



# AGENDA ITEM SUMMARY FORM

**MEETING DATE:** June 11, 2024  
**PREPARED BY:** Chris Whittaker  
**AGENDA CONTENT:** 288B Utility Improvements

**AGENDA ITEM SECTION:** Regular Agenda

**BUDGETED AMOUNT:** **FUNDS REQUESTED:**  
\$223,316.50

**FUND:**

## EXECUTIVE SUMMARY:

The City of Angleton (the City) is in the process of entering into an advance funding agreement (AFA) with TxDOT on the TA Grant Program to perform mobility improvements in the downtown area along State Highway 288B (SH 288B) from East Cedar Street to East Orange Street. In preparation of this project the City of Angleton would like to replace the aging utility infrastructure in the location of the proposed TA Grant Project.

The City has requested a proposal for the design phase, bid phase, and construction administration services for the above referenced project. The City has identified 2,600 linear feet of 8” PVC water line relocation and 350 linear feet of sanitary sewer that crosses 288B to be replaced in this project due to their age and material.

The water line will be installed by a trenchless method (boring) to reduce the surface disturbance to the area and limit the disruption of traffic during construction. The PVC water line portion under 288B is required by TxDOT to be cased in high density polyethylene pipe (HDPE). New water services will also be included in the project.

The existing sanitary sewer crossing 288B will be removed and replaced with PVC pipe with an HDPE casing. The existing sanitary sewer manholes will be lined with cementitious wall liner and several new manholes will be set at the 288B right of way to limit the amount of sanitary sewer line replacement.

This proposal is for HDR to perform Design, Bid, and Construction Phase Services for the 288B Utility Improvements.

**RECOMMENDATION:** Council to approve HDR for an amount of \$223,316.50.00 to perform the 288B Utility Improvements.



May 22, 2024

Chris Whittaker  
City Manager  
City of Angleton  
121 S. Velasco  
Angleton, Texas 77515

Re: Proposal for Professional Engineering Services  
Design, Bid, and Construction Administration Phase Services for  
288B Utility Improvements  
City of Angleton

Dear Mr. Whittaker:

HDR Engineering, Inc. (HDR) is pleased to submit this proposal for the design, bid, and construction phase services for the above referenced project. A general overview of the project, proposed scope of services, and a fee breakdown are included herein.

### **General Overview**

The City of Angleton (the City) is in the process of entering into a advance funding agreement (AFA) with TxDOT on the TA Grant Program to perform mobility improvements in the downtown area along State Highway 288B (SH 288B) from East Cedar Street to East Orange Street. In preparation of this project the City of Angleton would like to replace the aging utility infrastructure in the location of the proposed TA Grant Project.

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## **SCOPE**

The scope of engineering services is as follows:

### **DESIGN PHASE SERVICES**

#### **I. Basic Services**

- Research and gather existing data on the project such as existing utility information, pipeline crossings, and drawings on the existing utilities.
- Perform a site visit to verify topographical features and identify potential obstruction that may cause conflicts in construction.
- Review geotechnical information to determine existing soil conditions, ground water levels, bedding and backfill recommendations, and potential impact on construction methodologies and costs.
- Coordinate with private utility agencies their utilities in the project area.
- Design 8" water line and 6" sanitary sewer crossings. All utility crossing under 288B will be cased with HDPE as per TxDOT standards.
- Provide City with 30%, 75%, and 100% plan sets with opinion of probable construction cost for review and obtain input from the City.
- Incorporate appropriate comments and corrections from the City's review.
- Submit drawings to utility companies review, receive no objections, and obtain signatures on plans.
- Prepare final signed and sealed engineering design drawings and specifications.
- Prepare final opinion of probable construction cost for the project.
- Furnish two (2) sets of construction documents to the City.



## **II. Special Services – Design Phase Services**

### Geotechnical Study by Subcontractor (Geotest)

- Perform four (4) soil borings each to a depth of 20 ft below grade for a total of 80 lineal feet.
- Provide a geotechnical engineering report presenting the results of field and laboratory testing and engineering recommendations discussed below.
- The geotechnical study will provide boring logs with classification test results and results of undrained shear strength and depth to water measurements. The recommendations will include: bedding and backfill recommendations, and OSHA trench safety information. No recommendations or design of shoring or hydraulic fracture calculations for inadvertent returns, that will be responsibility of the contractor.

### Traffic Control Plan

- Prepare traffic control plans for the project. This plan will include phasing, detours, and required signs and lane closures to complete the proposed improvements.

### Storm Water Pollution Prevention Plan

- Prepare drawings for the required Storm Water Pollution Prevent Plan (SWPPP), in accordance with the Texas National Pollutant Discharge Elimination System (TPDES) General Permit for Storm Water Discharge from construction sites.

### Texas Department of Transportation (TxDOT) Coordination

- The proposed utility improvements will require a crossings of SH 288B which is owned by TxDOT. Coordination with TxDOT for construction methods, traffic control and construction phasing during construction will be required. TxDOT will have to permit the project prior to proceeding forward into construction.
- No costs have been included in this proposal for permit fees associated with the coordination with TxDOT. The City shall pay all fees associated with TxDOT permitting.

### TDLR Review, Inspection, and Filing



- HDR will utilize a subconsultant to register the project with the state, and for review and approval to verify the project is in compliance with ADA requirements, and inspect the work at the completion of the project.

### **BID PHASE SERVICES**

HDR will enter into this phase after the acceptance of the Design Phase documents. Bid Phase Services shall include the following:

- Assist the City in obtaining bids for the project. The City will advertise the project and will absorb all related advertising costs. HDR will coordinate with the City and will assist in developing the wording of the advertisement.
- HDR will post project plans and specifications on CivCast to generate interest for the project during the bidding process, provide information to and answer questions from potential bidders concerning the Project's construction documents and prepare addendums as necessary. The City will pay fees associated with posting on CivCast.
- Conduct a pre-bid conference for potential bidders, including the preparation of the meeting agenda and preparing a meeting minutes summary.
- Evaluate the bids and the qualifications of the apparent low bidder and advise the City as to the acceptability of the apparent low bidder.
- Prepare a letter of recommendation and advise the City as to the acceptability of the apparent low bidder.
- Attend a City Council Meeting to award construction project.

### **CONSTRUCTION ADMINISTRATION SERVICES**

HDR will enter into this phase after the City accepts the bids and awards the contract to a contractor. Construction Administration Phase Services shall include the following:

- Conduct a pre-bid conference and distribute meeting minutes.
- Act as the City's Project Representative during the construction phase.
- Log and review all material submittals pertaining to this project.
- Review and respond accordingly to all submittals and RFIs as required by the contract



specifications.

- Prepare change orders necessitated by field conditions.
- Review the contractor's pay estimates, evaluate the completion of work, and make payment recommendations to the City.
- Visit the site periodically to observe the progress and quality of executed work and to determine in general if such work is proceeding in accordance with the Contract Documents. Full-time site representation is not included as part of the Basic Services for Construction Administration.
- HDR will not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by the Contractor(s) or the safety precautions and programs incident to the work of the Contractor(s). HDR's effort will be directed toward providing a greater degree of confidence for the City that the completed work of Contractor(s) will conform to the Contract Documents, but HDR will not be responsible for the failure of Contractor(s) to perform the work in accordance with the Contract Documents. During site visits HDR shall keep the City informed of the progress of the work, shall endeavor to guard the City against defects and deficiencies in such work and may disapprove or reject work failing to conform to the Contract Documents.
- Conduct a final walk through of the Project and make a punch list of items in need of correction.
- Provide a recommendation for Final Payment on the Project to the City.
- Engineer shall provide one set of reproducible record plans based on the drawings provided to the Engineer by the Contractor(s).
- Engineer shall provide the City one electronic copy of record plans based on the drawings provided to the Engineer by the Contractor(s).

### **III. ADDITIONAL SERVICES**

- Additional Services shall only be performed when directed by the City to HDR. These services are not considered normal or customary engineering services.
- Services resulting from significant changes in the extent of the project or its design including but not limited to changes in size, complexity, the City's schedule, or character of construction or method of financing; and revising previously accepted



studies, reports design documents or Contract Documents when such revisions are due to causes beyond HDR's control.

- Preparing documents for alternate bids outside of the original scope requested by the City or documents for out of sequence work.
- Preparing to serve or serving as a consultant or witness for the City in any litigation, public hearing or other legal or administrative proceeding involving the Project.
- HDR will endeavor to appraise the City of any potential additional or extended services that may result from the above listed items, prior to HDR's expenditure of time on such services. As previously noted, any such extended or additional services shall only be performed when directed by the City to HDR.

### **TERMS AND CONDITIONS**

This project will be performed under the current on-going services contract with the City of Angleton, and its terms and conditions will apply.

### **FEE SCHEDULE**

HDR will submit monthly invoices with status reports for all engineering work completed to invoice date. Please be aware that these fees are based on performing all improvement design as a single project. The fees presented in this section reflect a combined effort to perform all proposed work concurrently. If the project is reduced the proposed fees will need to be adjusted accordingly to reflect the cost of performing engineering services on a smaller project. The invoices will be based on the following schedule:

<b><u>Engineering Services</u></b>	<b><u>Total Fees</u></b>
Design Phase (Lump Sum)	\$ 121,000.00
Geotechnical (cost + 10%)	\$ 13,546.50
Traffic Control Plan (Lump Sum)	\$ 17,800.00
Storm Water Pollution Prevention Plan	\$ 10,200.00
TxDOT Coordination (Hourly)	\$ 14,200.00
TDLR Review, Inspection and Filing (Cost +10%)	\$ 1,600.00
Bid Phase (Lump Sum)	\$ 9,600.00
<u>Construction Administration (Lump Sum)</u>	<u>\$ 35,370.00</u>
<b>Proposed Engineering Services Total</b>	<b>\$ 223,316.50</b>



Preliminary Estimated Construction Cost	\$ 900,000.00
<u>Proposed Engineering Total</u>	<u>\$ 223,316.50</u>
<b>Total Estimated Project Cost</b>	<b>\$1,123,316.50</b>

Additional services beyond those described in the Scope of Services will be completed under the current on-going contract at the established rates. No additional services will be performed or invoiced without prior authorization from the City.

It is anticipated that it will take six (6) months from the date of authorization to complete the design. Bid Phase services are anticipated to take two (2) months after receiving authorization. Execution of the contract documents is anticipated to one (1) month after City Council award of the contract. Construction is anticipated to take four (4) months.

HDR appreciates the opportunity to submit this agreement and to continue working for the City of Angleton.

Sincerely,

HDR ENGINEERING, INC.

Scott A. Marr, PE, LEED AP, APMP  
Resources Business Group Manager – TXGulf/LA

Approved:

Authorized signature on behalf of the City of Angleton:

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Printed Name: \_\_\_\_\_

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

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



**Sanitary Sewer**

- FITTINGS
- ▲ CLEANOUTS
- GRAVITY MAINS
- PRESSURIZED MAINS
- LATERAL LINES
- MANHOLES
- VALVES
- LIFT STATIONS
- WATER MAINS
- LATERAL LINES
- STORAGE TANKS
- PLANT BUILDINGS
- ★ GROUNDWATER WELLS

**Water Distribution System**

- FITTINGS
- ▲ CLEANOUTS
- GRAVITY MAINS
- PRESSURIZED MAINS
- LATERAL LINES
- MANHOLES
- VALVES
- LIFT STATIONS
- WATER MAINS
- LATERAL LINES
- STORAGE TANKS
- PLANT BUILDINGS
- ★ GROUNDWATER WELLS

