

## PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS FOR THE CONSTRUCTION OF

## Royal Street Lift Station Odor Control Improvements

Prepared By



KASBERG, PATRICK & ASSOCIÁTES, LP

CONSULTING ENGINEERS TEMPLE, TEXAS

June 2020

Approved by the Village of Salado, Texas this \( \frac{1}{2} \) day of \( \frac{1}{2} \) day of

Village Administrator

Date

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# **ATTORNEY'S REVIEW CERTIFICATION** (To Be Completed by Grantee)

I, the undersigned,	, the duly authorized and acting legal
representative of Village of Salado	, do hereby certify as follows:
I have examined the attached contract(s) and sure agreements may be duly executed by the proper representatives; that said representatives have full property.	er parties, acting through their duly authorized power and authority to execute said agreements on
behalf of the respective parties; and that the agre obligations upon the parties executing the same in	
thereof.	accordance with terms, conditions and provisions
Attorney's signature:	Date:
The state of the s	
Print Attorney's name:	

### NOTICE TO BIDDERS

Sealed bids addressed to the Honorable Mayor and Board of Aldermen will be received at the office of Don Ferguson, Village Administrator, Village of Salado, Municipal Building, 301 N. Stagecoach Road, Salado, Texas, 76571 until 3:00 PM on Tuesday, July 7, 2020 for construction of a Royal Street Lift Station Odor Control Improvements in the Village of Salado. The bids shall be labeled:

## **Royal Street Lift Station Odor Control Improvements**

The Bid/Contract Documents, including Construction Plans, Technical Specifications, and Bid Forms are available beginning Friday, June 19, 2020:

- On-line at http://www.civcastusa.com. Documents may be downloaded or viewed free of charge at this website. It is the bidder's responsibility to determine that a complete set of documents as defined in the Instructions to Bidders is received.
- At the office of Kasberg, Patrick & Associates, LP; 19 North Main Street; Temple, TX 76501 for a non-refundable cost of \$50.00 per set, checks made payable to Kasberg, Patrick & Associates, LP.

The bids will be publicly opened and read aloud in the main conference room in Municipal Building at 3:00 PM on Tuesday, July 7, 2020. The Board of Aldermen will officially review the bids at their next regularly scheduled meeting and award the contract as soon thereafter as practical.

Bids must be submitted on the Bid Form provided and must be accompanied by a cashier's check, certified check or acceptable bidder's bond payable without recourse to the Village of Salado, Texas in an amount not less than five (5) percent of the bid submitted as a guarantee that the bidder will enter into a contract and execute a Performance Bond and a Payment Bond within ten (10) days after the notification of the award of the contract.

The Village of Salado reserves the right to accept or reject any and all bids, as the best interest of the City may require, and to waive any informality in bids received. The Village of Salado also reserves the right to award the Contract as may be advantageous to the Village.

All contractors/subcontractors that are debarred, suspended or otherwise excluded from or ineligible from participation in federal assistance programs may not undertake any activity in part or in full under this project.

A Non-Mandatory Pre-bid conference will be held at the Municipal Building, 301 N. Stagecoach Road, Salado, TX 76571, at 10:00 AM on Tuesday, June 30, 2020.

All questions and inquiries about the project should be directed to Rick N. Kasberg, P.E., until noon on Thursday, July 2, 2020. Questions after that time and date will not be addressed and the Engineer and/or Owner shall not be bound by any references or dates obtained by the Bidders unless an official addendum is produced and released by Kasberg, Patrick & Associates, LP.

Village Voice Publications:	VILLAGE OF SALADO, TEXAS
June 18, 2020	
June 25, 2020	
	Don Ferguson
	Village Administrator

## SPECIAL PROJECT INFORMATION TO BIDDERS/CONTRACTORS

- A. All questions and inquiries about the project should be directed to Rick N. Kasberg, P.E., until 12:00 PM (Noon) on Thursday, July 2, 2020. Questions after that time and date will not be addressed and the Engineer and/or Owner shall not be bound by any references or dates obtained by the Bidders unless an official addendum is produced and released by Kasberg, Patrick & Associates, LP.
- B. Daily, on-site construction representation and observation will be provided by the Village of Salado and/or Kasberg, Patrick & Associates, LP.
- C. Contract Administration and Pay Estimate Approvals will be provided by Kasberg, Patrick & Associates, LP after Submittal to KPA by the Construction Inspector.
- D. The Contractor shall provide construction staking for this project, if required.
- E. The Bid Item for Mobilization, Bonds and Insurance shall not exceed 5% of the total amount Bid for any particular Base Bid, Add Alternate Bid or Alternate Bid.
- F. This project will be awarded based on Total Amount bid for Base Bid, with or without the Deductive Alternate, as selected by Village of Salado Board of Alderman.
- G. The retainage for monthly partial payment requests shall be 10%.
- H. Monthly payments to the Contractor under the Standard Form of Agreement shall be for items completed as of the 25<sup>th</sup> of each month.
- I. The Bidder/Contractor shall provide, as part of the Contract Documents at the time of execution of the Contracts, a Corporate Resolution or similar instrument that assigns appropriate authority to the person signing the Contract.
- J. The use of electronic bid forms by Contractors will not be allowed by the Owner. Accuracy of all bids submitted shall be full responsibility of the Contractor.

### 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 will be provided for your use.

### 2. Interpretations or Addenda

No oral interpretations will be made to any bidder. Each request for an interpretation shall be made in writing to the Engineer prior to 12:00 PM (noon) on Thursday, July 2, 2020. 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 by noon on Monday, July 6, 2020. 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 fully acquaint himself with the existing conditions there and should fully inform himself as to the facilities involved, the difficulties and restrictions attending the performance of the contract. The bidder should thoroughly examine and familiarize himself with the 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 his failure to receive or examine any form or legal document or to visit the site or acquaint himself with the conditions there existing. The city will be justified in rejecting any claim based on lack of inspection of the site prior to the bid.

### 4. Bids

- a. All bids must be submitted on the forms provided and are subject to all requirements of the Contract Documents, 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 bidders' qualifications shall be sealed in an envelope and clearly labeled with the words "Bid Documents", the project number, name of bidder and the date and time of bid opening.
- d. The Owner may consider as irregular any bid on which there is an alteration of or departure from the bid form and, at its option, may reject any irregular bid.
- e. If a contract is awarded, it will be awarded to a responsible bidder on the basis of the lowest/best bid and the selected alternate bid items, if any. The contract will require the completion of the work in accordance with the contract documents.

### 5. Bid 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 Owner, 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.

## 6. Statement of Bidders Qualifications

The Owner 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 Owner 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 Owner that the bidder is qualified to carry out properly the terms of the contract.

## 7. 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.

### 8. Corrections

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

## 9. 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 Owner 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.

### 10. Opening of Bids

The Owner 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.

## 11. 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 locality. 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.

## 12. 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 Owner 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 Owner 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.

## 13. 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 Owner may grant, shall constitute a default and the Owner may, at its option either award the contract to the next lowest responsible bidder, or re-advertise for bids. In either case, the Owner 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 Owner for a refund.

## 14. 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.

## 15. 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, gender, or national origin.

### **BID FORM**

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Village of Salado

**Royal Street Lift Station Odor Control Improvements** 

THIS BID IS SUBMITTED TO:

Village of Salado

301 N. Stagecoach Road Salado, Texas 76571

- 1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- 2. BIDDER accepts all of the terms and conditions of the Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for sixty (60) days after the day of Bid opening. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within ten days after the date of OWNER's Notice of Award.
- 3. In submitting this bid, BIDDER represents, as more fully set forth in the Agreement, that:
  - a. BIDDER has examined copies of all the Bidding Documents and of the following addenda (receipt of all which is hereby acknowledged):

Number	Date	Name	

b. BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

- c. BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests and studies which pertain to the subsurface of physical conditions at the site or otherwise may affect the cost, progress, performance or furnishing of the Work as BIDDER considers necessary for the performance or finishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 8 of the Agreement; and no additional examinations, investigations, explorations, tests, reports, or similar information or data are or will be required by BIDDER for such purposes.
- d. BIDDER has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumed responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports or similar information or data in respect of said Underground Facilities are or will be required by BIDDER in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 8 of the Agreement.
- e. BIDDER has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- f. BIDDER has given OWNER written notice of all conflicts, errors or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by OWNER is acceptable to BIDDER.
- g. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other BIDDER or over OWNER.
- 4 BIDDER will complete work for the following prices:

## ROYAL STREET LIFT STATION ODOR CONTROL IMPROVEMENTS Village of Salado, Texas

## BASE BID

Item Estimated				Unit	Total Amount
No. Quantity	Unit	Description		Price	(in numerals)
1 100%	LS	Mobilization, Bonds & Insurance, not-to- exceed 5% of the Base Bid Amount, Complete For	\$		\$
2 100%	LS	Furnishing All Labor, Tools & Equipment & Constructing the Proposed Odor Control System Improvements at the Royal Street Lift Station, Complete in All Details. Including All Mechanical, Electrical or Other Equipment, Piping and Site Work as Specified Herein and Shown on the Plans, Ready to Operate, Complete For			
			\$_		\$
		TOTAL Base Bid (Items 1 - 2):	\$	(numerals)	

(written words)

### **BID SUMMARY**

BASE BID:	\$					
BASE BID:	\$					

- 5. BIDDER agrees that all Work on each project will be substantially complete and ready for final payment by the dates indicated in SC. 16, Time Allotted for Completion of the Special Condition located in the Contract Documents. BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.
- 6. BIDDER must answer the following questions (refer to INSTRUCTIONS TO BIDDERS for definitions):
  - A. Is the BIDDER that is making and submitting this bid a "RESIDENT BIDDER" or a "NON RESIDENT BIDDER"?

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$\boldsymbol{\Gamma}$	12	w	-1	

B. If the BIDDER is a "NON RESIDENT BIDDER", does the State in which the Non Resident Bidder's principal place of business is located have a law requiring a Non Resident Bidder of the State to bid a certain amount or percentage under the bid of a Resident Bidder of that State in order for the Non Resident Bidder of that State to be awarded a contract on his bid in such State?

### Answer:

C. If the answer to Question B above is "yes", then what amount or percentage must a Texas Resident Bidder under the bid of a Resident Bidder of that State in order to be awarded a contract on such bid in said State?

#### Answer:

- 7. The following documents are attached to and made a condition of this Bid:
  - a. Required Bid Security in the form of five percent of the Bidder's maximum base bid price and in the form of certified check of a Bid Bond.

8.	Communications conce	ng this Bid shall be addressed to;	
	Estimator:		
	Company:		
	Address:		
	_		*
	Phone:		
	Fax:		
9.		Bid which are defined in the General Conditions of th of the Contract Documents have the meanings assigned	
	SUBMITTED ON:	2020	
If BII	ODER is:		
An In	<u>ndividual</u>		
	Ву	(Seal)	
	(Individual's Na		
	Daina husinga ası		
	Doing business as: Business address:		
	Dushiess address.		
	_		
	Phone No:		
A Pai	rtnership		
	By	(Seal)	
	(Firm Name)		
	(General Partner)	· · · · · · · · · · · · · · · · · · ·	
	Business Address:		
	-		
	Phone No:		

## **A** Corporation

	By				(Seal)
		(Corporation N	ame)	-	
		(State of Corpo	ration)	-	
	Ву				
		(Name of Perso	n Authorized to Sign)		
		(Title)		•	
	Attest			_	
		(Secretary)			
	Busine	ss Address:			
	Phone	No:			
A Join	t Ventu	<u>ıre</u>			
	Ву				
		(Name)			
	Busines	ss Address:			
	Phone 1	No:			
	Ву				
		(Name)			
	Busines	ss Address:			
	Phone 1	No:	,		

(Each Joint Venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint should be in the manner indicated above.)

## CERTIFICATE AS TO CORPORATE PRINCIPAL

I,, certify that I am the	, Sec	cretary
of the Corporation named as Principal in the within bond	1; that	_, who
signed the said bond on behalf of the Principal was then		of
said corporation; that I know his signature, and his sign	nature thereto is genuine; and that said	d bond
was duly signed, sealed, and attested to, for and in be	half of said corporation by authority	of this
governing body.		
	Cor	porate Seal
Title:		

<sup>\*</sup> Power-of-attorney for person signing for surety company must be attached to bond.

## **BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we the	undersigned,as
PRINCIPAL, and bound unto Village of Salado	, as SURETY are held and firmly
bound unto Village of Salado	hereinafter called the "Owner", in the penal
sum of lawful money of the United States, for the payment of	f which sum well and truly to be made, we hind
ourselves, our heirs, executors, administrators, successors	s and assigns jointly and severally firmly by these
presents for the construction and completion of:	s, and assigns, joining and severany, minny by mese
•	
Royal Street Lift Station Odo	r Control Improvements
THE CONDITION OF THIS OBLIGATION IS SUC Accompanying Bid, dated	
NOW, THEREFOR, if the Principal shall not withdraw sopening of the same, or, if no period be specified, within within the period specified therefore, or if no period be forms are presented to him for signature, enter into a writh Bid as accepted, and give bond with good and sufficient superformance and proper fulfillment of such contract; or in period specified, or the failure to enter into such Contract Principal shall pay the Owner the difference between the which the local Public Agency may procure the required with the former, then the above obligation shall be void and virtue.	in thirty (30) days after the said opening, and shall specified, within ten (10) days after the prescribed tten contract with the Owner in accordance with the urety or sureties, as may be required, for the faithful in the event of the withdrawal of said Bid within the and give such bond within the time specified, if the e amount specified in said Bid and the amount for work or supplies or both, if the latter be in excess of
IN WITNESS THEREOF, the above-bounded parties have this day of, 2020, the being hereto affixed and these present signed by its undergoverning body.	ne name and corporate seal of each corporate party ersigned representative, pursuant to authority of its
	(SEAL)
	(SEAL)
Attest:	By:
	Affix
	Corporate
	Seal
Attest:	Ву:
	Affix
	Corporate
	Seal
	~~~
Attest:	Ву:
Countersigned	
Ву	
* Attorney-in-Fact, State of	

### STANDARD FORM OF AGREEMENT

COUNTY O	F Bell					
THIS	AGREEMENT, made and entered into this_	day of		,	2020,	by
and between_	Village of Salado		of	the	County	of
Bell	and State of <u>Texas</u> , acting through	Mayor			thereu	nto

duly authorized so to do, Party of the First Part, hereinafter termed OWNER,

of the , County of

and

and \_\_\_\_\_\_ of the \_\_\_\_\_\_, County of \_\_\_\_\_\_, County of \_\_\_\_\_\_, Party of the Second Part, Hereinafter termed CONTRACTOR.

STATE OF TEXAS

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Party of the First Part (OWNER), and under the conditions expressed in the bond bearing even date herewith, the said Party of the Second Part (CONTRACTOR), hereby agrees with the said Party of the First Part (OWNER) to commence and complete the construction of certain improvements described as follows:

#### ROYAL STREET LIFT STATION ODOR CONTROL IMPROVEMENTS

and all extra work in connection therewith, under the terms as stated in the General Conditions of the Agreement and at his (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 construction, in accordance with the conditions and prices stated in the Proposal attached hereto, and in accordance with the Notice to Contractors, General and Special Conditions of Agreement, Plans and other drawings and printing or written explanatory matter thereof, and the Specifications and addenda therefor, as prepared by Kasberg, Patrick & Associates, LP; 19 North Main; Temple, Texas, 76501; (254) 773-3731, herein entitled the ENGINEER, each of which has been identified by the CONTRACTOR and the ENGINEER, together with the CONTRACTOR'S written Proposal, the General Conditions of the Agreement, and the Performance and Payment Bonds hereto attached; all of which are made a part hereof and collectively evidence and constitute the entire contract.

The CONTRACTOR hereby agrees to commence work within ten (10) calendar days after the date written notice to do so has been given, and to be at Final Completion within 165 calendar days after the issuance of the "Notice to Proceed", subject to such extensions of time as are provided by the General and Special Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds the price or prices shown in the proposal, which forms a part of this contract, such payments to be subject to the General and Special Conditions of the contract.

Village of Salado, Texas Party of the First Part (OWNER)	Party of the Second Part (CONTRACTOR)
By: Mayor Skip Blancett	By:
ATTEST:	ATTEST:
APPROVED AS TO FORM:	

IN WITNESS WHEREOF, the parties to these presents have executed this Agreement in the year and day first above written.

#### PERFORMANCE BOND

(Name of Co	ntractor or Company)
(Traine of each	intractor or company)
(Address)	<u> </u>
a	hereinafter called Principal,
and	
(Name of Surety Company	
(Address)	
hereinafter called Surety, are held and firmly bound unto	
Village of Salado	
(Name of Recipient)	
301 N. Stagecoach Road, Village of Salado	o, TX 76571
(Recipient's Address)	
hereinafter called OWNER, in the penal sum of \$	
	Dollars (\$) i
lawful money of the United States, for the payment of v	which sum well and truly to be made we bine
ourselves, successors, and assigns, jointly and severally,	firmly in these presents.
THE CONDITION OF THIS OBLIGATION is such that	t whereas, the Principal entered into a certai
contract with the OWNER dated theday of	
which is hereto attached and made a part hereof for the co	onstruction of:

## Royal Street Lift Station Odor Control Improvements

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 there under 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.

PROVIDED, HOWEVER that this bond is executed pursuant to Chapter 2253 of the Texas Government Code, as amended, and all liabilities on this bond shall be determined in accordance with the provisions of such statute, to the same extent as if it were copied at length herein.

PROVIDED FURTHER, that if any legal action be filed on this bond, venue shall be in Bell County, Texas.

utno	rized by any change orders.	
		of which shall
	(Principal)	
Ву		_(s)
	(Address)	
		_
	(Surety)	
Ву _	(Attorney in Fact)	-
	By	(Address)  (Surety)

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

(Address)

(Address)

#### PAYMENT BOND

## KNOW ALL MEN BY THESE PRESENTS: that (Name of Contractor or Company) (Address) (Corporation / Partnership) , hereinafter called Principal, (Name of Surety Company) (Address) hereinafter called Surety, are held and firmly bound unto Village of Salado (Name of Recipient) 301 N. Stagecoach Road, Village of Salado, TX 76571 (Recipient's Address) hereinafter called OWNER, in the penal sum of \$ ) in lawful money of the United States, for this payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents. THE CONFIDENTIALITY OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the day of \_\_\_\_\_, 2020, a copy of which is hereto attached and made a part hereof for the construction of:

## ROYAL STREET LIFT STATION ODOR CONTROL IMPROVEMENTS

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUB-CONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUB-CONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed there under 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.

PROVIDED FURTHER that if any legal action be filed on this bond, venue shall be in Bell County, Texas.

PROVIDED FURTHER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code, as currently amended, and all liabilities on this bond shall be determined in accordance with the provisions of said statute to the same extent as if it were copied at length herein.

The Surety is responsible for additional amounts authorized by any change orders.

IN WITNESS WHEREOF, this instrument is	executed	d in 7 (Number)	counter-parts, each on o
which shall be deemed an original, this the		ž. 252	, 2020.
ATTEST:			
		(Principal)	
	By		(s)
(Principal Secretary)			
(SEAL)			
(Witness as to Principal)		(Address)	
(Address)	,		
ATTEST:			
TITLEST.		(Surety)	
	By _	•	
(Witness as to Surety)	• 20 20 20 20 20 20 20 20 20 20 20 20 20	(Attorney in Fact)	
(Address)		(Address)	

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

### CERTIFICATE OF INSURANCE

THIS CERTIFICATE IS ISSUED FOR THE DURATION OF THE PROJECT AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES LISTED BELOW.

NAME AND ADDRESS OF AGENCY **COMPANIES AFFORDING COVERAGES** COMPANY A **LETTER** COMPANY B **LETTER** NAME AND ADDRESS OF INSURED COMPANY C

**LETTER** COMPANY D **LETTER** COMPANY E LETTER

This is to certify that policies of insurance listed below have been issued to the insured named above and are in force at this time. Not withstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

COMPANY LETTER	TYPE OF INSURANCE	POLICY NUMBER	POLICY EXPIRATION DATE	LIMITS OF	LIABILITY IN THOU	JSANDS (000)
					EACH OCCURRENCE	AGGREGATE
	GENERAL LIABILITY Comprehensive Form	-		Bodily Injury	\$	\$
	Premises-Operations Explosions and Collapse Hazard			Property Damage	\$	\$
	Underground HazardProducts/Completed Operations HazardContractual InsuranceBroad Form Property DamageIndependent ContractorsPersonal Injury			Bodily Injury and Property Damage Combined	\$	\$
				Personal Inju	ury	\$

A	UTOMOBILE LIABILITY		Bodily Injury (Each Perso		\$
_	Comprehensive Form		(Each Perso	11)	
=	Owned Hired				
-	Non-Owned		Padily Injun		\$
			Bodily Injury (Each Accid		\$
			Property Da		\$
			Bodily Injury Property Da	and mage Combined	\$
E	XCESS LIABILITY				
-	Umbrella Form Other than Umbrella				
	ORKERS' COMPENSATION ND EMPLOYER'S LIABILITY		Statutory		
		<b>'</b>			\$ (Each Accoun
Description of Street Lift Staready to opera	Operations/ Furnish attion Odor Control Impr	all labor and material overments, compl	terials, tools ar ete in all detail	nd equipment s as specified	for Royal I herein &
Locations/Veh	icles				
PROJECT TIT	TLE: <u>ROYAL STREI</u> ENTS	ET LIFT STATIO	ON ODOR CO	<u>NTROL</u>	
PROJECT LO	CATION: Village of Sa	lado, TX			
The Village of Workman's Co	of Salado is named as ompensation.	an additional in	sured under al	l insurance,	other than
Cancellation:	No policies will be ca days after the owner l or registered or certifi	nas received writt			
NAME AND	ADDRESS OF CERTIF	ICATE HOLDEF	₹:		
DATE ISSUE	D:	. 2020.			
	~ ·	,,			
ATTHORIZE	D REPRESENTATIVE				

END OF SECTION

		Date:
Project:	ROYAL STREET LIFT STATION	ODOR CONTROL IMPROVEMENTS
Owner:	Village of Salado	Engineer's Project No.: 2002-105-40
Contract	: ROYAL STREET LIFT STATION	ODOR CONTROL IMPROVEMENTS
Bidder:		
Bidder's	Address:	
You are been con		, 2020 for the above Contract has r and are awarded a Contract for:
	ROYAL STREET LIFT STATION	ODOR CONTROL IMPROVEMENTS
The Tota	al Amount of your Contract is	(\$ ).
		nts (except Drawings) accompany this Notice of Award.
	ets of the Drawings will be delivered ce of Contract Documents by the Owne	separately or otherwise made available to you upon er.
	must comply with the following conditice of Award.	ons precedent within [15] days of the date you receive
1.	Deliver to the Engineer [7] fu	lly executed counterparts of the Contract Documents.
2.		ocuments the Contract security [Bonds] as specified in Conditions), and Supplementary Conditions.
3.	Other conditions precedent:	
	re to comply with these conditions within, annul this Notice of Award, and decl	n the time specified will entitle Owner to consider you are your Bid security forfeited.
	in ten days after you comply with the a counterpart of the Contract Documents	above conditions, Owner will return to you one fully
	Signed by:	
	Title	

**Notice to Proceed** 

Date:					
	ct: ROYAL STREET L		ODOR CONT	ROL IMPROV	<u>'EMENTS</u>
То:					
In acc	ordance with the Agreement d	ated		,by and	l between the
	Village of Salado, Texas	(Owner)	and		(Contractor)
for wo	ork to be performed in conjunc	ction with thel	Royal Street	Lift Station	Odor Control
<u>Impro</u>	vements				
Final	completion of Construction sha	all be within 1	65 consect	ıtive calendar d	ays after issuance
	Notice to Proceed.				
1.	Contractor is hereby notified				2020 and to
	complete the work on or before	ore		, 20	
2.	Liquidated damages to be p	·		-	•
	completion date will be asses				
	day after				the assessment of
	damages will be in accordance	e with the Speci	al Conditions,	Section 21.	
ISSUI	ED ON BEHALF OF		ACCEP	ΓED ON BEHA	LF OF
Vi	llage of Salado, Texas				
	,	-			
		_		Contractor Signa	ature)
			`	5	·
Date		_	Date		

# **General Conditions**

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## GENERAL CONDITIONS OF AGREEMENT

### 1. DEFINITIONS OF TERMS

- 1.01 ... OWNER, CONTRACTOR AND ENGINEER. The OWNER, the CONTRACTOR and the ENGINEER are those persons or organizations identified as such in the Agreement and are referred to throughout the Contract Documents as if singular in number and masculine in gender. The term ENGINEER means the ENGINEER or his duly authorized representative. The ENGINEER shall be understood to be the ENGINEER of the OWNER, and nothing contained in the Contract Documents shall create any contractual or agency relationship between the ENGINEER and the CONTRACTOR.
- 1.02 ... CONTRACT DOCUMENTS. The Contract Documents shall consist of the Notice to Contractors (Advertisement), Special Conditions (Instructions to Bidders), Proposal, signed Agreement, Performance and Payment Bonds (when required), Special Bonds (when required), General Conditions of the Agreement, Technical Specifications, Plans, and all modifications thereof incorporated in any of the documents before the execution of the agreement.

The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. In case of conflict between any of the Contract Documents, priority of interpretation shall be in the following order: Signed Agreement, Performance and Payment Bonds, Special Bonds (if any), Proposal, Special Conditions of Agreement, Notice to Contractors, Technical Specifications, Plans, and General Conditions of Agreement.

- 1.03 ... SUB-CONTRACTOR. The term Sub-Contractor, as employed herein, includes only those having a direct contract with the CONTRACTOR and it includes one who furnishes material worked to a special design according to the plans or specifications of this work, but does not include one who merely furnishes material not so worked.
- 1.04 ... WRITTEN NOTICE. Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.
- 1.05 ... WORK. The CONTRACTOR shall provide and pay for all materials, supplies, machinery, equipment, tools, superintendence, labor, services, insurance, and all water, light, power, fuel, transportation and other facilities necessary for the execution and completion of the work covered by the Contract Documents. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of a good quality. The CONTRACTOR shall, if required, furnish satisfactory evidence as to the kind and quality of materials. Materials or work described in words, which so applied, have a well-known technical or trade meaning shall be held to refer to such recognized standards.
- 1.06 ... EXTRA WORK. The term "Extra Work" as used in this contract shall be understood to mean and include all work that may be required by the ENGINEER or OWNER to be done by the CONTRACTOR to accomplish any change, alteration or addition to the work

shown upon the plans, or reasonably implied by the specifications, and not covered by the CONTRACTOR'S Proposal, except as provided under "Changes and Alterations", herein.

- 1.07 ... WORKING DAY. A "Working Day" is defined as any day not including Saturdays, Sundays or any legal holidays, in which weather or other conditions, not under the control of the CONTRACTOR, will permit construction of the principal units of the work for a period of not less than seven (7) hours between 7:00 a.m. and 6:00 p.m.
- 1.08 ... CALENDAR DAY. "Calendar Day" is any day of the week or month, no days being excepted.
- 1.09 ... SUBSTANTIALLY COMPLETED. By the term "substantially completed" is meant that the structure has been made suitable for use or occupancy or the facility is in condition to serve its intended purpose, but still may require minor miscellaneous work and adjustment.

### 2. RESPONSIBILITIES OF THE ENGINEER AND THE CONTRACTOR

- **2.01** ... **OWNER ENGINEER RELATIONSHIP**. The ENGINEER will be the OWNER'S representative during construction. The duties, responsibilities and limitations of authority of the ENGINEER as the OWNER'S representative during construction are as set forth in the Contract Documents and shall not be extended or limited without written consent of the OWNER and ENGINEER. The ENGINEER will advise and consult with the OWNER, and all of OWNER'S instructions to the CONTRACTOR shall be issued through the ENGINEER.
- 2.02 ... PROFESSIONAL INSPECTION BY ENGINEER. The ENGINEER shall make periodic visits to the site to familiarize himself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the ENGINEER shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other Contract Document, the ENGINEER shall not be in any way responsible or liable for any acts, errors, omissions or negligence of the CONTRACTOR, any subcontractor or any of the CONTRACTOR'S or subcontractor's agents, servants or employees or any other person, firm or corporation performing or attempting to perform any of the work.
- 2.03 ... PAYMENTS FOR WORK. The ENGINEER shall review CONTRACTOR'S applications for payment and supporting data, determine the amount owed to the CONTRACTOR and approve, in writing, payment to CONTRACTOR in such amounts; such approval of payment to CONTRACTOR constitutes a representation to the OWNER of ENGINEER'S professional judgment that the work has progressed to the point indicated to the best of his knowledge, information and belief, but such approval of an application for payment to CONTRACTOR shall not be deemed as a representation by ENGINEER that ENGINEER has

made any examination to determine how or for what purpose CONTRACTOR has used the moneys paid on account of the Contract price.

- **2.04** ... **INITIAL DETERMINATIONS**. The ENGINEER initially shall determine all claims, disputes and other matters in question between the CONTRACTOR and the OWNER relating to the execution or progress of the work or the interpretation of the Contract Documents and the ENGINEER'S decision shall be rendered in writing within a reasonable time. Should the ENGINEER fail to make such decision within a reasonable time, appeal to arbitration may be taken as if his decision had been rendered against the party appealing.
- **2.05** ... **OBJECTIONS**. In the event the ENGINEER renders any decision which, in the opinion of either party hereto, is not in accordance with the meaning and intent of this contract, either party may file with the ENGINEER within thirty days his written objection to the decision, and by such action may reserve the right to submit the question so raised to arbitration as hereinafter provided.
- **2.06** ... LINES AND GRADES. Unless otherwise specified, all lines and grades shall be furnished by the ENGINEER or his representative. Whenever necessary, construction work shall be suspended to permit performance of this work, but such suspension will be as brief as practicable and the CONTRACTOR shall be allowed no extra compensation therefor. The CONTRACTOR shall give the ENGINEER ample notice of the time and place where lines and grades will be needed. All stakes, marks, etc., shall be carefully preserved by the CONTRACTOR, and in case of careless destruction or removal by him or his employees, such stakes, marks, etc., shall be replaced at the CONTRACTOR'S expense.
- **2.07** ... **CONTRACTOR'S DUTY AND SUPERINTENDENCE**. The CONTRACTOR shall give adequate attention to the faithful prosecution and completion of this contract and shall keep on the work, during its progress, a competent superintendent and any necessary assistants. The superintendent shall represent the CONTRACTOR in his absence and all directions given to him shall be as binding as if given to the CONTRACTOR.

The CONTRACTOR is and at all times shall remain an independent contractor, solely responsible for the manner and method of completing his work under this contract, with full power and authority to select the means, method and manner of performing such work, so long as such methods do not adversely affect the completed improvements, the OWNER and ENGINEER being interested only in the result obtained and conformity of such completed improvements to the plans, specifications and contract.

Likewise, the CONTRACTOR shall be solely responsible for the safety of himself, his employees and other persons, as well as for the protection of the safety of the improvements being erected and the property of himself or any other person, as a result of his operations hereunder. Engineering construction drawings and specifications as well as any additional information concerning the work to be performed passing from or through the ENGINEER shall not be interpreted as requiring or allowing CONTRACTOR to deviate from the plans and specifications, the intent of such drawings, specifications and any other such instructions being to define with particularity the agreement of the parties as to the work the CONTRACTOR is to perform. CONTRACTOR shall be fully and completely liable, at his own expense, for design, construction, installation and use, or non-use of all items and methods incident to performance of

the contract, and for all loss, damage or injury incident thereto, either to person or property, including, without limitation, the adequacy of all temporary supports, shoring, bracing, scaffolding, machinery or equipment, safety precautions or devices, and similar items or devices used by him during construction.

Any review of work in process, or any visit or observation during construction, or any clarification of plans and specifications, by the ENGINEER, or any agent, employee, or representative of either of them, whether through personal observation on the project site or by means of approval of shop drawings for temporary construction on construction processes, or by other means or method, is agreed by the CONTRACTOR to be for the purpose of observing the extent and nature of work completed or being performed, as measured against the drawings and specifications constituting the contract, or for the purpose of enabling CONTRACTOR to more fully understand the plans and specifications so that the completed construction work will conform thereto, and shall in no way relieve the CONTRACTOR from full and complete responsibility for the proper performance of his work on the project, including but without limitation the propriety of means and methods of the CONTRACTOR in performing said contract, and the adequacy of any designs, plans or other facilities for accomplishing such performance. Deviation by the CONTRACTOR from plans and specifications that may have been in evidence during any such visitation or observation by the ENGINEER, or any of his representatives, whether called to the CONTRACTOR'S attention or not shall in no way relieve CONTRACTOR from his responsibility to complete all work in accordance with said plans and specifications.

- 2.08 ... CONTRACTOR'S UNDERSTANDING. It is understood and agreed that the CONTRACTOR has, by careful examination, satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work under this contract. No verbal agreement or conversation with any officer, agent or employee of the OWNER or ENGINEER either before or after the execution of this contract, shall affect or modify any of the terms or obligations herein contained.
- 2.09 ... CHARACTER OF WORKMEN. The CONTRACTOR agrees to employ only orderly and competent men, skillful in the performance of the type of work required under this contract, to do the work; and agrees that whenever the ENGINEER shall inform him in writing that any man or men on the work are, in his opinion, incompetent, unfaithful or disorderly, such man or men shall be discharged from the work and shall not again be employed on the work without the ENGINEER'S written consent.
- **2.10 ... CONTRACTOR'S BUILDINGS**. The building of structures for housing men, or the erection of tents or other forms of protection, will be permitted only at such places as the ENGINEER shall direct, and the sanitary conditions of the grounds in or about such structures shall at all times be maintained in a manner satisfactory to the ENGINEER.
- **2.11** ... **SANITATION**. Necessary sanitary conveniences for the use of laborers on the work, properly secluded from public observation, shall be constructed and maintained by the CONTRACTOR in such a manner and at such points as shall be approved by the ENGINEER, and their use shall be strictly enforced.

2.12 ... SHOP DRAWINGS. The CONTRACTOR shall submit to the ENGINEER, with such promptness as to cause no delay in his own work or in that of any other Contractor, four checked copies, unless otherwise specified, of all shop and/or setting drawings and schedules required for the work of the various trades, and the ENGINEER shall pass upon them with reasonable promptness, making desired corrections. The CONTRACTOR shall make any corrections required by the ENGINEER; file with him two corrected copies and furnish such other copies as may be needed. The ENGINEER'S approval of such drawings or schedules shall not relieve the CONTRACTOR from responsibility for deviations from drawings or specifications, unless he has in writing called the ENGINEER'S attention to such deviations at the time of submission, nor shall it relieve him from responsibility for errors of any sort in shop drawings or schedules. It shall be the CONTRACTOR'S responsibility to fully and completely review all shop drawings to ascertain their effect on his ability to perform the required contract work in accordance with the plans and specifications and within the contract time.

Such review by the ENGINEER shall be for the sole purpose of determining the sufficiency of said drawings or schedules to result in finished improvements in conformity with the plans and specifications, and shall not relieve the CONTRACTOR of his duty as an independent contractor as previously set forth, it being expressly understood and agreed that the ENGINEER does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules, or any means or methods reflected thereby, in relation to the safety of either person or property during CONTRACTOR'S performance hereunder.

2.13 ... PRELIMINARY APPROVAL. The ENGINEER shall not have the power to waive the obligations of this contract for the furnishing by the CONTRACTOR of good material, and of his performing good work as herein described, and in full accordance with the plans and specifications. No failure or omission of the ENGINEER to discover, object to or condemn any defective work or material shall release the CONTRACTOR from the obligations to fully and properly perform the contract, including without limitations, the obligation to at once tear out, remove and properly replace the same at any time prior to final acceptance upon the discovery of said defective work or material; provided, however, that the ENGINEER shall, upon request of the CONTRACTOR, inspect and accept or reject any material furnished, and in event the material has been once accepted by the ENGINEER, such acceptance shall be binding on the OWNER, unless it can be clearly shown that such material furnished does not meet the specifications for this work.

Any questioned work may be ordered taken up or removed for re-examination, by the ENGINEER, prior to final acceptance, and if found not in accordance with the specifications for said work, all expense of removing, re-examination and replacement shall be borne by the CONTRACTOR, otherwise the expense thus incurred shall be allowed as EXTRA WORK, and shall be paid for by the OWNER; provided that, where inspection or approval is specifically required by the specifications prior to performance of certain work, should the CONTRACTOR proceed with such work without requesting prior inspection or approval he shall bear all expense of taking up, removing, and replacing this work if so directed by the ENGINEER.

**2.14** ... **DEFECTS AND THEIR REMEDIES**. It is further agreed that if the work of any part thereof, or any material brought on the site of the work for use in the work or selected for the same, shall be deemed by the ENGINEER as unsuitable or not in conformity with the specifications, the CONTRACTOR shall, after receipt of written notice thereof from the

ENGINEER, forthwith remove such material and rebuild or otherwise remedy such work so that it shall be in full accordance with this contract.

2.15 ... CHANGES AND ALTERATIONS. The CONTRACTOR further agrees that the OWNER may make such changes and alterations as the OWNER may see fit, in the line, grade, form, dimensions, plans or materials for the work herein contemplated, or any part thereof, either before or after the beginning of the construction, without affecting the validity of this contract and the accompanying Performance and Payment Bonds.

If such changes or alterations diminish the quantity of the work to be done, they shall not constitute the basis for a claim for damages, or anticipated profits on the work that may be dispensed with, except as provided for unit price items under Section 5 "Measurement and Payment." If the amount of work is increased, and the work can fairly be classified under the specifications, such increase shall be paid for according to the quantity actually done and at the unit price, if any, established for such work under this contract, except as provided for unit price items under Section 5 "Measurement and Payment;" otherwise, such additional work shall be paid for as provided under Extra Work. In case the OWNER shall make such changes or alterations as shall make useless any work already done or material already furnished or used in said work, then the OWNER shall recompense the CONTRACTOR for any material or labor so used, and for any actual loss occasioned by such change, due to actual expenses incurred in preparation for the work as originally planned.

#### 3. GENERAL OBLIGATIONS AND RESPONSIBILITIES

- 3.01 ... KEEPING OF PLANS AND SPECIFICATIONS ACCESSIBLE. The ENGINEER shall furnish the CONTRACTOR with an adequate and reasonable number of copies of all plans and specifications without expense to him, and the CONTRACTOR shall keep one copy of the same constantly accessible on the work, with the latest revisions noted thereon.
- **3.02** ... **OWNERSHIP OF DRAWINGS**. All drawings, specifications and copies thereof furnished by the ENGINEER shall not be reused on other work, and, with the exception of the signed contract sets, are to be returned to him on request, at the completion of the work. All models are the property of the OWNER.
- 3.03 ... ADEQUACY OF DESIGN. It is understood that the OWNER believes it has employed competent engineers and designers. It is, therefore, agreed that the OWNER shall be responsible for the adequacy of the design, sufficiency of the Contract Documents, the safety of the structure and the practicability of the operations of the completed project; provided the CONTRACTOR has complied with the requirements of the said Contract Documents, all approved modifications thereof, and additions and alterations thereto approved in writing by the OWNER. The burden of proof of such compliance shall be upon the CONTRACTOR to show that he has complied with the said requirements of the Contract Documents, approved modifications thereof and all approved additions and alterations thereto.
- 3.04 ... RIGHT OF ENTRY. The OWNER reserves the right to enter the property or location on which the works herein contracted for are to be constructed or installed, by such

agent or agents as he may elect, for the purpose of inspecting the work, or for the purpose of constructing or installing such collateral work as said OWNER may desire.

- 3.05 ... COLLATERAL CONTRACTS. The OWNER agrees to provide by separate contract or otherwise, all labor and material essential to the completion of the work specifically excluded from this contract, in such manner as not to delay the progress of the work, or damage said CONTRACTOR, except where such delays are specifically mentioned elsewhere in the Contract Documents.
- 3.06 ... DISCREPANCIES AND OMISSIONS. It is further agreed that it is the intent of this contract that all work must be done and all material must be furnished in accordance with the generally accepted practice, and in the event of any discrepancies between the separate contract documents, the priority of interpretation defined under "Contract Documents" shall govern. In the event that there is still any doubt as to the meaning and intent of any portion of the contract, specifications or drawings, the ENGINEER shall define which is intended to apply to the work.
- **3.07** ... EQUIPMENT, MATERIALS AND CONSTRUCTION PLANT. The CONTRACTOR shall be responsible for the care, preservation, conservation, and protection of all materials, supplies, machinery, equipment, tools, apparatus, accessories, facilities, all means of construction, and any and all parts of the work, whether the CONTRACTOR has been paid, partially paid, or not paid for such work, until the entire work is completed and accepted.
- 3.08 ... DAMAGES. In the event the CONTRACTOR is damaged in the course of the completion of the work by the act, neglect, omission, mistake or default of the OWNER, or of the ENGINEER, or of any other CONTRACTOR employed by the OWNER upon the work, thereby causing loss to the CONTRACTOR, the OWNER agrees that he will reimburse the CONTRACTOR for such loss. In the event the OWNER is damaged in the course of the work by the act, negligence, omission, mistake or default of the CONTRACTOR, or should the CONTRACTOR unreasonably delay the progress of the work being done by others on the job so as to cause loss for which the OWNER becomes liable, then the CONTRACTOR shall reimburse the OWNER for such loss.
- 3.09 ... PROTECTION AGAINST ACCIDENT TO EMPLOYEES AND THE PUBLIC. The CONTRACTOR shall at all times exercise reasonable precautions for the safety of employees and others on or near the work and shall comply with all applicable provisions of Federal, State, and Municipal safety laws and building and construction codes. All machinery and equipment and other physical hazards shall be guarded in accordance with the "Manual of Accident Prevention in Construction" of the Associated General Contractors of America except where incompatible with Federal, State, or Municipal laws or regulations. The CONTRACTOR shall provide such machinery guards, safe walkways, ladders, bridges, gangplanks, and other safety devices. The safety precautions actually taken and their adequacy shall be the sole responsibility of the CONTRACTOR, acting at his discretion as an independent contractor.
- 3.10 ... PERFORMANCE AND PAYMENT BONDS. Unless otherwise specified, it is further agreed by the parties to this Contract that the CONTRACTOR will execute separate performance and payment bonds, each in the sum of one hundred (100) percent of the total contract price, in standard forms for this purpose, guaranteeing faithful performance of the work

and the fulfillment of any guarantees required, and further guaranteeing payment to all persons supplying labor and materials or furnishing him any equipment in the execution of the Contract, and it is agreed that this contract shall not be in effect until such performance and payment bonds are furnished and approved by the OWNER.

Unless otherwise approved in writing by the OWNER, the surety company underwriting the bonds shall be acceptable according to the latest list of companies holding certificates of authority from the Secretary of the Treasury of the United States.

Unless otherwise specified, the cost of the premium for the performance and payment bonds shall be included in the CONTRACTOR'S proposal.

- 3.11 ... LOSSES FROM NATURAL CAUSES. Unless otherwise specified, all loss or damage to the CONTRACTOR arising out of the nature of the work to be done, or from the action of the elements, or from any unforeseen circumstance in the prosecution of the same, or from unusual obstructions or difficulties which may be encountered in the prosecution of the work, shall be sustained and borne by the CONTRACTOR at his own cost and expense.
- 3.12 ... PROTECTION OF ADJOINING PROPERTY. The said CONTRACTOR shall take proper means to protect the adjacent or adjoining property or properties in any way encountered, which might be injured or seriously affected by any process of construction to be undertaken under this Agreement, from any damage or injury by reason of said process of construction; and he shall be liable for any and all claims for such damage on account of his failure to fully protect all adjoining property. The CONTRACTOR agrees to indemnify, save and hold harmless the OWNER and ENGINEER against any claim or claims for damages due to any injury to any adjacent or adjoining property, arising or growing out of the performance of the contract; but any such indemnity shall not apply to any claim of any kind arising out of the existence or character of the work.
- 3.13 ... PROTECTION AGAINST CLAIMS OF SUB-CONTRACTORS, LABORERS, MATERIALMEN AND FURNISHERS OF MACHINERY, EQUIPMENT AND SUPPLIES. The CONTRACTOR agrees that he will indemnify and save the OWNER and ENGINEER harmless from all claims growing out of the lawful demands of sub-contractors, laborers, workmen, mechanics, materialmen and furnishers of machinery and parts thereof, equipment, power tools, and all supplies, including commissary, incurred in the furtherance of the performance of this contract. When so desired by the OWNER, the CONTRACTOR shall furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged or waived. If the CONTRACTOR fails so to do, then the OWNER may at the option of the CONTRACTOR either pay directly any unpaid bills, of which the OWNER has written notice, or withhold from the CONTRACTOR'S unpaid compensation a sum of money deemed reasonably sufficient to liquidate any and all such lawful claims until satisfactory evidence is furnished at all liabilities have been fully discharged, whereupon payments to the CONTRACTOR shall be resumed in full, in accordance with the terms of this contract, but in no event shall the provisions of this sentence be construed to impose any obligation upon the OWNER by either the CONTRACTOR or his Surety.
- **3.14 ... PROTECTION AGAINST ROYALTIES OR PATENTED INVENTION**. The CONTRACTOR shall pay all royalties and license fees, and shall provide for the use of any design, device, material or process covered by letters patent or copyright by suitable legal

agreement with the patentee or owner. The CONTRACTOR shall defend all suits or claims for infringement of any patent or copyright rights and shall indemnify and save the OWNER and ENGINEER harmless from any loss on account thereof, except that the OWNER shall defend all such suits and claims and shall be responsible for all such loss when a particular design, device, material or process or the product of a particular manufacturer or manufacturers is specified or required by the OWNER; provided however, if choice of alternate design, device, material or process is allowed to the CONTRACTOR, the CONTRACTOR shall indemnify and save OWNER harmless from any loss on account thereof. If the material or process specified or required by the OWNER is an infringement, the CONTRACTOR shall be responsible for such loss unless he promptly gives such information the OWNER.

- 3.15 ... LAWS AND ORDINANCES. The CONTRACTOR shall at all times observe and comply with all Federal, State and local laws, ordinances and regulations, which in any manner affect the contract or the work, and shall indemnify and save harmless the OWNER and ENGINEER against any claim arising from the violation of any such laws, ordinances, and regulations whether by the CONTRACTOR or his employees, except where such violations are called for by the provisions of the Contract Documents. If the CONTRACTOR observes that the plans and specifications are at variance therewith, he shall promptly notify the ENGINEER in writing, and any necessary changes shall be adjusted as provided in the contract for changes in the work. If the CONTRACTOR performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the ENGINEER, he shall bear all costs arising therefrom. In case the OWNER is a body politic and corporate, the law from which it derives its powers, insofar as the same regulates the objects for which, or the manner in which, or the conditions under which the OWNER may enter into contract, shall be controlling, and shall be considered as part of this contract, to the same effect as though embodies herein.
- 3.16 ... ASSIGNMENT AND SUBLETTING. The CONTRACTOR further agrees that he will retain personal control and will give his personal attention to the fulfillment of this contract and that he will not assign by Power of Attorney, or otherwise, or sublet said contract without the written consent of the ENGINEER, and that no part or feature of the work will be sublet to anyone objectionable to the ENGINEER or the OWNER. The CONTRACTOR further agrees that the subletting of any portion or feature of the work, or materials required in the performance of this contract, shall not relieve the CONTRACTOR from his full obligations to the OWNER, as provided by this Agreement.
- **3.17 ... INDEMNIFICATION**. The CONTRACTOR shall defend, indemnify and hold harmless the OWNER and the ENGINEER and their respective officers, agents and employees, from and against all damages, claims, losses, demands, suits, judgments and costs, including reasonable attorneys' fees and expenses, arising out of or resulting from the performance of the work, provided that any such damages, claim, loss, demand, suit, judgment, cost or expense:
  - ......(1) . . . is attributable to bodily injury, sickness, disease or death or to injury to or destruction of tangible property (other than the work itself) including the loss of use resulting therefrom; and
  - ......(2) . . . is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any one of them or anyone for whose acts any of them may be liable,

regardless of whether or not it is caused in part by a party indemnified hereunder.

The obligation of the CONTRACTOR under this Paragraph shall not extend to the liability of the ENGINEER, his agents or employees arising out of the preparation or approval of maps, drawings, reports, surveys, Change Orders, designs or specifications, or the giving of or the failure to give directions or instructions by the ENGINEER, his agents or employees, provided such giving or failure to give is the primary cause of the injury or damage.

- 3.18 ... INSURANCE. The CONTRACTOR at his own expense shall purchase, maintain and keep in force such insurance as will protect him from claims set forth below which may arise out of or result from the CONTRACTOR'S operations under the Contract, whether such operations be by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
  - ......(1) . . . Workmen's compensation claims, disability benefits and other similar employee benefit acts;
  - ......(2) . . . Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees, and claims insured by usual bodily injury liability coverages;
  - ......(3) . . . Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees, and claims insured by usual bodily injury liability coverages; and
  - .....(4) . . . Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- **3.18.1** ... CERTIFICATE OF INSURANCE. Before commencing any of the work, CONTRACTOR shall file with the OWNER valid Certificates of Insurance acceptable to the OWNER and the ENGINEER. Such Certificates shall contain a provision that coverages afforded under the policies will not be canceled until at least fifteen days' prior written notice has been given to the OWNER.

The CONTRACTOR shall also file with the OWNER valid Certificates of Insurance covering all sub-contractors.

#### 4. PROSECUTION AND PROGRESS

4.01 ... TIME AND ORDER OF COMPLETION. It is the meaning and intent of this contract, unless otherwise herein specifically provided, that the CONTRACTOR shall be allowed to prosecute his work at such times and seasons, in such order of precedence, and in such manner as shall be most conducive to economy of construction: provided, however, that the order and the time of prosecution shall be such that the work shall be substantially completed as a whole and in part, in accordance with this contract, the plans and specifications, and within the time of completion designated in the Proposal; provided, also, that when the OWNER is having other work done, either by contract or by his own force, the ENGINEER may direct the time and manner of constructing the work done under this contract, so that conflict will be avoided and the construction of the various works being done for the OWNER shall be harmonized.

The CONTRACTOR shall submit, at such times as may reasonably be requested by the ENGINEER schedules which shall show the order in which the CONTRACTOR proposes to carry on the work, with dates at which the CONTRACTOR will start the several parts of the work, and estimated dates of completion of the several parts.

- **4.02** ... **EXTENSION OF TIME.** Should the CONTRACTOR be delayed in the completion of the work by any act or neglect of the OWNER or ENGINEER, or of any employee of either, or by other contractors employed by the OWNER, or by changes ordered in the work, or by strikes, lockouts, fires, and unusual delays by common carriers, or unavoidable cause or causes beyond the CONTRACTOR'S control, or by any cause which the ENGINEER shall decide justifies the delay, then an extension of time shall be allowed for completing the work, sufficient to compensate for the delay, the amount of the extension to be determined by the ENGINEER, provided, however, that the CONTRACTOR shall give the ENGINEER prompt notice in writing of the cause of such delay.
- **4.03** ... **HINDRANCES AND DELAYS.** No claims shall be made by the CONTRACTOR for damages resulting from hindrances or delays from any cause (except where the work is stopped by order of the OWNER) during the progress of any portion of the work embraced in this contract. In case said work shall be stopped by the act of the OWNER, then such expense as in the judgment of the ENGINEER is caused by such stoppage of said work shall be paid by the OWNER to the CONTRACTOR.

#### 5. MEASUREMENT AND PAYMENT

- **5.01 ... QUANTITIES AND MEASUREMENTS**. No extra or customary measurements of any kind will be allowed, but the actual measured and/or computed length, area, solid contents, number and weight only shall be considered, unless specifically provided.
- 5.02 ... ESTIMATED QUANTITIES. This agreement, including the specifications, plans and estimate, is intended to show clearly all work to be done and material to be furnished hereunder. Where the estimated quantities are shown for the various classes of work to be done and material to be furnished under this contract, they are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. It is understood and agreed that the actual amount of work to be done and material to be furnished under this contract may differ somewhat from these estimates, and that where the basis for payment under this contract is the unit price method, payment shall be for the actual amount of such work done and the material furnished.

Where payment is based on the unit price method, the CONTRACTOR agrees that he will make no claim for damages, anticipated profits or otherwise on account of any differences which may be found between the quantities of work actually done, the material actually furnished under this contract and the estimated quantities contemplated and contained in the proposal; provided, however, that in case the actual quantity of any major item should become as much as 20% more than, or 20% less than the estimated or contemplated quantity for such items, then either party to this Agreement, upon demand, shall be entitled to a revised consideration upon the portion of the work above or below 20% of the estimated quantity.

A "Major Item" shall be construed to be any individual bid item incurred in the proposal that has a total cost equal to or greater than five (5) percent of the total contract cost, computed on the basis of the proposal quantities and the contract unit prices.

Any revised consideration is to be determined by agreement between the parties, otherwise by the terms of this Agreement, as provided under "Extra Work."

- 5.03 ... PRICE OF WORK. In consideration of the furnishing of all the necessary labor, equipment and material, and the completion of all work by the CONTRACTOR, and on the completion of all work and of the delivery of all material embraced in this Contract in full conformity with the specifications and stipulations herein contained, the OWNER agrees to pay the CONTRACTOR the prices set forth in the Proposal hereto attached, which has been made a part of this contract. The CONTRACTOR hereby agrees to receive such prices in full for furnishing all material and all labor required for the aforesaid work, also for all expense incurred by him, and for well and truly performing the same and the whole thereof in the manner and according to this Agreement.
- **5.04** ... **PARTIAL PAYMENTS**. On or before the 25th day of each month, the CONTRACTOR shall prepare and submit to the ENGINEER for approval or modification a statement showing as completely as practicable the total value of the work done by the CONTRACTOR up to and including the last day of the preceding month; said statement shall also include the value of all sound materials delivered on the site of the work that are to be fabricated into the work.

The OWNER shall then pay the CONTRACTOR on or before the 15th day of the current month the total amount of the approved statement, less 10 percent of the amount thereof, which 10 percent shall be retained until final payment, and further less all previous payments and all further sums that may be retained by the OWNER under the terms of this Agreement. It is understood, however, that in case the whole work be near to completion and some unexpected and unusual delay occurs due to no fault or neglect on the part of the CONTRACTOR, the OWNER may -- upon recommendation of the ENGINEER -- pay a reasonable and equitable portion of the retained percentage to the CONTRACTOR, or the CONTRACTOR at the OWNER'S option, may be relieved of the obligation to fully complete the work and, thereupon, the CONTRACTOR shall receive payment of the balance due him under the contract subject only to the conditions stated under "Final Payment".

5.05 ... USE OF COMPLETED PORTIONS. The OWNER shall have the right to take possession of and use any completed or partially completed portions of the work, notwithstanding the time for completing the entire work or such portions may not have expired but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the work, the CONTRACTOR shall be entitled to such extra compensation, or extension of time, or both, as the ENGINEER may determine.

The CONTRACTOR shall notify the ENGINEER when, in the CONTRACTOR'S opinion, the contract is "substantially completed" and when so notifying the ENGINEER, the CONTRACTOR shall furnish to the ENGINEER in writing a detailed list of unfinished work. The ENGINEER will review the CONTRACTOR'S list of unfinished work and will add thereto such items as the CONTRACTOR has failed to include. The "substantial completion" of the

structure or facility shall not excuse the CONTRACTOR from performing all of the work undertaken, whether of a minor or major nature, and thereby completing the structure or facility in accordance with the Contract Documents.

- 5.06 ... FINAL COMPLETION AND ACCEPTANCE. Within ten (10) days after the CONTRACTOR has given the ENGINEER written notice that the work has been completed, or substantially completed, the ENGINEER and the OWNER shall inspect the work and within said time, if the work be found to be completed or substantially completed in accordance with the Contract Documents, the ENGINEER shall issue to the OWNER and the CONTRACTOR his Certificate of Completion, and thereupon it shall be the duty of the OWNER within ten (10) days to issue a Certificate of Acceptance of the work to the CONTRACTOR or to advise the CONTRACTOR in writing of the reason for non-acceptance.
- 5.07 ... FINAL PAYMENT. Upon the issuance of the Certificate of Completion, the ENGINEER shall proceed to make final measurements and prepare final statement of the value of all work performed and materials furnished under the terms of the Agreement and shall certify same to the OWNER, who shall pay to the CONTRACTOR on or after the 30th day, and before the 35th day, after the date of the Certificate of Completion, the balance due the CONTRACTOR under the terms of this Agreement, provided he has fully performed his contractual obligations under the terms of this contract; and said payment shall become due in any event upon said performance by the CONTRACTOR. Neither the Certificate of Acceptance nor the final payment, nor any provision in the Contract Documents, shall relieve the CONTRACTOR of the obligation for fulfillment of any warranty which may be required.
- **5.08** ... **PAYMENTS WITHHELD.** The OWNER may, on account of subsequently discovered evidence, withhold or nullify the whole or part of any certificate to such extent as may be necessary to protect himself from loss on account of:

When the above grounds are removed or the CONTRACTOR provides a Surety Bond satisfactory to the OWNER, which will protect the OWNER in the amount withheld, payment shall be made for amounts withheld because of them.

5.09 ... DELAYED PAYMENTS. Should the OWNER fail to make payment to the CONTRACTOR of the sum named in any partial or final statement, when payment is due, then the OWNER shall pay to the CONTRACTOR, in addition to the sum shown as due by such statement, interest thereon at the rate of six (6) percent per annum, unless otherwise specified, from date due as provided under "Partial Payments" and "Final Payments", until fully paid, which shall fully liquidate any injury to the CONTRACTOR growing out of such delay in payment, but the right is expressly reversed to the CONTRACTOR in the event payments be not

promptly made, as provided under "Partial Payments", to at any time thereafter treat the contract as abandoned by the OWNER and recover compensation, as provided under "Abandonment of Contract", unless such payments are withheld in accordance with the provisions of "Payments Withheld".

#### 6. EXTRA WORK AND CLAIMS

**6.01** ... CHANGE ORDERS. Without invalidating this Agreement, the OWNER may, at any time or from time to time, order additions, deletions or revisions to the work; such changes will be authorized by Change Order to be prepared by the ENGINEER for execution by the OWNER and the CONTRACTOR. The Change Order shall set forth the basis for any change in contract price, as hereinafter set forth for Extra Work, and any change in contract time which may result from the change.

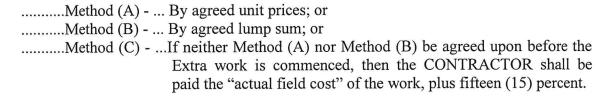
In the event the CONTRACTOR shall refuse to execute a Change Order which has been prepared by the ENGINEER and executed by the OWNER, the ENGINEER may in writing instruct the CONTRACTOR to proceed with the work as set forth in the Change Order and the CONTRACTOR may make claim against the OWNER for Extra Work involved therein, as hereinafter provided.

**6.02** ... MINOR CHANGES. The ENGINEER may authorize minor changes in the work not inconsistent with the overall intent of the Contract Documents and not involving an increase in Contract Price. If the CONTRACTOR believes that any minor change or alteration authorized by the ENGINEER involves Extra Work and entitles him to an increase in the Contract Price, the CONTRACTOR shall make written request to the ENGINEER for a written Field Order.

In such case, the CONTRACTOR by copy of his communication to the ENGINEER or otherwise in writing shall advise the OWNER of his request to the ENGINEER for a written Field Order and that the work involved may result in an increase in the Contract Price.

Any request by the CONTRACTOR for a change in Contract Price shall be made prior to beginning the work covered by the proposed change.

**6.03** ... **EXTRA WORK.** It is agreed that the basis of compensation to the CONTRACTOR for work either added or deleted by a Change Order for which a claim for Extra Work is made shall be determined by one or more of the following methods:



In the event said Extra Work be performed and paid for under Method (C), then the provisions of this paragraph shall apply, and the "actual field cost" is hereby defined to include the cost to the CONTRACTOR of all workmen, such as foreman, timekeepers, mechanics and laborers, and materials, supplies, teams, trucks, rentals on machinery and equipment, for the time

actually employed or used on such Extra Work, plus actual transportation charges necessarily incurred, together with all power, fuel, lubricants, water and similar operating expenses, also all necessary incidental expenses incurred directly on account of such Extra Work, including Social Security, Old Age Benefits and other payroll taxes, and a rateable proportion of premiums on Performance and Payment Bonds and Maintenance Bonds, Public Liability and Property Damage and Workmen's Compensation and all other insurance as may be required by any law or ordinance or directed by the OWNER or by them agreed to. The ENGINEER may direct the form in which accounts of the "actual field cost" shall be kept and the records of these accounts shall be made available to the ENGINEER. The ENGINEER or OWNER may also specify in writing, before the work commences, the method of doing the work and the type and kind of machinery and equipment to be used; otherwise these matters shall be determined by the CONTRACTOR. Unless otherwise agreed upon, the prices for the use of machinery and equipment shall be determined by using 100 percent, unless otherwise specified, of the latest schedule of Equipment Ownership Expense adopted by the Associated General Contractors of America. Where practicable the terms and prices for the use of machinery and equipment shall be incorporated in the Written Extra Work Order. The fifteen (15%) percent of the "actual field cost" to be paid the CONTRACTOR shall cover and compensate him for his profit, overhead, general superintendence and field office expense, and all other elements of cost and expense not embraced within the "actual field cost" as herein defined, save that where the CONTRACTOR'S Camp or Field Office must be maintained primarily on account of such Extra Work; then the cost to maintain and operate the same shall be included in the "actual field cost".

No claim for Extra Work of any kind will be allowed unless ordered in writing by the ENGINEER. In case any orders or instructions, either oral or written, appear to the CONTRACTOR to involve Extra Work for which he should receive compensation or an adjustment in the construction time, he shall make written request to the ENGINEER for written order authorizing such Extra Work. Should a difference of opinion arise as to what does or does not constitute Extra Work, or as to the payment therefor, and the ENGINEER insists upon its performance, the CONTRACTOR shall proceed with the work after making written request for written order and shall keep an accurate account of the "actual field cost" thereof, as provided under Method (C). The CONTRACTOR will thereby preserve the right to submit the matter of payment to arbitration, as herein below provided.

- 6.04 ... TIME OF FILING CLAIMS. It is further agreed by both parties hereto that all questions of dispute or adjustment presented by the CONTRACTOR shall be in writing and filed with the ENGINEER within thirty (30) days after the ENGINEER has given any directions, order or instruction to which the CONTRACTOR desires to take exception. The ENGINEER shall reply within thirty (30) days to such written exceptions by the CONTRACTOR and render his final decision in writing. In case the CONTRACTOR should appeal from the ENGINEER'S decision, any demand for arbitration shall be filed with the ENGINEER and the OWNER in writing within ten (10) days after the date of delivery to CONTRACTOR of the ENGINEER'S final decision. It is further agreed that final acceptance of the work by the OWNER and the acceptance by the CONTRACTOR of the final payment shall be a bar to any claims by either party, except where noted otherwise in the Contract Documents.
- 6.05 ... ARBITRATION. All questions of dispute under this Agreement shall be submitted to arbitration at the request of either party to the dispute. The parties may agree upon one arbiter, otherwise, there shall be three, one named in writing by each party, and the third chosen by the two arbiters so selected; or if the arbiters fail to select a third within ten (10) days,

he shall be chosen by a District Judge serving the County in which the major portion of the project is located, unless otherwise specified. Should the party demanding arbitration fail to name an arbiter within ten (10) days of the demand, his right to arbitrate shall lapse, and the decision of the ENGINEER shall be final and binding on him. Should the other party fail to choose an arbiter within ten (10) days, the ENGINEER shall appoint such arbiter. Should either party refuse or neglect to supply the arbiters with any papers or information demanded in writing, the arbiters are empowered by both parties to take ex parte proceedings.

The arbiters shall act with promptness. The decision of any two shall be binding on both parties to the contract. The decision of the arbiters upon any question submitted to arbitration under this contract shall be a condition precedent to any right of legal action. The decision of the arbiter or arbiters may be filed in court to carry it into effect.

The arbiters, if they deem the case demands it, are authorized to award the party whose contention is sustained, such sums as they deem proper for the time, expense and trouble incident to the appeal, and if the appeal was taken without reasonable cause, they may award damages for any delay occasioned thereby. The arbiters shall fix their own compensation, unless otherwise provided by agreement, and shall assess the cost and charges of the arbitration upon either or both parties. The award of the arbiters must be made in writing.

#### 7. ABANDONMENT OF CONTRACT

7.01 ... ABANDONMENT BY CONTRACTOR. In case the CONTRACTOR should abandon and fail or refuse to resume work within ten (10) days after written notification from the OWNER, or the ENGINEER, or if the CONTRACTOR fails to comply with the orders of the ENGINEER, when such orders are consistent with the Contract Documents, then, and in that case, where performance and payment bonds exist, the Sureties on these bonds shall be notified in writing and directed to complete the work, and a copy of said notice shall be notified in writing and directed to complete the work, and a copy of said notice shall be delivered to the CONTRACTOR.

After receiving said notice of abandonment, the CONTRACTOR shall not remove from the work any machinery, equipment, tools, materials or supplies then on the job; but the same, together with any materials and equipment under contract for the work, may be held for use on the work by the OWNER or Surety on the performance bond, or another contractor in completion of the work; and the CONTRACTOR shall not receive any rental or credit therefor (except when used in Work and Claims), it being understood that the use of such equipment and materials will ultimately reduce the cost to complete the work and be reflected in the final settlement.

Where there is no performance bond provided or in ease the Surety should fail to commence compliance with the notice for completion herein before provided for, within ten (10) days after service of such notice, then the OWNER may provide for completion of the work in either of the following elective manners:

- 7.01.1 The OWNER may thereupon employ such force of men and use such machinery, equipment, tools, materials and supplies as said OWNER may deem necessary to complete the work and charge the expense of such labor, machinery, equipment, tools, materials and supplies to said CONTRACTOR, and expense so charged shall be deducted and paid by the OWNER out of such moneys as may be due, or that may thereafter at any time become due to the CONTRACTOR under and by virtue of this Agreement. In case such expense is less than the sum which would have been payable under this contract, if the same had been completed by the CONTRACTOR, then said CONTRACTOR shall receive the difference. In case such expense is greater than the sum which would have been payable under this contract, if the same had been completed by said CONTRACTOR, then the CONTRACTOR and/or his Surety shall pay the amount of such excess to the OWNER; or
- 7.01.2 The OWNER under sealed bids, after five (5) days' notice published one or more times in a newspaper having general circulation in the county of the location of the work, may let the contract for the completion of the work under substantially the same terms and conditions which are provided in this contract. In case any increase in cost to the OWNER under the new contract as compared to what would have been the cost under this contract, such increase shall be charged to the CONTRACTOR and Surety shall be and remain bound therefor. However, should the cost to complete any such contract prove to be less than what would have been the cost to complete under this contract, the CONTRACTOR and/or his Surety shall be credited therewith.

When the work shall have been substantially completed the CONTRACTOR and his Surety shall be so notified and Certificates of Completion and Acceptance, as provided in

Paragraph 5.06 hereinabove, shall be issued. A complete itemized statement of the contract accounts, certified to by the ENGINEER as being correct, shall then be prepared and delivered to the CONTRACTOR and his Surety, whereupon the CONTRACTOR and/or his Surety, or the OWNER as the case may be, shall pay the balance due as reflected by said statement, within fifteen (15) days after the date of such completion.

In the event the statement of accounts shows that the cost to complete the work is less than that which would have been the cost to the OWNER had the work been completed by the CONTRACTOR under the terms of this contract; or when the CONTRACTOR and/or his Surety shall pay the balance shown to be due by them to the OWNER, then all machinery, equipment, tools, materials or supplies left on the site of the work shall be turned over to the CONTRACTOR and/or his Surety. Should the cost to complete the work exceed the contract price, and the CONTRACTOR and/or his Surety fail to pay the amount due the OWNER within the time designated hereinabove, and there remains any machinery, equipment, tools materials or supplies on the site of the work, notice thereof, together with an itemized list of such equipment and materials shall be mailed to the CONTRACTOR and his Surety at the respective addresses designated in this contract, provided, however, that actual written notice given in any manner will satisfy this condition. After mailing, or other giving of such notice, such property shall be held at the risk of the CONTRACTOR and his Surety subject only to the duty of the OWNER to exercise ordinary care to protect such property. After fifteen (15) days from the date of said notice, the OWNER may sell such machinery, equipment, tools, materials or supplies and apply the net sum derived from such sale to the credit of the CONTRACTOR and his Surety. Such sale may be made at either public or private sale, with or without notice, as the OWNER may elect. The OWNER shall release any machinery, equipment, tools, materials, or supplies, which remain on the work, and belong to persons other than the CONTRACTOR or his Surety, to their The books on all operations provided herein shall be open to the proper owners. CONTRACTOR and his Surety.

7.02 ... ABANDONMENT BY OWNER. In case the OWNER shall fail to comply with the terms of this contract, and should fail or refuse to comply with said terms within ten (10) days after written notification by the CONTRACTOR, then the CONTRACTOR may suspend or wholly abandon the work, and may remove therefrom all machinery, tools and equipment, and all materials on the site of work that have not been included in payments to the CONTRACTOR and have not been wrought into the work. And thereupon the ENGINEER shall make an estimate of the total amount earned by the CONTRACTOR, which estimate shall include the value of all work actually completed by said CONTRACTOR (at the prices stated in the attached proposal where unit prices are used), the value of all partially completed work at a fair and equitable price, and the amount of all Extra Work performed at the prices agreed upon, or provided for by the terms of this contract, and a reasonable sum to cover the cost of any provisions made by the CONTRACTOR to carry the whole work to completion and which cannot be utilized. The ENGINEER shall then make a final statement of the balance due the CONTRACTOR by deducting from the above estimate all previous payments by the OWNER and all other sums that may be retained by the OWNER under the terms of this Agreement and shall certify same to the OWNER who shall pay to the CONTRACTOR on or before thirty (30) days after the date of the notification by the CONTRACTOR the balance shown by said final statement as due the CONTRACTOR, under the terms of this Agreement.



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# VILLAGE OF SALADO, TEXAS

# ROYAL STREET LIFT STATION ODOR CONTROL IMPROVEMENTS SPECIAL CONDITIONS

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SC.48	Barricades, Lights and Watchmen
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## VILLAGE OF SALADO, TEXAS

# Royal Street Lift Station Odor Control Improvements

#### SPECIAL CONDITIONS

## SC.01 GENERAL

The provisions of this section of the specifications shall govern in the event of any conflict between them and the "General Conditions of Agreement."

# SC.02 DEFINITIONS

Agreement. "Agreement" shall mean the contract document as herein set forth. Calendar Day. "Calendar Day" shall mean any day of the week or month, no days being excepted.

Extra Work. "Extra Work" shall mean and include all work that may be required by the Owner to be done by the Contractor to accomplish any change, alteration, or addition to the work shown on the plans or reasonably implied by the specifications, and not covered by the Contractor's proposal.

Parties. The parties to this agreement are the Owner and the Contractor.

<u>Project.</u> "Project" shall mean the work embraced by this agreement, including the Plans and Specifications, General and Special Conditions, Performance and Payment Bonds attached hereto; generally described as follows:

#### ROYAL STREET LIFT STATION ODOR CONTROL IMPROVEMENTS

<u>Subcontractor</u>. "Subcontractor" shall mean only those having a direct contract with the Contractor for performance of work on the project contemplated by these contract documents.

<u>Substantially Completed.</u> "Substantially Completed" shall mean that the project contemplated by the contract documents has been made suitable for use or occupancy, or the facility is in a condition to serve its intended purpose; but still may require minor miscellaneous work and adjustment, provided, however, that final payment of the contract price including retainage, shall not be made until completion of all punch list items and upon acceptance by the Owner. Acceptance by the Owner shall not impair any warranty obligation of the Contractor.

Work. "Work" or "Scope or Work" shall mean Royal Street Lift Station Odor Control Improvements as more fully described in the Scope of Work contained in SC.06.

### SC.03 ENGINEER

The word "Engineer" in these specifications shall be understood as referring to Kasberg, Patrick & Associates, LP, Consulting Engineers; 19 North Main; Temple, Texas 76501, Engineer of the Owner, or such other representatives as may be authorized by said Owner to act in any particular position.

## SC.04 LOCATION OF PROJECT

Please see Sheet G-01 of the plans for general location map.

#### SC.05 EXAMINATION OF SITE OF PROJECT

Prospective bidders shall make a careful and thorough examination of the site of the project, including all soil and water conditions to be encountered, improvements to be protected, disposal sites for surplus materials, arrangements necessary for providing ingress and egress to private properties and methods of handling traffic during prosecution of all the work involved.

#### SC.06 SCOPE OF WORK

The work to be performed under this contract consists of furnishing all materials, labor, supervision, tools, equipment and incidentals required, and performing all work necessary for the construction of:

Royal Street Lift Station Odor Control Improvements including all mechanical, electrical or other equipment, piping and site work.

# SC.07 FORMS, PLANS AND SPECIFICATIONS

Bound copies of Forms of Proposal, Contract and Bonds, Plans and Specifications may be purchased from the offices of Kasberg, Patrick & Associates, LP. The cost for the plans and specifications is <u>Fifty Dollars (\$50.00)</u> per set and is non-refundable.

Forms of Proposal, Contract and Bonds, Plans and Specifications will also be available on-line at http://www.civcastusa.com. Documents may be downloaded or viewed free of charge at this website. It is the bidder's responsibility to determine that a complete set of documents as defined in the Instructions to Bidders is received.

#### SC.08 COPIES OF PLANS AND SPECIFICATIONS FURNISHED

Five (5) sets of 11"x17" plans and specifications shall be furnished to the successful Contractor, at no charge, for construction purposes. Additional copies may be obtained at the cost of reproduction upon request.

#### SC.09 PRE-BID CONFERENCE

Prior to receiving bids on this project, the Owner will conduct a Mandatory Pre-bid Conference with all prospective bidders and other interested parties. The Mandatory Pre-bid Conference will be held on Tuesday, June 30, 2020 at 10:00 AM at the Municipal Building, 301 N. Stagecoach Road, Salado, TX 76571.

## SC.10 ADDENDA

Bidders desiring further information, or interpretation of the plans and specifications must make request for such information to the Engineer as outlined in this Section and in the Instructions to Bidders for Construction. Answers to all such requests will be given in writing to all Plan Holders (persons who have made deposit for received plans and specifications) in addendum form and all addenda will be bound with and made a part of the contract documents. No other explanation or interpretation will be considered official or binding.

Any addenda issued before the opening of bids will be emailed to each Plan Holder, unless requested otherwise by the Plan Holder. The proposals as submitted by the Contractor will be so constructed as to include any addenda if such are issued by the Engineer prior to twenty-four (24) hours before the opening of bids.

In order that all plan holders will have equal access to information on this project, all requests to the Engineer for information or interpretation of the plans and specifications must be received before noon on Thursday, July 2, 2020. If there is a need to clarify any requests at that time, the Engineer will issue a written addendum Friday, July 3, 2020 by 4:00 PM. The Engineer and Owner will not attempt to further clarify any written or oral requests.

# SC.11 PREPARATION OF PROPOSAL

The Bidder shall submit his proposal on the forms furnished. All blank spaces in the form shall be correctly filled in and the bidder shall write or type the unit price and extended amount in numerals, for which he proposes to do the work contemplated or furnish the materials required. Such prices shall be written in ink, distinctly and legibly, or typewritten. If the proposal is submitted by an individual, his name must be signed by him or his duly authorized agent. If a proposal is submitted by a firm, association, or partnership, the name and address of each member must be given and the proposal signed by a member of the firm, association or partnership, or person duly authorized. If the proposal is submitted by a company or corporation, the company or corporate name and business address must be given, and the proposal signed by an official or duly authorized agent. Powers of attorney authorizing agents or others to sign proposal must be properly certified and must be in writing and submitted with the proposal. The proposal shall be executed in ink.

Each proposal shall be enclosed in a sealed envelope, addressed as specified in the Notice to Contractors, and endorsed on the outside of the envelope in the following manner:

- a. Bidder's name.
- b. Proposal for "Royal Street Lift Station Odor Control Improvements"

Bid proposal may be withdrawn and resubmitted at any time prior to the time set for opening of the bids, but no proposal may be withdrawn or altered after the opening of the bids.

#### SC.12 ALTERNATE BIDS

(Not Applicable)

#### SC.13 QUALIFICATION OF LOW BIDDER

Prior to award of contract, the bidder shall submit such evidence as the Owner may require establishing the bidder's qualifications to satisfactorily perform the work included in this project. Information that may be required shall include (1) the bidder's current financial statement including amount of funds readily available to commence and carry out the work, (2) a list of equipment available for this project, (3) a list of projects that of the same general type as included in this contract, together with the names, addresses and phone numbers of persons familiar with this work, and (4) other information that may be pertinent to the bidder's qualifications.

Should the bidder fail to promptly produce evidence satisfactory to the Owner on any of the foregoing points, he may be disqualified and the work awarded to the next bidder so qualifying.

#### SC.14 AWARD OF CONTRACT

It is the intention of the Owner to award a contract on the basis of the lowest acceptable bid submitted by a qualified bidder as determined by the Owner. The right is reserved, as the interest of the Owner may require, to reject any and all bids and to waive any informality in bids received.

The Village of Salado will notify the successful bidder, in writing, within sixty (60) days of the date of receiving bids, of its acceptance of his proposal. The Contractor shall complete the execution of the required Bond and Contract within ten (10) days of such notice.

## SC.15 SEQUENCE OF CONSTRUCTION

The time allotted for completion of this project is described under Section SC.16 of these Special Conditions.

Prior to beginning construction on this project, the Contractor shall prepare a written construction sequence and schedule for review by the Engineer and approval by the Owner. This construction sequence and schedule shall be followed by the Contractor unless changes are approved by the Owner.

No partial payment estimates will be issued until the Sequence and Schedule of Construction has been approved.

# SC.16 TIME ALLOTTED FOR COMPLETION AND NOTICE TO PROCEED

The construction of the 0.200 MGD Wastewater Treatment Plant shall be completed within 165 Calendar Days of the issuance of the Notice to Proceed. The Notice to Proceed shall consist of a written request by the Engineer for the Contractor to proceed with the construction of the project.

## SC.17 PRECONSTRUCTION CONFERENCE

After award of bid and prior to beginning construction, a conference will be held with representatives of the Contractor, Owner, Engineer, and the affected Utility Companies to discuss schedules and utility conflicts in the project. The purpose is to establish lines of communication between the parties involved. The time and place for the Preconstruction Conference shall be determined at the time of Bid Award.

## SC.18 CONSTRUCTION IN PUBLIC ROADS AND PRIVATE DRIVES

No public or private road shall be entirely closed overnight. It shall be the responsibility of the Contractor to build and maintain all weather bypasses and detours, if necessary, and to properly light, barricade, and mark all bypasses and detours that might be required on and across the roads involved in the work included in this contract.

The Contractor shall be responsible for repair and maintenance of all roadways damaged as a result of the construction of this project for a period of one year after completion or acceptance of the work. Within this period of one year time, if it becomes necessary for the Owner to make such repairs, the Contractor shall reimburse the Owner for the cost of such repairs.

### SC.19 REFERENCE SPECIFICATIONS

Where reference is made in these specifications to specifications compiled by others, such reference is made for expediency and standardization from the material supplier's point of view, and such specifications referred to are hereby made a part of these specifications.

#### SC.20 EXTENSION OF TIME

Contractor agrees he has submitted his proposal in full recognition of the time required for the completion of this project, taking into consideration the average climatic range and material manufacturing conditions prevailing in this locality, and has considered the liquidated damage provision herein, and that he shall not be entitled to, nor will he request, an extension of time on this contract, except when his work has been delayed by an act or neglect of the Owner, employees or representatives of the Owner, or other contractors employed by the Owner, or by changes ordered in the work, or reductions thereto in writing. The Contractor may apply in writing for an extension of time, submitting therewith all written justification as may be required by the Engineer for such and extension as requested by Contractor. The Engineer, within ten (10) days after receipt of a written request for an extension of time by the Contractor, which is supported by all requested documentation, shall decide if an extension of time shall be allowed.

# SC.21 LIQUIDATED DAMAGES FOR DELAY BY CONTRACTOR

The Contractor agrees that time is of the essence on this contract and that the Owner will be damaged as a result of any delay beyond the date agreed upon in the completion of all items of work herein specified and contracted for. The parties understand and agree that the actual damages will be sustained by the Owner because of such delay will be uncertain and difficult of ascertainment and it is further agreed that a reasonable estimate of the actual amount of such damages in light of the facts known to the parties at the time of execution of this contract will be five hundred dollars (\$500.00) per day.

It is therefore agreed that the Owner may withhold permanently from the Contractor's total compensation, the total sum of \$500.00 per day as liquidated damages for delay for each day of delaying completion beyond the date agreed upon for completion of the items of work herein specified and contracted for (after due allowance for such extension of time as is provided for in the General Conditions of Agreement and in Paragraph SC.20).

#### SC.22 DAMAGES

Article 3.08 of the General Conditions of Agreement is hereby voided and replaced with the following:

In the event the Contractor is damaged in the course of the completion of the work by the neglect, or default of the Owner, or representative of the Owner, or of any other Contractor employed by the Owner upon the work, thereby causing loss to the Contractor, the Owner agrees that he will reimburse the Contractor for such loss. In the event the Owner is damaged in the course of the work by the act, negligence, omission, mistake or default of the Contractor, or should the Contractor unreasonably delay the progress of the work being done by others on the job so as to cause loss for which the Owner becomes liable, then the Contractor shall reimburse the Owner for such loss.

# SC.23 OBJECTIONS AND TIME OF FILING CLAIMS

In Paragraph 6.04 of the General Conditions, add the following after the first sentence:

"Failure to file such an objection during such period shall constitute waiver thereof and consent to the decision rendered by the Engineer."

Also, delete the third sentence, which deals with arbitration.

Also, in Paragraph 2.05 of the General Conditions, delete the last clause dealing with arbitration and insert:

"Failure to file such an objection during such period shall constitute waiver thereof and consent to the decision rendered by the Engineer."

### SC.24 MEDIATION

Article 6.05 of the General Conditions of Agreement is hereby voided and replaced with the following:

In an effort to resolve any conflicts that arise during the construction of the Project or following the completion of the Project, the Owner and the Contractor agree that all disputes between them arising out of or relating to this Agreement or the Project shall be submitted to nonbinding mediation unless the parties mutually agree otherwise.

The Owner and Contractor further agree to include a similar mediation provision in all agreements with their subcontractors, subconsultants, suppliers and fabricators, thereby providing for mediation as the primary method for dispute resolution between the parties to all those agreements.

## SC.25 FEES AND ROYALTIES

All fees or royalties for any patented invention, process, article, or arrangement in any manner connected with the work, or with these specifications, shall be included in the price stated in the proposal.

#### SC.26 INDEMNITY

Contractor agrees to and shall indemnify and hold harmless Owner, its officers, agents and employees, from and against any and all claims, losses, damages, causes of action, suits, and liability of every kind, including all expenses damages, causes of action, suits, and liability of every kind, including all expenses of litigation, court costs, and attorney's fees, for injury to or death of any person, or for damage to any property, arising out of or in connection with the work done by Contractor under this contract, regardless of whether such injuries, death or damages are caused in whole or in part by the negligence of the Village of Salado.

Contractor assumes full responsibility for the work to be performed hereunder, and hereby releases, relinquishes and discharges Owner, its officers, agents and employees, from all claims, demands, and causes of action of every kind and character including the cost of defense thereof, for any injury to, including death of, person (whether they be third persons, contractor, or employees of either the parties hereto) and any loss of or damage to property (whether the same be that of either of the parties hereto or of third parties) caused by or alleged to be caused by, arising out of, or in connection with Contractor's work to be performed hereunder whether or not said claims, demands and causes of action in whole or in part are covered by insurance regardless of whether such loss, damage, or injury was caused by Owner. Owner, by this agreement does not give consent to litigation.

#### SC.27 LAWS TO BE OBSERVED

The Contractor shall, at his own expense, do those things necessary for the procurement of and shall procure all permits, certificates and licenses required of him by the law or governmental regulation for the performance of his work. He shall comply with all federal, state and local laws, ordinances or rules and regulations relating to the performance of his work. In addition to all other laws, ordinances and rules and regulations, these shall include any such laws, ordinances or rules and regulations relating to noise from the Contractor's operations.

#### SC.28 STATE AND CITY SALES TAXES

This contract is issued by an organization which qualifies for exemption provisions pursuant to Provisions of the Texas Tax Code. Sections 151.301, 151.307, 151.309 and 151.311. The Contractor must obtain a limited sales excise and use tax permit or exemption certificate which shall enable him to buy the materials to be incorporated into the work without paying the tax at the time of purchase.

#### SC.29 ANTITRUST

The Contractor hereby assigns to the Owner any and all claims for overcharges associated with this contract which arise under the antitrust laws of the United States, 15 U.S.C.A. Section 1, et seq, (1973).

## SC.30 GUARANTY AGAINST DEFECTIVE WORK

The Contract shall indemnify the Owner against any repairs which may become necessary to any part of the work performed under each contract, arising from defective workmanship or material used therein, for a period of one (1) year from the date of final acceptance of the work, unless the technical specifications provide for another period.

Neither the Certificate of Acceptance nor any provision in the Contract Documents, nor partial or entire use, or occupancy of the premise by the Owner will constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials.

### SC.31 INSURANCE

Satisfactory certificates of insurance for all coverage listed herein shall be filed with the Owner prior to starting any construction work on this contract. Insurance shall include the Owner, the Engineer and the State of Texas as additional insured parties.

## Workmen's Compensation and Employer's Liability

This insurance shall protect Contractor against all claims under applicable state workmen's compensation laws. Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a workmen's compensation law. This policy shall include an "all states" endorsement.

The liability limits shall not be less than:

Workmen's Compensation Statutory
Employer's Liability \$100,000 each occurrence

#### Comprehensive Automobile Liability

This insurance shall be written in comprehensive form and shall protect Contractor against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, and shall cover operation on or off site of all motor vehicles licensed for highway use, whether they are owned, non-owned, or hired.

The liability limits shall not be less than:

Combined Single Limit (each accident) \$1,000,000

#### Comprehensive General Liability

This insurance shall be written in comprehensive form and shall protect Contractor and additional insured parties against all claims arising out of any act or omission of the Contractor or his agents, employees or subcontractors.

The liability limits shall be not less than:

**Bodily Injury** 

\$500,000 each person

\$500,000 each occurrence

\$500,000 aggregate

Property Damage

\$100,000 each occurrence

\$100,000 aggregate

## **Excess Liability Insurance**

The Contractor shall obtain, pay for and maintain a policy during the contract term, insuring Contractor for an amount of not less than \$1,000,000 combined single limit bodily injury and property damage liability insurance, including death, in excess of the primary coverage required hereinabove. The Owner, the Engineer and the State of Texas shall be named as additional insureds.

The Contractor shall furnish a Certificate of Insurance for the above coverage with a provision that the Owner will be notified by the insurance company thirty (30) days prior to cancellation of the policy during the term of the contract, and if canceled, a new policy must be furnished prior to cancellation.

# SC.32 PAYMENTS TO CONTRACTOR

#### **Progress Payments**

Article 5.04 of the General Conditions of Agreement, is hereby voided and replaced by the following:

The Contractor shall prepare a requisition for progress payment and submit to the Engineer on or before the 25th day of each month. The Engineer shall prepare a statement showing as completely as practicable the total value of the work done by the Contractor up to and including the last day of the preceding month; said statement shall also include the invoice value of all sound materials delivered, and properly stored and protected, on the site of the work that are to be fabricated into the work.

The Owner shall then pay the Contractor on or before the 15h day of the following month the total amount of the approved statement. 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) five percent (5%) of the total amount, as a retainage 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 process contained in the agreement and adjusted by approved change orders. 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 furnished to the Engineer.

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 Owner. Such payment shall not constitute a waiver of the right of the Owner 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 Owner in all details.

The five percent (5%) retainage of the progress payments otherwise due to the Contractor may not be reduced until the building of the project is substantially complete and a reduction in the retainage has been authorized by the Owner.

#### Withholding Payments

The Owner may withhold from any payment otherwise due the Contractor so much as may be necessary to protect the Owner and if so elects may also withhold 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 Owner and will not require the Owner 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 Owner elects to do so. The failure or refusal of the Owner 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.

#### Separate Payment

Except as modified by Change Orders subsequent to execution of the Contract for this proposed work, no separate payment shall be made for work described in these Specifications or shown on the Plans. Total compensation to the Contractor shall be as set forth in the various Bid Items in the Proposal and Bid Schedule.

The Owner, before paying the final estimate, may 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, if the Owner deems the same necessary in order to protect the Owner's interests. The Owner, however, may if it deems such action advisable make payment in part or in full to such Contractor without requiring the

furnishing of such releases or receipts and any payments so made shall in no way impart the obligations of any surety or sureties furnished under this Contract.

Withholding of any amount due the Owner, under general and/or special conditions regarding "Liquidated Damages," shall be deducted from the final payment due the Contractor.

All sentences of Article 5.07 of the General Conditions shall remain and govern the contract as stipulated.

## SC.33 WAGE RATES

All employees of the Contractor on the work to be performed under this contract shall be paid the prevailing wage scale in the Davis-Bacon wage rates, and in no event less than the rates shown in the schedule of minimum wage rates furnished in these Special Conditions.

#### SC.34 EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this contract, the Contractor agrees as follows:

- (a) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin. The Contractor shall take affirmative action to insure that applicants are employed, that employees are treated during employment without regard to their race, color, sex, religion, age or national origin. Such action shall include, but not be limited to the following: employment, upgrading, 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 or applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (b) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants shall receive consideration for employment without regard to race, color, religion, sex, national origin or age.
- (c) The Contractor shall send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided, advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) The Contractor shall include the provisions of this section in all subcontracts pertaining to the work.

## SC.35 SUPERINTENDENCE BY CONTRACTOR

The Contractor shall have on the project at all times, as his agent, a competent Superintendent capable of reading and of thoroughly understanding the plans and specifications and thoroughly experienced in the type of work being performed. The Superintendent shall have full authority to execute orders or directions and to promptly supply such materials, equipment, tools, labor and incidentals as may be required. Such superintendence shall be furnished regardless of the amount of the work subcontracted.

## SC.36 INSPECTION

The word "Inspection" or other forms of the word, as used in the contract documents for this project shall be understood as meaning the Engineer will observe and check the construction in sufficient detail to satisfy himself that the work is proceeding in general accordance with the contract documents, but he will not be a guarantor of the Contractor's performance.

## SC.37 SHOP DRAWINGS

Contractor shall submit shop drawings in accordance with the following:

All shop drawings submitted by subcontractors for review by the Owner shall be sent directly to the Contractor for checking. The Contractor shall be responsible for their submission at the proper time so as to prevent delays in delivery of materials.

The Contractor shall check all subcontractor's shop drawings regarding measurements, size of members, materials, and details to satisfy himself that they conform to the intent of the Drawings and Specifications. Shop drawings found to be inaccurate or otherwise in error shall be returned to the subcontractors for correction before submission thereof.

All details on shop drawings submitted for review shall show clearly the relation of the various parts to the main members and lines of the structure, and where correct fabrication of the work depends upon field measurements, such measurements shall be made and noted on the drawings before being submitted for review.

The review of shop drawings, samples or product data by the Engineer shall not relieve the Contractor from his/her responsibility with regard to the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the Contractor and the Engineer will have no responsibility therefor.

No portion of the work requiring a shop drawing, sample, or product data shall be started nor shall any materials be fabricated or installed prior to the review of such item. Fabrication performed, materials purchased or on-site construction accomplished which does not conform to reviewed shop drawings and data shall be at the Contractor's risk. The Owner will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.

When the shop drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make no further changes therein except upon written instructions from the Engineer.

Coordination of Submittal Times: Prepare and transmit each submittal sufficiently in advance of performing the related work or other applicable activities, or within the time specified in the individual work sections, of the Specifications, so that the installation will not be delayed by processing times including disapproval and resubmittal (if required), coordination with other submittals, testing, purchasing, fabrication, delivery and similar sequenced activities. No extension of time will be authorized because of the Contractor's failure to transmit submittals sufficiently in advance of the Work.

Seven (7) hard copies, or 1 electronic file of each shop drawing shall be submitted for review. Each shop drawing shall be legible and shall be on sheets no larger than 11" x 17".

## SC.38 TRADE NAMES AND MATERIALS

Where materials or equipment are specified by a trade or brand name, it is not the intention of the Owner to discriminate against any equal product of another manufacturer, but rather to set a definite standard of quality or performance, and to establish an equal basis for the evaluation of bids. Where the words "equivalent," "proper," or "equal to" are used, they shall be understood to mean that the thing referred to shall be proper, the equivalent of, or equal to some other thing. Unless other wise specified all materials shall be of the best of their respective kinds, shall be in all cases fully equal to approved samples and shall never have been used for any temporary purpose whatsoever. Notwithstanding that the words "or equal to" or other such expressions may be used in the specifications in connection with a material, manufactured article or process specifically designated shall be used, unless a substitute shall be approved in writing before installation.

#### SC.39 TESTING OF MATERIALS

Testing and control of construction materials and methods used in the work shall be done by an approved local commercial laboratory employed and paid directly by the Owner, or other approved personnel employed by the Owner. Where a commercial laboratory is used, all representative testing caused by test failure will be accomplished at the Contractor's expense.

#### SC.40 COORDINATION WITH OTHERS

In the event other contractors are doing work in the same area simultaneously with this project, the Contractor shall coordinate his proposed construction with that of other contractors.

## SC.41 EXISTING UTILITIES AND SERVICE LINES

The Contractor shall be responsible for the protection of all existing utilities or service lines crossed or exposed by his construction operations. Where existing utilities or service lines are cut, broken, or damaged, the Contractor shall replace or pay for replacement of the utilities or service lines with the same type of original construction, or better, at his own cost and expense.

### SC.42 EXISTING STRUCTURES

The plans show the location of all known surface and subsurface structures. However, the Owner assumes no responsibility for failure to show any or all of these structures on the plans, or to show them in their exact locations. It is mutually agreed that such failure shall not be considered sufficient basis for claims for additional compensation for extra work or for increasing the pay quantities in any manner whatsoever, unless the obstruction encountered is such as to necessitate changes in the lines or grades, or require the building of special work, provisions for which are not made in these plans and proposal, in which case the provisions in these specifications for extra work shall apply.

## SC.43 CONNECTIONS TO EXISTING FACILITIES

Connections to existing facilities which are in service shall be thoroughly planned in advance, and all required equipment, materials and labor shall be on hand at the time of undertaking the connections. Work shall proceed continuously (around the clock if necessary) to complete connections in the minimum time. Operations of valves or other appurtenances on existing utilities, when required, shall be by or under direct supervision of the Owner.

The Contractor should anticipate that the length of time for various connections, disconnections and modifications will be minimal. Also, the time of day when connections and disconnections may be accomplished will generally be during periods of low flow. The Contractor should plan his construction sequence and schedule accordingly.

# SC.44 PROPERTY LINES AND MONUMENTS

The Contractor shall protect all property corner markers, and when any such markers or monuments are in danger of being disturbed they shall be properly referenced and if disturbed shall be reset at the expense of the Contractor.

### SC.45 USE OF EXPLOSIVES

Use of explosives will not be allowed.

## SC.46 LINES AND GRADES

All work under this Contract shall be constructed with the lines and grades shown on the Plans or as given by the Engineer. The full responsibility for holding to alignment and grade shall rest upon the Contractor.

The Engineer will provide one-time off-set construction staking for the project.

The Contractor shall stockpile excavation and other materials as to cause no inconvenience in the use of the lines and grades given. He shall remove any obstruction created by him contrary to this provision.

The Contractor shall safeguard all control points and bench marks established on the site by the Engineer, shall bear the cost of reestablishing same, if disturbed, and shall assume the entire expense of rectifying work improperly constructed due to failure to maintain and protect such established control points and bench marks.

## SC.47 ACCESS TO PROJECT SITE AND RIGHT-OF-WAY

The Contractor shall provide at its expense all improvements and make suitable provisions for ingress and egress. The Contractor also shall provide at its expense necessary all-weather access roads to the project location as required for transporting equipment and materials.

If additional area is needed by the Contractor, it shall be the responsibility of the Contractor to make all necessary arrangements and pay all costs associated with the acquisition and utilization of such area.

Specific right-of-way easement arrangements between the Owner and property owners include restrictions that may affect the Contractor's construction operations. These restrictions are summarized on a sheet included in the plans.

#### SC.48 BARRICADES, LIGHTS AND WATCHMEN

The Contractor shall, at his own cost and expense, furnish and erect such barricades, fences, lights and danger signals, shall provide such watchmen, and shall provide such other precautionary measures for the protection of persons or property and of work as are necessary. There shall be no open trenches not properly barricaded at the end of each workday. Barricades shall be painted in a color that will be visible at night. From sunset to sunrise, the Contractor shall furnish and maintain sufficient lights at each barricade and sufficient numbers of barricades shall be erected to keep vehicles from being driven on or into any work under construction. The Contractor shall furnish watchmen in sufficient numbers to protect the work.

The Contractor will be held responsible for all damage due to failure of barricades, signs, lights and watchmen. The Contractor's responsibility for the maintenance

of barricades, signs and lights, and for providing watchmen shall not cease until the project has been accepted by the Owner.

## SC.49 PROTECTION OF TREES AND LANDSCAPING

No trees or landscaping shall be removed or cut without the Owner's approval except those that provide direct interference with the installation of the Proposed Improvements or as otherwise required within the project plans and specifications. The Contractor shall use proper caution to minimize removal of trees within the temporary easement where applicable. Trees adjacent to the permanent and temporary easements, but not interfering with the work, shall be protected from damage by the construction operations.

# SC.50 <u>LIGHTS AND POWER</u>

The Contractor shall provide, at his own expense, temporary lighting and power facilities required for the proper prosecution of the work.

## SC.51 WATER FOR CONSTRUCTION AND TESTING

The Contractor shall make the necessary arrangements for securing and transporting all water required in the construction.

# SC.52 TRENCH SAFETY SYSTEM

Contractor shall provide a trench safety system which conforms to OSHA Standards if required for this project per local, State and Federal laws. The trench safety system shall meet all the requirements of Trench Safety Requirements Section of the Technical Specifications.

## SC.53 TOOLS AND ACCESSORIES

The Contractor shall, unless otherwise stated in the specifications, furnish with each type, kind or size of equipment, one (1) complete set of suitably marked high grade special tools and appliances which may be needed to adjust, operate, maintain, or repair the equipment. Ordinary mechanic's tools are not considered special tools. Such special tools and appliances shall be furnished in approved painted steel cases, properly labeled and equipped with good grade cylinder locks and duplicate keys.

Each piece of equipment shall be provided with a substantial name plate, securely fastened in place and clearly inscribed with the manufacturer's name, year or manufacture, and principal rating data.

# SC.54 PROJECT MAINTENANCE

The Contractor shall maintain, and keep in good repair, the improvements covered by these plans and specifications during life of this contract.

#### SC.55 FENCES, IMPROVEMENTS AND DRAINAGE CHANNELS

Fencing and gates removed to permit construction shall be replaced in the same location and left in a condition as good as, or better, than that in which they were found. Fences to be removed and not replaced are noted on the plans.

Where surface drainage channels, storm sewers, or drainage structures are disturbed or altered during construction, they shall be restored to their original condition as soon as possible.

#### SC.56 DISPOSAL OF WASTE AND SURPLUS EXCAVATION

All trees, stumps, slashings, brush or other debris removed from the site as a preliminary to the construction shall be chipped or removed from the property. No burning will be allowed. No trash, debris or refuse from construction shall exist on the ground.

All excavated earth in excess of that required for backfilling shall be disposed of in a satisfactory manner in locations approved by the Owner.

#### SC.57 CLEANUP

The Contractor shall at all times keep the job site as free from all material, debris and rubbish as is practical and shall remove same from any portion of the job site as construction of that portion is completed.

Upon completion of the work, the Contractor shall remove from the site all plant, materials, tools and equipment belonging to him and leave the site with an acceptable appearance. The Contractor shall thoroughly clean all equipment and materials installed by him and shall deliver over such materials and equipment in a bright, clean, polished and new-appearing condition.

## SC.58 ARCHEOLOGICAL DISCOVERIES

No activity which may affect a State Archeological Landmark is authorized until the Owner has complied with the provisions of the Antiquities Code of Texas. The Owner has previously coordinated with the appropriate agencies and impacts to known cultural or archeological deposits have been avoided or mitigated. However, the Contractor may encounter unanticipated cultural or archeological deposits during construction.

If archeological sites or historic structures are discovered after construction operations are begun, the Contractor shall immediately cease operations in that particular area and notify the Owner, and the Texas Historical Commission, (512-463-6096). The Contractor shall take reasonable steps to protect and preserve the discoveries until they have been inspected by the Owner. The Owner

will promptly coordinate with the Texas Historical Commission and any other appropriate agencies to obtain any necessary approvals or permits to enable the work to continue. The Contractor shall not resume work in the area of the discovery until authorized to do so by the Owner.

Compensation to the Contractor, if any, for lost time or changes in construction resulting from the find, shall be determined in accordance with changed or extra work provisions of the Contract Documents.

# SC.59 <u>SERVICE OF MANUFACTURER'S REPRESENTATIVE</u>

The contract price for the project shall include the cost of furnishing competent and experienced representatives from the manufacturers involved. Such representatives shall assist the Contractor, when required, to install, adjust, and test the equipment in conformity with the contract documents. After the equipment is placed in permanent operation by the Village of Salado, such representatives shall make all adjustments and tests as specified or required to comply with the contract documents, and shall instruct the Owner in the operation and maintenance of the equipment.

## SC.60 FINAL FIELD TESTS

Upon completion of the work and prior to final payment, all items installed under this contract shall be subject to acceptance tests as specified or required to provide compliance with the contract documents.

# SC.61 AS-BUILT DIMENSIONS AND DRAWINGS

Contractor shall make appropriate daily measurements of work constructed and keep accurate records of location (horizontal and vertical) of all constructed work.

Upon completion of the project, the Contractor shall furnish the Owner with one set of direct prints, marked with red pencil, to show as-built dimensions and locations of all work constructed. As a minimum, the final drawings shall include the following:

- (1) Horizontal and vertical locations of work.
- (2) Changes in material and dimensions due to substitutions.
- (3) Deletions, additions, and changes to scope of work.
- (4) Any other changes made.

This set of marked up prints shall be incorporated into record drawings prepared by the Engineer.

Separate payment will be made for as-built drawings at the contract unit price as provided for in the Bid Schedule. Payment for As-Built Drawings will not be made until such drawings are provided to and approved by the Engineer.

#### TECHNICAL SPECIFICATIONS

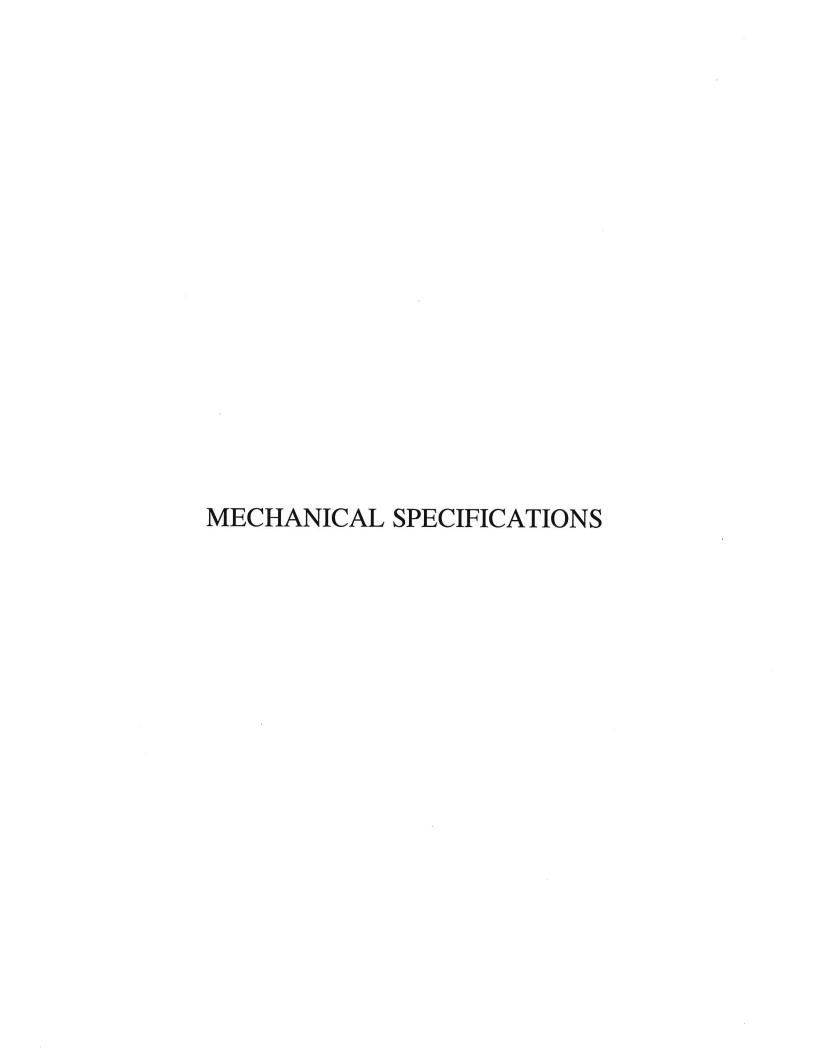
All utility technical specifications for the Village of Salado shall be accordance with the specifications listed below and amendments include herein.

The technical specifications from STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (Blue Book) by the North Central Texas Council of Governments:

North Central Texas Council of Governments Regional Information Center P.O. Box 5888 Arlington, Texas 76005-5888

will be used on this project. Copies may be purchased from the above address. Responsibility for updating these copies will be the Contractor's.

http://www.nctcog.org/envir/SEEDevEx/publicworks/standards.asp



# SECTION M1 - TWO-STAGE BIOLOGICAL ODOR CONTROL SYSTEM TECHNICAL SPECIFICATION

# M1.1 GENERAL

- A. This document covers the furnishing and delivery of materials, equipment and appurtenances for a two-stage biological odor control system.
- B. The Contractor shall purchase and install the odor control system. Installation components and scope of work required for installation of the biofilter system shall be provided by the Contractor as outlined in these specifications.

## M1.2 SUBMITTALS

- A. Manufacturer shall provide shop drawings, samples, administrative, quality control, and contract closeout submittals in accordance with the requirements of this proposal and as listed below.
- B. All submittals for a complete odor control system shall be submitted by the Contractor to the Engineer in one package simultaneously.
- C. Manufacturer shall Provide Shop Drawings as Follows:
  - 1. Complete fabrication, assembly and installation drawings, together with electrical and instrumentation shall be submitted for review. All dimensions, parts, construction details and materials of construction shall be shown.

# M1.3 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Product delivery, storage, and handling shall comply with Manufacturer's instructions and as follows.
- B. All media shall be delivered either pre-loaded in the system, or in bulk bags for loading on-site by the contractor. No bulk media deliveries are allowed.
- C. The media shall be stored on a clean surface, protected from the elements. Avoid contamination of foreign materials during handling and placement.
- D. Media storage >6 weeks is not acceptable.
- E. All other equipment shall be protected from the elements and damage while in storage.
- F. All packing slips and shipments must be inspected upon delivery to ensure they are complete, and no damage has occurred during transportation.

# M1.4 WARRANTIES

- A. AiraGlass™ Biotrickling filter media shall not compact, degrade or decompose for a period of 10 years from the date of system start-up.
- B. All mechanical equipment and components shall be free of manufacturing defects for a period of 12 months from system start-up, or 18 months from delivery (whichever comes first).
- C. The system must be operated in accordance with the supplied operation and maintenance manuals, and the specified design parameters.

## M1.5 ACCEPTABLE MANUFACTURERS

- A. This specification is based on the AiraHybrid<sup>TM</sup> multi-stage biological odor control system as supplied by Anua, Greensboro, NC
  - 1. Systems using masking agents will not be considered.
  - 2. System using chemicals will not be considered
  - 3. Biological media shall be a product of the USA
  - 4. Biological media shall be derived from environmentally friendly, sustainable, or recycled sources.
  - 5. Biological media containing organic matter, soil, lava rock, or mined ore/rock shall not be allowed.
  - 6. Biological medias that compress will not be considered
  - 7. Biofilter media must have the ability to continuously buffer low pH events throughout its lifespan without additives or chemicals.
  - 8. Biological systems using structured media shall not be considered.
  - 9. Biological systems requiring continuous supplemental nutrient feed shall not be allowed.
  - 10. Substitution of the specified media or other products must be pre-approved by the consulting engineer twenty-one (21) days prior to the bid date and be formally added by addendum.

## M1.6 QUALIFICATIONS

A. The system supplier shall have at least 5 years' experience in design and fabrication of municipal odor control systems, as demonstrated by a list of at least 5 successful installations (greater than or equal to 1,000cfm), with references. All references shall include valid contact names and phone numbers that can be verified.

#### M1.7 MANUFACTURER

- A. Manufacturer shall be Anua, Greensboro, NC
- B. Substitutions must be pre-approved by the consulting engineer at least twenty-one (21) days prior to bid date, and be specifically listed by addendum
- C. If an alternate supplier is chosen, the contractor shall be responsible for all costs associated with any needed re-designs, revisions, modifications, or engineering time.

## M1.8 SERVICE CONDITIONS AT SYSTEM INLET

- A. Total airflow: 500CFM (max)
- B. 1<sup>st</sup> Stage Empty Bed Residence Time (EBRT): 16 seconds
- C. 2<sup>nd</sup> stage Empty Bed Residence Time (EBRT): 25 seconds
- D. Qty of systems: One (1)
- E. Ambient air temperature range: 0 to 110F
- F. Foul air temperature range: 50-105F.
- G. Foul air RH: ≥65 percent.
- H. Foul air inlet contaminants:

Contaminant	Average (ppm)	Peak (ppm)
H2S	200	230
Total Reduced Sulfur Compounds	2	5

## M1.9 SYSTEM PERFORMANCE REQUIREMENT

- A. The system shall provide >99% removal, or 0.10ppm at the discharge, of H2S when operated within the specified parameters.
- B. The system shall provide >80% removal, or 0.5ppm (total) at the discharge, of all remaining total reduced sulfur compounds listed when operated within the specified parameters

## M1.10 SCOPE OF SUPPLY

- A. Manufacturer shall supply a completely assembled skid-mounted system, submittals, and services shall include the following.
  - 1. Treatment vessel
  - 2. 1<sup>st</sup> Stage biological media
  - 3. 2<sup>nd</sup> Stage biological media
  - 4. Recirculation/irrigation water system
  - 5. Nutrient addition
  - 6. System fan
  - 7. Inter-connecting ductwork
  - 8. Instrumentation
  - 9. Electrical control panel
  - 10. Water control panel
  - 11. Instrumentation.
  - 12. Field services.

## M1-11 SUPPLIED BY OTHERS

- A. Offloading, storage, installation, assembly, and placement of equipment.
- B. Design and installation of the concrete pad, including any required protective coatings.
- C. Supply, installation, and testing of all plumbing for the system.
- D. Supply and installation of all foul air collection ductwork, dampers, and supports.
- E. Electrical service
- F. Plumbing and drain design and supply
- G. Heat tracing & insulation of exposed plumbing (if applicable), to be completed after successful system start-up and hydro-testing.
- H. Taxes, duties, permits, or bonds.
- I. HVAC balancing, adjusting or testing.
- J. Performance testing of the system.

## M1-12 DETAILED SCOPE OF SUPPLY

- A. AiraHybrid<sup>TM</sup> Biological System
  - 1. Treatment Vessel
    - a. Qty: One (1) horizontal vessel(s) req'd
      - i. 13'-5" L x 7'-11" W x 10'-7"H
    - b. Vessel to be constructed of pre-molded GRP panels, per the following:
      - i. Hot press molded panels
      - ii. Tensile strength >70Mpa
      - iii. Hardness >60 barcol
      - iv. UV stabilized
    - c. Vessel to be shop-assembled prior to shipping.
    - d. Vessel shall be designed for +/-10" wc
    - e. Vessel shall contain an internal water collection area for recirculation system supply
    - f. Vessel shall have a completely removable top.
    - g. All wetted and internal surfaces to be corrosion resistant and able to withstand a low-pH environment
    - h. All hardware and metal wetted parts to be SS
  - 2. 1st Stage Biological Media:
    - a. 140ft3 of AiraGlass<sup>TM</sup> biotrickling filter media, by Anua
    - b. The media must be manufactured from post-consumer recycled glass.
    - c. The media shall be a product of the USA.
    - d. The media shall not shrink or swell with varying moisture contents
    - e. The media dry weight shall not exceed 17 lbs/ft3.
    - f. The media shall be shop-loaded.
  - 3. 2nd Stage Biological Media:
    - a. 208ft3 of AiraShell® biofilter media, by Anua
    - b. The media must be repurposed, and steam cleaned shells acquired from the commercial seafood industry.
    - c. The media shall be a product of the USA.
    - d. The media shall not shrink or swell with varying moisture contents
    - e. The media dry weight shall not exceed 40 lbs/ft3.
    - f. The media shall be shop-loaded.
  - 4. Water Irrigation/Recirculation System
    - a. System to continuously spray water over the 1<sup>st</sup> stage biological media bed by means of a recirculation pump
      - i. One (1) horizontal magnetic drive, corrosion resistant recirculation pump(s) to be supplied. Flowrate to be 7GPM @ 20ft head. Motor to be 1/3HP, TEFC, severe duty, 120/1/60VAC 1800RPM.
    - b. 2<sup>nd</sup> stage biological media shall be intermittently irrigated on a 24 hour timed basis
    - c. Spray nozzle(s) to be non-clogging type, PVC or PPL, quantity to assure 100% media surface coverage
    - d. All plumbing, and wetted components, to be Sch80 PVC, and/or able to withstand a low-pH (1.0) environment.
    - e. All recirculation and irrigation control valves and instrumentation shall be housed in a NEMA4X shop-assembled water cabinet (see below).
    - f. All plumbing to be shop-assembled at factory.
  - 5. Nutrient Addition

#### 5. Nutrient Addition

- a. Nutrients shall be provided for the initial start-up. The nutrients would be added to the vessel sump at start-up.
- b. Once the system is acclimated, use of nutrient is no longer required.
- c. If available, treatment plant secondary effluent water can be used and is preferred. If not available, potable water can be used.

### 6. System Fan(s):

- a. Qty of fan: One (1)
- b. Cast aluminum construction
- c. Arrg't 4, direct drive
- d. Fan designed for 500CFM @ 8" wc @ 70F.
- e. Flanged and drilled inlet and outlet connections
- f. Housing to contain low-point drain connection
- g. Internal airstream to be epoxy-coated
- h. Motor to be 1HP TEFC 230/60/3 VAC, 3,600 RPM
- i. Fan to include EPDM expansion joint on fan inlet connection
- j. Fan to be located on the suction side of the treatment.
- k. Fan to have exhaust stack with no-loss rain cap
- 1. Fan to be Cincinnati Fan, American Fan, or equal
- m. Fan to be assembled on system skid at factory.

#### 7. Inter-Connecting Ductwork

- a. Odor control system supplier shall provide all req'd ductwork from the biological treatment vessel discharge connection to the fan inlet connection.
- b. Ductwork shall be Sch80 PVC.
- c. Ductwork shall be shipped as req'd for ease of shipping and installation. All flanged connections (if applicable) shall include EPDM gaskets, and SS hardware. All flanges to be per PS15-69 (UNO).
- d. Fan shall be operating on the suction side of the biological treatment vessel
- e. Ductwork to be shop-assembled.

#### 8. Instrumentation (All local read)

- a. One (1) bi-metal foul air temperature gauge
  - i. 3" dia dial x 12" long probe
  - ii. 25-125F range
  - iii. Stainless steel construction.
  - iv. ½" NPT back connection, to be threaded into foul air ductwork prior to 1st stage biological vessel inlet
  - v. Digi-Sense model SK-08084-09 or equal.
- b. Two (2) differential pressure gauges
  - i. 0-10" we range
  - ii. To measure DP across each treatment vessel media bed.
  - iii. Dwyer model 4010 or equal

## 9. Electrical Control Panel

- a. The enclosure shall be NEMA 4X rated.
- b. The panel shall be wired for 460/3/60VAC power of adequate amperage to power all associated pumps, motors, valves, and controls.
- c. An adequately sized main disconnect switch shall be provided within the panel.
- d. An adequately sized VFD shall be provided for operation of the fan
- e. A properly sized motor starter, and hand switch, shall be provided for operation of the recirculation pump.

- f. A 120 VAC control power transformer rated at a minimum of 300 VA shall be provided with circuit breaker protection.
- g. All pilot lights shall be LED. Green will indicate that equipment is running, Red will indicate that equipment is stopped.

## 10. Water Control Panel

- a. One (1) NEMA4X water control panel to be supplied.
- b. Cabinet to contain all required valves, plumbing, and instrumentation to properly operate the water recirculation/irrigation system.
- c. Panel to contain 120/1/60VAC standard duplex plug, GFI protected, powered from the main electrical control panel.
- d. Include terminal strip as needed for instrumentation and communication needs.
- e. The panel shall be completely shop assembled and tested.
- f. All utility connections exterior to the panel will be supplied, installed, and winterized (if applicable) by the contractor after hydro-testing of completely assembled system.

## M1.13 GENERAL

- A Install in accordance with Manufacturer's written instructions.
- B The Contractor shall give the Manufacturer 15 full working days' notice prior to requested start-up/training date.

## M1.14 INSTALLATION

A Install all equipment and media in accordance with the manufacturer's written instructions and recommendations.

### M1.15 MANUFACTURER'S SERVICES

- A The manufacturer shall provide the following services:
  - 1. One (1) trip, two (2) days on site for start-up, commissioning, and operator training
  - 2. Certificate of proper installation and commissioning report.
  - 3. Additional on-site assistance is available for an additional charge.

#### END OF SECTION



#### **GENERAL NOTES:**

#### A. BIDDER/CONTRACTOR ELIGIBILITY

A NON-MANDATORY PRE-BID CONFERENCE WILL BE HELD PRIOR TO BID OPENING FOR THE PROJECT.

#### **B. GENERAL NOTES**

- ALL CONSTRUCTION FOR THIS PROJECT SHALL GENERALLY CONFORM TO THE REQUIREMENTS OF THE TEXAS DEPARTMENT OF TRANSPORTATION <u>STANDARD SPECIFICATIONS</u> FOR <u>CONSTRUCTION OF HIGHWAYS</u>, <u>STREETS AND BRIDGES</u> (2004 EDITION) UNLESS EXCEPTED OR NOTED ON THESE PLANS.
- 2. ALL BARRICADES, SIGNS AND TRAFFIC CONTROL FOR THIS PROJECT SHALL CONFORM TO THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR
- 3. THE BIDDERS FOR THIS PROJECT SHALL FAMILIARIZE THEMSELYES WITH ALL REQUIREMENTS OF WORKING IN STATE AND VILLAGE OF SALADO RIGHTS-OF-WAY AND EASEMENTS. THE BIDDERS SHALL FAMILIARIZE THEMSELYES WITH ALL INSURANCE REQUIREMENTS FOR SAID WORK AND SHALL INCLUDE IN THEIR BIDS, INSURANCE COSTS AND INSURANCE PREMIUMS THAT PROVIDE FOR THE STATE OF TEXAS. THE CITY OF TEMPLE, TEMPLE REINVESTMENT ZONE 1 AND THE ENGINEER AS ADDITIONAL INSUREDS UNDER THE CONTRACTOR'S POLICIES.
- THE CONTRACTOR SHALL IF REQUIRED PROVIDE THE OWNER WITH A BARRICADE, SIGNING AND TRAFFIC PLAN WHICH WILL INCLUDE HOW TRAFFIC WILL BE HANDLED DURING CONSTRUCTION. THE BARRICADES, SIGNS AND LIGHTS SHALL CONFORM TO THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, THE PLAN SHALL BE PREPARED BY A TEXAS REGISTERED PROFESSIONAL ENGINEER STANDARD TRAFFIC CONTROL PLANS HAVE BEEN PROVIDED. SHOULD THE CONTRACTOR CHOOSE TO DEVAITE AND DEVELOP THEIR OWN TRAFFIC CONTROL IT SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS.

PROFESSIONAL ENGINEER IN THE STATE OF TEXAS.

(MONDAY-FRIDAY) IN ADVANCE OF CONSTRUCTION STARTUP, FOLLOWED BY A LETTER OF CONFIRMATION. CONTRACTOR SHALL ALSO GIVE A MINIMUM OF THREE (3) WORKING DAYS (MONDAY-FRIDAY) NOTICE TO ALL ALTHORIZED INSPECTORS, SUPERINTENDENTS OR PERSONS IN CHARGE OR PRIVATE AND PUBLIC UTILITIES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK. THE FOLLOWING ARE TELEPHONE NUMBERS OF THE ENTITIES MOST LIKELY TO BE AFFECTED:

TEXAS ONE CALL (B11)

TEXAS EXCAVATION SAFETY SYSTEM
TXU ELECTRIC DELIVERY
ATMOS ENERGY
ATMOS ENERGY
1-866-332-8667
CITY OF TEMPLE, TEXAS
1-254-298-5611
CABLEVISION
CENTROVISION
1-254-778-9441
SBC.
1-254-9754-4102 OR 1-800-669-8 (811) 1-800-344-8377 1-512-244-5691 1-866-332-8667 1-254-298-5611 1-254-778-9441 1-254-773-1163 1-254-954-4102 OR 1-800-669-8344 1-800-252-1133 1-254-933-56471 1-254-933-5823 BRAZOS RIVER AUTHORITY CITY OF BELTON

- CITY OF BELTON

  1-254-933-5823

  6. LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS WAS COMPILED FROM RECORD INFORMATION. NO WARRANTY IS IMPLIED AS TO THE ACTUAL LOCATION OF EXISTING UTILITIES. CONTRACTOR TO FIELD VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING TEXAS ONE CALL (811) AND ANY OTHER UTILITY COMPANIES REQUIRED BY STATE LAW. IF HERE ARE ANY CONFLICTS BETWEEN PROPOSED AND EXISTING UTILITIES, OR IF THE EXISTING UTILITIES ARE IN ANY WAY DIFFERENT FROM WHAT IS SHOWN ON THE DRAWINGS, THEN IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER (FOR CITY UTILITIES) OR OTHER AFFECTED UTILITY BEFORE PROCEEDING WITH ANY CONSTUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR RESOLVING ALL CONFLICTS AT HIS EXPENSE. THE OWNER AND ENGINEER WILL CONSIDER ANY CONFLICTS AT SAID LOCATIONS ON A CASE BY CASE BASIS IN ORDER TO DETERMINE IF THE CONTRACTOR SHOULD BE REIMBURSED FOR HIS EXPENSE IN SOLVING SAID CONFLICT.
- 7. CONTRACTOR SHALL MAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF THESE CONSTRUCTION OPERATIONS ARE TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR TO AT LEAST THE PREEXISTING CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL COORDINATE INTERRUPTIONS OF ALL UTILITIES AND SERVICES WITH ALL APPLICABLE UTILITY COMPANY OR COMPANIES. ALL WORK TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY COMPANY OR AGENCY INVOLVED.
- 9. WHEN UNLOCATED OR INCORRECTLY LOCATED UNDERGROUND PIPING OR A BREAK IN A LINE OR OTHER UTILITIES AND SERVICES ARE ENCOUNTERED DURING SITE WORK OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. CONTRACTOR TO COOPERATE WITH THE APPLICABLE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICES IN OPERATION.
- 10. THE CONTRACTOR SHALL CALL 811 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. IN ADVANCE OF CONSTRUCTION, THE CONTRACTOR IS TO VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL STRIP 6 INCHES OF TOPSOIL FROM ALL AREAS SUBJECT TO GRADE MODIFICATIONS. REMOVE ANY AREA OF WEAK SOIL.
- 12. THE CONTRACTOR SHALL PROTECT ALL EXISTING FENCES. IN THE EVENT THAT A FENCE MUST BE REMOVED. THE CONTRACTOR SHALL REPLACE SAID FENCE OR PORTION THEREOF WITH THE SAME TYPE OF FENCING TO A QUALITY OF EQUAL OR BETTER THAN THE ORIGINAL FENCE. THIS WILL NOT BE A SEPARATE PAY ITEM, UNLESS SPECIFICALLY NOTED ON THE CONSTRUCTION DRAWINGS.
- 13. THE CONTRACTOR SHALL MAKE AN EXAMINATION OF THE PROJECT SITE AND COMPLETELY FAMILIARIZE HIMSELF WITH THE NATURE AND EXTENT OF THE WORK TO BE ACCOMPLISHED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY WORK MADE NECESSARY BY UNUSUAL CONDITIONS OR OBSTACLES ENCOUNTERED DURING THE PROGRESS OF THE WORK, WHICH CONDITIONS OR OBSTACLES ARE READILY APPARENT UPON A VISIT TO THE SITE. IF THERE ARE ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL SITE CONDITIONS THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE SUBMISSION OF BIDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF HIS MATERIALS AND EQUIPMENT FROM THEFT, VANDALISM, ANIMALS, FIRE, ETC., WHILE SAID MATERIALS AND EQUIPMENT ARE ON THE PROJECT WHETHER STORED OR INSTALLED IN PLACE, UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITIES.
- UPON COMPLETION OF THE PROJECT, THE SITE(S) AS DEFINED HEREIN, SHALL BE CLEANED OF ALL DEBRIS AND LEFT IN A NEAT AND PRESENTABLE CONDITION.
- 16. IN THOSE CASES WHERE FIXED FEATURES REQUIRE, THE DESIGN SLOPES INDICATED HEREIN AND ON THE CROSS SECTIONS MAY BE MODIFIED IN THE FIELD AS DETERMINED BY THE ENGINEER IF EXISTING CONDITIONS SO REQUIRE.

- THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT ALL ADJOINING PAVEMENT SECTIONS SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION AND ANY DAMAGES INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED AND/OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- WHERE EXISTING PAVEMENT ADJOINS NEW PAVEMENT, THE EXISTING PAVEMENT SHALL BE SAWED TO A NEAT TRANSVERSE LINE TO PERMIT ADEQUATE JOINING.
- ACCESS TO OFFICES, BUSINESSES AND DRIVEWAYS ALONG THE PROJECT MUST RECEIVE PRIORITY BY THE CONTRACTOR.
- 20. EXISTING PAYING, BUILDINGS AND OTHER ITEMS SHOWN ON THE PLANS ARE NOT SPECIFICALLY RELATED TO THE WORK OF THE CONTRACTOR AND IS FOR INFORMATION ONLY, UNLESS OTHERWISE
- 21. THE PROCUREMENT AND TRANSPORTATION OF WATER REQUIRED FOR INCLUSION IN THE PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR. WATER METER CAN BE PROCURED THROUGH THE CITY OF BELTON.
- CONTRACTOR SHALL CONTROL DUST CAUSED BY THE WORK AND COMPLY WITH POLLUTION CONTROL REGULATIONS OF GOVERNING AUTHORITIES.
- 23. THE PROCUREMENT AND TRANSPORTATION OF WATER REQUIRED FOR INCLUSION IN THE PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 24. ALL UTILITY TECHNICAL SPECIFICATIONS FOR THE VILLAGE OF SALADO SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS LISTED BELOW AND AMENDMENTS INCLUDED HEREIN. THE TECHNICAL SPECIFICATIONS FROM "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (BLUE BOOK) BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS:

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS REGIONAL INFORMATION CENTER
P.O. BOX 5888 ARLINGTON, TEXAS 76005-5888

WILL BE USED ON THE PROJECT. COPIES MAY BE PURCHASED FROM THE ABOVE AD RESPONSIBILITY FOR UPDATING THESE COPIES WILL BE THE CONTRACTORS RESPONSIBILITY. ABOVE ADDRESS.

#### C. CONSTRUCTION LAYOUT/PROJECT COORDINATION

- CONTRACTOR SHALL LOCATE, PROTECT AND MAINTAIN BENCHMARKS, MONUMENTS AND CONTROL POINTS. RE-ESTABLISHMENT OF DISTURBED OR DESTROYED ITEMS SHALL BE ACCOMPLISHED BY A TEXAS REGISTERED PROFESSIONAL LAND SURVEYOR AT NO COST TO THE OWNER.
- 2. PRE-CONSTRUCTION CONFERENCE
- . PRE-CONSTRUCTION CONFERENCE

  A. PRIOR TO BEGINNING WORK ON THE PROJECT AND SOON AFTER THE AWARD OF THE CONTRACT, A CONFERENCE WILL BE HELD AMONG THE REPRESENTATIVES OF THE OWNER, THE ENGINEER, THE CONTRACTOR AND ANY SUBCONTRACTOR THAT WILL BE INVOLVED IN THE WORK, AT THAT TIME THE CONTRACTOR SHALL SUBMIT CHARTS OR BRIEFS, OUTLINING THE MANNER OF EXECUTION OF THE WORK THAT IS INTENDED IN ORDER TO COMPLETE THE SPECIFIED WORK WITHIN THE ALLOTTED TIME. THIS CONFERENCE WILL MORE COMPLETION, ESTABLISH THE SEQUENCE OF WORK TO BE FOLLOWED AND ESTABLISH THE ESTIMATED PROGRESS SCHEDULE FOR COMPLETION OF THE VARIOUS TASKS. WHEN APPLICABLE, THE PRE-CONSTRUCTION CONFERENCE WILL BE HELD ONLY AFTER INSTALLATION OF THE EROSION AND SEDIMENTATION CONTROLS. THIS CONFERENCE SHOULD TAKE PLACE ON THE SITE TO DEMONSTRATE COMPETENCE WITH THE EROSION AND SEDIMENTATION CONTROLS. THIS CONFERENCE SHOULD TAKE PLACE ON THE SITE TO DEMONSTRATE COMPETENCE WITH THE EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN.

  B. IN ADDITION. AT THIS CONFERENCE THE CONTRACTOR SHALL BE RESPONSIBLE FOR
- B. IN ADDITION, AT THIS CONFERENCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING THE ENGINEER WITH ALL OF THE FOLLOWING, AS SPECIFIED HEREIN OR AS DIRECTED BY THE ENGINEER:
- i. SAMPLES OF ALL MATERIALS TO BE USED ON THE PROJECT WITH IDENTIFICATION AS TO PRODUCT NAME: NAME, LOCATION, PHONE NUMBER (INCLUDING AREA CODE) AND MAILING ADDRESS OF PRODUCT SOURCE AND MANUFACTURER, IF DIFFERENT FROM SOURCE; CONTENT OF PRODUCT; AMOUNT OF EACH INGREDIENT IN THE PRODUCT, AND MANUFACTURER'S DIRECTIONS AS TO USE AND APPLICATION OF THE PRODUCT, IF APPLICABLE.
- ii. Manufacturer's literature of all materials and equipment installed on the project.
- THE PROVECT.

  3. THE PLANS FOR THIS PROJECT SHOW PROPOSED ELEVATIONS, SLOPES AND DIMENSIONS THAT ARE INTENDED FOR ACTUAL PLACEMENT. HOWEVER, THERE MAY BE SOME INSTANCES WHERE EXISTING CONDITIONS MAKE IT IMPRACTICAL TO ACHIEVE THE IDEAL. IN THOSE INSTANCES, THE ENGINEER WILL ASSIST THE CONTRACTOR IN MAKING PROPER FIELD CHANGES TO BETTER ACCOUNT FOR FIELD CONDITIONS.
- FIELD CHANGES TO BETTER ACCOUNT FOR FIELD CONDITIONS.

  4. THE CONTRACTOR FOR THE PROJECT WILL MARK THE LIMITS OF CONSTRUCTION PRIOR TO COMMENCEMENT OF THE PROJECT. PRIVATE PROPERTY SHALL BE OFF LIMITS UNLESS WRITTEN PERMISSION IS GIVEN TO THE CONTRACTOR BY THE OWNER. THE CITY OF TEMPLE WILL NOT BE RESPONSIBLE FOR ANY CONTRACTOR OPERATIONS OFF OF THE PROJECT SITE.

  5. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION. IF THERE ARE ANY DISCREPANCIES THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. THIS SHALL BE SUBSIDIARY.

#### D. CONCRETE FOR PROPOSED AND EXISTING PADS

- THE CONCRETE FOR THE ODOR CONTROL SYSTEM PAD AND REPLACEMENT OF THE SAW-CUT SECTION FOR THE LIFT STATION PAD SHALL BE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 P.S.I., A MINIMUM 7-DAY FLEXURAL STRENGTH OF 510 P.S.I., A MAXIMUM WATER TO CEMENT RATIO OF 6.0 GALLONS PER SACK AND BE A MINIMUM (6) SIX SACKS PER CUBIC YARD OF CONCRETE SHALL BE REQUIRED UNLESS OTHER WISE SPECIFIED IN PLANS.
- 2. TYPE 2 MEMBRANE CURING COMPOUND (WHITE PIGMENTED) SHALL BE USED FOR THIS PROJECT.
- 3. ALL REINFORCING STEEL FOR CONCRETE SHALL MEET ASTM A 615, GRADE 60 AND SHALL BE USA DOMESTIC

#### **E. JOB SITE SAFETY NOTES**

ALL CONSTRUCTION OPERATIONS FOR THIS PROJECT SHALL BE ACCOMPUSHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). COPIES OF THE OSHA STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM OSHA: 903 SAN JACINTO; AUSTIN, TEXAS.

- 2. THESE PLANS, PREPARED BY KASBERG, PATRICK & ASSOCIATES, LP, DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR HIS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF KASBERG, PATRICK & ASSOCIATES, LP, REGISTERED PROFESSIONAL ENCINEERICS) HEREON DOES NOT EXTEND TO AMY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THE WORK.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ALL JOB SITE SAFETY, FOR MANAGEMENT OF JOB SITE PERSONNEL FOR SUPERVISION OF THE USE OF JOB SITE EQUIPMENT AND FOR DIRECTION OF ALL CONSTRUCTION PROCEDURES, METHODS AND ELEMENTS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

#### F. ENVIRONMENTAL NOTES

- CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING SANITARY FACILITIES ON THIS
  PROJECT FOR EMPLOYEES.
- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIAL, INCLUDING METHODS OF HANDLING AND DISPOSAL.
- CONTRACTOR SHALL MAINTAIN ACCESS TO PUBLIC AND PRIVATE FACILITIES DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES TO BE COORDINATED WITH THE OWNER. THIS SHALL BE SOLE RESPONSIBILITY OF THE CONTRACTOR
- CONTRACTOR SHALL LOCATE MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. CONTRACTOR TO PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS AND OTHER POTENTIALLY TOXIC MATERIALS.
- 5. FUEL STORAGE IS NOT ALLOWED ON THIS PROJECT.
- CONTRACTOR SHALL ADVISE OWNER IMMEDIATELY, VERBALLY AND IN WRITING, OF ANY FUEL OR TOXIC MATERIAL SPILLS ONTO THE PROJECT CONSTRUCTION AREA AND THE ACTIONS TO BE TAKEN TO REMEDY THE PROBLEM.
- CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF HIS FUELS, MATERIALS AND CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
- 8. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE ENVIRONMENTAL

#### G. BID SCHEDULE NOTES

CONTRACTOR SHALL SUBMIT A SCHEDULE OF VALUES (SOV) FOR ALL LUMP SUM BID ITEMS AT LEAST TWO WEEKS PRIOR TO THE FIRST PAY REQUEST. ENGINEER AND OWNER WILL REVIEW SOV FOR GENERAL CONFORMANCE WITH STANDARD PRACTICES AND HISTORICAL COSTS. CONTRACTOR SHALL NOT FRONT-END LOAD THE SOV, SOV WILL BE USED TO DETERMINE PROGRESS AS A BASIS FOR PARTIAL PAYMENT OF LUMP SUM BID

#### H. ELECTRICAL NOTES

- 1. SPECIFICATIONS

  a. FURNISH ALL WORK, LABOR, TOOLS, SUPERINTENDENCE, MATERIAL EQUIPMENT AND OPERATIONS NECESSARY TO PROVIDE A COMPLETE AND WORKABLE ELECTRICAL SYSTEM.
  b. ELECTRICAL WIRE, CONDUIT, AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED PER LATEST EDITION OF THE NEC BY A LICENSED ELECTRICIAN IN A WORKMAN LIKE
- MANNER.

  c. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC. BENDS TO GRADE SHALL BE MADE WITH PLASTIC COATED RIGID ALUMINUM CONDUIT AND SHALL EXTEND 3" ABOVE GRADE. EXPOSED CONDUIT SHALL BE RIGID ALUMINUM CONDUIT. d. DUCTBANK
- TRANK

  I. FOR UNDERGROUND CONDUIT INSTALLATION FIELD CHECK AND VERIFY
  LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATING.

  II. AVOID DISTURBING UTILITIES AS FAR AS POSSIBLE. IN THE EVENT
  EXISTING UTILITIES ARE BROKEN OR DAMAGED THEY SHALL BE REPAIRED AS TO
  MAKE THEIR OPERATION EQUAL TO THAT BEFORE TRENCHING WAS STARTED. INSTALL UNDERGROUND CONDUITS IN INTERLOCKING CONDUIT SADDLES
- DUCTBANK SHALL BE 24" DEEP.
- THE BOTTOM 4" LAYER SHALL CONSISTS OF SELECT FILL COMPACTED.
- THE MIDDLE 12" LAYER SHALL CONSIST OF PIT SAND, CONDUIT SADDLES AND A #6 TINNED STRANDED BARE COPPER WIRE INSTALLED ABOVE THE CONDUIT. CONDUIT SHALL BE INSTALLED AT 24" MINIMUM BELOW GRADE.
- 3. THE TOP 12" COVERING SHALL CONSIST OF 6"CONCRETE CAP
  REINFORCED WITH FIBERSTRAND ON TOP OF THE PITSTAND WITH ONSITE
  CRUSHED STONE AND A 6" WIDE BURIED CONDUIT MARKER TAPE 2" ABOVE
  THE CONCRETE CAP

  e. POWER AND CONTROL WIRING SHALL BE INSULATED FOR 600 VOLTS AND SHALL BE
  COPPER CONDUCTOR WITH XHHW—2 INSULATION AS MANUFACTURED BY SOUTHWIRE OR PPROVED EQUAL. f. GROUNDING
- FURNISH AND INSTALL COMPLETE GROUNDING SYSTEM IN ACCORDING WITH ARTICLE 250 OF THE NEC. ALL EQUIPMENT ENCLOSURES, MOTOR AND TRANSFORMER FRAMES, METALLIC CONDUIT SYSTEMS AND EXPOSED STRUCTURAL STEEL SYSTEMS SHALL BE GROUNDED.
- GROUND RODS SHALL BE COPPER CLAD 3/4" DIAMETER X 10 LONG III. PROVIDE HEAVY DUTY GROUND ROD CLAMPS, EXOTHERMIC WELDS WHERE CONCEALED OR BELOW GRADE. EXOTHEMIC WELDING KITS SHALL BE CADWELD PRODUCTS. ALL EXOTEMIC WELDS SHALL ENCOMPASS 100% OF THE MATERIALS BEING WELDED.
- BOND EACH EQUIPMENT GROUNDING CONDUCTOR TO THE EQUIPMENT GROUNDS AT EACH END OF EACH RUN. CONNECT DUCT BANK GROUND WIRE TO EXISTING GROUND MAT.
- 9. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PROVIDE ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE AND FUNCTIONAL SYSTEM.

  IN SECURE ALL PERMITS, LICENSES, AND INSPECTION AS REQUIRED BY ALL AUTHORITIES
- IN THE POWER PANEL RELOCATE THE EXISTING TWO POLE 480 VOLT 20 AMP BREAKER TO THE RIGHT OF THE 3 POLE SPARE BREAKER. WHERE THE TWO POLE BREAKER WAS PREVIOUSLY LOCATED FURNISH AND INSTALL NEW 3 POLE 480 VOLT 20 AMP SQUARE D POWERPACT BREAKER.

- 2.FURNISH AND INSTALL NEW 2#12, #12G WIRING FROM 480 VOLT TWO POLE BREAKER TO 5 KVA SINGLE PHASE TRANSFORMER FOR BREAKER RELOCATION.
- 3. FURNISH AND INSTALL 3#12 WIRING FROM POWER DISTRIBUTION BLOCK TO NEW THREE POLE BREAKER AND 3#12, #12G IN 1" CONDUIT FROM NEW 3 POLE BREAKER TO ODOR CONTROL SYSTEM ELECTRICAL PANEL. PROVIDE ADDITIONAL GROUND BLOCK FOR GROUND WASTE IN CONTROL SYSTEM ELECTRICAL PANEL. PROVIDE ADDITIONAL GROUND BLOCK FOR GROUND
- WIRE IN PANEL.
  FURNISH AND INSTALL 4#14, #14G IN 1" CONDUIT FROM INSTRUMENT PANEL TO ODOR
  CONTROL SYSTEM ELECTRICAL PANEL TO PICK UP DIGITAL INPUTS FOR SALADO SCADA
  SYSTEM FOR FAN RUN AND RECIRCULATION PUMP RUN. COORDINATE WITH KENT
  MYERHOEFER AT WHEECO CONTROLS (817) 244-6660 FOR INTEGRATING POINTS INTO
  EXISTING SCADA SYSTEM.

PROJECT NO. NO. DATE REVISION BY Plot Date Jun 12, 2020 - 1:31pm

Plotted By: ZCOOPER

RICK N. KASBERG DESIGNED BY 100 grelie APPROVED BY 0-15-2020 DATE

2002-105

ZANE G. COOPER

OF COM RICK N. KASBERG 70163 CISTERO STORING



KASBERG, PATRICK & ASSOCIATES, LP **CONSULTING ENGINEERS TEMPLE. TEXAS 76501** 

VILLAGE OF SALADO, TEXAS

**ROYAL STREET LIFT STATION** 

SHEET NO. OC02

**GENERAL AND ELECTRICAL NOTES** 

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