

City of Fort Stockton



Storage Tank Rehabilitation,
Well Rehabilitation,
Fort Stockton, Texas

TXCDBG CONTRACT No. 7214169

CONTRACT DOCUMENTS AND SPECIFICATIONS

By

Project Engineer
Raul B. Rodriguez, P.E.
City of Fort Stockton

September 17, 2015



ISSUED FOR BID

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Advertisement and Invitation for Bids
City of Fort Stockton
TxCDBG Contract No. 7214169

The CITY OF FORT STOCKTON will receive sealed bids for WATER SYSTEM IMPROVEMENTS PROJECT, TxCDBG CONTRACT NO. 7214169 until 4:00P.M.on, October 9, 2015 in person at City Hall or by mail to City Manager Raul B. Rodriguez, P.O. Box 1000, Fort Stockton, TX 79735. The bids will be publicly opened and read aloud at 4:00 P.M. on Friday, October 9, 2015 at 121 W. Second St., Fort Stockton, TX 79735.

Sealed bids are invited for several items and quantities of work as follows:

Base Bid – Water System Improvements:

Water System Improvements include: The Rehabilitation of an 800,000 Gallon Water Storage Tank and the Rehabilitation of 12” Municipal Water Well.

Bid/Contract Documents, including Drawings and Technical Specifications are on file at Office of the City Manager, 121 West Second Street, Fort Stockton, TX 79735. (432) 336-8525

A bid bond in the amount of 5 percent of the bid issued by an acceptable surety shall be submitted with each bid. A certified check or bank draft payable to the CITY OF FORT STOCKTON or negotiable U.S. Government Bonds (as par value) may be submitted in lieu of the Bid Bond.

Attention is called to the fact that not less than, the federally determined prevailing (Davis-Bacon and Related Acts) wage rate, as issued by the Texas Department of Agriculture Office of Rural Affairs and contained in the contract documents, must be paid on this project. In addition, the successful bidder must ensure that employees and applicants for employment are not discriminated against because of race, color, religion, sex age or national origin.

The CITY OF FORT STOCKTON reserves the right to reject any or all bids or to waive any informalities in the bidding.

Bids may be held by CITY OF FORT STOCKTON for a period not to exceed 30 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.

All contractors/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.

CITY OF FORT STOCKTON

Raul B. Rodriguez, City Manager

September 14, 2015

INSTRUCTION TO BIDDERS FOR CONSTRUCTION

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. Separate bid forms are provided for your use.

2. Interpretations or Addenda

No oral interpretations will be made to any bidder. Each request for clarification shall be made in writing to the Grant Recipient or engineer 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 or not received by the bidders.

3. Inspection of Site

Each bidder should visit the site of the proposed work and should become acquainted with the existing conditions and facilities, the difficulties and restrictions pertaining the performance of the contract. The bidder should thoroughly examine and become familiar with the drawings, 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 failure to receive or examine any form or legal document or to visit the site or the conditions there existing. The city/county will be justified in rejecting any claim based on lack of inspection of the site prior to the bid.

4. Alternate bid items

No alternate bids or bid items will be considered unless they are specifically requested by the technical specifications.

5. Bids

- a. All bids must be submitted on the forms provided and are subject to all requirements of the Contract Documents, including the Drawings.
- b. All bids must be regular in every respect and no interlineation, 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 bidder's 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 locality 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.

6. Bid Modifications Prior to Bid Opening

- a. Any bidder may modify its bid in writing at any time prior to the scheduled closing time for receipt of bids, provided such modification is received by the locality prior to the closing time. The modification 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 locality until the sealed bid is open.
- 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 locality until the sealed bid is open.

7. 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 locality 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.

8. Statement of Bidders Qualifications

Each bidder shall submit on the form furnished for that purpose a statement of the bidder's qualifications. The Grant Recipient 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 Grant Recipient 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 Grant Recipient that the bidder is qualified to carry out properly the terms of the contract.

9. 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.

10. Corrections:

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

11. Time for Receiving Bids

Bids 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 Grant Recipient 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.

12. Opening of Bids

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

13. 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 Grant Recipient. Upon receipt of such notice, the unopened bid will be returned to the bidder. The bid guaranty of any bidder withdrawing his bid will be returned promptly.

14. 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 locality 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 Grant Recipient 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.

15. 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, county, school district or any division or subdivision thereof, to obtain a 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 locality may grant, shall constitute a default and the locality may, at its option either award the contract to the next lowest responsible bidder, or re-advertise for bids. In either case, the locality 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.

16. 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.

17. 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.

**BID PROPOSAL
WATER SYSTEM IMPROVEMENTS PROJECT**

Place CITY OF FORT STOCKTON

Date _____

Project No. TXCDBG NO. 7214169

Proposal of _____ (hereinafter called
"Bidder", organized and existing under the laws of the State of _____, doing business as a _____
_____) (corporation, partnership, sole proprietor, etc.).

To CITY OF FORT STOCKTON (hereinafter called the "Owner").

In compliance with the Advertisement for Bids, Bidder hereby proposes to perform all work for: **PROPOSED
WATER SYSTEM IMPROVEMENTS, TXCDBG CONTRACT NO. 7214169**, in strict accordance with the
Plans and Specifications, these Contract Documents, and Bid Proposal, within the time set forth therein, and
at the total price of _____ Dollars, and _____
_____ Cents (\$ _____) for Total Base Bid Items. Amounts are to be shown in both words
and figures. In case of discrepancy, the amount shown in words will govern.

By submission of the Bid, each Bidder certifies, and in the case of a joint Bid, each party certifies as to his own
organization, that this Bid has been arrived at independently, without consultation, communication, or
agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bidder hereby agrees to commence work under this Contract on or before a date to be specified in the Notice
to Proceed and to fully complete the project within **150** consecutive calendar days thereafter for the Base Bid
Items. Bidder further agrees to pay as liquidated damages the sum of **\$200.00** for each consecutive calendar
day thereafter as provided in Section 111 of the General Contract Conditions.

Bidder acknowledges receipt of the following Addendum:

BID PROPOSAL WATER SYSTEM IMPROVEMENTS PROJECT

Bidder agrees to perform all work for WATER SYSTEM IMPROVEMENTS, TxCDBG CONTRACT NO. 7214169 described in the Specifications and shown on the Plans, for the following unit prices.

ITEM NO.	DESCRIPTION AND UNIT PRICE IN WORDS	UNIT	QUANTITY	UNIT PRICE IN FIGURES	AMOUNT
1	<u>Mobilization/Demolition</u> - including insurance, bid bond, performance bond, and move in/move out of equipment and related costs.	LS.	1	.	
2	<u>Interior Coating</u> - existing 800,000 gallon tank, approx. 86 ft dia. X 24 ft height. Surface preparation, protection of appurtenances to remain, removal of designated appurtenances, placement of new appurtenances, complete high performance coating system; to include all equipment, materials, transportation, safety precautions and testing; complete in place	LS.	1		
3	<u>Altitude Gauge System</u> - Placement of a separate inlet with system for sampling and to accommodate a "feet & inches" water gauge; to include all fittings, appurtenances, coating as needed, and testing complete system in place.	L.S.	1		
4	<u>Shell Hatch</u> - Tombstone style, 30"x36"; to include all equipment and labor complete in place.	Each	1		
5	<u>Well Site Preparation</u> - to include removal and replacing of motor and pump assemblies, cleaning up after completion of the work, and incidental items not specifically called out in the bid proposal.	LS	1	.	
6	<u>Well Rehabilitation</u> - install steel casing liner in existing well to within 40 feet of bottom of well, provide new column pipe.	LF	240		

7	<u>Water quality analysis</u> - Acceptably performed analysis based on the submission of samples within specified holding times and analysis by methods which provide detection limits below the applicable drinking water standards.	EA	1		

ITEM NO.	DESCRIPTION AND UNIT PRICE IN WORDS	UNIT	QUANTITY	UNIT PRICE IN FIGURES	AMOUNT

TOTAL WATER SYSTEM IMPROVEMENTS, TCDBG CONTRACT NO. 7214169
BID - BASE BID Items 1 thru _____

_____ dollars
 _____ cents \$ _____

ALTERNATE "A" BID ITEMS

ITEM NO.	DESCRIPTION AND UNIT PRICE IN WORDS	UNIT	QUANTITY	UNIT PRICE IN FIGURES	AMOUNT
A1	<u>Safety Climb</u> - install a safety climb system on existing exterior ladder. Tee rail type system; to include all equipment and labor complete system in place	LS	1	\$	\$
A2	<u>Exterior Overcoat</u> - to include surface preparation, protection of appurtenances to remain, complete high performance coating system; to include all materials, transportation, safety precautions and testing, complete in place.	LS	1	\$	\$
A3	<u>Delete</u> - Removal of bid items 2, 3 and 4 from overall project.	LS	1	\$	\$
A4	<u>Delete</u> - Removal of bid items 5 and 6 from overall project.	LS	1	\$	\$

The above unit prices shall include all labor, materials, bailing, shoring, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for. The Bidder understands that the Owner reserves the right to reject any or all Bids and to waive any informalities in the Bidding.

The Bidder agrees that this Bid shall be good and may not be withdrawn for a period of 30 calendar days after the scheduled closing time for receiving bids.

The Bidder must attach a certificate of Worker's Compensation coverage to this bid proposal. If the required certificate is not attached the bid will be deemed incomplete.

Upon receipt of written notice of the acceptance of the Bid, Bidder will execute the formal contract attached within 10 days. The Bid Security attached in the sum of _____ Dollars and _____ cents(\$ _____) is to become the property of the Owner in the event the Contract and Bond are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

Respectfully submitted:

By _____
Signature ()

Title

Company Name

Business Address

(SEAL-IF BIDDER IS A CORPORATION)

City, State, Zip

Phone Number

FAX Number

Email Address

Employer ID Number

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned, _____
_____ as PRINCIPAL, and _____, as SURETY are
held and firmly bound unto (City/County) hereinafter called the "Local Public Agency", in the penal
sum of _____ Dollars, (\$ _____), lawful money of
the United States, for the payment of which sum 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, 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 thirty (30) days after the said
opening, and shall within the period specified therefor, 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
Local Public Agency 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 Local
Public Agency 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 parties have executed this instrument 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

Attest:

By: _____

Affix
Corporate
Seal

Attest:

By: _____

Countersigned

By _____

* Attorney-in-Fact, State of _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the _____, Secretary of the Corporation named as Principal in the within bond; that _____, who signed the said bond on behalf of the Principal was then _____ of said corporation; that I know his/her signature, and his/her signature thereto is genuine; and that said bond was duly signed, sealed, and attested to, for and in behalf of said corporation by authority of this governing body.

Corporate
Seal

Title: _____

* Power-of-attorney for person signing for surety company must be attached to bond.

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 _____:

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 _____, 20____.

By: (signature) _____ Title: _____

(print name) _____

CONTRACTOR'S LOCAL OPPORTUNITY PLAN

_____ agrees to implement the following specific affirmative action steps directed at increasing the utilization of lower income residents and businesses within the City of Andrews.

- A. To ascertain from the Grant Recipient's CDBG program official the exact boundaries of the project area and where advantageous, seek the assistance of local officials in preparing and implementing the affirmative action plan.
- B. To attempt to recruit from within the city the necessary number of lower income residents through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within and servicing the project area such as Service Employment and Redevelopment (SER), Opportunities Industrialization Center (OIC), Urban League, Concentrated Employment Program, Hometown Plan, or the U.S. Employment Service.
- C. To maintain a list of all lower income residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and if a vacancy exists.
- D. To insert this plan in all bid documents and to require all bidders on subcontracts to submit an affirmative action plan including utilization goals and the specific steps planned to accomplish these goals.
- E. To ensure that subcontracts (greater than \$10,000), which are typically let on a negotiated rather than a bid basis in areas other than the covered project area, are also let on a negotiated basis, whenever feasible, in a covered project area.
- F. To formally contact unions, subcontractors, and trade associations to secure their cooperation in this effort.
- G. To ensure that all appropriate project area business concerns are notified of pending sub-contractual opportunities.
- H. To maintain records, including copies of correspondence, memoranda, etc., which document that all of the above affirmative action steps have been taken.
- I. To appoint or recruit an executive official of the company or agency as Equal Opportunity Officer to coordinate the implementation of this plan.
- J. To maintain records concerning the amount and number of contracts, subcontracts, and purchases which contribute to objectives.
- K. To maintain records of all projected work force needs for all phases of the project by occupation, trade, skill level, and number of positions and to update these projections based on the extent to which hiring meets these Local Opportunity objectives.

As officers and representatives of _____, we the undersigned have read and fully agree to this Plan, and become a party to the full implementation of the program and its provisions.

Signature

Title

Date

PROPOSED CONTRACTS BREAKDOWN

Type of Contracts	No. of Contracts	Approx. Total Dollar Amount	Estimated No. to local Business	Estimated \$ Amount Local Business

ESTIMATED PROJECT WORKFORCE BREAKDOWN

Work Classifications	Total Estimated Positions	No. of Positions Currently Filled	No. of Positions not Filled	No. of Positions to fill with LM/ Residents
Totals				

CONTRACT

THIS AGREEMENT, made this _____ day of __, 2015, by and between CITY OF FORT STOCKTON, TEXAS herein called "OWNER", and _____ of _____, County of _____, and State of TEXAS hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

PROPOSED WATER SYSTEM IMPROVEMENTS TCDBG CONTRCT NO. 7214001

herein called the "PROJECT", for the sum of _____ dollars and ____ **NO** _____ cents (\$ _____) and all extra work in connection therewith, under the terms as stated in the General and Special Conditions of the Contract and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, the General Conditions and Special Conditions of the Contract, the plans, which include all maps, plats, blueprints and other drawings and printed or written explanatory matter thereof, the specifications and contract documents therefore as prepared by Raul B. Rodriguez, P.E., herein entitled the Engineer, and as enumerated in Paragraph 2 of the Supplemental General Conditions, all of which are made a part hereof and collectively evidence and constitute the contract.

The Contractor 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 by 150 days. The CONTRACTOR further agrees to pay, as liquidated damages, the sum of \$200.00 for each consecutive calendar day thereafter as hereinafter provided in Paragraph 9 of the General Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the Contract, and to make payments on account thereof as provided in Paragraph 6, of the General Conditions.

Venue of any litigation involving this contract shall be in Pecos County, Texas.

IN WITNESS WHEREOF, the parties to these presents have executed this contract in six (6) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

OWNER: CITY OF FORT STOCKTON

BY: _____
_____, Mayor

CONTRACTOR

BY: _____

ADDRESS AND ZIP CODE

CONTRACTOR CERTIFICATIONS

U.S. Department of Housing and Urban Development

CERTIFICATION OF BIDDER REGARDING CIVIL RIGHTS LAWS AND REGULATIONS

INSTRUCTIONS

CERTIFICATION OF BIDDER REGARDING Executive Order 11246 and Federal Laws Requiring Federal Contractor to adopt and abide by equal employment opportunity and affirmative action in their hiring, firing, and promotion practices. This includes practices related to race, color, gender, religion, national origin, disability, and veterans' rights.

NAME AND ADDRESS OF BIDDER (include ZIP Code)

CERTIFICATION BY BIDDER

Bidder has participated in a previous contract or subcontract subject to Civil Rights Laws and Regulations.

☒ Yes

☐ No

The undersigned hereby certifies that:

X The Provision of Local Training, Employment, and Business Opportunities clause (Section 3 provision) is included in the Contract. A written Section 3 plan (Local Opportunity Plan) was prepared and submitted as part of the bid proceedings (if bid equals or exceeds \$100,000).

X The Non Segregated Facilities clause (Section 109 provision) is included in the Contract. No segregated facilities will be maintained as required by Title VI of the Civil Rights Act of 1964.

X The Equal Employment Opportunity clause is included in the Contract (if bid equals or exceeds \$10,000).

X The Affirmative Action for Handicapped Workers clause is included in the contract.

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

SECTION 504 CERTIFICATION

POLICY OF NONDISCRIMINATION ON THE BASIS OF DISABILITY

The _____ does not discriminate on the basis of disability status 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).

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM
CONTRACTOR'S CERTIFICATION

CONCERNING LABOR STANDARDS AND PREVAILING WAGE REQUIREMENTS

TO (appropriate recipient) City of Fort Stockton	DATE
C/O	PROJECT NUMBER (if any) TXCDBG Contract No. 7214169
	PROJECT NAME Proposed Water System Improvements Project

1. The undersigned, having executed a contract with City of Fort Stockton
_____ for the construction of the above-identified project, acknowledges that:

- (a) The Labor Standards provisions are included in the aforesaid contract,
- (b) Correction of any infractions of the aforesaid conditions, including infractions by any subcontractors and any lower tier subcontractors, is Contractor's responsibility.

2. Certifies that:

- (a) Neither Contractor nor any firm, partnership or association in which it has substantial interest is designated as an ineligible contractor by the Comptroller General of the United States pursuant to Section 5.6(b) of the Regulations of the Secretary of Labor, Part 5 (29 CFR, Part 5) or pursuant to Section 3(a) of the Davis-Bacon Act, as amended.
- (b) No part of the aforementioned contract has been or will be subcontracted to any subcontractor if such subcontractor or any firm, corporation, partnership or association in which such subcontractor has a substantial interest is designated as an ineligible contractor pursuant to any of the aforementioned regulatory or statutory provisions.

3. Contractor agrees to obtain and forward to the aforementioned recipient within ten days after the execution of any subcontract, including those executed by subcontractors and any lower tier subcontractors, a Subcontractor's Certification Concerning Labor Standards and Prevailing Wage Requirements executed by the subcontractors.

4. Certifies that:

- (a) The legal name and the business address of the undersigned are:

(b) The undersigned is (choose one):

(1) A SINGLE PROPRIETORSHIP

(3) A CORPORATION ORGANIZED IN THE STATE OF

(2) A PARTNERSHIP

(4) OTHER ORGANIZATION (Describe)

Partnership

(c) The name, title and address of the owner, partners or officers of the undersigned are:

NAME	TITLE	ADDRESS
		P

- (d) The names and addresses of all other persons having a substantial interest in the undersigned, and the nature of the interest are:

NAME	ADDRESS	NATURE OF INTEREST

- (e) The names, addresses and trade classifications of all other building construction contractors in which the undersigned has a substantial interest are:

NAME	ADDRESS	TRADE CLASSIFICATION

Date

(Contractor)

By

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

State of Texas)

County of _____)

_____, being first duly sworn, deposes and says that:

(1) He/She is _____ of _____, the Bidder that has submitted the attached Bid;

(2) He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham Bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with another Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix an overhead, profit or cost element of the Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Fort Stockton (Local Public Agency) or any person interested in the proposed Contract; and

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Title

Subscribed and sworn to me this _____ day of _____.

By: _____
Notary Public

My commission expires _____

**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: _____
Title: _____

Date: _____

Disclosure of Lobbying Activities

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure)

1. Type of Federal Action: a. contract _____ b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	2. Status of Federal Action: a. bid/offer/application _____ b. initial award c. post-award	3. Report Type: a. initial filing _____ b. material change
1. Name and Address of Reporting Entity: _____ Prime _____ Subawardee Tier _____, if Known: Congressional District, if known:	2. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime: Congressional District, if known:	
3. Federal Department/Agency:	7. Federal Program Name/Description: CFDA Number, if applicable: _____	
4. Federal Action Number, if known:	9. Award Amount, if known: \$	
10. a. Name and Address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i>	b. Individuals Performing Services <i>(including address if different from No. 10a)</i> <i>(last name, first name, MI):</i>	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: • _____	
Federal Use Only	Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)	

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 follow-up 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.

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 I

PERFORMANCE AND PAYMENT BONDING REQUIREMENTS

Pursuant to the Texas Uniform Grant and Contract Management Act of 1981, the following minimum requirements apply to all Contracts Exceeding \$25,000 in total value.

- (a) A Performance Bond on the part of the Contractor for 100 percent of the Contract Price. A "Performance Bond" is one executed in connection with a Contract to secure fulfillment of all the Contractor's Obligations under the Contract. For Contracts under \$100,000, the Owner has the option of withholding payment to Construction Contractors until completion of the construction and acceptance of work by the ___ in lieu of such Performance Bonds.
- (b) A Payment Bond on the part of the Contractor for 100 percent of the Contract Price. A "Payment Bond" is one executed in connection with a Contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the Contract.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor or Company)

(Address)

a _____ hereinafter called Principal, and

(Name of Surety Company)

(Mailing Address)

(Physical Address)

(Telephone Number)

hereinafter called Surety, are held and firmly bound unto

CITY OF FORT STOCKTON

(Name of Recipient)

P.O. Box 1000, Fort Stockton, Texas 79735

(Recipient's Address)

hereinafter called Owner, in the penal sum of _____ Dollars, and ____ Cents (_____) 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 ___, 2015, a copy of which is hereto attached and made a part hereof for the construction of:

WATER SYSTEM IMPROVEMENTS PROJECT

TXCDBG CONTRACT NO. 7214169

(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 THEREOF, this instrument is executed in SIX (6) counterparts, each one of which shall be deemed an original, this the ____ day of ___, 2015.

ATTEST PRINCIPAL:

_____	_____
	(Principal)
_____	_____
(Witness as to Principal)	(Principal Officer)
_____	_____
(Address)	(Address)
_____	_____
(Address)	(Address)
_____	(Corporate Seal)
(Principal Secretary)	

ATTEST SURETY:

_____	_____
	(Surety)
_____	By: _____
(Witness as to Surety)	(Attorney in Fact)
_____	_____
(Address)	(Address)
_____	_____
(Address)	(Address)
	(Surety Seal)

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all Partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state of Texas and must be registered with the Texas Department of Insurance.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor or Company)

(Address)

a _____ hereinafter called Principal, and

(Name of Surety Company)

(Mailing Address)

(Physical Address)

(Telephone Number)

hereinafter called Surety, are held and firmly bound unto

CITY OF FORT STOCKTON

(Name of Recipient)

P.O. BOX, FORT STOCKTON, TX 79735

(Recipient's Address)

hereinafter called Owner, in the penal sum of _____ Dollars, and ____ Cents (\$ _____) 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 ___, 2015, a copy of which is hereto attached and made a part hereof for the construction of:

WATER SYSTEM IMPROVEMENTS PROJECT

TXCDBG CONTRACT NO. 7214169

(Project Name)

NOW THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modifications thereof, including all amounts due for materials, lubricants, oil, gasoline, 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 subcontractor 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 THEREOF, this instrument is executed in SIX (6) counterparts, each one of which shall be deemed an original, this the ____ day of ___, 2015.

ATTEST PRINCIPAL:

_____	_____
(Witness as to Principal)	(Principal)
_____	_____
(Address)	(Principal Officer)
_____	_____
(Address)	(Address)
_____	_____
(Principal Secretary)	(Address)
	(Corporate Seal)

ATTEST SURETY:

_____	_____
(Witness as to Surety)	(Surety)
_____	By: _____
(Address)	(Attorney in Fact)
_____	_____
(Address)	(Address)

	(Address)
	(Surety Seal)

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all Partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state of Texas and must be registered with the Texas Department of Insurance.

ATTORNEY'S REVIEW CERTIFICATION

I, the undersigned, _____, the duly authorized and acting legal representative of the _____, 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: _____

GENERAL CONTRACT CONDITIONS FOR CONSTRUCTION

1. Contract and Contract Documents

- (a) The project to be constructed pursuant to this contract will be financed with assistance from the Texas Department of Agriculture - Office of Rural Affairs through a Community Development Block Grant (CDBG) and is subject to all applicable Federal and State laws and regulations.
- (b) The Plans, Specifications and Addenda, hereinafter enumerated in Paragraph 1 of the Supplemental General Conditions shall form part of this contract and the provisions thereof shall be binding upon the parties as if they were herein fully set forth.

2. Definitions

Whenever used in any of the contract Documents, the following meanings shall be given to the terms here in defined:

- (a) The term "Contract" means the Contract executed between the City of Fort Stockto, hereinafter called the Grant Recipient and (Name of Construction Co.), hereinafter called Contractor, of which these GENERAL CONDITIONS, form a part.
- (b) The term "Project Area" means the area within which are the specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this contract.
- (c) The term "Engineer" means Raul B. Rodriguez, Engineer in charge, serving the Locality with architectural or engineering services, his successor, or any other person or persons, employed by the Grant Recipient for the purpose of directing or having in charge the work embraced in this Contract.
- (d) The term "Contract Documents" means and shall include the following: Executed Contract, Addenda (if any), Invitation for Bids, Instructions to Bidders, Signed Copy of Bid, General Conditions, Special Conditions, Technical Specifications, and Drawings (as listed in the Schedule of Drawings).

3. Supervision By Contractor

- (a) Except where the Contractor is an individual and personally supervises the work, the Contractor shall provide a competent superintendent, satisfactory to the Engineer, on the work at all times during working hours with full authority to act as Contractor's agent.. The Contractor shall also provide adequate staff for the proper coordination and expediting of his work.
- (b) The Contractor shall be responsible for all work executed under the Contract. Contractor shall verify all figures and elevations before proceeding with the work and will be held responsible for any error resulting from his failure to do so.

4. Subcontracts

- (a) The Contractor shall not execute an agreement with any subcontractor or permit any subcontractor to perform any work included in this contract until Contractor has verified the subcontractor is eligible to participate in federally funded contracts.
- (b) No proposed subcontractor shall be disapproved by the city/county except for cause.
- (c) The Contractor shall be as fully responsible to the city/county for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them.
- (d) The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work and required compliance by each subcontractor with the applicable provisions of the Contract.
- (e) Nothing contained in the Contract shall create any contractual relation between any subcontractor and the Locality.

5. Fitting and Coordination of Work

The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operations of all trades, subcontractors, or material suppliers engaged upon this Contract.

6. Payments to Contractor

(a) Partial Payments

- 1) The Contractor shall prepare the requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Engineer for approval. The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) ten percent (10%) of the total amount, to be retained until final payment, and (2) the amount of all previous payments. The total value of work completed to date shall be based on the estimated quantities of work completed and on the unit prices contained in the agreement. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for inspection of the Engineer.
- 2) Monthly or partial payments made by the Grant Recipient to the Contractor are advanced for the purpose of assisting the contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Grant Recipient. Such payments shall not constitute a waiver of the right of the Grant Recipient to require the fulfillment of all terms of the Contract and the delivery of all improvements embraced in this Contract complete and satisfactory to the Grant Recipient in all details.

(b) Final Payment

- 1) After final inspection and the acceptance by the Grant Recipient of all work under the Contract, the Contractor shall prepare the requisition for final payment which shall be based upon the careful inspection of each item of work at the applicable unit prices stipulated in the Agreement. The total amount of the final payment due the Contractor under this contract shall be the amount computed as described above less all previous payments.

2) Before paying the final estimate, Grant Recipient shall require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor. The Grant Recipient may make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments made shall in no way impair the obligations of any surety or sureties furnished under this Contract.

3) Any amount due the Grant Recipient under Liquidated Damages, shall be deducted from the final payment due the contractor.

(c) Payments Subject to Submission of Certificates

Each payment to the Contractor by the Locality shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors.

(d) Withholding Payments

The Grant Recipient may withhold any payment due the Contractor as deemed necessary to protect the Grant Recipient, and if so elects, may also withhold any amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Grant Recipient and will not require the Grant Recipient to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the Grant Recipient elects to do so. The failure or refusal of the Grant Recipient to withhold any moneys from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this Contract.

7. Changes in the Work

(a) The Grant Recipient may make changes in the scope of work required to be performed by the Contractor under the Contract without relieving or releasing the Contractor from any obligations under the Contract or any guarantee given pursuant to the Contract provisions, and without affecting the validity of the guaranty bonds, and without relieving or releasing the surety or sureties of said bonds. All such work shall be executed under the terms of the original Contract unless it is expressly provided otherwise. Additionally, all such change orders must be approved by TxCDBG prior to execution of same.

(b) Except for the purpose of affording protection against any emergency endangering health, life, limb or property, the Contractor shall make no change in the materials used or in the specified manner of constructing and/or installing the improvements or supply additional labor, services or materials beyond that actually required for the execution of the Contract, unless in pursuance of a written order from the Grant Recipient authorizing the Contractor to proceed with the change. No claim for an adjustment of the Contract Price will be valid unless so ordered.

(c) If applicable unit prices are contained in the Agreement, the Grant Recipient may order the Contractor to proceed with desired unit prices specified in the Contract; provided that in case of a unit price contract the net value of all changes does not increase the original total amount of the agreement by more than twenty-five percent (25%) or decrease the original the total amount by eighteen percent (18%).

(d) Each change order shall include in its final form:

- 1) A detailed description of the change in the work.
- 2) The Contractor's proposal (if any) or a confirmed copy thereof.
- 3) A definite statement as to the resulting change in the contract price and/or time.
- 4) The statement that all work involved in the change shall be performed in accordance with contract requirements except as modified by the change order.
- 5) The procedures as outlined in this Section for a unit price contract also apply in any lump sum contract.

8. Claims for Extra Cost

- (a) If the Contractor claims that any instructions by Drawings or otherwise involve extra cost or extension of time, he shall, within ten days after the receipt of such instructions, and in any event before proceeding to execute the work, submit his protest thereto in writing to the Grant Recipient, stating clearly and in detail the basis of his objections. No such claim will be considered unless so made.
- (b) Claims for additional compensation for extra work, due to alleged errors in ground elevations, contour lines, or bench marks, will not be recognized unless accompanied by certified survey data, made prior to the time the original ground was disturbed, clearly showing that errors exist which resulted, or would result, in handling more material, or performing more work, than would be reasonably estimated from the Drawings and maps issued.
- (c) Any discrepancies which may be discovered between actual conditions and those represented by the Drawings and maps shall be reported at once to the Grant Recipient and work shall not proceed except at the Contractor's risk, until written instructions have been received from the Grant Recipient.
- (d) If, on the basis of the available evidence, the Grant Recipient determines that an adjustment of the Contract Price and/or time is justifiable, a change order shall be executed.

9. Termination, Delays, and Liquidated Damages

- (a) Right of the Grant Recipient to Terminate Contract.
- (b) In the event that any of the provisions of this contract are violated by the Contractor, or by any subcontractors, the Grant Recipient may serve written notice upon the Contractor and the Surety of its intention to terminate the contract. The notices shall contain the reasons for such intention to terminate the contract, and unless such violation or delay shall cease and satisfactory arrangement of correction be made within ten days, the contract shall, upon the expiration of said ten (10) days, cease and terminate. In the event of any such termination, the Grant Recipient shall immediately serve notice thereof upon the Surety and the Contractor. The Surety shall have the right to take over and perform the contract. Provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the Grant Recipient may take over the work and complete the project by bid/contract or by force account at the expense of the Contractor and his Surety shall be liable to the Grant Recipient for any excess cost incurred. In such event the Grant Recipient may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefore.

(c) Liquidated Damages for Delays.

(d) If the work is not completed within the time stipulated in the applicable bid for Lump Sum or Unit Price Contract provided, the Contractor shall pay to the Grant Recipient as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) the amount of \$200 for each calendar day of delay, until the work is completed. The Contractor and Contractor's sureties shall be liable to the Grant Recipient for the amount thereof.

(e) Excusable Delays.

- 1) The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due to:
- 2) Any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, national defense, or any other national emergency;
- 3) Any acts of the Grant Recipient;
- 4) Causes not reasonably foreseeable by the parties to this Contract at the time of execution which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, terrorism, war, acts of another Contractor in the performance of some other contract with the Grant Recipient, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions.
- 5) Provided, however, that the Contractor promptly notifies the Grant Recipient within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the Grant Recipient shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this contract, the delay is properly excusable, the Grant Recipient shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

10. Assignment or Novation

The Contractor shall not assign or transfer, whether by assignment or novation, any of its rights, duties, benefits, obligations, liabilities, or responsibilities under this Contract without the written consent of the Grant Recipient.; No assignment or novation of this Contract shall be valid unless the assignment or novation expressly provides that the assignment of any of the Contractor's rights or benefits under the Contract is subject to a prior lien for labor performed, services rendered, and materials, tools, and equipment supplied for the performance of the work under this Contract in favor of all persons, firms, or corporations rendering such labor or services or supplying such materials, tools, or equipment.

11. Disputes

(a) All disputes arising under this Contract or its interpretation except those disputes covered by FEDERAL LABOR STANDARDS PROVISIONS whether involving law or fact or both, or extra work, and all claims for alleged breach of contract shall, within ten (10) days of commencement of the dispute, be presented by the Contractor to the Grant Recipient for decision. Any claim not presented within the time limit specified in this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of its commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt of the Grant Recipient.

- (b) The Contractor shall submit in detail the claim and proof thereof.
- (c) If the Contractor does not agree with any decision of the Grant Recipient, Contractor shall in no case allow the dispute to delay the work but shall notify the Grant Recipient promptly that the work shall proceed under protest.

12. Technical Specifications and Drawings

Anything mentioned in the Technical Specifications and not shown on the Drawings or vice versa, shall be of like effect as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in Drawings, or Technical Specifications, the matter shall be immediately submitted to the Grant Recipient for review. Contractor shall be liable for any issues or expenses in the event the discrepancy is not submitted to the Grant Recipient.

13. Shop Drawings

- (a) All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in 4 copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at Contractor's own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the Contractor, for extension of the contract time shall be granted by reason of his failure in this respect.
- (b) Any drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time, otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.
- (c) If a shop drawing is in accordance with the contract or involves only minor adjustment in the interest of the Grant Recipient not involving a change in contract price or time, the engineer may approve the drawing. The approval shall not relieve the Contractor from responsibility to adhere to the contract or for any error in the drawing.

14. Requests for Supplementary Information

It shall be the responsibility of the Contractor to make timely requests of the Grant Recipient for any additional information which should be furnished by the Grant Recipient under the terms of this Contract, and which is required in the planning and execution of the work. Such requests may be submitted from time to time as the need approaches, but each shall be filed in ample time to permit appropriate action to be taken by all parties involved so as to avoid delay. Each request shall be in writing, and list the various items and the latest date by which each will be required by the Contractor. The first list shall be submitted within two weeks after Contract award and shall be as complete as possible at that time. The Contractor shall, if requested, furnish promptly any assistance and information the Engineer may require in responding to these requests of the Contractor. The Contractor shall be fully responsible for any delay in his work or to others arising from his failure to comply fully with the provision of this section.

15. Materials and Workmanship

- (a) Unless otherwise specifically provided for in the technical specifications, all workmanship, equipment, materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where equipment, materials, articles or workmanship are referred to in the technical specifications as "equal to" any particular standard, the Engineer shall decide the question of equality.
- (b) The Contractor shall furnish to the Grant Recipient for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which he contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required, and shall likewise submit for approval full information concerning all other materials or articles which he proposes to incorporate.
- (c) Machinery, mechanical and other equipment, materials or articles installed or used without such prior approval shall be at the risk of subsequent rejection.
- (d) Materials specified by reference to the number or symbol of a specific standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto in effect on the date of the Invitation for Bids, except as limited to type, class or grade, or modified in the technical specifications shall have full force and effect as though printed therein.
- (e) The Grant Recipient may require the Contractor to dismiss from the work such employee or employees as the Grant Recipient or the Engineer may deem unqualified.

16. Samples, Certificates and Tests

- (a) The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents or required by the Engineer, promptly after award of the contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.
- (b) Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Engineer in making a prompt decision regarding the acceptability of the sample. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.
- (c) Approval of any materials shall be general only and shall not constitute a waiver of the Grant Recipient's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.

(d) Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:

- 1) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;
- 2) The Contractor shall assume all costs of re-testing materials which fail to meet contract requirements;
- 3) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient;
- 4) The Grant Recipient will pay all other expenses.

17. Permits and Codes

- (a) The Contractor shall give all notices required by and comply with all applicable federal and state laws, ordinances, and codes of the Local Government. All construction work and/or utility installations shall comply with all applicable ordinances, and codes including all written waivers. Before installing any work, the Contractor shall examine the drawings and technical specifications for compliance with applicable ordinances and codes and shall immediately report any discrepancy to the Grant Recipient. Where the requirements of the drawings and technical specifications fail to comply with such applicable ordinances or codes, the Grant Recipient will adjust the Contract by Change Order to conform to such ordinances or codes (unless waivers in writing covering the difference have been granted by the governing body or department) and make appropriate adjustment in the Contract Price or stipulated unit prices.
- (b) Should the Contractor fail to observe the foregoing provisions and proceed with the construction and/or install any utility at variance with any applicable ordinance or code, including any written waivers (notwithstanding the fact that such installation is in compliance with the drawings and technical specifications), the Contractor shall remove such work without cost to the Grant Recipient.
- (c) The Contractor shall at his own expense, secure and pay for all permits for street pavement, sidewalks, shed, removal of abandoned water taps, sealing of house connection drains, pavement cuts, buildings, electrical, plumbing, water, gas and sewer permits required by the local regulatory body or any of its agencies.
- (d) The Contractor shall comply with applicable local laws and ordinances governing the disposal of surplus excavation, materials, debris and rubbish on or off the Project Area and commit no trespass on any public or private property in any operation due to or connected with the Improvements contained in this Contract.
- (e) The Contractor will be required to make arrangements for and pay the water, electrical power, or any other utilities required during construction.
- (f) During construction of this project, the Contractor shall use every means possible to control the amount of dust created by construction. Prior to the close of a day's work, the Contractor, if directed by the Grant Recipient, shall moisten the bank and surrounding area to prevent a dusty condition.

18. Care of Work

- (a) The Contractor shall be responsible for all damages to person or property that occur as a result of his fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance.
- (b) In an emergency affecting the safety of life, limb or property, including adjoining property, the Contractor, without special instructions or authorization from the Grant Recipient is authorized to act to prevent such threatened loss or injury. Contractor shall follow all instructions of Grant Recipient.
- (c) The Contractor shall avoid damage as a result of his operations to existing sidewalks, streets, curbs, pavements, utilities (except those which are to be replaced or removed), adjoining property, etc., and shall be responsible for completely repairing any damage thereto caused by the operations.
- (d) The Contractor shall shore up, brace, underpin, secure, and protect as maybe necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site, which may be in any way affected by the excavations or other operations connected with the construction of the improvements included in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owner or other party before the commencement of any work. The Contractor shall indemnify and save harmless the Grant Recipient from any damages on account of settlements or the loss of lateral support of adjoining property and from all loss or expense and all damages for which the Grant Recipient may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

19. Accident Prevention

- (a) No laborer or mechanic employed in the performance of this Contract shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety as determined under construction safety and health standards promulgated by the Department of Labor.
- (b) The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work.
- (c) The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Contract. The Contractor shall promptly furnish the Grant Recipient with reports concerning these matters.
- (d) The Contractor shall indemnify and hold harmless the Grant Recipient from any claims for damages resulting from property damage, personal injury and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this contract.
- (e) The Contractor shall provide trench safety for all excavations more than five feet deep prior to excavation. All OSHA Standards for trench safety must be adhered to by the Contractor.
- (f) The contractor shall at all times conduct work in such a manner as to ensure the least possible inconvenience to vehicular and pedestrian traffic. At the close of the work each day, all streets

where possible in the opinion of the Grant Recipient, shall be opened to the public in order that persons living in the area may have access to their homes or businesses by the use of the streets. Barricades, warning signs, and necessary lighting shall be provided to the satisfaction of the Grant Recipient at the expense of the Contractor.

20. Sanitary Facilities

The Contractor shall furnish, install and maintain ample sanitary facilities for laborers. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required. Drinking water shall be provided from an approved source, so piped or transported as to keep it safe and fresh and served from single service containers or satisfactory types of sanitary drinking stands or fountains. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

21. Use of Premises

- (a) The Contractor shall confine equipment, storage of materials, and construction operations to the contract limits as shown on the drawings and as prescribed by ordinances or permits, or as may be desired by the Grant Recipient, and shall not unreasonably encumber the site or public rights of way with materials and construction equipment.
- (b) The Contractor shall comply with all reasonable instructions of the Grant Recipient and all existing federal, state and local regulations regarding signs, advertising, traffic, fires, explosives, danger signals, and barricades.

22. Removal of Debris, Cleaning, Etc.

The Contractor shall, periodically or as directed during the progress of the work, remove and legally dispose of all surplus excavated material and debris, and keep the Project Area and public rights of way reasonably clear. Upon completion of the work, he shall remove all temporary construction facilities, debris and unused materials provided for work, and put the whole site of the work and public rights of way in a neat and clean condition.

23. Inspection

- (a) All materials and workmanship shall be subject to inspection, examination, or test by the Grant Recipient and Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction occurs. The Grant Recipient shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactorily corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the Grant Recipient may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any Monies which may be due the Contractor, without prejudice to any other rights or remedies of the Grant Recipient.
- (b) The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. All tests by the Grant Recipient will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with the provisions of the technical specifications.

- (c) The Contractor shall notify the Grant Recipient sufficiently in advance of back filling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the Grant Recipient, the Contractor shall uncover for inspection and recover such facilities at Contractor's expense, when so requested by the Grant Recipient.
- (d) Should it be considered necessary or advisable by the Grant Recipient at any time before final acceptance of the entire work to make an examination of work already completed, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or subcontractors, the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, shall be reimburseable and if completion of the work of the entire Contract has been delayed a suitable extension of time will be approved.
- (e) Inspection of materials and appurtenances to be incorporated in the improvements included in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, unless otherwise stated in the technical specifications, shall be final, except as regards to: (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud or such gross mistakes as amount to fraud. Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.
- (f) Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the Grant Recipient or its agents shall relieve the Contractor or its sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

24. Review by Locality

The Grant Recipient and its authorized representatives and agents shall have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however that all instructions and approval with respect to the work will be given to the Contractor only by the Grant Recipient through its authorized representatives or agents.

25. Final Inspection

When the Improvements included in this Contract are substantially completed, the Contractor shall notify the Grant Recipient in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The Grant Recipient will make the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable.

26. Deduction for Uncorrected Work

If the Grant Recipient deems it not expedient to require the Contractor to correct work not done in accordance with the Contract Documents, an equitable deduction from the Contract Price will be made by agreement between the Contractor and the Grant Recipient and subject to settlement, in case of dispute, as herein provided.

27. Insurance

The Contractor shall not commence work under this contract until all required insurance under this paragraph has been secured and approved by the Grant Recipient.

- (a) **Compensation Insurance:** The Contractor shall procure and shall maintain during the life of this contract Worker's Compensation Insurance as required by the State of Texas for all of his employees to be engaged in work at the site of the project under this contract and, in case of any such work sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Worker's Compensation Insurance.
- (b) **Contractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance.** The Contractor shall procure and shall maintain during the life of this contract Contractor's Public Liability Insurance, Contractor's Property Damage Insurance and Vehicle Liability Insurance in the following amounts: (\$1,000,000).
- (c) **Proof of Insurance:** The Contractor shall furnish the Grant Recipient with certificates showing the type, amount, class of operations covered, effective dates and date of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by the Grant Recipient."

28. Warranty of Title

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase or other agreement by which an interest is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed by Contractor to the Grant Recipient free from any claims, liens, or charges. Neither the Contractor nor any person, firm, or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any law permitting such persons to look to funds due the Contractor. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

29. Warranty of Workmanship and Materials

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the improvements included in this Contract by the Grant Recipient or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of 12 months from the date of final acceptance of the work.

30. Compliance with Air and Water Acts

- (a) In compliance with the Clean Air Act, as amended, 41 U.S.C. Sec. 7401 et. seq., and the regulations of the Environmental Protection Agency with respect thereto, the Contractor agrees that:
- 1) Any facility to be utilized in the performance of this contract or any subcontract shall not be a facility listed on the EPA List of Violating Facilities pursuant to 40 CFR 15.20.
 - 2) Contractor will comply with all requirements of Section 114 of the Clean Air Act, as amended.
 - 3) Materials utilized in the project shall be free of any hazardous materials, except as may be specifically provided for in the specifications.
- (b) If the Contractor encounters existing material on sites owned or controlled by the Grant Recipient or in material sources that are suspected by visual observation or smell to contain hazardous materials, the Contractor shall immediately notify the Engineer and the Grant Recipient. The Grant Recipient will be responsible for testing for and removal or disposition of hazardous materials on sites owned or controlled by the Grant Recipient. The Grant Recipient may suspend the work, wholly or in part during the testing, removal or disposition of hazardous materials on sites owned or controlled by the Grant Recipient.

31. Equal Employment Opportunity

- (a) The Contractor will not discriminate against any employee or the applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, promotion, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the owner.
- (b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- (c) The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this contract so that such provisions will be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.
- (d) The Contractor shall take affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions.
- (e) Contractors are encouraged to participate in voluntary associations which assist in fulfilling their affirmative action obligations.
- (f) The 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.

- (g) The Contractor shall not use the affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- (h) The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts.
- (i) Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents.

32. Affirmative Action for Qualified Individuals with Disabilities

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified individuals without discrimination based upon their physical or mental disability in all employment practices such as the following: employment, promotion, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

33. Section 109 of the Housing and Community Development Act of 1974

No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title.

34. The Provision of Local Training, Employment, and Business Opportunities

- (a) To the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.
- (b) The Contractor must include this clause in every subcontract for work in connection with the project.

35. Non Segregated Facilities

The Contractor certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees any segregated facilities at any of its establishments, or permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. As used in this paragraph the term "segregated facilities" means any waiting rooms, work areas, rest rooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise.

36. Job Offices

- (a) The Contractor and its subcontractors may maintain such office and storage facilities on the site as are necessary for the proper conduct of the work. These shall be located so as to cause no

interference to any work to be performed on the site. The Grant Recipient shall be consulted with regard to locations.

- (b) Upon completion of the improvements, or as directed by the Grant Recipient, the Contractors shall remove all such temporary structures and facilities from the site, and leave the site of the work in the condition required by the Contract.

37. Partial Use of Site Improvements

The Grant Recipient may give notice to the Contractor and place in use those sections of the improvements which have been completed, inspected and can be accepted as complying with the technical specifications and if in its opinion, each such section is reasonably safe, fit, and convenient for the use and accommodation for which it was intended, provided:

- (a) The use of such sections of the Improvements shall in no way impede the completion of the remainder of the work by the Contractor.
- (b) The Contractor shall not be responsible for any damages or maintenance costs due directly to the use of such sections.
- (c) The period of guarantee stipulated in the Section 132 hereof shall not begin to run until the date of the final acceptance of all work which the Contractor is required to construct under this Contract.

38. Contract Documents and Drawings

The Grant Recipient will furnish the Contractor without charge 2 copies of the Contract Documents, including Technical Specifications and Drawings. Additional copies requested by the Contractor will be furnished at cost.

39. Contract Period

The work to be performed under this contract shall commence within the time stipulated by the Grant Recipient in the Notice to Proceed, and shall be fully completed within 150 calendar days thereafter.

40. Liquidated Damages

Since the actual damages for any delay in completion of the work under this contract are impossible to determine, the Contractor and his Sureties shall be liable for and shall pay to the Grant Recipient the sum of Two Hundred Dollars (\$ 200.00) as fixed, agreed and liquidated damages for each calendar day of delay from the above stipulated time for completion.

MINORITY/FEMALE GOALS AND TIMETABLES

The female employment goal is effective as of April 1980 and is currently 6.9%. The percentages for minority participation in Texas are:

Texarkana Area:

Texarkana & Bowie Co.	19.7
Non-MSA Counties of Camp, Cass, Lamar, Morris, Red River & Titus	22.2

Tyler-Longview Area:

Longview, Gregg Co. & Harrison Co.	22.8
Tyler & Smith Co.	23.5
Non-MSA Counties of Anderson, Angelina, Cherokee, Henderson, Marion, Nacogdoches, Panola, Rusk, San Augustine, Shelby, Upshur & Wood	22.5

Beaumont-Port Arthur Area:

Beaumont, Port Arthur, Orange, Hardin Co., Jefferson Co., & Orange Co.	22.6
Non-MSA Counties of Jasper, Houston, Newton, Sabine, & Tyler	22.6

Houston Area:

Bryan, College Station & Brazos Co.	23.7
Galveston, Texas City & Galveston Co.	28.9
Houston, Brazoria Co., Fort Bend Co., Harris Co., Liberty Co., Montgomery Co. & Waller Co.	27.3
Non-MSA Counties of Austin, Burleson, Calhoun, Chambers, Colorado, DeWitt, Fayette, Goliad, Grimes, Jackson, Lavaca, Leon, Madison, Matagorda, Polk, Robertson, San Jacinto, Trinity, Victoria, Walker, Washington, & Wharton	27.4

Austin Area:

Austin, Hays Co., Travis Co., & Williamson Co.	24.1
Non-MSA Counties of Bastrop, Blanco, Burnet, Caldwell, Lee & Llano	24.2

Waco, Killeen, Temple Area:

Killeen, Temple, Bell Co. & Coryell Co.	16.4
Waco & McLennan Co.	20.7
Non-MSA Counties of Bosque, Falls, Freestone, Hamilton, Hill, Lampasas, Limestone, Milam & Mills	18.6

Dallas, Fort Worth Area:

Dallas, Fort Worth, Collin Co., Dallas Co., Denton Co., Ellis Co., Hood Co., Johnson Co., Kaufman Co., Parker Co., Rockwall Co., Tarrant Co. & Wise Co.	18.2
Sherman, Denison & Grayson Co.	9.4
Non-MSA Counties of Cooke, Delta, Erath, Fannin, Franklin, Hopkins, Hunt, Jack, Montague, Navarro, Palo Pinto, Rains, Somervell, & Van Zandt	17.2

Wichita Falls Area:

Wichita Falls, Clay Co. & Wichita Co.	12.4
Non-MSA Counties of Archer, Baylor, Cottle, Foard, Hardeman, Wilbarger & Young	11.0

Abilene Area:

Abilene, Callaghan Co., Jones Co. & Taylor Co.	11.6
Non-MSA Counties of Brown, Coleman, Comanche, Eastland, Fisher, Haskell, Kent, Knox, Mitchell, Nolan, Scurry, Shackelford, Stephens, Stonewall & Throckmorton	10.9

San Angelo Area:

San Angelo & Tom Green Co.	19.2
Non-MSA Counties of Coke, Concho, Crockett, Irion, Kimble, McCullough, Mason, Menard, Reagan, Runnels, San Saba, Schleicher, Sterling, Sutton & Terrell	20.0

San Antonio Area:

Laredo & Webb Co.	87.3
San Antonio, Bexar Co., Comal Co. & Guadalupe Co.	47.8

Non-MSA Counties of Atascosa, Bandera, Dimmit, Edwards, Frio, Gillespie, Gonzales, Jim Hogg, Karnes, Kendall, Kerr, Kinney, La Salle, McMullen, Maverick, Medina, Real, Uvalde, Val Verde, Wilson, Zapata & Zavala	49.4
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Corpus Christi Area:

Corpus Christi, Nueces Co. & San Patricio Co.	41.7
Non-MSA Counties of Aransas, Bee, Brooks, Duval, Jim Wells, Kenedy, Kleberg, Live Oak & Refugio	44.2

Brownsville, McAllen, Harlingen Area:

Brownsville, Harlingen, San Benito & Cameron Co.	71.0
McAllen, Pharr, Edinburg & Hidalgo Co.	72.8
Non-MSA Counties of Starr & Willacy	72.9

Odessa, Midland Area:

Midland & Midland Co.	19.1
Odessa & Ector Co.	15.1
Non-MSA Counties of Andrews, Crane, Glasscock, Howard, Loving, Martin, Pecos, Reeves, Upton, Ward & Winkler	18.9

El Paso Area:

El Paso & El Paso Co.	57.8
Non-MSA Counties of Brewster, Culbertson, Hudspeth, Jeff Davis & Presidio	49.0

Lubbock Area:

Lubbock & Lubbock Co.	19.6
Non-MSA Counties of Bailey, Borden, Cochran, Crosby, Dawson, Dickens, Floyd, Gaines, Garza, Hale, Hockley, King, Lamb, Lynn, Motley, Terry & Yoakum	19.5

Amarillo Area:

Amarillo, Potter Co. & Randall Co.	9.3
Non-MSA Counties of Armstrong, Briscoe, Carson, Castro, Childress, Collingsworth, Dallam, Deaf Smith, Donley, Gray, Hall, Hansford, Hartley, Hemphill, Hutchinson, Lipscomb, Moore, Ochiltree, Oldham, Parmer, Roberts, Sherman, Swisher, & Wheeler	11.0

Temporary Project Signage

All TxCDBG construction projects utilizing TxCDBG funding must have temporary signage erected in a prominent location at the construction project site or along a major thoroughfare within the community as directed by the owner. A photo of this signage must be submitted to TDA prior to the release of construction funds.

Requirements of temporary signage include:

- placement in a prominent visible public area that is not blocked or obscured;
- construction of durable materials;
- minimum size of 12" x 18" with lettering no smaller than 1/2";
- Required text:

"This project is funded by the Texas Department of Agriculture, to strengthen and enhance the quality of life in smaller and rural communities with funds allocated by the United States Department of Housing and Urban Development through the Community Development Block Grant Program."

Temporary signage may be reused for future TxCDBG projects as appropriate.

Projects Requiring Permanent Signage

Permanent signage identifying the location as a TxCDBG-funded project is required for any TxCDBG funded public structure or project that is located above ground and enclosed by a fence. Some examples of projects requiring permanent signage include water pump stations, water wells, water storage tanks, wastewater treatment facilities, lift stations, community centers, fire stations, and significant improvements to existing facilities (e.g., installation of new electrical controls, SCADA systems, pumps, etc.). Project signage is an eligible construction cost.

Requirements of permanent signage include:

- placement in a prominent visible public area that is not blocked or obscured;
- construction of permanent materials;
- minimum size of 12" x 18" with lettering no smaller than 1/2";
- Required text:

"This project is funded by the Texas Department of Agriculture, to strengthen and enhance the quality of life in smaller and rural communities with funds allocated by the United States Department of Housing and Urban Development through the Community Development Block Grant Program."

Please include this requirement in your specifications and bid documents

Recommended additional condition - Payment under this contract must be processed through the Texas Department of Agriculture - Office of Rural Affairs. Receipt of payment from the Grant Recipient will take at least 45 days from the time of pay estimate approval by the project engineer.

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 TXCDBG.
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.

135.38 - Section 3 Clause.

All section 3 covered contracts shall include the following clause (referred to as the section 3 clause): A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.


G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

SECTION 3 POLICY

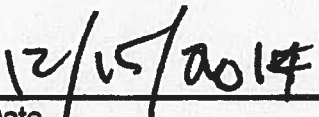
In accordance with 12 U.S.C. 1701u, (Section 3), the City of Fort Stockton agrees to implement the following steps, which, to the *greatest extent feasible*, will provide job training, employment and contracting opportunities for Section 3 residents and Section 3 businesses of the areas in which the program/project is being carried out.

- A. Introduce and pass a resolution adopting this plan as a policy to strive to attain goals for compliance to Section 3 regulations by increasing opportunities for employment and contracting for Section 3 residents and businesses.
- B. Assign duties related to implementation of this plan to the designated Equal Rights Officer.
- C. Notify Section 3 residents and business concerns of potential new employment and contracting opportunities as they are triggered by grant awards through the use of: Public Hearings and related advertisements; public notices; bidding advertisements and bid documents; notification to local business organizations such as the Chamber(s) of Commerce or the Urban League; local advertising media including public signage; project area committees and citizen advisory boards; local HUD offices; regional planning agencies; and all other appropriate referral sources. Include Section 3 clauses in all covered solicitations and contracts.
- D. Maintain a list of those businesses that have identified themselves as Section 3 businesses for utilization in grant funded procurements, notify those businesses of pending contractual opportunities, and make this list available for general Grant Recipient procurement needs.
- E. Maintain a list of those persons who have identified themselves as Section 3 residents and contact those persons when hiring/training opportunities are available through either the Grant Recipient or contractors.
- F. Require that all Prime contractors and subcontractors with contracts over \$100,000 commit to this plan as part of their contract work. Monitor the contractors' performance with respect to meeting Section 3 requirements and require that they submit reports as may be required by HUD or TDA to the Grant Recipient.
- G. Submit reports as required by HUD or TDA regarding contracting with Section 3 businesses and/or employment as they occur; and submit reports within 20 days of calendar year end which identify and quantify Section 3 businesses and employees.
- H. Maintain records, including copies of correspondence, memoranda, etc., which document all actions taken to comply with Section 3 regulations.

As officers and representatives of the City of Fort Stockton, we the undersigned have read and fully agree to this plan, and become a party to the full implementation of this program.



William C. Lannon, Mayor



Date

FEDERAL LABOR STANDARDS PROVISIONS

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321)

shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii)(a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage rate and fringe benefits therefore only when the following criteria have been met.

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140).

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of an laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140).

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract, in the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be

(ii)(a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the

necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates or contributions or costs anticipated for bona fide fringe benefits or cash equivalents there of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017).

applicant, sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be

submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-0014-1), U. S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149).

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.5(a)(3)(i) and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(i) **Apprentices.** Apprentices will be permitted to work at least at the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration. Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph A.3.(ii)(b) of this section.

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph A.3.(i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

4. Apprentices and Trainees.

otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe

benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(II) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may be appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a government contract by virtue of Section 3(a) of

the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part "Whoever, for the purpose of ... influencing in any way the action of such Administration... makes, utters or publishes any statement, knowing the same to be false... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of eight hours in any calendar day in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in any calendar day or in excess of forty hours in such workweek, whichever is greater.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted

programs pursuant to 24 CFR Part 24.

to work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat.96).

(3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Title 29 — LABOR

Subtitle A — Office of the Secretary of Labor

PART 3 — CONTRACTORS AND SUBCONTRACTORS ON PUBLIC BUILDING OR PUBLIC WORK FINANCED IN WHOLE OR IN PART BY LOANS OR GRANTS FROM THE UNITED STATES

- Sec.
- 3.1 Purpose and scope
 - 3.2 Definitions
 - 3.3 Weekly statement with respect to payment of wages
 - 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.
 - 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.
 - 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.
 - 3.7 Applications for the approval of the Secretary of Labor
 - 3.8 Action by the Secretary of Labor upon applications.
 - 3.9 Prohibited payroll deductions.
 - 3.10 Methods of payment of wages.
 - 3.11 Regulations part of contract.

part by loans or grants from the United States. The part is intended to aid in the enforcement of the

AUTHORITY: The provisions of this Part 3 issued under R.S. 161, sec. 2, 48 Stat. §48; Reorg. Plan No. 14 of 1950, 64 Stat. 1267, 5 U.S.C. Appendix; 5 U.S.C. 301; 40 U.S.C. 276c.

SOURCE: The provisions of this Part 3 appear at 29 F.R. 97, Jan. 4, 1964, unless otherwise noted.

Section 3.1 Purpose and Scope.

This part prescribes "anti-kickback" regulations under section 2 of the Act of June 13, 1934, as amended (40 U.S.C. 276c), popularly known as the Copeland Act. This part applies to any contract which is subject to Federal wage standards and which is for the construction, prosecution, completion, or repair of public buildings, public works or buildings or works financed in whole or in

minimum wage provisions of the Davis-Bacon Act and the various statutes dealing with Federally-assisted construction that contain similar minimum wage provisions, including those provisions which are not subject to Reorganization Plan No. 14 (e.g., the College Housing Act of 1950, the Federal Water Pollution Control Act, and the Housing Act of 1959), and in the enforcement of the overtime provisions of the Contract Work Hours Standards Act whenever they are applicable to construction work. The part details the obligation of contractors and subcontractors relative to the weekly submission of statements regarding the wages paid on work covered thereby; sets forth the circumstances and procedures governing the making of payroll deductions from the wages of those employed on such work; and delineates the methods of payment permissible on such work.

Section 3.2 Definitions.

articles, supplies, or equipment during the course of the manufacture or furnishing, or owns the materials from which they are manufactured or furnished) is not a "building" or "work" within the meaning of the regulations in this part.

(b) The terms "construction," "prosecution," "completion," or "repair" mean all types of work done on a particular building or work at the site thereof, including, without limitation, altering, remodeling, painting and decorating, the transporting of materials and supplies to or from the building or work by the employees of the construction contractor or construction subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the building or work, by persons employed at the site by the contractor or subcontractor.

(c) The terms "public building" or "public work" include building or work for whose construction, prosecution, completion, or repair, as defined above, a Federal agency is a contracting party, regardless of whether title thereof is in a Federal agency.

(d) The term "building or work financed in whole or in part by loans or grants from the United States" includes building or work for whose construction, prosecution, completion, or repair, as defined above, payment or part payment is made directly or indirectly from funds provided by loans or grants by a Federal agency. The term includes

As used in the regulations in this part:

(a) The terms "building" or "work" generally include construction activity as distinguished from manufacturing, furnishing of materials, or servicing and maintenance work. The terms include, without limitation, buildings, structures, and improvements of all types, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, powerlines, pumping stations, railways, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, and canals; dredging, shoring, scaffolding, drilling, blasting, excavating, clearing, and landscaping. Unless conducted in connection with and at the site of such a building or work as is described in the foregoing sentence, the manufacture or furnishing of materials, articles, supplies, or equipment (whether or not a Federal or State agency acquires title to such materials,

building or work for which the Federal assistance granted is in the form of loan guarantees or insurance.

(e) Every person paid by a contractor or subcontractor in any manner for his labor in the construction, prosecution, completion, or repair of a public building or public work or building or work financed in whole or in part by loans or grants from the United States is "employed" and receiving "wages," regardless of any contractual relationship alleged to exist between him and the real employer.

(f) The term "any affiliated person" includes a spouse, child, parent, or other close relative of the contractor or subcontractor; a partner or officer of the contractor or subcontractor; a corporation closely connected with the contractor or subcontractor as parent, subsidiary or otherwise, and an officer or agent of such corporation.

(g) The term "Federal agency" means the United States, the District of Columbia, and all executive departments, independent establishments, administrative agencies, and instrumentality's of the United States and of the District of Columbia, including corporations, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or any of the foregoing departments, establishments, agencies, and instrumentality's.

{29 FR 97, Jan. 4, 1964, as amended at 33 FR 32575, Nov. 27, 1973}

Section 3.3 Weekly statement with respect to payment of wages.

(a) As used in this section, the term "employee" shall not apply to persons in classifications higher than that of laborer or mechanic and those who are the immediate supervisors of such employees.

(b) Each contractor or subcontractor engaged in the construction, prosecution, completion, or repair of any public building or public work, or building or work financed in whole or in part by loans or grants from the United States, shall furnish each week a statement with respect to the wages paid each of its employees engaged on work covered by 29 CFR Parts 3 and 5 during the preceding weekly payroll period. This statement shall be executed by the contractor or subcontractor or by an authorized officer of employee of the contractor or subcontractor who supervises the payment of wages, and shall be on form WH 348, "Statement of Compliance," or on an identical form

(a) Each weekly statement required under §3.3 shall be delivered by the contractor or subcontractor, within seven days after the regular payment date of the payroll period, to a representative of a Federal or State agency in charge at the site of the building or work, or if there is no representative of a Federal or State agency at the site of the building or work, the statement shall be mailed by the contractor or subcontractor, within such time, to a Federal or State agency contracting for or financing the building or work. After such examination and check as may be made, such statement, or a copy thereof, shall be kept available, or shall be transmitted together with a report of any violation, in accordance with applicable procedures prescribed by the United States Department of Labor.

(b) Each contractor or subcontractor shall preserve his weekly payroll records for a period of three years from date of completion of the contract. The payroll records shall set out accurately and completely the name and address of each laborer and mechanic, his correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Such payroll records shall be made available at all times for inspection by the contracting officer or his authorized representative, and by authorized representatives of the Department of Labor.

on the back of WH 347, "Payroll (For Contractors Optional Use)" or on any form with identical wording. Sample copies of WH 347 and WH 348 may be obtained from the Government contracting or sponsoring agency, and copies of these forms may be purchased at the Government Printing Office.

(c) The requirements of this section shall not apply to any contract of \$2,000 or less.

(d) Upon a written finding by the head of a Federal agency, the Secretary of Labor may provide reasonable limitations, variations, tolerances, and exemptions from the requirements of this section subject to such conditions as the Secretary of Labor may specify.

{29 F.R. 95, Jan. 4, 1964, as amended at 33 F.R. 10186, July 17, 1968}

Section 3.4 Submission of weekly statements and the preservation and inspection of weekly payroll records.

Section 3.5 Payroll deductions permissible without application to or approval of the Secretary of Labor.

Deductions made under the circumstances or in the situations described in the paragraphs of this section may be made without application to and approval of the Secretary of Labor:

(a) Any deduction made in compliance with the requirements of Federal, State, or local law, such as Federal or State withholding income taxes and Federal social security taxes.

(b) Any deduction of sums previously paid to the employee as a bona fide prepayment of wages when such prepayment is made without discount or interest. A "bona fide prepayment of wages" is considered to have been made only when cash or its equivalent has been advanced to the person employed in such manner as to give him complete freedom of disposition of the advanced funds.

(c) Any deduction of amounts required by court process to be paid to another, unless, the deduction is in favor of the contractor, subcontractor or any affiliated person, or when collusion or collaboration exists.

(d) Any deduction constituting a contribution on behalf of the person employed to funds established by the employer or representatives of employees, or both, for the purpose of providing either from principal or income, or both, medical or

hospital care, pensions, or annuities on retirement, death benefits, compensation for injuries, illness, accidents, sickness, or disability, or for insurance to provide any of the foregoing, or unemployment benefits, vacation pay, savings accounts, or similar payments for the benefit of employees, their families and dependents: Provided, however, That the following standards are met: (1) The deduction is not otherwise prohibited by law; (2) it is either: (i) Voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of or for the continuation of employment, or (ii) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; (3) no profit or other benefit is otherwise obtained, directly or indirectly, by the contractor or subcontractor or any affiliated person in the form of commission, dividend, or otherwise; and (4) the deductions shall serve the convenience and interest of the employee.

(j) Any deduction not more than for the "reasonable cost" of board, lodging, or other facilities meeting the requirements of section 3(m) of the Fair Labor Standards Act of 1938, as amended, and Part 531 of this title. When such a deduction is made the additional records required under §516.27(a) of this title shall be kept.

(k) Any deduction for the cost of safety equipment of nominal value purchased by the employee as his own property for his personal protection in his work, such as safety shoes, safety glasses, safety gloves, and hard hats, if such equipment is not required by law to be furnished by the employer, if such deduction is not violative of the Fair Labor Standards Act or prohibited by other law, if the cost on which the deduction is based does not exceed the actual cost to the employer where the equipment is purchased from him and does not include any direct or indirect monetary return to the employer where the equipment is purchased from a third person, and if the deduction is either (1) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance; or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees.

(e) Any deduction contributing toward the purchase of United States Defense Stamps and Bonds when voluntarily authorized by the employee.

(f) Any deduction requested by the employee to enable him to repay loans to or to purchase shares in credit unions organized and operated in accordance with Federal and State credit union statutes.

(g) Any deduction voluntarily authorized by the employee for the making of contributions to governmental or quasi-governmental agencies, such as the American Red Cross.

(h) Any deduction voluntarily authorized by the employee for the making of contributions to Community Chests, United Givers Funds, and similar charitable organizations.

(i) Any deductions to pay regular union initiation fees and membership dues, not including fines or special assessments: Provided, however, That a collective bargaining agreement between the contractor or subcontractor and representatives of its employees provides for such deductions and the deductions are not otherwise prohibited by law.

{36 F.R. 9770, May 28, 1971.}

Section 3.6 Payroll deductions permissible with the approval of the Secretary of Labor.

Any contractor or subcontractor may apply to the Secretary of Labor for permission to make any deduction not permitted under §3.5. The Secretary may grant permission whenever he finds that:

(a) The contractor, subcontractor, or any affiliated person does not make a profit or benefit directly or indirectly from the deduction either in the form of a commission, dividend, or otherwise;

(b) The deduction is not otherwise prohibited by law;

(c) The deduction is either (1) voluntarily consented to by the employee in writing and in advance of the period in which the work is to be done and such consent is not a condition either for the obtaining of employment or its continuance, or (2) provided for in a bona fide collective bargaining agreement between the contractor or subcontractor and representatives of its employees; and

(d) The deduction serves the convenience and interest of the employee.

Section 3.7 Applications for the approval of the Secretary of Labor.

Any application for the making of payroll deductions under §3.6 shall comply with the requirements prescribed in the following paragraphs of this section:

(a) The application shall be in writing and shall be addressed to the Secretary of Labor.

(b) The application need not identify the contract or contracts under which the work in question is to be performed. Permission will be given for deductions on all current and future contracts of the applicant for a period of 1 year. A renewal of permission to make such payroll deduction will be granted upon the submission of an application which makes reference to the original application, recites the date of the Secretary of Labor's approval of such deductions, states affirmatively that there is continued compliance with the standards set forth in the provisions of §3.6, and specifies any conditions which have changed in regard to the payroll deductions. {36 F.R. 9770, May 28, 1971.}

(c) The application shall state affirmatively that there is compliance with the standards set forth in the provisions of §3.6. The affirmation shall be accompanied by a full statement of the facts indicating such compliance.

Section 3.10 Methods of payment of wages.

The payment of wages shall be by cash, negotiable instruments payable on demand, or the additional forms of compensation for which deductions are permissible under this part. No other methods of payment shall be recognized on work subject to the Copeland Act.

Section 3.11 Regulations part of contract.

All contracts made with respect to the construction, prosecution, completion, or repair of any public building or public work or building or work financed in whole or in part by loans or grants from the United States covered by the regulations in this part shall expressly bind the contractor or subcontractor to comply with such of the regulations in this part as may be applicable. In this regard, see §5.5(a) of this subtitle.

(d) The application shall include a description of the proposed deduction, the purpose to be served thereby, and the classes of laborers or mechanics from whose wages the proposed deduction would be made.

(e) The application shall state the name and business of any third person to whom any funds obtained from the proposed deductions are to be transmitted and the affiliation of such person, if any, with the applicant.

Section 3.8 Action by the Secretary of Labor upon applications.

The Secretary of Labor shall decide whether or not the requested deduction is permissible under provisions of §3.6; and shall notify the applicant in writing of his decision.

Section 3.9 Prohibited payroll deductions.

Deductions not elsewhere provided for by this part and which are not found to be permissible under §3.6 are prohibited.

General Decision Number: TX150109 01/02/2015 TX109

Superseded General Decision Number: TX20140109

State: Texas

Construction Type: Heavy

County: Pecos County in Texas.

HEAVY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is 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 \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/02/2015

SUTX2009-118 04/21/2009

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 13.00	0.00
LABORER: Common or General.....	\$ 9.00	0.00
LABORER: Pipelayer.....	\$ 10.65	0.00
OPERATOR: Backhoe/Trackhoe.....	\$ 14.00	0.00
OPERATOR: Bulldozer.....	\$ 14.25	0.00
OPERATOR: Front End Loader.....	\$ 11.52	0.00
TRUCK DRIVER.....	\$ 10.80	0.26

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

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)).

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.

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.

END OF GENERAL DECISION



SPECIFICATIONS

DEFINITIONS AND TERMINOLOGY

1.00 GENERAL

1.1 SPECIFICATION TERMINOLOGY

- A. "Engineer" means Raul B. Rodriguez, P.E., City of Fort Stockton., 121 West Second Street, Fort Stockton, Texas 79735, or its designated representative.
- B. "Furnish" means to supply, deliver and unload materials and equipment at the project site ready to install.
- C. "Install" means the operations at the project site including unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, training and similar operations required to prepare the materials and equipment for use, verify conformance with Contract Documents and prepare for acceptance and operation by the Owner.
- D. "Provide" means to furnish and install materials and equipment.
- E. "Perform" means to complete the operations necessary to comply with the Contract Documents.
- F. "Indicated" means graphic representations, notes, or schedules on drawings, or other requirements in Contract Documents. Words such as "shown", "noted", "scheduled", are used to help locate the reference. No limitation on the location is intended unless specifically noted.
- G. "Specified" means written representations in the bid documents or the technical specifications.
- H. "Regulation" means laws, statutes, ordinances, and lawful orders issued by authorities having jurisdiction, as well as, rules, conventions, and agreements within the construction industry that control performance of work, whether they are lawfully imposed by authorities having jurisdiction or not.
- I. "Installer" means an entity engaged by Contractor, either as an employee, subcontractor, or sub-subcontractor to install materials and/or equipment. Installers are to have successfully completed a minimum of five projects similar in size and scope to this project, have a minimum of five years of experience in the installation of similar materials and equipment, and comply with the requirements of the authority having jurisdiction.
- J. "Manufacturer" means an entity engaged by Contractor, as a subcontractor, or sub-subcontractor to furnish materials and/or equipment. Manufacturers are to have a minimum of five years experience in the manufacture of materials and equipment similar in size, capacity and scope to the specified materials and equipment.
- K. "Project site" means the space available to perform the work, either exclusively or in conjunction with others performing construction at the project site.
- L. "Testing laboratory" means an independent entity engaged to perform specific inspections or tests, either at the project site or elsewhere, and to report and interpret the results of those inspections or tests.
- M. "Listed" means equipment is included in a list published by a nationally recognized laboratory which makes periodic inspection of production of such equipment and states that such equipment meets nationally recognized standards or has been tested and found safe for use in a specified manner.
- N. "Labeled" means equipment that embodies a valid label, symbol, or other identifying mark of a nationally recognized testing laboratory such as Underwriters Laboratories, Inc., and

production is periodically inspected in accordance with nationally recognized standards or tests to determine safe use in a specified manner.

- O. "Certified" used in context with materials and equipment means the material and equipment has been tested and found by a nationally recognized testing laboratory to meet specification requirements, or nationally recognized standards if requirements are not specified, and is safe for use in the specified manner. Production of the equipment must be periodically inspected by a nationally recognized testing laboratory and the equipment must bear a label, tag, or other record of certification.

"Certified" used in context with labor performance or ability to install materials and equipment means that the abilities of the proposed installer have been tested by an representative of the specified testing agency authorized to issue certificates of competency and has met the prescribed standards for certification.

"Certified" used in context with test reports, payment requests or other statements of fact means that the statements made on the document are a true statement as attested to by the certifying entity.

- P. "Contractor", "General Contractor", "Construction Contractor", "Offeror", "Proposer" or "Bidder" means the contractor selected to rehabilitate the Water Supply Wells, including the purchase and installation of necessary materials, coordination of all necessary work activities, well development and aquifer testing.

1.2 SPECIFICATION SENTENCE STRUCTURE

- A. Specifications are written in modified brief style. Requirements apply to all work of the same kind, class, and type even though the word "all" is not stated.
- B. Simple imperative sentence structure is used which places a verb as the first word in the sentence. It is understood that the words "furnish", "install", "provide", or similar words include the meaning of the phrase "The Contractor shall..." before these words.
- C. It is understood that the words "directed", "designated", "requested", "authorized", "approved", "selected", or similar words include the meaning of the phrase "by the Engineer" after these words unless otherwise stated. Use of these words does not extend the Engineer's responsibility for construction supervision or responsibilities beyond those defined in the General Conditions.
- D. "At no additional cost to Owner", "With no extra compensation to Contractor", "At Contractor's own expense", or similar words mean that the Contractor will perform or provide specified operation of work without any increase in the Contract Amount. It is understood that the cost for performing all work is included in the amount bid and will be performed at no additional cost to the Owner unless specifically stated otherwise.

1.3 INTERPRETATIONS OF DOCUMENTS

- A. Comply with the most stringent requirements where compliance with two (2) or more standards is specified, and they establish different or conflicting requirements for minimum quantities or quality levels, unless Contract Documents indicate otherwise.
1. Quantity or quality level shown or indicated shall be minimum to be provided or performed in every instance.
 2. Actual installation may comply exactly with minimum quality indicated, or it may exceed that minimum within reasonable limits.
 3. In complying with these requirements, indicated numeric values are minimum or maximum values, as noted, or appropriate for context of requirements.
 4. Refer instances of uncertainty to the Engineer for a decision before proceeding.
- B. Provide materials and equipment comparable in quality to similar materials and equipment

incorporated in the project or as required to meet the minimum requirements of the application if the materials and equipment are shown in the drawings but are not included in the specifications.

1.4 REFERENCE STANDARDS

- A. Comply with applicable construction industry standards as if bound or copied directly into the Contract Documents regardless of lack of reference in the Contract Documents. Apply provisions of the Contract Documents where Contract Documents include more stringent requirements than the referenced standards.
 - 1. Standards referenced directly in the Contract Documents take precedence over standards that are not referenced but recognized in the construction industry as applicable.
 - 2. Comply with standards not referenced but recognized in the construction industry as applicable for performance of the work except as otherwise limited by the Contract Documents. The Engineer determines whether code or standard is applicable, or which of several are applicable.
- B. Consider a referenced standard to be the latest edition with supplements or amendments when a standard is referred to in an individual specification section but is not listed by title and date.
- C. Trade association names and title of general standards are frequently abbreviated. Acronyms or abbreviations used in the Contract Documents mean the recognized name of trade association, standards generating organization, authority having jurisdiction, or other entity applicable in the context of the Contract Documents. Refer to "Encyclopedia of Associations," published by Gale Research Company.
- D. Make copies of reference standards available as requested by Engineer or Owner.

1.5 SUBSTITUTIONS AND EQUAL PRODUCTS

Provide materials and equipment manufactured by the entities specifically listed in each technical specification section. Submit a Contractor's Modification Request per Section 01300, SUBMITTALS for substitution of materials and equipment of manufacturers not specifically listed or for materials and equipment that does not strictly comply with the Contract Documents.

1.6 SUBSTITUTIONS AND EQUAL PRODUCTS

Contractor may provide "equal" products manufactured by manufacturers other than those specifically listed in the technical specification section unless it is specifically stated that only the materials and equipment of the specified manufacturers shall be provided. Provide Submittals for proposed "equal" non-specified products to the Engineer for any materials or equipment not specifically listed. Submit a Contractor's Modification Request for substitution of materials and equipment of other manufacturers or for materials and equipment that does not strictly comply with the Contract Documents. A Field Order or Change Order will be issued if the contract modification is approved.

END OF SECTION

12-INCH SUPPLY WELL REHABILITATION

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this specification includes furnishing all labor, tools, equipment, materials, transportation, security, and performing all operations in connection with the drilling, casing, grouting, testing, and cleaning up after rehabilitation of One (1) water supply well for the City of Fort Stockton. All work will be done in accordance with the administrative rules of the Texas Department of Licensing and Regulation Title 16, Chapter 76 of the TAC relating to Water Well Drillers and Water Well Pump Installers.
- B. The Contractor shall familiarize himself with the local conditions at the well site. Failure to do so shall in no way relieve Contractor of the responsibility for performing any of the work or operations required as a part of this contract.
- C. The scope of work includes rehabilitation of the water supply well within the Edwards/Trinity Aquifer. The general scope of work at each site includes:
 - 1. Mobilization/demobilization - Activities associated with moving development, and testing equipment, disposal of excess materials, site cleanup, and incidental items required to complete the scope of work.
 - 2. Rehabilitation - Remove and replace well column pipe to approximate depths of 180 feet below ground surface (ft bgs). Install well casing liner.
 - 3. Well head completion - Sanitary seals, concrete wellhead blocks and aprons.

1.2 CONTRACTOR'S LICENSE

- A. The Contractor shall have a valid license for drilling water wells in the State of Texas. The Contractor shall submit record completion forms to the State and provide the Engineer with a copy of the final well record.
- B. Contractor Qualifications: The Contractor shall have prior experience in the construction of at least three (3) wells in similar geologic materials and similar to the dimensions and expected maximum capacity of the well specified herein. The Contractor shall have engaged in the construction of wells of similar design for a period of not less than five (5) years.

1.3 GENERAL PROVISIONS

- A. Warranties: Unless otherwise indicated, the Contractor shall warrant all materials provided and work performed under this contract for a period of 2 years from the date of Final Acceptance. The Contractor shall replace promptly, at the Contractor's own expense, any materials and workmanship that fail during this warranty period as determined by the Owner or Engineer.
- B. Protection of Site: The premises, materials, tools, and drilling equipment shall be maintained to prevent contamination of the groundwater during drilling operations. Except as otherwise provided herein, the Contractor shall protect all existing fences, structures, utilities, roads, trees, etc. During the progress of the work the Contractor shall

remove all debris and unused materials and shall, upon completion of the work, restore the site as nearly as possible to its original condition to the satisfaction of the Owner. The restoration shall include the replacement, at the Contractor's sole expense, of any facility or landscapes that are destroyed or damaged beyond restoration.

- C. **Site Access:** The Contractor shall not enter on or occupy with personnel, tools, equipment, or material, any ground outside the construction area without approval of the Owner. Other contractors, employees, or agents of the Owner may, for business purposes, enter the work site and premises used by the Contractor. The Contractor shall not impede any work being done by others on or adjacent to well sites unless necessary as determined by the Engineer. The Contractor shall implement all means and methods to prevent livestock from entering his work site. This may include temporary electric fencing or other barriers to prevent livestock from migrating into his work zone. The Contractor may incur damage claims from the property owner for injuries or death of livestock as a result of inadequate safeguards or barriers.
- D. **Storm Water Pollution Prevention Plan (SWPPP):** A SWPPP for the project will be prepared by the Contractor. The SWPPP will be approved by a Texas Professional Engineer. A notice of intent (NOI) to discharge shall be submitted by the Contractor with the TCEQ in accordance with general permit TXR150000 at least seven (7) days prior to commencing construction activities). A copy of the NOI must be provided to the Owner and the Engineer prior to commencing construction activities. The Contractor's operations and activities must fully comply with all facets of the SWPPP and NOI. It is the responsibility of the Contractor to ensure that compliance with the terms and conditions of the TPDES General Permit TXR150000 is met in the areas of the construction site where the Contractor has day-to-day operational control.
- E. **Utilities:** Unless otherwise indicated in these Specifications, the Contractor shall arrange for and provide any required utilities at his sole cost and expense. This includes, but is not limited to, power for operating the drill rig or equipment (including testing equipment), and personnel sanitation facilities. If needed, water for construction will be provided by the City from their existing well field facilities. The Contractor will be responsible for transporting water to the construction sites. It shall be the Contractor's responsibility to notify all utility companies involved whenever activities are to occur that have the potential to cut, tap, move, or in any way disturb a utility line from its original placement. Sufficient notice shall be provided to the utility company so that its users can be informed of any disruption of service. Such notice shall be given no less than 24 hours in advance, including weekends.
- F. **Disposal of Wastewater and Drilling Fluids:** The Contractor shall be responsible for disposing of all debris, including but not limited to drilling fluid and water produced by test pumping or other operations, by such methods and to such locations that will not cause damage to, or interference with, structures, roads, or utilities, or with other construction projects. All costs incurred in connection with the disposal of drilling fluid, cuttings, and water shall be incidental to the Contract and shall be included in the contract price. Test water shall be discharged away from the construction area by way of a line or other conveyance supplied by the Contractor.
- G. **Safety Requirements:** The Contractor shall comply with all pertinent provisions of the Department of Labor "Safety and Health Regulations for Construction (Title 29 Code of Federal Regulations Part 1926 [29 CFR Part 1926])," with additions and modifications thereto, in effect during construction of this project. The following measures or provisions shall be adhered to at all times during the construction of this project:

1. All heavy construction machinery, such as trenching machines, bulldozers, and backhoes must be equipped with a roll bar meeting the requirements of the above regulation.
 2. Safety helmets, eye protection, and hearing protection shall be worn by all personnel working at the site.
 3. Safety shoes or boots shall be worn by all personnel working at the site. Contractor shall inspect the site for the presence of overhead and underground utilities and shall satisfy himself in regard to their existence and locations prior to submitting his bid. Contractor shall have utilities spotted prior to beginning any subsurface work. A safe distance shall be maintained between equipment and materials and power lines. The Contractor shall provide temporary fencing, caution signs, or barricades as necessary to ensure the safety of personnel at the site and people adjacent to, or passing by, the site. The Contractor must develop a site specific health and safety plan that is subject to the Engineer's approval.
- H. Security: The Contractor shall be responsible for site security of materials, equipment, and protection of the boreholes and wells. The Owner and Engineer cannot be held responsible for security. The Contractor must protect the boreholes and wells from the entry of undesirable fluids and materials at all times. Any time a site is unoccupied by the Contractor, the borehole or well shall be covered and secured against tampering. This shall require a 3/8-in. thick steel plate to be welded to the top of the production casing and the space between the production casing and surface casing, with continuous welds.
- I. Sanitary Facilities: The Contractor shall provide and maintain portable sanitary toilet facilities for the duration of the project. No temporary toilet facilities shall be maintained within 150 feet of the well being constructed unless they are of a sealed, leakproof type. Facilities shall be maintained at regular intervals. Contractor's costs associated with providing and maintaining sanitary toilet facilities are considered incidental to the project, and no separate payment will be made.
- J. Standard Specifications: When any of the following standards or specifications are referred to in these specifications, the latest edition, publication, standard, or specification should be used:
1. API American Petroleum Institute
 2. ASTM American Society for Testing and Materials
 3. AWWA American Waterworks Association
 4. EPA Environmental Protection Agency
 5. NSF National Sanitation Foundation
 6. OSHA Occupational Safety and Health Administration
 7. TCEQ Texas Commission on Environmental Quality
 8. TDLR Texas Department of Licensing and Regulation

1.4 SCHEDULE

- A. Within ten (10) calendar days of receiving the notice to proceed, the Contractor shall begin work with a crew comparable to the size of the project and will proceed continuously until the final completion of the project.
- B. No unnecessary delays or work stoppages will be tolerated. The Contractor will be held responsible for unnecessary delays of the approved project schedule, including reimbursing the Owner for excess time spent in the field by the Engineer.

- C. The methods or combination of methods to be utilized shall be adequate, as determined by the Owner and Engineer, to meet the completion schedule for the work.

PART 2 PRODUCTS

2.1 CONTRACTOR'S EQUIPMENT AND METHODS

- A. The Contractor shall supply capable and experienced personnel and suitable equipment to perform the work, as specified herein. The Contractor shall employ only competent workers for the execution of the work, which shall be directly supervised by an experienced drilling superintendent who shall be deemed satisfactory by the Owner/Engineer.
- B. Contractor shall be held responsible and payment will be withheld for damages to wells due to any act of omission, error, or faulty operation by the Contractor or his employees or agents. Resulting repairs shall be completed by the Contractor to the satisfaction of the Owner, or a replacement well drilled at no additional cost to the Owner, and without claim against the Owner, Engineer, or agents.

2.2 CEMENT GROUT SEALS

- A. Annular seals for the well casing will consist of neat cement or sand cement grout that meets the requirements of the ASTM C150 Type II. Grout density will depend on the approved cementing mix but are expected to be in the range of 14 to 16 lbs/gal (117 lbs/) for each application. Sulfate resistant cements (Type V) will be required where seals are placed across intervals of bedded gypsum/anhydrite. A maximum of 3 percent bentonite and 2 percent calcium chloride by weight may be added to the cement grout. All additives must be approved by the OWNER or ENGINEER prior to use. Surface casing liner shall be cemented in place using tremie methods. The cement will be allowed to set for a period of at least 48 hours whereupon a pressure testing must be completed to validate integrity of the cement seal. A grout compressive strength of at least 500 psi must be achieved before new well work can be undertaken.

2.3 CASING FOR WATER-SUPPLY WELL

- A. All materials to be used for construction of the wells shall conform to AWWA A100-06. No well materials containing 8% or more of lead are allowed.
- B. Surface casing liner shall be supplied in maximum lengths of 20 ft, and the casing end finish shall be plain end beveled. The surface casing liner shall be new and free of rust, pits, or other defects. Surface casing shall be 12-inch outside diameter blank, low carbon steel casing, ASTM A-53.

2.4 PIPE TALLIES

- A. An accurate record of all drill-pipe, tubing, and casing on the location shall be maintained at all times. A current pipe tally shall be maintained for all drill bits, subs, cross-overs, drill-pipe, tubing, and casing run into the borehole. Measurements of each joint shall be made to the nearest 0.01 foot prior to running in the borehole. Upon completion of the well construction, copies of the pipe tallies shall be provided to the Engineer.

2.5 WELL CONSTRUCTION

- A. Surface Protection: The open annulus shall be protected from entry of unwanted material at all times by preventing surface runoff from reaching and entering the boring during

construction activities. Whenever work ceases on the boreholes and well, the top of the casing shall be capped to cover and protect the hole until the permanent well head assembly is installed. The Contractor shall construct and maintain drainage berms around the wellhead to prevent surface runoff from reaching and entering the well during construction. After installing well casing, the Contractor shall continue to guard against entry of unwanted objects and contaminants into the well casing.

B. Plumbness and Alignment

1. The alignment must be satisfactory for the successful installation of the specified well and future installation of permanent pumping equipment; and shall meet AWWA A100-06, Section 4.7.9 specifications for plumbness and alignment from the ground surface to the bottom of the well casing liner.

2.6 DISINFECTION

- A. Disinfection procedures shall comply with AWWA standard C654-03 DISINFECTION OF WELLS except that the disinfectant shall remain in the well for at least twelve hours but not more than twenty-four hours.
- B. Upon well completion, the well shall be completely disinfected. The Contractor shall distribute granular calcium hypochlorite throughout the water column with a chlorine basket. The chlorine basket shall have a fine mesh exterior and be of such design so that it can be lowered on a wire line to the full depth of the well and be capable of holding at least 30 pounds of chlorine. The amount of granular calcium hypochlorite shall be sufficient so that the resulting solution within the well shall have an available chlorine concentration maintained of at least 50 mg/L. The basket shall then be run to the bottom of the well on a wire line and slowly retrieved through the entire water column. This process shall be repeated until all of the chlorine has dissolved. After the chlorine has been applied, the well shall be surged to improve the mixing and induce contact of the chlorinated water with the adjacent aquifer.

2.7 PROTECTION OF BORING AND WELL DURING CONSTRUCTION

- A. Whenever work ceases on the production well, the top of the casing shall be capped using not less than a 3/8-inch-thick steel plate to cover and protect the well until the permanent pump installation is begun. The plate shall be attached with a continuous weld to the top of the well casing or otherwise secured to insure protection and prevention of access.

2.8 WATER QUALITY TESTING

- A. The Contractor shall assist the Engineer in collecting water samples at the end of the constant-rate test pumping for the water-supply well. All samples shall be collected in properly preserved bottles provided by the laboratory. Samples shall be stored immediately on ice or blue ice after collection and remain so stored until received by the laboratory.
- B. All laboratory holding times for sample preservation shall be followed. Laboratory detection limits must be below the TCEQ standards for parameters analyzed. Samples for water-quality analysis of inorganic and organic parameters listed below shall be submitted for analysis by a certified laboratory acceptable to the Engineer.

Group	Constituent
Metals	Aluminum Arsenic Barium Boron Cadmium Chromium Copper Lead Mercury

Group	Constituent
Metals (continued)	Selenium Silver Thallium Zinc
Organics	Endrin Lindane Methoxychlor Toxaphene 2,4-D 2,4,5-TP Silvex Benzene Vinyl Chloride Carbon tetrachloride 1,2-dichloroethane Trichloroethylene 1,1-Dichloroethylene 1,1,1-trichloroethane para-dichlorobenzene
Major Cations and Anions	Ammonia Bicarbonate Calcium Carbonate Chloride Fluoride Iron Magnesium Manganese Nitrate (as N) Nitrite (as N) Phosphate Potassium Silica Sodium Sulfate Sulfides

Other Constituents	Color Conductivity Corrosivity Odor pH Total dissolved solids (TDS) Total hardness Turbidity
Radiological	Gross Alpha Radium- 226, -228 Uranium

2.9 COLIFORM WATER ANALYSIS

- A. The Contractor shall assist the Engineer in collecting water samples at the end of the constant-rate test pumping for the water-supply well. Once it is confirmed that the residual chlorine content is not greater than 0.4 mg/L, water samples shall be taken from the well and shall be submitted to a laboratory for bacteriological analysis until three successive daily raw water samples are free of coliform organisms. If unsatisfactory bacteriological results are obtained, the well disinfection shall be repeated as described in Section 3.8(C), the well flushed until the residual chlorine content is not greater than 0.4 mg/L, and samples taken until satisfactory results are obtained for bacteria.
- B. It is Contractor's responsibility to see that the well is so tested and, if unacceptable, to repeat the well disinfection procedure. Disinfection and subsequent testing shall continue at the Contractor's expense until test results are approved, indicating acceptable conditions. The pump shall not be removed from the well until results are approved.

2.10 WELL ABANDONMENT

- A. In the event that the production well is not accepted for completion because of insufficient capacity or unsatisfactory chemical or bacteriological quality, or if it is abandoned because of poor alignment, loss of tools, or for any other cause, the Contractor shall, as directed by the Owner, fill the abandoned hole with expansive clay or a clay and concrete mixture in accordance with the administrative rules of the Texas Department of Licensing and Regulation 16 TAC, Chapter 76.

2.11 CLEAN UP AND RESTORATION

- A. After the work is completed, the Contractor shall remove all debris, tools, equipment, supplies, and excess material from the site and shall restore the site to its original condition, as approved by the Owner/Engineer.

2.12 ADDITIONAL INFORMATION

- A. The Contractor is responsible for the structural integrity of the well. If bidder's professional opinion is that any of these specifications are inadequate to ensure the long-term structural integrity of the well, the bidder shall notify Owner and Engineer in writing prior to the bid date.

END OF SECTION

STORAGE-TANK REHABILITATION

PART 1-GENERAL

1.1 TEMPORARY ELECTRICITY

- A. Contractor to provide and pay for power service required from Utility.
- B. Provide main service disconnect and overcurrent protection at convenient Location in conformance with National Electrical Code.

1.2 TEMPORARY LIGHTING (ONLY IF NECESSARY)

- A. Provide and maintain lighting for construction operations to achieve a minimum lighting level of 2 watt/sq ft.
- B. Provide and maintain 1 watt/sq ft lighting to exterior staging and storage areas after dark for security purposes.

1.3 TEMPORARY VENTILATION

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

1.4 TEMPORARY WATER SERVICE

- A. Contractor shall be responsible for transporting water for construction purposes and potable water for construction personnel.
- B. Owner will provide water used except as noted below. Exercise measures to conserve water.
- C. Extend branch piping with outlets located so water is available by hoses with threaded connections. Provide temporary pipe insulation to prevent freezing.
- D. The Owner will make available to Contractor water for the filling and testing of the water storage tank one time. The Contractor will pay the cost of water at prevailing rates for refilling the tank for retests, etc.

1.5 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures.
- B. Permanent building facilities shall not be used during construction operations. Maintain daily in clean and sanitary condition.

1.6 BARRIERS

- A. Provide barrier to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide protection for plant life designated to remain. Replace damaged plant life.
- C. Protect non-owned vehicular traffic, stored materials, site and structures from damage.

1.7 WATER CONTROL

- A. Grade site to drain. Maintain excavations free of water. Provide, operate and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.8 PROTECTION OF INSTALLED WORK

- A. Protect installed Work and provide special protection where specified in individual specification Sections.
- B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to minimize damage.

1.9 SECURITY

- A. Provide security and facilities to protect Work from unauthorized entry, vandalism , or theft.
- 1.10 PROGRESS CLEANING
 - A. Maintain areas free of waste materials, debris and rubbish. Maintain site in a clean and orderly condition.
 - B. Remove waste material s, debris, and rubbish from site and dispose off-site at intervals as required to maintain clean site.
- 1.11 FIELD OFFICES AND SHEDS
 - A. Field Office not required.
 - B. Locate sheds a minimum distance of 30 feet from existing and new structures.

END OF SECTION

MATERIAL AND EQUIPMENT

PART 1-GENERAL

- 1.1 PRODUCTS
 - A. Products: Means new material forming the delivery of materials. Does not include machinery and equipment used for preparation, fabrication. conveying and erection of the Work.
 - B. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents
 - C. Provide interchangeable components of the same manufacturer, for similar components.
- 1.2 PRODUCT DELIVERY, STORAGE AND HANDLING
 - A. Delivery
 - 1. Deliver materials to the project site in undamaged condition in manufacturer's original, unopened containers or packaging, with identifying labels intact and legible.
 - 2. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
 - 3. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
 - 4. Arrange deliveries in accord with the construction schedule and in ample time to facilitate inspection prior to installation to avoid unnecessary delays in the construction process.
 - B. Storage
 - 1. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather tight climate controlled enclosures.
 - 2. For exterior storage of fabricated products, place on sloped supports, above ground.
 - 3. Provide off site storage and protection when site does not permit on-site storage or protection.
 - 4. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.
 - 5. Store materials on solid flat surfaces in a well-drained area.
 - 6. Provide equipment and personnel to store products by methods to prevent soiling,

7. disfigurement, or damage.
Arrange storage of products to permit access for inspection. Periodically inspect to assure products are not damaged and are maintained under specified conditions.
 8. Materials, products and equipment may be stored off site in a bonded and insured warehouse approved by the A-E and Owner. Pay all costs incurred for off-site storage facilities. Products properly stored in bonded off-site storage facilities may be included in progress pay requests with written approval of the Owner.
- C. Handling
1. Handle materials, products and equipment in a manner prescribed by manufacturer specified to protect from damage during storage and installation.

1.3 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of manufacturers named and meeting specifications, no options or substitutions allowed. •
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

1.4 SUBSTITUTIONS

- A. Instructions to Bidders specify time restrictions for submitting requests for Substitutions during the bidding period to requirements specified in this Section.
- B. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.
- D. A request constitutes a representation that the Bidder:
 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 2. Will provide the same warranty for the Substitution as for the specified product.
 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 4. Waives claims for additional costs or time extension which may subsequently become apparent.
 5. Will reimburse Owner for review or redesign services associated with re-approval by authorities.
- E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- F. Substitution Submittal Procedure:
 1. Submit four copies of request for Substitution for consideration. Limit each request to one proposed Substitution
 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence.
 3. The Engineer will notify Contractor, in writing, of decision to accept or reject request.

END OF SECTION

STARTING OF SYSTEMS

1.1 STARTING SYSTEMS

- A. Coordinate schedule for placing tank in service or operating any valves.
- B. Notify Engineer seven days prior to start-up of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication drive rotation, belt tension, control sequence or other conditions which may cause damage.
- D. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of responsible manufacturer's representative and Contractors' personnel in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
- H. Submit a written report in accordance with Section 01400 that equipment or system has been properly installed and is functioning correctly.

1.2 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of final inspection.
- B. For equipment or systems requiring seasonal operation, perform demonstration for other season.
- C. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual with Owners' personnel in detail to explain all aspects of operation and maintenance.
- D. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed-upon times, at equipment location.
- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.

END OF SECTION

EXECUTION REQUIREMENTS

PART 1 GENERAL

1.1 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for Architect/Engineer's review.
- B. Provide submittals to Engineer required by authorities having jurisdiction.
- C. Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

1.2 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.

- B. Remove waste and surplus materials and rubbish from site.

1.3 DELIVERY OF MATERIAL

- A. Coordinate schedule for delivery of various materials.
- B. Notify Engineer and Owner three (3) working days prior to delivery of each item.

1.4 PROTECTING INSTALLED CONSTRUCTION

- A. Owner will assume responsibility to protect properly delivered materials.

1.5 HAZARDOUS MATERIALS AFFIDAVITS

- A. Contractor, each subcontractor, each sub-subcontractor, and each material/product supplier to provide a notarized affidavit declaring that hazardous materials were not incorporated into construction of or delivered to the Project.
- B. Hazardous materials include asbestos, lead polychlorinated biphenyl (PCB), prohibited termite eradication chemicals or any substance of any proportion determined or suspected by an agency of federal or state government to create a health hazard.
- C. Provide table of contents listing all affidavits in alphabetical order and assemble with metal prong binder in durable plastic presentation cover.
- D. Prepare binder cover with printed title "AFFIDAVITS OF NON-INCORPORATED HAZARDOUS MATERIALS", Title of Project, Project Address, Owner's Name, Address and Phone and date of Construction Completion.
- E. Provide one complete set of the aforementioned information in the prescribed format and on CD in PDF format.
- F. Submit prior to Application for Final Payment.

1.6 OPERATION AND MAINTENANCE DATA

- A. Submit data bound in 8-1/2 x 11 inch (A4) text pages, three D side ring binders with durable plastic covers.
- B. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are required.
- C. Internally subdivide binder contents with permanent page divide, logically organized as described below with tab titling clearly printed under reinforced laminated plastic tabs.
- D. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- E. Contents: Prepare Table of Contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Engineer, Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.
 - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
 - 3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.
 - b. Air and water balance reports.
 - c. Certificates.

- d. Originals or Photocopies of warranties and bonds.
4. Submit one complete set of the aforementioned information in the prescribed format and on CD in PDF format.
5. Provide CD with three separate titles as noted above (Part 1, Part 2 and Part 3)
6. Submit binder and CD with Application for Final Payment.

END OF SECTION

STEEL REPAIR

PART 1-GENERAL

1.1 SCOPE OF WORK

- A. Work to be done comprises the furnishing of all materials, machinery, tools, brushes, equipment, labor and the performance of all work necessary to repair and install miscellaneous steel appurtenances on the storage tanks.

1.2 LOCATION AND SITE CONDITIONS

- A. The Contractor is made aware of the close proximity of the tanks to commercial and residential dwellings. It is the Contractor's responsibility to perform his work in a prudent and diligent manner and to take special effort to protect adjacent and nearby properties from damage as a result of his actions.
- B. Contractor is to notify the area residence about the schedule and type of work that is to be performed.

1.3 GENERAL WORKMANSHIP AND REQUIREMENTS

- A. The highest standards of workmanship shall prevail, and extreme care shall be exercised in order not to injure the tanks or structures or surrounding properties in anyway. The Contractor shall use no hammer on the tank in excess of 3-lbs. in weight. If, in the process of carrying out the work specified in this Contract any leaks develop which in the opinion of the City were caused by negligence, lack of skill or other act or omission on the part of the Contractor, such leaks shall be repaired by the Contractor without additional remuneration; or if the City so elects, by another Contractor to be employed and paid by the City out of sums due the Contractor. In the latter case, it is expressly understood that the Contractor shall not claim, nor shall the City be liable, for cost resulting from the delay in having the repair work done, but the City shall expedite the completion of such work.
- B. The Contractor will make necessary arrangements to provide for the storage of his equipment, etc. with the Water Department so that it will not interfere with the operations and appearance of the City facilities.

1.4 PAYMENT

- A. Payment for work performed under this section will be made according to the amount for each listed item of work included in the Bid Form.

PART 2- PRODUCTS

2.1 GENERAL

- A. All material used in the miscellaneous repairs shall conform to the material requirements in Section 2.2 of AWWA D 100-05.

2.2 HATCH

- A. Roof hatch to be 30-inch diameter, hinged with lockable hasp. Edge of hatch shall extend 2 inches below top of ringed opening. Ringed opening shall be minimum 4 inches in height above tank roof. Hatch must be gasketed.

PART 3- EXECUTION

3.1 GENERAL REQUIREMENTS

- A. The Contractor shall furnish all labor, materials and equipment necessary to complete all repairs and modifications. All repair and modification work including all welding shall be performed in accordance with the provisions given in AWWA Standard for Welded Steel Tanks for Water Storage ANSI/AWWA D-100-05 or latest revision.

3.2 WELDING REPAIRS

- A. Pit Welding: All critically deep pitting and gouges representing 50% or more reduction in plate thickness shall be filled by welding. Welds shall be ground smooth. Only those areas directed and approved by the Engineer shall be welded.
- B. Seam Welding: If directed by the Engineer, seams shall be welded. Welds shall be ground smooth.
- C. Connection Welding: Weld all bolted connection of lower ends of roof trusses. Welds shall be ground smooth.
- D. Fillet Welding: Plates 3/16 in. and less in thickness shall have fillet welds equal to the base metal thickness. Plates more than 3/16 in. thick shall have welds of as not less than one third the thickness of the thinner plate at the joint, with a minimum of 3/16 in.
- E. Seal Welding: Seal welding, when desired shall preferably be accomplished by a continuous weld combining the functions of sealing and strength, changing section only as the required strength may necessitate.
- F. Miscellaneous Repairs and Appurtenances:
1. Seal existing cathodic protection holes with 1/4" plate of diameter large enough to overlap openings by 2". Plates should be welded on interior and exterior. Return existing cathodic protection to Owner.

3.3 INSPECTION AND TESTING

- A. If additional steel repairs are required on the tank contact the Engineer to evaluate the repair needs. Corrective actions will be established and a price agreed upon to perform the work.

3.4 CAULKING

- A. Where caulking is required, it shall be a FILLER AND SURFACER as recommended by the paint manufacturer. Application, finishing, and curing of the caulking shall be in accordance with the instructions of the manufacturer.

3.5 CLEANING AND PREPARATION OF SURFACES

- A. The tank shall be completely cleaned and rigged to permit the Owner's Engineer to inspect the exterior surfaces to determine the condition of the steel structure and to determine the need for any repairs.

3.6 CLEANUP

- A. The Contractor shall note the near proximity of private structures and shall be completely responsible for any damages which might be caused by his actions in repair operations.

END OF SECTION

COATING & PAINTING

1.1 LOCATION AND SITE CONDITIONS

A. **The tank locations and characteristics are as follows:**

1. Capacity: 800,000 Gallon.
2. Location: 509 N. Valentine, City of Fort Stockton
3. Height: Approximately 24 feet
4. Diameter: Approximately 86 feet

- B. The Contractor is made aware of the close proximity of the tank to the local residents. It is the Contractor's responsibility to perform his work in a prudent and diligent manner and to take special effort to protect adjacent and nearby properties from damage as a result of his actions.
- C. The Contractor is advised that there may be power lines in the proximity of the tower. Owing execution of the work, the Contractor shall take all necessary precautions to insure no ropes, ladders, scaffolding or other equipment comes near or in contact with the high voltage power lines. The Contractor shall coordinate all work with the electric utility company.
- D. Work shall also be coordinated with the Water Utilities personnel so that cleaning and pressure washing operations are performed only when wind conditions will not adversely affect the surrounding residents. The same restrictions shall apply to painting operations if the procedure used in painting forms particles which can be carried out by the wind.

1.2 REFERENCE SPECIFICATIONS AND STANDARDS

A. Without limiting the general aspects of other requirements of these specifications, all surface preparation, coating and painting of interior and exterior surfaces and inspection shall conform to the applicable requirements of the Steel Structures Painting Council, NACE International ASTM (American Society for Testing and Materials), AWWA and the manufacturer's printed instructions.

1. ASTM (American Society for Testing and Materials)

- | | |
|-------------|---|
| ASTM D 520 | Standard Specification for Zinc Dust Pigment |
| ASTM D 4417 | Standard Test Methods for Field Measurement of Surface Profile of Blast Cleaned Steel |
| ASTM E 337 | Standard Practice Test Method for Measuring Humidity with a Psychrometer |
| ASTM D2200 | Standard Methods of Evaluating Degree of Rusting on Painted Surfaces |

2. ANSI (American National Standards Institute)

- | | |
|----------------------|--|
| ANSI/ASC 29.4 | Exhaust Systems Abrasive Blasting Operations - Ventilation and Safe Practice |
| ANSI/NSF Standard 61 | Drinking Water Components |

3. AWWA (American Water Works Association)

- | | |
|-----------|-----------------------------------|
| AWWA D102 | Coating Steel Water Storage Tanks |
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4. Consumer Product Safety Act, Part 1303

5. NACE International

- | | |
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| NACE Publication TPC2 | Coatings and Linings for Immersion Service: Chapter 1 Safety, Chapter Surface Preparation, Chapter 3 Curing, and Chapter 4 Inspection |
| NACE Standard RP0178 | Standard Recommended Practice - Fabrication Details, Surface Finish Requirements and Proper Design Considerations for Tanks and Vessels to be Lined for Immersion Service |
| NACE Standard RP0188 | Standard Recommended Practice - Discontinuity (Holiday) Testing of Protective Coatings |
| NACE Standard RP0287 | Field Measurement of Surface Profile of Abrasive Blast-Cleaned Steel Surfaces Using a Replica Tape |
| NACE Standard RP0288 | Standard Recommended Practice, Inspection of Linings on Steel and Concrete |

6. OSHA (Occupational Safety & Health Administration)

- 1915.35 Standards- 29 CFR- Painting
7. SSPC (Steel Structures Painting Council)
 - SSPC-SP2 Hand Tool Cleaning
 - SSPC-SP3 Power Tool Cleaning
 - SSPC-PA-1 Shop, Field and Maintenance Painting
 - SSPC-PA-2 Measurement of Dry Film Thickness with Magnetic Gages
 - SSPC-PA-3 Guide to Safety in Paint Application
 - SSPC-Guide 12 Guide for Illumination of Industrial Painting Project
 - SSPC-VIS 1-89 Pictorial Surface Preparation Standards for Painting Steel Surfaces
 - SSPC Paint Spec 36 Two Component Weatherable Aliphatic Polyurethane Topcoat. Performance-Based
 8. SSPC/NACE Joint Standards
 - SSPC-SP5/NACE 1 White Metal Blast Cleaning
 - SSPC-SP6/NACE 3 Commercial Blast Cleaning
 - SSPC-SP7/NACE 4 Brush-Off Blast Cleaning
 - SSPC-SP10/NACE 2 Near-White Metal Blast Cleaning

- B. The Engineer's decision shall be final as the interpretation and/or conflict between any of the referenced specifications and standards contained herein.

1.3 CONTRACTOR

- A. The Contractor shall have three years practical experience and successful history in the application of specified product to surfaces of steel water tanks. Upon request, he shall substantiate this requirement by furnishing a list of references and job completions.
- B. The Contractor shall submit with his bid 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 SSPC-PA1, "Shop, Field and Maintenance Painting".

1.4 QUALITY ASSURANCE

- A. General: Quality assurance procedures and practices shall be utilized to monitor all phases of 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.
- B. Surface Preparation: Surface preparation will be based upon comparison with: "Pictorial Surface Preparation Standards for Painting Steel Surfaces: SSPC-VIS 1-89\ ASTM Designation 02200-95, "Standard Methods of Evaluating Degree of Rusting on Painted Surfaces", ASTM D 4417-91, Method A and/or Method C or NACE Standard RP0287-87, and ASTM Designation D610 visual Standard for Surfaces of New Steel Airblast Cleaned with Sand Abrasive". In all cases the written standard shall take precedence over the visual standard. In addition NACE Standard RP0178-91, along with the Visual Comparator, shall be used to verify the surface preparation of welds.
- 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 surface 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. 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 and Holiday Checking:
 1. Thickness of coatings and paint shall be checked with a non-destructive magnetic-type thickness gauge, as per SSPC-PA 2 "Measurement of Dry Film Thickness with Magnetic Gages". References in PA 2 which allow 80% of the minimum thickness

specified are not acceptable. Use an instrument such as a Tooke Gauge if a destructive test is deemed necessary by the Engineer.

2. The integrity of interior coated surfaces shall be checked with a low voltage holiday detector in accordance with NACE Standard RPOI88. Non-destructive holiday detector shall not exceed 67.5 volts, nor shall destructive holiday detector exceed the voltage recommended by the manufacturer of the coating system. A solution of 1 ounce non-sudsing type wetting agent, such as Kodak Photo-Flo, and 1 gallon of tap water shall be used to perform the holiday testing. All pinholes and/or holidays shall be marked and repaired in accordance with the manufacturer's printed recommendations and retested. No pinholes or other irregularities will be permitted in the final coating.
- 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 of 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. Holiday detection devices shall be operated in the presence of the Engineer.
- F. Inspection: Inspection for this project shall consist of 'hold point' inspections. The Engineer or his representative 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, but prior to placing the tank in service. Contractor will insure that sufficient rigging is in place so that the Engineer or his representative shall be able to conduct the required inspections.
- G. Warranty Inspection: Warranty inspection shall be conducted during the eleventh 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.

1.5 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 halfmask 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 a hazard does not exist. Air circulation and exhausting of solvent vapors shall be continued until coatings have fully cured.
- 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.
- E. Illumination: Adequate illumination shall be provided while work is in progress, including explosion-proof lights and electrical equipment. Whenever required by the Engineer, the Contractor shall provide additional illumination and necessary supports to cover all areas to be inspected. The level of illumination for inspection purposes shall be determined by the inspector/Engineer.
- F. Temporary Ladders and Scaffolding: All temporary ladders and scaffolding shall conform to applicable safety requirements. They shall be erected where requested by the Engineer to facilitate inspection and be moved by the Contractor to locations requested by the Engineer.

1.6 PRODUCT DELIVERY, STORAGE & HANDLING

- A. All materials shall be brought to the jobsite in original sealed containers. They shall not be used until the Engineer has inspected the contents and obtained data from information on

containers or label. 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 with City, County, State and Federal safety codes for flammable coating or paint materials. At all times coatings and paints shall be protected from freezing.

1.7 EXTRA STOCK

- A. Provide a two gallon container of each color and surface texture to Owner.
- B. Label each container with color, texture and locations in addition to the manufacturer's label.

PART 2- PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Materials specified are those that have been evaluated for the specific service. Products of the Tnemec Company, Inc. are listed to establish a standard of quality. Equivalent materials of other manufacturer's may be submitted on written approval of the Engineer. As part of the proof of equality, the Engineer will require at the cost of the Contractor, certified test reports from a nationally known, reputable and independent testing laboratory conducting comparative tests as directed by the Engineer between the product specified and the requested substitution.
- B. Requests for substitution shall include manufacturer's literature for each product giving name, product number, generic type, descriptive information, solids by volume, recommended dry film thickness and certified lab test reports showing results to equal the performance criteria of the products specified herein. In addition, a list of five projects shall be submitted in which each product has been used and rendered satisfactory service.
- C. All requests for product substitution shall be made at least 10 days prior to the bid date.
- D. Any material savings shall be passed to the owner in the form of a contract dollar reduction.
- E. Manufacturer's color charts shall be submitted to the Engineer at least 30 days prior to coating and/or paint application. General Contractor and Painting Contractor shall coordinate work so as to allow sufficient time (normally seven to ten days) for paint to be delivered to the job site.

2.2 GENERAL REQUIREMENTS

- A. All materials shall be lead-free as defined by the Consumer Product Safety Act, Part 1303.
- B. All zinc dust pigment contained in any zinc-rich material shall meet the requirements of ASTM D 520 Type II as regards zinc content and purity.
- C. All high gloss clear coats shall incorporate the use of a fugitive dye to aid in the proper application and coverage of such coats.
- D. All materials for the interior wetted portion of the tank shall meet the requirements of ANSI/NSF Standard 61 for potable water contact.
- E. All catalyzed polyurethane products shall meet the minimum requirements of SSPC Paint Specification Number 36, Level 3 Performance Level.
- F. No products containing MOCHA shall be allowed.

2.3 MATERIAL PREPARATION

- A. Mix and thin materials according to manufacturers 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.

2.4 TANK INTERIOR COATING SYSTEM- WETTED AREAS (ALL TANKS)

A. Thee..Coat Zinc/Epoxy System:

1. Surface Preparation Prior to Abrasive Blast Cleaning: 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 RPO178 and herein.
2. Surface Preparation: SSPC-SPIO 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 RP0287.
3. Coating System:
Prime Coat: Tnemec Series 91-H20 Hydro-Zinc applied at 2.5 to 3.5 dry mils. Thin only with approved thinner, Tnemec 41-2 or 41-3 Thinner.
Stripe Coat: Tnemec Series 91-H20 Hydro-Zinc applied by brush and scrubbed into a weld seams. In addition to weld seams, all edges, comers, bolts, rivets, pits shall receive a stripe coat.
Intermediate Coat: Tnemec Series N140 Beige Pota-Pox applied at 4.0 to 6.0 dry mils. Thin only with approved thinner, Tnemec 41-4 Thinner.
Top Coat: Tnemec Series N140 White Pota-Pox applied at 4.0 to 6.0 dry mils. Thin only with approved thinner, Tnemec 41-4 Thinner.
Total dry film thickness shall be a minimum of 10.5 mils per SSPC-PA 2 dry film inspection standards, with exception as noted in this specification.
For cold weather applications, use Series N140. For cold weather applications, substitute Series N140F for standard Series N140.

2.5 TANK EXTERIOR OVERCOATING SYSTEM

- A. Prior to Surface 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 RPO178 and herein.
- B. Surface Preparation: Pressure all surfaces to be coated using a solution of hot water and TSP at a minimum of 3000 psi and a minimum flow rate of 3.0 gallons per minute. For mildewed surfaces, add chlorine bleach and allow to dry on the surface. Rinse all surfaces with clean water. Clean all failed and rusting areas as per SSPC-SP2 to SP3 Hand or Power Tool Cleaning. Feather all edges smooth. Spot prime with Tnemec Series 27WB TyPox applied at 4.0 to 6.0 dry mils.
- C. Coating System:
 1. 1st Coat: Tnemec Series 30-Color Spra-SafEN applied at 3.5 to 4.0 dry mils.
 2. 2nd Coat: Tnemec Series 30-Color Spra-SafEN applied at 3.5 to 4.0 dry mils.
 3. Proposed Color: Tnemec White. Contractor to provide Owner with color swatches for verification at Preconstruction Conference.
 4. Logo: Tnemec Series 1028 Enduratone applied at 3.0 to 4.0 dry mils. Exact orientation, size and color to be discussed with Owner.
 5. Total dry film thickness of the new system shall be 7.0 mils per SSPC-PA 2 dry film inspection standards, with exception as noted in this specification.
- D. Humidity must be monitored and recorded each day that any exterior coating will be applied.

PART 3- EXECUTION

3.1 GENERAL

- 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 Engineer.

- C. The Contractor shall provide a supervisor at the work site during cleaning and application operations. The supervisor shall have the authority to sign and change orders, 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.
Coating and painting systems include surface preparation, prime coating and finish coatings. Unless otherwise approved in writing by the Engineer, prime coating shall be field applied. Where prime coatings are shop applied, the Contractor shall instruct suppliers to provide the prime coat compatible with the specified finish coat. Any off-site work which does not conform to this specification is subjected to damage during transportation, construction or installation shall be thoroughly cleaned and touched-up in the field as directed by the Engineer. The Contractor shall use repair procedures which insure the complete protection of all adjacent primer. The specified repair method and equipment may include wirebrushing, 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.
- F. The Contractor's coating and painting equipment shall be designed for application of materials specified and shall be maintained in first class working condition. 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 Engineer.
- G. Application of the first coat shall follow immediately after surface preparation and cleaning and stripe coat, if applicable, before rust bloom occurs or the same day, whichever is less. Any cleaned areas not receiving first coat within this period shall be recleaned prior to application of first coat. Use of dehumidification equipment shall be first reviewed by the Engineer and coatings manufacturer prior to deviating from this provision.
- H. Prior to assembly, all surfaces made inaccessible after assembly shall be prepared as specified herein and shall receive the coating or paint system specified.

3.2 CLEANING AND PREPARATION OF SURFACES

- A. No painting work is to be done until after the inspection and all repairs have been completed.
- B. The Contractor shall be responsible for notifying the Engineer of any items which require repairing that become apparent while the tank is being cleaned and before painting has started. Any such work must be authorized by the City prior to being performed.
When more than one coat is to be applied each coat should have a marked visual difference from the preceding and following coats. Surfaces should be prepared as required by the paint manufacturers before applying any coatings. 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 solvent 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 mill 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 mill 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-SPI0 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-SPI1): Differs from SSPC-SP3 in that it requires more thorough cleaning and a surface profile not less than 1 mil.
- E. 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 RPO178 for all interior and exterior surfaces:
1. Butt Welds: Shall be ground smooth and free of all defects, designation "D".
 2. Lap Welds: Shall be ground smooth and blended, designation "D".
 3. Fillet Welded Tee Joint: Shall be ground smooth and blended, designation "D".
- F. Field blast cleaning for all surfaces shall be by dry method unless otherwise directed. Blast nozzles shall be venturi-type nozzles with a minimum pressure at the nozzle of 90 psi.
- G. Particle size of abrasives used in blast cleaning shall be that which will produce a 1.5-2.5 mil (37.5 microns- 65.0 microns) surface profile or in accordance with recommendations of the manufacturer of the specified coating or paint system to be applied. If the profile of the blasted steel exceeds the profile specified above, the Contractor shall be required to do one or both of the following:
1. Reblast the surface using a finer aggregate in order to produce the required profile.
 2. Apply a thicker prime coat, if possible given the limitations of the products being applied, in order to adequately cover the blast profile
- H. Abrasive used in blast cleaning operations shall be new, washed, graded and free of contaminants that would interfere with adhesion of coating or paint and shall not be reused unless specifically approved in writing by the Engineer.
- I. During blast cleaning operations, caution shall be exercised to insure that existing coatings or paint are not exposed to abrasion from blast cleaning.
- J. 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.
- K. 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.
- L. All welds shall be neutralized with a suitable chemical compatible with the specified coating or paint.
- M. Pitted areas on the tank interior shall be repaired by either filling with Tnemec Series 63-1500 Epoxy Filler and Surfacer or by welding. Epoxy filler shall be feathered smooth. Filler shall be applied after the prior to the application of the finish coat. No protrusions or spatter will be allowed. Pits deeper than 1/16", shall be filled by welding.
- N. Specific Surface Preparation: Surface preparation for the specific system shall be as noted in Sections 2.4 and 2.5.

3.3 NON-VISIBLE CONTAMINANTS

- A. Chloride, sulfate and ferrous ions (Fe^{2+}) tests shall be performed on the interior metal portions of the tank prior to sandblasting the existing coating system. The maximum allowable limit of these non-visible contaminants is:
1. The maximum level of chlorides is 30 milligrams per square meter or 3 micrograms per square centimeter.
 2. The maximum level of sulfates is 100 milligrams per square meter or 10 micrograms per square centimeter.

3. The maximum level of ferrous ions (Fe^{2+}) is 50 milligrams per square meter or 5 micrograms per square centimeter.
- B. If testing shows amounts present in the test solution to be greater than the limits listed herein, the Contractor shall clean the surface of the entire tank interior with a 5,000 psi water blast with fine entrained abrasive until the levels in the test solutions are below the maximum acceptable level. Alternate cleaning methods may be allowed with prior approval of the Engineer. All blasted surfaces shall be reblasted as specified in 2.4 and 2.5 at no additional cost to the Owner.
- C. Contractor shall provide a written statement from paint manufacturer stating that the maximum acceptable levels are not less than those listed herein. Results of the testing shall be provided to the Engineer before any coatings are applied.

3.4 CLEANING EXTERIOR SURFACES

- A. Areas showing corrosion shall be power tool cleaned (vacuum contained) to bare metal and recoated with series 18 primer before rust bloom forms.
- B. Cleaning of exterior surfaces shall be done by pressure washing to remove all loosely bonded paint coatings, taking care not to remove the existing primer. Power tool cleaning will be required to remove any loose coatings.
- C. After pressure washing, all loose residue shall be removed from all surfaces by brushings, vacuum cleaning or other agreed upon methods.
- D. Immediately prior to paint application, the surface shall comply with the degree of cleaning as specified. Any visible rust that forms on the surface of the steel after cleaning shall be removed to meet the requirements of this specification.
- E. Under no circumstances shall the steel be permitted to rust-back before painting regardless of the time elapsed. Under mild ambient conditions, it is best to blast clean and coat the surface the same day.
- F. All rigging and scaffolding shall be safe and give access to the Contractor's workers and the Engineer. The Contractor shall submit his proposed rigging scheme to the Engineer for review. The Contractor is solely responsible for the safety and adequacy of all rigging and scaffolding.

3.5 APPLICATION, GENERAL

- A. Coating and paint application shall conform to the requirements of the Steel Structure Painting Council Paint Application Specification SSPC-PAI, latest revision, for shop, field and maintenance painting...
- B. Thinning shall be permitted only as recommended by the manufacturer and approved by the Engineer, and utilizing the thinners stated in Sections 2.4 and 2.5.
- C. Each application of coating or paint shall be applied evenly, free of brush marks, sags, runs, with no evidence of poor workmanship. Care shall be exercised to avoid lapping on glass or hardware. Coatings and paints shall be sharply cut to lines. Finished surfaces shall be free from defects or blemishes.
- D. Protective coverings or drop cloths shall be used to protect floors, fixtures and equipment. 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 Engineer 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.
- F. Film thickness per coat as specified in Sections 2.4 and 2.5 are the minimum required. If roller application is deemed necessary, the Contractor shall apply additional coats as to achieve the specified thickness.
- G. All material shall be as specified.

3.6 COATING SYSTEMS APPLICATION

- A. After completion of surface preparation as specified for the specific system, materials shall be applied as noted in Sections 2.4 and 2.5.

- B. Care shall be taken so as to eliminate overspray and dry spray on the tank interior. Where such conditions are encountered, the surface shall be cleaned of all overspray and dry spray prior to the application of the succeeding coat.

3.7 DISINFECTION

- A. Disinfection of interior surfaces shall be performed in the presence of the Engineer in accordance with all the requirements of applicable AWWA Standards and regulatory agencies.
- B. Disinfection shall be performed after protective coatings have been applied to the interior surfaces and allowed to thoroughly cure.
- C. Prior to disinfecting, the complete interior shall be washed down with clean water and thoroughly flushed out.
- D. All interior surfaces shall be thoroughly washed with a solution having a minimum chlorine content of 50 PPM. Chlorine solution accumulated on the bottom shall be drained to waste. Rinsing with clean water is not required.

3.8 SOLVENT VAPOR REMOVAL

- A. All solvent vapors shall be completely removed by suction-type exhaust fans and blowers before placing tank in operating service.
- B. All solvent vapors will be exhausted per AWWA D102 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.
- C. Ventilation shall be continued until such time as the coating has reached "full cure" as specified by the coating manufacturer.

3.9 CLEANUP

- A. 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.

END OF SECTION

SAFE REMOVAL OF A LEAD BASE PAINT SYSTEM

PART 1-GENERAL

1.1 SCOPE

- A. Preliminary testing showed no presence of lead. In the event that lead is encountered this item provides for the safe removal and disposal of lead based paint and lead contaminated spent abrasive and adequate personnel protection during the abrasive blasting and removal of lead base paint and spent abrasive in accordance with all current Federal and State of Texas regulations.
- B. This item provides for the following steps for the monitoring and testing procedures prior to, during and subsequent to the removal.
 - 1. Soil sampling prior to and after the removal of the coating
 - 2. High volume air monitoring samplers will be employed for the total length of time that abrasive blasting is being performed.
 - 3. TCLP toxicity testing will be performed on the spent abrasive for identification of a potentially hazardous waste material.
 - 4. Medical tests will be performed on Contractor personnel exposed directly or indirectly to the abrasive blasting and/or removal operation. These tests will include

- blood level and cardiovascular/pulmonary as well as urine tests for drug analysis.
5. Personal monitoring will be performed continuously during abrasive blasting and/or removal operations to ascertain the airborne concentration of lead averaged over an 8 hour period.
 6. Installation of negative air pressure containment during blasting operations inside the column, tank or modular containment.
 7. Exterior partial containment.
 8. Proper disposal of contaminated spent abrasive .

1.2 REGULATORY AGENCIES AND REGULATIONS

A The TCEQ Air Control Division

B. The TCEQ

1. The Occupational Safety and Health Administration (OSHA) in 29 CFR 1910.1025.
2. The Agency for Toxic Substances and Disease Registry of the U.S. Public Health Service, draft guidelines on lead dated March, 1988.

C. The Texas Water Commission utilizes the Federal EPA regulations to identify Hazardous Wastes . Their regulations are as follows:

1. 40 CFR Part 261, paragraph 261.24 Characteristics of EP Toxicity .
2. The Federal Register, Volume 55, Page 61, dated March 29, 1990, Revised 40 CFR Part 261 effective September 25, 1990. This revision refines and broadens the scope of the hazardous waste regulatory program.
3. 31 Texas Administrative Code (TAC) Section 335.8 Closure, and Section 335.4 General Prohibitions.

D. If environmentally sensitive locations exist within 200' of the structure, the air quality will be exceeded if negative pressure containment is not employed.

E. TCEQ

1. In accordance with TCEQ Regulations VI (31 TAC Chapter 116), "Control of Air Pollution by Permits for New Construction or Modifications", revised August 11, 1969, paragraph 116.6, Exempted Facilities, Sub-paragraph (1) states: "Actual emissions from the proposed facility shall not exceed 250 tons per year of carbon monoxide or nitrogen oxides or 25 tons per year of any other contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen". In other words, this operation is temporary and does not require permitting to perform the work. However, the above regulation and paragraph 101.4 of the General Regulations of the TACB concerning nuisance emissions state in part that any work performed shall not create a "nuisance"; to residences and/or commercial buildings. What actions create a "nuisance" is ambiguous . Nevertheless, the Owner is very sensitive to this ambiguity and is therefore requiring the Contractor to employ California-type concepts in the performance of this contract .
2. Although not mandated by the state in this instance, the Contractor shall nonetheless complete and forward to the TCEQ, a copy of Form PI-7, "Registration Form for Standard Exemptions" at least one (1) week prior to the commencement of work on the project.

1.3 MATERIALS

A Contractor Responsibilities

1. The Contractor is required to submit the following:

- a. Safety Program in writing and schedule of regulatory scheduled safety orientation meetings.
 - b. Medical tests for all workers who will be exposed to abrasive blasting operation for blood lead level content before and after completions of coating contract, urine tests for drug analysis, and cardiovascular/pulmonary tests for fitness to wear full face,form fitting respirators. NO FACIAL HAIR will be permitted by employees required to wear full face respirators.
 - c. Detailed work schedule .
 - d. Quality Control program.
 - e. Methodology for compliance with full containment of spent abrasive and proper disposal of hazardous waste, if present, in a Class 1 approved EPA disposal site.
2. Paint sampling and analysis .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 an analytical laboratory for analysis of % by weight lead content in the samples. This analysis is to be performed in accordance with ASTM D-3335, "Low Concentrations of Lead", Cadmium and Cobalt in Paint by Atomic Absorption Spectroscopy". The Consumer Product Safety Commission has decreed that if a sample contains more than .06% by weight lead content, the paint is by definition a •lead base painf .
3. Soil Sampling
- a. The contractor shall provide for analytical lab personnel to sample the soil at the job site immediately prior to the commencement of lead operations and upon the completion of the operations. The samples will be analyzed for lead content using atomic absorption techniques . Increases in the total lead content of the soil will not be permitted. The Contractor shall be responsible for restoring and retesting the site to its original condition in accordance with 31 Texas Administration Code (TAC),Section 336.8,*Closure", and Section 335.7, "General Prohibitions". If increases do occur as a result of the Contractor's failure to adequately contain fugitive dust and spent contaminated abrasive, proper disposal must be made. If the waste is classified as a municipal waste,the Texas Department of Health, Solid Waste Management Section must be contacted regarding disposal. The TWC Seven Day Leachate Test will be required to be performed on the residue.
 - b. Four (4) representative sites downwind of the prevailing wind will be identified and samples by the following procedure:five (5) %"x %"deep plugs, one from each corner and one from the middle of a 12• x 12" are of soil will be obtained by the analytical lab personnel prior to the commencement of and at the completion of the coating application . The samples obtained from each 12" x 12• site wilt be combined as a single sample, bagged, sealed,identified and shipped to the analytical laboratory for analysis of lead content to determine if there has been any increase in lead content of the soil.
4. Air Monitoring
- a. Air monitoring and analysis will be performed in accordance with ASTM 0409-82, "Standard Practice for Application of Hi-Vol (High Volume) Sampler Method for Collection and Mass Determination of Airborne Particulate Matter."
 - b. The Contractor's analytical laboratory will supply, set up, calibrate and maintain three (3) PM-10 Hi Volume Air Samplers.The analytical laboratory personnel will install pre-weighted filter media in each of the 3 samplers, removing the previous day's filters. The contaminated filters will be expressed overnight to the laboratory for analysis for PM-10 and lead in accordance with TCEQ guidelines.

5. Sampling Procedures and Toxicity Testing of Spent Abrasive

- a. 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 analytical lab personnel 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-gallons 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 lead toxicity testing in accordance with EPA Procedures Manual SW846, "Toxicity Characteristic Leaching Procedures (TCLP)," Toxicity Characteristic Rule, Volume 55, Federal Register.

6. Classification

- a. As related to lead, hazardous waste is defined by the EPA as lead leachate having a concentration of more than 5.0 milligrams per liter, or 5 ppm.

7. Personnel Monitoring for Exposure limits

- a. lead monitoring procedures for personnel shall be in accordance with CFR 1910.1025- Lead.
- b. Definitions-Key words in this section are "Action Level" and "Lead".
 - 1) "Action Level" means employee exposure, without regard to the use of respirators, to an airborne concentration of lead of 30 micrograms per cubic meter of air averaged over an 8 hour period.
 - 2) "lead" means metallic lead, an inorganic lead compounds and organic lead soaps.
- c. Permissible Exposure limit (PEL) - The maximum Permissible Exposure limit is 50 micrograms per cubic meter of air over an 8 hour period. if employees are exposed to lead for more than 8 hours per day, a time weighted average (TWA) will be used with a maximum Permissible Exposure limit determined by the formula 400 micrograms per cubic meter divided by the hours worked in the day.
- d. When engineering controls do not reduce employee exposure to or below 50 micrograms per cubic meter, respirators shall be used in accordance with paragraph 9.5.1. If air fed hoods are worn, maintain a minimum air flow of 6 CFM to prevent contaminants from entering the air hood. Personnel air sampling monitoring shall be installed inside the air hood preferably on the worker's shoulder next to the neck.

1.4 EMPLOYEE PROTECTION

A. Respiratory Protection

1. The Contractor shall set the appropriate respirator according to 20 CFR 1910.1025 (f) (2) (i) (Table II).
2. The Contractor shall fit test all employees issued a respirator and perform either a quantitative or quantitative fit test.
3. For all personnel directly or indirectly exposed to abrasive dusting and spray mist and fumes, the Contractor shall select respirators approved by The Mine Safety and Health Administration and the National Institute for Occupational Safety and Health for protection against lead dust, fumes and mist under provisions of 30 CFR Part II.
4. The Contractor shall institute a respiratory protection program, a copy of which is to be furnished to the Engineer.
5. Employees shall be permitted to change filter elements whenever there is increased resistance. Employees will be permitted to leave the work area to wash their face

and respirator face piece whenever they feel it necessary.

6. These respirators are based on expected lead levels in work areas. The type of respirators may or may not change depending on area lead levels and exposure levels. The Contractor shall supply the Engineer with a list of all respirator fit tested employees .

B. Personnel Hygiene and Safety.

1. The Contractor shall not permit any employees exposed directly or indirectly to lead to smoke, eat or drink so long as he remains in that environment.
2. The Contractor shall provide employees exposed to lead with appropriate work clothing. 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 lead. All containers so used shall be properly labeled and stored.
3. The Contractor shall be responsible for furnishing portable laboratories.
4. The Contractor shall be responsible for informing employees when monitoring of the air, soil, personnel and abrasive are being performed, and the results of the monitoring.
5. If an employee is found to have an elevated lead count in the blood, then they shall be immediately removed from the lead exposure .

C. Employee Information and Training

1. The Contractor will institute a training program to explain lead, its hazard, and what measures have been taken to eliminate unsafe levels of lead exposure.
2. The Contractor will make available records of training to the Engineer, if requested.

D. Medical Tests and employee Awareness Program

1. The Contractor shall furnish proof of medical tests performed on all contractor personnel who will be exposed directly to the abrasive blasting operation and for disposal of lead contaminated spent abrasive and refuse. These tests shall include blood lead level both before and after work is performed; cardiovascular/pulmonary tests to verify fitness for the worker to wear full face fresh air masks; and urine tests for drug analysis. The Contractor shall keep all medical records for a minimum of 40 years.
2. The Contractor shall furnish proof of evidence that employees have been provided with a lead awareness program that includes awareness of lead hazards, health and safety procedures in and around lead exposure sites; and restrictions such as smoking, etc., while exposed to lead sources.

1.5 COLLECTION, STORAGE, SECURITY AND DISPOSAL OF SPENT ABRASIVE AND/OR HAZARDOUS MATERIAL

A Collection- Proper collection of the removed debris is one of the most important steps in handling the hazardous debris. Collection of the potentially hazardous debris must be carried out without releasing lead into the environment. Precautions must be taken to prevent release of the removed coating to the air, water or soil. 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. Care must be taken not to re-disperse the materials into the air, water or soil during the collection step.

B. Containment and Transportation to the Temporary Storage Area

1. The lead containing spent abrasive and/or debris must be stored in a manner which will not allow entry of any of the hazardous materials into the environment. Leak-proof drums or portable bins, such as gondolas, are generally acceptable. The lids of the drums, or the covers of the bins, must

be firmly secured. If ground storage is allowed, it must be in an area which is not a flood plain 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 segregated and handled as hazardous material. Labels, warning of the hazards associated with the material, shall be placed on the containers. The containers should also be marked with the contents, tar weights of containers, the origin and the date of collection of the material. The containers must be keyed to the samples taken.

2. 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.

C. Site Storage

1. Site storage involves grouping of materials by particular work site, even though the physical location of the storage site may be separated from the work site itself. Regardless of the location of the storage site, certain requirements remain constant:
 - a. The site must be secure. Security begins with the choice of a suitable location. Storage site must be well-drained ground which is not subject to flooding. The area must be enclosed by a locked chain link fence and prominent warning signs must be displayed around the perimeter. If the same storage site is also used for equipment and supplies, the waste containers shall be segregated within the site. This can be accomplished by placing all debris material in an assigned area within the secured site and surrounding this area with a temporary "fence" of ribbons of thin rope. Such temporary enclosure can be used only if a site is used for a very short-term storage. Identification and warning signs should be prominently displayed where the material is being stored, all drums must be placed on pallets or dunnage to prevent corrosive attack from moist soil.
2. It is important to remember that a material is not hazardous waste until it has been so declared. Even if the samples which have been tested are reported to contain 5ppm or more of lead, the material does not automatically become a hazardous waste. It may even have utility as a raw material for another use. If the lead containing debris is being held for use as raw material for some other process, it will normally be stripped from the site within a relatively short period of time.
3. If the toxic lead content exceeds 5 milligrams per liter, the waste must be disposed of at a Hazardous Waste Disposal Site. The Texas Water Commission Form TWC-0757 (known as the One Time Shipping Permit) must be submitted to the TWC 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.
4. If the toxic lead content does not exceed 5 milligrams per liter, the TWC Seven Day Leachate Test must be performed. Results of this test, the EP Tox and TCLP, and the total lead tests must be submitted in writing to the Texas Department of Health, Solid Waste Management Section for municipal waste and TWC 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. The Health Department has a particular concern for wastes with concentrations in excess of 500 micrograms per gram of total lead and 2.5 milligrams per liter of toxic lead.
5. All hazardous waste identified under the Land Disposal Restrictions, 40 CFR 268 Subpart D (RCRA Section 304 (m) (1)) shall be treated before disposal or recovered for re-use. Treatment may be one of the following: (a) stabilization and disposal; (b) treatment by a third-party; (c) on-site treatment; (d) incineration; or (e) recycling/reuse of waste.

1.6 MEASUREMENT AND PAYMENT

- A. Shall be on a 2-lump sum basis, for all removal and/or disposal of the hazardous material generated by the lead contained in the existing coating system. Compensation shall be for complete disposal to include all testing and documentation.

**PART 2 - PRODUCTS
NOT USED**

PART 3 -EXECUTION

3.1 EXECUTION

- A. The Contractor may choose from several options listed herein for the containment and removal of the existing lead base paint system. He may use a dedicated system or he may select a combination of several systems, any of which will be acceptable so long as all Federal, State and local regulations have been observed, and that the method(s) of removal complies with the governing specifications be in the instance of Nevertheless, any Federal, State or local regulations shall conflict between it and these governing specifications supersede any requirements contained herein.
- B. The Contractor may choose from any of the following options, or submit an acceptable alternative. Total or partial containment may be required in order to comply with the ambient air monitoring requirement.
1. Abrasive blast with water ring for dust suppression.
 2. Abrasive slurry blast.
 3. Abrasive vacuum blast
 4. Open blast cleaning within an enclosed containment structure.
 5. "Peel-Away" or similar environmentally safe chemical stripping system.
- C. If the Contractor selects total (modular) or partial (containment) encapsulation, the system shall conform to the following requirements:
1. The containment and collection system proposed by each prospective bidder must assure the non-pollution of the surrounding environment.
 2. The Contractor shall include in his proposal 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:
 - a. Wind Resistance
 - b. Opacity
 - c. Burst Strength
 - d. Material Composition
 - e. Color
 - f. Fire Rating
 - g. Thread Count
 - h. Ultra-Violet Stabilized
 3. Partial (Containment) Encapsulation -The partial containment system shall be constructed of wind screens of a minimum retention capacity of 85% similar to Eagle Industries Model 733-85 Containment Screens (alternate 95% retention Model 733-95 Containment Screens). Impervious tarps with or without windows are unacceptable. The wind screen containment system must be designed for the purpose of blasting and painting and shown to have been used on similar projects in the past. The containment system shall be supported by cable, scaffold or other acceptable means as to best ensure a safe working environment.
 4. The wind containment must comply with the principles of security, which are:
 - a. Appropriate protection of the environment from abrasive blasting and painting debris.
 - b. Pin-hole ventilation (% for retention) allowing for cross-flow of air movement.
 - c. Sewn edging, as well as every internal seam.
 - d. Internal seams that are alternate reversed for additional strength
 - e. Grommets spaced along all edges and seams for wind load to be supported by the screens.
 - f. Permeable to natural lighting, unless alternate lighting is to be provided (show that lighting is explosion-proof).

- g. A minimum of 6" tarp overlap will be allowed as to provide for maximum possible containment of spent debris.
 - 5. The wind screen containment system shall be maintained free of defects through the course of the project. Work shall be stopped until all defects are repaired.
 - 6. Prior to installation, the wind screen containment system must be approved in writing by the Engineer.
 - 7. Any changes to the installed wind screen containment system must also be approved in writing.
- D. Total (Modular) Encapsulation Using Negative Air Pressure Containment
- 1. The Contractor will be held responsible for implementing sound engineering and work practice controls to reduce and maintain employee exposure to lead levels at or below safe levels as defined in CRF 1910.1025- Lead.
 - 2. Blasting inside a tank, tank column, or modular containment is considered working within a dosed environment. OSHA therefore requires a clean, uncontaminated air source outside the enclosure with an appropriate backup such as another source of clean, uncontaminated air to be activated by merely switching a valve contained on the worker's body; air bottles strapped onto the worker's body; or other OSHA approved and accepted air sources.
 - 3. The Contractor shall employ negative air pressure inside the structure with the air vented to the outside, filtered and dewatered and returned to the enclosed space at least as clean as native air.
 - 4. The Contractor shall construct and install a temporary double entry vestibule or dead air space at the outside entrance to a tank column. This vestibule shall be sufficiently large enough to permit the workers to change clothing before entering or egressing the column so as not to permit contaminated clothing, equipment, or air to escape to the outside.
 - 5. All contaminated clothing, spent abrasive, equipment and refuse shall be properly disposed in accordance with all applicable Federal, state or local regulations in sealed containers and labeled before removing from the enclosure.

END OF SECTION

TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.1 DESCRIPTION

- A. Section Includes: Requirements, procedures, and methods related to responsibilities for providing temporary erosion and sediment control for land-disturbing activities.
 - 1. Land-disturbing activity: Earth movement and land change that may result in soil erosion from water, wind, or movement of sediments into State waters or onto State lands, including but not limited to tilling, clearing, stripping, grading, excavating, filling, and related activities, and covering of land with impermeable material.

1.2 PERMIT

- A. General: For construction, the Texas Commission on Environmental Quality (TCEQ) Storm Water Program Texas Pollution Discharge Elimination System (TPDES) Construction General Permit TXR150000 shall be utilized pursuant to the Texas Water

Code - Chapter 26. Work under this Project shall comply with:

1. Requirements and procedures of TXR150000.
 2. Apply and maintain measures to control erosion of disturbed areas and to minimize sedimentation of adjacent watercourses and lands throughout life of project.
- B. Initial Permit Procedures: Before discharging storm water to any surface water in the state of Texas:
1. Prepare and implement a Storm Water Pollution Prevention Plan. For more details, see Part III of General Permit TXR150000.
 2. Submit an original completed Notice of Intent (NOI) form with an original signature and fee..
 3. Before starting construction, post a copy of the NOI and a copy of the Site Notice at the construction site. Leave these posted until construction is completed.
- C. Permit Coverage: Provisional coverage under this general permit begins:
1. Seven (7) days after the completed NOI is postmarked for delivery to the TCEQ or
 2. Immediately if the completed NOI is submitted electronically.
- After TCEQ review, one of the following will be received: an Acknowledgement Certificate acknowledging your coverage under this general permit, a Notice of Deficiency, or a Denial Letter.
- D. Permit Procedures After Obtaining Coverage.
1. Adhere to the requirements of General Permit TXR150000.
 2. Submit a Notice of Termination (NOT) within 30 days after one or more of the following occurs:
 - a. Final stabilization has occurred.
 - b. Another permitted operator has assumed control over all areas of the site.
- E. Notice of Change: A Notice of Change is required to be submitted for making updates, changes, or corrections to an NOI or Waiver, as required in the general permit.

PART 2 PRODUCTS

2.1 SEED AND SOD

- A. Seed, Sod, Mulches, Fertilizer, Topsoil, Soil Conditioner, and Other Materials for Seeding and Sodding.

2.2 MATERIAL FOR EROSION AND SEDIMENT CONTROL DEVICES

- A. Geotextiles.
- B. Silt Fence: Sediment Control Geotextile.
- C. Surge Stone and Riprap.
- D. Stone:

1. 2 inch to 3 inch stone: AASHTO M-43, size no. 1.
 2. 3/4 inch to 1-1/2 inch stone: AASHTO M-43, size no. 57.
- E. Straw Bale Dike:
1. Straw or hay bales with minimum of two bale bindings securely in place.
 2. Stakes of 2-inch diameter or square wood, or equal, with length sufficient to be driven minimum of 1-1/2 feet in ground and be flush with top of bale.
- F. Timber, lumber, and pipes for bridges and culverts: Sufficient size and strength to accommodate loads to be imposed.
- G. Silt fence posts: Minimum 36 inches long, 2 by 2 hardwood posts, with minimum cross sectional area of 3 square inches.
- H. Chain link fence for super silt fence. Use Type 1 fabric, 42 inches high, and posts 6 feet long.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

- A. Clear only areas within limits of rights of way, easements, or work limits.
- B. Protect excavated material and disturbed areas from erosion into waters or onto adjacent land.
- C. Install sediment control devices during initial clearing and grubbing operations and before performing other construction activities.
- D. Maintain erosion and sediment control measures and devices until final restabilization and restoration are complete.

3.2 STABILIZATION OF DISTURBED AREAS

- A. Following initial disturbance or redisturbance, complete permanent or temporary stabilization:
 1. Within 7 days for surfaces of dikes, swales, ditches, perimeter controls and slopes greater than 3:1.
 2. Within 14 days for other disturbed or graded areas.
 3. Maintain stabilized areas to ensure that areas meet the requirements of general permit TXR150000.
- B. Stabilization:
 1. Temporary: Consisting of vegetation, anchored straw mulch, mulch netting, jute, excelsior blankets, wood chips, surge stone or stone mulch.
 2. Permanent: Following restoration schedule.
- C. Requirements do not apply to areas currently used for material storage or on which actual construction activities are currently performed.

3.3 EROSION AND SEDIMENT CONTROL DEVICES

- A. Install devices to comply with general permit TXR150000, or at Engineer's direction. Maintain sediment control devices to contain surface drainage and prevent sediment from leaving confines of work site.
- B. Silt Fence
 - 1. Definition: Temporary continuous barrier constructed of sediment control geotextile supported by posts used to trap sediment but allow surface runoff to filter through.
 - 2. Maintenance: Remove sediment deposits when it reaches approximately one-half of height of silt fence or install a second silt fence as directed by Engineer.
 - a. Replace geotextile when silt fence is in place longer than 12 months unless Engineer directs otherwise.
 - b. Areas where construction activities have changed natural contour and drainage runoff: Review daily silt fence locations to ensure effectiveness.
 - 1) Where deficiencies exist, install additional silt fences under Engineer's direction.
 - 2) Promptly repair or replace damaged or otherwise ineffective silt fence.
 - c. Areas where construction activities have not changed natural contour and drainage runoff: Periodically, inspect and repair damage to silt fence to ensure effectiveness.
 - 3. Removal and Restoration: Engineer will determine when silt fence is to be removed, after removal, fill depressions and restore area following restoration schedule.
- C. Super Silt Fence
 - 1. Definition: Temporary continuous barrier of sediment control geotextile placed over chain link fencing used to intercept sediment.
 - 2. Construction: As specified below.
 - 3. Maintenance: See silt fence specification (Section B above).
 - 4. Removal and Restoration: Replace with silt fence when directed by Engineer.
- D. Stream Bank Protection at Utility Stream Crossing
 - 1. Definition: Placement of ungrouted riprap on stream banks for permanent stabilization at each utility stream crossing.
 - 2. Construction: As specified below.
 - a. Install stream diversion when flow is impacted by excavation or fill.
 - b. Riprap as specified.
 - 3. Restoration: Within 7 days after utility is installed crossing stream, restore banks of stream with riprap.
- E. Stream Invert Protection for Shallow Utility Stream Crossing
 - 1. Definition: Placement of ungrouted armor stones on excavated stream bottom for permanent stabilization at each utility stream crossing.

2. Construction: As specified below.
 - a. Install stream diversion as directed by Engineer.
 - b. Cover stream bottom with erosion control geotextile.
 - c. Place ungrouted riprap on erosion control geotextile lined stream banks.
 - d. Place armor stones on excavated erosion control geotextile lined stream bottom with top of stone even with existing stream bottom or as directed by Engineer.
3. Restoration: Within 7 days after utility is installed crossing stream, restore banks with riprap and bed of stream with armor stone.

F. Riprap Outlet Sediment Trap

1. Definition: Temporary basin similar to stone outlet sediment trap except that basin is larger and capable of accommodating up to 10 acres of drainage area and outlet is channel lined with surge stone, underlain with erosion control geotextile, type B.

G. Stone Outlet Sediment Trap

1. Definition: Temporary basin formed by excavating a depression in ground or by building earth embankment or dike that collects runoff and traps sediment allowing filtered runoff to leave site through stone outlet. Trap limited to a 5 acre maximum drainage area.
2. Construction: As specified below.
 - a. Erosion control geotextile may be substituted for stone face by placing it on inside face of outlet. Place erosion control geotextile, type B, on a smoothly graded surface so overlaying material will not excessively stretch or tear the geotextile.

- b. Make length of stone outlet in feet equal to 4 times drainage area in acres, or as determined by Engineer.
 - c. Direct stone outlet sediment trap onto well-stabilized surface area, directly into waterway, stabilized channel, or storm drain system.
 3. Maintenance:
 - a. Periodically remove accumulated sediment, inspect and repair damage after each rainfall.
 - b. Remove sediment immediately from basin area when one-half of wet storage is filled.
 - c. Repair or replace stone outlet if washed out or clogged with sediment.
 - d. Promptly remove sediment discharged due to trap failure and dispose of offsite.
 4. Removal and Restoration: When no longer required, remove all materials, fill depressions, and restore area following restoration schedule.

H. Stone Outlet Structure

1. Definition: Stone berm used in conjunction with earth or straw bale dike to provide sediment filtering device for runoff and discharge onto well stabilized area.
2. Construction: As specified below.
 - a. Construct outlet structure with 2-inch to 3-inch stone.
 - b. Construct optional baffle board embedded 1 foot into outlet structure.
3. Maintenance:
 - a. Periodically inspect for damage. Inspect after each rainfall.
 - b. Replace or reconstruct if structure becomes clogged with sediment or is damaged.
4. Removal and Restoration: When no longer required, remove and restore area following restoration schedule.

I. Stabilized Construction Entrance

1. Definition: Temporary construction entrance constructed of aggregate on top of roadway geotextile, type B, used to reduce or eliminate tracking of soils material onto paved streets and other paved areas.
2. Location: Install at locations where construction traffic enters and leaves construction site from or onto paved street or paved area.
3. Construction: As specified below.
 - a. Place roadway geotextile, type B, over entire graded area and cover with layer of 2-inch to 3-inch stone minimum 6 inches thick or recycled concrete of the same size.
4. Maintenance:
 - a. Periodically apply layer of stone or recycled concrete to maintain entrance.
 - b. Immediately remove soils material or debris tracked onto areas of

adjacent street or paved areas.

5. Removal and Restoration: When no longer required, remove and restore area following restoration schedule.

J. Earth Dike

1. Definition: Temporary dike of machine compacted soils material used to confine and channel rainfall runoff to specific location.
2. Location: Place earth dike at site perimeter.
3. Construction: As specified below.
 - a. Mound compactible soil materials to form continuous dike and machine compact.
 - b. Stabilize top, slopes, and flow channel of dike temporarily with anchored mulch and grass seed within 7 days of installation.
4. Maintenance:
 - a. Periodically inspect for damage. Inspect after each rainfall.
 - b. Repair washouts, eroded slopes, and flow areas.
 - c. Remove accumulated sediment in order to maintain positive drainage to outlets.
5. Removal and Restoration: When no longer required, remove and restore area following restoration schedule.

K. Straw Bale Dike

1. Definition: Temporary continuous barrier constructed of straw or hay bales placed and anchored together, used to trap sediment but allow rainfall runoff to filter through.
2. Maintenance:
 - a. Periodically inspect for damage and sediment accumulation. Inspect after each rainfall.
 - b. Repair or replace straw bales and remove sediment accumulation.
 - c. Unless otherwise directed, replace straw bale dike totally with new bales after 90 days.
3. Removal and Restoration: When no longer required, remove and restore area following restoration schedule.

L. Temporary Access Bridge

1. Definition:
 - a. Temporary bridge structure spanning stream channel less than 40 feet without pier supports, installed and dismantled within 2 months, and not reused at same location.
2. Construction: As specified below.
 - a. Bridge:
 - 1) Bridge must span greater than 10 feet beyond top of bank.
 - 2) Do not extend bottom of bridge below waterway banks.
 - 3) Width of bridge: Twelve feet minimum, 20 feet maximum.
 - 4) Abutments: Do not excavate stream banks; design and locate so that expected loads do not cause stream bank instability.

- b. Access ramps:
 - 1) If required to the bridge deck from the approach road, space supports no closer than 5 feet on center.
 - 2) If gravel is used for access ramps: ASTM C33, Coarse Aggregate, size number 3.
 - 3) Place drainage pipes on ground through gravel ramps where thickness of ramp exceeds 3 feet.
 - 4) Where multiple pipes are required, place no closer than 1 foot apart.
 - 5) Gravel for ramps and drainage pipes shall be placed on geotextile.
 - 6) Use pipe diameters that need no more than 1 foot of cover.
 - c. Curbs: Prevent soil and other debris from entering stream from bridge.
 - d. Anchorage:
 - 1) Bridge and appurtenances: Secure to prevent channel obstruction or floatation downstream.
3. Maintenance:
- a. Periodically remove soil buildup from decking and inspect after each rainfall.
 - b. Remove trapped debris and repair damage.
 - c. Temporarily stabilize land and bank areas within 7 days after initial disturbance.
4. Removal and Restoration: When no longer required, remove bridge, supports, approach roads and permanently restore area within 7 days following restoration schedule.

M. Temporary Access Culvert

- 1. Definition: Structure consisting of 1 or more pipe sections placed on roadway geotextile, type B, and covered with aggregate to provide access for crossing waterway where anticipated loading may be too heavy for bridge or waterway channel too wide, and remaining in place for not longer than one year.
- 2. Construction: As specified below.
 - a. Roadway geotextile, type B:
 - 1) Place on natural streambed and banks of waterway.
 - 2) Extend approximately 8 inches beyond end of culvert pipe and aggregate fill.
 - b. Pipes:
 - 1) Place on top of geotextile in streambed utilizing largest diameter that fits into existing waterway channel without excavating.
 - 2) Use minimum 12 inch diameter with minimum length of 14 feet and maximum length of 40 feet.
 - 3) When channel width exceeds 3 feet, use culvert pipes with cross sectional area greater than 60 percent of cross sectional area of existing channel. Additional pipes may be used to meet required cross sectional area.
 - 4) Extend minimum of 1 foot beyond toe of aggregate both upstream and downstream.
 - 5) Make cross sectioned area of pipes large enough to accommodate waterway flow and strong enough to support

- 6) anticipated loading.
Cover pipes with minimum of 1 foot of surge stone. If multiple pipes are used, place at least 12 inches of aggregate between pipes.

3. Maintenance:

- a. Periodically remove soil buildup from road surface and inspect after each rainfall.
 - b. Repair damage and remove trapped debris.
 - c. Temporarily stabilize land and bank areas within 7 days after initial disturbance.
4. Removal and Restoration: When use is no longer required, remove all materials from stream bed and approach roads and permanently restore area within 7 days following restoration schedule.

N. Open Diversion and Culvert Diversion

1. Definition: Devices used when installing utility under waterways, designed to prevent erosion and sediment from entering flow of waterway. Diversions used to divert waterway flow around work site within waterway channel.
2. Construction: As specified below.
 - a. Remove large stones, woody plants, and debris from site.
 - b. If culvert diversion is to be used, place filter geotextile, type B, on streambed and banks where culvert will be placed.
 - c. Extend geotextile minimum of 6 inches beyond ends of culvert.
 - d. Use minimum 12-inch diameter culvert placed on geotextile with surge stone around and over culvert.
 - e. Form cofferdam with sandbags, diverting flow around and away from area to be excavated. Height of dam and size and number of culverts will depend on water flow and size of work area and right of way.
 - f. After utility is installed and backfilled in cofferdam area, repeat same procedure to direct flow to opposite side of waterway to complete utility installation under waterway.
3. Maintenance:
 - a. Inspect after each rainfall.
 - b. Repair or replace damaged materials.
 - c. Temporarily stabilize land and bank areas within 7 days after initial disturbance.
4. Removal and Restoration:
 - a. When installation of utility is completed, remove all materials from waterway.
 - b. Permanently stabilize and restore disturbed areas within 7 days following restoration schedule.

O. Portable Sediment Tank

1. Definition: Compartmental tank through which sediment laden water is pumped to trap and retain sediment.
2. Construction:
 - a. Tanks may be connected in series.

P. Curb Inlet Protection

1. Definition: Device used to prevent sediment from entering existing storm drains.
2. Construction: As specified below.
 - a. Install 2 by 4 weir, spacer and anchors, wire mesh, and sediment control geotextile on inlet.
 - b. Use wire mesh and geotextile 30 inches long with minimum width of opening in curb inlet plus 2 feet each side.
 - c. Fasten wire mesh to 2 by 4 frame and wire tie geotextile to wire mesh.
 - d. Place 2 inch stone over geotextile and wire mesh so water will pass through and not around geotextile.
 - e. Use sand bags or alternate weight on 2 by 4 anchors.
3. Maintenance:
 - a. Inspect daily.
 - b. Replace or repair damaged materials.
 - c. Remove deposited sediment and replace clogged stone.
4. Removal and Restoration: When no longer required, remove and restore area to original condition.

3.4 CONSTRUCTION OPERATIONS

- A. Do not begin construction operations until required erosion and sediment control devices are in place and functioning.
- B. Do not violate requirements of general permit TXR150000 during construction operations.
- C. If permit violation is observed, the Engineer will issue notice stating violation and date by which violation must be corrected.
 1. If violation is not corrected by date stated, the Engineer may issue civil citation, Field Order stopping Work, or Permit may be revoked, and only work to correct permit violation will be permitted.
- D. Stop Work orders will not be lifted until violations are corrected and brought into compliance with Permit, and Contractor has requested inspection of site. Cost or Time extensions requested as result of delays occasioned by Stop Work orders will not be granted.
- E. Engineer must approve changes to approved sediment control plan.

3.5 FIELD CONDITIONS

- A. Immediately notify Engineer if conditions arise in field that renders Drawings, these specifications, or requirements of Erosion and Sediment Control Permit inappropriate or inadequate. Contractor will furnish additional Drawings or modifications, when required, which will become part and condition of Erosion and Sediment Control Permit.

END OF SECTION