

EXHIBIT D

Further Description of Basic Engineering Services

and

Related Services

Tiffany Rank

From: Henry, Joe <JHenry@grwinc.com>
Sent: Friday, October 6, 2017 11:24 AM
To: Tiffany Rank
Subject: Clarification of Scope of Work

[EXTERNAL] Use caution before clicking links and/or opening attachments.

Ms. Rank,

All scope of services as listed in the RFP are included in the fee proposal revised breakdown, submitted on September 25, 2017. The design fee does include all "related equipment and building repairs" in the Sludge Thickening Building, with exception of unknown structural repairs, which have not been identified at this time. In summary of these included items:

1. Plant water review/extension near the sludge thickening building
2. Replacement of hydrants near the sludge thickening building
3. Flow meters and valves
4. Gravity thickener odor control
5. Rooftop heaters and ventilators
6. Tank ventilators
7. Doors and windows
8. General building review will be performed. No structural repairs are presently included.
9. Roof replacement

The following work is also included in the scope for the two (2) primary sludge buildings:

1. Replacement of the primary sludge pumps, valves, and VFD's.

Our base proposals include the items above for the following amounts

1. Alternative 1 – Construct Additional Gravity Thickener - \$251,380
2. Alternative 2 – Construct Additional WAS Thickener - \$194,300

We have also offered additional services for replacement of the lighting, heaters, and ventilators for both primary sludge buildings. The total additional fee for evaluation and design of these items is \$9,760. Our construction amounts for addition of these items will not change.

Even if Alternative 2, Construct Additional WAS Thickener is selected, GRW has included retrofit/repair of the existing odor control system in our scope of services. I hope I have addressed the needed issues. Please review and contact me at your convenience to discuss any issues. Thanks.

Joe Henry, PE

Vice President

GRW | engineering | architecture | geospatial

801 Corporate Drive | Lexington, KY 40503

P 859.223.3999 ext213 | C 859.227.0246

Email: JHenry@grwinc.com | Website: www.grwinc.com

[Follow Us On LinkedIn](#)

[Subscribe to Our Client E-Newsletter](#)

Tiffany Rank

From: Henry, Joe <JHenry@grwinc.com>
Sent: Monday, September 25, 2017 4:53 PM
To: Brian Marcum; Tiffany Rank
Subject: GRW Revised Pricing to Include Design for Evaluated Items
Attachments: Revised Fee Schedule with Spreadsheet 9-25-17.pdf

[EXTERNAL] Use caution before clicking links and/or opening attachments.

Good Afternoon

Attached are the fee summary pages and the itemized fee pages for your consideration. We have included VFD's, pumps, and valves for both of the Primary Sludge Pumping Stations along with the listed items. We have also provided an additional engineering services fee of \$9,760 for ventilation, heaters, and lighting of both Primary Sludge Pumping Stations. These services are itemized at the end of the "itemized breakdown" and not included in the Summary Page fees. I hope this meets your expectations. Thanks for the opportunity.

Joe Henry, PE

Vice President

GRW | engineering | architecture | geospatial

801 Corporate Drive | Lexington, KY 40503

P 859.223.3999 ext213 | C 859.227.0246

Email: JHenry@grwinc.com | Website: www.grwinc.com

[Follow Us On LinkedIn](#)

[Subscribe to Our Client E-Newsletter](#)

Revised: 9/25/2017

Alternative No. 1 — Construct Additional Gravity Thickener
Investigation/Design Services for Town Branch WWTP
Thickening Process Evaluation and Equipment Upgrades

Fee Schedule

(For a description of task refer to Section 2 of the RFP)

Section 2

Scope of Work: Thickening Process Evaluation and Equipment Upgrades

A. Task 1: Existing Process Performance Review	Cost Task 1: \$ 4,260
B. Task 2: Develop Equipment/Process Replacement Concepts	Cost Task 2: \$ 28,880
C. Task 3: Detailed Design	Cost Task 3: \$ 131,120
D. Task 4: Bidding Services	Cost Task 4: \$ 7,840
E. Task 5: Construction Administration Services	Cost Task 5: \$ 79,280

Details for Task 5.5 - The total cost should be included in Cost Task 5. Please provide the following breakdown. Estimated Weekly Inspection Hrs/Estimated Total Inspection Hrs/Hourly Rate.
8 hrs/wk / 344 hrs.(43 wks) / \$95/hr.

Section 2 Total Cost: \$ 251,380

Revised: 9/25/2017

Alternative No. 2 — Construct Additional Mechanical WAS Thickener
Investigation/Design Services for Town Branch WWTP
Thickening Process Evaluation and Equipment Upgrades

Fee Schedule

(For a description of task refer to Section 2 of the RFP)

Section 2

Scope of Work: Thickening Process Evaluation and Equipment Upgrades

A.	Task 1: Existing Process Performance Review	Cost Task 1: \$ 4,260
B.	Task 2: Develop Equipment/Process Replacement Concepts	Cost Task 2: \$ 28,880
C.	Task 3: Detailed Design	Cost Task 3: \$ 95,240
D.	Task 4: Bidding Services	Cost Task 4: \$ 7,840
E.	Task 5: Construction Administration Services	Cost Task 5: \$ 58,080

Details for Task 5.5 - The total cost should be included in Cost Task 5. Please provide the following breakdown. Estimated Weekly Inspection Hrs/Estimated Total Inspection Hrs/Hourly Rate.
8 hrs/wk / 280 hrs.(35 wks) / \$95/hr.

Section 2 Total Cost: \$ 194,300

Engineer Fee Proposal: Investigation/Design Services Town Branch Wastewater Treatment Plant Thickening Evaluation & Equipment Upgrades REVISED 9-25-17 Per LFUGG Request													TOTAL HOURS	TOTAL FEE
Principal Engineer VII	Project Manager VI	Project Engineer IV	Project Engineer II Engineer II	Electrical Engineer VI	Electrical Engineer IV	Mechanical Engineer IV	Architect IV	Structural Engineer V	CADD Designer III	Admin	TOTAL HOURS	TOTAL FEE		
\$180	\$160	\$120	\$85	\$160	\$130	\$130	\$130	\$140	\$90	\$50				
Base Contract - Proposal														
3.1.4.5	Primary Sludge Pumping Buildings (2 Facilities - 12 Pumps)													
3.1.4.5.A	Sludge Pumps, VFD's, and Valves													
3.1.5	8	16	16		8				32	8				
Cost Estimates & Life Cycle Costs														
3.1.6	4	8	16		8	4				4				
Prepare Detailed Specifications, Bid Documents and Contract Documents														
	24	40	40		16	8	8			24				
Subtotal Hours														
	116	188	72	80	112	68	76	40	320	60	1128			
Subtotal Cost														
	\$18,560	\$22,560	\$6,840	\$9,000	\$14,560	\$8,840	\$9,880	\$5,600	\$28,800	\$3,000		\$131,120		
Task 3 - Detailed Design (Alternate 2 - Mechanical Thickening of WAS)														
3.2.1	Design Progress Meetings (25%, 50%, 90%, 100%)													
	6	16		16										
Prepare Construction Drawings														
3.2.2	2	8	8											
-- Replace Existing Gravity Thickening Equipment														
3.2.3	6	60	80	16	40				32					
-- Install Mechanical WAS Thickening Equipment in Existing Solids Processing Building														
3.2.4	4	8	16		8				160					
Cost Estimates & Life Cycle Costs														
3.2.5	Prepare Detailed Specifications, Bid Documents and Contract Documents													
	16	40			16					4				
Subtotal Hours														
	112	168	32	52	72	16	28	0	280	60	834			
Subtotal Cost														
	\$2,520	\$17,920	\$3,040	\$5,320	\$9,360	\$2,080	\$3,640	\$0	\$25,200	\$3,000		\$85,240		
Task 4 - Bidding Services														
4.1	Permits and Approvals													
4.2	2	4												
Pre-Bid Meeting														
4.3	2	12	20	2						16				
Bidding Administration														
	4	18	28	0	0	0	0	0	0	16	66			
Subtotal Hours														
	\$720	\$2,880	\$3,120	\$0	\$0	\$0	\$0	\$0	\$0	\$800		\$7,840		
Subtotal Cost														
Task 5 - Construction Administration Services (Alternate 1-10 Months)														
5.1.1	Pre-Construction Conference													
	2	4	4											
Shop Drawing Review														
5.1.2	8	40	16		24	8	16	8	8	16				

Engineer Fee Proposal: Investigation/Design Services Town Branch Wastewater Treatment Plant Thickening Evaluation & Equipment Upgrades REVISED 9-25-17 Per LFUGG Request											TOTAL HOURS	TOTAL FEE
Principal Engineer VII	Project Manager VI	Project Engineer IV	Project Engineer II	Electrical Engineer VI	Electrical Engineer IV	Mechanical Engineer IV	Architect IV	Structural Engineer V	CADD Designer III	Admin	TOTAL HOURS	TOTAL FEE
Base Contract - Proposal												
5.1.3	2	40	16									
5.1.4	24	40		8			8			16	16	
5.1.5			344			8				16	16	
5.1.6	8	8		8						8	8	
5.1.7	2	2							24	2	2	
Subtotal Hours	4	88	108	8	32	16	24	8	32	80	738	
Subtotal Cost	\$720	\$13,760	\$12,960	\$1,280	\$4,160	\$2,080	\$5,120	\$1,120	\$2,880	\$3,000		\$79,200
Task 5 - Construction Administration Services (Alternets 2-8 Months)												
5.2.1	2	6										
5.2.2	8	8	40	8	16					2	2	
5.2.3	2	32	12							12	12	
5.2.4	20	32								12	12	
5.2.5			280							12	12	
5.2.6	8	8		8						2	2	
5.2.7	2	2							12	2	2	
Subtotal Hours	4	76	92	0	24	0	0	0	12	52	548	
Subtotal Cost	\$720	\$12,160	\$11,040	\$0	\$3,120	\$0	\$0	\$0	\$1,080	\$2,600		\$88,080
Total Hours												
HOURLY RATE												
	54	466	686	768	134	108	136	52	656	258	3,312	
	\$180	\$160	\$120	\$95	\$160	\$130	\$130	\$140	\$90	\$50		
Additional Engineering Services Requested												
A.1		2			24				8	4		
A.1.1		2			8				8	4		
A.1.2		2			24				8	4		
Subtotal Hours	0	4	0	0	32	24	0	0	16	8	0	
Subtotal Cost	\$0	\$640	\$0	\$0	\$4,160	\$3,120	\$0	\$0	\$1,440	\$400		\$8,760
Notes												
1	All equipment, lighting, and electrical replacement and repair assume no electrical panel or electrical service changes.											
2	Section A - Additional engineering services requested, is additional in scope and fee to the RFP.											
3	NFPA 820 compliance review and design is included in the scope of services.											
4												