



Water Plant Nos. 2 & 3 Bleach Conversion

City of Montgomery

Request: Council Authorization on July 12, 2022

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, PLLC and the City of Montgomery (the "City").

WGA understands the City wants to replace the existing gaseous chlorine disinfection system at Water Plants Nos. 2 and 3 with a liquid bleach disinfection system.

SCOPE OF WORK

- *Preliminary & Design Phase Services*
 - *WGA will create a preliminary site layout and coordinate with the City and the City's operator H2O Innovations ("H2O"). A design agenda will be established for the proposed improvements and will be coordinated with the City and H2O. This phase will include internal/ external project kickoff meetings and the establishment of the design basis and schedule.*
 - *Update scope and engineer's opinion of probable construction cost as needed.*
 - *WGA will develop drawings and specifications for the successful construction of the Water Plant Nos. 2 & 3 Bleach Conversion. Design changes initiated by the Client after the design is complete may result in a request for additional authorization. Also, additional authorization may be requested for any additional treatment systems that are mandated by TCEQ after submission.*
 - *This scope includes replacement of the existing gaseous chlorine disinfection system with a liquid bleach disinfection system, and construction of an enclosure surrounding the new system.*

- *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 contract.*



CONSULTING ENGINEERS

- *Field Project Representation*
 - *Onsite inspection by a Field Project Representative for approximately 12 hours per week (including travel time) during active construction for the duration of the projected contract period of performance (90 calendar days).*
 - *Onsite inspection by the project team throughout the duration of the project to attend periodic site visits, final walkthrough inspections, etc.*
- *Additional Services and Reimbursable Expenses*
 - *Includes system testing, advertising expenses, and other reimbursable expenses.*
 - *Includes electrical, geotechnical, and structural engineering services to be performed by a subconsultant, as needed.*

ENGINEERING COST

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

Preliminary Phase/Design -	\$22,000 (Time and Material)
Construction Administration -	\$12,500 (Time and Material)
Field Project Representation -	\$15,000 (Time and Material)
Additional Services & Reimbursable Expenses -	\$20,500 (Time and Material)

WGA requests the City Council’s authorization to proceed with the preparation of the proposed Water Plant Nos. 2 & 3 Bleach Conversion on a time and material basis, as described above, for a total estimated cost of \$70,000.

SCHEDULE

Authorization to Proceed	1	calendar day*
Design	60	calendar days
Approval	30	calendar days
Bidding	30	calendar days
Contracts	30	calendar days
Construction	90	calendar days
TOTAL DURATION	241	calendar days

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



Preliminary Cost Estimate
FOR
Water Plant Nos. 2 & 3 Bleach Conversion
City of Montgomery
 July 8, 2022

<u>ITEM</u>	<u>Description</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT COST</u>	<u>ITEM TOTAL</u>
1	Contractor Mobilization, Bonds, & Insurance	1	LS	\$ 15,000	\$ 15,000
2	Demo Existing Gas System	1	LS	15,000	15,000
<u>Water Plant No. 2 Bleach Conversion</u>					
3	Bleach Storage Tank and Interior Piping	1	LS	41,000	41,000
4	Yard Piping	1	LS	9,500	9,500
5	Electrical Work	1	LS	46,000	46,000
6	Eye Wash System	1	LS	4,500	4,500
7	Concrete Slab for Building	1	LS	11,500	11,500
8	Sidewalk	1	LS	5,000	5,000
9	Stormwater Pollution Prevention Plan	1	LS	5,000	5,000
<u>Water Plant No. 2 Canopy Building</u>					
10	Canopy Roof and Siding	1	LS	22,000	22,000
<u>Water Plant No. 3 Bleach Conversion</u>					
11	Bleach Storage Tank and Interior Piping	1	LS	51,000	51,000
12	Yard Piping	1	LS	9,500	9,500
13	Electrical Work	1	LS	46,000	46,000
14	Eye Wash System	1	LS	4,500	4,500
15	Concrete Slab for Building	1	LS	18,500	18,500
16	Stormwater Pollution Prevention Plan	1	LS	3,000	3,000
<u>Water Plant No. 3 Canopy Building</u>					
17	Canopy Roof and Siding	1	LS	\$ 26,500	\$ 26,500
Subtotal					333,500
Engineering					70,000
Contingencies(10%)					34,000
Total Construction Cost \$					437,500

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.
- 3 The cost is to install a 330 gallon bleach storage and all associated pumps, piping, meters and other equipment inside the liquid bleach distribution system building.
- 4 Includes all piping to connect the bleach feed to Water Plant No. 2 as well as potable water piping to the eyewash station.
- 5 All associated electrical work required for operation of a liquid bleach system.
- 6 Furnishing and installing an eyewash station inside the liquid bleach system building.
- 7 Installation of a 8' x 10' concrete foundation for the liquid bleach system building.
- 8 Installation of a concrete sidewalk to connect the liquid bleach system building to the driveway.
- 9 Construction of an 8' x 10' canopy and exterior fencing around the liquid bleach system.
- 10 The cost is to install a 1,000-gallon bleach storage and all associated pumps, piping, meters and other equipment inside the liquid bleach distribution system building.
- 11 Includes all piping to connect the bleach feed to Water Plant No. 3 as well as potable water piping to the eyewash station.
- 12 All associated electrical work required for operation of a liquid bleach system.
- 13 Furnishing and installing an eyewash station inside the liquid bleach system building.
- 14 Installation of a 10' x 14' concrete foundation for the liquid bleach system building.
- 15 Construction of an 10' x 14' canopy and exterior fencing around the liquid bleach system.