



February 19, 2025

Ms. Noreen Housewright  
Director of Public Works  
300 W Main Street, Grand Prairie  
Grand Prairie, Texas 75050

**Subject:** Proposal for Engineering Services for  
Design of Water and Wastewater Main Replacement/Rehabilitation for  
Small Street between N. Beltline Road and SE 17<sup>th</sup> Street

Dear Ms. Housewright:

We appreciate the opportunity to present a proposal for the engineering design of the water and wastewater mains on Small Street from Beltline Road to E. Main Street in the City of Grand Prairie.

**PROJECT UNDERSTANDING AND DESCRIPTION:**

The City plans to replace the water and wastewater infrastructure on Small Street before beginning the roadway rehabilitation and reconstruction projects. The first phase involves milling and overlaying a section of Small Street between Beltline Road and NE 13th Street, followed by a major reconstruction of Small Street from Beltline to E. Main Street the following year. The water and wastewater infrastructure must be rehabilitated prior to the roadway reconstruction.

**Water Main Design:**

**Beltline Road to E. Main Street (approximately 4,700 LF):**

There are no record drawings available for the existing water main between Beltline Road and E. Main Street. The existing 10-inch pipe needs to be upsized to a 12-inch pipe, including the installation of new fire hydrants, valves, service connections, and other necessary components.

**Wastewater Design:**

The wastewater system consists of three segments, each discussed below, along with a recommendation for replacement or rehabilitation.

*Genuine Ingenuity*

500 N. Akard Street  
Suite 3210  
Dallas, TX 75201  
214-350-1500

GreshamSmith.com



**Segment 1: From Beltline Road to NE 11<sup>th</sup> Street (approximately 1,100 LF):**

According to the City of Grand Prairie staff, the wastewater line was initially designed to be replaced "By Other Than Open Cut" (BOTO) as part of the Skyline/Small Street project. However, an inspection conducted prior to construction revealed that a portion of the segment has been s pipe bursted and upgraded to a 12-inch pipe, while the rest of the segment still requires replacement. There are no records available for the rehabilitated section. A CCTV inspection has been requested to assess the condition of this section. Based on the inspection results, two options are available:

- Option 1: Design the entire segment using the open-cut method.
- Option 2: Retain the 12-inch slip-lined portion and replace the remaining 8-inch VCP pipe with a 12-inch PVC pipe.

The design fee will be based on replacing the entire segment, adjustments will be made if Option 2 is chosen.

**Segment 2: NE 11th Street to NE 13th Street (approximately 700 LF):**

This segment primarily consists of a 6-inch VCP pipe, with small footage of 8-inch PVC pipe that may have been installed as part of a pipeline repair.

**Recommendation:**

Replace the entire segment, including the associated manholes, with a new 8-inch pipe.

**Segment 3: NE 15th Street to NE 17th Street (approximately 1000 LF):**

According to the record drawings, this segment was constructed in 1999. The most recent CCTV inspection shows that the pipeline is generally in good condition, although some debris was found inside. However, a few manholes were inaccessible during the inspection.

**Recommendation:**

Keep the existing pipe and replace the manholes as needed.

**SCOPE OF SERVICES:**

**Basic Services**

**TASK 1. DESIGN MANAGEMENT.**

- Coordination with the City and the design Team
- Communications and Reporting
- Attend a pre-design project kickoff/chartering meeting with City staff to confirm and clarify scope, understand the City's objectives, and ensure economical and functional designs that meet City requirements (assume 1 meeting)
- Conduct review meetings with the City at the end of each design milestone (assume 4 meetings)
- Attend quarterly franchise utility meetings (assume 4 meetings)
- Prepare invoices and submit them monthly in the format agreed by the City
- Prepare and submit monthly progress reports in the format agreed by the City



- Prepare and submit baseline Project Schedule initially, and Project Schedule updates with a schedule narrative monthly.
- Coordinate with other agencies and entities, such as TCEQ, as necessary for the design of the proposed infrastructure, and provide and obtain information needed to prepare the design.

## **TASK 2: PRELIMINARY (65%) AND DETAILED DESIGN DELIVERABLES)**

This task includes the development of 65% and 95% design plans and specifications for the water wastewater pipeline design and manhole rehabilitation/replacement. A detailed scope for the design of phase for each project component is provided below.

- Coordination with Grantham & Associates, Inc. for obtaining topo survey and review of provided data
- Develop design plan and profile sheets which show the proposed water and wastewater plan/profile, recommended pipe size, wastewater manholes, existing utilities and utility easements, and all pertinent information needed to construct the project
- Identification of potential utility conflicts (Utility Matrix)
- Identify construction approach (i.e., Opencut, CIPP, Pipe bursting.)
- Permanent or temporary pavement trench repair, coordinating with Transportation Department
- Develop an Opinion of Probable Construction Cost (OPCC)
- Development of technical specifications
- Draft field notes/sketches for all required ROW/Easement Acquisition (if required)
- Draft exhibits for Temporary Construction Easements (if required).

Gresham Smith will provide digital PDFs of the Design Phase documents. The City will provide compiled comments within 2 weeks of deliverables. Gresham Smith will incorporate the comments into the design and proceed to the next task.

*Deliverables: 65% Specifications and OPCCs in electronic (pdf) format*

## **TASK 3: FINAL DESIGN (95% & 100%) DESIGN PLANS AND CONSTRUCTION DOCUMENTS**

After acceptance of Task 2 above by the City, Gresham Smith will finalize the Construction Documents in preparation for bidding the project. For purposes of this proposal, we have assumed the preparation and delivery of a single bid package for the water and wastewater mains and manholes. Coordination with the City's Procurement Department and inclusion of any City- standard front-end specifications sections are included in this task.

- Final Utility Matrix.
- Submit Updated Project Schedule.
- Submit draft WORD Bid Book
- Prepare final Bidding and Contract Documents — (Pipelines and Manhole Rehab)
- Prepare final Opinion of Probable Construction Costs.
- Submit a PDF set of the final design to the City for approval.
- Complete the final design to reflect final review comments.



- Submit the final updated utility matrix.
- Submit final ROW/Easement documents including field notes and sketches as required by the contract.

*Deliverables: Construction Plans and Specifications in electronic (pdf) format and up to 5 bound bid books and up to 5, 11x17 (half-sized drawings), and specifications.*

#### **TASK 4: BIDDING PHASE SERVICES**

Gresham Smith will support the bid phase of the project as follows.

- Upload all plans and contract documents onto CivCast for access to potential bidders.
- Attend the prebid conference in support of the CITY.
- Prepare and keep the official pre-bid meeting attendance roster
- Prepare responses to all bidders' questions and requests electronically
- Prepare addenda for bidding document modifications
- Attend the bid opening in support of the CITY.
- Tabulate and review all bids received for the construction
- Assist the CITY in determining the qualifications and acceptability of prospective contractors, subcontractors, and suppliers.
- Assist the CITY in evaluating bids and recommend award of the contract.

Gresham Smith will attend up to one pre-bid meeting and assist the City with bidding services including posting to CivCast, responding to bidder's questions, preparing addenda, evaluating bids, and providing the City with an award recommendation. We assume that the bid package will be bid within 1 year of design completion.

*Deliverables: Addenda, Award Recommendation Letter*

#### **TASK 5: CONSTRUCTION ADMINISTRATION / CONSTRUCTION OBSERVATION (CA/CO)**

The total CA/CO level of effort is assumed to include submittal reviews, site visits for construction observation, and providing responses/ recommendations for RFIs and change orders.

- Respond to RFI and provide necessary interpretations and clarifications of contract documents (up to 8)
- Review shop drawings and submittals for conformance to project plan and specifications (up to 8)
- Review change orders and make recommendations (up to 2)
- Attend the "Final Walk Through" and assist with preparation of final punch list
- Prepare Engineer's record drawings using information of changes from the Contractor and CITY project manager

Deliverables. Up to 3 Full size Conformed Construction Plans and Specifications in electronic (pdf) format and up to 6 bound bid books and up to 10 11x17 (half-sized drawings), and specifications.

**TASK 6: Special Services:** Gresham Smith will allocate the special services fee to cover a topographic survey, as well as Subsurface Utility Engineering (SUE) and geotechnical services. Given the absence of record drawings for the 10-inch water main, SUE is recommended to accurately determine the horizontal (Quality Level B. QL-B) and vertical alignment (Quality Level A. QL-A) of the existing water main, along with identifying other utilities within the project area. Additionally, the wastewater main



located between NE 11th Street and N. Beltline Road is buried at a depth of 15-20 feet, making a geotechnical investigation essential during both the design and construction phases for this segment.

**SCHEDULE:** The Gresham Smith Team is prepared to begin work immediately upon receipt of the NTP from the City. Our team is prepared to complete Task 1 in 3 months and deliverable of 65% Design Documents (Task 2) in 5 months, deliverable of 95% (Task 3) Design Documents in 3 months after receipt of City comments on 65% deliverable, and deliverable of 100% (Task 3) Construction Documents in 1 month after receipt of City comments on 95% deliverable.

**EXCLUSIONS:**

The following items are excluded from the scope of work but can be provided as an amendment to the scope upon written agreement:

- Design Report is not included in the scope of work
- Public Involvement & Meetings
- Design of Water Main and Storm Sewer Relocation
- ADA Requirements and/or TDLR Review
- Roadway Replacement Design
- Franchise Utility Relocation Design
- Right of Way Acquisition Services and Documentation for Obtaining Easements/Right of Way
- Section 404 Permitting

**SUMMARY OF DESIGN FEE:**

Task 1-Project Management

- Fee: \$25,890

Task 2 — Preliminary (65% Design)

- Fee: \$89,150

Task 3 — Final Construction Documents

- Fee: \$44,700

Task 4 — Bidding Phase Services

- Fee: \$17,250

Task 5 — Construction Phase Services

- Fee: \$22,350

<b>Basic Services Fee:</b>	<b>\$199,340</b>	
<b>Special Services Fee:</b>	<b>\$79,850.00</b>	
<b>Total Fee:</b>		<b>\$280,190</b>



Ms. Noreen Housewright  
February 18, 2025

Gresham Smith understands that the fee for this project is based on "Time and Material" based on hourly, not to exceed contract in the amount of. Invoices will be billed monthly. Consultant to notify City of any work task approaching budget overrun. The hourly rates of this contract are valid through April 2026. Project delays by the consultant will negate this date (April 2026)

We appreciate the City's consideration of Gresham Smith to provide the proposed services and look forward to the opportunity to work with the City on this project. Please let us know if there are any questions or additional information needed in your consideration of this proposal.

Sincerely,

Tim O'Brien, P.E.

Vice President

**Gresham Smith**

Attachments:

Grand Prairie Water & Wastewater Maps

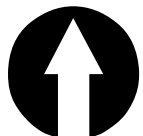
Level of Service Effort

**Attachment A- Level of Effort Spreadsheet**  
**TASK/HOUR BREAKDOWN**  
**Design Services**  
**CITY OF GRAND PRAIRIE WATER/WASTEWATER LINE REPLACEMENTS**

Task No.	Task Description						Total Labor Cost	Total Expense Cost
		Project Manager	Engineer of Records	EIT Designer	QA/QC	Project Acct.		
		Hourly Rate to Be Billed Per Gresham Smith Staff Member	\$250	\$200	\$150	\$300		
1.0	Design Management	53	38	22	0	12	\$ 25,890	0
	Initial Project Setup & Subconsultant Management	15				2	\$ 4,040	\$0
	Communications and Reporting							
	Attend a pre-design project kickoff/chartering meeting with CITY	4	4	4			\$ 2,400	
	Conduct review meetings with the CITY at the end of each design phase	10	10	10			\$ 6,000	
	Prepare and submit monthly progress reports in the format provided by the City	16				10	\$ 5,450	
	Prepare and submit baseline Project Schedule	4					\$ 1,000	
	Coordinate with other agencies and entities as necessary	2	12	4			\$ 3,500	
	Work with regulatory authorities to obtain approval of the designs	2	12	4			\$ 3,500	
2.0	Preliminary Design (60 Percent)	56	141	289	12	0	\$ 89,150	0
	Data Collection							
	Pre-design Site Visits, Review Record drawing	8	12	20			\$ 7,400	
	Coordination with Survey and Review of Provided Survey Data	8	10	25			\$ 7,750	
	Coordinate with Franchise Utilities	2	8	8			\$ 3,300	
	Plan and profile sheets							
	W& WW Design	20	70	160	12		\$ 46,600	
	Estimates of Opinion of Probable Construction Cost	4	10	16			\$ 5,400	
	Constructability Review (Including site visits)	8	8	8			\$ 4,800	
	Utility Clearance (Level D one call Franchise Utility Locations)	2	6	6			\$ 2,600	
	Identification of potential utility conflicts (Utility Matrix)	1	3	6			\$ 1,750	
	Erosion Control Plan	1	6	16			\$ 3,850	
	Traffic Control Plan	2	8	24			\$ 5,700	\$0
3.0	Final Design	52	52	118	12	0	\$ 44,700	\$ 1,000
	Final Draft (90%) Construction Plans and Specifications (Includes Design Details) Preparation and Submission	12	24	56			\$ 16,200	
	Final (100%) Plans and Specifications Preparation and Submission	12	18	40	6		\$ 14,400	
	Final Opinion of Probable Construction Cost (100%)	12	6	12	6		\$ 7,800	
	Draft WORD Bid Book	16	4	6			\$ 5,700	
	Printing			4			\$ 600	\$1,000
4.0	Bid Phase	33	30	20	0	0	\$ 17,250	0
	Respond to bidders questions, Modify Plans and Specifications for bidder clarifications	8	6	4			\$ 3,800	
	Attend Pre-bid Conference, prepare agenda	4	4	4			\$ 2,400	
	Review bidders qualification and make recommendation to City	8	6	4			\$ 3,800	
	Attend Bid Opening	4	4	4			\$ 1,800	
	Bid Tabulation, and Recommendation for Award	8	6	4			\$ 3,800	
	Submit Final Drawings in PDF & DWG Format	1	4	4			\$ 1,650	
5.0	Construction Phase Services	31	46	36	0	0	\$ 22,350	
	Attend Pre Construction Meeting	4	4	4			\$ 2,400	
	Monthly Progress Meetings ( Assume 12)	12	12				\$ 5,400	
	Review of Contractor RFIs, submittals (Assume 8)	5	16				\$ 4,450	
	Final Inspection	8	8	8			\$ 4,800	
	Record Drawings	2	6	24			\$ 5,300	
	Subtotal Fee						\$199,340	\$1,000
6.0	Special Services	0	0	0	0		\$ 79,850.00	
	Topo Survey						\$ 39,850.00	0
	SUE & Geotech						\$ 40,000.00	0
Totals		225	307	485	24	12		







0 125 250 500 750 1,000 Feet

## Legend

- Water to be Improved
- Existing Water Lines
- Existing Water Fixtures

Proposed 12" Water  
Approximately 4700 LF

## CITY OF GRAND PRAIRIE

Water Line Improvements

Small St

February 3, 2025

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