REQUEST FOR COMPETITIVE SEALED PROPOSALS

CITY OF CONROE

2018-01 WATER LINE – SGT. ED HOLCOMB EXTENSION
(aka Cayden Creek and PRV at Sgt. Ed Holcomb)

CITY OF CONROE
P.O. BOX 3066
CONROE, TEXAS 77305

NON-MANDATORY PRE-BID MEETING
THURSDAY NOVEMBER 8, 2018 AT 10:00 AM

RESPONSES DUE THURSDAY NOVEMBER 15, 2018

QUESTIONS MUST BE SUBMITTING IN WRITING:
www.civcastusa.com

CITY OF CONROE PURCHASING DEPARTMENT
NOVEMBER 2018
TABLE OF CONTENTS
CONTRACT DOCUMENTS CITY PROJECT RFP# 2018-01

GENERAL CONTRACT DOCUMENTS

Bid Requirements, Contract Forms and Conditions of the Contract

Document 00040 Notice for Competitive Sealed Proposals
Document 00050 General
Section 00100 Instructions to Proposers and Special Provisions to the Contract
Document 00300 Offer Proposal Form
Document 00510 Construction Contract
Document 00520 Bid Bond, Performance Bond, Payment Bond & Insurance, TEC Forms,
House Bill 89 Verification, Senate Bill 525 Verification
Section 00600 General Conditions of the Agreement
Section 00700 Special Conditions of the Agreement

Signed and Sealed Plans

Technical Specifications
NOTICE FOR COMPETITIVE SEALED PROPOSALS

The City of Conroe will receive Competitive Sealed Proposals in quadruplicate for Sgt. Ed Holcomb Waterline Extension, located in Montgomery County, Texas. The RFPs shall be appropriately marked “2018-01 Sgt. Ed Holcomb Waterline Extension” and delivered to the City Secretary 300 West Davis, 3rd Floor, Conroe, Texas 77301.

A Non-Mandatory Pre-Bid Conference will be held on THURSDAY, NOVEMBER 8, 2018 at 10:00am located at the Conroe Tower – City Hall, Council Chambers, 300 West Davis, Conroe, TX 77301. Bids are due on THURSDAY, NOVEMBER 15, 2018 at 2:00 p.m. at which time they will be publicly opened and read aloud in the 3rd floor conference room, 300 West Davis St. Conroe Texas. Bids received after the specified time and date will be returned unopened.

RFP’s must be accompanied by a certified check upon some responsible bank of the State of Texas or a bid bond from a Surety Company holding a permit in the State of Texas in the amount of 10% of the bid. The amount of said check or bond will be forfeited to the Owner and the bank or surety shall be liable to the Owner for the amount in the event the successful proposer shall fail or refuse to enter into a contract or furnish bonds as hereafter required.

The successful proposer must furnish a performance bond and a payment bond on the forms provided, each in the amount of 100% of the contract price from a Surety Company holding a permit in the State of Texas and approved by the Federal Government.

Specifications and RFP documents may be reviewed and downloaded online at Civcast www.civcastusa.com. Questions concerning this bid shall also be submitted on Civcast.

No RFP may in any way qualify, modify, substitute or change any part of the specifications or contract documents.

Pursuant to Government Code Chapter 2269, subchapter D the City of Conroe may enter into a contract with the offeror meeting all the qualifications and specifications that submits the RFP that offers the best value to the City considering the selection criteria and weighted value set forth in the request for proposals and the ranking evaluation of the proposals received. The City reserves the right to reject any and all RFPs, award parts of bids and to waive informalities in submission of RFPs.

CC: OCTOBER 21, 2018

OCTOBER 29, 2018

NOVEMBER 9, 2018

CITY OF CONROE, TEXAS
Pursuant to Government Code Chapter 2269, subchapter D, competitive sealed bids will be received in quadruplicate on the following project as described below.

300 West Davis
Conroe, Texas 77301

OWNER: City of Conroe

OPENING TIME: 2:00 P.M., THURSDAY NOVEMBER 15, 2018

BID OPENING LOCATION: Conroe Tower - City of Conroe
300 W. Davis
3rd Floor Conference Room
Conroe, Texas

1 Bid Documents for the above project may be obtained by qualified Construction Contractors from the City of Conroe’s website at www.cityofconroe.org, Purchasing.

2 All bids, whether mailed or delivered, must be in the hands of the Owner not later than the above specified time for above project. All bids shall be sealed and clearly marked “2018-01 Water Line Extension – Sgt. Ed Holcomb Blvd.” on the outside of the envelope. Faxed bids will not be considered.

3 Offers shall not be withdrawn within forty five (45) days after bid opening without consent of the Owner. No bid may in any way qualify, modify, substitute or change any part of the bid specifications. The City, through its duly authorized officials, reserves the right to reject any, part of, or all bids and to waive any informalities pertaining to any bid, without the imposition of any form of liability. The Owner also reserves the right to award this bid to the most qualified proposer or to the proposer that offers the best value to the City taking into consideration the evaluation criteria contained herein. The companies whose bids are not accepted will be notified after a binding agreement between the successful Candidate and the Owner is executed, or upon the Owner’s rejection of all bids. A decision concerning award of Contract will be made as soon as practicable.

4 It is understood and agreed that the work for this project is to substantially complete within * calendar days and complete in full within * calendar days after notification to proceed. The proposer will begin construction within fifteen days after Notice to Proceed. * Must be filled in by Contractor

5 Bid security of either a certified check payable to the Owner, or an acceptable Proposer’s / Bidder’s Bond, in an amount not less than 10% of the greatest amount of the offer submitted must accompany each bid.

6 As a condition for award of contract, a Performance Bond, and a Payment Bond, each in an amount not less than 100% of the contract sum, conditioned upon the faithful performance of the Contract, will be required of the Contractor. Bonding companies must be acceptable to the Owner. The amount of each bond shall be adjusted by the amount of any change order.

7 Not less than the prevailing rates of wages shall be paid on the project in conformity with the laws of the State of Texas.

8 A NON-MANDATORY PRE-BID CONFERENCE - a pre-bid conference which will be held on THURSDAY, NOVEMBER 8, 2018 at 10:00 A.m. at the Conroe Tower – City Hall, Council Chambers, 300 West Davis, Conroe, TX 77301.

9 All questions pertaining to this project will be answered in addendum form and posted on the City’s website daily. Contractors will be responsible for all addenda issued whether received or not. FINAL QUESTIONS must be submitted 72 hours before the due date and time which will allow for final addenda to be issued within that 72 hour period. Technical questions should be submitted in writing to CIVCAST.

END OF DOCUMENT

The project consists of installation of a 12-inch waterline along Sgt. Ed Holcomb Road. Project scope includes construction of approximately 2,960 linear feet of 12-inch PVC waterline with fittings, appurtenances, and site restoration.

The City will provide a Construction Manager to represent the City in a fiduciary capacity, obtain construction materials testing services on behalf of the City, assist the City in evaluating the award of the construction contract and provide oversight on behalf of the City during construction.

The City of Conroe is interested in working with a firm that has extensive experience in waterline construction.

The City will also place strong emphasis on the evaluation criteria used to determine “The Best Value” for the City of Conroe concerning this project.

- Submittal Packet: Please return one original signed and bound RFP response (Labeled Original) and three copies of that original. Please include one original bid bond and three copies of that original, not bound. Please include one original of the ethics forms 1295, CIQ, HB89 and SB252 along with three copies of each original, not bound.
  - One original RFP response labeled original, bound, three copies labeled copies
  - One original bid bond, three copies of that original, do not include them in the bound copies, they should be separate.
  - One original of the ethics forms and one copy of each, separate and not included in the bound RFP response.

- ALL of the above may be included in the same box or envelope and sent to the address below.

If you are interested in being considered as a contractor for this project, please submit your original and three copies of your bid to:

Physical: Soco Gorjon, City Secretary
300 West Davis St.
Conroe, TX. 77301

USPS: Soco Gorjon, City Secretary
P.O. Box 3066
Conroe, TX. 77305

1.2 Questions and Inquiries. Any person with questions regarding this RFP should e-mail a written request for clarification to:

BIDDING PROCEDURES: Kristina Colville, Purchasing Manager
kcolville@cityofconroe.org

TECHNICAL QUESTIONS: Submit in writing to CIVCAST
www.civcastusa.com

Answers and all Addenda will be posted on the City's Website at cityofconroe.org with a link to CIVCAST. Candidates should not rely on any oral communication concerning this Bid and oral responses will have no binding effect. Candidates may not visit any proposed project site without the Owner's permission and coordination.

1.3 Conditions of Conduct. At all times any agent, officer, or employee of Proposer shall be present upon property owned by the City of Conroe, the terms and conditions of the Drug and Alcohol Policy currently adopted by the City of Conroe, shall be deemed applicable to such persons. Violations of terms and conditions while present on the premises owned by the City of Conroe shall be grounds for termination of any contract between the City and Proposer. A copy of this policy is available for public inspection in the office of the City Secretary and copies may be obtained at a nominal charge.
1.4 **Ethical Standard.** No City official or employee shall have interest in any contract resulting from this RFP. Individuals with a possible conflict will enact a public disclosure record by completing a “Statement of Financial Interest” form.

Refer to Project number and title on the 1295 form. Example forms are included with this RFP.

- 1295 certificate of Interested Parties
- Conflict of Interest Questionnaire
- HB 89 Verification Form
- SB 252 Verification Form

The four forms stated above MUST be returned as part of your RFP response. Failure to include these forms may result in your RFP being considered unresponsive and therefor disqualified. Sample copies of these forms are included in the RFP. The web address to the Texas Ethics Commission website with instructions is listed below:

(Sample Forms are attached)

https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

1.5 **Reimbursements.** There is no expressed or implied obligation for the City of Conroe to reimburse responding firms for any expenses incurred in preparing bids in response to this request and the City will not reimburse responding firms for these expenses, nor will the City pay any subsequent costs associated with the provision of any additional information or presentation, or to procure a contract for these services.

1.6 **Disclosure.** The name of the respondents and their lump-sum offer will be read at that time of opening. All bids will be kept confidential during the negotiation process. Once the contract has been awarded, all bids will be open for public inspection, except for trade secrets and confidential information, which the firm identifies as proprietary.

1.7 After written bids are received and initially evaluated, the Owner may require one or more of the Candidates to provide an oral presentation as a supplement to their bids. Any Candidate required to interview should be prepared to discuss and substantiate any area of their bid. The Owner is under no obligation to grant interviews to any Candidate receiving a copy of this Bid and/or submitting a written bid in response to this Bid.

1.8 **Selection Process.** The bids will be evaluated on behalf of the Owner by an Evaluation Committee which will consist of City of Conroe Employees. The City Administrator is an ex-officio member of the Evaluation Committee and may substitute for any other designated committee member.

As authorized by Government Code Chapter 2269, subchapter D the Evaluation Committee will evaluate and rank the bids and will identify the offeror that submits the bid that offers the best value for the Owner based on the selection criteria and weighted value set forth below.

The selection criteria and their weighted value are:

<table>
<thead>
<tr>
<th></th>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The proposed price/cost</td>
<td>30 Points</td>
</tr>
<tr>
<td>2</td>
<td>The quality of the Bidder's goods or services.</td>
<td>25 Points</td>
</tr>
<tr>
<td>3</td>
<td>The reputation/past relationship with the City of Conroe</td>
<td>15 Points</td>
</tr>
<tr>
<td>4</td>
<td>Time for completion or Project scheduling</td>
<td>10 Points</td>
</tr>
<tr>
<td>5</td>
<td>Ability and qualifications or professional personnel</td>
<td>10 Points</td>
</tr>
<tr>
<td>6</td>
<td>Financial capability (or workload of Firm)</td>
<td>5 Points</td>
</tr>
<tr>
<td>7</td>
<td>Safety record (or past performance in similar projects)</td>
<td>5 Points</td>
</tr>
</tbody>
</table>

Total 100 Points

Category Listing from Research

1. Cost
2. Quality
3. Cycle Time
4. Service
5. Relationship
6. Organizational Profile

The Owner shall first attempt to negotiate a contract with the selected offeror. The Owner and its architect or engineer may discuss with the selected offeror options for a scope or time modification and any price change associated with the modifications and any such modifications may be included in the final contract.
If discussions with the selected offeror are unsuccessful for any reason, the City will terminate negotiations formally and in writing with such firm and proceed to the next offeror in the order of the selection ranking until an agreement is reached or all bids are rejected.

Upon reaching an agreement the contract will be placed in writing and executed by both parties and a purchase order will be issued by Owner for the contract amount.

1.9 **Response format.** The items listed below shall be submitted with each bid and should be submitted in the order shown. Each section should be clearly labeled, with pages numbered and separated by tabs. Failure by a Proposer to include all listed items may result in their bid being rejected.

- **Tab I – Cover Letter**
  
  Provide a cover letter indicating your firm’s understanding of the requirements of this specific job bid. The letter must be brief and formal from the proposer that provides information regarding the firm’s interest in and ability to perform the requirements of the Bid. A person who is authorized by the organization to enter into an agreement with the City of Conroe will sign the letter.

  Please include all contact information.

- **Tab 2 – Proposal and Contract Documents**

- **Tab 3 – Acceptance of Conditions**
  
  Indicate any exceptions to the terms and conditions of this Bid, including the Scope of Services. Include a copy of all amendments issued pertaining to this RFP.

- **Tab 4 – Company Background (2 – Pages Maximum)**
  
  1. Years in business under present name.
  2. Name and address of each office location.
  3. Ownership structure (Corporation / Partnership).
  4. Names and titles of officers in the company.
  5. Company trade organizations / associations / affiliations

- **Tab 5 – Experience of Key Personnel on Similar Jobs**
  
  1. List key personnel that will be assigned or oversee this job.
  2. Provide resumes for key personnel.
  3. List all subcontractors that will be used for this construction project.

- **Tab 6 – References**
  
  Provide references from the last five similar construction projects for which your company provided waterline extension construction services as a General Contractor.

- **Tab 7 – List of Ongoing and Completed Projects**
  
  Provide a list of all public and private construction projects in which your company is currently involved, or has been involved, in whole or in part, as a General Contractor.

  Please list project description, cost, and status.
SECTION 00100

INSTRUCTIONS TO BIDDERS AND SPECIAL PROVISIONS TO THE CONTRACT

SECTION 1
DEFINITIONS

1.1 "Engineer" means Amber R. Hurd, PE CobbFendley 13430 Northwest Freeway Houston Texas 77040

1.2 "City" means the City of Conroe, Texas.

1.3 "Contractor" means the Proposer who is awarded the Contract.

1.4 "Project" means the improvements as requested by City of Conroe including the provision of all labor, materials, services, equipment, and appliances necessary to complete the Work in accordance with project drawings and specifications.

1.5 "Building Code" means the City of Conroe adopted building code (2003 IBC) with all applicable amendments and ordinances.

SECTION 2
INSTRUCTIONS TO BIDDERS

2.1 Examination of Bid Documents and Work Site. Before submitting a bid the proposer shall examine carefully all contract documents including the form of the contract to be executed. In addition the proposer shall examine the site of the work and fully inform themselves as to all conditions and matters, which can in any way affect the costs thereof. The submission of a Bid shall be conclusive evidence that proposer has complied with this requirement.

2.2 Preparation of Bid. The proposer shall submit its bid on the prescribed form accompanying the bid documents. The bid form shall be executed with ink in the complete and correct name of the individual, firm, corporation or combination thereof making the offer and shall be signed by a person or persons authorized to contractually obligate the proposer. All offers must be submitted to the City Secretary by the prescribed deadline in a sealed opaque envelope prominently marked with the proposer’s name, the project title and the notation SEALED BID – DO NOT OPEN RFP #2018-01 Sgt. Ed Holcomb Waterline Extension prominently displayed thereon.

2.3 Bid / Bid Bond. Each bid must be accompanied by a bid bond or other acceptable security in an amount equal to ten percent (10%) of the base offer amount. The bond may consist of a surety bid bond executed by a surety licensed to do business in the State of Texas, or a certified check or cashier’s check in the required amount drawn on a bank doing business in the State of Texas and made payable to the City of Conroe, Texas.

The bid / bid bond of the successful proposer shall be returned upon issuance of a notice to proceed to the proposer. The bonds of unsuccessful proposer’s shall be returned upon the earlier of (1) the issuance of a notice to proceed to the successful proposer, or (2) the expiration of thirty (30) days following the bid opening.

2.4 The Texas Ethics Commission requires the City to keep on file a Certificate of Interested Parties and a Conflicts of Interest Form (if applicable). The Forms are included in section 00520. Please refer to the Texas Ethics Commission website, https://www.ethics.state.tx.us/whatsnew/FAQ_Form1295.html#Q2

2.5 Withdrawal of Bids Prior to Opening. A bid may be withdrawn by the offeror for any
reason without penalty at any time prior to the deadline for bid submission. A proposer desiring to withdraw an offer must do so by written notice delivered to the City Secretary prior to the deadline for submission.

2.6 Firm Offer Following Opening. Once the deadline for bid submission has passed, an offer remains open and may not be withdrawn but may be accepted by the City for a period of forty-five (45) days following the date of opening, regardless of whether or not a notice of award has been previously issued to another proposer.

SECTION 3
CONTRACT AWARD AND POST AWARD REQUIREMENTS

3.1 Award of Contract. The City of Conroe reserves the right to reject any and all bids, award parts of bids and to waive informalities in submission of bids. The City also reserves the right to award the bid to the proposer meeting all the qualifications and specifications or to the proposer who provides goods or services at the best value for the City, taking certain evaluation factors into consideration as set forth in this request for bid.

The bid documents may provide for deduct alternates in addition to a base offer. Where bids for deduct alternates are solicited, such deduct alternates may be awarded or rejected. Where deduct alternates are accepted, the lowest best offer shall be determined upon the basis of the total of the base bid and any deduct alternates actually to be awarded.

3.2 Execution and Delivery of Contract, Required Bonds and Certificates of Insurance. Not later than ten (10) days following notice of award the successful proposer shall submit (1) two executed original copies of the required contract form, (2) the performance and payment bonds, if required, and (3) certificates of insurance evidencing all required coverages. Failure to deliver any such documents within the time required may result in forfeiture of the bid / bid bond. Award of the contract is not final until all documents required by this paragraph have been submitted and accepted by City.

3.3 Post Bid Award Submissions. If directed by the notice of award, the proposer who is selected as the Contractor shall attend a post award meeting with the City’s Representative. Either at the post award meeting, or not later than ten (10) calendar days following notice of award if no post award meeting is scheduled, the Contractor shall submit the following items to the City’s Representative:

1. Schedules of the work, including the starting date and anticipated date of substantial completion, as well as the starting and ending date of each major component stage of the work.

2. The names and addresses of all proposed subcontractors, together with a description of the scope of the work to be performed by each subcontractor and the anticipated starting and ending dates of the subcontractor’s work.

3. The name of the Contractor’s Project Manager, together with the local office address and phone number where such person may be reached.

4. Review Pre-Construction Meeting Guidelines and Requirements.

3.4 Notice to Proceed. The Contractor shall not begin the work until authorized to do so by a written notice to proceed issued by the City’s Representative. When authorized to proceed, the Contractor shall commence the work within fifteen (15) calendar days of receiving the notice to proceed.
SECTION 4
BONDS AND INSURANCE

4.1 Performance and Payment Bonds.

4.1.2 The Contractor shall provide separate performance and payment bonds, each in an amount equal to the contract price and executed by both Contractor and a surety company authorized to execute surety bonds and to do surety business in the State of Texas. The bonds must be in a form acceptable to City and satisfying the requirements of Texas Government Code, Chapter 2253.

4.1.3 Contractor shall provide a copy of the payment bond to each subcontractor and to each person or entity alleging a claim against the project or appearing to be a potential beneficiary of the payment bond.

4.1.4 If the Contract price does not exceed $50,000, then no performance or payment bond shall be required, provided however, City shall retain the entire contract price until final completion and acceptance of the work.

4.1.5 Contractor shall be exclusively responsible for the payment of Contractors, employees, subcontractors, suppliers and materials and shall promptly obtain the release of any lien or claim filed against the property of City by such persons as a result of the project.

4.2 Workers' Compensation Insurance Coverage:

4.2.1 Definitions:

Certificate of coverage ("certificate") – A copy of a certificate of insurance, a certificate of authority to self-insure issued by the Texas Workers’ Compensation Commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory worker’s compensation insurance coverage for the person's or entity's employees providing services on the project, for the duration of the project.

Duration of the project – includes the time from the beginning of the work on the project until the Contractor's/person's work on the project has been completed and accepted by the City.

Persons providing services on the project ("subcontractor" in Texas Labor Code, § 406.096) – includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project.

"Services" include without limitation, providing, hauling, or delivering equipment or materials, or providing labor, transportation, or other service related to a project. “Services” does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

4.2.2 The Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, § 401.011 (44) for all employees of the contractor providing services on the project, for the duration of the project.

4.2.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.
4.2.4 If the coverage period shown on the Contractor’s current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage within the City showing that coverage has been extended.

4.2.5 The Contractor shall obtain from each person providing services on a project, and provide it to the City:

- A certificate of coverage, prior to that person beginning work on the project, so the City will have on file certificates of coverage showing coverage for all persons providing services on the project; and

- No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the project.

4.2.6 The Contractor shall retain all required certificates of coverage for the duration of the project and one year thereafter.

4.2.7 The Contractor shall notify the City in writing by certified mail or personal delivery, within ten (10) days after the Contractor knew or should have known, of any change that materially affect the provisions of coverage of any person providing services on the project.

4.2.8 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers’ Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

4.2.9 The Contractor shall contractually require each person with whom it contracts to provide services on a project, to:

1. provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, § 401.011 (44) for all of its employees providing service to the project for the duration of the project;

2. provide to the Contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

3. provide the Contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage if the coverage period shown on the current certificate of coverage ends during the duration of the project;

4. obtain from each other person with whom it contracts, and provide to the contractor:

   1. a certificate of coverage, prior to the other person beginning work on the project; and

   2. a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period on the current certificate of coverage ends during the duration of the project;

5. retain all required certificates of coverage on file for the duration of the project
and for one year thereafter;

6. notify the City in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

7. contractually require each person with whom it contracts, to perform as required by paragraphs 4.2.9.1 through 4.2.9.7, with the certificates of coverage to be provided to the person for whom they are providing services.

4.2.10 By signing the Contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the City that all employees of the Contractor who will provide services on the project will be covered by workers’ compensation for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the Texas Workers’ Compensation Commission’s Division of Self-Insurance Regulation. Providing false or misleading information may subject the Contractor to administrative penalties, criminal penalties, civil penalties or other civil actions.

4.2.11 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the City to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

4.3 General Provisions Applicable to Other Required Insurance. At all times during the term of the contract the Contractor shall keep in effect (1) a Commercial General Liability Policy and (2) an Automobile Liability Policy.

4.3.1 Only insurance carriers licensed and admitted to do business in the State of Texas will be accepted.

4.3.2 "Claims Made" policies will not be accepted.

4.3.3 The City of Conroe, Texas, its officials, employees and volunteers are to be added as "Additional Insureds" to the General Liability Policy. The coverage shall contain no special limitations applicable to such additional insureds.

4.3.4 Each insurance policy shall be endorsed to City of Conroe that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested has been given to the City of Conroe, Texas.

4.3.5 Contractor waives all rights, including that of subrogation, against Owner, Architect, their officers, employees, agents or assigns with respect to personal injury or property damage arising out of the Project or the Work to the extent that such loss or damage is insured, or required to be insured by the Contractor under the Contract Documents.

4.4 Commercial General Liability Insurance.

4.4.1 A minimum combined single limit of $1,000,000 per occurrence for bodily injury and property damage must be provided.

4.4.2 General liability coverage shall cover all risks described in AIA Document A201-1997 Subparagraph 11.1.1, except those related to the use of an automobile, which shall be addressed under paragraph 4.5 of these Instructions To Proposers.
4.5 **Automobile Liability Insurance.** A minimum combined single limit of $1,000,000.00 per occurrence for bodily injury and property damage must be provided.

4.6 **Indemnity.** The Contractor shall indemnify and hold harmless City, 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 of litigation, court costs, and attorney’s fees, for injury to or death of any person, or for damage to any property, or for breach of contract, arising out of or in connection with the work done by the Contractor under the agreement, regardless of whether such injuries, death, damages or breach are caused in whole or in part by the negligence of City.

**SECTION 5**

**COMPENSATION AND METHOD OF PAYMENT**

5.2 **Lump Sum Contract Price.** For the performance of the work Contractor shall be compensated the lump sum amount indicated by the Contract. Such lump sum amount includes complete compensation for all labor, equipment, materials or service which may be reasonably inferred from the Contract Documents as necessary to the completion of the intended work, regardless of whether or not specifically called for by the Contract Documents.

5.3 **Extra Work.** Extra work shall be authorized only through a written Change Order or Construction Change Directive approved by City. If directed to perform work which Contractor believes to be extra work, Contractor shall, within ten (10) days of such directive notify City of its intention to seek additional compensation. The Contractor shall be compensated for approved extra work by payment of the direct costs of labor and materials incurred together with an additional percentage of such direct costs as compensation for overhead and profit. The percentage allowance for overhead and profit is established by the Contractor’s bid.

5.4 **Progress Payments.** If the Contract Price exceeds $25,000, progress payments will be made monthly in accordance with the Contract Documents. If the Contract Price does not exceed $25,000, such sum shall be withheld by City in its entirety until final completion of the work.

5.5 **Retainage.** If the Contract Price is equal to or exceeds $400,000, an amount equal to five percent (5%) of each approved payment shall be retained by City until final payment is made. If the Contract Price is less than $400,000, but greater than $25,000, an amount equal to ten percent (10%) of each approved progress payment shall be retained by City until final payment is made.

5.6 **Final Payment.** Final payment, including all previously retained funds from previously approved progress payments shall be made within thirty (30) days of the date of final completion.

**SECTION 6**

**PREVAILING WAGE RATE**

6.1 **Wage Rates.** The project is a public project within the meaning of Texas Government Code, Chapter 2258. Wage rates paid on this project shall not be less than specified in the schedule of general prevailing wages attached hereto. In addition, Contractor shall be responsible for compliance with all applicable requirements of Chapter 2258.
Superseded General Decision Number: TX20170095

State: Texas

Construction Type: Heavy

Counties: Montgomery and Waller Counties in Texas.

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

<table>
<thead>
<tr>
<th>Modification Number</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>01/05/2018</td>
</tr>
</tbody>
</table>

* SFTX0669-001 04/01/2017

<table>
<thead>
<tr>
<th>Rates</th>
<th>Fringes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRINKLER FITTER (Fire Sprinklers)........$ 29.03</td>
<td>15.84</td>
</tr>
</tbody>
</table>

SUTX2005-024 06/14/2005

<table>
<thead>
<tr>
<th>Rates</th>
<th>Fringes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpenter.................$ 14.38</td>
<td></td>
</tr>
<tr>
<td>Ironworker, reinforcing:.......$ 11.29</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laborers:</th>
<th>Fringes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common - Montgomery County..$ 8.83</td>
<td>0.94</td>
</tr>
<tr>
<td>Common - Waller County......$ 8.97</td>
<td>0.88</td>
</tr>
<tr>
<td>Landscape...............$ 7.35</td>
<td></td>
</tr>
<tr>
<td>Mason Tender Cement......$ 9.96</td>
<td></td>
</tr>
<tr>
<td>Pipelayer - Montgomery County........$ 10.04</td>
<td></td>
</tr>
<tr>
<td>Pipelayer - Waller County...$ 10.07</td>
<td></td>
</tr>
<tr>
<td>CEMENT MASON/CONCRETE FINISHER...$ 11.37</td>
<td>1.13</td>
</tr>
<tr>
<td>ELECTRICIAN.................$ 18.40</td>
<td>1.34</td>
</tr>
<tr>
<td>Formbuilder/Formsetter...........$ 13.35</td>
<td>1.17</td>
</tr>
<tr>
<td>PIPEFITTER......................$ 17.00</td>
<td>0.04</td>
</tr>
</tbody>
</table>

POWER EQUIPMENT OPERATOR:
<p>| Backhoe.......................$ 13.25 | |
| Bulldozer - Montgomery | |</p>
<table>
<thead>
<tr>
<th>Classification</th>
<th>Rate</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>$13.12</td>
<td></td>
</tr>
<tr>
<td>Bulldozer - Waller County</td>
<td>$12.46</td>
<td></td>
</tr>
<tr>
<td>Crane</td>
<td>$14.91</td>
<td>0.58</td>
</tr>
<tr>
<td>Excavator</td>
<td>$16.74</td>
<td></td>
</tr>
<tr>
<td>Front End Loader -</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomery County</td>
<td>$12.30</td>
<td>0.57</td>
</tr>
<tr>
<td>Front End Loader - Waller County</td>
<td>$11.75</td>
<td>0.92</td>
</tr>
<tr>
<td>Grader</td>
<td>$12.20</td>
<td>1.48</td>
</tr>
<tr>
<td>Tractor</td>
<td>$12.38</td>
<td>1.51</td>
</tr>
<tr>
<td>TRUCK DRIVER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomery County</td>
<td>$11.82</td>
<td>0.92</td>
</tr>
<tr>
<td>Waller County</td>
<td>$12.28</td>
<td>0.98</td>
</tr>
</tbody>
</table>

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

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

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

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

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

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

-----------------------------------------------------------------

WAGE DETERMINATION APPEALS PROCESS

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

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

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour

Section 00100- Page 9 of 11
Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

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

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

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

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

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

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

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

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

================================================================
END OF GENERAL DECISION

SECTION 7

WEATHER DAYS

7.1 Weather Days. Include in the Base Bid, anticipated weather days from the chart below. All weather day claims, including those from the chart, must be applied for (and claimed) within 24 hours of the occurrence, otherwise they will not be acknowledged.

For these weather days and any additional, no weather day extensions will be allowed:
A) For Saturdays, Sundays and legal holidays
B) If at least 7 hours of work time are available out of the working day
C) For drying of materials when it is reasonably possible for the contractor to enclose and use drying devices

The Contract time is established in Calendar days and extensions for working days will be converted (i.e. 1.4x working day(s)) to Calendar Days.

Number of Anticipated Weather Days to be Included in Bid Completion Time
Note: If in any month, the number of rain days designated by this chart are not used, then the remaining rain days for that month will transfer to the next month to ensure that all of the rain days to be included in the Contract are accounted for. For example, if in December only 2 days are claimed, then the remaining 2 days are transferred to January and January will now have a total of 5 days. If the 5 days are not used in January, say only 4, then the remaining 1 day will be transferred to February and February will now have 4 days, and so on and so on. Additional rain days cannot be claimed until the number exceeds the amount indicated for that month. For example, if in December a total of 6 days were claimed, then the 2 additional days would transfer to January and be deducted from January's 3 days, leaving 1 day for January. If in January, 3 days were claimed, then the additional 2 days would transfer to and be deducted from February and February would become 1, and so on and so on, until the total number of rain days included in the Contract are accounted for. If the total number of rain days included in this Contract are accounted for (i.e. used) and exceeded, then, additional 'APPROVED' rain days will be added by Change Order; thereby changing the scheduled Contract Substantial Completion date.

SECTION 8
LIQUIDATED DAMAGES

Liquidated Damages. The Work to be performed under this Contract shall be substantially complete within the time listed on the Agreement or by such dates thereafter as may be established in any written extensions granted under Article 8. The parties hereto agree that time is of the essence of this contract and that the pecuniary damages which would be suffered by the Owner, if the Contractor does not complete all Work called for in the Contract Documents by the specified date, are in their very nature difficult of ascertainment. It is therefore expressly agreed as a part of the consideration inducing the Owner to execute this Contract that the Owner may charge the Contractor a sum equal to $1,000.00 per day for each and every calendar day beyond the agreed date, which the Contractor shall require for Substantial Completion of the Work included in this Contract. It is expressly understood that the said sum per day is agreed upon as a fair estimate of the pecuniary damages, which will be sustained by the Owner in the event that the Work is not completed within the agreed time, or within the legally extended time, if any, otherwise provided for herein. Said sum shall be considered a liquidated damages only and in no sense shall be considered a penalty, said damage being caused by additional compensation to personnel, for loss of interest on money and other miscellaneous increased costs, all of which are difficult of exact ascertainment.
PROPOSAL FORM – Competitive Sealed Proposal

PROJECT: 2018-01 WATER LINE – SGT. ED HOLCOMB BLVD. EXTENSION
(aka Cayden Creek and PRV at Sgt. Ed Holcomb Blvd.)
Conroe, Texas

OWNER: CITY OF CONROE
Thomas Woolley, Jr.
Director of Capital Projects/ Transportation
300 W. Davis St.
Conroe, TX 77301.

CIVIL ENGINEER: AMBER R HURD, PE
CobbFendley
13430 Northwest Freeway, Ste 1100
Houston Texas 77040

PROPOSER: _______________________________________________
Company Name
________________________________________________________________________
Company Address
________________________________________________________________________
City, State, Zip
Telephone

APPLICABLE CONTRACT DOCUMENTS

Documents and Specifications:
- Technical Specifications – dated 9/19/18
- Construction Plans dated 9/19/18
- Project Contract Documents # 2018-01
PROPOSAL FORM – Competitive Sealed Proposal

Having examined the Contract Documents, including the Instructions to Bidders, Form of Agreement, the General and Supplemental Conditions of the Contract, the Drawings, Technical Specifications including Addenda numbered _____ through _____ inclusive, as prepared by the Engineer named above, the undersigned proposes to perform the complete work required by the said Documents for:

TOTAL SUM OF BASE BID ITEMS (1 through 13) [Gen. Conditions, overhead and profit are to be attributed within each item]

Amount written in words

$ _______________________

Proposer hereby acknowledges receipt of the following addenda:

ADDENDUM NO.1 RECEIVED ___________________________ (Initial and Date)

ADDENDUM NO.2 RECEIVED ___________________________ (Initial and Date)

ADDENDUM NO.3 RECEIVED ___________________________ (Initial and Date)

ADDENDUM NO.4 RECEIVED ___________________________ (Initial and Date)

The city will make every effort to supply proposers with a copy of all addenda relating to this project. However, it will be the sole responsibility of the proposer to secure all addenda issued and make them part of the RFP documents. All addenda will be uploaded to CivCast: https://www.civcastusa.com.
PROPOSAL FORM – Competitive Sealed Proposal

Where applicable, if the Owner elects to subtract any or all of the Alternate items, the undersigned agrees to modify the Total Sum Proposal as stipulated in the Total Contract Award above. Alternate amounts shall include all variations in profit, over-head, bonds, insurance, and other related items. Time of completion shall not be changed if alternates are subtracted. To be a valid proposal, price for all alternates must be provided. A "no bid" on any alternate will be reason for rejection of the entire proposal.

The undersigned Proposer, pursuant to the right reserved by the Owner under Consideration of proposals as to rejection of proposals, agrees to accept the award of said contract and hereby agrees to furnish performance and payment bonds in the amount of Contract Price and to enter into a Contract within ten (10) days after date of due notification from the Owner of award of the Contract; and further agrees to achieve Substantial Completion including the furnishing of all labor, tools, materials, plant and equipment and perform all services as set out in this Agreement, in accordance with the terms of the same, the work for this project is to be substantially complete within _____ calendar days and complete in full within _____ calendar days after notification to proceed.

The undersigned accepts that this Proposal Form becomes a part of the Contract Documents upon the signing of the Owner/Contractor Agreement and failure of the Proposer to comply with any part of his proposal may be taken as failure to comply with the Contract Documents and may be just cause of rejection of the Work.

The undersigned further certifies that the unit prices contained in the proposal have been carefully checked and are correct and final and shall remain firm for a period of forty five (45) days from the proposal due date.

The undersigned states that the cost of payment and performance bonds in an amount equal to 100% of the Contract Price and shall be included as part of the Total Sum Proposal.

The undersigned states that charges for overhead and profit in connection with authorized changes in the Work shall be as follows:

1) Changes that result in a net increased cost:
   a. Cost for labor and material provided by the General Contractor's own forces shall include a maximum General Contractor's mark-up of ____% overhead and profit.

   b. Cost of labor and material provided by Subcontractors shall include a maximum General Contractor's mark-up of ____ % overhead and ____ % profit.

2) Changes that result in a net decreased cost:
   a. Credit for labor and material to have been provided by the General Contractor's own forces shall include credits for General Contractor's mark-up of ____% overhead and ____% profit.

   b. Credit for labor and materials to have been provided by Subcontractors shall include credits for General Contractor mark-up of ____% overhead and ____% profit.
NAMING SUBCONTRACTORS

It is required that a Subcontractor shall be named for each of the categories of Work listed below. If work will be performed by your "Own Forces", so state. After the award of Contract, no substitutions of Subcontractors may be made without written approval of the Owner.

____________________:  
(List only one (1) Subcontractor)

____________________:  
(List only one (1) Subcontractor)

____________________:  
(List only one (1) Subcontractor)

I agree to provide all accompaniments to this proposal as required by the Instructions to Proposers, General Conditions and Special Conditions of the agreement.

Signature: _________________________________

Typed Name: _______________________________

Title: _________________________________

Name of Corporation, Partnership or Joint Venture

Legal Mailing Address

Date Signed
<table>
<thead>
<tr>
<th>ITEM</th>
<th>ITEM DESCRIPTION AND UNIT PRICE IN WORDS</th>
<th>UNIT</th>
<th>APPROX. QTY.</th>
<th>UNIT PRICE (FIGURES)</th>
<th>EXTENSION (FIGURES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MOBILIZATION (max. 5% of Construction Amount), Per TS 60</td>
<td>LS</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>STORM WATER POLLUTION PREVENTION PLAN AND ASSOCIATED DEVICES</td>
<td>LF</td>
<td>2,960</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>TRENCH SAFETY</td>
<td>LF</td>
<td>2,960</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>WATERLINE (12 IN)(PVC)(C900, DR-18) &amp; FTTGS, OPEN CUT</td>
<td>LF</td>
<td>2,960</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>WATERLINE (12 IN)(PVC)(C900, DR-18) &amp; FTTGS, TRENCHLESS</td>
<td>LF</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>WATERLINE (8 IN)(PVC)(C900, DR-18) &amp; FTTGS, OPEN CUT</td>
<td>LF</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>GV&amp;B (12 IN) (DI), W/MJ-RESTRAINT, COMPLETE IN PLACE</td>
<td>EA</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>GV&amp;B (8 IN) (DI), W/MJ-RESTRAINT, COMPLETE IN PLACE</td>
<td>EA</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>FIRE HYDRANT ASSEMBLY, COMPLETE IN PLACE</td>
<td>EA</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>TS&amp;V (6-IN) (DI), W/MJ-RESTRAINT, WITH SPECIAL FITTING, MUELLER H-615, COMPLETE IN PLACE</td>
<td>EA</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>REMOVING AND REPLACING ASPHALT (PAV OR DRIVEWAYS)</td>
<td>SY</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>HYDROMULCH</td>
<td>SY</td>
<td>19,733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>SOD WITH MATCHING (GRASS TYPE AS DIRECTED BY THE CITY)</td>
<td>SY</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PROPOSAL TOTAL:
DOCUMENT 00510
CONSTRUCTION CONTRACT

STATE OF TEXAS §

COUNTY OF MONTGOMERY §

This Contract is made and entered into this___ day of____, 2018 by and between THE CITY OF CONROE, TEXAS, a Texas Home Rule Municipality, hereinafter referred to as "CITY", and ______________________________.

Hereinafter referred to as "CONTRACTOR", and is as follows:

ARTICLE I
THE PROJECT

1.01 The PROJECT is generally referred to as a waterline extension - Project NO. 2018-01 Sgt. Ed Holcomb Blvd. Waterline Extension, by the City of Conroe located in Conroe, Texas as indicated by this Contract, all in accordance with project technical specifications prepared by the PROJECT ENGINEER: Amber R. Hurd, PE CobbFendley, 13430 Northwest Freeway Houston Texas 77040

ARTICLE II
ADMINISTRATION

2.01 Contract Administrator: Thomas Woolley, Jr. Director of Capital Projects/ Transportation 300 W. Davis St. Conroe, TX 77301.

who is hereinafter called ADMINISTRATOR and who is to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to CONTRACT ADMINISTRATOR in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE III
COMPENSATION

3.01 For the performance of the Work, the lump sum of:

TOTAL SUM OF BASE BID ITEMS (1 through 13) [Gen. Conditions, overhead and profit are to be attributed within each item]

Amount written in words

$
3.02 Additional provisions regarding progress and final payment are contained in the Contract Documents.

ARTICLE IV
CONTRACT TIME

4.01 Time is of the essence to this Contract.

4.02 The Work shall be substantially completed within the time proposed which shall run from the date when the notice to proceed is given to Contractor.

ARTICLE V
CONTRACT DOCUMENTS

5.01 The Contract Documents consist of the documents hereinafter described, the terms and conditions of which are incorporated herein by reference. The terms of these documents are the terms of the Contract. The Contract Documents are hereinafter listed in order of precedence. In the event of any conflict between the terms and conditions of one document and that of another, the document first listed shall be deemed controlling over a subsequent document. In the event of any conflict between the terms and conditions of any document, and the provisions of an amendment to that document, then the terms of such amendment shall be deemed controlling. In order of precedence, the Contract Documents are:

(a) This Contract; #2018-01
(b) The Contractor’s executed Offer Bid Form;
(c) The Project Plans and Specifications together with all subsequent addenda _____ through _____ thereto;
(d) The Instructions to Proposers and Special Provisions to the City of Conroe, Texas.
(e) Any Amendments to General or Special Conditions.
(f) The General and Special Conditions of the Contract for Construction.

ARTICLE VI
ENTIRE AGREEMENT

6.01 This Contract contains the whole agreement between the parties and there are no representations, terms, conditions, or collateral agreements other than those expressly set forth herein.

Effective as of the date hereinabove first set forth.

CONTRACTOR:

BY: ____________________________________________

NAME PRINTED: ________________________________

TITLE: ________________________________

COMPANY: ________________________________

CITY:

BY: ____________________________________________

Toby Powell, Mayor

BY: ____________________________________________

Soco Gorjon, City Secretary

( IF THIS CONTRACT IS WITH A CORPORATION, IT MUST BE EXECUTED BY AN OFFICER THEREOF AND THE SEAL OF THE CORPORATION IMPRESSED.)
BIDDER (Name and Address):
________________________________________________________________________
________________________________________________________________________

SURETY (Name and Address of Principal Place of Business):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

OWNER (Name and Address):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

BID
BID DUE DATE: ___________________________________________________________
PROJECT (Brief Description Including Location):
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

BOND
BOND NUMBER: ___________________________________________________________
DATE: (Not later than Bid Due Date): _________________________________________
PENAL SUM: _____________________________________________________________

IN WITNESS WHEREOF, Surety and Bidder, intending to be legally bound hereby, subject to the terms
printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its
authorized officer, agent, or representative.

BIDDER           SURETY
_______________________________(Seal)   _______________________________(Seal)
Bidder’s Name and Corporate Seal        Surety’s Name and Corporate Seal
By:________________________________    By:_________________________________
Signature and Title          Signature and Title
(Attach Power of Attorney)

Attest:______________________________    Attest:______________________________
Signature and Title          Signature and Title

Note: (1) Above addresses are to be used for giving required notice.
(2) Any singular reference to Bidder, Surety, Owner or other party shall be considered plural
where applicable.
1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents and Contract Documents.

3. This obligation shall be null and void if:
   3.1 Owner accepts Bidder’s bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents and Contract Documents, or
   3.2 All bids are rejected by Owner, or
   3.3 Owner fails to issue a notice of award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of and any and all defenses based on or arising out of any time extension to issue notice of award agreed to in writing by Owner and Bidder, provided that the time for issuing notice of award including extensions shall not in the aggregate exceed 120 days from Bid Due Date without Surety’s written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in paragraph 4 above is received by Bidder and Surety, and in no case later than one year after Bid Due Date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notice required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of the Bond conflicts with any applicable provision of any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term “bid” as used herein includes a bid, offer or proposal as applicable.
LET IT BE KNOWN BY THIS INSTRUMENT:

That we, ________________________________________________, as Principal, and ________________________________________________________, a corporation duly authorized to do business in this State, as Surety, are this date held and firmly bound unto the City of Conroe, Texas in the amount of ________________________________ Dollars ($_____________________________) for payment of which indemnity the said Principal and Surety, by this declaration, do firmly bind themselves, their heirs, executors, administrators, successors and assigns, jointly and individually.

This bond is made to secure the performance of Principal with respect to a contract dated ___________________________ made by and between Principal and the City of Conroe, Texas for ________________________________

The conditions of this obligation are, therefore, such that it shall remain in full force and effect until the Principal shall faithfully perform the Contract in accordance with the Contract Documents.

In the event of Principal’s failure to faithfully perform the Contract, Surety will assume full responsibility for completion of the Contract and become entitled to payment of the balance of the Contract amount.

The liabilities, rights, limitations, and remedies concerning this Bond shall be determined in accordance with the provisions of Chapter 2253 of the Texas Government Code, pursuant to which this bond is executed and given.

IN WITNESS TO THIS DECLARATION, the said Principal and Surety have signed and sealed this instrument,

this _______ day of __________________________, 2_______.

PRINCIPAL          SURETY*

By:______________________________ By:________________________________
Name:___________________________  Name: _____________________________
Title:____________________________  Address of Attorney-In-Fact

_________________________________  Telephone No. of Attorney-In Fact
STATE OF TEXAS
COUNTY OF MONTGOMERY

LET IT BE KNOWN BY THIS INSTRUMENT:

That we, ____________________________________________ _____________, as Principal, and _______________________________________________________________, a corporation duly authorized to do business in this State, as Surety, are this date held and firmly bound unto the City of Conroe, Texas in the amount of ________________________________Dollars ($_____________________________) for payment of which indemnity the said Principal and Surety, by this declaration, do firmly bind themselves, their heirs, executors, administrators, successors and assigns, jointly and individually.

This bond is made to secure the performance of Principal with respect to a contract dated ________________________________ made by and between Principal and the City of Conroe, Texas for ________________________________

This Bond is entered into for the protection of claimants supplying labor and material in the prosecution of the Work provided for in said Contract Documents, and all such claimants shall have a direct right of action under the Bond as provided in Chapter 2253, Texas Government Code.

The liabilities, rights, limitations, and remedies concerning this Bond shall be determined in accordance with the provisions of Chapter 2253 of the Texas Government Code, pursuant to which this bond is executed and given.

IN WITNESS TO THIS DECLARATION, the said Principal and Surety have signed and sealed this instrument,

this ________ day of __________________________, 2_______.

PRINCIPAL           SURETY*

By:________________________________   By:__________________________________
Name:_____________________________   Name: _______________________________
Title:_______________________________   Address of Attorney-In-Fact

_____________________________________
Telephone No. of Attorney-In Fact
**CERTIFICATE OF INTERESTED PARTIES**

**FORM 1295**

Complete Nos. 1 - 4 and 6 if there are interested parties.
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name of business entity filing form, and the city, state and country of the business entity’s place of business.</td>
</tr>
<tr>
<td>2</td>
<td>Name of governmental entity or state agency that is a party to the contract for which the form is being filed.</td>
</tr>
<tr>
<td>3</td>
<td>Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the goods or services to be provided under the contract.</td>
</tr>
<tr>
<td>4</td>
<td>Name of Interested Party</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Check only if there is NO Interested Party.</td>
</tr>
<tr>
<td>6</td>
<td><strong>AFFIDAVIT</strong></td>
</tr>
</tbody>
</table>

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said ____________________________, this the __________ day of __________________, 20_____, to certify which, witness my hand and seal of office.

Signature of officer administering oath: ____________________________
Printed name of officer administering oath: ____________________________
Title of officer administering oath: ____________________________

ADD ADDITIONAL PAGES AS NECESSARY
CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

1  Name of vendor who has a business relationship with local governmental entity.

2  Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3  Name of local government officer about whom the information is being disclosed.

[Signature]

Name of Officer

4  Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

[ ] Yes [ ] No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

[ ] Yes [ ] No

5  Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6  Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7  [Signature]

Signature of vendor doing business with the governmental entity

[Date]
CONFLICT OF INTEREST QUESTIONNAIRE
For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

**Local Government Code § 176.001(1-a):** “Business relationship” means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:
- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

**Local Government Code § 176.003(a)(2)(A) and (B):**
(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:
***
(2) the vendor:
   (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds $2,500 during the 12-month period preceding the date that the officer becomes aware that
      (i) a contract between the local governmental entity and vendor has been executed; or
      (ii) the local governmental entity is considering entering into a contract with the vendor;
   (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than $100 in the 12-month period preceding the date the officer becomes aware that:
      (i) a contract between the local governmental entity and vendor has been executed; or
      (ii) the local governmental entity is considering entering into a contract with the vendor.

**Local Government Code § 176.006(a) and (a-1)**
(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:
   (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
   (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
   (3) has a family relationship with a local government officer of that local governmental entity.
(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:
   (1) the date that the vendor:
      (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
      (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
   (2) the date the vendor becomes aware:
      (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
      (B) that the vendor has given one or more gifts described by Subsection (a); or
      (C) of a family relationship with a local government officer.
House Bill 89 Verification

I, ___________________________ (Person name), the undersigned representative of ____________________________ (Company or Business Name) hereafter referred to as “Company”; being an adult over the age of eighteen (18) years of age, after being duly sworn by the undersigned notary, do hereby depose and verify under oath that the company named above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

1. Does not boycott Israel currently; and
2. Will not boycott Israel during the term of the contract.

Pursuant to Section 2270.001, Texas Government Code:

1. “Boycott Israel” means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and

2. “Company” means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.

DATE ____________________________ SIGNATURE OF COMPANY REPRESENTATIVE

On this the _____ day of _________________________, 20____, personally appeared __________________________________, the above-named person, who after by me being duly sworn, did swear and confirm that the above is true and correct.

NOTARY SEAL ____________________________

NOTARY SIGNATURE ____________________________

Date ____________________________
CITY OF CONROE
PURCHASING DEPARTMENT

SENATE BILL 252 CERTIFICATION

On this day, I, ______________________________________________, the Purchasing Representative for the City of Conroe, Texas, pursuant to Chapter 2252, Section 2252.152 of the Texas Government Code, certify that I did review the website list prepared, maintained, and made available to the City of Conroe by the Comptroller of the State of Texas of companies known to have contracts with or provide supplies or services to Iran, Sudan or any foreign terrorist organization. I have ascertained that the below-named company is not contained on said list of companies that do business with Iran, Sudan or any Foreign Terrorist Organization.

______________________________
Company Name

______________________________
RFP or Vendor number

CERTIFICATION CHECK PERFORMED BY:

______________________________
Purchasing Representative

______________________________
Date
Article I - General Contract Definitions

Unless the context clearly requires another meaning, the following terms shall have the meaning assigned herein:

1.1 Change Order means a written modification of the Contract between the Owner and Contractor, signed by the Owner and the Contractor.

1.2 Close-out documents means the standard product brochures, product/equipment maintenance and operations instructions, manuals, etc., and as may be further defined or identified and required by the Contract Documents.

1.3 Contract means the Contract Documents between the Owner and the Contractor.

1.4 Contract Date is the date of the Owner-Contractor Agreement is effective between the Owner and Contractor.

1.5 Contract Documents means the Owner-Contractor Agreement, the Conditions of the Contract (General and Special Conditions), the Drawings, the Specifications, the Bidding Documents, Advertisement, Invitation and Instruction to Bidders, Contractor's Proposal, Contract Award and all Addenda issued prior to and any Change Orders issued after execution of the Contract.

1.6 Contractor means the individual, corporation, company, partnership, firm or other organization that has contracted to perform the Work under the Contract with the Owner.

1.7 Contract Sum mean the total compensation payable to the Contractor for completion of the Work in accordance with the Contract Documents as originally contracted for and as subsequently adjusted by Change Order.

1.8 Contract Time means the period between Date of Commencement and the date scheduled for substantial completion in the Contract Documents, as may be amended by Change Order.

1.9 Date of Commencement means the date designated in the Notice to Proceed that Contractor shall commence the Work.

1.10 Day means a calendar day, unless otherwise specifically stipulated.

1.11 Drawings means the work product of the Architect/Engineer which depicts the location and quantity of elements of the Work.
1.12 Final Completion means the date when the Contract is fully performed according to the Contract Documents and is acceptable to Owner.

1.13 Owner means the City of Conroe, Texas acting through its designated representative.

1.14 Owner’s Designated Representative (ODR) means the individual appointed or assigned by the Owner to be its on-site representative during the Project, to exercise certain power on behalf of the Owner and to undertake certain contract administration activities as specifically outlined in the Contract.

1.15 Project means the Work as described by the Contract Documents.

1.16 Site means the geographical area at the location where the Work is to be performed.

1.17 Special Conditions means the documents containing terms and conditions, which relate to specific project and are peculiar to it. Special Conditions when used, are a part of the Contract Documents and supercede the Uniform General Conditions to the extent of conflict.

1.18 Specifications means the Architect/Engineer’s work product which establishes the quality of the products and processes to be used to produce the Work.

1.19 Subcontractor means a person or organization who, as an independent contractor, contracts directly or indirectly with Contractor to perform part or all of the Contract between the Owner and the Contractor. The term does not include the Architect/Engineer.

1.20 Substantial Completion means the date when the Work or a designated portion thereof, is so sufficiently complete, in accordance with the Contract Documents, as to be fully operational in all its components and fit for the use for which it is intended.

1.21 Unit Price Work means Work to be paid for on the basis of unit prices.

1.22 Unilateral Change Order (ULCO) means a Change Order issued by the Owner without the agreement of the Contractor.

1.23 Work means all labor, plant, materials, facilities, and all other things, including the construction and services necessary or incidental to fulfill Contractor’s obligations for the Project in conformance with the Contract Documents.
Article II - General Laws Governing Construction

2.1 **Compliance with Laws.** In the execution of the Contract Documents and the Work, the Contractor shall comply with all applicable local State and Federal laws, including but not limited to, laws governing labor, equal employment opportunity, safety, environmental protection and prevailing wage rates. The Contractor shall make himself familiar with and at all times shall observe and comply with all Federal, State and Local laws, ordinances and regulations which in any manner affect the conduct of the Work. The Contractor shall indemnify and save harmless the Owner and its official representatives against any claim arising from violation of any such law, ordinance or regulation by himself, his subcontractors and his employees. Except where expressly required otherwise by applicable laws and regulations, neither Owner nor the Architect/Engineer shall be responsible for monitoring Contractor's compliance with any laws or regulations.

2.1.1 The Contractor shall cooperate with city permitting officials and authorities at all times where their jurisdiction applies. The Contractor shall make application to obtain all local permits that are required for the performance of the Work. Contractor has a continuing obligation throughout the term of the Contract to conduct his operations under duly issued permits and, in the event Contractor loses or has revoked a necessary permit, Contractor must take immediate steps to apply for and receive another permit. Owner shall waive or be responsible for the payment of all fees necessary for the issuance of municipal permits.

2.2 **State Sales and Use Taxes.** The Owner qualifies for exemption from State and Local Sales and Use Taxes pursuant to the provisions of Chapter 151, Texas Tax Code. The Contractor may claim exemption from payment of applicable State taxes by complying with such procedures as may be prescribed by the State Comptroller of Public Accounts.

2.3 **Venue for Suits.** The venue for any suit brought as to matters arising out of or related to this Contract shall be in a court of competent jurisdiction in Montgomery County, Texas.

2.4 **Licensing of Trades.** The Contractor shall comply with all applicable provisions of state law related to required licensing of skilled tradesmen, contractors, materialmen, suppliers and or laborers, as necessary to accomplish the Work.

2.5 **Environmental Regulations.** At all times, Contractor shall conduct its activities in compliance with applicable laws and regulations relating to the environment, and its protection.
Article III- Compliance with and Enforcement of Prevailing Wage Laws

3.1 Duty to Pay Prevailing Wage Rates. The Contractor shall pay not less than the wage scale of the various classes of labor as shown on the "Prevailing Wage Schedule" provided by the Owner. The specified wage rates are minimum rates only. The Owner will not consider any claims for additional compensation made by any Contractor because the Contractor pays wages in excess of the applicable minimum rate contained in the Contract. The "Prevailing Wage Schedule" is not a representation that quantities of qualified labor adequate to perform the Work may be found locally at the specified wage rates.

3.2 Prevailing Wage Schedule. The "Prevailing Wage Schedule" shall be determined by the Owner in compliance with Chapter 2258, Texas Government Code. Should the Contractor at any time become aware that a particular skill or trade not reflected on the Owner's Prevailing Wage Schedule will be or is being employed in the Work, whether by the Contractor or by a subcontractor, the Contractor shall promptly inform the ODR and the Owner shall specify a wage rate for that skill or trade, which shall bind the Contractor.

3.3 Penalty for Violation. The Contractor and any Subcontractor shall pay to the Owner a penalty of sixty dollars ($60.00) for each worker employed for each calendar day, or portion thereof, that the worker is paid less than the wage rates stipulated in the Prevailing Wage Schedule or any supplement thereto pursuant to §3.2. The Contractor and each Subcontractor shall keep, or cause to be kept, an accurate record showing the names and occupations of all workers employed in connection with the Work, and showing the actual per diem wages paid to each worker, which records shall be open at all reasonable hours for the inspection by the Owner.

Article IV - Drawings and Specifications

4.1 Ownership of Drawings and Specifications. All Drawings, Specifications and copies thereof furnished by the Architect/Engineer are, and shall remain, his property. They are not to be used on any other project and, with the exception of one contract set for each party to the Contract, are to be returned to the Architect/Engineer, upon request, following completion of the Work.

4.2 Copies Furnished. The Contractor will be furnished two sets of the Contract Documents free of charge. Additional complete sets will be furnished at reproduction cost to the one requesting such additional sets.

4.3 Interrelation of Documents. The Drawings depict the location and quantity of elements of the work. The specifications indicate quality. All documents are intended to be complimentary to produce the Work.

4.4 Resolution of Conflicts in Documents.
4.4.1 In the event of conflict between Drawings and Specifications, the Specifications shall prevail.

4.4.2 In the event of conflict among the drawings, the large-scale drawings prevail over the small-scale drawings.

4.5 Contractor's Duty to Review Contract Documents. In order to facilitate its responsibilities for completion of the Work in accordance with and as reasonably inferable from the Contract Documents, prior to commencing the Work, the Contractor shall examine and compare: the Contract Documents; information furnished by the Owner, relevant field measurements made by the Contractor; and any visible conditions at the Site affecting the Work.

4.6 Discrepancies and Omissions in Drawings and Specifications.

4.6.1 If in the course of the performance of the obligations in § 4.5, the Contractor discovers any errors, omissions or inconsistencies in the Contract Documents, the Contractor shall promptly report them to the Owner. It is recognized, however, that the Contractor is not acting in the capacity of a licensed design professional, and that the Contractor's examination is to facilitate construction and does not create an affirmative responsibility to detect errors, omissions or inconsistencies or to ascertain compliance with applicable laws, building codes or regulations.

4.6.2 The Contractor has no liability for errors, omissions, or inconsistencies described in §§ 4.5 and 4.6.1 unless the Contractor knowingly failed to report a recognized problem to the Owner. If, however, the Contractor fails to perform the examination and reporting obligations of these provisions, the Contractor shall be responsible for any avoidable costs or direct damages.

4.6.3 The Owner shall develop a solution and provide it to Contractor. If the solution prompts changes to the Contract Sum or Contract Time the contract shall be equitably adjusted.

4.7 Other Information Provided to Contractor.

4.7.1 The Owner may provide Contractor with information, reports, pictures or other items which are not contained within the Contract Documents, but which Contractor should review and use pursuant to § 4.5.
Article V - Construction Bonds

5.1 Performance and Payment Bonds. The Contractor is required to tender to Owner, prior to commencing the Work, performance and payment bonds, as required by Chapter 2253, Texas Government Code.

5.1.1 A Performance Bond is required if the Contract Price is in excess of $100,000. The performance bond is solely for the protection of the city, in the full amount of the Contract and conditioned on the faithful performance of the Work in accordance with the Contract Documents.

5.1.2 A Payment Bond is required if the Contract Price is in excess of $25,000. A payment bond is payable to the City of Conroe, in the full amount of the Contract and solely for the protection and use of payment bond beneficiaries who have a direct contractual relationship with the Contractor or a supplier of required materials or labor.

5.1.3 Corporate sureties authorized to issue bonds shall be qualified and comply with relevant provisions of the Texas Insurance Code.

5.2 The process of requiring and accepting bonds and making claims thereunder shall be conducted in compliance with Chapter 2253, Texas Government Code. If for any reason a statutory payment or performance bond is not honored by the surety, the Contractor shall fully indemnify and hold the Owner harmless of and from any costs, losses, obligations or liabilities it incurs as a result.

5.3 Owner shall furnish certified copies of a payment bond and the related Contract to any qualified person seeking copies who complies with §2253.026, Texas Government Code.

5.4 Claims on Payment Bonds. Claims on payment bonds must be sent directly to the Contractor and his surety in accordance with § 2253.041, Texas Government Code. All Payment Bond claimants are cautioned that no lien exists on the funds unpaid to the Contractor on such Contract, and that reliance on notices sent to the Owner may result in loss of their rights against the Contractor and/or his surety. The Owner is not responsible in any manner to a claimant for collection of unpaid bills, and accepts no such responsibility because of any representation by any agent or employee.

5.5 Payment Claims when Payment Bond not Required. When the value of the Contract between the Owner and the Contractor is less than $25,000.00, claimants and their rights are governed by Texas Property Code, §§ 53.231 – 53.239. These provisions set out the requirements for filing a valid lien on funds unpaid to the Contractor as of the time of filing the claim, actions necessary to release the lien and satisfaction of such claims.

Article VI - Insurance Requirements

6.1 Insurance requirements are set out in Section 00100, Bonds and Insurance, section 4.
Article VII - General Responsibilities of Owner and Contractor

7.1 Owner’s General Responsibilities.

7.1.1 The Owner is the entity identified as such in the Contract and is referred to throughout the Contract Documents as if singular in number.

7.1.2 Owner’s Designated Representative. Prior to the start of construction, Owner shall designate in writing the Owner’s Designated Representative (ODR), who shall have express authority to act and bind the Owner to the extent and for the purposes described in the various Articles of the Contract, including responsibilities for general administration of the Contract. Unless otherwise specifically provided for, the ODR is the single point of contact between the Owner and Contractor. Notice to the ODR, unless otherwise noted, constitutes notice to the Owner under the Contract.

7.1.3 The foregoing is in addition to the specific duties and authority of Owner and the ODR found in other Articles of the Contract.

7.2 Limitation on Owner’s and ODR’s Duties. Owner and ODR will not supervise, direct, control or have authority over or be responsible for Contractor’s means, methods, technologies, sequences or procedures of construction or the safety precautions and programs incident thereto. Owner and ODR are not responsible for any failure of Contractor to comply with laws and regulations applicable to furnishing or performing the Work. Owner and ODR are not responsible for the failure of Contractor to perform or furnish the work in accordance with the Contract Documents. Owner and ODR are not responsible for the acts or omissions of Contractor, or of any Subcontractor, any supplier, or of any other person or organization performing or furnishing any of the Work.

7.3 Role of Architect/Engineer.

7.3.1 In General. Unless otherwise provided for in the Contract Documents, the Architect/Engineer will perform the duties of the Architect/Engineer as described in this Contract during construction and until final payment, including advising the ODR on matters where assistance is needed. The assignment of any authority, duties or responsibilities to the Architect/Engineer under the Contract Documents, or under any agreement between Owner and Architect/Engineer, or any performance thereof by Architect/Engineer is for the exclusive benefit of Owner and not for the benefit of Contractor, any Subcontractors, suppliers or their respective employees or sureties.

7.3.2 The Architect/Engineer shall have the authority to recommend to Owner to reject work performed by the Contractor, which, in the opinion of the Architect/Engineer, does not meet the requirements of the Contract Documents. Architect/Engineer shall communicate with the ODR upon discovery of non-compliant Work and shall provide a recommendation upon request for review by the ODR. The ODR shall
order in writing such work removed and replaced in accordance with Article XII.

7.4 Limitations on Architect/Engineer Authority. Architect/Engineer will not supervise, direct, control or have authority over or be responsible for Contractor’s means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto. Architect/Engineer is not responsible for any failure of Contractor to comply with laws and regulations applicable to the furnishing or performing the Work. Architect/Engineer is not responsible for Contractor’s failure to perform or furnish the Work in accordance with the Contract Documents. Architect/Engineer is not responsible for the acts or omissions of Contractor, or of any Subcontractor, any supplier, or of any other person or organization performing or furnishing any of the Work.

7.5 Contractor’s General Responsibilities.

7.5.1 The Contractor is the person or entity identified as such in the Contract and is referred to throughout the Contract Documents as if singular in number. The Contractor shall supervise and direct the Work using the best skill and attention. The Contractor shall be solely responsible for all construction means, methods, techniques, safety, sequences and procedures, and for coordinating all portions of the Work under the Contract. Contractor shall be responsible to see that the completed Work complies accurately with the Contract Documents.

7.5.2 Contractor’s Superintendent. The Contractor shall employ a competent resident superintendent who shall be in attendance at the Project Site during the progress of the Work. The superintendent shall be satisfactory to the Owner, and shall not be changed except with the written approval of the Owner unless he leaves the employment of the Contractor. The superintendent shall represent the Contractor at the Site and shall have full authority to act on behalf of the Contractor. All communications given to the superintendent shall be binding on Contractor. All oral communications affecting Contract Time, Contract Sum and contract interpretation will be confirmed in writing to Owner.

7.5.3 Labor. Contractor shall provide competent, suitably qualified personnel to survey, lay out, and construct the Work as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

7.5.4 Services, Materials, and Equipment. Unless otherwise specified in the Supplementary General Conditions, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

7.5.5 No Substitutions Without Approval. The Contractor may make substitutions only with the consent of the Owner, after evaluation and
recommendation by the Architect/Engineer and in accordance with a Change Order.

7.5.6 Should Work be identified by either the Architect/Engineer and/or the ODR as not being in compliance with the Contract Documents, the ODR shall communicate the finding to Contractor and such Work shall be corrected by the Contractor at its expense. The approval of Work by either the Architect/Engineer or ODR does not relieve the Contractor from compliance with all requirements of the Contract Documents where such requirements are not judged at the time of observation of the Work due to work sequences by the Contractor or the lack of time to judge the performance characteristics of the particular Work item.

7.5.7 Subcontractors. Contractor shall not employ any Subcontractor, supplier or other person or organization, whether initially or as a substitute, against whom Owner may have reasonable objection. Owner will communicate such objections in writing. If a rejection causes a change to the Contractor’s cost to perform the Work, then Contractor may file a claim under Article XV of these General Conditions. Contractor shall not be required to employ any Subcontractor, supplier or other person or organization to furnish any of the work to whom Contractor has reasonable objection. Contractor will not substitute Subcontractors without the approval of Owner.

7.5.7.1 Contractor shall enter into written agreements with all Subcontractors and suppliers which specifically bind the Subcontractors and suppliers to the applicable terms and conditions of the Contract Documents for the benefit of the Owner and the Architect/Engineer. The Owner reserves the right to specify that certain requirements shall be adhered to by all Subcontractors and sub-subcontractors as indicated in other portions of the Contract Documents and these requirements shall be made a part of the agreement between Contractor and Subcontractor or supplier.

7.5.7.2 Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with Contractor. Contractor shall require all Subcontractors, suppliers and such other persons and organizations performing or furnishing any of the Work to communicate with Owner through Contractor.

7.5.8 Continuing the Work. Contractor shall carry on the Work and adhere to the progress schedule during all disputes, disagreements or alternative resolution processes with Owner. No Work shall be delayed or
postponed pending resolution of any disputes, disagreements or processes, except as Owner and Contractor may agree in writing.

7.5.9 Cleaning. The Contractor shall at all time keep the Site and the Work clean and free from accumulation of waste materials or rubbish caused by the construction activities under the Contract. Upon completion of the Project, and prior to the final inspection, the Contractor shall have the Work in a neat and clean condition.

7.5.10 Acts and Omissions of Contractor, his Subcontractors and employees. The Contractor shall be responsible for acts and omissions of his employees and his subcontractors, their agents and employees.

7.5.11 Indemnification of Owner. Contractor covenants and agrees to FULLY INDEMNIFY and HOLD HARMLESS, the Owner and the elected officials, employees, officers, directors, volunteers, and representatives of the Owner, individually or collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including but not limited to, personal or bodily injury, death and property damage, made upon the Owner directly or indirectly arising out of, resulting from or related to Contractor’s activities under this Contract, including any acts or omissions of Contractor, any agent, officer, director, representative, employee, consultant or Subcontractor of Contractor, and their respective officers, agents, employees, directors and representatives while in the exercise of performance of the rights or duties under this Contract. The indemnity provided for in this paragraph shall not apply to any liability resulting from the negligence of Owner, officers or employees, separate contractors or assigned contractors, in instances where such negligence causes personal injury, death, or property damage. IN THE EVENT CONTRACTOR AND OWNER ARE FOUND JOINTLY LIABLE BY A COURT OF COMPETENT JURISDICTION, LIABILITY SHALL BE APPORTIONED COMPARATIVELY IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, WITHOUT, HOWEVER, WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE STATE UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW.

7.5.11.1 The provisions of this Indemnification are solely for the benefit of the parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

7.5.11.2 Contractor shall promptly advise the Owner in writing of any claim or demand against the Owner or Contractor known to Contractor related to or arising out of Contractor’s activities under this Contract.

7.5.13 The duties listed above are in addition to the duties, responsibilities and activities to be undertaken by Contractor as specified throughout the Articles of the Contract.
Article IX - The Contractor’s Responsibility for Jobsite Safety

9.1 Unless otherwise specified, Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. It shall be the duty and responsibility of the Contractor and all of its Subcontractors to be familiar and comply with all requirements of Public Law 91-596, 29 U.S.C. §§ 651 et. seq., the Occupational Safety and Health Act of 1970, (OSHA) and all amendments thereto, and to enforce and comply with all of the provisions of the Act. Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for safety of persons or property to protect them from damage, injury or loss and shall erect and maintain all necessary safeguards for such safety and protection.

Article X - Materials and Workmanship; Licensing and Testing

10.1 Materials and Workmanship. The Contractor warrants and guarantees that all Work shall be executed in a good and workmanlike matter in accordance with the Contract Documents, complete in all parts and in accordance with approved practices and customs. Unless otherwise specified, all materials and equipment incorporated into the Work under the Contract shall be new.

10.2 Contractor’s Warranty of Workmanship.

10.2.1 Limits on Warranty. Contractor’s Warranty and guarantee hereunder excludes defects or damage caused by:

a. Abuse, modification or improper maintenance or operation by persons other than Contractor, Subcontractors, suppliers or any other individual or entity for whom Contractor is responsible, or

b. Normal wear and tear under normal usage.

10.2 Events Not Affecting Warranty. Contractor’s obligation to perform and complete the Work in a good and workmanlike manner in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor’s obligation to perform the Work in accordance with the Contract Documents:

a. Observations by Owner and/or Architect/Engineer;

b. Owner’s payment of any progress or final payment;

c. The issuance of a certificate of Substantial Completion or any payment by Owner to Contractor under the Contract Documents;

d. Use or occupancy of the Work or any part thereof by Owner;
e. Any acceptance by Owner or any failure to do so; or
f. Any inspection, test or approval by others.

10.3 Owner shall have the right to require testing of mechanical systems installed hereunder.

Article XI – Substitutions

11.1 Intent of Contract Documents. It is not the intent of the Specifications or Contract Documents to limit materials, equipment or fixtures to the product of any particular manufacturer. Where definite materials, equipment and/or fixtures have been specified by name, manufacturer or catalog number, it has been done to set a definite standard and a reference for comparison as to quality, application, physical conformity, and other characteristics. It is the Owner’s or Architect/Engineer’s intention to not discriminate against or prevent any dealer, jobber or manufacturer from furnishing materials, equipment, and/or fixtures which meet or exceed the characteristics of the specified items. Substitution of materials shall not be made without prior written approval from the Owner.

11.2 Unauthorized Substitutions at Contractor’s Risk. All proposed substitution of materials, equipment or fixtures shall be presented through the submittal process. The Contractor shall be financially responsible for any additional costs or delays resulting from using materials, equipment or fixtures other than those specified, and shall reimburse the Owner for any increased design or contract administration costs resulting from such unauthorized substitutions.

Article XII - Inspection of the Project During Construction

12.1 Contractor Quality Control. Contractor is responsible for controlling the quality of the work as set forth in the Contract Documents.

12.2 Owner Quality Assurance.

12.2.1 The Owner will make periodic visits to the site to familiarize itself with the progress and quality of the Work, conduct inspections and tests and to determine if the Work is proceeding in accordance with the Contract Documents. The Contractor shall provide sufficient, safe and proper facilities at all reasonable times for observation and/or inspection of the Work by the authorized representatives of the Owner.

12.2.2 The Contractor shall not cover up any work with finishing materials or other building components prior to an inspection of the work by the Owner. Should corrections of the work be required for
approval, cover up shall be delayed until another inspection can be made and approval is indicated.

12.2.3 The Contractor shall be responsible for providing notification of at least five (5) working days or as mutually agreed, to the Owner of the anticipated need for a cover up inspection. Should the Owner fail to make the necessary inspection within the five (5) working day period, or as mutually agreed, the Contractor may proceed with cover up work.


12.3.1 The ODR has the authority to reject Work which does not meet the requirements of the Contract and to order such work removed and replaced with conforming Work. The approval of a work item by the ODR does not relieve the Contractor from compliance with the Contract Documents where such requirements are not judged at the time of observation of the Work due to work sequences by the contractor or the lack of time to judge the performance characteristics of the particular work item.

12.3.2 If any materials or Work furnished under this Contract are rejected by the Owner, the Contractor shall, after notice from the Owner, proceed to remove materials, whether worked or unworked, and to take down all portions of the Work condemned. Contractor shall make good all Work damaged or destroyed by the removal and replacement process.

12.3.3 Upon notice of rejection, the Contractor may request to prove to Owner, at Contractor's sole cost, that the Work should be accepted because it meets performance, and other relevant standards. Owner shall respond to Contractor's showing of proof in writing.

Article XIII – Contract Payments

13.1 Progress Payments. Periodic progress payments will be made to the Contractor for Work performed, and materials in place. Payment shall not become due until receipt by the ODR of a correct and complete Pay Application.

13.2 Owner's Duty to Pay. The Owner shall have no duty to pay the Contractor except on receipt by the ODR of (1) a complete Pay Application.

13.3 Retainage. The Owner shall withhold from each progress payment, as retainage, the amount authorized by law, as set out in the Section 00100 Special Provisions. Retainage so withheld shall be managed in conformance with Subchapter B, Chapter 2252, Texas Government Code.

13.4 Reduction to Cover Loss. The Owner may reduce any Invoice prior to payment to the extent necessary to protect the Owner from loss on account of actions of the Contractor, including, but not limited to:
   a. Defective work not remedied;
   b. Damage to work of a separate contractor;
c. Failure to maintain scheduled progress;

d. Failure to comply with the requirements of Texas Government Code Chapter 2258 (Prevailing Wage Law); or

e. For Contracts with a value of less than $25,000 for which no payment bond is posted, receipt of written notice by the Owner of unpaid bills, filed in conformance with § 53.232, Texas Property Code. Any funds so withheld shall be released to the Contractor if he furnishes a bond for release of lien as provided in § 53.236, Texas Property Code.

13.5 Title to all material and Work covered by progress payments transfers to the Owner upon payment. Transfer of title to Owner does not relieve the Contractor of the sole responsibility for the care and protection of materials and work upon which payments have been made, or the restoration of any damaged work, or waive the right of the Owner to require the fulfillment of all the terms of the Contract.

13.6 Progress payments to the Contractor shall not release the Contractor or his surety from any obligations under this Contract. Progress payments shall be made at intervals of not less than thirty (30) days.

Article XIV - Closing Inspections

14.1 Substantial Completion Inspection. When the Contractor considers the entire Work Substantially Complete, the Contractor shall so notify the ODR in writing that the Work will be ready for Substantial Completion Inspection on a date certain. The Contractor shall include with this notice a list of items to be completed or corrected prior to final inspection. On the date indicated by Contractor, or as soon thereafter as is practicable, the ODR and the Contractor shall inspect the work and if the ODR agrees that the Work is Substantially Complete a Certificate of Substantial Completion shall be issued to the Contractor, fixing the date of Substantial Completion. The ODR shall submit with this certificate a list of items to be completed prior to final inspection (the Pre-Final Punchlist). This list may include additional items not included on the Contractor's list, which are deemed necessary by the Owner to correct or complete prior to Final Inspection.

14.2 Final Inspection. The Contractor shall fully complete the list of items listed on the Prefinal Punchlist prior to Final Inspection. Unless otherwise specified in Special Conditions, or otherwise agreed in writing by the parties, the Contractor shall complete this work within 15 days of the certified date of Substantial Completion. When the Contractor has completed the Prefinal Punchlist, he shall give written notice to the ODR that the Work will be ready for Final Inspection on a date certain. On this date, or as soon thereafter as is practicable, the ODR and Contractor shall inspect the Work and the ODR shall issue a certificate fixing the date of Final Completion or direct such final items as shall be necessary to the issuance of a certificate of Final Completion. Final Completion shall be a condition precedent to the Contractor's right to receive Final Payment.

Article XV - Claims and Dispute Resolution

15.1 Claims. All claims must be made in writing and presented by the claimant to the other party within thirty (30) calendar days after the start of the occurrence or event giving rise to the claim and the notice must include a
general description of the nature of the claim. Notice of the amount of the claim with supporting data must be provided by the claimant to the other party within thirty (30) days after the delivery of the initial claim notice.

15.2 Conference between Owner and Contractor. Within sixty (60) days after delivery of the notice of the claim the ODR and Contractor shall meet to discuss the claim. If the parties are unable to agree on the resolution of the claim then the claimant shall have any remedy that may be lawfully available to the party.

Article XVI - Contract Final Acceptance and Payment

16.1 Request for Final Payment. At any time following the date of Final Completion the Contractor may submit a certified Application for Final Payment.

16.2 Final Payment Documentation. The Contractor shall submit, prior to or with the Application for Final Payment, all close out documents, including maintenance and operating instructions, guarantees and warranties, certificates, record documents and all other items required by the Contract Documents. The Contractor shall also submit an affidavit that all payrolls, bills for materials and equipment, subcontracted work and other indebtedness connected with the Work, except as specifically noted, have been paid or will be paid or otherwise satisfied within the period of time required by Chapter 2251, Texas Government Code. If required by the Owner, the Contractor shall furnish documentation establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of claims arising out of the Contract, to the extent and in such form as may be designated by the Owner. The Owner is entitled to rely upon this affidavit; the Contractor may not submit a claim on behalf of a subcontractor or vendor if that claim has not been noted as an exception in the affidavit.

16.3 Offsets and Deductions: The Owner may deduct from the Final Payment all sums due from the Contractor for any reason, all deductions authorized by Article 13, and as Liquidated Damages. If the Certificate of Final Completion notes any Work remaining incomplete or defects not remedied, the Owner may deduct the reasonable cost of remedying such deficiencies from the Final Payment. If such deductions are made, the Owner shall identify each deduction made and the reason therefore, and furnish the Contractor with an explanation of the deduction and the amount deducted on or by the 21st day after Owner's receipt of an approved, or deemed approved Application for Final Payment.

16.4 Final Payment Due. Final Payment shall become due and payable by Owner, subject to all allowable offsets and deductions, on the 31st day next following the receipt of the approved or deemed approved Application for Final Payment. If the Contractor disputes any amount deducted by the Owner, the Contractor shall give notice of the dispute on or before the thirtieth day next following receipt of Final Payment; failure to do so will bar any subsequent claim for payment of amounts deducted.

Article XVII - Contract Warranty and Guarantee
17.1 **Contractor's General Warranty and Guarantee.** Contractor warrants to the Owner that all Work shall be executed in accordance with the Contract Documents, complete in all parts and in accordance with approved practices and customs, and of the best finish and workmanship. Unless otherwise specified, all materials and equipment incorporated in the Work under the Contract shall be new. The Owner may, at its option, agree in writing to waive any failure of the Work to conform to the Contract Documents, and to accept a reduction in the Contract Price for the cost of repair or diminution in value of the Work by reason of such defect. Absent such a written agreement, however, the Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute and is not waived by any inspection or observation by the Owner, Architect/Engineer or others, by making any progress payment or final payment.

17.2 **Warranty Period.** Except as otherwise specified, the Contractor shall repair all defects in materials, equipment or workmanship appearing within one year from the date of Substantial Completion of the Work as a whole. Upon receipt of written notice from the Owner of the discovery of any defects, the Contractor shall promptly and at its own cost remedy the defects and replace any property damaged therefrom. In case of emergency where delay would cause serious risk of loss or damage to the Owner, or if the Contractor, after notice, fails to proceed promptly and remedy within 30 days or within another period of time which has been agreed to in writing, in compliance with the terms of the warranty and guarantee, the Owner may have the defects corrected and the Contractor and his surety shall be liable for all expenses incurred.

**Article XVIII - Change Orders**

18.1 **Effect of Change Order.** A Change Order authorizes a change in the Scope of the Work or an adjustment in the Contract Sum or the Contract Time. Work performed under a Change Order is subject to all provisions of the Contract Documents.

18.2 **Modifications for which a Change Order is Required.** All changes in the scope of the Work, the Contract Sum and the Contract Time shall be documented by a Change Order. Change Orders are the exclusive method for modifying the Contract Sum or Contract Time.

18.3 **Agreed and Unilateral Change Orders.** A Change Order may be either an Agreed Change Order or a Unilateral Change Order. An Agreed Change Order is a Change Order jointly executed by the Owner and the Contractor, in which each agrees to all of the terms of the amendment. A Unilateral Change Order is a Change Order issued by the Owner without the agreement of the Contractor. Contractor shall comply with a Unilateral Change Order but shall be entitled to an equitable adjustment of the Contract Time and Contract Price.
Article XIX – Contract Time

19.1 Contract Time. The Contract Time will be measured from the date designated in the Notice to Proceed to the date specified for completion by the Contract Documents, including any modification by Change Order. Failure to achieve Substantial Completion within the Contract Time will subject the Contractor to Liquidated Damages. Unless otherwise specified in the Special Conditions or elsewhere in the Contract Documents, the date of Contract Completion shall be the date on which the Work is certified as Substantially Complete.

19.2 Contractor Delayed. When Contractor, without fault and for reasons beyond the control of Contractor, is delayed from completing the Work within the Contract Time, the Contractor shall be entitled to an extension of time commensurate with the period of delay.

19.3 Failure to Complete Work Within the Contract Time. Time is of the essence of this Contract. The Contractor’s failure to complete the Work within the Contract Time will cause damage to the Owner. These damages shall be liquidated by agreement of the Contractor and the Owner, as set forth in the Special Conditions.

19.3.1 Collection of Liquidated Damages. The Owner may collect Liquidated Damages due from the Contractor directly or indirectly by reducing the contract sum in the amount of Liquidated Damages stated in the Special Conditions and the Contract.

Article XX - Termination for Cause by Owner

20.1 Termination by Owner for Cause. The Owner may, without prejudice to any right or remedy terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor, under the following circumstances:

a. Persistent or repeated failure or refusal, except during complete or partial suspensions of work authorized under the Contract Documents, to supply enough properly skilled workmen or proper materials;

b. Persistent disregard of laws, ordinances, rules, regulations or orders of any public authority having jurisdiction;

c. Persistent failure to prosecute the work in accordance with the Contract Documents, and to insure its completion within the time, or any extension thereof, specified in this contract;

d. Failure to remedy defective work;

e. Failure to pay subcontractors, laborers, materialmen and suppliers pursuant to Texas Government Code Chapter 2251;
f. Persistent endangerment, by the Contractor or its Subcontractors or other vendors, of the safety of labor or of the Work itself;

g. Failure to supply or maintain statutory bonds, pursuant to Article V, or the supply or maintain Required insurance, pursuant to Article VI; or

h. Any other material breach of the Contract.

The Owner reserves the right to terminate at any time for any of the above listed causes. Failure to exercise the right to terminate in any instance or for any proper reason shall not be construed as waiver of the right to do so in any other instance or for any other proper reason.

20.1.1. The ODR shall give the Contractor and its Surety thirty days' prior written notice of its intent to terminate for any of the above reasons. If the Contractor or the Surety demonstrates, to the satisfaction of the Owner, that the condition or conditions upon which the notice of termination is based have been removed, corrected, or will not recur, then the Owner shall rescind the notice and the Contract shall continue unmodified, and the Contractor shall not be entitled an extension of time.

20.1.2. Should the Contractor or the surety fail to so demonstrate within thirty days following receipt of such notice, or fail to satisfy the Owner that the condition or conditions upon which the notice of termination is based have been removed, corrected, or will not recur, the Owner may arrange for completion of the Work and deduct the cost thereof from the unpaid Contract sum remaining. If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, including compensation for the Architect/Engineer's additional services made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor or his surety shall pay the difference to the Owner. This obligation for payment shall survive the termination of the Contract. The Owner reserves the right, where the Contract is terminated for cause, to take assignment of any and all contracts between the Contractor and its Subcontractors, vendors and suppliers, and the ODR shall promptly notify the Contractor of the contracts the Owner elects to assume. Upon receipt of such notice, the Contractor shall promptly take all steps necessary to effect such assignment.

Article XXI – Miscellaneous

21.1 Computation of Time. In computing any time period set forth in this Contract, the first day of the period shall not be included, but the last day shall be.

21.2 Survival of Obligations. All representations, indemnifications, warranties and guarantees made in accordance with the Contract Documents will survive final payment, completion and acceptance of the Work, as well as termination for any reason. All duties imposed upon the Contractor by reason of termination, including without limitation the duty to assign subcontracts and contracts with vendors and suppliers, shall likewise survive the termination of the Contract.
21.3 **No Waiver of Performance.** The failure of either party in any instance to insist on the performance of any of the terms, covenants or conditions of the Contract Documents, or to exercise any of the rights granted thereunder, shall not be construed as waiver of any such term, covenant, condition or right with respect to further performance.

21.4 **Governing Law and Venue.** This Contract shall be governed by the law of the State of Texas. Exclusive venue of any cause of action arising out of or related to the Contract or the performance of the Work shall lie in the District Court of Montgomery County, Texas.

21.5 **Captions and catchlines.** The captions and catchlines used throughout the Uniform General Conditions are for ease of reference only and have no effect on the meaning of the terms and conditions set forth herein.

21.6 **Independent Contractor Status.** The Contract Documents create an independent contractor relationship between the Owner and Contractor and neither party’s employees or contractors shall be considered employees, contractors, partners or agents of the other party.

21.7 **No third party beneficiaries.** The parties do not intend, nor shall any clause be interpreted to create in any third party, any obligations to, or right of benefit by, such third party under these Contract Documents from either the Owner or Contractor.

21.8 **Entire Agreement.** These Contract Documents supersede in full all prior discussions and agreements (oral and written) between the parties relating to the subject matter hereof and constitutes the entire agreement.

21.9 **Assignment.** This Contract may not be assigned by either party without the prior written consent of the other, except either party may, upon notice to the other party but without the other party’s consent, assign this Contract to a present or future Affiliate or successor, provided that any such assignment by Contractor shall be contingent on Owner’s determination that the assignee is qualified to perform the work, is in good standing with the City of Conroe and otherwise eligible to do business within the State of Texas.

21.10 **Severability.** If any provision, sentence, clause or article of this Contract is found to be invalid or unenforceable for any reason, the remaining provisions shall continue in effect as is the invalid or unenforceable provision were not in the Contract. All provisions, sentences, clauses and articles of this Contract are severable for this purpose.

21.11 **Parties Bound.** Execution of this Contract by each party binds the entity represented as well as its employees, agents, successors and assigns to its faithful performance.

21.12 **No waiver of Immunity.** Nothing herein shall be construed to waive City’s immunity from suit or damages except to the extent that such waiver has been otherwise provided by law.
SECTION 00700

SPECIAL CONDITIONS OF THE AGREEMENT

1.0 Permits. Contractor shall make any and all arrangements and pay for any and all permits required for this work. Any City permits will be free of charge. EPA and TCEQ rules and regulations must be followed regardless of whether they are specified individually or not.

2.0 Utilities. Contractor shall make all arrangements for and pay for any utility services required during construction of this project. Water will be provided at no charge by the City, however, all water use must be metered, and tap fees shall be paid by the Contractor.

3.0 Materials Testing.
   3.1 The City of Conroe will provide for materials testing as part of the contract for laboratory certification of materials and workmanship in construction of this project.
   3.2 The City of Conroe has the right to temporarily halt construction or repairs for the purpose of acquiring test samples.
   3.3 Copies of the test results will be forwarded to the City.

4.0 Protection of Existing Facilities. Existing facilities, including utility or paving facilities, disturbed or damaged by or because of performance of this contract shall be promptly restored or repaired at Contractor’s expense. Contractor shall be responsible for all areas of the site used by him and all subcontractors in the performance of the Work. He will exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to Owner or others. Contractor has the right to exclude from the site all persons who have no purpose related to the Work or it’s inspection, and may require all persons on the site (except Owner’s employees) to observe the same regulations, as he requires of his employees.

5.0 Timing and Sequence of Work.
   5.1 Contractor is advised that the timing of the work is of critical concern to the Owner, who desires to utilize the proposed facility as quickly as possible.
   5.2 Contractor is therefore informed that time is of the essence in this contract and that the time allowed for completion is the time shown in the Proposal subject to extensions in accordance with the General Conditions.
   5.3 Contractor is further advised that he will be liable for liquidated damages in the amount of $1,000.00/day for each day the project is not completed in the time allowed plus extensions.

6.0 Final Approval and Guarantee.
   6.1 The work is to be completed to the satisfaction of the Owner.
   6.2 Contractor is to guarantee all work to be free from defect due to faulty workmanship or materials for a period of one year from the date of final acceptance of the work by the Owner. Contractor shall repair defects, which develop in construction, during that time, upon notice by the Owner to do so. No provisions of this contract shall relieve Contractor of this guarantee. Failure of the Contractor to repair or replace a defect upon notice shall entitle Owner to perform necessary work and recover the cost of the same from Contractor and/or his surety.
7.0 Form of Specifications.

7.1 Specifications are of the abbreviated, simplified or streamlined type and include incomplete sentences. The omission of words or phrases such as “the Contractor shall”, “inconformity therewith”, “Shall be”, “as noted on the drawings”, “according to the plans”, “a”, “an”, shall be supplied by inference in the same manner as they are when a “note” occurs on drawings.

7.2 The specifications are interpreted to require that the Contractor shall provide all items, articles, materials, operation or methods listed, mentioned or scheduled whether on the plans or specified therein, or both, including all labor, material, equipment and incidentals necessary and required for their completion.

7.3 Whenever the words “approved”, “satisfactory”, “designated”, “submitted”, “observed”, or similar words or phrases are used it shall be assumed that the word “Contract Administrator” follows the verb as the object of the clause, such as “approved by the Contract Administrator”.

7.4 All references to standard specifications or manufacturer’s installation directions shall mean the latest edition thereof.

7.5 Reference to technical society, organization or body is made in specifications in accordance with the following abbreviations:

- AASHO American Association of State Highway Officials
- ASTM American Society for Testing Materials
- AWWA American Water Works Association
- EPA Environmental Protection Agency
- TCEQ Texas Commission on Environmental Quality

7.6 Some specification items cover construction requirements and materials in comprehensive manner, and only pertinent portions of these items apply.

7.7 For construction specifications or details not detailed in plans and/or specifications use relevant City of Conroe or Texas Commission on Environmental Quality standards.

8.0 Other Contractors. The Contractor is advised that other work may be underway in the area simultaneously. Each Contractor will be required to coordinate his activities with others and the City at no increased time or cost to the Owner.

9.0 General Prosecution of Work. The Contractor is expected to prosecute the work diligently and continuously, weather permitting, and is also expected to maintain site in a safe and orderly condition. These steps will be expected to be performed at no extra cost to the Owner.

10.0 Storage of Equipment and Materials.

10.1 Contractor furnished equipment and materials shall be stored in such manner as to protect them from the elements, and prevent damage to, corrosion of, deterioration of, or loss of materials or components.

10.2 Materials and equipment shall be stored on high ground on a suitable working surface free of mud and water.

10.3 Equipment and materials storage shall be limited to areas designated by the Contract Administrator to protect existing vegetation.

10.4 Contractor shall immediately move stored material or equipment if determined necessary for any reason by the owner.
11.0 **Access to Construction Site.**

11.1 Contractor should investigate the site and define any potential construction problems and/or delivery route restrictions for the components to be supplied, prior to submitting a bid. No blocking or redirection of traffic shall be done as part of this project.

11.2 Access to the project can be obtained from public roads and City of Conroe property. Access across private property is strictly forbidden unless written permission has been obtained from the landowner.

12.0 **Land for Construction Purposes.** Contractor will be permitted to use available land belonging to Owner, on or near the site of the Work, for construction purposes. The location and extent of the areas so used shall be as designated by the Owner.

13.0 **Salvage of Materials and Equipment.**

13.1 At the option of the Owner, all existing materials and equipment removed, and not reused, as a part of the Work shall remain the property of the Owner, unless otherwise noted. (Items not to be salvaged shall be removed and legally disposed of by the Contractor, as part of this contract.)

13.2 Contractor shall carefully remove and protect salvaged items, which are to be reused or remain the property of the Owner. Salvaged items not to be reused in the Work, but to remain Owner’s property, shall be delivered by Contractor to a site designated by the Owner.

14.0 **General Provisions Applicable to Other Required Insurance.** At all times during the term of the contract the Contractor shall keep in effect (1) a Commercial General Liability Policy and (2) an Automobile Liability Policy.

14.1 Only insurance carriers licensed and admitted to do business in the State of Texas will be accepted.

14.2 “Claims Made” policies will not be accepted.

14.3 The City of Conroe, Texas, its officials, employees and volunteers are to be added as “Additional Insured’s” to the General Liability Policy. The coverage shall contain no special limitations applicable to such additional insured’s.

14.4 Each insurance policy shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty days prior written notice by certified mail, return receipt requested has been given to the City of Conroe, Texas.

14.5 Contractor waives all rights, including that of subrogation, against Owner, Architect, their officers, employees, agents or assigns with respect to personal injury or property damage arising out of the Project or the Work to the extent that such loss or damage is insured, or required to be insured by the Contractor under the Contract Documents.

15.0. **Independent Contractor Relationship.** The Contractor is and shall perform these services as an independent contractor, and as such, shall have and maintain complete control over all of its employees, agents, and operations. Neither the Contractor nor anyone employed by it shall be, represent, act, purport to act or be deemed to be the agent, representative, employee or servant of the City of Conroe.

No person listed as a registered sex offender in the central database maintained by the Texas Department of Public Safety may be allowed by Contractor to perform work related to this contract in, or within 500 feet of any park or recreation facility of the City of Conroe, or within 500 feet of any public or private school or childcare facility. Contractor and its subcontractors shall use due diligence to investigate the criminal history of all employees assigned to perform work under or related to this contract to ensure compliance with this requirement. Internet access to the DPS database is available to the general public at [https://records.txdps.state.tx.us](https://records.txdps.state.tx.us).
The Bidder selected by this invitation for bid will be working as an independent contractor and will be required to take out and keep in force all permits, licenses, certifications, other approvals, and or insurance that may be required by the City of Conroe, any local or regional governmental agency, the State of Texas, or the federal government. Failure to comply with any of these items would be grounds for immediate cancellation of the contract.

16.0 Notice Before Commencing Work. The Contractor shall give the Contract Administrator at least 48 hours notice in writing before commencing work on any portion of the contract, or renewing work at any place where work has been stopped for any cause. He shall also give the same notice to all authorized inspectors, superintendents, or persons in charge of utilities, or roadways affected by his operations. Any work done contrary to the provisions of this clause must be taken up and rebuilt immediately upon order from the Administrator.

17.0 Environmental Protection. The Contractor shall be responsible for compliance with all applicable federal, state, and local laws, rules, requirements, codes and regulations.

The Contractor and any subcontractors shall recognize the environmental requirements of the project. Disturbed areas shall be strictly limited to boundaries established by the Contract Administrator. Particular attention is drawn to the avoidance of any pollution of any near by streams, sewers, wells or other water sources.

All work shall be performed in such a manner as may be required to avoid pollution of the air by dust or other contaminants and also to control noise.

Contractor shall keep the premises free from accumulations of waste materials and rubbish. Contractor shall provide adequate trash receptacles about the site, and shall promptly empty the containers when filled.

Contractor when not in use shall neatly stack construction materials. Contractor shall promptly remove splattered concrete, asphalt, oil, paint, corrosive liquids and cleaning solutions from surfaces to prevent marring or other damage.

Volatile wastes shall be properly stored in covered metal containers and removed daily.

The Contractor shall comply with the U.S. Environmental Protection Agency (EPA) and TCEQ including submitting a Notice of Intent (NOI) and adhering to the terms and conditions imposed by EPA’s National Pollutant Discharge Elimination System (NPDES) storm water baseline general permit. Among the conditions and requirements of this permit, the Contractor must prepare and implement a pollution prevention plan (PPP) that is tailored to the construction site. Once the facility is authorized to discharge under this storm water baseline construction general permit, the Contractor remains responsible for compliance with all terms and conditions to maintain coverage. The Contractor shall be responsible for any breach of terms or conditions imposed by the storm water baseline construction general permit and is responsible for any resulting penalties.

The Contractor shall prevent erosion of soil and excess runoff of surface or subsurface water from the construction site during the construction period. To retain existing drainage patterns external to the construction site, the Contractor shall construct temporary earth berms, sedimentation basins, retaining areas, and temporary ground cover as needed to control conditions.

The Contractor shall legally dispose of all solid waste materials and other materials to be removed from the site by transporting them to disposal areas that are approved by all Federal, State and Local authorities.

18.0 In the event there exists a conflict between any portion of these contract documents, the following is a list, in order of priority, to be given to said documents:

1. Proposal Form
2. Special Notes
3. Plans
5. Technical Specifications
6. Notice to Bidders
7. Instruction to Bidders (Project Manual & Contract Documents)
9. Bid, Performance and Payment Bonds
10. Certificate of Insurance
11. Wage Decisions
19.0 **Declaration.** By my signature below I agree to comply with all the provisions of this Contract. I further understand any breach of the Contract entitles the City of Conroe a governmental entity to declare the Contract void within ten days after receipt of notice of breach.

SIGNED this ________ day of _______ 2018

Contractor: __________________________

By: _________________________________

Printed Name: _______________________

Title: _______________________________  

The City of Conroe, Texas

By: _________________________________  

Mayor Toby Powell

Attest: _______________________________  

Soco Gorjon, City Secretary
LAKESANJACINTORIVER

PROJECT LOCATION

SGT. ED HOLCOMB ROAD
12" WATER LINE EXTENSION
CIP # 2018-01

MAYOR
TOBY POWELL
COUNCIL MEMBERS
DUANE M. HAM
BETH M. GISSON
DUKE W. COON
RAYMOND MCDONALD
JODY CZAJKOSKI

CITY ADMINISTRATOR:
PAUL VIRGADAMO

APPROVED BY
THOMAS E. WOOLLEY, JR.
DIRECTOR OF CAPITAL PROJECTS / TRANSPORTATION

THEREFORE, the following is approved:

THOMAS E. WOOLLEY, JR.
DIRECTOR OF CAPITAL PROJECTS / TRANSPORTATION
GENERAL CONSTRUCTION NOTES

1. MATERIALS: CONSTRUCTION-ONLY TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF CONROE STANDARDS AND SPECIFICATIONS. LABORATORY TESTING WILL BE PERFORMED BY THE CONTRACTOR AT THEIR OWN EXPENSE.

2. ALL SUBMITTAL REQUIREMENTS ON WHICH THIS CONTRACT IS BASED ARE NOT TO BE VIEWED AS SUBSTITUTE FOR THE CONTRACT DOCUMENTS. A DEVIATION FROM ANY CONTRACT DOCUMENTS WILL REQUIRE THE CONTRACTOR’S WRITTEN APPROVAL.

3. LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL REQUEST ACCURATE LOCATIONS OF THE UTILITY LINES FROM THE APPROPRIATE GOVERNMENTAL AGENCY PRIOR TO CONSTRUCTION.

4. MEDICAL RECORDS OF WORKERS UNDER THESE LAWS. IF EITHER THE CONTRACTOR OR THE OWNER BECOMES LEGALLY RESPONSIBLE FOR THE SAFETY OF WORKERS UNDER THESE LAWS. THE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE SAFETY OF WORKERS UNDER THESE LAWS.

5. THE CONTRACTOR SHALL NOTIFY THE LOCAL POLICE DEPARTMENT AND CITY OF CONROE STREET DEPARTMENT PRIOR TO COMMENCEMENT OF WORK.

6. ALL EXISTING ROADS AND/OR RIGHT-OF-WAYS DISTURBED DURING CONSTRUCTION SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

7. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

8. ALL CONTRACTORS SHALL PROVIDE ACCESS TO THE PROPERTY AREA IN ACCORDANCE WITH THE CITY OF CONROE STANDARDS.

9. EXISTING ROADS AND/OR RIGHT-OF-WAYS TO BE EVACUATED PRIOR TO COMMENCEMENT OF WORK.

10. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

11. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

12. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

13. CONSTRUCTION SHALL BE COMPLIANT WITH THE U.S. ENVIRONMENTAL PROTECTION AGENCY’S Guidelines for the Control of Erosion and Sedimentation on Construction Sites. This includes the use of sediment control measures, such as straw blankets, silt fences, and erosion control blankets. The contractor shall be responsible for ensuring that all work is performed in accordance with the approved plans.

14. THE CONTRACTOR SHALL PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

15. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

16. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

17. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

18. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

19. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

20. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

21. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

22. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

23. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

24. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

25. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

26. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

27. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

28. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

29. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

30. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

31. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

32. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

33. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

34. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

35. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

36. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.

37. THE CONTRACTOR SHALL USE A MINIMUM OF SIX INCHES (6") OF CLEAN TOP SOIL TO FILL IN ANY SLOPES BETWEEN 4'-6" AND GROUND LEVEL, BROADCAST OR BUSHHOG AND BROADCAST THE TOP SOIL TO PER CONSTRUCTION DEPARTMENT STANDARDS.

38. PROVIDE 2'-6" MAXIMUM LAYERS OF FILL. IN AREAS WHERE SLOPES ARE LESS THAN 4H:1V, SOLID SOD TO BE PLACED IN SLOPES BETWEEN 2H:1V TO 4H:1V, AND WATER UNTIL GRASS IS ESTABLISHED.

39. STORM SEWER CONSTRUCTION ACTIVITIES WITHIN THE PROPERTY AREA SHALL BE AS GOOD OR BETTER THAN THE CONDITION PRIOR TO STARTING THE WORK, UPON COMPLETION OF THE WORK. IF THEY ARE NOT RECONSTRUCTED TO PROVIDE A SOFTER RIDE QUALITY, THE CONTRACTOR SHALL REQUEST ACCURATE WIDTH AND LOCATION DETAILS FROM THE APPROPRIATE GOVERNMENTAL AGENCY.
KINDER MORGAN CONSTRUCTION NOTES

1. CONSTRUCTION AND TESTING OF SANITARY SEWER MANHOLE RIMS SHALL BE 3-INCHES MINIMUM AROUND THE MANHOLE RIM. ALL MANHOLE RIMS SHALL BE PUSH ON TYPE WITH GASKETS CONFORMING TO ASTM C478. COPPER COATED STEEL MANHOLE RIMS MOUNTED IN CONCRETE ARE PERMITTED.

2. ALL PIPE FOR WATER MAINS SHALL BE CLASS 150 OR BETTER CONFORMING TO AWWA C900 OR C905 UNLESS OTHERWISE SPECIFIED. JOINTS REQUIREMENTS.

3. SANITARY SEWER MANHOLE RIMS SHALL BE 3-INCHES MINIMUM AROUND THE MANHOLE RIM. ALL MANHOLE RIMS SHALL BE PUSH ON TYPE WITH GASKETS CONFORMING TO ASTM C478.

4. SANITARY SEWER MANHOLE RIMS SHALL BE 3-INCHES MINIMUM AROUND THE MANHOLE RIM. ALL MANHOLE RIMS SHALL BE PUSH ON TYPE WITH GASKETS CONFORMING TO ASTM C478.

5. ALL NEW PRECAST CONCRETE MANHOLES SHALL BE COATED WITH MOLTEN IRON TO PREVENT CORROSION. THICKNESS OF PROTECTIVE COATING SHALL BE AS SPECIFIED.

6. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

7. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

8. WHEN THE SERVICE LATERAL AND LARGE METER VAULT ASSEMBLY IS INSTALLED AND OPERATED BY KINDER MORGAN, THE PIPELINE SHALL BE pressure tested in accordance with the City of Conroe testing requirements and specifications. All finished construction shall be in accordance with City of Conroe standards and specifications. All finished construction shall be in accordance with City of Conroe standards and specifications.

9. ENTERGY WILL NOT BE HELD RESPONSIBLE FOR THE LOCATION OF PRIVATE UNDERGROUND ELECTRICAL, ELECTRONIC, WATER AND GAS LINES NOT LOCATED PRIOR TO BORING OR AUGURING ACROSS A PIPELINE OWNED AND OPERATED BY KINDER MORGAN.

10. KINDER MORGAN SHALL BE GIVEN 72 HOUR NOTICE PRIOR TO ANY AND ALL UNDERGROUND SERVICE LOCATIONS.

11. KINDER MORGAN SHALL BE GIVEN 72 HOUR NOTICE PRIOR TO ANY AND ALL UNDERGROUND SERVICE LOCATIONS.

12. SANITARY SEWER FORCE MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE CITY OF CONROE STANDARDS AND SPECIFICATIONS. ALL FITTINGS AND PIPE FITTINGS SHALL BE INSURED IN CONFORMITY WITH CITY OF CONROE STANDARDS AND SPECIFICATIONS.

13. THE CONTRACTOR SHALL OBTAIN A MINIMUM SEPARATION DISTANCE BETWEEN ANY UNDERGROUND SERVICES AND ANY PIPELINE AS REQUIRED BY SEWER TRACT MANAGEMENT OR IN THE CONTRACTSpecified. All finished construction shall be in accordance with City of Conroe standards and specifications. All finished construction shall be in accordance with City of Conroe standards and specifications.

14. THE CONTRACTOR SHALL OBTAIN A MINIMUM SEPARATION DISTANCE BETWEEN ANY UNDERGROUND SERVICES AND ANY PIPELINE AS REQUIRED BY SEWER TRACT MANAGEMENT OR IN THE CONTRACTSpecified. All finished construction shall be in accordance with City of Conroe standards and specifications. All finished construction shall be in accordance with City of Conroe standards and specifications.

15. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

16. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

17. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

18. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

19. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

20. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

21. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

22. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

23. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

24. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

25. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

26. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

27. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

28. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

29. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

30. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

31. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

32. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

33. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

34. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

35. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.

36. SANITARY SEWER MANHOLES SHALL BE COVERED WITH DRAINAGE DITCHES AND THE COVER DEPTH SHALL BE A MINIMUM OF 18" FROM GRADE TO TOP OF MANHOLE.
1. Mount sign on (2) 4" x 4" wooden post set in concrete.

2. Sign must not obstruct line of sight for traffic safety

3. Vertical clearance above natural ground must be 84" minimum.
MATCHLINE STA. 0+00 TO STA. 5+00

NOTES:
1. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION
2. RESTORE EXISTING DITCH GRADE TO ORIGINAL OR BETTER CONDITION.
3. PROPOSED WATER LINE INSTALLATION SHALL HAVE A BURY DEPTH OF 4' MIN TO 7' MAX
4. REGRADE DITCH TO MATCH EXIST FLOW LINE NO EXTRA PAY

12" WATER LINE
STA. 0+00 TO STA. 5+00

SGT. ED HOLCOMB ROAD 12" WATER LINE EXTENSION
12" WATER LINE
STA. 0+00 TO STA. 5+00
MATCHLINE STA. 5+00 (SEE SHEET 6) 6+00 7+00 8+00 9+00 10+00

MATCHLINE STA. 10+00 (SEE SHEET 6)

MATCHLINE STA. 10+00 (SEE SHEET 8)

MATCHLINE STA. 5+00 (SEE SHEET 8)

NOTES:
1. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. RESTOREEXISTING DITCH GRADE TO ORIGINAL OR BETTER CONDITION.
3. PROPOSED WATER LINE INSTALLATION SHALL HAVE A BURY DEPTH OF 4' MIN TO 7' MAX.
4. REGRADE DITCH TO MATCH EXISTING FLOW LINE NO EXTRA PAY.

12" WATER LINE
STA. 5+00 TO STA. 10+00
NOTES:
1. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION
2. RESTORE EXISTING DITCH GRADE TO ORIGINAL OR BETTER CONDITION.
3. PROPOSED WATER LINE INSTALLATION SHALL HAVE A BURY DEPTH OF 4' MIN TO 7' MAX
4. REGRADE DITCH TO MATCH EXIST FLOW LINE NO EXTRA PAY
NOTES:
1. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION
2. RESTORE EXISTING DITCH GRADE TO ORIGINAL OR BETTER CONDITION.
3. PROPOSED WATER LINE INSTALLATION SHALL HAVE A BURY DEPTH OF 4' MIN TO 7' MAX
4. NO EXTRA PAY
MATCHLINE STA. 20+00 (SEE SHEET 9)

MATCHLINE STA. 25+00 (SEE SHEET 11)

MATCHLINE STA. 25+00 (SEE SHEET 10)

NOTES:
1. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION
2. RESTORE EXISTING DITCH GRADE TO ORIGINAL OR BETTER CONDITION.
3. PROPOSED WATER LINE INSTALLATION SHALL HAVE A BURY DEPTH OF 4' MIN TO 7' MAX
4. REGRADE DITCH TO MATCH EXIST FLOW LINE NO EXTRA PAY

EX NG @ W.L.

MATCHLINE STA. 20+00 (SEE SHEET 9)

GGE 12" C-900 W.L.

BARBED WIRE FENCE R.O.W.

EDGE OF PVMT

FL DITCH

SGT. ED HOLCOMB RD.

(100' R.O.W.)

1-FIRE HYDRANT

1-6" G.V. & BOX

1-12"x6" TEE

STA=23+25.00 0.00'

32'

U/G TELE

U/G TELE

U/G TELE

U/G TELE

U/G TELE

U/G TELE

U/G TELE

U/G TELE

U/G TELE

ASPH. PVMT

D:\cfa\2018\12005.Sgt_Ed_Holcomb_Waterline_Extension\CAD\HOLCOMB.dwg

NOTES:
1. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION
2. RESTORE EXISTING DITCH GRADE TO ORIGINAL OR BETTER CONDITION.
3. PROPOSED WATER LINE INSTALLATION SHALL HAVE A BURY DEPTH OF 4' MIN TO 7' MAX
4. REGRADE DITCH TO MATCH EXIST FLOW LINE NO EXTRA PAY

D:\cfa\2018\12005.Sgt_Ed_Holcomb_Waterline_Extension\CAD\HOLCOMB.dwg

12" WATER LINE

STA. 20+00 TO STA. 25+00

MATCHLINE STA. 25+00 (SEE SHEET 11)

MATCHLINE STA. 20+00 (SEE SHEET 9)

MATCHLINE STA. 20+00 (SEE SHEET 9)
MATCHLINE STA. 25+00  TO STA. 30+00

STATION  

Notes:
1. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION
2. RESTORE EXISTING DITCH GRADE TO ORIGINAL OR BETTER CONDITION
3. PROPOSED WATER LINE INSTALLATION SHALL HAVE A BURY DEPTH OF 4' MIN TO 7' MAX
4. REGRADE DITCH TO MATCH EXIST FLOW LINE NO EXTRA PAY

Drawing Name: 12" WATER LINE EXTENSION  STA. 25+00 TO STA. 30+00

Engineer:

Cobb Pendley

CITY OF CONROE ENGINEERING
15630 Northwest Freeway, Suite 1100
Houston, Texas 77040
713.462.3242 | fax 713.462.3262
www.cobbfendley.com
TBPE Firm Registration No. 274
TBPLS Firm Registration No. 100467
CONTRACTOR SHALL OPEN CUT & RESTORE EX ASPHALT PAVEMENT TO PRE EXISTING CONDITION OR BETTER.

CENTER 1-20 FT JOINT OF WATER OVER EXISTING SAN SWR.

BARBED WIRE FENCE EDGE OF PVMT.

EX 18" CULVERT

EX 6" W.L.

30' U/G TELE U/G TELE U/G TELE

CONNECT PROP 1/2" WATER LINE TO EXIST 6" WATER LINE INCLUDE ALL FITTINGS NECESSARY & ACCESSORIES.

1-12"x6" REDUCER

1-6" T.S. % V.

STA=31+05.08 0.00 R

NOTES:
1. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. BATTERY CONSTRUCTION DOWNS TO ORIGINAL.
3. PROPOSED WATERLINE INSTALLATION SHALL HAVE A BURY DEPTH OF 4' MIN TO 7' MAX.
4. NO EXTRA PAY TO MATCH EXIST FLOW LINE.

MATCHLINE STA. 30+00 (SEE SHEET 11)

MATCHLINE STA. 25+00 (SEE SHEET 11)

30+00 31+00

MATCHLINE STA. 30+00 (SEE SHEET 11)

MATCHLINE STA. 25+00 (SEE SHEET 11)

30+00 31+00 32+00

PROFILE
1. PROVIDE CONCRETE UTILITY MARKER MEETING US ARMY CORPS OF ENGINEERS TYPE C DISC SPECIFICATIONS WITH A 3-INCH LONG SPLIT STYLE TAPERED STEM, DYED RED

2. THE MARKER IS TO BE ORBITAL-FORMED FROM SOLID UNLEADED SILICON-BRONZE BAR MARKER STAMPED WITH VALVE TYPE, VALVE DIAMETER, AND VALVE NUMBER

GATE VALVE

NO. 10

SECTION - VERTICAL GATE VALVE OPERATOR

NOTES

1. PROVIDE LOCATION AND REMARK H/NO. - LOCATION WILL BE MARKED AS DIRECTED BY THE ENGINEER.

2. THE MATERIAL FOR ALL BASE REINFORCEMENT SHALL BE STABILIZED BASED ON 1% OR MATCH THE STANDARD BASE OF MATERIALS FOR CONCRETE PLACEMENT. THE BASE OF MATERIALS FOR CONCRETE PLACEMENT SHALL BE STABILIZED BASED ON STABLE MATERIALS FOR CONCRETE PLACEMENT.

3. ALL WORK TO BE COMPLETED BY THE CONTRACTOR. THE MATERIALS AND LABOR FOR THE INSTALLATION OF FABRICATION AND CONCRETE WORK SHALL BE COMPLETED BY THE CONTRACTOR.

4. PROVIDE CONCRETE UTILITY MARKER DETAIL MUSIC BOX COVER PROVIDE TYLER UNION 145462 LOCKING VALVE BOX COVER OR APPROVED EQUAL

NATURAL GROUND OR FINISHED GRADE

2" OPERATING NUT CONCRETE TO BE DYED RED, CONCRETE AROUND TOP OF VALVE BOX 30 SQUARE INCH, 8 INCH THICK REINFORCE WITH #3 BARS @ 8" C.C. BOTHWAYS TWO LAYERS

3.5"
1. Flags attached to signs above are required.

2. All traffic control devices illustrated are SHOFCO, except those marked with the brackets symbol may be controlled when installed according to the plan. As for other construction work, when approved by the Engineer.

3. Traffic control vehicles or other equipment shall be parked near the right-hand lane and not parked in the paved shoulder.

4. Shadow Vehicle with a TMA shall be placed anywhere in the area of view where it is essential to maintain the performance or quality of the work. It shall not be allowed to enter the road with the construction work.

5. Additional Shadow Vehicle with TMA may be positioned off the paved shoulder and the third shown in order to protect with view of the equipment.

6. End TOPO-Set should be used on divided highways, expressways and freeways.

7. CV-1 and/or CV-105 signs may be used in place of CV-105 "Road Work Ahead" signs for shoulder work or conventional roadways.
SGT. ED HOLCOMB ROAD

LEGEND

SCALE: 1" = 40'

Drawing Name: SWPPP.DWG

Graphic Scale: NTS

ENGINEERING
300 W. DAVIS   P.O. BOX 3066
CONROE, TEXAS 77305   (936) 522-3100

N/A

Horizontal Scale: N/A

Drawn By:

Designed By:

Vertical Scale: N/A

Sheet No: 16

SGT. ED HOLCOMB ROAD 12" WATER LINE EXTENSION

TBPE Firm Registration No. 274
TBPLS Firm Registration No. 100467

13430 Northwest Freeway, Suite 1100
Houston, Texas 77040
713.462.3242 | fax 713.462.3262
www.cobbfendley.com
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>No. of Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Summary of Work</td>
<td>5</td>
</tr>
<tr>
<td>02</td>
<td>Special Notes</td>
<td>2</td>
</tr>
</tbody>
</table>

## DIVISION 1 - TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>No. of Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS 01</td>
<td>Submittals</td>
<td>2</td>
</tr>
<tr>
<td>TS 02</td>
<td>Construction Schedule</td>
<td>1</td>
</tr>
<tr>
<td>TS 03</td>
<td>Shop Drawings</td>
<td>2</td>
</tr>
<tr>
<td>TS 04</td>
<td>Trench Safety System</td>
<td>2</td>
</tr>
<tr>
<td>TS 05</td>
<td>Control of Surface and Ground Water</td>
<td>2</td>
</tr>
<tr>
<td>TS 07</td>
<td>Hydromulch Seeding</td>
<td>2</td>
</tr>
<tr>
<td>TS 20</td>
<td>Sand Backfill</td>
<td>2</td>
</tr>
<tr>
<td>TS 21</td>
<td>Cement Stabilized Sand</td>
<td>3</td>
</tr>
<tr>
<td>TS 34</td>
<td>Furnishing and Installing Water Lines</td>
<td>4</td>
</tr>
<tr>
<td>TS 35</td>
<td>Valves, Fire Hydrants and Accessories</td>
<td>5</td>
</tr>
<tr>
<td>TS 36</td>
<td>Disinfection of Water Piping Systems</td>
<td>2</td>
</tr>
<tr>
<td>TS 37</td>
<td>Hydrostatic Testing of Pressure Pipes</td>
<td>2</td>
</tr>
<tr>
<td>TS 54</td>
<td>Augering Pipe and Conduit</td>
<td>8</td>
</tr>
<tr>
<td>TS 60</td>
<td>Mobilization</td>
<td>1</td>
</tr>
</tbody>
</table>

END OF DOCUMENT
SUMMARY OF WORK

The project is installation of a 12-inch waterline along Sgt. Ed Holcomb Road. Project scope includes:

- Construction of approximately 2,960 linear feet of 12-inch PVC waterline with fittings, appurtenances, and site restoration

Construction activities will include but are not limited to the following.

1. Mobilization (Item 1)
   Payment will be made by Lump Sum. Unit price will include payment bond, performance bond, required insurance, project signs and construction staking. Limit mobilization lump sum to a maximum 5% of Construction Amount. Schedule of values are required.

   \[\text{Construction amount} = (\text{Total Proposal Amount} - \text{Mobilization Lump Sum})\]

2. Storm Water Pollution Prevention Plan (Item 2)

   - **SWP Plan** – develop and implement Storm water Pollution Prevention Plan (SWP3) in accordance with Part III of Construction General Permit (CGP). Update SWP3 as necessary during construction as required by Part III, Section E of the CGP. File Notice of Intent (NOI) for Small Construction Activity. Post copies of signed TCEQ Construction Site Notices, both from the City and the Contractor, at both ends of the project. Payment will be by the Lump Sum to include preparation of SWP3, filing NOI/NOT, posting site notices, maintenance and monitoring of sediment control devices. Maximum 95% of lump sum will be paid as the construction progresses. Remaining 5% of lump sum bid will be paid after vegetation is established on all disturbed areas.

   - **Temporary Sediment Control Devices** – provide reinforce filter fabric, biodegradable erosion control logs (inlet protection), construction entrances/exits and rock filter dams ash shown on the plans. Payment will be made by the Lump Sum to include labor, material, equipment, tools necessary to install and proper removal and disposal of sediment control devices at the end and incidentals.

3. Trench Safety (Item 3)

   Measurement for trench safety systems used on trench excavations is on a linear foot basis measured along the centerline of the trench, including manholes and other line structures.

   - Install and maintain trench safety systems in accordance with provisions of OSHA 29CFR.

   - Install specially designed trench safety systems in accordance with the Contractor’s trench excavation safety program for the locations and conditions identified in the program.
• A competent person, as identified in the Contractor’s Trench Safety Program, shall verify that trench boxes and other premanufactured systems are certified for the actual installation conditions.

4. Waterline (Items 4 to 10)
   • Waterline – Waterline measured by the linear foot along the centerline of pipe without deductions for valves and fittings, from start to line terminus. Unit price bid shall be full compensation for trench/trenchless construction, pipe bedding, backfill, pipe material (blue PVC), joint restraints as necessary, tracer wires, compacted backfill per plan details, surface restoration, hydrostatic testing, disinfection and incidentals to complete the work.
   • Provide joint restraints in accordance with the plan details for “Minimum Restrained Length”.
   • Provide restrained-joint pipes when installed by trenchless method or when encased. No separate pay.
   • Restrained joint pipes – provide Certa-Lok™, Diamond Lok-21®, Eagle Lok 900™ or approved equal.
   • Fittings
     o Include cost in unit price bid for pipe.
     o Fitting shall be furnished with ductile iron mechanical joint restraints with accessory pack.
     o Compact fittings are acceptable, except for TEEs or 90° Bends, which must be full body type.
     o Fittings are ductile iron, cement-mortar lined inside and coated with an asphaltic material outside.
   • Gate Valves – Valves will be measured by each. Unit price is full compensation for furnishing and installing gate valve with resilient seat, manual operator of the type specified, mechanical joint restraint with accessory pack, adjustable Type-A valve box, valve box riser (DI or PVC C900), concrete block, labor, equipment, tools and incidentals.
   • Tapping Sleeve & Valve (TS&V) – TS&V will be measured by each. Unit price is full compensation for furnishing and installing TS&V, mechanical joint restraint with accessory pack, adjustable Type-A valve box, valve box riser (DI or PVC C900), concrete block, labor, equipment, tools and incidentals.
   • Insertable Valves – provide insertable valves Hydra-Stop Insta-Valve 250 where directed. Measurement will be per each valve complete in place. Unit price is full compensation for excavation, backfill, surface restoration, valve material, valve box, labor, equipment, tools and incidentals.
• Fire hydrant assembly – fire hydrant assembly will be measured by each. Unit price is full compensation for hydrant lead (variable length), gate valve, hydrant body, extensions (as required), joint restraints, necessary fittings, paints and reflector tape, complete in place per plan details.

• Water Services – measurement will be per each. Unit price is full compensation for polyethylene pipe (SDR-9) of matching size, necessary bore (for long side), tapping saddle, valves, connection to meter, labor, equipment, tools and incidentals. Water meter relocation will be paid separately.

5. Asphalt Stabilized Base Removal and Replacement (Item 11)
Construct asphalt-stabilized base (ASB) for temporary widening or asphalt pavement at plan-designated locations to a thickness specified on the plans. ASB shall be compacted to a minimum of 97.0% density as determined by Tex-126-E.

ASB will be measured by the square yard. Unit price is full compensation for furnishing, loading, hauling, placing, compacting, sampling, testing, and replacing defective material, and equipment, labor, tools, and incidentals.

Basis of Estimate

• Temporary widening – 6” thick ASB (this base will not be reclaimed)
• Asphalt Pavement (permanent) – 8” thick ASB

6. Dense-Graded Hot Mix Asphalt (SQ) (Item 11)
Measurement will be by the square yard of composite hot-mix that includes asphalt, aggregate and additives. Provide Dense Graded, Hot-Mix Asphalt Type D SAC B (PG64-22) per TxDOT Item 340. Unit price is full compensation for surface preparation, materials including tack coat, placement, equipment, labor, tools and incidentals. Following notes shall apply to HMA:

• Taper the asphalt concrete pavement at the beginning and ending points.
• Use a maximum 6H:1V slope for the asphalt concrete pavement edge.
• Do not use Surface Aggregate Classification (SAC) C for this project. Only twenty percent (20%) maximum amount of Reclaimed Asphalt Pavement (RAP) is allowed on this project.
• Do not use petroleum-based solvents in the beds of HMA delivery vehicles.
• For determining the Asphalt Content, only ignition ovens will be allowed.
• Dilution of tack coat is not allowed.
• Monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 350⁰ F (or 275⁰ F for WMA) and not lower than 215⁰ F. The City will not pay for or allow placement of any mixture produced above 350⁰ F.
Basis of estimate:

- 110 lb/SY-inch (Asphalt 6% by weight; aggregate – 94% by weight)

7. Site Restoration (Item 12 and 13)

Site restoration will be paid by the square yard for all work related to restoration of earthen areas and establishment of vegetation.

- Hydromulch Seeding – provide Bermuda grass mix or other mix as approved. Unit price is full compensation for furnishing materials, including water for hydroseeding and hydro-mulching operations, mowing, labor, equipment, tools, supplies and incidentals. Watering and fertilizer will not be paid for directly but will be subsidiary to this Item. Perform reseeding if turf coverage is not adequate. No extra payment will be made for reseeding. Water sodding and seeded area adequately until turf is established

- Sodding – provide and install Bermuda grass or approved sodding at plan-designated locations or as directed. Measurement will be per square yard. Unit price is full compensation for excavation, loading, hauling, placing, rolling, finishing, materials, equipment, labor, tools, supplies and incidentals. Watering and fertilizer will not be paid for directly but will be subsidiary to this Item.
1. Weekend Work Schedule
   Contractor is allowed to work on Saturdays. However, he/she must notify the City on or before Thursday for scheduling. Working on Sundays will not be allowed except in extenuating circumstances and must have written permission from the City.

2. All products, materials and shop drawings must be approved by the City prior to construction.

3. The Contractor shall submit daily reports, along with quantities of materials used, and material receipts, with reference to bid items, as applicable.

4. Contractor’s Project Superintendent shall be capable of speaking English fluently and must be available on the project at all times when work is being performed, including subcontractor’s work. The Superintendent must be available and on-call 24 hours a day.

5. Roadside ditch to remain shall be maintained and cleaned to have a positive drainage. Ditch cleaning will be considered subsidiary to other items.

6. All roadway constructions shall maintain positive drainage by means of temporary ditch or swale. No ponding is allowed on stabilized subgrade or base. If pavement structure fails due to surface water ponding, the Contractor shall repair or replace the pavement structure as directed by the Engineer.

7. Construction of items that are not specifically addressed by the City of Conroe standards and specifications shall be in accordance with the TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (November 1, 2014).

8. The Contractor will be responsible for any damage resulting from negligence. The Contractor will take the necessary steps to prevent these occurrences and damage to Owner’s property or adjacent properties.

9. The City has the first option to retain any salvageable materials or reject all excess materials. Materials that are not retained by the City shall become the property of the Contractor. The Contractor shall properly dispose of all excess material off site in an approved manner.

10. Implement proper traffic control plans during construction and install all necessary signs, controls, barriers, flaggers, etc. as needed for a safe construction zone.

11. Cover work zone signs when work related to the signs is not in progress, or when any hazard related to the signs no longer exists.

12. Final cleanup, unless shown as a separate proposal item, will be considered subsidiary to the related items. Final cleanup shall include removal of all surplus materials, debris, and necessary final grading fully restoring the site to the original or better condition.

13. No monetary claims shall be made for adverse field conditions, and/or natural disasters, but time extension for delays may be approved. Rain days must be requested with each pay application each month.
14. Contractor shall work within the limits of the right of way or easements shown on the plans. No work shall be performed outside the ROW or the easements without the Right of Entry Letter on hand.

15. Although, the trade names or brand names may have been used in the plans, proposal form or the specifications, it is intended that only the domestic products (made in USA) of equal quality will be acceptable and are subject to prior approval. “Made in USA” requirement shall apply to reinforcing steel, pipes (PVC, ductile iron, steel), fittings, joint restraints and accessories, fire hydrants and gate valves. Pumps, electrical components, specialty valves and controls are exempt from this requirement. Submittal must include a certification from product manufacturer or supplier.

16. Contractor shall notify the businesses 48-hours in advance of any construction activities that may affect the existing businesses. Driveway access to businesses shall remain open all the time. Contractor shall notify residences using door hangers or other suitable approved method.

17. Water usage – this project is covered under City’s Capital Improvement Program (CIP) and water usage fees will be waived. Setup a service account for water with the City’s Utility Billing Department (936-522-3175). Water meter will be installed at the nearest fire hydrant from the site. The Contractor shall carry water from the source of supply to the job site.
SUBMITTALS

1.0 GENERAL

1.1 This section covers documents required for City projects prior to construction, during the construction and all deliverables once the project has been completed.

2.0 EXECUTION

2.1 PRIOR TO BEGINNING WORK

Submit the following items with signed agreement forms as a prerequisite to the approval of the Agreement between the Contractor and the City.

A. Performance Bond
B. Payment Bond
C. Certificates of Insurance
D. List of Subcontractors
E. Overall Project Schedule
F. Calculations, Shop Drawing, Product Data and other information as requested by the City

2.2 DURING CONSTRUCTION

As the project progresses, submit following items in a timely manner:

A. Updated Schedules – if applicable, update project schedules as the project progresses.
B. Schedule Format – provide schedule in Microsoft Project format (preferred) that includes all activities and duration with start and finish dates.
C. Daily Reports – submit daily reports for the entire week, in pdf format, on every Monday or on the first business day.
D. Schedule of Values – submit cost breakdown for all Lump Sum items in the proposal form
E. Payment Application – Submit monthly application on or before the 25th day of each month for timely approval by the City Council
F. Request for Information (RFI) – submit RFI using City’s standard form when a clarification on plan is required or when an alternate method, alignments, designs are proposed.
G. Proposal for Change Order – the Contractor may submit a request for change order whenever a need arises. Contractor must go through an RFI process for any change order to be considered by the City. The request must be in writing and must include sufficient information to assess the need for a change in the work, the contract time or the contract amount.

2.3 PROJECT CLOSEOUT & DELIVERABLES

Once construction has been substantially completed, submit the following items before the final payment and Initial Certification are processed.
A. Statement of Substantial Completion and Request for Initial Certification

B. Warranty for General Construction

C. Maintenance bond – 5% of the construction cost (based on final project cost). Alternately, a Performance Bond that extends One (1) year after the construction completion will suffice. This must be issued by a Surety Company that is licensed by the State of Texas and is in good standing.

D. Letter from Surety – include a statement indicating that the final payment can be issued

E. Affidavit of Bills Paid

F. Record Drawings and deliverables as required by the specifications

G. Letter of Compliance with the law for Prevailing Wage Rates

*END OF SECTION*
CONSTRUCTION SCHEDULE

1.0 Scope

1.1 This section covers preparation and submittal of construction schedule to insure adequate planning and execution of construction activities within the Contract time.

2.0 Preparation

2.1 Construction schedule must include Construction Activities, duration, start and finish date and precedence.

2.2 Schedule must identify construction activities or tasks that include but are not limited to the following:
   a. Major proposal items and related activities
   b. Items requiring long lead-time to order/manufacture such as equipment parts, motor/machinery or pre-fabricated items
   c. Items requiring engineering design/calculations and shop drawings
   d. Initial acceptance inspection and addressing punch list items
   e. Final inspection and deliverable submittals

3.0 Submittals

3.1 Submit construction schedule within ten (10) days of Notice to Proceed.

3.2 Format – *Microsoft Project* or similar format showing Activities, duration, Start/Finish dates, precedence and Gantt Chart

3.3 Submit one (1) pdf copy of construction schedule and a copy of schedule file (.mpp), if using MS Project.

3.4 Submit revised/updated schedule when rain days or time extensions are approved by the City. Rain days and time extensions must be approved separately by the City.

*END OF SECTION*
SHOP DRAWINGS

1.0 SCOPE
1.1 This section covers shop drawings, product data and samples that shall be submitted to the Engineering.

2.0 REQUIREMENTS
2.1 All materials and product must be submitted to the City for review and approval prior to construction. Products or materials used without the prior approval will be rejected and must be replaced at no additional cost to the City.

2.2 Submit shop drawings, product data, and samples required by specifications and as requested by the Project Manager.

2.3 All shop drawings, and submittal data shall be in the English language, and all dimensions, weights, capacities and other measurements shall be expressed in the Standard English system of measurements. All standards and standard specifications (i.e., ACI, AISC, NEC) referenced shall be those customarily in use in the United States.

3.0 SUBMISSION
3.1 Transmittal Letter/Submittal form – include transmittal/submittals form and indicate the product or material name for which approval is being requested. Indicate sequential submittal number, project title, name (s) of contractor and sub-contractors, if applicable.

3.2 Shop Drawings – shop drawings shall show sufficient details for all structural, mechanical and electrical work as applicable. Stations and elevations shall be referenced to the construction plans.

3.3 Product Data – submit manufacturer’s catalog sheets, brochures, diagrams, schedules, performance charts illustrations, and other descriptive data clearly marked to identify pertinent materials, products or models proposed for the project. Indicate all applicable reference standards such as ASTM, ACI etc.

3.4 Calculations and Drawings – calculations and drawings, when required, must be signed and sealed by a professional engineer registered in the State of Texas.

3.5 Place on the data sheet(s) all information required for submission or include the required information on separate sheet(s), or on the transmittal letter.

3.6 Product Samples – when required by specifications, submit product samples of sufficient size and quantity to illustrate clearly the functional characteristics of product or materials with integrally related parts and attachment devices; and full range of color samples.
3.7 Prepare and install field samples and mock-ups at the project site in an acceptable location when required by specifications.

3.8 Format – all submittals must be in color pdf format. All texts and drawings must be legible.

3.9 Submit via email or use appropriate electronic transmittal methods.

4.0 REVIEW AND APPROVAL

4.1 City’s Project Manager will review and process all submittals within ten (10) business days.

4.2 All submittals marked “REJECTED” must be resubmitted with corrected information.

*END OF SECTION*
TRENCH SAFETY SYSTEM

1.0 DESCRIPTION

1.1 This item is for furnishing all labor and materials for installation and maintenance of a trench safety system.

1.2 For any trench excavation other than in solid rock, greater than five (5) feet in depth, the Contractor shall provide a trench safety system. This trench safety system shall be in accordance with the appropriate requirements established in the Occupational Safety and Health Administration (OSHA), Safety and Health Regulations, Part 1926, Subpart P, as published in the Federal Register, Volume 54, Number 209, dated October 31, 1989, and the City of Conroe Ordinance #1053-67, or latest revisions - "Excavations, Trenching and Shoring" (latest edition).

1.3 Before commencing any trench excavation, which will exceed a depth of five feet, Contractor will provide Owner with detailed plans and specifications regarding the safety systems to be utilized. Said plans and specifications shall include a certification from a registered professional Engineer, licensed in the State of Texas, indicating full compliance with the OSHA provisions.

2.0 EXECUTION

2.1 Trench Safety System

The trench safety system shall be constructed and maintained in accordance with OSHA 2226, Trench Safety Details and Specifications, to prevent death or injury to personnel or damage to structures in or near these trench excavations.

2.2 Supervision

The Contractor shall provide competent supervisory personnel at the trench, while work is in progress to ensure that the Contractor's methods, procedures, equipment and materials pertaining to the safety systems of this item, are sufficient to meet the requirements of OSHA Standards and Regulations.

2.3 Maintenance of Safety System

The safety system shall be maintained in the acceptable condition, or as specified by the Contractor's Registered Professional Engineer. The Contractor shall take all necessary precaution to ensure that the safety systems are not damaged during their use. If, at any time during its use, a safety system is damaged, personnel shall be immediately removed from the trench or excavated area and the safety system repaired. The Contractor shall take all necessary precautions to ensure that no loads, except those included in the safety system design, are imposed on the excavation.

2.4 Inspection

The Contractor shall make daily inspections of the Trench Safety Systems to ensure that the system meets OSHA requirements. Daily inspection is to be made by a "competent person" provided by the Contractor. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench. It is the sole duty,
responsibility and prerogative of the Contractor, not the Owner or the Engineer, to
determine the specific applicability of the designed trench safety systems to each field
condition encountered on the project. The Contractor shall maintain a permanent record
of daily inspections.

2.5 Indemnification:

The Contractor shall indemnify and hold harmless the City, its employees and agents,
including the Engineer, from all damages, costs (including, without limitation, legal fees,
court costs and the cost of investigation), judgments or claims by anyone for injury or
death of persons resulting from the collapse or failure of trenches constructed under this
contract.

3.0 MEASUREMENT AND PAYMENT

3.1 Measurement will be per linear foot along the centerline of trench. Unit price is full
compensation for furnishing all equipment, labor, materials, superintendence, and
incidentals.

*END OF SECTION*
CONTROL OF SURFACE AND GROUND WATER

1.0 General
A. This section shall govern means, methods, techniques, sequences and procedures of construction to install wellpoint-dewatering system to facilitate construction of underground utilities and surface water control.

B. Install properly designed dewatering system to:
   1) Reduce the groundwater static level to reduce effectively, the lateral forces on excavation shoring from either hydrostatic pressures or lateral forces.
   2) Reduce the groundwater static level to provide stable excavation subgrade.
   3) Prevent failure or heaving from the bottom of excavations.
   4) Direct surface water away from the excavation or eliminate the surface water, as a potential problem.

2.0 References
   • Federal Regulations, 29 CFR Part 1926, Standards-Excavation, Occupational Safety and Health Administration (OSHA).
   • Federal Register 40 CFR (Vol. 55, No. 222) Part 122, EPA Administered Permit Programs (NPDES), Paragraph 122.26(b)(14) Storm Water Discharge.

3.0 Submittals
A. Submittals shall conform to the requirements of TS 01 Submittals.

B. Submittals shall include following:
   1) Dewatering equipment – pumps, onsite power generator, pipes, dewatering bags etc.
   2) Dewatering Bag – include size, flow rate, sediment capacity and other relevant information.
   3) Schematic layout or drawing for dewatering system

4.0 Construction
A. Groundwater control
   • Install well points to lower the piezometric water level to a point that will allow excavation to proceed in a workable and safe condition (normally 2 to 3 feet below subgrade).
   • Implement and operate dewatering system few days or longer before excavation begins.
• Install dewatering wellpoints outside the limits of excavations to allow enough workspace for excavation.

• Conduct daily maintenance and observation of the ground water control system.

• Replace inoperable or damaged system components as necessary to maintain operation.

• Keep monitoring system piping accessible for observation.

B. Surface water control

• Intercept surface water and divert it away from excavations. This includes temporary works required to protect adjoining properties from surface drainage caused by construction operations.

• Divert surface water and seepage water into sumps and pump it into drainage channels, settling basins or storm drains.

5.0 Monitoring

Monitor water elevation daily to evaluate performance of the dewatering systems. Visually monitor discharge from dewatering systems for the first few days to determining if soil particles are being removed by the systems. If soil particles are being pumped beyond first 12 hours well must be redeveloped, tested or plugged properly.

6.0 Measurement and payment

• Work under this section will be measured per linear foot along the centerline of the utility being installed unless otherwise shown in the proposal form and regardless of the duration of dewatering operation.

• Unit price is in full compensation for designing dewatering system, dewatering plan, labor, materials and equipment and incidentals.

*END OF SECTION*
HYDROMULCH SEEDING

1.0 General
This section work covered by this item consists of furnishing all plant, labor, materials, equipment, supplies, supervision and tools, and performing all work necessary for topsoiling, smoothing, seeding, fertilizing, watering, maintenance, and cleanup of all areas disturbed during construction.

2.0 Materials
A. Seed – all seed must meet the requirements of U.S. Department of Agriculture Rules and Regulations as set forth in Federal Seed Act and Texas Seed Law. Seed shall be certified 90 percent pure and furnish 80 percent germination and meet the following requirements:
   a) Rye – fresh, clean, annual Rye grass (Gulf) seed mixed in labeled proportions. As tested, minimum percentages of impurities and germination must be labeled. Deliver in original unopened containers.
   b) Bermuda – extra-fancy, treated, lawn type common Bermuda. Deliver in original, unopened container showing weight, analysis, name of vender, and germination test results.
   c) Wet, moldy, or otherwise damaged seed will not be accepted.
B. Fertilizer – Fertilizer shall be dry and free flowing, inorganic, water-soluble commercial fertilizer, which is uniform in composition. Deliver in unopened containers, which bear the manufacturers guaranteed analysis. Caked, damaged, or otherwise unsuitable fertilizer will not be accepted. Fertilizer shall contain minimum percentages of the following elements:
   Nitrogen: 15 Percent
   Phosphoric Acid: 15 Percent
   Potash: 15 Percent
C. Mulch – mulch shall be virgin wood cellulose fibers from whole wood chips having a minimum of 20 percent fibers 0.42 inches in length and 0.01 inches in diameter.
D. Mulch shall be dyed green for coverage verification purposes.
E. Soil Stabilizer – provided Terra-Blend with Tacking Agent 3 or approved equal.

3.0 Execution
3.1 Preparation
A. Prepare all disturbed areas by placing top soils free from undesirable organic or inorganic materials, including stones, hard clay lumps or other debris.
B. Do not perform work if current or immediate future weather conditions are not satisfactory.

3.2 Application

A. Seed – provide appropriate type of seed mix and apply uniformly at the rate shown below:

<table>
<thead>
<tr>
<th>Seed Mix</th>
<th>Application Rate (lbs/ac)</th>
<th>Application Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hullled Common Bermuda Grass 98/88</td>
<td>40</td>
<td>Jan 1 to Apr 15</td>
</tr>
<tr>
<td>Unhulled Common Bermuda Grass 98/88</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Annual Rye Grass (Gulf)</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Hullled Common Bermuda Grass 98/88</td>
<td>40 lbs.</td>
<td>Apr 15 to Oct 1</td>
</tr>
<tr>
<td>Unhulled Common Bermuda Grass 98/88</td>
<td>40</td>
<td>Oct 1 to Jan 1</td>
</tr>
<tr>
<td>Annual Rye Grass (Gulf)</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

B. Fertilizer – apply uniformly at a rate of 600 pounds per acre.

C. Mulch – apply uniformly at a rate of 2,000 pounds per acre.

D. Soil Stabilizer – apply uniformly at a rate of 40 pounds per acre.

E. Suspend all operations under conditions of drought, excessive moisture, high winds, or extreme or prolonged cold. Obtain Project Manager’s approval before resuming application. Work affected by the weather will not be paid.

4.0 Maintenance

A. Maintain grassed areas by watering, fertilizing, weeding, and trimming as required to establish and sustain minimum 75% of turf cover on all disturbed areas.

B. Stablished coverage will be verified by the City Inspector. Areas that do not have an acceptable turf shall be reseeded at no additional cost to the City.

C. Replace seeded areas damaged by Contractor's operations at no cost to the City.

5.0 Measurement and Payment

A. Measurement will be by the squared yard or acre as shown on plans or proposal. Unit price is full compensation for furnishing materials, including water for hydro-seeding and hydro-mulching operations, mowing, labor, equipment, tools, supplies and incidentals. Watering and fertilizer will not be paid for directly but will be subsidiary to this item.

*END OF SECTION*
SAND BACKFILL

1.0 Scope
This item specifies furnishing, placing, manipulation, compacting and completing in-place, Sand as a bedding and backfill material for water and sewer lines, as construction fill for certain excavation areas, as construction fill for ruts, holes and other similar conditions; as a fill material for project clean-up.

2.0 Submittals
A. Submittals shall conform to the requirements of TS 01 Submittals
B. Submit test results showing Plasticity Index and sieve analysis

3.0 Materials
A. Bank Sand – provide durable bank run sand classified as SP, SW, or SM by Unified Soil Classification System (ASTM D2487) meeting following requirements:
   i. Less than 15% passing #200 sieve when tested in accordance with ASTM D1140. Amount of clay lumps or balls may not exceed 2%.
   ii. Material passing #40 sieve shall have Plasticity Index (PI) of less than or equal to 7 when tested in accordance with ASTM D 4318.

4.0 Construction
A. After the water line, sewer line or other similar construction item, such as a trench, has been excavated and brought to grade, bank sand shall be furnished, placed, compacted complete in-place, either as bedding or backfill material, as shown on the plan, described in these specifications or as directed by the Engineer.
B. Bank sand shall be placed in layers not exceeding 8-inches. It shall be compacted with mechanical vibratory tamps to maximum dry density in accordance with ASTM D698 at a moisture content ranging from optimum to three percentage points above optimum. Water flooding will not be permitted.

5.0 Testing
A. Laboratory technician will determine the moisture density relationship for each material proposed for use as backfill, in accordance with ASTM D698. In place density will be determined in accordance with ASTM D2922 or D1556, and with each type of construction.
B. For walls and trenches, determine the in place density for each 200 feet of wall or trench, for each lift of fill placed.
6.0 **Measurement and Payment**

A. Sand Backfill will not be measured for payment and will be incidental to the related items.

B. Sand backfill, if shown as a separate bid item, will be measured by the cubic yard compacted in place.

*END OF SECTION*
1.0 GENERAL

1.1 SCOPE

This section shall govern furnishing all labor, materials, tools, equipment and supervision to install cement stabilized sand for backfill.

1.2 QUALITY ASSURANCE

A. Materials must be supplied by plants which are certified in accordance with Certifying Procedures contained herein.

B. Certification

1) Certification is to be performed by a laboratory certified by either the Cement Concrete Reference Laboratory (CCRL) or the American Association of Laboratory Accreditation (AALA).

2) Certification is to be in the form of a letter report from the laboratory stating that the laboratory has done the following.
   a) Inspected all scales for a Seal of Calibration.
   b) Measured the rate of feed for sand and cement equipment.
   c) Tested sand from the stockpile for gradation and Plasticity Index.
   d) Taken two samples of cement stabilized sand for cement content analysis.
   e) Inspected the time stamping facilities.
   f) Inspected the equipment and confirmed its operation to be in accordance with Manufacturer's recommendations.

3) The report will further state that all the test and inspection results indicate that a quality product meeting these specifications can be produced at the plant.

4) Inspection and test are to be performed at the Plant Operator's request and expense. Certification reports are to be filed at the laboratory for distribution as requested by the Plant Operator. An inspection report file will be created for each plant inspected.

5) Certification shall be valid for 30 days, after which the Plant Operator shall request inspection from a laboratory other than the one having performed the most recent inspection.

1.3 DESIGN REQUIREMENTS

A. Cement-Sand mixture shall produce minimum compressive strength of 100 psi in 2 days.
B. Design shall be based on strength specimens molded in accordance with ASTM D558 at moisture content within 3% of optimum moisture content and within 4 hours of batching.

C. Determine minimum cement content from production data and statistical history. Provide no less than 2-sacks of cement per ton of dry sand.

1.4 SUBMITTALS

A. Submittals shall be in accordance with the requirements of TS 01 Submittals.

B. The Contractor shall submit a current Plant Certification Report each month in which Cement Stabilized Sand will be installed.

C. Furnish stamped delivery tickets at the time of delivery which show producer's name, specified cement content of stabilized sand, and date and time of batching.

2.0 PRODUCTS

2.1 MATERIALS

A. Sand

   i. Provide natural, manufactured, or combination of natural and manufactured sand conforming to the grading requirements shown below when tested in accordance with ASTM C136:

<table>
<thead>
<tr>
<th>Sieve</th>
<th>Percent Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>100</td>
</tr>
<tr>
<td>#4</td>
<td>95 – 100</td>
</tr>
<tr>
<td>#8</td>
<td>80 – 100</td>
</tr>
<tr>
<td>#16</td>
<td>50 – 85</td>
</tr>
<tr>
<td>#30</td>
<td>25 – 60</td>
</tr>
<tr>
<td>#50</td>
<td>10 – 30</td>
</tr>
<tr>
<td>#100</td>
<td>2 – 10</td>
</tr>
</tbody>
</table>

   ii. Limit deleterious material as specified below:

<table>
<thead>
<tr>
<th>Description</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight of Clay Lumps (ASTM C 142)</td>
<td>&lt; 0.50 %</td>
</tr>
<tr>
<td>Lightweight pieces (ASTM C123)</td>
<td>&lt; 0.50%</td>
</tr>
<tr>
<td>Organic Impurities (ASTM C40)</td>
<td>Color no darker than standard color</td>
</tr>
</tbody>
</table>

   iii. Plasticity Index (PI) shall be less than or equal to 4 when tested in accordance with ASTM D4318

B. Cement – Type I Portland Cement conforming to ASTM C150.

C. Water – Potable and free of oils, acids, alkalies, organic matter, or other deleterious substances meeting requirements of ASTM C94.
2.2 MIXING
   A. Add required amount of water and mix thoroughly in pugmill-type mixer.
   B. Stamp batch ticket at plant with time of loading. Mixture will be rejected if not placed and compacted within 4 hours after mixing.

3.0 EXECUTION
3.1 PLACING
   A. Place material within four hours from the time stamped on delivery tickets.
   B. Place cement stabilized sand backfill per plan details compacted to minimum 95% standard density per ASTM D698 as specified in the plans.

3.2 TESTING & ACCEPTANCE
   A. One sample of cement stabilized sand shall be obtained for each 150 tons of material placed per day with no less than one sample per day of production. Random samples of delivered cement stabilized sand shall be taken in the field at point of delivery in accordance with ASTM 3665.
   B. Specimens will be tested for compressive strength in accordance with ASTM D1633, Method A. Two specimens will be tested at 48 hours plus or minus 2 hours and two specimens will be tested at 7 days plus or minus 4 hours.
   C. Strength level of material will be considered satisfactory if the average 48-hour strength is greater than 100 psi with no individual strength test below 70 psi.
   D. Materials placed that fail to meet the requirements, as determined by tests, shall be removed and replaced at no additional cost to the Owner.

4.0 MEASUREMENT AND PAYMENT
4.1 Cement stabilized sand, if shown as a separate item, will be paid by the Cubic Yard.
4.2 Cement stabilized sand, if not shown as a separate item, will be considered incidental to the related items.

*END OF SECTION*
FURNISHING AND INSTALLING WATERLINES

1.0 DESCRIPTION

1.1 This section shall govern the provisions for furnishing of all equipment, superintendence, labor, materials and performance of all operations in connection with installation of water lines, fittings and appurtenances as specified herein, or as indicated on the drawings.

2.0 SUBMITTALS

2.1 Submittals shall be in accordance with the requirements of TS 01 Submittals and TS 03 Shop Drawings.

2.2 Submit product data sheets for pipes, fittings and mechanical joint restraints.

3.0 MATERIALS

3.1 Polyvinyl Chloride (PVC) Pipes
   A. All PVC pipes for waterlines shall be in blue color.
   B. Pipe shall be of the type and size indicated on plans and shall conform to AWWA C900 or C905. Pipe shall be made from cell class 12454-A or class 12454-B material providing a hydrostatic design basis (HDB) of 4,000 psi and conforming to the outside diameter (OD) dimensions of steel pipe (IPS) or cast iron pipe (CI) and with the wall thickness of DR series 14, 18, and 26.
   C. Design requirements and criteria for PVC water pipe shall be in accordance with the requirements established in AWWA C900, Appendix A.
   D. PVC pipe joints shall meet the requirements of ASTM D3139 and gaskets shall meet the requirements of ASTM F477. Gaskets and lubricants to be used for PVC pipe and couplings shall be made of materials that are compatible with pipe material, but will not support growth of bacteria and will not adversely affect the potable quality of the water being transported.
   E. Fittings shall be ductile iron with MEGALUG or approved equal mechanical joint restraints and shall conform to ANSI/AWWA C153/A21.53 or of the latest revision.

3.2 Ductile Iron Pipes
   A. Ductile iron pipe, 3” through 64”, shall meet the requirements of ANSI/AWWA C150/A21.51 and ANSI/AWWA C150/ A21.50.
   C. Flanged Joints – Joints shall conform to ANSI/AWWA C115/A21.15. Bolts shall conform to ANSI B18.2.1 and nuts shall conform to ANSI B18.2.2.

SECTION 34 – PAGE 1

TS 34-Furnishing and Installing Waterlines.docx Revised 6/28/2018
D. Coating and Lining – For underground installations, pipe exterior shall have a standard bituminous coating approximately one mil thick. For aboveground installations, pipe exterior shall be painted as indicated on plans. Pipe interior shall be lined with cement-mortar per ANSI/AWWA C104/A21.4.

3.3 Fittings

A. Fittings shall be ductile iron conforming to ANSI/AWWA C153/A21.53 for compact fittings and ANSI/AWWA C110/A21.10 for full body fittings.

B. Fittings shall be cement-mortar lined inside and coated with an asphaltic material outside in accordance with ANSI/AWWA C104/A21.4.

C. Mechanical Joint Fittings and accessories are made to meet all applicable requirements of ANSI/AWWA C110/A21.10, 3” through 48” and ANSI/AWWA C111/A21.11. Furnish MEGALUG or approved equal joint restraints for all mechanical joint fittings.

D. Compact fittings are acceptable, except for TEEs, which must be full body type.

4.0 EXECUTION

5.1 Material Handling – Pipes must be handled and stored at the job site per manufacturer’s recommendations. Pipe, fittings, valves and accessories shall be loaded and unloaded carefully to avoid damage.

5.2 Alignment – Horizontal alignment of the pipeline shall be as shown on the drawings. Except where fittings are specifically required, the Contractor may use fittings or joints for deflections per manufacturer’s recommendation or a combination thereof to obtain plan indicated alignment.

5.3 Pipe Cover – provide minimum 4 feet of cover for pipes smaller than 16-inch diameter and 5 feet of cover for pipes 16-inch and larger diameter.

5.4 Dewatering – Implement dewatering as necessary to lower ground water levels. It shall be the Contractor's full responsibility for the diversion of surface water drainage during construction operations of this project.

5.5 Trench Excavation – Implement necessary trench safety per OSHA regulations. Avoid over excavating pipe trench. Correct if trench is over excavated more than 6" below the bottom of pipe using Class I material, such as crushed stone at no additional cost to the City.

5.6 Inspection before Installation – All pipe and fittings shall be carefully examined for defects immediately before installation in final position. Any defective, unsound or damaged material shall not be installed. All foreign material or dirt shall be removed from the pipe and fittings and it shall be kept clean during and after laying. At times when pipe installation is not in progress, and at the end of a days work, open ends of the installed pipe shall be securely closed.
5.7 Pipe Laying
   A. Polyvinyl Chloride (PVC) Pipe – Install PVC pipes per manufacturer’s recommendations and in compliance with AWWA C605.
   B. Ductile Iron Pipe – Install ductile iron pipes per manufacturer’s recommendations or Ductile Iron Pipe Research Association (DIPRA) guidelines.

5.8 Tracer Wire
   A. For buried installations, provide a continuous #14 AWG tracer wire per standard details. Tracer wires shall be accessible at each valve stack, meter box or valve vault etc.
   B. Contractor shall demonstrate the continuity of tracer wires installed prior to acceptance of waterline by the City.

5.9 Pipe embedment – Unless otherwise specified in the plans and when allowed by the trench condition, provide bank sand for pipe embedment 6-inch around the pipe.

5.10 Backfill – Provide suitable backfill material from trench excavation, or imported select fill materials as approved by the Engineer. Backfill material shall be free from large clods of earth, stones, or debris. Place backfill material in 6-inch layers and compact thoroughly to achieve density of the adjacent soil or better.

5.11 Backfill Compaction testing
   A. City will employ Certified Geotechnical Lab to perform compaction testing of backfill materials.
   B. Compaction testing will be performed on random lifts at the discretion of the Project Manager or the City Inspector. No additional lifts will be placed if any density test fails and retesting charges will be paid by the contractor.

5.12 Special Bedding – Where soil in the trench bottom is soft and not capable of supporting weight of the pipe or fittings, provide pipe foundation per standard details.

5.0 DISINFECTION OF WATERLINES
5.1 Disinfect newly installed waterlines per TS 36 Disinfection of Water Piping Systems.

6.0 LEAKAGE AND HYDROSTATIC TEST
6.1 Perform leakage and hydrostatic test per TS 37 Hydrostatic Testing of Pressure Pipes.

7.0 MEASUREMENT & PAYMENT
7.1 Waterline will be measured by the linear foot along the centerline alignment of the pipe without deduction for fittings. Payment for waterline will be made at the unit price bid
per linear foot in full compensation for furnishing all equipment, labor, materials, trench excavation, thrust blocking, joint restraints as necessary, tracer wires, disinfection, pressure testing, backfill, cleanup, and all incidentals required for a complete water main installation in accordance with the plans and specifications.

7.2 Fittings, when shown as separate proposal item, measured and paid at the unit price per each fittings installed. Unit price for fittings shall include mechanical joint restraint with accessory pack. If not shown as separate proposal item, fittings shall be considered incidental to the waterline.

*END OF SECTION*
VALVES, FIRE HYDRANTS AND ACCESSORIES

1.0 DESCRIPTION
1.1 This item shall govern the provisions for furnishing and installing all valves, fire hydrants and accessories as shown on the plans, which work includes excavation, trenching, thrust blocking, testing, backfilling, clean-up, and other incidental work necessary for a complete installation.

2.0 SUBMITTALS
2.1 Submittals shall be in accordance with the requirements of TS 01 Submittals and TS 03 Shop Drawings and shall include product data sheets.

3.0 STANDARDS
3.1 Applicable Standards of American Water Works Association (AWWA).
3.2 Valves and hydrants shall be certified to NSF/ANSI 61 Drinking Water System Components - Health Effects and certified to be Lead-Free in accordance with NSF/ANSI 372 – Drinking Water System Components – Lead Content or NSF/ANSI 61 – Annex G.

4.0 GATE VALVES
4.1 Gate valves shall be resilient wedge and non-rising stem (NRS) type conforming to AWWA C515.
4.2 The valves shall have a ductile iron body, bonnet, and O-ring plate. The wedge shall be totally encapsulated with rubber. The sealing rubber shall be permanently bonded to the wedge per ASTM D429. Valve body/bonnet shall have through-bolt style connection using Type 304 Stainless Steel hardware.
4.3 Gate valves shall be furnished with 2-inch square operating nuts or a hand-wheel with the word “Open” and an arrow indicating the direction to open. Gate valves shall open by turning to the left (counter-clockwise).
4.4 Stems shall be cast copper alloy with integral collars in full compliance with AWWA. All stems shall operate with copper alloy stem nuts independent of wedge and of stem (in NRS valves).
4.5 The body, bonnet and O-ring plate shall be fusion-bond epoxy coated, both interior and exterior on body and bonnet. Epoxy shall be applied in accordance with AWWA C550 and be NSF 61 Certified.
4.6 End connections shall be mechanical joint or flanged joints as indicated on the plans.
4.7 Each valve shall have manufacturer’s name, pressure rating, and year in which it was manufactured cast in the body. Prior to shipment from the factory, each valve shall be tested by hydrostatic pressure equal to the requirements of AWWA C515 (and UL/FM where applicable).
4.8 Pre-approved manufacturers include Mueller, Kennedy, American, Clow and Pratt Valve.
5.0 TAPPING SLEEVES
5.1 Tapping sleeves shall be sized to fit IPS size PVC C900 or C905 or ductile iron pipes with standard test plug
5.2 Body – Stainless Steel, 18-8 Type 304
5.3 Bolts & Nuts – Stainless Steel, Type 304
5.4 Branch Outlet – Heavy stainless Steel pipe
5.5 Flange – flange shall be 18-8 Type 304 stainless steel, ANSI Class 150 with recess per MSS SP-60. Mechanical joint adapter type outlet, when used, shall be furnished with adapter gasket Buna-N (NBR) per ASTM D2000.
5.6 Gasket – Full circumferential (360°) gasket compounded for water use per ASTM D2000.
5.7 Pre-approved products include Mueller, JCM Model 432, Powerseal Model 3490 and Ford Model FTSS.

6.0 BUTTERFLY VALVES
6.1 When approved by the City and for waterlines larger than 24-inch diameter.
6.2 The valves shall be designed, manufactured and tested in accordance with AWWA C504 and C516.
6.3 Connections – Connections shall be flanged end or mechanical joint type. Flanged end connections shall conform to ANSI B16.1 for Class 125, Class 250 iron flanges, or AWWA C207Class D. Both 125 and 250 flanges shall be flat faced. Mechanical Joint end connections shall conform to ANSI/AWWA C111/A21.11.
6.4 Body – Valve shafts shall be of the through-type for sizes 3” to 24”. 30” and larger shall be of the stub type design. Shafts shall be locked to the disc by O-ring sealed taper pins retained with stainless steel nuts. Through-type shafts shall be supplied on 30” and larger valves when specified. Class 150B valve bodies shall be ASTM A126, Class B gray iron or ASTM A536 Grade 65-45-12 ductile iron. Class 250B valve bodies shall be ASTM A536 Grade 65-45-12 ductile iron.
6.5 Disc – Valve discs shall be of the solid type without external ribs or vanes to obstruct flow made of ASTM A536 Grade 65-45-12 ductile iron.
6.6 Resilient Seats – Resilient seats, located on the valve disc, shall provide a 360° continuous, uninterrupted seating surface. Seats shall be mechanically retained with a stainless steel retaining ring and stainless steel Nylok® cap screws which shall pass through both the resilient seat and the retaining ring. The retaining ring shall be continuous or investment cast with overlapping sections, serrated grooves, and shoulders providing a Tri-Loc™ system. Resilient seat shall be Buna-N and mate to a
Type 316 Stainless Steel body seat ring. Resilient seats shall be field adjustable and replaceable without removing the valve from the line and shall not require epoxy, syringes, needles or pressure vessels to replace or adjust.

6.7 Sleeve Bearings – Sleeve bearings shall be self-lubricating nylatron or woven teflon, fiberglass backed material and non-corrosive.

6.8 Thrust Bearings – Thrust bearings shall be provided to assure proper centering of valve disc. Thrust bearings shall be field adjustable on valves 30” and larger.

6.9 Shafts – Shaft seals shall be of the V-type and shall be replaceable without removal of the valve from the line or the shaft from the valve. Shafts shall be ASTM A276 type 304, or ASTM A564, Type 630 Stainless Steel.

6.10 Hardware – All seat-retaining hardware shall be Type 316 stainless steel.

6.11 Actuation – Actuators shall be manual type or as indicated in the plans. Manual actuators shall be of the traveling nut design with characterized closure per AWWA C504 and equipped with externally adjustable closed position stops capable of withstanding 450 ft-lbs. Actuators shall be lubricated with EP-2 grease and fully enclosed in an iron housing sealed against the entry of water.

6.12 Protective Coatings – Valve exteriors for above ground service shall be coated with a universal, alkyd primer. Valve exteriors for buried service shall be coated with an epoxy coating. Valve interiors shall be coated with an NSF/ANSI 61 epoxy coating approved for potable water. Fusion bonded epoxy shall be supplied on the exterior and interior when specified.


7.0 FIRE HYDRANTS

7.1 Fire hydrants shall conform to the requirements of AWWA C502 for dry barrel hydrants except for supplementary requirements contained herein.

7.2 Fire hydrants shall be of the traffic model type equipped with a barrel ground line flangible coupling of the split break-away flange type and main rod coupling designed to fail completely and uniformly when the hydrant is impacted by a motor vehicle. Weakened steel or weakened cast iron bolts, used in breakable barrel couplings will not be acceptable. The hydrant must be of dry barrel and dry top type with no part of the threads in the open waterway when the hydrant is pressurized.

7.3 The main valve opening shall not be less than five and one-quarter (5-1/4) inches in diameter. Hydrant shall open by turning to the left, counter-clockwise and close right, clockwise.

7.4 The inlet connection shall be six (6) inch push-on joint, RING-TITE™ and FLUID-TITE™, with two strapping lugs.
7.5 Fire hydrants shall have two (2) – one-half (½) inch inside diameter hose nozzles and one 4” inside diameter pumper nozzle with National Standard Threads. Nozzle caps and non-kinking chains shall be equipped.

7.6 Hydrants shall be equipped with a seal plate with an integral lubrication chamber that lubricates the operating threads and bearing surfaces each time the hydrants are operated. The lubrication chamber shall be protected at the top from dirt and moisture intrusion by means of an O-ring seal.

7.7 Hydrant operating nut shall be National Standard, 1-½” pentagon, measured from point to opposite flat.

7.8 Hydrants shall have a double drain valve which is an integral part of main valve assembly to give positive, automatic operation without springs, toggle joints or synchronized mechanisms.

7.9 Hydrants shall have two external drain openings, full bronze mounted, in the ring and shoe which are momentarily force-flushed each time hydrant is operated. All fittings for fire hydrant assembly shall have MEGALUG or approved equal mechanical joint restraints and must be anchored to rigid fittings using two (2) 5/8”x7” galvanized steel all-thread rods, nuts and washers.

7.10 Hydrants shall be shop coated with a suitable primer and finish painted to City of Conroe specifications. Body of hydrant shall be painted with Sherwin-Williams Silver-Brite or approved equal aluminum paint. Below ground line to and including the inlet shoe, the outside of the barrel and shoe shall be coated with coal-tar enamel or asphalt base bituminous coating material not less than one (1) mil in thickness. Bonnet, pumper nozzle cap and hose connection caps shall be painted Red on 6” mains, Orange on 8” mains and Green on 10” or larger mains.

7.11 Approved manufacturers include Mueller, Kennedy, American, USP and Clow Valve.

8.0 VALVE BOXES

8.1 Valve box shall be provided for all underground installations to allow access to the operating nuts.

8.2 Valves box shall be cast iron construction conforming to ASTM A48, Class 20. Shaft shall have 5¼-inch inside diameter and 3/16” wall thickness. Lids shall be marked “WATER” or “W”. All pieces shall be asphalt-dipped.

8.3 For valves located outside of roadway, screw type cast iron extension or 6” PVC SDR-26 extension with cast iron Section A and Lid. Provide a 6-inch concrete block around the valve box at finished grade or at natural grade per standard detail.

8.4 For valves located within roadway, furnish slip type cast iron extension with cast iron section A and Lid. Provide extensions of proper length, as necessary.

9.0 MEASUREMENT AND PAYMENT

8.1 Gate Valves will be measured and paid by each. Unit price is in full compensation for furnishing and installing complete valve with resilient seats, manual operator of the
specified, mechanical joint accessory pack, adjustable Type-A valve box, concrete block, and labor, equipment, tools and incidentals.

8.2 Tapping Sleeve & Valves will be measured and paid by “Per Each”. Unit price is in full compensation for making tap, furnishing and installing stainless steel tapping sleeve, gate valve with resilient seats, manual operator of the type specified, mechanical joint accessory pack, adjustable Type-A valve box, concrete block, and labor, equipment, tools and incidentals.

8.3 Fire Hydrant Assembly will be measured by each. Unit price will be full compensation for furnishing hydrant lead (variable length), hydrant tee, gate valve, hydrant body, extensions (as required), joint restraints, necessary fittings, paint, installing complete hydrant, labor, equipment and incidentals.

*END OF SECTION*
DISINFECTION OF WATER PIPING SYSTEMS

1.0 GENERAL

1.1 Scope
This item shall govern furnishing labor, material and equipment, superintendence for complete disinfection of water piping systems.

1.2 Quality Assurance
A. Work shall conform to AWWA C651.
B. Bacteriological test shall be in accordance with the Standard Methods for Examination of Water and Wastewater by the American Public Health Association.

1.3 Submittals
A. Submit disinfection plan prior to starting disinfection work.
B. Disinfection plan must include calculations showing estimated slug volume, movement rate, contact time, water usage volume and flush point (identified by plan station) etc.

2.0 EXECUTION

2.1 General Requirements
A. Chlorination agent – Chlorination agents shall be liquid chlorine or calcium hypochlorite in water per AWWA C651. Liquid chlorine shall conform to AWWA B301 and calcium hypochlorite shall conform to AWWA B300
B. Chlorine Dose – minimum dosing mg/l (i.e. 50 parts per million)
C. Pre-chlorination flushing – thoroughly flush waterline before introduction chlorinating agent to remove all foreign materials.
D. Contact Time – minimum contact period shall be 24 hours.
A. Inspect materials to be used to ensure their integrity.
B. Prevent contaminating materials from entering the water main during storage, construction or repair and noting potential contamination at the construction site.
C. Remove, by flushing or other means, those materials that may have entered the water main or appurtenances.
D. Prevent contamination of existing mains from cross-connection during flushing, pressure testing and disinfection.
E. Pressure test the water main to ensure the main has no leakage. Hydrostatic pressure tests should be conducted with potable water.
2.2 Disinfection
   A. Contractor may choose at his/her option, to utilize Tablet/Granule Method, Continuous-Feed Method or Slug Method of Chlorination per AWWA C651.
   B. Submit disinfection plan with calculations for Continuous-Feed and Slug Method.

2.3 Sampling and Bacteriological Tests
   A. Following 24-hr contact period, collect samples, using the sampling site procedures outlined in AWWA C651 and without flushing the main, two sets of samples a minimum of 15 min. apart while the sampling taps are left running. Both sets of samples must pass for the main to be approved for release.
   B. Collect two sets of samples, as described above, for each 1,000 feet of completed waterline or at the next available sampling point beyond 1,000 feet.
   C. If initial treatment results are unsatisfactory, repeat disinfection procedures at no additional cost to the Owner until satisfactory results are obtained.
   D. Prevent admission of contaminated water to previously disinfected units/pipes. In case of contamination, the Contractor shall disinfect units/pipes at no additional cost to the Owner.

2.4 Final Flushing
   A. Flush waterline until replacement water has chlorine content not more than 0.1 mg/L in excess of residual in water from supply line, and in any event, not more than 0.2 mg/L total. Properly dispose of chlorinated water.
   B. Water with chlorine concentration in excess of 0.2 mg/L shall not be discharged into sanitary sewer, on to ground or storm sewer system. Provide proper neutralization (dechlorination) of disinfecting water in strict accordance with current AWWA Standard C655.

3.0 REPORTING & ACCEPTANCE
   A. Submit laboratory report to the City for review and acceptance.
   B. Lab report shall show Total Coliform and E. Coli results
   C. Chlorine Residual (mg/L) will be measured onsite by the City Inspector.

4.0 MEASUREMENT & PAYMENT
   There will be no separate measurement and payment for work performed under this section. Include cost for disinfection in the unit price bid for the related work.

*END OF ITEM*
Hydrostatic Testing of Pressure Pipes

1.0 General
1.1 This section shall govern the provisions for furnishing all materials, equipment, superintendence, labor and performance of all operations in connection with hydrostatic testing of newly installed waterlines or force mains.

2.0 Test Pressure and Duration
2.1 All newly installed waterlines shall be hydrostatically tested for leakage at minimum pressure of 135 psi for 4 hours.
2.2 Waterlines shall be tested in sections between inline valves not exceeding 1,000 feet.

3.0 Execution
3.1 Furnish and install all necessary connections, pump, meter and gauges for the pressure test. Prior to running any test, the meter must be tested, sealed and approved at a certified commercial Laboratory or meter repair shop.
3.2 Sufficiently restrain both ends of test section to withstand potential thrusts developed under test pressure.
3.3 Use potable water to fill the main while allowing entrapped air to escape at the highest elevated points or at the hydrants. Pressurize the main and maintain minimum pressure and duration specified in Paragraph 2.1 above. The test pressure shall not vary by more than 5 psi during the duration of test.
3.4 All exposed pipes, fittings, valves and joints shall be examined for leakage during the test. Any leak shall be repaired immediately at the Contractor’s expense.
3.5 Once a stable test pressure has been achieved, begin the four (4) hour test period. If the test pressure decreases during the four-hour period, the test will be considered to have failed.
3.6 Any leaking joints or fittings identified during the test shall be removed and replaced with sound material at no additional cost to the Owner. Repeat the test until satisfactory results are obtained.

4.0 Acceptance
4.1 Pipes shall have zero leakage under specified test pressure and duration. A successful test must be witnessed by the City’s Inspector.

5.0 Measurement & Payment
5.1 Work performed under this section will not be paid separately and will be incidental to the related items.
AUGERING PIPE AND CONDUIT

1.0 GENERAL

1.1 This section shall govern the provisions for furnishing all materials, labor and equipment for trenchless installation of steel casing by bore or auger method.

1.2 REFERENCES

ASTM D638  Standard Test Method for Tensile Properties of Plastics

1.3 REGULATORY REQUIREMENTS

A. Installations under State Highways – Construction shall conform to the TxDOT requirements for installations under State Highways.

B. Installations Under Railroads – Secure and comply with requirements of right-of-entry for crossing Railroad Company’s easement or right-of-way from railroad companies affected. Comply with railroad permit requirements.

   1) Use dry auger method only.

   2) Maintain equipment and excavations minimum 35-foot clearance from centerline of tracks.

1.4 SUBMITTALS

A. Submittals shall conform to the requirements of TS 01 Submittals and TS 03 Shop Drawings.

B. Certifications where applicable.

C. Following submittals are required:

   1) Boring or Augering Methodology – a brief description of proposed methodology

      a) Manufacturer and type of boring or augering machine proposed and accessories.

      b) Product information for Auger Rig Guidance System, Steering Head Kit, Pilot Tube Accessories, Upsize Tooling and Hydraulic System to operate jacking frame (Power Pack).

SECTION 51 – PAGE 1
c) Product data for casing steel and welder’s certifications

d) Monitoring Plans – includes schedule of instrumentation design, layout of instrumentation points, equipment installation details, manufacturer's catalog/literature and monitoring report forms.

e) Casing Spacers – product data, installation manual and calculations showing recommended maximum spacing to maintain plan grades.


1.5 QUALITY ASSURANCE

A. Installer’s Qualifications – installer shall have a satisfactory experience record of at least three (3) years in similar scope.

B. All welding shall be performed by a certified welder in the State of Texas. Submit welder’s certification to the City prior to commencing work.

2.0 PRODUCTS

2.1 MATERIALS

A. Carrier Pipes – as shown in the plans or related specifications. All pipe joints within the augured section shall be restrained with approved joint restraints.

B. Casing Pipe – rolled steel pipes conforming to ASTM A252, Grade 2 or better with 0.375” minimum thickness, minimum yield strength of 35,000 psi and tensile strength of 60,000 psi.

C. Casing Spacers and End Seals – provide approved casing spacers and end seals.

D. Grout – provide grout for annular spaces per TxDOT Item 401. All slurry shall be plant batched and transit mixed.

3.0 EXECUTION

3.1 CONSTRUCTION OPERATIONS CRITERIA

A. Conduct boring or augering operations in accordance with applicable safety rules and regulations, OSHA standards and Contractor's trench safety plan. Use methods that include due regard for safety of workers, adjacent structures, utilities and public.

B. Maintain clean working conditions wherever there is man access.

C. For boring or augering under railroad embankments, highways, or streets, perform installation so as to avoid interference with operation of railroads, highways, or streets, except as approved by owner of facility.
3.2 GROUND WATER CONTROL
   A. Provide ground water control measures in conformance with TS 05 Control of Ground Water and Surface Water if necessary to perform the task.

3.3 ENTRY AND EXIT PITS
   A. Provide entry and exit pits of sufficient size to accommodate the boring machine operation and casing pipe insertion. Determine the size of the pits and verify whether enough working space is available.
   B. If soil stability cannot be maintained or the ground is unstable, install appropriately designed concrete slab to complete the boring operation. This will be incidental to the pertaining item.
   C. Determine the finish grade elevation for bore pits to allow for boring operations such that the casing pipe and carrier pipes will be at plan grades.

3.4 SAFETY
   A. Provide properly designed sheeting, lining, shoring, and bracing required for protection of workmen and public per TS 04 Trench Safety System.
   B. Provide proper ventilation to the shafts with electric powered blowers located at ground level. The ventilation system shall be capable of delivering a minimum of 200 cubic feet of fresh air per minute per each person working in the shaft as well as address the horsepower emissions of operating diesel dry bore equipment. Atmospheric testing and monitoring of the work shaft and tunnel portal shall be performed utilizing appropriate gas monitor to detect hazardous gases.

3.5 INSTALLATION
   A. Carrier Pipe in Augured Casing
      1) Set, level, and align dry bore machine track off primary survey control provided by the Engineer or set by the Contractor.
      2) Install the thrust frame and set the guidance system using the control provided establish centerline and grade.
      3) Install the steering head kit and push the pilot tube to the receiving shaft. Once the pilot tube is at the receiving shaft, verify line and grade.
      4) Install the upsize tooling for applicable steel casing condition.
      5) Load properly sized flight auger with appropriate connections into the casing.
      6) Lower casing pipe sections entry shaft and connect to the upsize tooling.
7) Commence with pushing the casing, continuously monitoring the grade with the guidance system. At the same time casing is advanced, remove the pilot tube from the receiving shaft with the break out tool.

8) Continue pushing and welding the casing pipes until entire length of bore is completed.

9) Maintain the casing advancement and hole excavation at the same rate to avoid possible collapse or failure of pilot hole.

10) Properly remove the excavated spoil from the work shaft.

11) Remove and replace casing damaged in jacking operation.

12) Install pressure grout (flowable backfill) immediately upon completion of setting casing pipe.

B. Carrier Pipe in Uncased Bore (When shown by the plans)

1) Perform boring at the low or downstream end unless otherwise specified. Set, level, and align slurry auger machine into the work shaft off of primary survey control provided by the Engineer or set by the Contractor.

2) Install a 2” pilot from the entry shaft to the exit shaft. Check the alignment for accuracy at the exit shaft. Install a cutter at the exit shaft and cut back hole towards the work shaft large enough to accommodate the pipe. Pull a plug by cable with use of an excavator to remove cuttings from the hole.

3) In unconsolidated soil formations, a gel-forming colloidal drilling fluid, consisting of at least 10 percent of high-grade processed bentonite, may be used to consolidate cuttings of bit, seal walls of hole and furnish lubrication for subsequent removal of cuttings and installation of pipe.

4) Push or pull first joint of pipe into the hole. Follow pipe manufacturer’s recommendation on installing in uncased bore. Set another joint of pipe and continue push/pull process until all pipe is in place.

3.6 Spacer Installation

A. Furnish and install approved casing spacers. End spacers shall be placed not more than 2’ from the casing ends. Subsequent spacers shall be per manufacturer’s recommendations to avoid possible sagging or reverse grade in gravity carrier pipes.

3.7 End Seal Installation

A. Seal annular space between carrier pipe and casing with casing end seals at each end of casing.
3.8 SETTLEMENT MONITORING

A. Instrumentation – utilize suitable monitoring instrument to control alignment, grade and track any ground surface movements necessary to complete the task. Establish necessary vertical control points, at safe location, to avoid disturbance or tampering.

B. Prior to beginning boring operations, a system of monitoring points shall be established along the proposed length of the trenchless alignment at grade level. These points shall be identified by using wooden hubs, steel rods, or marking paint on immovable objects along the alignment. An elevation shall be recorded for each monitoring point on the grid. Each monitoring point will be surveyed daily to detect any settlement. Record the elevations accurately to ± 0.01 feet for each monitoring point location.

C. Railroads – Monitor ground settlement of track subbase at centerline of each track.

D. Utilities and Pipelines – monitor ground settlement directly above and 10 feet before and after utility or pipeline intersection.

E. Immediately report to the Engineer any movement, cracking, or settlement which is detected.

F. Following substantial completion but prior to completion, make final survey of all monitoring points.

3.9 DISPOSAL OF EXCESS MATERIAL

A. Excess material shall be removed disposed of properly.

3.10 ACCEPTANCE TESTING

A. Acceptance testing shall be in accordance with the related utility installation specifications.

4.0 MEASUREMENT AND PAYMENT

4.1 Work under this section will be measured by the linear foot. Unit price is full compensation for excavation of entry/exit pits, sheeting, shoring or bracing, dewatering; disposal of excess materials; installation, observation and reporting of monitoring system, utility adjustments, connections to existing utilities, grouting annular space between casing pipe and bore hole, testing, backfilling, clean-up, labor, equipment and incidentals.

*END OF SECTION*
MOBILIZATION

1.0 Description.

Establish and remove offices, plants, and facilities. Move personnel, equipment, and supplies to and from the project or the vicinity of the project site to begin work or complete work on Contract Items.

2.0 Lump Sum Uni Price

Limit unit price bid for mobilization to a maximum of 5% of Construction Amount. 

\[ \text{Construction Amount} = (\text{Total Proposal Amount} - \text{Mobilization Lump Sum}) \]

3.0 Cost Breakdown

Provide cost breakdown for payment as listed below.

- A. Insurance, bonds, permits etc. – per lump sum
- B. Mobilization of labor & equipment, preparatory works etc. – per lump sum
- C. Onsite health and safety setup – per lump sum
- D. Surveying and staking ROW, Easements etc. – per lump sum
- E. Submittals and Scheduling – per lump sum
- F. Project Sign – quantity as shown by the plans

4.0 Payment

Partial payments of the lump sum bid for mobilization will be as follows.

- A. Insurance, bonds, permits etc – payment will be made upon presentation of a paid invoice for the payment bond, performance bond, and required insurance. The combined payment for bonds and insurance will be no more than 10% of the mobilization lump sum or 1% of the total Contract amount, whichever is less.
- B. Mobilization of labor & equipment, preparatory works etc. – payment will be made once labor & equipment has been mobilized for preparatory tasks.
- C. Onsite health and safety setup – Payment will be made upon verification of facility setup related to onsite health and safety. Daily reports are required.
- D. Surveying and staking – payment will be made upon verification of ROW/Easement, alignment staking. Daily reports are required.
- E. Submittals and Scheduling – payment will be made upon verification of receipt of schedules and product data submittals.
- F. Project sign installation – payment will be made upon verification of project sign installation.

G. Maximum 90% of Mobilization lump sum bid will be paid as the project progresses.

H. Payment for the remainder of the lump sum bid for “Mobilization” will be made once the project is substantially completed. “Letter of Substantial Completion” is required for payment.

*END OF SECTION*