Crane Engineering Corporation

City of Laredo
16" Waterline Replacement along IH35 (approximately 10,500 LF)
Professional Engineering Services

Title	EDG PM	FM Sr. PE	RG ENG 1	CADD CADD	MR Eng Tech	Survey SC	MAG Admin	Total
Hourly Rate	$ 235.00	$ 185.00	$ 125.00	$ 85.00	$ 70.00	$ 165.00	$ 70.00	
Task 1 - Preliminary Engineering								
1.1 Meet with City to discuss project goals and budget; provide minutes	4.0	4.0	2.0	2.0			6.0	18.0
1.2 Secure TxDOT ROW maps, plats and masterplans from City Planning Dept. and develop preliminary base maps;	4.0	8.0	16.0	72.0			12.0	112.0
1.3 Meet with TxDOT on IH35 widening plans and coordinate project;	4.0	4.0		4.0			3.0	15.0
1.4 Review current floodmaps to determine controlling site conditions;	2.0	8.0	8.0	8.0			4.0	30.0
1.5 Coordinate with UPRR / KCSR on permitting requirements for waterline installation within railroad right-of-way;	3.0	4.0	8.0	4.0			4.0	23.0
1.6 Coordinate with Geotech consultant retained by City;	6.0	6.0	8.0	4.0			6.0	30.0
Total Hours	**23.0**	**34.0**	**42.0**	**94.0**	**0.0**	**0.0**	**35.0**	**228.00**
Preliminary Engineering - Total Labor $	$ 5,405.00	$ 6,290.00	$ 5,250.00	$ 7,990.00	$ -	$ -	$ 2,450.00	**$ 27,385.00**
Task 2 - Topo Survey / Mapping								
2.1 Perform topographic survey within project limits (survey work within TxDOT and UPRR / KCSR ROW); Topo Map	6.0	8.0	8.0	80.0	16.0	100.0	8.0	226.0
2.2 Prepare base maps for design development;	4.0	8.0	32.0	80.0			8.0	132.0
Total Hours	**10.0**	**16.0**	**40.0**	**160.0**	**16.0**	**100.0**	**16.0**	**358.0**
Topo Survey & Mapping - Total Labor $	$ 2,350.00	$ 2,960.00	$ 5,000.00	$13,600.00	$1,120.00	$16,500.00	$ 1,120.00	**$ 42,650.00**
Task 3 - Utility Coordination								
3.1 Coordinate with all utility providers to secure existing utility maps and add to base maps; Digtess Call	16.0	24.0	32.0	40.0		24.0	24.0	160.0
3.2 Provide City with existing topo and utility map	2.0	8.0	12.0	40.0	8.0		8.0	78.0
Total Hours	**18.0**	**32.0**	**44.0**	**80.0**	**8.0**	**24.0**	**32.0**	**238.0**
Utility Coordination - Total Labor $	$ 4,230.00	$ 5,920.00	$ 5,500.00	$ 6,800.00	$ 560.00	$ 3,960.00	$ 2,240.00	**$ 29,210.00**
Task 4 - Hydraulic Modeling								
4.1 Hydraulic Modeling	8.0	48.0	24.0	24.0			6.0	110.0
4.2 Provide Engineering Report	8.0	32.0	24.0	24.0			16.0	104.0
Total Hours	**16.0**	**80.0**	**48.0**	**48.0**	**0.0**	**0.0**	**22.0**	**214.0**
Hydraulic Modeling - Total Labor $	$ 3,760.00	$14,800.00	$ 6,000.00	$ 4,080.00	$ -	$ -	$ 1,540.00	**$ 30,180.00**
Task 5 - Construction Documents								
5.1 Prepare preliminary waterline alignments based on controlling topo and TxDOT and UPRR / KCSR conditions and prepare preliminary cost estimate; Submit to City for review and comment; Identify easement needs, if any; 50%	12.0	56.0	80.0	120.0		16.0	16.0	300.0
5.2 Prepare construction plans and specifications based on 50% comments 95% Plans	12.0	40.0	80.0	120.0		8.0	16.0	276.0
5.3 Update cost estimate to reflect final design;	4.0	6.0	8.0				8.0	26.0
5.4 Submit to UCC to coordinate conflicts and secure C3 letter;	6.0	6.0	12.0	8.0			8.0	40.0

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Updated 11/6/24
10/4/24
8/7/24
6/12/24
5/7/24

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Title Hourly Rate	$ 235.00	$ 185.00	$ 125.00	$ 85.00	$ 70.00	$ 165.00	$ 70.00	
5.5 TxDOT permit applications;	4.0	6.0	8.0	8.0			8.0	34.0
5.6 Coordinate with Geotech consultant retained by City;	4.0	8.0	16.0	8.0			8.0	44.0
5.7 Prepare Final PS&E for bid letting	12.0	24.0	40.0	80.0			16.0	172.0
5.8 Submit final plans, specs to City for bid let	1.0	2.0		4.0			4.0	11.0
Total Hours	**55.0**	**148.0**	**244.0**	**348.0**	**0.0**	**24.0**	**84.0**	**903.0**
Construction Documents - Total Labor $	$12,925.00	$27,380.00	$30,500.00	$29,580.00	$ -	$ 3,960.00	$ 5,880.00	**$110,225.00**

Task 6 - Construction Phase Services (TBD)

Total Hours   **1,941.00**

Summary
Task 1 - Preliminary Engineering $ 27,385.00
Task 2 - Topo Survey / Mapping $ 42,650.00
Task 3 - Utility Coordination $ 29,210.00
Task 4 - Hydraulic Modeling $ 30,180.00
Task 5 - Construction Documents $110,225.00
Task 6 - Construction Phase Services (TBD)

Total   **$239,650.00**