



The Crossing at Montgomery Sanitary Sewer Improvements

City of Montgomery

Request: Council Authorization on November 12, 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 defined terms in a Development Agreement (the “Agreement”) with Morning Cloud Investments, for the Developer to deposit funds for the sanitary sewer improvements needed to serve the proposed single-family development. Due to the existing utilities, and site location, we recommend the construction of a lift station and force main extension along Old Dobbin Plantersville Road and SH 105, discharging into an existing manhole. Due to the increased flow into the existing gravity lines, the developer will also be responsible for upsizing a stretch of 8-inch gravity sewer to 12-inch lines. We understand that included in the Agreement, will be the dedication of all easements needed for the gravity sanitary sewer and force main routes. WGA recommends moving forward with the scope below for the sanitary sewer improvements project to serve the proposed, and adjacent developments.

SCOPE OF WORK

- *Preliminary Phase Services*
 - *Preliminary sizing analysis of proposed lift station to determine force main size.*
 - *WGA will coordinate with the Developer of the single-family development and City staff to determine a suitable connection point for the proposed force main.*
 - *WGA will coordinate with the Developer of the single-family development and City staff to determine a suitable lift station site.*
 - *WGA will create a preliminary sanitary sewer layout for the proposed gravity sanitary sewer extension and force main, and coordinate with the City’ 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 as needed for any utilities and other work performed in the right-of-way of SH105.*
 - *Determine final scope of work with the Developer and City staff.*

- *Lift Station Design Services*
 - *Conduct monthly progress meetings, up to a maximum of five (5) meetings during the final design phase.*
 - *Perform unit process calculations consistent with TCEQ Chapter 217 requirements for lift station design. Document calculations and any proposed variances to TCEQ rules for regulatory approvals.*
 - *Prepare drawings, specifications, and layouts of improvements to be constructed for design milestone (50% and 100%) submittal and for the final construction contract documents.*



- *Prepare application for and obtain TCEQ approval for the project.*
- *Final Construction Contract Documents: The plans and specifications will be finalized based on one set of compiled comments from Client. Engineer will seal and sign the completed documents. Engineer shall update plans and specifications with any final comments prior to finalizing for construction.*
- *Prepare revised opinion of probable construction cost for the 50% and 100% design completion levels.*

- *Gravity Sanitary Sewer & Force Main Design Services*
 - *Update scope and engineer's opinion of probable construction cost as needed.*
 - *WGA will develop drawings and specifications for the successful construction of the sanitary sewer extensions and force main. Design changes initiated by the City or the Developer 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.*
 - *Review and approval of project material submittals.*

- *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 (270 calendar days.)*
 - *Onsite inspection by the project team throughout the duration to attend periodic site visits, final walkthrough inspections, etc.*

- *Reimbursable Expenses*
 - *Includes surveying services to be performed by a subconsultant.*
 - *Includes geotechnical services to be performed by a subconsultant.*
 - *Includes electrical design services for the Lift Station to be performed by a subconsultant.*
 - *Includes structural engineering design services for the Lift Station to be performed by a subconsultant.*
 - *Includes construction materials testing, advertising expenses, and other reimbursable expenses.*
 - *Coordination and fees associated with work performed within TxDOT right-of-way.*



ENGINEERING COST

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

Preliminary Phase	\$ 9,000	(Time and Material)
Lift Station Design	\$ 45,000	(Time and Material)
Gravity San. Sewer & Force Main Design	\$ 60,000	(Time and Material)
Bid Phase	\$ 6,000	(Time and Material)
Construction Administration	\$ 52,000	(Time and Material)
Field Project Representation	\$ 51,000	(Time and Material)
Reimbursable Expenses	\$ 109,600	(Time and Material)

WGA requests the City’s authorization to proceed with the design of the sanitary sewer improvements project along Old Dobbin Plantersville Road and SH-105 on a time and materials basis, as described above, for a total estimated cost of \$332,600.

SCHEDULE

Authorization to Proceed	1 Calendar Day*
Preliminary (Survey, Easement & TxDOT Discussions)	45 Calendar Days
Design	90 Calendar Days
Approvals & Permitting	60 Calendar Days**
Bid Phase	30 Calendar Days
Contracts	21 Calendar Days
Construction	270 Calendar Days
TOTAL DURATION	517 Calendar Days

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

** Timeline is based on projects with similar scope and is contingent on TxDOT review time.

Accepted by Client

Regards,

Chris Roznovsky, P.E.
Practice Leader

Signature

Printed Name and Title

Date



**Engineer's Opinion of Probable Cost
Force Main Extension and Sanitary Sewer Improvements**

10/18/2024

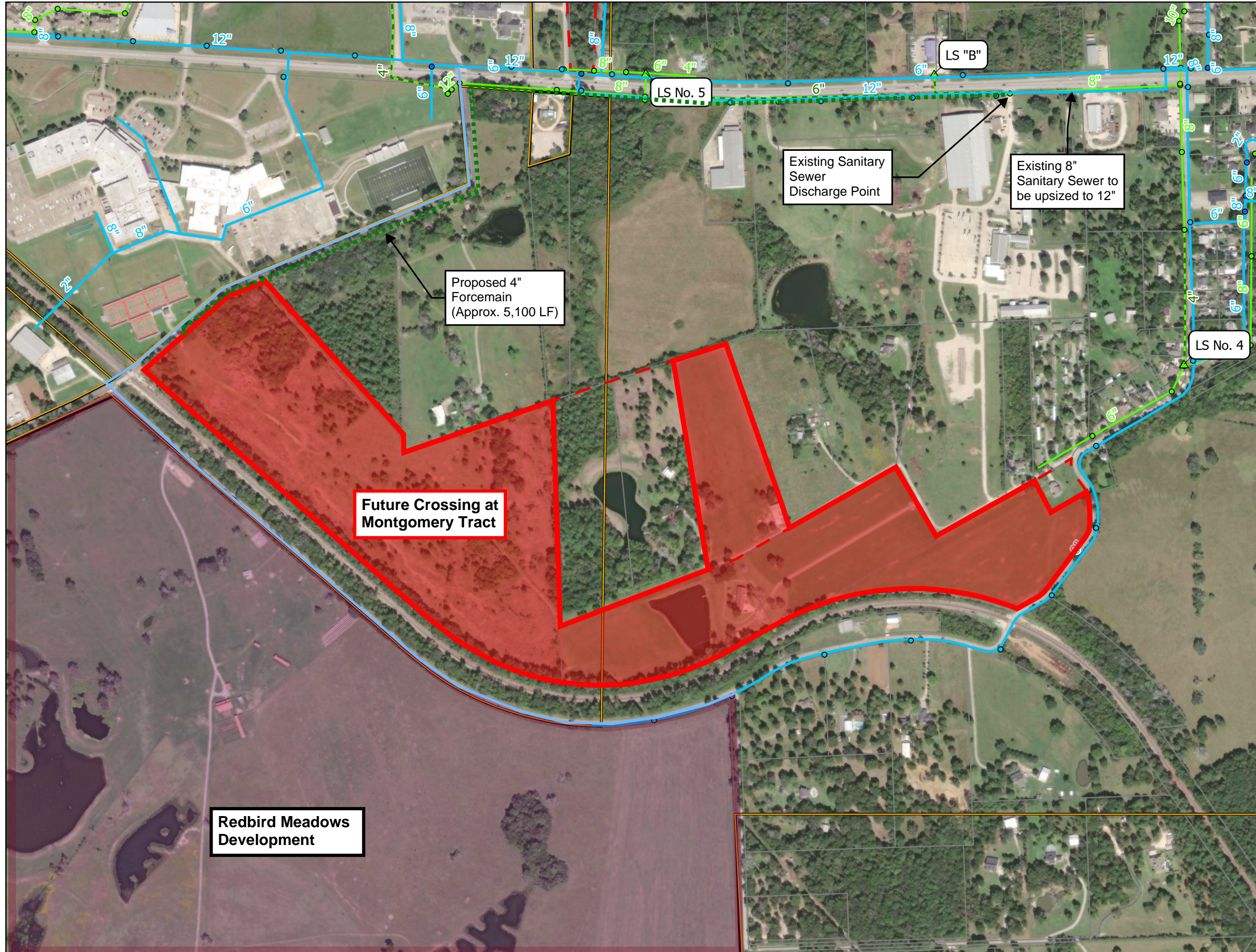
Item No.

	Description	Quantity	Unit	Unit Price	Cost
General					
1	Mobilization, Bonds, and Insurance (5%)	1	LS	\$ 62,000	\$ 62,000
2	Construction Staking (3%)	1	LS	36,000	36,000
3	Site Preparation & Restoration	1	LS	20,000	20,000
4	Trench Safety System	6,480	LF	1	6,480
5	SWPPP	1	LS	7,500	7,500
6	Traffic Control	1	LS	25,000	25,000
Force Main					
7	4-Inch C900 Sanitary Sewer Force Main (Open Cut)	5,150	LF	40	206,000
8	Additional Cost for Trenchless Construction (4-inch FM)	400	LF	100	40,000
9	8-Inch Steel Casing for 4-Inch Force Main	400	LF	100	40,000
10	Connection to Existing Manhole	1	EA	2,500	2,500
11	Air Release Manhole	2	EA	10,000	20,000
Gravity Sanitary Sewer					
12	Pipe Burst 8-Inch to 12-Inch	930	LF	220	204,600
13	20-Inch Steel Casing for 12-Inch Gravity	200	LF	280	56,000
14	Service Lead Reconnections	3	EA	2,500	7,500
15	Core & Boot Conn. to Existing Manhole	1	EA	2,000	2,000
Lift Station					
16	Pumps	1	LS	75,000	75,000
17	Piping, Valving, and Meters, Etc.	1	LS	66,000	66,000
18	Wet Well and Misc. Structural	1	LS	220,000	220,000
19	Electrical and Instrumentation	1	LS	77,000	77,000
20	Standby Generator	1	LS	115,000	\$ 115,000

Construction Subtotal	\$ 1,289,000
Contingencies (15%)	\$ 194,000
Preliminary Design	\$ 9,000
Lift Station Design	\$ 45,000
Sanitary Sewer Line Design	\$ 60,000
Construction Administration and Bid Phase Services	\$ 58,000
Field Project Representation	\$ 51,000
Reimbursible Expenses (Survey, Geotechnical, Etc.)	\$ 109,600
TOTAL PROJECT COST	\$ 1,815,600

Notes:

- 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.



Legend

- Jurisdictional Boundary
- Parcel Boundary
- Montgomery ETJ
- Montgomery City Limits
- Subject Tract

Water Infrastructure

- wMain
- wLateral
- wControlValve
- wFittings
- wHydrant

Sanitary Sewer Infrastructure

- Lift Station
- Treatment Plant
- ssGravityMain
- ssManhole
- ssPressurizedMain

THE CROSSING AT MONTGOMERY SANITARY SEWER IMPROVEMENTS

City of Montgomery
Proposed Development



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