWER EQUIPMENT OPERATOR

(1) Tower Crane.....	\$ 29.00	10.60
(2) Cranes with Pile Driving or Caisson Attachment and Hydraulic Crane 60 tons and above.....	\$ 28.75	10.60
(3) Hydraulic cranes 59 Tons and under.....	\$ 27.50	10.60

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IRON0084-011 06/01/2017

	Rates	Fringes
IRONWORKER, ORNAMENTAL.....	\$ 23.27	7.12

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PLUM0404-001 07/01/2016

	Rates	Fringes
PLUMBER.....	\$ 25.91	9.40

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SUTX2014-058 07/21/2014

	Rates	Fringes
BRICKLAYER.....	\$ 20.04	0.00
CARPENTER.....	\$ 12.71	0.66
CEMENT MASON/CONCRETE FINISHER...	\$ 15.32	0.00
ELECTRICIAN (Low Voltage Wiring Only).....	\$ 17.00	0.00
INSULATOR - MECHANICAL (Duct, Pipe & Mechanical System Insulation).....	\$ 19.77	7.13
IRONWORKER, REINFORCING.....	\$ 12.27	0.00
IRONWORKER, STRUCTURAL.....	\$ 22.16	5.26
LABORER: Common or General.....	\$ 11.89	0.00
LABORER: Mason Tender - Brick...	\$ 11.36	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 10.58	0.00

LABORER: Pipelayer.....	\$ 12.49	2.13
LABORER: Roof Tearoff.....	\$ 11.28	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 14.25	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 13.93	0.00
OPERATOR: Bulldozer.....	\$ 18.29	1.31
OPERATOR: Drill.....	\$ 16.22	0.34
OPERATOR: Forklift.....	\$ 14.83	0.00
OPERATOR: Grader/Blade.....	\$ 13.37	0.00
OPERATOR: Loader.....	\$ 13.55	0.94
OPERATOR: Mechanic.....	\$ 17.52	3.33
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 16.03	0.00
OPERATOR: Roller.....	\$ 12.70	0.00
PAINTER (Brush, Roller, and Spray).....	\$ 14.45	0.00
PIPEFITTER.....	\$ 25.80	8.55
ROOFER.....	\$ 13.75	0.00
SHEET METAL WORKER (HVAC Duct Installation Only).....	\$ 22.73	7.52
SHEET METAL WORKER, Excludes HVAC Duct Installation.....	\$ 21.13	6.53
TILE FINISHER.....	\$ 11.22	0.00
TILE SETTER.....	\$ 14.74	0.00
TRUCK DRIVER: Dump Truck.....	\$ 12.39	1.18
TRUCK DRIVER: Flatbed Truck.....	\$ 19.65	8.57
TRUCK DRIVER: Semi-Trailer		

Truck.....	\$ 12.50	0.00
TRUCK DRIVER: Water Truck.....	\$ 12.00	4.11

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

## Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

## Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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## WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

**EQUAL OPPORTUNITY GUIDELINES FOR CONSTRUCTION CONTRACTORS**

*Note: To be included in bid packet and distributed at the preconstruction conference (optional)*

1. **What are the responsibilities of the offeror or bidder to insure equal employment opportunity?**  
The offeror or bidder must comply with the "Equal Opportunity Clause" and the "Standard Federal Equal Opportunity Construction Contract Specifications."
2. **Are construction contractors required to insure a comfortable working environment for all employees?**  
Yes, it is the construction contractor's responsibility to provide an environment free of harassment, intimidation, and coercion to all employees and to notify all foremen and supervisors to carry out this obligation, with specific attention to minority or female individuals.
3. **To alleviate developing separate facilities for men and women on all sites, can a construction contractor place all women employees on one site?**  
No, two or more women should be assigned to each site when possible.
4. **Are construction contractors required to make special outreach efforts to minority and female recruitment sources?**  
Yes, construction contractors must establish a current list of minority and female recruitment sources. Notification of employment opportunities, including the availability of on-the-job training and apprenticeship programs, should be given to these sources. The efforts of the construction contractors should be kept in file.
5. **Should records be maintained on the number of minority and females applying for positions with construction contractors?**  
Yes, records must be maintained to include a current list of names, addresses and telephone numbers of all minority and female applicants. The documentation should also include the results of the applications submitted.
6. **What happens if a woman or minority is sent to the union by the Contractor and is not referred back to the Contractor for employment?**  
If the unions impede the construction contractor's responsibility to provide equal employment opportunity, a written notice should be submitted to TDA.
7. **What efforts are made by construction contractors to create entry-level positions for women and minorities?**  
Construction contractors are required to develop on-the-job training programs, or participate in training programs, especially those funded by the Department of Labor, to create positions for women and minorities and to meet employment needs.
8. **Are any efforts made by the Contractor to publicize their Equal Employment Opportunity (EEO) policy?**  
Yes, the construction contractor is responsible for notifying unions and sources of training programs of their equal employment opportunity policy. Unions should be requested to cooperate in the effort of equal opportunity. The policy should be included in any appropriate manuals, or collective bargaining agreements. The construction contractor is encouraged to

publicize the equal employment opportunity policy in the company newspaper and annual report. The Contractor is also responsible to include the EEO policy in all media advertisement.

9. **Are any in-service training programs provided for staff to update the EEO policy?**  
At least annually a review of the EEO policy and the affirmative action obligations are required of all personnel employees of a decision-making status. A record of the meeting including date, time, location, persons present, subject matter discussed, and disposition of the subject matter should be maintained.
10. **What recruitment efforts are made for minorities and women?**  
The construction contractor must notify, both orally and in writing, minority and female recruitment sources one month prior to the date of acceptance for apprenticeship or other training programs.
11. **Are any measures taken to encourage promotions for minorities and women?**  
Yes, an annual evaluation should be conducted for all minority and female personnel to encourage these employees to seek higher positions.
12. **What efforts are taken to insure that personnel policies are in accordance with the EEO policy?**  
Personnel policies in regard to job practices, work assignments, etc. should be continually monitored to insure that the EEO policy is carried out.
13. **Can women be excluded from utilizing any facilities available to men?**  
No, all facilities and company activities are non-segregated except for bathrooms or changing facilities to insure privacy.
14. **What efforts are made to utilize minority and female contractors and suppliers?**  
None, however records are kept of all offers to minority and female construction contractors.
15. **If a construction contractor participates in a business related association that does not comply with affirmative action standards, does that show his/her failure to comply?**  
No, the construction contractor is responsible for its own compliance.
16. **Will a construction contractor be in violation of EEO policy and affirmative action if he sets up one set of goals to include minorities and women?**  
Yes. There is a separate goal for minorities and a separate single goal for women. The construction contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women both minority and non-minority.
17. **Can a construction contractor hire a subcontractor who has been debarred from government contracts pursuant to EEO?**  
No. The construction contractor must suspend, terminate or cancel its contract with any Subcontractor who is in violation of the EEO policy.
18. **What effort has been taken by the construction contractor to monitor all employment to insure the company EEO policy is being carried out?**  
The construction contractor must designate a responsible individual to keep accurate records of all employees that includes specific information required by the government.

**TECHNICAL SPECIFICATIONS  
TOPC East Elevated Water Tank  
Rehabilitation**

**PART 1 - GENERAL**

**1.01 SCOPE**

A. This project is for the Coatings Rehabilitation of the existing tank known as the TOPC East Elevated Tank located in Pecos, Texas. Constructed in 1954 by Pittsburg Des Moines Steel Company the tank is operated by the City of Pecos. This specification covers the minimum requirements for design, selection of materials, fabrication, repairs, inspection, testing, cleaning and coating of a carbon steel elevated tank. This contract involves some corrosion related repairs, installation of a new interior and exterior access ladder, repairing/replacing the liquid target level and coatings rehabilitation on the 500,000-gallon steel elevated storage tank. The Contractor shall be responsible for all labor, materials and equipment necessary for the repairs, cleaning, painting of the interior and exterior tank surfaces and disinfection. The work of this section includes the sediment removal, cleaning, repairs, surface preparation and coating of all exterior and interior surfaces. It is the intent of these specifications that the Contractor shall perform the work on this tank in accordance with the following codes and specifications.

**See Part 3.12, for a more complete listing and description of work.**

- B. The term “interior surfaces” shall refer to the inside of the tank proper, and all appurtenances located inside the tank (i.e. ladders, etc.) to include the interior side of all manholes, hatches, connections, interface of spandrel rods to roof, etc.
- C. The term “exterior surfaces” shall refer to the outside of the tank proper and all appurtenances located outside of the tank including, valves, piping that are attached and next to the tank existing above grade.
- D. The paint and painting products used for this project shall be manufactured by the Tnemec Corporation only. No other painting manufacturers will be allowed for use on this project. The contractor shall make arrangements for the Tnemec representative to attend the pre-construction conference.

**\*\*SPECIAL NOTE: Full Containment of the tank during exterior surface preparation and painting operations is required and specified under Part 3.07. The contractor is advised that the existing exterior coating systems contain high levels of lead and may contain other RCRA metals. Section RCRA provides information and contractor responsibilities. Results of the Laboratory Test provided by DHL Analytical are attached to the RCRA Section.**

## **1.02 PRE-CONSTRUCTION CONFERENCE**

- A.** City of Pecos (owner) and FXSA Consulting Engineers (engineer) will arrange a meeting to be held before work begins. The meeting will be held on-site with the following representatives present: 1) General CONTRACTOR and the CONTRACTOR'S SUPERINTENDENT who will be on the job, 2) OWNER, including Project Managers, and Inspectors and 3) Paint manufacturer's representative. At this meeting the Specifications and CONTRACTORS work schedule will be reviewed in detail. It is the responsibility of the CONTRACTOR to notify his paint representative, subcontractor, superintendent and other parties listed. Owner/Engineer will set up the meeting date and time.

## **1.03 SPECIFICATIONS AND STANDARDS**

- A.** Without limiting the general aspects of other requirements of these specifications, all work on the water storage tank shall fully conform to the requirements of the latest published editions of the following Standard Specifications.
- AWWA D100 - Standard for Welded Carbon Steel Tanks for Water Storage
  - AWWA D102 - Standard for Painting Steel Water Storage Tanks
  - AWWA C652 - Standard for Disinfection of Water Storage Facilities
  - AWWA M42 – Manual of Steel Water Storage Tanks
  - AWS D1.1 - Structural Steel Welding Code
  - ASME Section IX - Boiler and Pressure Vessel Code
  - NACE International - National Association of Corrosion Engineers
  - SSPC - Steel Structures Painting Council
  - ASTM - American Society for Testing and Materials
  - NSF - National Sanitary Foundation
  - OSHA – Occupational Safety and Health Administration
  - TCEQ – Texas Commission on Environmental Quality
  - CFR – Code of Federal Regulations
  - TAC – Texas Administrative Code
  - EPA – U.S. Environmental Protection Agency
  - ANSI – American National Standards Institute
- B.** The Engineer and Inspector's decision shall be final as the interpretation and/or conflict between any of the referenced specifications and standards contained herein.

## **1.04 CONTRACTOR**

- A.** The Contractor shall be a specialist in the painting and rehabilitation of elevated storage tanks and have a minimum of seven (7) years experience and successful history. The contractor shall have experience with full containment and coatings removal containing high levels of RCRA Metals and the application of similar internal and external coatings. Such experience must have been on a minimum of five (5) projects in the State of Texas, completed during the existence of business under the current company name and original ownership. The Contractor must be able to demonstrate experience through the submittal of a project portfolio that successfully documents the completion of the coatings rehabilitation of at least

five (5) Elevated Water Tanks on a minimum size of 100,000-gallons, as part of the bid submittal on the Bidder's Qualification Statement Form. The Contractor shall not subcontract the coatings rehabilitation tasks but may hire a subcontractor to perform minor tank modification/repairs and or containment installation.

- B.** The Contractor shall submit with his bid the following information. No bid will be considered unless this information is provided with the proposal.
- A list of five (5) Elevated Storage Tanks for potable water service that have been rehabilitated within the past five years, including the Owner's name, tank storage capacity and name of the Project Engineer.
  - A Preliminary or Final Containment Drawing and a written plan explaining the contractor's procedural steps for executing the work as specified in the contract documents.
  - A Preliminary Schedule that meets the City's needs and timeline for the completion date based on the 120-day contract.
  - A Valid Contingency Plan if delays occur and the ability to execute the plan.
  - A written statement by the coatings manufacturer stating that the Contractor is familiar with the materials specified and has workers capable of performing the work specified herein.
- C.** The personnel performing the work shall be knowledgeable and have the required experience and skill to adequately perform the work for this project, in accordance with AWWA D100, AWWA D102 and SSPC-PA1, "Shop, Field and Maintenance Painting". The contractor shall meet the requirements of the Bidder Qualifications.
- D.** The Contractor is responsible for all claims for welding and paint damage during the progress of the tank rehabilitation and is especially forewarned of this responsibility so that he may exert all possible precaution and care for protection of surrounding property, which includes the existing facility and tank while under rehabilitation.
- E.** The Contractor shall protect the public from harm caused by the Contractor's actions and performance of the work. Prior to the start of work or mobilization on site, the Contractor shall submit a site-specific Public Safety Plan based on the Contractor's selected work methods. The plan shall include necessary plans and measures to protect the general public from harm. Safety signs, warning signs, protective barriers and safety warning devices for daylight and nighttime protection shall be installed.
- F.** When not working on the tank or site (such as during the evening, weekends, holidays, or bad weather days), the Contractor shall secure all openings in the tank, the exterior ladder and access or rigging devices. The Contractor shall lock the site fencing, equipment and supply storage containers. The Contractor shall be solely responsible for the security of the site, tank, equipment and supplies during working and non-working hours.

## 1.05 QUALITY ASSURANCE

- A. **General:** Quality assurance procedures and practices shall be utilized to monitor all phases of erection, welding surface preparation, application and inspection throughout the duration of the project. Procedures or practices not specifically defined herein may be utilized provided they meet recognized and accepted professional standards and are approved by the Engineer and City's Inspector.

A form for recording the daily activities of the contractor not limited to roof modifications, surface preparation and coatings application shall be provided by the contractor and submitted at the beginning of the job for approval by the City's Inspector. The information required on the form is listed under Part 3.10 of this specification.

Each day during the surface preparation and coatings activities the air temperature, steel surface temperature, humidity and dew point shall be measured, and recorded by the Contractor prior to beginning of blasting and prior to application of coating daily. Atmospheric conditions shall be measured and recorded at least every 3 hours and when climatic conditions begin to change. All environmental readings shall be recorded and placed in a file located on the job site and made available for daily owner review. This file shall be turned over to the Owner's Inspector at the end of the job.

Surface temperature shall be measured by using approved thermometers. Temperature of both the sunny side and shady side of the reservoir shall be recorded periodically each day. The dew point shall be measured and recorded at least every 3 hours by use of a digital or sling Psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables. The reservoir surface temperatures, relative humidity, dry bulb, wet bulb and dew point temperatures both interior and exterior (as appropriate) are to be recorded.

- B. **Surface Preparation:** Surface preparation will be based upon comparison with: "Pictorial Surface Preparation Standards for Painting Steel Surfaces: SSPC-Vis 1-02, SSPC-Vis 3-04 and SSPC-Vis 4-01, ASTM Designation D2200-17, "Standard Methods of Evaluating Degree of Rusting on Painted Surfaces", ASTM D 4417-14, Method A and/or Method C, "Standard Test Method for Field Measurement of Surface Profile of Blast Cleaned Steel" or NACE SP0287-16, "Field Measurement of Surface Profile of Abrasive Blast-Cleaned Steel Surfaces Using Replica Tape", NACE SP0178-07, "Design, Fabrication, and Surface Finish Practices for Tanks and Vessels to Be Lined for Immersion Service", along with the Visual Comparator, shall be used to verify the surface preparation of welds. In all cases the written standard shall take precedence over the visual standard. In addition, see special section 3.03 Surface Preparation.
- C. **Application:** No coating or paint shall be applied when: 1) the surrounding air temperature or the temperature of the surface to be coated or painted is below the minimum surface temperature for the products specified herein, 2) rain, snow, fog or mist is present, 3) the temperature is less than 5°F above the dew point, 4) the air temperature is expected to drop below the minimum temperature for the products specified within six hours after application of coating, 5) the relative

humidity is above 85% and/or surface temperature will exceed the recommended temperatures within six hours after application of coating. Dewpoint shall be measured by use of an instrument such as a Sling Psychrometer in conjunction with U.S. Department of Commerce Weather Bureau Psychrometric Tables. If any of the above conditions are prevalent, coating or painting shall be delayed or postponed until conditions are favorable. The day's coating or painting shall be completed in time to permit the film sufficient drying time prior to damage by atmospheric conditions.

- D. Thickness Checking:** Thickness of coatings and paint shall be measured checked according to the procedures outlined in SSPC-PA 2 "Measurement of Dry Film Thickness with Magnetic Gages", May 2012 Edition. Dry film thickness shall be a Level 2 as defined in Paragraph 9.2, excepting that no single gage reading shall be less than 80% of the specified dry film thickness. Areas that fail to meet these criteria shall be corrected at no expense to the Owner. Use of an instrument such as a Tooke Gauge, precision groove grinder, etc. is permitted if a destructive test is deemed necessary by the Engineer and the total DFT is less than 50 mils.
- E. Inspection Devices:** The contractor shall furnish, until final acceptance of coating and painting is accepted, inspection devices in good working condition for detection of holidays and measurement of dry film thickness of coating and paint. The Contractor shall also furnish U.S. Department Commerce, National Bureau of Standards certified thickness calibration plates and/or plastic shims, depending upon the thickness gauge used, to test the accuracy of dry film thickness gauges and certified instrumentation to test the accuracy of holiday detectors. Dry film gauges and holiday detectors shall be made available for the Engineer's use at all times until final acceptance of application
- F. 3<sup>rd</sup> Party Inspection:** The Owner/Engineer will retain the services of an independent AWS Certified Welding Inspector and NACE Certified Coating Inspector for construction observations and quality conformance inspections during the project duration. The observation/inspection process of the welding techniques, preparation of steel, and coatings applications will help assure quality control and specification compliance. Contractor is responsible for providing access to tank, communicating work progress, and coordinating inspection services with Owner's independent consultant. The inspection company shall report to the engineer. The inspector shall communicate directly with the CONTRACTOR'S SUPERINTENDENT. Final inspections shall be performed in the presence of the ENGINEER, OWNER and/or INSPECTOR and the CONTRACTORS SUPERINTENDENT. All materials and equipment used in the accomplishment of testing are subject to inspection at any time by the ENGINEER, OWNER and/or INSPECTOR.

The CONTRACTOR shall not move or remove scaffolding, ladders or other fixtures necessary to provide proper inspection until such work has been inspected and approved by the INSPECTOR and/or the ENGINEER/OWNER.

Inspection for this project shall consist of 'hold point' inspections. The owner's inspector shall inspect the surface prior to abrasive blasting, after abrasive blasting but prior to application of coating materials, and between subsequent coats of material. Final inspection shall take place after all coatings are applied. Contractor will insure that sufficient rigging is in place so that the Engineer/OWNER or his representative shall be able to safely conduct the required inspections. Irregularities due to poor workmanship will be corrected by the CONTRACTOR at his expense. **Re-inspection fees charged by the INSPECTOR will be the responsibility of the CONTRACTOR.** The Owner and Engineer reserve the right to require this correction at any time during construction or at final inspection.

- G. Warranty Inspection:** A warranty inspection shall be scheduled during the 24th month following acceptance of all coating and painting work. All defective work shall be repaired in accordance with this specification and to the satisfaction of the Engineer and/or Owner. The Contractor's Performance Bond or separate Maintenance Bond shall be in force until after remedial work is performed. The Contractor shall warranty all repair work for two-years.

The CONTRACTOR shall provide suitable and adequate equipment including: lighting, ventilation, rigging, cable climbers, mirrors, inspection equipment, and sufficient man-power to clean and move equipment and tools around the tank, etc., as may be necessary to facilitate complete inspection of all interior surfaces. The CONTRACTOR shall bear all costs of the anniversary inspection and shall incorporate such costs into his bid. This shall include the owner's 3<sup>rd</sup> party inspector's fees.

Any location, including but not limited to locations where a coating has peeled off, bubbled, blistered, chipped, or cracked, etc., or where pinholes and/or holidays are present and locations where rusting or corrosion is evident, will be considered a failure or defect of the coating system and shall be repaired as required. Repairs will be made at areas or locations where coating failures are found.

Methods of testing for coating failure which, may or may not be evident, shall include, but not be limited to, adhesion tests, film thickness measurement, holiday testing, etc. Testing may be non-destructive or destructive. The CONTRACTOR, at his expense, shall repair all areas where destructive tests are performed.

The OWNER and CONTRACTOR shall complete the anniversary repair work within an agreed time period as determined. All repairs shall be made as per the coating manufacturers written repair work instructions or that which is approved and acceptable to the OWNER and completed within ninety (90) calendar days of the anniversary inspection.

## 1.06 SAFETY AND HEALTH REQUIREMENTS

- A. **General:** In accordance with requirements set forth by regulatory agencies applicable to the construction industry and manufacturer's printed instructions and appropriate technical bulletins and manuals, the Contractor shall provide and require use of personal protective lifesaving equipment for persons working on or about the project site.
- B. **Head and Face Protection and Respiratory Devices:** Equipment shall include protective helmets, which shall be worn by all persons while in the vicinity of the work. In addition, workers engaged in or near the work during sandblasting shall wear eye and face protection devices and air purifying half mask or mouthpiece respirators with appropriate filters. Barrier creams shall be used on any exposed areas of skin.
- C. **Ventilation:** Where ventilation is used to control hazardous exposure, all equipment shall be explosion-proof. Ventilation shall reduce the concentration of air contaminants to a degree that a hazard does not exist. Air circulation and exhausting of solvent vapors shall be continued until coatings have fully cured for immersion service. From the beginning of interior coating and until interior coating is complete, the CONTRACTOR shall monitor the air for its lower explosion limit (LEL). CONTRACTOR shall submit to the ENGINEER, for review and approval, the air monitors technical literature. The ENGINEER/OWNER and his representatives shall be allowed to check and inspect the monitor at any time.
- D. **Sound Levels:** Whenever the occupational noise exposure exceeds maximum allowable sound levels, the Contractor shall provide and require the use of approved ear protection devices. Noise control of equipment during working and non-working hours shall be submitted to the ENGINEER/OWNER for review and approval. If excessive noise is noted by the OWNER or neighboring residents, the CONTRACTOR shall modify or replace the existing equipment to reduce the noise to an OWNER acceptable level. CONTRACTOR shall bear all costs for noise reduction and incorporate this cost and any others into their bid.
- E. **Illumination:** Adequate illumination shall be provided while work is in progress, including explosion-proof lights and electrical equipment. Whenever required by the Engineer or Owner's Representative, the Contractor shall provide additional illumination and necessary supports to cover all areas to be inspected. The inspector shall determine the level of illumination for inspection purposes.
- F. **Temporary Ladders and Scaffolding:** All temporary ladders and scaffolding shall conform to applicable safety requirements. They shall be erected where requested by the Inspector or Engineer to facilitate inspection and be moved by the Contractor to locations requested by the Engineer or Owner's Representative.

**G. The Contractor is required to submit the following upon selection:**

1. Safety Program in writing and schedule of regularly scheduled safety orientation meetings complying with OSHA.
2. Detailed work schedule.
3. Quality Control Program.
4. Methodology for compliance with full containment of spent abrasive and proper disposal of waste not limited to lead or other RCRA metals.
5. TCEQ Notification that the Contractor shall satisfy the requirements as set forth in 30 TAC, Rule 111 prior to blasting.
6. Schedule of values in accordance with the contract scope of work.
7. Any sub-contractors to be employed on the project such as scaffolding contractor, containment contractor and or welding contractor.
8. Dehumidification and Dust Collection System Supplier/Manufacturer.
9. Detailed drawing of containment rigging, attachments and shroud. Statement of wind load resistance to be considered during bad weather days.
10. Tnemec coating system submittals in accordance with specifications.
11. Contact names and phone numbers.
12. List of inspection devices and equipment to be on site at all times.
13. Insurance Form that list the City of Pecos and each of their officers, agents and employees as additional insured on all insurance policies (except worker's compensation and employers' liability coverage which are required by the OWNER as specified in the Contract Documents).

**H. Air Monitoring:** Ambient Air Quality – Visible Emissions: Visible emissions shall be used as criteria for project shut down until corrections to the containment are made. Visible emissions shall be determined in accordance with 40 CFR 60, Appendix A, Method 22. If required by the Texas Air Control Board, the Contractor shall provide additional monitoring as follows: Ambient Air Quality for Particulate Matter (40 CFR 50): Emissions in excess of 150  $\mu\text{p}/\text{m}^3$  of PM 10 over a 24-hour period shall be cause for shut down of the project until corrections to the containment are made to comply with this level. Monitoring for this level shall be accomplished using high volume air samplers.

**I. Environmental Regulations:** Compliance with local, state and federal regulations concerning emissions, transportation or disposal of solid, particulate, liquid, or gaseous matter as a result of the cleaning, painting, or other operations under this contract shall be the responsibility of the Contractor. Any fines or damages imposed on the Owner, Engineer, or Inspector/Field Observer by any regulatory agency or court as a result of the Contractor's noncompliance with environmental or nuisance regulations or any other applicable standard shall be paid for or reimbursed by the Contractor.

**J. Notification to TCEQ:** The Contractor shall provide information needed by the Owner to notify the TCEQ of the ensuing cleaning and painting work on the tank as required by 30 TAC 11.135. The TCEQ shall be notified at least 10 days, but not more than 30 days prior to the start of the cleaning operations.

- K. Soil Sampling:** The Field Inspector and Contractor shall remove one soil sample per 10,000 sq./ft. within the limits of the tank site or as directed by the Field Inspector prior to the start of work at the site, identify the soil samples, and deliver to the soil samples to an approved testing lab to have atomic absorption or inductively coupled plasma testing (total lead) performed on the soil samples. For purposes of defining the tank site for soil sampling, the site shall consist of all land within 50 ft. of the tank or otherwise determined by the Field Inspector. Each set of solid samples shall consist of five 3/4" dia. plugs by 1/2" deep taken from a 1 sq./ft. area. The location where the soil samples were taken shall also be documented. After substantial completion of the work, the Contractor and Field Inspector shall remove additional sets of soil samples from the same locations as before; identify the soil samples, and deliver to the approved testing lab for testing as described above. The cost of testing the initial and final soil samples shall be borne by the Contractor. Cost associated with testing shall be included in the Contractor's Bid Proposal. The Contractor shall be responsible for seeing that the Chain of Custody Form is used on the initial and final sampling of the soil. If the initial and final total lead levels in the soil fall in a category that requires action by the Contractor, then the Contractor shall perform action as stipulated below.

<b>Initial Total Lead Levels in Soil, "Initial" (mg/kg)</b>	<b>Final Total Lead Levels in Soil, "Final" (mg/kg)</b>	<b>Required Action By Contractor</b>
Initial < 2,000	Final < 2,000	None
Initial < 2,000	2,000 ≤ Final < 5,000	Interim Controls
2,000 ≤ Initial	Final < 5,000	None
Initial < 5,000	5,000 ≤ Final	Abatement of Soil
5,000 ≤ Initial	5,000 ≤ Final	None

1. **Interim Controls:** Interim Controls in accordance with EPA guidance document "Guidance on Residential Lead-Based Paint, Lead-Contaminated Dust, and Lead-Contaminated Soil," include, but are not limited to the following:
  - a. Establish barriers between children and soil by planting ground cover and shrubbery, moving play equipment, restricting access through posting and fencing, and/or preventing further lead contamination of the area.
  - b. Monitor condition of interim controls.
  - c. Post public notice of contaminated common areas.
  
2. **Abatement of Soil:** Abatement of Soil techniques include, but are not limited to the following:
  - a. Remove and legally dispose of the contaminated soil and place an Owner approved topsoil and ground cover over the abated area or pave the site with asphalt.
  - b. Post public notice of contaminated common areas

## **1.07 PRODUCT DELIVERY, STORAGE & HANDLING**

- A.** All materials shall be brought to the jobsite and identifiable by MTR's, certification reports and or batch numbers. The coatings shall be in the original sealed containers from the Manufacturer. Within 48 hours of coating delivery to the job site, the CONTRACTOR shall record the delivered material and the batch number stamped on each coating container and maintains the record in the daily log for examination by the INSPECTOR AND ENGINEER. Minimum information required will include: date of delivery to job site, name and signature of superintendent recording the data, list of certification reports, MTR's and batch number including corresponding coating identification, date of manufacture and volume of each container. They shall not be used until the INSPECTOR OR ENGINEER has inspected the contents. Manufacturer's Material Safety Data Sheets (MSDS) for all coating products used on the jobsite shall be submitted to the OWNER at the preconstruction conference or prior to commencing work. Materials exceeding storage life recommended by the manufacturer shall be rejected.
- B.** All coatings and paints shall be stored in enclosed structures to protect them from weather and excessive heat or cold. Flammable coatings and paints must be stored to conform to City, County, State and Federal safety codes for flammable coating or paint materials. At all times coatings and paints shall be protected from freezing.

## **PART 2 – COATING MATERIALS**

### **2.01 ACCEPTABLE MANUFACTURERS**

- A.** The paint and paint products used for this project shall be manufactured by The Tnemec Corporation. No other paint manufacturer will be allowed for use on this project.

### **2.02 GENERAL REQUIREMENTS**

- A.** All materials shall be lead-free as defined by the Consumer Product Safety Act, Part 1303. Additionally, all materials shall be free of other heavy metals such as chrome, mercury and cadmium.
- B.** All materials for the interior wetted portion of the tank shall meet the requirements of ANSI/NSF Standard 61 for potable water contact.
- C.** No coating submitted or used on this project shall have a VOC (Volatile Organic Content) in excess of 340 grams/liter or 2.8 lbs./gal.

### **2.03 MATERIAL PREPARATION**

- A.** Mix and thin materials according to manufacturer's latest printed instructions.
- B.** Do not use materials beyond manufacturer's recommended shelf life.

- C. Do not use mixed materials beyond manufacturer's recommended pot life.

## 2.04 COATING SYSTEM

### A. Tank Exterior Coating System – Zinc/Epoxy/Urethane System

1. **Weld Preparation:** Weld flux and spatter shall be removed by power tool cleaning. Sharp projections shall be ground to a smooth contour. All welds shall be ground to a smooth contour as per NACE Standard SP0178, Designation D.
2. **Surface Preparation:** SSPC-SP6/NACE 3 Commercial Blast Cleaning. An angular profile of 1.5 to 2.5 mils as per ASTM D 4417, Method C or NACE Standard SP0287 is required.
3. **Coating System:**
  - 1st Coat:** Tnemec Series 94-H20 Tnemec-Zinc applied at 2.5 to 3.5 dry mils.
  - 2nd Coat:** Tnemec Series 66 Hi-Build Epoxoline applied at 4.0 to 6.0 dry mils. (Two coats may be required if applied by roller.)
  - 3rd Coat:** Tnemec Series 1074U Endura Shield II (Color-TBD) applied at 2.0 to 3.0 dry mils.
  - LOGO:** Tnemec Series 700 Hydroflon (Color-TBD) applied at 2.0 to 3.0 dry mils.

Total dry film thickness shall be a minimum of 8.5 mils and maximum 13.5 mils per SSPC-PA 2 dry film inspection standards, with exception as noted in this specification.

For cold weather applications, Series 44-710 Urethane Accelerator may be added to Series 94-H20 and Series 1074 at the rate specified on the Series 44-710 product data sheet. Series 44-710 Accelerator must be used with Series 94-H20 if the surface temperature is 35°F to 60°F and 20% to 40% relative humidity.

### B. Tank Interior Coating System – Zinc/Epoxy System

1. **Weld Preparation:** Weld flux and spatter shall be removed by power tool cleaning. Sharp projections shall be ground to a smooth contour. All welds shall be ground to a smooth contour as per NACE Standard SP0178, Designation D.
2. **Surface Preparation:** SSPC-SP10 Near-White Metal Blast Cleaning. Anchor profile shall be 1.5 to 2.5 mils as per ASTM D 4417, Method C or NACE Standard SPO287 is required.

### **3. Coating System:**

**1<sup>st</sup> Coat:** Tnemec Series 94-H20 Hydro-Zinc applied at 2.5 to 3.5 dry mils. Thin only as instructed in manufacturers data sheet.

**Stripe Coat:** Tnemec Series N140F – 15BL Tank White Pota-Pox Plus applied by brush and scrubbed into all weld seams. In addition to weld seams, all edges, corners, bolts, pits shall receive a stripe coat. This shall be a separate step. The 2<sup>nd</sup> coat or subsequent coat shall not be applied until the recoat time has been achieved.

**2nd Coat:** Tnemec Series N140F – 1255 Beige Pota-Pox Plus applied at 6.0 to 8.0 dry mils. Thin only as instructed in manufacturers data sheets.

**3rd Coat:** Tnemec Series N140F – 15BL Tank White Pota-Pox Plus applied at 6.0 to 8.0 dry mils. Thin only as instructed in manufacturers data sheets.

Total dry film thickness on all surfaces shall be a minimum of 14.5 mils and maximum 18.5 mils per SSPC-PA 2 dry film inspection standards, with exception as noted in this specification.

For cold weather applications, Series 44-710 Urethane Accelerator may be added to Series 94-H20 at the rate specified on the Series 44-710 product data sheet. Series 44-710 Accelerator must be used with Series 94-H20 if the surface temperature is 35°F to 60°F and 20% to 40% relative humidity.

## **PART 3 - EXECUTION**

### **3.01 TANK REPAIRS and MODIFICATIONS**

**A. General Repairs** - Field welding shall conform to the minimum requirements of AWS D1.1, AWWA D100, Section 8 and specifications here within. The contractor shall ensure welders or welding operators are qualified in accordance with ASME Section IX or ANSI/AWS B2.1. All fabrication and shop assembly shall conform to the minimum requirements of AWWA D100, Section 9 and specifications here within.

1. General Repairs of Roof, Shell, Bowl, Ladders, Liquid Level Gauge and Appendages – Plate shall be a minimum thickness 1/8” for roof repairs and 1/4” for shell and bowl repairs. Overlay (scarf plate) installation is acceptable on the shell and bowl. Seal weld all plate utilizing a welding sequence, which shall be adopted so that plates are assembled and welded together by a procedure that will result in a minimum of distortion from weld shrinkage.

2. Seam Sealing and Epoxy Surfacing – Apply a Sikaflex 1A, polyurethane elastomeric sealant and or Tnemec Series 215, 100% solids epoxy surfacing compound on areas deemed necessary. The color shall be determined depending on its application step being before or after the finish coat.

### 3.02 SURFACE PREPARATION

- A. The latest revision of the following surface preparation specifications of the Steel Structures Painting Council (SSPC) shall form a part of this specification. The summaries listed below are for informational purposes; consult the actual SSPC specification for full detail.
  1. **Solvent Cleaning (SSPC-SP1):** Removal of oil, grease, soil and other contaminants by use of solvents, emulsions, cleaning compounds, steam cleaning or similar materials and methods, which involve a solvent, or cleaning action.
  2. **Hand Tool Cleaning (SSPC-SP2):** Removal of loose rust, loose mil scale and other detrimental foreign matter to a degree specified by hand chipping, scraping, sanding and wire brushing.
  3. **Power Tool Cleaning (SSPC-SP3):** Removal of loose rust, loose mil scale and other detrimental foreign matter by power wire brushing, power impact tools or power sanders.
  4. **White Metal Blast Cleaning (SSPC-SP5/NACE No. 1):** Air blast cleaning to a gray-white uniform metallic color until each element of surface area is free of all visible residues.
  5. **Commercial Blast Cleaning (SSPC-SP6 NACE No. 3):** Air blast cleaning until at least two-thirds of each element of surface area is free of all visible residues.
  6. **Brush-Off Blast Cleaning (SSPC-SP7 NACE No. 4):** Air blast cleaning to remove loose rust, loose mil scale and other detrimental foreign matter to a degree specified.
  7. **Near-White Metal Blast Cleaning (SSPC-SP10 NACE No. 2):** Air blast cleaning until at least 95% of each element of surface area is free of all visible residues.
  8. **Power Tool Cleaning to Bare Metal (SSPC-SP11):** Differs from SSPC-SP3 in that it requires more thorough cleaning and a surface profile not less than 1 mil.
- B. Slag, weld metal accumulation and spatters not removed by the Fabricator, Erector or Installer shall be removed by chipping and/or grinding. All sharp edges shall be peened, ground or otherwise blunted as required by the Engineer. All grinding and finishing of welds, edges, etc. shall be performed prior to solvent

cleaning and abrasive blasting. Welds shall be prepared as per NACE Standard SP0178 designation D for all interior and exterior surfaces.

- C. Field blast cleaning for all surfaces shall be by dry method only using Steel Grit/Shot Abrasive and a Blast Media Recovery and Separation System. Blast nozzles shall be venturi-type nozzles with a minimum pressure at the nozzle of 90 psi.
- D. Particle size of abrasives used in blast cleaning shall be that which will produce a 1.5 – 3.5 mil surface profile or in accordance with recommendations of the manufacturer of the specified coating or paint system to be applied.
- E. **Blast Media Recovery and Separation System and the use of re-usable abrasive such as steel grit/shot used on this project will have to meet the following criteria:**

The steel grit shall meet the requirements of SSPC-AB 3, Newly Manufactured or Re-Manufactured Steel Abrasives, and be approved for use by the manufacturer of blasting, media recovery, and separation equipment. The initial quantity of grit shall consist of an artificial working mix determined by the CONTRACTOR to produce an acceptable profile in accordance with these specifications. Any used steel grit used on this Project shall be sampled before use by the FIELD OBSERVER and the CONTRACTOR and the CONTRACTOR shall have the samples sent to a laboratory for inductively coupled plasma-atomic emission spectrometry analyses for total lead. The steel grit shall not be used until the results of the inductively coupled plasma-atomic emission spectrometry analyses testing are submitted to the OWNER and indicate that the total lead levels are less than 250 ppm (<0.025%).

Blast Media Recovery and Separation System:

(1) Equipment Requirements: The equipment provided for the spent abrasive recovery and media separation shall be a portable commercial recycling abrasive blast machine. The re-used abrasive shall comply with the requirements of SSPC-AB 2, Specification for Cleanliness of Recycled Ferrous Metallic Abrasives. The system shall be capable of recovering the abrasive, and returning the spent cleaning debris to a dust separator which shall be an integrated part of the machine. The waste material shall be placed in hazardous container drums in accordance with the Removal and Disposal of Cleaning Residue paragraph of this specification.

(2) Equipment Characteristics: As a minimum, the vacuum system used to recover the spent blasting material shall contain the following:

- i. A double-chambered ASME pressure vessel, which can effectively recycle blast media on a continuous basis, with no interruption, except for air filter back-flushing, media loading to the machine, and removal of collected dust and spent cleaning debris.
- ii. A dust filter back-flushing system.
- iii. An air drying system consisting of an air-cooled after cooler, sling separator, and desiccant drier.

All abrasive media shall be removed from the facility and disposed of by the Contractor in accordance with the Local, State and Federal Regulations. The abrasive manufacturer, media type and grit size shall be submitted and approved by the Engineer/Owner.

- F.** The Contractor shall keep the area of his work and the surrounding environment in a clean condition. He shall not permit blasting materials to accumulate as to constitute a nuisance or hazard to the accomplishment of the work, the operation of the existing facilities or to the surrounding environment. If blast abrasive is left on the tank floor while painting the ceilings and walls, no paint may be applied to walls within six feet of the floor.
- G.** Blast cleaned surfaces shall be cleaned prior to application of specified coatings or paint. All surfaces shall be free of dust, dirt, and other residue resulting from the abrasive blasting operation. No coatings or paint shall be applied over damp or moist surfaces.
- H.** All welds shall be neutralized with a suitable chemical compatible with the specified coating or paint.

### **3.03 COATINGS**

- A.** All surface preparation, coating and painting shall conform to applicable standards of the Steel Structures Painting Council, NACE International and the manufacturer's printed instructions. Materials applied to the surface prior to the approval of the Engineer shall be removed and re-applied to the satisfaction of the Engineer at the expense of the contractor.
- B.** All work shall be performed by skilled craftsmen qualified to perform the required work in a manner comparable with the best standards of practice. Continuity of personnel shall be coordinated with the Inspector.
- C.** The Contractor shall provide a supervisor at the work site during cleaning and application operations. The supervisor shall have the authority to coordinate work and make decisions pertaining to the fulfillment of the contract.
- D.** Dust, dirt, oil, grease or any foreign matter that will affect the adhesion or durability of the coating or paint must be removed by washing with clean rags dipped in an approved cleaning solvent and wiped dry with clean rags.
- E.** Coating and painting systems include surface preparation, prime coating, stripe coating and finish coatings. Unless otherwise approved in writing by the Engineer, prime coating shall be field applied. The Contractor shall use repair procedures, which insure the complete protection of all adjacent primer. All repair procedures shall be in accordance with the coating manufacturer's written recommended methods. It is the responsibility of the CONTRACTOR to provide the ENGINEER, INSPECTOR and OWNER with the coating manufacturer's written recommended repair procedures. The specified repair method and equipment may include wire brushing, hand or power tool cleaning, or dry air blast cleaning. In order to prevent injury to surrounding painted surfaces, blast

cleaning may require use of lower air pressure, smaller nozzle and/or abrasive blast particles, or shorter blast nozzle distances from surface shielding and masking. If damage is too extensive or uneconomical to touch-up, the entire item shall be blasted and then coated or painted as directed by the Engineer.

- E. The Contractor's coating and painting equipment shall be designed for application of materials specified and shall be maintained in first class working condition. Abrasive blast equipment shall be equipped with noise reducing devices, hose coupling safety devices, electrical grounding devices, fresh air hoods, and "Dead Man" switches on all blast hoses. Compressors shall have suitable traps and filters to remove water and oils from the air. Contractor's equipment shall be subject to approval of the Inspector. All equipment shall comply with current OSHA regulations.
- L. Application of the first (prime coat) coat on the exterior shall follow immediately after surface preparation and before rust bloom occurs or the same day, whichever is less. Application of the first (prime coat) coat on the interior shall follow within multiple days of surface preparation utilizing the dehumidification equipment designed to hold the blast from rust bloom. Dehumidification equipment shall be used for all interior wet and dry areas. Therefore, all blasting and cleaning shall be completed prior to any coating application. Any cleaned areas not receiving first coat within this period shall be re-cleaned prior to application of first coat. All blasted surfaces shall be coated to within 6 inches of the edge of a blasted area.

### 3.04 APPLICATION, GENERAL

- A. Coating and paint application shall conform to the requirements of the Steel Structure Painting Council Paint Application Specification SSPC-PA1, latest revision, for "Shop, Field and Maintenance Painting".
- B. Thinning shall be permitted only as recommended by the manufacturer and approved by the Engineer.
- C. Each application of coating or paint shall be applied evenly, free of brush marks, sags, runs, bubbles, drips, waves, laps, unnecessary brush marks, over spray, environmental contaminants or other physical defects, including shadows, and be **UNIFORM** in color, texture and gloss. Thus, all coatings shall be applied in a professional manner to achieve the specified dry film thickness (DFT). Coatings and paints shall be sharply cut to lines. Finished surfaces shall be free from defects or blemishes. Cleaning and coating shall be scheduled such that dust and other materials from adjoining work will not contaminate wet or newly coated surfaces.

The CONTRACTOR shall submit written detailed procedures for all surface preparation and application of coating, including touch-up procedures. The ENGINEER and OWNER shall approve the procedures, with no exceptions, before any surface preparation, application, or touch-up begins.

- D. Protective coverings, masking or drop cloths shall be used to protect floors, fixtures, piping, and equipment. Care shall be taken to prevent debris or any other foreign matter from entering water mains. The covers and plugs shall remain in place until just prior to filling the tank for disinfection. Care shall be exercised to prevent coatings or paints from being spattered onto surfaces, which are not to be coated or painted. Report to the Inspector surfaces from which materials cannot be satisfactorily removed.
- E. When two coats of coating or paint are specified, where possible, the first coat shall contain sufficient approved color additive to act, as an indicator of coverage or the two coats must be of contrasting color. Should a third interior coating be used, it too shall be contrasting in color from the second coating.
- F. Steel surfaces that have rusted or changed color shall be re-blasted in accordance with these specifications. No visible rust shall be overcoated under any circumstances. Painting shall not take place when the atmospheric temperature is below or above the coating manufacturer's written instructions, or above 50°F or when the steel surface temperature is less than or equal to 5°F above the dew point, or when the relative humidity is above 85% unless approved by the Engineer/Owner. Painting shall not occur when the surface is damp due to rain, snow, fog or mist. Painting shall also not occur if the surface temperature is expected to drop below manufacturer's recommendations within 4 hours after coating application.

### **3.05 DISINFECTION**

- A. Disinfection shall be performed after protective coatings have been applied to the interior surfaces and allowed to thoroughly cure as recommended by the Coating Manufacturer.
- B. Prior to disinfecting, the complete interior shall be washed down with clean water and thoroughly flushed out.
- C. Disinfection of interior surfaces shall be performed in the presence of the Inspector in accordance with AWWA C652 Method 2. All the requirements of applicable AWWA Standards and regulatory agencies shall apply. CONTRACTOR shall furnish all labor, materials, tools, equipment and related items to seal and disinfect the reservoir. CONTRACTOR shall submit, for ENGINEER/OWNER approval all gasket and sealer materials necessary to seal all vents and manways. All bolts, nuts and washers shall be of HDG (hot dipped galvanized) construction.
- E. After the chlorination procedure is completed by the CONTRACTOR, and before the storage facility is placed in service, water from the full facility shall be sampled by the OWNER and tested for coliform organisms in accordance with the latest edition of Standard Method for Examination of Water and Wastewater.
- F. If the CONTRACTOR wishes to have the samples collected and tested by an independent testing laboratory, the cost of such testing shall be paid by the CONTRACTOR and the laboratory shall be required to meet the testing

qualifications and to have certifications to do this testing that are acceptable to the OWNER.

- G. The OWNER shall furnish the water used for cleaning and initial filling of the reservoir for disinfection. The CONTRACTOR shall bear the costs of any subsequent fillings of the reservoir necessary until the disinfection is complete and satisfactory results are obtained and approved by the OWNER.
- H. It is necessary that the CONTRACTOR schedule his activities such that the initial filling occurs entirely during a low use period as determined by the OWNER. Close coordination by the CONTRACTOR with the OWNER is mandatory prior to and during the filling of the reservoir and until the disinfection work is completed.
- I. The CONTRACTOR and the OWNER shall have at least one representative present at the job site at all times during the filling of the reservoir regardless of the time of day. If the CONTRACTOR'S representative leaves the job site during the filling process, the filling will be stopped and be rescheduled for a later date. The CONTRACTOR shall pay all refilling and re-disinfection costs due to this inconvenience.

### **3.06 SOLVENT VAPOR REMOVAL AND DEHUMIDIFICATION**

All solvent vapors will be exhausted both during and after coating application at a minimum rate of one air change every four hours to allow the proper curing of the coating material. High rates of production may require an increase in ventilation. Forced ventilation as noted above shall be continued for 7 days or until such time as the coating has reached "full cure to immersion" as specified by the coating manufacture. Dehumidification equipment will be used to control the environment in the space 24 hours a day during blast cleaning, coating application and coating cure. All interior surfaces must be complete, clean and accepted by the Inspector prior to the application of any coating. Desiccant dehumidifiers, as manufactured by Munters Corporation and D.H. Technologies or equal will be a solid desiccant design having a single rotary desiccant wheel capable of fully automatic continuous operation. No liquid, granular, or loose lithium chloride drying systems will be accepted.

The use of direct expansion (DX) refrigeration type dehumidifiers with reheat may be considered if the expected ambient temperature will remain above 60°F. Below that coils may not remove moisture and, as noted above, reheat alone will not change the dew point. Heating the space changes relative humidity only and does not change the dew point; therefore, not a substitute for dehumidification, unless substrate temperature is high enough to meet dew point differential. The dehumidification system may consist of a combination of desiccant and refrigerant equipment for year round use to maintain very low dew points in the space.

During the blasting operation, dehumidification equipment shall maintain a lower dew point than outside ambient. A differential of 20°F to 25°F between inside substrate surface temperature and inside space air dew point temperature shall be maintained. In addition, inside relative humidity shall not exceed 40% to 45%.

The air change rate for maintaining the above mentioned interior surface temperature and dew point temperature differential will depend upon the type of equipment to be used and the time of the year. Another consideration is length of time required to hold the blast. The volume of space is a major factor in determining equipment type and size. The rate of air changes per hour may be anywhere from 1 to 6 or more to hold the desired degree of cleanliness of the blast.

Auxiliary heat, cooling and/or insulation may be necessary to maintain the surface temperature at the acceptable level for the coating manufacturer's application parameters. This auxiliary equipment must be approved for use by the supplier of the dehumidification equipment and will meet the following requirements.

1. Heaters and refrigerant type systems must be installed in the process air supply duct between, and/or blended with, the dehumidifier as close to the space as possible.
2. Only electric, indirect fired combustion, or steam coil auxiliary heaters will be used. No direct-fired space heaters will be allowed during the blasting, coating, and curing phases.
3. Heaters will be equipped with controls that automatically turn the heater off if the airflow is interrupted or the internal temperature of the heater exceeds its design temperature or that of the supply duct.
4. The space to be controlled will be sealed off as well as possible, allowing air to escape the space away from the point where the dehumidified air is being introduced. Filter the air escaping the space; the filtration system must be designed so that it does not interfere with the dehumidification equipment's ability to control the dew point and relative humidity of space. Do not recirculate the air from the space or from filtration equipment back through the dehumidifier during coating application or when solvent vapors are present.

### **3.07 CONTAINMENT AND DUST CONTROL EQUIPMENT**

**Full containment of the entire structure shall be required during surface preparation and painting of exterior. The Contractor shall control emissions from abrasive blasting in accordance with 30 TAC, Rule 111.135 or Rule 111.137. The Contractor shall ensure that no spent cleaning/blasting debris, dust, overspray, coating droplets, or emissions of any kind, escape to the atmosphere, the base of the tank, or adjacent buildings, private property, work sites and parking lots.**

The containment system shall at a minimum meet the emissions control requirements of a Class 2 System as specified in Section 4.2.2.2 of SSPC-Guide 6 (CON), Guide for Containing Debris Generated During Paint Removal Operations, (Latest Edition). The ground surrounding the tank shall be protected from all debris, emissions, dust and other materials generated in the cleaning operations with a minimum of two layers of impervious membrane covered with plywood or the same material used for the perimeter containment system.

The Contractor shall be responsible for all materials that are used and for any apparatus used to contain dust emissions, debris, overspray, and coating droplets. The containment system attachments to the tank shall be designed by a Professional Engineer licensed in the State of Texas not to impose excessive loading on the tank. The Contractor shall submit the P.E. designed, stamped, and signed details of the containment system and the attachment details for review prior to installation of the containment system on the tank. The containment system will place additional loads on the tank that the tank was not originally designed for. The Contractor shall reinforce the tank as necessary to prevent permanent deformation and to assure that no damage occurs to the tank. Any damage to the tank as a direct or indirect result of the containment system shall be repaired or sections replaced by the Contractor at no additional costs to the Owner. Neither the Owner nor the Consultant assumes any responsibility for the structural ability of the tank to support the containment system.

Complete containment of the tank shall be utilized to contain all cleaning dust, debris, emissions, paint droplets, and paint overspray, the complete containment shall include a full bonnet. If tarps are used as part of the containment system, the tarps shall be an impervious, solid, flame-resistant material, reinforced with a fiber mesh and shall allow as much light as possible to pass through the material.

The OWNER reserves the right to stop work or require additional or different containment methods if the CONTRACTOR's operations create a nuisance beyond the tank site property line in the sole opinion of the OWNER, the Consultant, the OWNER's designated representative, any regulatory agency, or neighbor. The CONTRACTOR in the Base Bid shall include all costs of providing an adequate containment system.

Review of the containment system for containing the spent cleaning dust, debris, emissions, overspray, and coating droplets shall not warrant the structural integrity of the containment system and shall not warrant the structural integrity of the tank to support the containment system. Nor shall review of the containment system warrant the ability of the system to contain spent cleaning dust, debris, emissions, and overspray.

All attachments to the tank shall include a "reinforcing" pad/plate designed to distribute the loads and to prevent damage to the tank. The reinforcing pad/plate may remain in the tank at the completion of the project as long as the pad/plate is completely seal welded. All edges ground to 1/8 in. minimum radius, and all submittals shall include, at a minimum, the following detail and descriptions.

1. Brackets/outriggers to be attached to tank including size, material, etc.
2. Bracket/outrigger attachments to the tank.
3. Number of brackets/outriggers and spacing on tank container.
4. Center roof "tree" and attachment details.
5. Reinforcing pad between structure and attachments.
6. Any additional roof support.

7. Size of cables to be used and locations.
8. Anchorage details of hoist and location
9. Ground Anchors.
10. Catalog cuts of tarp (screen) material.
11. Tarp/screen material connection and overlaps.
12. Design/operation parameters of containment, such as wind speed when containment shall be lowered or not used.
13. Ground Anchors.
14. Other dust collection and engineering controls.
15. Any item desired to be left on the tank structure at the completion of the Project (subject to approval by the OWNER).
16. Maximum wind velocity which the containment system can remain raised and the procedure for which the containment system will be utilized on forecasted high/gusty wind days.

Dust Collection: CONTRACTOR shall furnish, operate, and maintain adequate dust collection during the Project to achieve negative pressure within the containment or adequate airflow within the tank interior. The dust collection system shall at a minimum meet the requirements of a Type J1 Air Filtration system, as specified in Section 5.4.5.1 of the SSPC-Guide 6 (CON), Guide for containing Debris Generated During Paint Removal Operations. The dust collection shall be operated during all abrasive blast cleaning and until the area is clean enough for coating application. The CONTRACTOR shall be responsible for all sizing, design of ductwork, etc., based upon the CONTRACTOR's operations, number of blasters, duration of blasting, etc. The CONTRACTOR shall also take precautions to avoid a vacuum from developing inside the tank, as even slight vacuum inside of the tank may cause damage to the tank.

**3.08 CONFINED SPACE:** The Contractor shall acknowledge that confined space training has been issued to all persons who will be working on this project.

**3.09 CLEAN UP:** Upon completion of the work, all staging, scaffolding and containers shall be removed from the site or destroyed in a manner approved by the Engineer. Coating or paint spots or oil stains upon adjacent surfaces shall be removed and the jobsite cleaned. All damage to surfaces resulting from the work of this section shall be cleaned, repaired or refinished to the satisfaction of the Engineer at no cost to the Owner.

**3.10 REPORTING/RECORDS:** All work, including inspections, shall be recorded daily by the Contractor. A copy of each daily report shall be placed in a file kept on the job site. The reports shall include, but not necessarily limited to, the following information:

- Date
- CONTRACTOR and subcontractor name (where applicable)

- INSPECTOR name (where applicable)
- Work Identification including:
  - Type of work performed
  - Location of work performed Weather conditions, including corresponding time of day, before during and after work begins including:
    - Temperature (air and surface)
    - Humidity/dew point
    - Wind velocity/direction,
- Remarks and results of work
- CONTRACTOR signature

**3.11 MAINTENANCE MATERIAL:** At the end of the project before final payment, the CONTRACTOR shall provide the OWNER (5) five one gallon cans of each type and color of coating, primer, thinner, and other coatings used in the field including multiple component materials. The material shall be delivered in unopened, typed-labeled cans, just as it comes from the factory. If the manufacturer does not package the material in one (1) gallon cans, and in the case of special colors, the materials may be delivered in new five (5) gallon containers, properly closed with typed, color, and batch numbers. The manufacturer's directions for use and literature describing the materials shall also be furnished to the OWNER in three bound copies and a typed inventory list shall be furnished at the time of delivery.

### **3.12 DESCRIPTION OF BID ITEMS**

No welding over coated steel. All areas that require welding are to be abrasive blasted or tool cleaned before any welding is started. All structural modifications and repairs are to be conducted and approved prior to the coatings portion of this contract. All welding to be seal welded.

All welders shall be qualified in accordance with the current ASME, Section IX or AWS D1.1 (tests as described in AWS B2.1) to the procedures and processes required to accomplish the work. Completed welds shall be detailed in accordance with NACE Standard RPO178 designation "C". Any full penetration welds on the primary structure of this tank shall be tested by X-ray (radiograph) at the expense of the contractor by an approved 3<sup>rd</sup> party laboratory in accordance with the governing code and standards. The owner's engineer/inspector will select the number and location of all testing.

**Bid Item 1:** Lump sum price for the Complete Cleaning and Repainting of the tank exterior surfaces with containment, shrouding and dust control. All of this work shall be in accordance with this Section "Technical Specifications" Part 2.04.A, and Part 3.07.

**Bid Item 2:** Lump sum price for the Complete Cleaning and Repainting of the tank interior surfaces with Dehumidification. All of this work shall be in accordance with this Section "Technical Specifications" Part 2.04.B, and Part 3.06.

**Bid Item 3:** Lump sum price for General Repairs to include the following: Perform grinding, welding and general work to repair corrosion related surfaces, repair the liquid float level gauge and seal weld areas deemed necessary during the rehabilitation of this tank in accordance with this Section "Technical Specification" Part 3.01.A.

**Bid Item 4:** Lump sum price for Containment and Dust Collection System to be furnished and operated by the contractor in accordance with this Section “Technical Specifications” Part 3.07.

**Bid Item 5:** Lump sum price for New Exterior Ladder and Balcony Mid-Rail Installation to include removing the existing safety climb, removing the existing ladder and replacing with an OSHA approved ladder, repositioning electrical conduit and obstacles preventing safe use, modifying the balcony mid-railing rendering it OSHA Compliant.

**Bid Item 6:** Lump sum price for the Dehumidification Control to be furnished, installed and operated by the contractor in accordance with this Section “Technical Specifications” Part 3.06.

**Bid item 7:** Unit price for Caulking Seam Sealing to include the following: Install Sika-Flex 1A or Tnemec Series 215 or equal NSF approved sealant/caulking at areas deemed necessary in accordance with this Section “Technical Specification” Part 3.01.A.2.

**END OF SECTION**

**SECTION RCRA  
TOPC East Elevated Storage Tank  
Rehabilitation**

RCRA.1      WARNING

The CONTRACTOR is advised that the existing exterior and interior coating system contain RCRA metals. The exterior coating system contains high levels of Lead and may contain other RCRA metals. Results of the Laboratory Test provided by DHL Analytical are attached to this section. The following list of total metals is offered for reference only; the CONTRACTOR shall secure his own test for use on this project.

RCRA.2.      CONTRACTOR'S RESPONSIBILITIES

The CONTRACTOR is required to submit the following upon selection:

1.      CONTRACTOR'S qualifications certifying experience and references for the work contemplated.
2.      Safety Program in writing and a schedule of regularly scheduled safety orientation meetings.
3.      Medical tests for all workers who will be exposed to abrasive blasting operations for blood RCRA metal level content before and after completion of the coating contract. **No Facial Hair** will be permitted for employees required to wear full-face respirators.
4.      Detailed work schedule.
5.      Quality Control program.
6.      Methodology for compliance with full containment of spent abrasive and proper disposal of hazardous waste, if applicable.

RCRA.3.      REMOVAL OF A RCRA EIGHT METAL BASE PAINT SYSTEM

1.      The CONTRACTOR shall provide for the safe removal and disposal of RCRA metal based paint and contaminated spent abrasive along with adequate personnel protection during the abrasive blasting and removal of RCRA metal based paint and spent abrasive in accordance with all current Federal and State of Texas regulations.
2.      Blasting material will be restricted to those materials containing recyclable Steel Grit/Shot Abrasive.

RCRA.4. PAINT SAMPLING AND ANALYSIS

The CONTRACTOR shall obtain a total of three (3) paint chip samples (minimum of 1 gram by weight per sample)—one each from the roof, midpoint and lower exterior portion of the tank. These samples are to be bagged, sealed, identified and forwarded to a certified analytical laboratory for analysis of % by weight RCRA metals content in the samples.

RCRA.5. SOIL SAMPLING

Soil Quality: The CONTRACTOR shall not contaminate the soil with RCRA metals. Samples of the soil shall be removed and tested for total metal content prior to job start up and upon completion of the project at the expense of the CONTRACTOR. Laboratory analysis shall be conducted in accordance with EPA Methods. The CONTRACTOR shall remove all contaminated soil if the analysis upon project completion shows any increase in soil metal levels.

RCRA.6. AIR MONITORING

Ambient Air Quality – Visible Emissions: Visible emissions shall be used as criteria for project shut down until corrections to the containment are made. Visible emissions shall be determined in accordance with 40 CFR 60, Appendix A, Method 22.

If required by the Texas Air Control Board the Contractor shall provide additional monitoring as follows:

Ambient Air Quality for Particulate Matter (40 CFR 50): Emissions in excess of 150ug/m<sup>3</sup> of PM 10 over a 24-hour period shall be cause for shut down of the project until corrections to the containment are made to comply with this level. Monitoring for this level shall be accomplished using high volume air samplers.

RCRA.7. SAMPLING PROCEDURES AND TOXICITY TESTING OF SPENT ABRASIVE

The CONTRACTOR is responsible for containing and tarping ground areas for the daily collection of all debris from the abrasive blasting operation. Prior to containerizing and temporary storage, the CONTRACTOR will obtain samples of the spent abrasive using 1-gallon containers. One 1-gallon sample shall be obtained from each wheelbarrow load of spent abrasive. These one-gallon samples shall then be combined into one large sample, split, quartered and finally reduced to a final 1-gallon sample. This final sample will be expressed overnight to an analytical laboratory for RCRA metal toxicity testing in accordance with EPA Procedures.

Hazardous Waste: The paint debris is classified as hazardous due to the characteristic of toxicity, if after testing by Toxicity Characteristics Leaching Procedures (TCLP), the leachate contains any of the elements in the concentrations listed below (or general):

Barium	100 ppm
Cadmium	1 ppm
Chromium	5 ppm
Lead	5 ppm
Mercury	0.2 ppm

NOTE: Other elements can cause a material to be hazardous as defined in 40 CFR 261 and must be taken into consideration. The list above includes only those elements typically associated with paints.

RCRA.8. PERSONNEL MONITORING FOR EXPOSURE LIMITS

OSHA requirements for worker protection shall be followed in accordance with 29CFR 1926 or 29 CFR 1910 as outlined in OSHA Booklet 3126 (Reference 2.2)

The CONTRACTOR shall not permit any employees exposed directly or indirectly to RCRA metals to smoke, eat or drink so long as those employees remain in that environment.

The CONTRACTOR shall provide employees exposed to RCRA metals with appropriate work clothing such as Tyvek suits or cotton/polyester white coveralls. The CONTRACTOR shall be responsible for providing closed containers for contaminated clothing. Any person who launders protective clothing shall be notified of the potentially harmful effects of exposure to RCRA metals. All containers so used shall be properly labeled and stored.

If an employee is found to have an elevated metal count in his blood, then that employee shall be immediately removed from the RCRA metals exposure.

The CONTRACTOR will institute a training program to explain RCRA metals, its hazards and what measures have been taken to eliminate unsafe levels of RCRA metal exposure before start of the project.

RCRA.9. COLLECTION, STORAGE, SECURITY AND DISPOSAL OF SPENT ABRASIVE

Collection – Proper collection of the blasting debris is one of the most important steps in handling the spent abrasive. Collection of the potentially hazardous debris must be carried out without releasing metals into the environment. Collection of the debris shall be carried out no less frequently than once per day. Whether collection is carried out using mechanical devices or by hand tools, it is important that the workers be fully protected against breathing, ingesting, or contacting any of the debris.

Containment and Transportation to the Temporary Storage Area – The metal containing spent abrasive must be stored in a manner which will not allow entry of any hazardous materials into the environment. Leak-proof drums or portable bins, such as gondolas, are generally acceptable. If ground storage is allowed, it must be in an area which is not a floodplain and will not permit run-

off. The material must be placed on an impervious barrier such as a tarpaulin. The pile must be securely covered. It is important to note that the material in the containers is not yet classified as hazardous waste, although it should be regarded and handled as hazardous material.

Labels which warn of the hazards associated with the material shall be placed on the containers. The containers should also be marked with the contents, tare weights of the containers, the origin and the date of the collection of the material. The containers must be keyed to the samples taken.

The filled containers can then be moved to a temporary holding area at the work site. During the moving operations, normal precautions must be taken to prevent damage which would result in spillage of contents or entry of water into the containers.

If the toxic content exceeds RCRA limits, the waste must be disposed of at a Hazardous Waste Disposal Site. The Texas Commission on Environmental Quality (known as the One Time Shipping Permit) must be submitted to the TCEQ for assignment of a registration number and waste classification. The waste can then be disposed of at a Hazardous Waste Disposal Site capable of accepting this type of waste. The spill area around the tank must be cleaned to acceptable levels.

If the toxic content does not exceed RCRA limits, results of this test, the TCLP, and the total metal tests must be submitted in writing to the TCEQ, Solid Waste Management Section for municipal waste and the TCEQ Section for industrial wastes. A determination will then be made as to what class of waste disposal site may be used for deposition of the wastes and the level of clean up required.

RCRA.10. METHODOLOGY FOR REMOVAL OF EXTERIOR RCRA METAL BASE PAINT SYSTEM

Containment System: The CONTRACTOR shall design a containment system for the work area. The containment shall control environmental emissions and control the working environment within containment so all Federal, State and local regulations have been observed and that the method(s) or removal complies with the governing specifications. Nevertheless, in the instance of conflict between any Federal, State or local regulations and the governing specifications, the Federal, State or local regulations shall supersede any requirements contained herein.

The CONTRACTOR shall thoroughly examine the structure to be prepared to verify its ability to support a containment system including the wind loads that can be imparted by such a system.

The CONTRACTOR shall use encapsulation; the system shall conform to the following requirements:

The containment and collection system proposed by each prospective bidder must assure the non-pollution of the surrounding environment.

The CONTRACTOR shall submit a sample and/or samples of wind screening material supported by technical data sheets for the proposed containment system, the technical data sheet to include:

- Wind Resistance
- Opacity
- Burst Strength
- Material Composition
- Color
- Fire Rating
- Thread Count
- Ultra-Violet Stabilized

The wind containments must comply with the principles of security, which are:

- Appropriate protection of the environment from abrasive blasting and painting debris.
- Pinhole ventilation (% for retention), allowing for cross-flow of air movement.
- Edgings as well as every internal seam are sewn.
- Alternate internal seams are reversed for additional strength.
- Grommets are spaced along all edges and seams for the wind load to be supported by the screens.
- Permeable to natural lighting, unless alternate lighting is to be provided (show that lighting is explosion-proof).
- A minimum of 6" tarp overlap will be required as to provide for a maximum possible containment or spent debris.

The windscreen containment system shall be maintained free of defects through the course of the project. Work shall be stopped until all defects are repaired.

#### RCRA.11. TESTING

All testing, disposal, shipping, etc. cost associated with processing the RCRA metal based paint and/or debris shall be borne directly by the CONTRACTOR. This cost shall be included in the contractor's base bid.

Copies of all Manifests and Chain of Custody documentation must be provided to the OWNER once the testing, disposal, shipping, etc., is completed.



**Town of Pecos City  
East Elevated Tank Inspection  
For  
The City of Pecos  
and  
Frank X Spencer & Associates**

500,000-gallon Elevated Storage Tank  
October 2019

# **HOT INSPECTION SERVICES**

**TANK CONSULTANTS & INSPECTION SPECIALISTS**

P.O. Box 1208  
ROUND ROCK, TX 78680  
[WWW.HOTINSPECTION.COM](http://WWW.HOTINSPECTION.COM)  
(512) 244-2523



# **HOT Inspection Services, Inc.**

P.O. Box 1208 · Round Rock, TX 78680-1208

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## **PROJECT REPORT**

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<b>TO: Francisco X. Urueta, P.E.</b>	<b>DATE: 11/5/19</b>
<b>Frank X Spencer &amp; Associates</b>	<b>REPORT NO: 2779-1</b>
<b>1130 Montana Ave.</b>	
<b>El Paso, Texas 79902</b>	<b>CUSTOMER P.O. Contract</b>
<b>PROJECT: East Elevated Storage Tank</b>	<b>LOCATION: Pecos, Texas</b>

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### **1.0 INTRODUCTION:**

The subject of this report is the evaluation of a 500,000-gallon elevated storage tank known as the TOPC East Elevated Tank, located in Pecos, Texas. The Elevated Tank is welded steel construction, has a stiffener supported dome roof and is supported by eight I-beam columns sitting on a concrete pier foundation. The date of the original construction is 1954 by PDM, as shown on the name plate for this tank. The comprehensive evaluation and dimensional checks have been documented and are part of this report. The tank is operated by the City of Pecos and was made available for inspection on 10/17/19. The tank was in service at the time of inspection and at approximate 60% capacity.

John H. Konzen, CWI, NDE Level III and NACE Certified Coating Inspector and Justin Konzen, NACE Certified Coating Inspector of HOT Inspection Services Inc., performed the inspection and evaluation. The condition survey was conducted and generally follows the guidelines as described in Chapter 9 and Appendix C of the AWWA M42 Manual for Steel Water Storage Tanks. The inspection and evaluation meets and exceeds the requirements of the Texas Administration Code of TCEQ Chapter 290 subchapter D, Rule 290.46. The following report provides information that is valuable in the continued operation and maintenance of the tank.

The information contained herein is as accurate as could be obtained by HOT at the time of the inspection and from the history of the respective tank. No other assurance or warranty is expressed or implied. We assume no responsibility for any errors or omissions in this report, but will attempt to resolve concerns with the content of this report upon request. Any estimates or opinions with respect to tank rehabilitation provided by HOT in this report are based on HOT's experience and qualifications as a consultant and represent its best judgment as an experienced and qualified consultant familiar with the tank construction industry. Since we have no control over costs of labor, materials, equipment or services furnished by others or over competitive bidding or market conditions, it cannot guarantee that proposals, bids or actual project costs will not vary from any estimates or opinions of costs prepared by HOT.

The purpose of this evaluation was to determine the condition of the tank interior, exterior, exposed foundations and accessories and to make recommendations and cost estimates for recoating, repairing, corrosion protection and maintenance. Budget estimates for the work, anticipated life of the coating and the structure are included.

## **2.0 SUMMARY:**

**2.1 Exterior Surfaces** – In 2004, this office conducted an inspection of the subject elevated water storage facility and made general recommendations to rehabilitate accordingly. It was recommended to completely remove and replace the exterior coating system. As noted in a set of specifications written after the 2004 inspection, the exterior coating was specified to be pressure washed and overcoated with a Tnemec Series 135 Chembuild Epoxy spot primer and two coats of a Tnemec Series 30 Spra-Saf Waterborne Acrylic. Reportedly and from the history research and communication with the previous coating contractor that rehabilitated the tank, it appears the exterior overcoating was conducted with the general recommended repairs. The overflow, roof hatch and vent were modified and the exterior overcoat system was installed as specified. Several areas on the legs, underbelly, sway rods, tie rods, riser, shell, catwalk and roof were noted as having failed coating down to the primer and metal substrate. In evaluating the failed areas, it was noted that the primer is of orange/red color and some areas exposing the metal substrate. The exposed metal appears to contain the original mil scale indicating there was never any metal surface preparation and anchor profiling achieved during the original coatings process. None of the areas observed except on the leg base plate supports, appeared to have any active corrosion causing metal loss, as the remaining surface areas accessed were minimal corrosion. The underlying existing coating system previous to the overcoat in 2004 is not known but has been verified from analytical testing as to the presence of chromium and lead that are discussed under Heavy Metal Testing below. The coatings' esthetic appearance on the exterior is in fair condition with moderate to heavy chalking along surfaces from the UV exposure. The integrity of the exterior coating is aged and in poor condition at the areas accessed during the inspection. The adhesion is less than acceptable for any spot repairs and therefore a complete coating removal should be considered. Additionally, the coating has started to delaminate and flake off of the tank which can cause concern to the environment due to its high level of RCRA Lead.

**2.2 Interior surfaces** – In 2004, this office conducted an inspection of the subject elevated water storage facility and made general recommendations to rehabilitate accordingly. It was recommended to completely remove and replace the interior coating system. As noted in a set of specifications written after the 2004 inspection, the interior coating was specified to be removed by abrasive blast cleaning to SSPC-SP10 near-white metal blast and coated with a three coat system. Tnemec Series 91H20 Hydro-Zinc primer and two coats of Tnemec Series 20 Pota Pox. Reportedly and from the history research and communication with the previous coating contractor that rehabilitated the tank, it appears the interior was abrasively blasted and recoated with the specified coating system. The existing interior coating system has not been verified from analytical testing at the time of this report, however there are no signs that the interior primer is lead or chromium based. There is minimal corrosion on the tank plate surfaces with some edge and seam corrosion at laps, welds and penetrations. The interior coating is approximately 15-16 years old and is exhibiting normal surface protection to the underlying steel substrate. The adhesion is good and but the protective coating is nearing the end of its life expectancy.



**Name of Tank:** East EST  
**Date:** 10/17/19  
**Constructed:** 1954 by PDM  
**Tank Type:** Elevated Storage Tank  
**Type of Construction:** Steel Welded  
**Type of Coatings:** Exterior – Acrylic overcoat on top of unknown system  
Interior – Zinc/Epoxy  
**Type of Foundation:** Concrete Piers (8-WF old series 14x16 columns w/30"x25"x3" base plates)  
**Capacity:** 500,000-gallons  
**Dimensions:** Approx. overall height = 162' tall  
TCL = 156'  
BCL = 115'-11"  
Bowl = 46'Ø  
**Interior Surface Area:** Approx. 10,500 sq./ft.  
**Exterior Surface Area:** Approx. 19,600 sq./ft.  
**Tank Component Thicknesses/Sizes:**  
Bowl = .270 - .288" \*\*  
Riser = 11/32" \*\*  
Shell = .3125" \*\*  
**Roof System:** Self Supported dome w/angle stiffeners  
**Columns:** (8) old series wide flange beams W14x16  
**Struts/Rods/Diagonal Bracing:** 5 Bay Tower w/4 sets of struts. 1-3/4"Ø sway rods and 3/4"Ø tie rods.  
**Riser:** 3'Ø w/32"x32"x1/2" base plate mounted to concrete pier  
**Riser Manway:** 24"Ø w/1/4" reinforcing pad  
**Overflow:** 6"Ø w/crow flap valve 6" above splash pad level  
**Roof Hatch:** (1) 30"Ø Steel  
**Shell Manway:** (1) 20" Ø Steel  
**Roof Vent:** 12"x12" Steel  
**Ladder Description:** Exterior tower ladder w/pipe safety climb)  
Exterior shell ladder w/pipe safety climb)  
Exterior roof ladder w/pipe safety climb)  
Interior ladder (no safety climb)  
**Level Indicator:** Digital Transducer  
**Cathodic Protection System:** Yes (suspended from roof w/hand holes)  
**Exterior Coating Thickness:** 8-11 dft mils average  
**Exterior Coating Adhesion Rating:** 1A per ASTM D3359  
**Interior Coating Thickness:** 12-14 mils average  
**Interior Coating Adhesion Rating:** 4A per ASTM D3359  
**Security Fence:** Yes. Chain Link. Needs some repairs to Reinforce up right

**\*\*Note:** *The description above was obtained from field measurement taken during the inspection and represents a general description of the tank components and appurtenances. Original construction drawing was not available.*

#### 4.0 INSPECTION RESULTS:

##### 4.1 Exterior

A. **Security Fence:** The facility was inside a chain link security fencing that is secure and locked. *See photo below.*



B. **Foundation:** The tank foundation consists of concrete piers for the riser and each of the eight column legs and base plate connections. The majority of the foundation appeared to be in good overall condition with some minor cracking. *See photo below.*



C. **Exterior Coating Condition:** The exterior coating system appear to be in poor condition. The protective coating has oxidized and chalked from the UV sunlight and weather. Brittleness, cracking and poor adhesion was observed at areas, indicating that the coating has reached its overall protective life. *See photos below.*



**D. Base Plates:** The column and riser base plates appear to be in good condition as seen in the foundation and riser manway photos.

**E. Anchor Bolts:** Each of the (8) columns and (1) riser was equipped with two 1-1/2"Ø anchor bolts and the riser was equipped with four 1"Ø anchor bolts. Anchors are in good condition and relatively corrosion free as seen in the various leg and riser photos.

**F. Columns (legs):** The columns were constructed from WF 14x16 old series wide flange beams that 15-1/2" wide x 15" deep x 1-1/16" thick. *See photos below.*



**G. Riser and Manway:** The riser manway is 24"Ø w/1/4" reinforcing pad and is leak tight showing minimal signs of deterioration or corrosion on the bolts and surrounding surface areas and remaining riser. The manway was an upgrade during the last rehabilitation (2004-2005) to the previous 12"x14" oval access hatch. *See photo below.*



**H. Tower Bracing:** The coating on the diagonal bracing, rods, struts, clevises, wing plates and turnbuckles is in fair to good condition with isolated areas that have failed exposing underlying primer and bare steel as observed. *See photos below.*



**I. Overflow Pipe:** The overflow pipe exits through the top shell ring and extended down the shell and connects into a drain valve. The overflow is positioned approx. 6" from the splash pad, which it discharges onto. The overflow is equipped with a clog flap valve. The overflow was an upgrade during the last rehabilitation (2004-2005). *See photos below.*



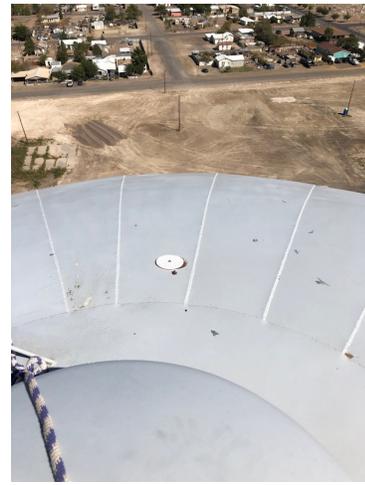
**J. Water Level Indicator:** The tank level is measured with a digital transducer located in the block building onsite. There is a floating target gauge on the shell of the tank. The float has been cable fastened to the roof of the tank and disconnected from the guide cables and made inoperable. Since there is a digital level gauge at the tank site the inoperable floating target gauge is not required and maybe removed if desired. Otherwise the target may be repaired and placed into operation. *See photos below.*



**K. Exterior Ladder:** *There were safety and OSHA deficiencies noted: (1) the width between the side rails of 15" did not meet the required 16" minimum. (2) the 1/2" diameter ladder rungs did not meet the 3/4" minimum ladder rung diameter. (3) the ladder rails did not meet the 7" clearance standoff. (4) there is electrical conduit attached to the ladder which could interfere with the unrestricted use of the side rail by the climber and an electrical weather head located in close proximity of the ladder. (5) the safety climb device was not securely fastened on all of the ladder rungs.* The ladder was equipped with a cable type safety climbing device. The ladder is approximately 12' from grade level and could be accessed with an extension ladder. *See photos below.*



**L. Roof and Roof Hatch:** The roof hatch is 30"Ø of steel construction with a locking hasp that was not secure with a lock. The hatch is in good condition with the coating providing adequate protection. The roof coating is experiencing some chalking from the UV and minor corrosion at areas observed. The roof hatch was an upgrade during the last rehabilitation (2004-2005) *See photos below.*



**M. Shell/Balcony/Bowl:** *There were safety and OSHA deficiencies noted: (1) the balcony handrail does not have a mid-rail at 21" but may be approved with the X bracing if there is no opening to allow greater than a 19". (2) there is cable extending across the balcony which creates a trip hazard.* The coating appeared to be in fair overall condition and exhibited poor adhesion to the underlying coating mostly along the balcony floor. Some corrosion to base metal, chalking of the coating, chalking from UV exposure were noted. *See photos below.*



**N. Roof Vent:** The roof vent is 30"Ø is of steel construction and fitted with a steel vent hood. The vent screen is the required 16-mesh screen. The vent was an upgrade during the last rehabilitation (2004-2005). *See photos below.*



## 4.2 Interior

A. **Interior Shell and Roof Coating Condition:** The coating on the interior surfaces of the tank appeared to be in good condition. The interior coatings exhibited good adhesion to the steel but is showing some edge and seam corrosion at laps, crevices, roof penetrations and the edges of the roof stiffeners. The shell below the HWL is providing excellent protection to the surfaces and shows normal staining from the wet dry conditions as result of the fluctuating water level. The interior coating system is becoming somewhat dry and brittle as its age approaches 16 years. *See photos below.*

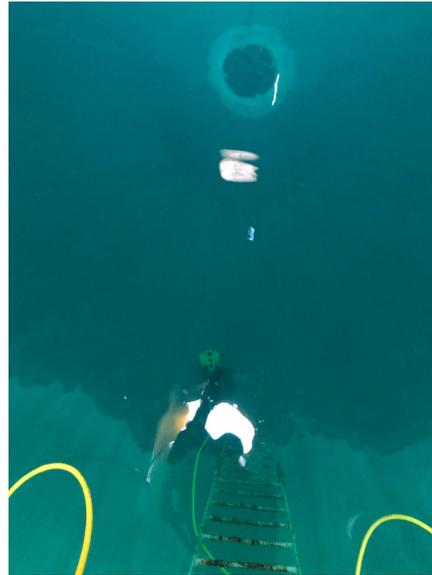


C. **Overflow Weir:** The weir is an extension of the overflow pipe that exits the top shell of the tank. Some minor edge corrosion along the top of the pipe. *See photo below.*



D. **Interior Shell Ladder:** The interior ladder was attached to the shell and appeared in structural sound condition. The ladder was not equipped with a safety climb but may be accessed if a safety lanyard is used.

E. **Bowl and Sediment Level:** The condition of the surfaces observed along the bowl during the underwater inspection via ROV, showed no signs of deterioration or concern to the coating. About 40-50% of the bottom of the bowl was covered with a light film of 1/8" to 1/4" sediment level. *See photos below.*



### 4.3 Coating Adhesion test

**A. Interior and Exterior:** An adhesion test was conducted in accordance with ASTM D3359 Standard for measuring the adhesion rating of the current interior exterior coating system. This is a vital test to determine the options available for rehabilitating the coating system. Over-coating a tank exterior requires adhesion ratings of 3 or greater on a scale of 0-5. Overcoating the interior is never recommended by this office but only spot repairs with proper surface preparation and repair coating application. The results are reported in the tank description table using the ASTM scale. The ASTM scale is a relative scale to rate adhesion from 0 to 5 with 5 being the best. The exterior was at or below 2A. The interior was rated a 3A

*5 (very good) - 4 (good) - 3 (fair) - 2 (poor) - 1 (very poor) - 0 (unacceptable and failing)*

### 4.4 Heavy Metal Testing

Several areas on the shell and roof exterior paint samples were collected and combined into 1 Sample. Heavy metals tests were conducted on the coating samples as indicated below. After collection, the samples were placed in plastic baggies and delivered to DHL Analytical in Round Rock, Texas for analysis. The results are given in mg/kg (ppm). The report from DHL is a separate attachment to this report and is included in the submittal.

Sample No.	Location	Cr mg/kg	Pb mg/kg
1	Ext. Shell, Leg and Roof	511	221,000

- ❖ The analytical results exhibited show that the contents in the coating at the combined samples that were collected. The allowable limits for Chromium and Lead is 5000 ppm (mg/kg) by weight. The value for the Pb (lead) concentration listed is above the EPA Allowable Limits.

## 5.0 DEFICIENCIES:

TCEQ, AWWA, OSHA and Safety-Related Deficiencies. There were deficiencies and concerns with this tank. They included:

- The exterior coating system has reached its full potential for providing protection and preventing delamination. There is coating flaking off (delaminating) that is exposing lead to the environment. *TCEQ Rule 290.43 (c) (8). Coatings of all clear wells, ground storage tanks, standpipes and elevated tanks shall be maintained in strict accordance with current AWWA Standards.*
- The roof hatch is not locked and is required to be secure. *TCEQ Rule 290.43 (c) (2). All hatches shall remain locked except during inspections and maintenance.*
- The exterior ladder is less than the 16" wide and ¾"Ø required rungs and adequate standoff. The safety climb hardware needs to be tightened and repaired.
- The balcony handrail should be modified to meet the OSHA Standard for a mid-railing. A variance from OSHA may be available if the X-bracing is an adequate replacement.

## 6.0 RECOMMENDATIONS:

**6.1 Exterior:** HOT defines the life of an exterior coating as the amount of time before repainting becomes necessary due to coating failure and corrosion. During the exterior coating's life, the owner should expect the coating to lose its gloss, start to chalk, show signs of weathering, mildew and possibly some rust staining. The typical life of a properly applied exterior coating system is approximately 15-20 years. Due to the age of the coating, chalking and brittleness it is recommended that a complete exterior coating rehabilitation be performed. A zinc/epoxy/urethane system is recommended for the exterior of this tank. This coating system should meet the AWWA D102 recommendations. The typical life of this properly formulated and applied coating system is approximately 18-25 years. Due to the presence of high lead content in the coating, age of the coating and brittleness, it is recommended that the exterior be rehabilitated.

**6.2 Interior:** HOT defines the life of an interior coating as the amount of time before repainting becomes necessary due to coating failure and corrosion. During the coating life the owner should expect some rust staining due to interface corrosion some checking, a few small holidays and minor blistering due to entrapment. The optimum long-life coating system presently available is a Zinc-epoxy coating system. A zinc and two-coat or single hi-build epoxy system is recommended for the interior of this tank. This coating system should meet the certification criteria of ANSI/NSF 61 and TCEQ regulations. The typical life of this properly formulated and applied coating system is approximately 15-20 years. The interior coating system is approaching an approximate age of 16 years. The extended life of the interior should be considered when the exterior is rehabilitated.

**6.3 Recommendation List:** The recommended scope of work listed below applies to the Town of Pecos East Elevated Tank for proper modification and rehabilitation to bring the tank into a serviceable condition in accordance with TCEQ, AWWA and Industry Standards. The budget and bidding process will have an effect on the project's end result. A set of specifications that has a detailed scope of work and itemizes the repair and modifications well enough to properly bring the tank into compliance is an essential requirement for a successful project. The City of Pecos should employ the services of a Professional Engineering Firm to provide a P.E. in the State of Texas for the specifications

and bid document preparation. It is recommended that any surrounding instruments and equipment be protected during the project. Industry standards with recommended practices and procedures should be referenced in the specification as to give the contractor a quality standard for accomplishing the scope of work.

1. Make any necessary interior/exterior welding repair, corrosion related repairs and general repairs and modifications to the tank. This includes: Repairing by welding, grinding, sealing any pitting and items deemed necessary to restore integrity. Repair the existing liquid target level by replacing the cable from the target to the float, attach the cable guide to the floor and install level graduation marks on the target. Providing miscellaneous electrical work to reposition any electrical conduit back onto the new exterior ladder. Grinding all sharp edges, weld splatter, arc strikes, uneven weld profiles, and any other defects that do not provide adequate anchor profile and causes a lack of coating adhesion. Any small gaps that are not in a structural connection zone, may be seam sealed using an approved seam sealer. The resident inspector and engineer should identify any repairs necessary. A welder certified to ASME Section IX or AWS D1.1 (tests as described in AWS B2.1) code shall conduct all welding.
2. Provide a containment system to the exterior of the tank to protect the facility and surrounding property. The containment system shall be specified in the contract bid documents and technical specifications to meet the emission control requirements of a Class 2 System as specified in the SSPC-Guide 6 for containing debris generated during paint removal operations.
3. Remove and replace the exterior access ladders with new AWWA D100, OSHA and TCEQ compliant ladders. Re-use the existing safety climb on the exterior and at the request of the owner, provide a retractable fall device on the interior. A portable retractable fall device is recommended on the interior in lieu of a permanent safety-climb that is subject to corrosion.
4. Apply an industrial coating system using trained and qualified coating applicators. The Tnemec Coating System is recommended utilizing the coatings available from Tnemec. Clean the exterior surfaces to a SSPC-SP 6, Commercial Blast Cleaning and apply a Zinc/Epoxy/Urethane system. Clean the interior surfaces to a SSPC-SP 10, Near White Blast Cleaning and apply a Zinc/2-Coat Epoxy system. ***(A detailed coating specification will be written under a separate cover upon review and discussion of this report. The system above may be changed depending on the existing coating system results and the time of year the tank will be rehabilitated).***
5. Provide a dust collector and dehumidification unit to control the interior environment while abrasive blasting and coatings application.
6. Seal caulk all interior penetrations, laps and other unsealed connections that cannot be protected from the moisture or corrosive environment.
7. Provide a knowledgeable and qualified welding/coating inspector to monitor all aspects of the scope of work to assure the customer that all industry standards, specifications and good workmanship practices are being followed.

## 7.0 BUDGET COST:

<b>EXTERIOR (based on 12,500 sq./ft. @ \$12.00/sq./ft.)</b>	
Clean & Paint Exterior	\$150,000
SP-6 Clean, apply zinc/epoxy/urethane system	
Hazardous Lead Removal Methodology	
<b>INTERIOR (based on 19,600 sq./ft. @ 9.00/sq./ft.)</b>	
Clean and Paint Interior	\$176,400
SP-10 Clean, apply zinc/2-coat epoxy system	
<b>LINE BID ITEMS</b>	
Grinding, welding, repairs, foundation repairs and misc. (item 1)	\$15,500
Containment System (item 2)	\$70,000
Install a new exterior ladder shell (item 3)	\$15,000
Dehumidification and dust collection (item 5)	\$25,000
Caulking @ 50 tubes (item 6)	\$ 2,500
<b>CONTINGENCY</b>	
10% of \$454,400	\$45,440

***Total Cost to Budget should be \$499,840. This budget accounts for the fact that the results of the exterior paint testing is hazardous per the limits of RCRA metals for lead and will require special consideration. It does not include the cost for Engineering Services to write the bid documents/specifications and administrate the project or the Third Party NACE Level III Inspection. The contractor should consider the accessibility to this project.***

## 8.0 CONCLUSION OF OBSERVATION:

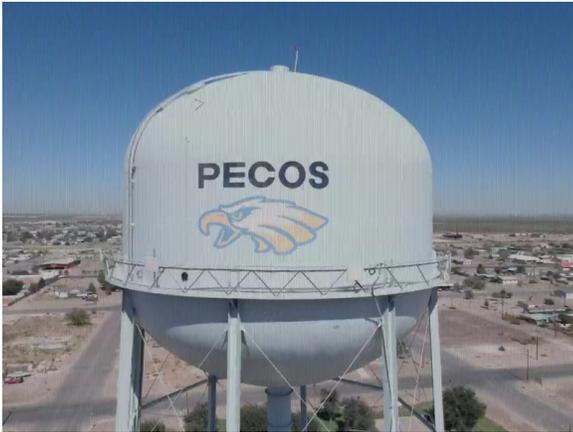
The intent of this report is to convey the condition of the tank and make reasonable recommendations and cost estimates to the owner on rehabilitating the tank. The cost associated with a total rehabilitation will be substantial and should be considered sensitive to the time of bidding as it relates to our economy. The recommendations and budget have been offered by HOT Inspection Services as a plan to consider within the next budget year. The CIP budget should be approved with a contingency as indicated for the economy and any local, state or federal regulations that may affect the pricing. In conclusion to the inspection and evaluation of the above referenced tank, it is the opinion of HOT Inspection Services that the recommended repairs be conducted to maintain the integrity of the water storage tank. HOT Inspection Services, Inc., assumes no responsibility for losses of any kind due to our interpretation of the quality of the material submitted. All data and information will be held strictly confidential.

**HOT Inspection Services, Inc.**

  
\_\_\_\_\_  
John H. Konzen  
NACE Certified Coating Inspector #7841  
AWS Certified Welding Inspector #85040251  
AWS Certified Welding Educator #9612020E  
NDE Level III



**EXTERIOR PHOTOS**



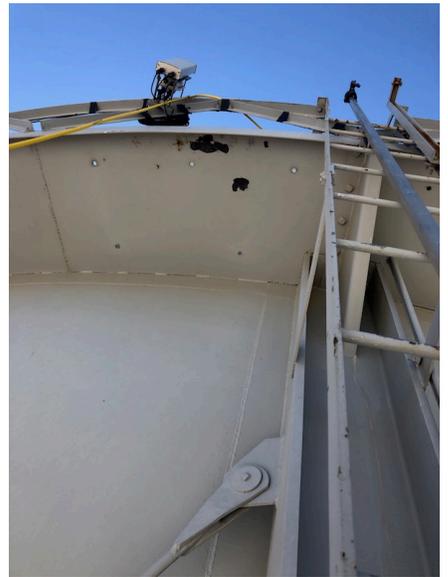
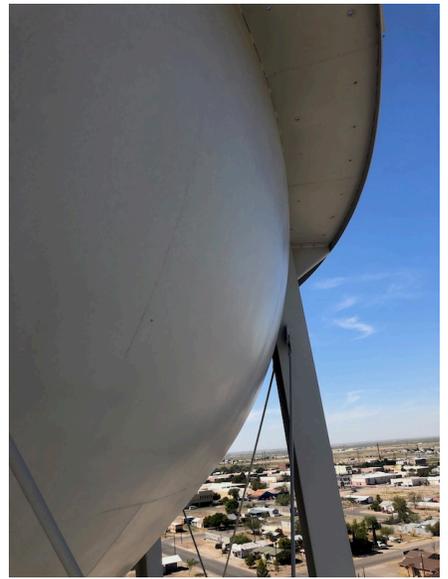
















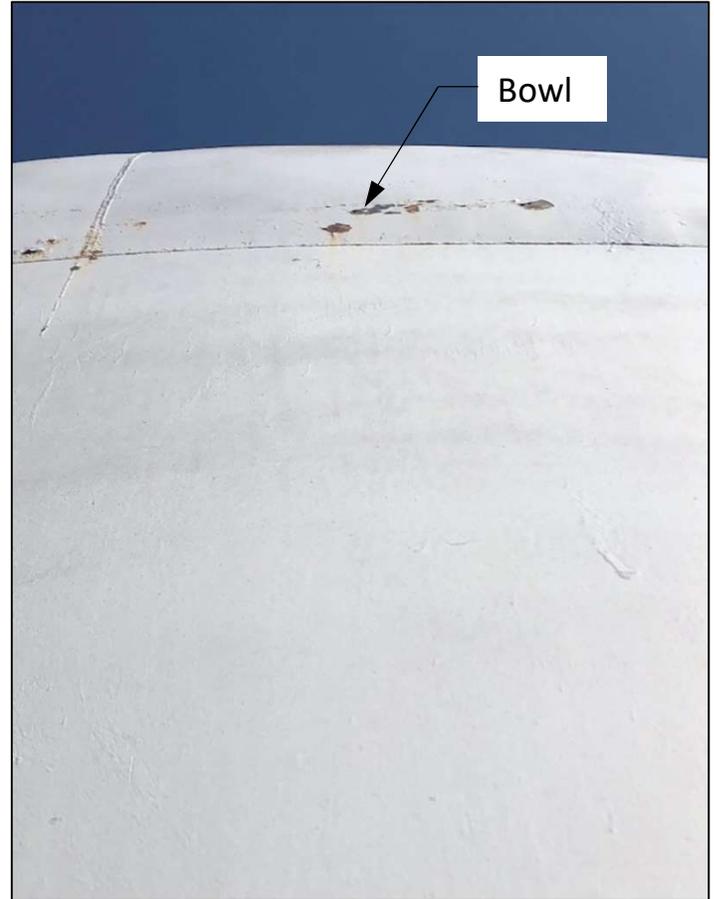


**INTERIOR PHOTOS**









Notes:

This exhibit is based on inspection report provided by Heart of Texas (HOT) Inspection Services, Inc. dated November 5, 2019 and attached in this package

Contractor shall spot repair by grinding and welding to ensure adequate coating adhesion. Roof steel plate (minimum thickness 1/8") and shell and bowl steel plates (minimum thickness 1/4")



**Frank X. Spencer & Associates, Inc.**  
Consulting Civil Engineers & Surveyors

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Ph: (915) 533.4600 | F: (915) 533.4673  
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## EXHIBIT A

### Roof, Shell, and Bowl Steel Plates

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**TOPC 500,000 Gallon Elevated  
Storage Tank Project**



Notes:

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Contractor shall secure and lock roof hatch

## EXHIBIT B

### Roof Hatch

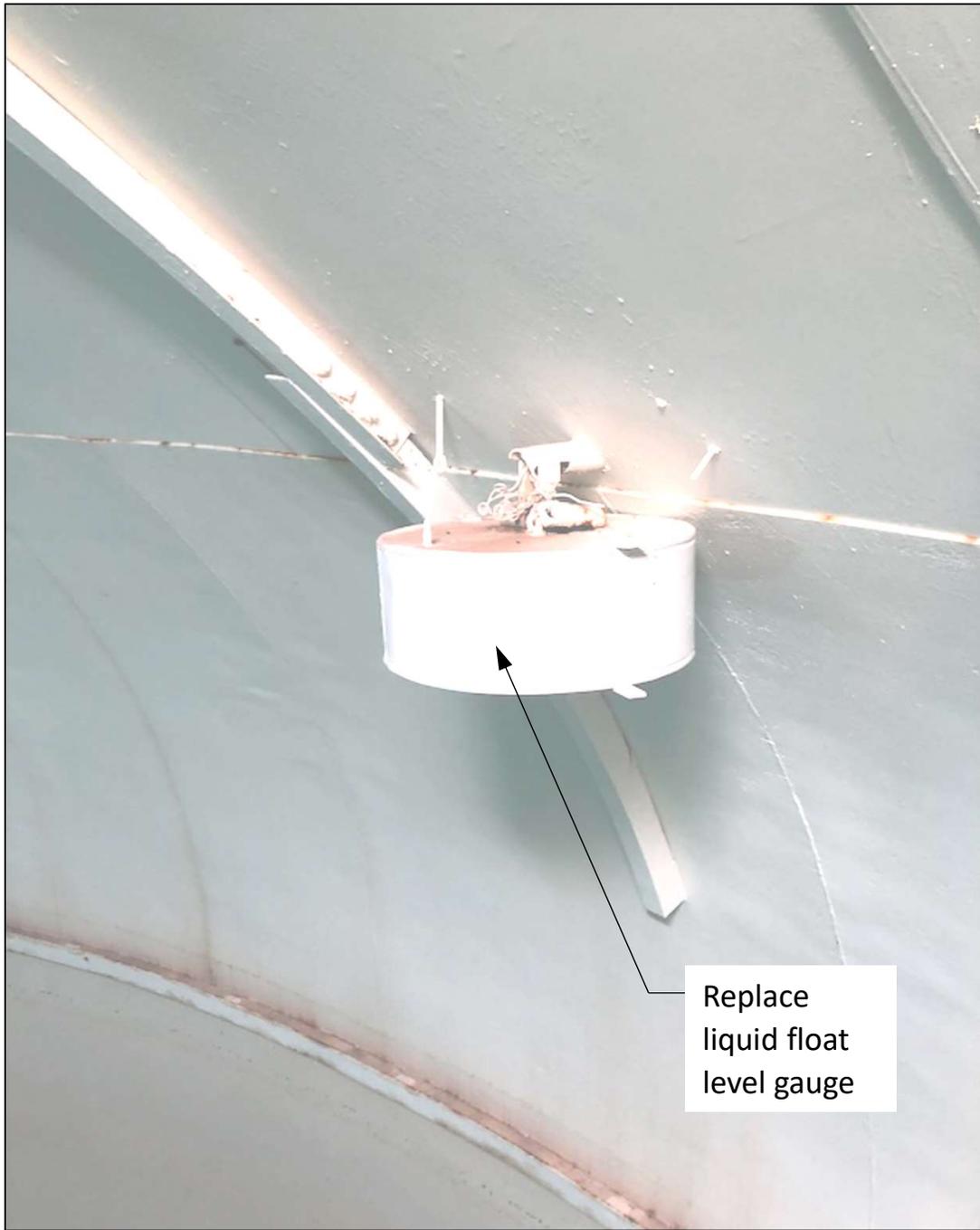


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**TOPC 500,000 Gallon Elevated  
Storage Tank Project**



**Notes:**

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Contractor shall replace liquid float level gauge

## EXHIBIT C

### Liquid Float Level Gauge

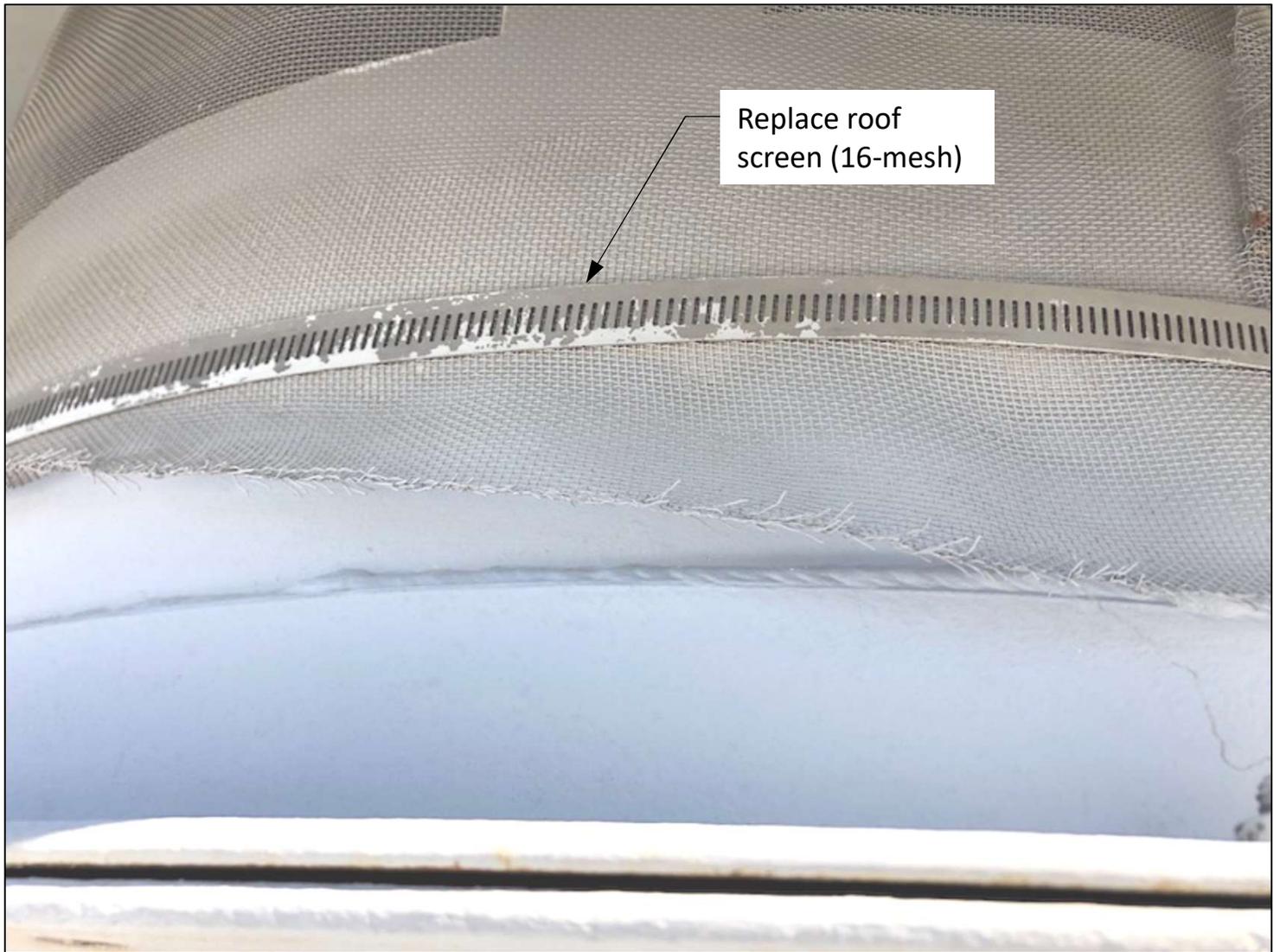
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Notes:

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Contractor shall replace roof screen (16-mesh)



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## EXHIBIT D

### Roof Screen Mesh

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**TOPC 500,000 Gallon Elevated  
Storage Tank Project**



Notes:

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Contractor shall follow specification sections 3.01.A, 3.01.A.2 and 3.12 for any incidental work/repairs after blasting and the weld metal overlay method under general repairs if any metal buildup is needed and indicated by the Engineer.

## EXHIBIT E

### Incidental Repairs after Blasting

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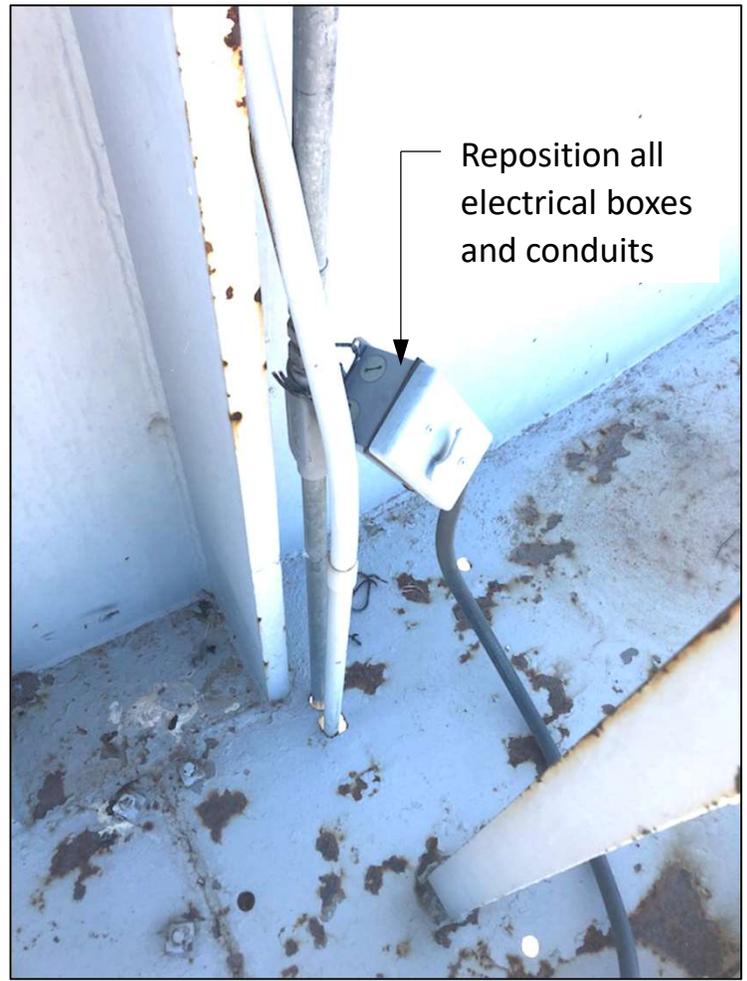
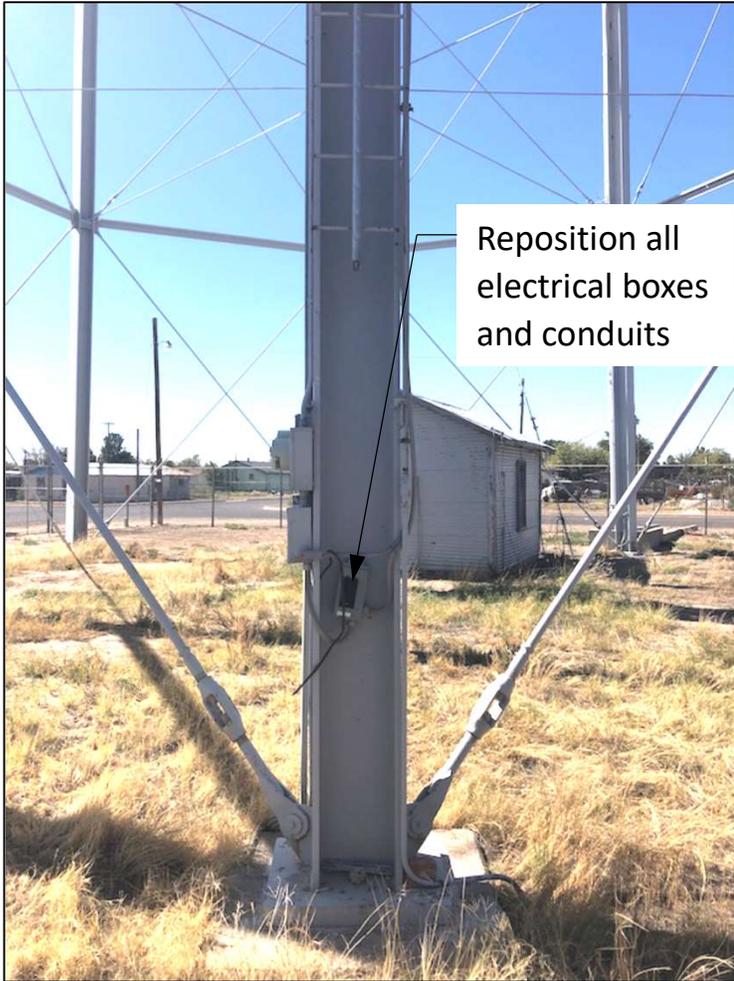
### TOPC 500,000 Gallon Elevated Storage Tank Project



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Notes:

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Contractor shall reposition all electrical boxes and conduits as indicated by the engineer



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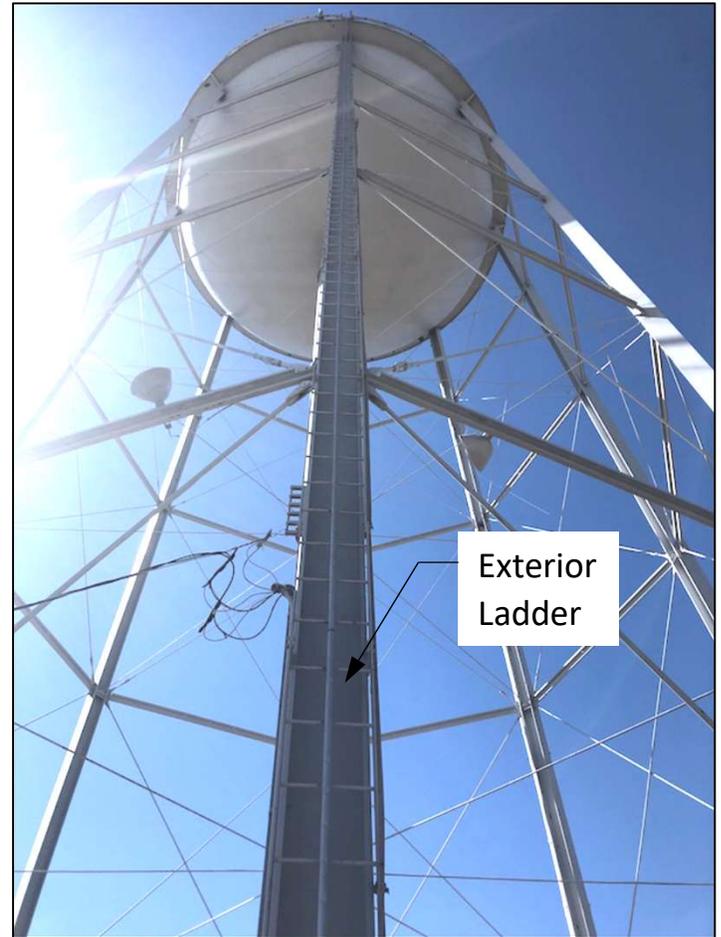
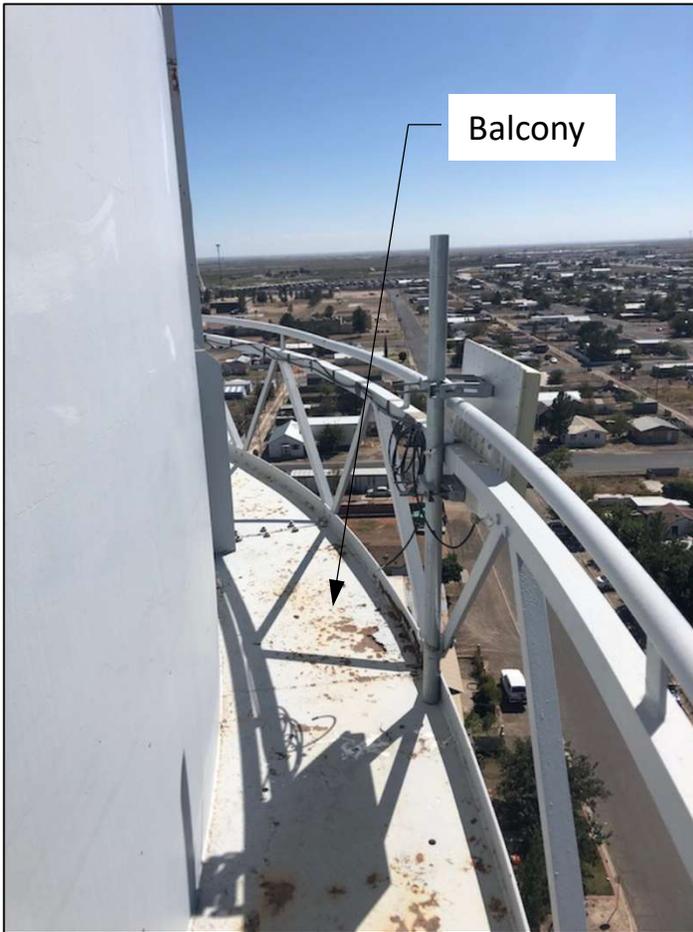
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## EXHIBIT F

### Electrical Boxes and Conduits

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### TOPC 500,000 Gallon Elevated Storage Tank Project



**Notes:**

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Exterior Ladder needs to comply with OSHA Standards. The minimum width required between side rails is 16". The minimum diameter required of ladder rungs is 3/4". The ladder rails need to meet a 7" clearance standoff. The safety climb device needs to be securely fastened on all ladder rungs. Balcony Mid-Rail needs to comply with OSHA Standards. The balcony handrail may be approved with the X bracing if there is no opening to allow greater than 19". There are not to be any trip hazards extending across the balcony.

**EXHIBIT G**

**Balcony, and Exterior Ladder**

**TOPC 500,000 Gallon Elevated Storage Tank Project**



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