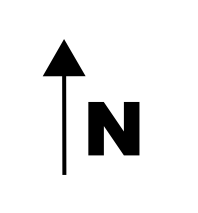


FM 1097 Sanitary Sewer Improvements

City of Montgomery



Montgomery County MUD 160 Approximate Area



Engineer's Opinion of Probable Cost
FM 1097 Sanitary Sewer Improvements
City of Montgomery
4/18/2024

Item No.	Description	Quantity	Unit	Unit Price	Cost
BASE ITEMS					
General					
1	Mobilization, Bonds, and Insurance	1	LS	\$ 10,000	\$ 10,000
2	Site Preparation & Restoration	1	LS	5,000	5,000
3	Construction Staking	1	LS	6,000	6,000
4	Trench Safety System	500	LF	1	500
5	Plug & Abandon Existing Sanitary Sewer Line	1	LS	8,000	8,000
6	SWPPP	1	LS	2,500	2,500
7	Traffic Control	1	LS	5,000	5,000
Sanitary Sewer					
8	8-Inch SDR-26 PVC Gravity Sanitary Sewer	500	LF	60	30,000
9	12" Steel Casing for 8-Inch Gravity Sewer	120	LF	180	22,000
10	4' Sanitary Sewer Manhole	2	EA	5,000	10,000
11	Core into Existing Manhole	2	EA	3,000	6,000
12	Concrete Abutment	2	EA	7,000	14,000
13	Bypass Pumping	1	LS	\$ 5,000	\$ 5,000
Base Items Subtotal					\$ 124,000
Contingencies (20%)					\$ 25,000
Engineering (Surveying, Design, Constr., etc.)					\$ 51,500
Reimbursable Expenses					\$ 16,000
Total					\$ 216,500
ALTERNATE ITEMS					
TxDOT Drainage Improvements					
14	Additional Mobilization, Bonds, and Insurance	1	LS	\$ 15,000	\$ 15,000
15	Import High Clay Content Fill	1,500	CY	24	36,000
16	Regrade Existing Creek	1	LS	25,000	25,000
17	3'x5' Reinforced Box Culvert	120	LF	450	54,000
18	Cementitious Grout Reinforced Rip Rap	400	SY	\$ 240	\$ 96,000
Alternate Items Subtotal					\$ 226,000
Contingencies (20%)					\$ 46,000
Additional Engineering (Design, Constr., etc.)					\$ 25,000
Total					\$ 297,000

Notes:

- 1 All values rounded up to the nearest thousand.
- 2 This estimate is based on my best judgement as a design professional familiar with the construction industry. We cannot and do not guarantee that bids will not vary from this cost estimate.



FM 1097 Sanitary Sewer Improvements

City of Montgomery

Request: Council Authorization on April 23, 2024

This proposal is submitted pursuant to and in accordance with that certain Professional Services Agreement dated May 25, 2021, by and between Ward, Getz & Associates, LLP and the City of Montgomery (the "City").

WGA understands that the City has interest in relocating an existing sanitary sewer line that is currently in danger of failing due to progressing erosion of a Town Creek tributary. We understand the City would also like to stabilize the existing portion of the creek that runs near the City's existing public utilities. We understand the City would prefer TxDOT to handle the drainage improvements portion of the project as it is partially within TxDOT ROW. The City does not own the land where improvements to are to be made but we understand the City has recently agreed to enter into an agreement with the landowner, Montgomery County MUD No. 160 that allows for the City to perform work in an emergency scenario. Additional easements will be required from the adjacent landowners to proceed with the project. WGA recommends moving forward with the below scope for the improvements project to avoid potential bypass pumping costs upon failure of the existing line.

SCOPE OF WORK

- *Preliminary Phase Services*
 - *WGA will create a preliminary sanitary sewer layout and coordinate with the City's staff and the City's operator Hays Utility Services ("Hays") to delineate the most appropriate alignment.*
 - *Coordinate with adjacent property owners and surveyor to obtain and required easements.*
 - *Coordinate with TxDOT on jurisdiction and responsibility for performing drainage improvements to adjacent creek area experiencing heavy erosion.*
 - *Determine final scope of work with City staff.*
- *Design Phase Services*
 - *Update scope and engineer's opinion of probable construction cost as needed.*
 - *Coordinate with City staff for efforts to determine and receive funding for costs associated with the project.*
 - *WGA will develop drawings and specifications for the successful construction of the Sanitary Sewer Improvements project. Design changes initiated by the City after the design is complete may result in a request for additional authorization. Also, additional authorization may be requested for any TxDOT required design requirements due to work being performed within their right-of-way.*



- *Construction Administration*
 - *Coordinate advertising for bids, hold a pre-bid conference, answer questions from bidders, hold bid opening, prepare bid tabulation, and prepare recommendation of award.*
 - *Prepare construction contracts and coordinate execution of the same.*
 - *Issue notice to proceed and hold pre-construction meeting.*
 - *Review of construction submittals and RFIs.*
 - *Preparation of pay estimates, change orders, and other associated construction documents.*
 - *General oversight and coordination of construction contracts.*
- *Field Project Representation*
 - *Onsite inspection by a Field Project Representative for approximately 6 hours per week (including travel time) during active construction for the duration of the projected contract period of performance (60 calendar days.)*
 - *Onsite inspection by the project team throughout the duration to attend periodic site visits, final walkthrough inspections, etc.*
- *Reimbursable Expenses*
 - *Includes construction materials testing, advertising expenses, and other reimbursable expenses.*
 - *Includes surveying services to be performed by a subconsultant.*
- *Additional Services*
 - *If required, WGA will develop drawings and specifications for the successful construction of drainage improvements along the eroded area of the creek to protect the utilities adjacent to FM 1097.*
 - *Discuss with City drainage consultant to determine the most cost-effective long-term solution for drainage improvements of the creek for protection of existing and proposed utilities and the roadway of FM 1097.*

ENGINEERING COST

The cost to perform the scope of services described above is as follows:

Preliminary Phase	\$ 5,000	(Time and Material)
Design Phase (Not including drainage)	\$ 18,000	(Time and Material)
Bid Phase	\$ 5,500	(Time and Material)
Construction Administration	\$ 13,000	(Time and Material)
Field Project Representation	\$ 10,000	(Time and Material)
Reimbursable Expenses	\$ 16,000	(Time and Material)
Additional Services (Drainage Improvements if required)	\$ 25,000	(Time and Material)

WGA requests the City's authorization to proceed with the design of the sanitary sewer and drainage improvements project along FM 1097 on a time and materials basis, as described above, for a total estimated cost of \$67,500 (\$92,500 if drainage design and construction is required).



SCHEDULE

Authorization to Proceed	1 Calendar Day*
Preliminary (Survey, Easement & TxDOT Discussions)	45 Calendar Days
Design	60 Calendar Days
Approvals & Permitting	30 Calendar Days
Bid Phase	30 Calendar Days
Contracts	21 Calendar Days
Construction	60 Calendar Days
TOTAL DURATION	247 Calendar Days

*If approved, the effective start date is the day after authorization is received.