



ROGERS WATERWORKS AND SEWER COMMISSION MEETING AGENDA
SEPTEMBER 18, 2023
4:00 PM

AGENDA

CALL TO ORDER:

EMPLOYEE RECOGNITIONS:

ACTION ON MINUTES:

1. Approve minutes from August 21, 2023 Water and Sewer Commission Meeting

REPORTS:

1. Financial Reports - B. Dobler
2. RPCF Reports - T. Beaver
3. Engineering Reports - B. Sartain

NEW BUSINESS:

1. Rogers Pollution Control Facility Solids Handling PhII Dryer Selection Recommendation - B. Sartain
2. Rogers Pollution Control Facility Solids Handling PhII Design Consultant Recommendation - B. Sartain
3. Western Corridor Transmission Main Corridor Study Presentation - C. Buntin - Garver Engineers
4. Clarifier Coating Contract - T. Beaver
5. Vacuum Excavator Truck Purchase - J. Lunsford
6. New Service Truck Purchase - J. Lunsford

ADJOURN:

Rogers Waterworks and Sewer Commission
August 21, 2023
Minutes

The Rogers Waterworks and Sewer Commission held its regularly scheduled meeting at 4:00 PM, August 21, 2023, in the Rogers Administration Building located at 601 S 2nd Street.

Present were Commissioners Travis Greene, Kathy McClure, Jerry Carmichael, and Chairman Peter Farmer. Rogers Water Utilities staff present were Todd Beaver, Aaron Short, Dana Daniel, Brian Sartain, Debbie Putman, Brent Dobler, Johnny Lunsford, and Mark Landis. Paige Sultemeier was in attendance. Robert Frazier from the Frazier Law Firm was present.

Chairman Farmer called the meeting to order at 4:01PM.

Chairman Farmer called for an action on the minutes from the July 24, 2023, Water and Sewer Commission meeting, Commissioner Greene made a motion to approve the July 24, 2023 minutes, Commissioner McClure seconded. All in favor, 4-0 motion carried.

Chairman Farmer then recognized Brent Dobler for the Financial Reports. He stated that RWU is currently awaiting completion of the audit to present the final year-end financial reports. The annual audit will begin on Monday the 28th and all completed financial reports should be available by the September Commission meeting.

Chairman Farmer then recognized Brian Sartain to go over the July engineering reports. Brian went over a few of the latest plans submitted. Chairman Farmer asked how many plans RWU reviews every month. Sartain replied that we average around 40 reviews per month. RWU is currently working on the 12" waterline on Arkansas north of Chestnut to stay ahead of the proposed street widening. Commissioner Carmichael inquired about the Bellview/J.B. Hunt roundabout and if there was a utility relocation as well. Sartain stated that yes, there will be a 12" waterline relocation involved. RWU has not received a bid date for the Walnut St widening process at this time. Chairman Farmer asked what we have paid our plan review consultant to date, and Brian informed him that although we have an agreement to utilize Crafton Tull engineers for work that exceeds what our in-house engineers can approve, we have not utilized them for plan review to date.

Chairman Farmer then recognized Todd Beaver for the RPCF report. The plant has been operating smoothly, including processes and staffing. No issues on the industrial front, no surprises on inspections. He stated that staff has been diligently working on the FOG policy. The flow study on the headworks continues with FNI Engineering. I & I was down in July in spite of a somewhat wet month.

Chairman Farmer then recognized Brent Dobler to present Resolution No. 23-18 Cooperative Purchasing Agreements. He stated that RWU will utilize the State bid first, but if a piece of equipment is not on that list, RWU will then utilize cooperative purchasing agreements. This Resolution formally recognizes and codifies nationwide Cooperative Purchasing Agreements such as Sourcewell and HJAC. RWU feels that this is a more efficient process than bidding out each unique piece of equipment. These agreements go through a bid process to arrive at the final price. Commissioner Greene stated that he has seen construction projects bid this way. Robert Frazier stated that a construction project would fall under a different code section for RWU. Commissioner Carmichael stated that the Commission would certainly be made aware of all bids that utilize a cooperative purchasing agreement due to the \$35K amount that

requires Commission approval. Commissioner Greene made a motion to approve Resolution No. 23-18 Cooperative Purchasing Agreements, Commissioner McClure seconded. All in favor 4-0, Resolution passed.

Dobler continued and presented Resolution No. 23-19 Customer Service Operating Policy Updates. This Resolution updates operating policies regarding meter shut offs and other items such as how we contact customers that are subject to shut off. Chairman Farmer asked how we distributed this policy internally for input and how we will record and maintain this. Dobler replied that we sent it to all departments for input, and that Dana Daniel will be the repository for all policy. Commissioner Carmichael asked who makes the decisions on payment plans, and how a customer can get in substantial arrears with RWU. Dobler explained that issues in the past were a direct result of shut-offs being suspended. When RWU is enforcing shut-offs, large debts simply cannot occur since the water use will be stopped. Commissioner McClure made a motion to pass Resolution No. 23-19 Customer Service Operating Policy, seconded by Commissioner Carmichael. All in favor 4-0, Resolution passed.

Dobler continued and presented Resolution No. 23-20 Catastrophic Leak Policy. Formalizing and codifying existing policy that is administered uniformly across all customers. Commissioner Carmichael made a motion to approve Resolution 23-20 Catastrophic Leak Policy, seconded by Commissioner McClure. All in favor 4-0, Resolution passed.

Dobler continued and presented Resolution No. 23-21 Meters Policy. Dobler explained that the only time RWU has leverage to demand that a meter set conform to all installation specifications is before the meter is actually set in the service. Commissioner Carmichael inquired about the requirement for vacuum breakers on frost free hydrants. Dobler stated that RWU actively polices these since they are a hazardous connection. Commissioner McClure made a motion to approve Resolution No. 23-21 Meters Policy, seconded by Commissioner Greene. All in favor 4-0, Resolution passed.

Dobler continued and presented Resolution No. 23-22 Requesting City Council Resolution of Intent for RPCF Solids Handling Phase II Project. City Council approval is required by law before the issuance of the bonds. Commissioner Greene made a motion to approve Resolution No. 23-22, seconded by Commissioner McClure. All in favor 4-0, Resolution passed.

Chairman Farmer then recognized Todd Beaver to present Resolution No. 23-23 Flender Gear Reducer for RPCF Treatment Train 4. Beaver explained that engineered equipment does not always give RWU much choice of vendors when and if this custom equipment must be replaced. Commissioner McClure made a motion to approve Resolution No. 23-23 Flender Gear Reducer, Commissioner Greene seconded. All in favor 4-0, Resolution passed.

Todd Beaver then presented Resolution No. 23-24 Spare Transformer for RPCF. Beaver explained that due to the commercial rate RWU receives at the plant, RWU is responsible for any maintenance or replacement of onsite transformers. Currently, RWU does not have a spare transformer onsite at the RPCF but does have an emergency agreement with Springdale if RWU requires a transformer before this one arrives. The lead time on this piece of equipment is 14 months. Commissioner Greene made a motion to approve Resolution No. 23-24 Spare Transformer, Commissioner McClure seconded. All in favor 4-0, Resolution passed.

Todd Beaver then presented Resolution No. 23-25 Lamella Screen for RPCF. Beaver explained that these screens must be purchased from the original equipment screen manufacturer and that they are wear

items. Commissioner McClure made a motion to approve Resolution No. 23-25 Lamella Screen for the RPCF, Commissioner Carmichael seconded. All in favor 4-0, Resolution passed.

Chairman Farmer then recognized Brent Dobler to present Resolution No. 23-26 Signature of Resolutions. Dobler explained that he was responsible for but did not obtain signatures from then Chairman Mike Watkins on Resolutions 22-20, 22-21, 22-22, 22-23 and 22-24 from the last Commission meeting before Chairman Watkins completed his term and did not renew. This Resolution allows the current Chairman to sign these retroactively. Commissioner Carmichael made a motion to approve Resolution No. 23-26 Signature of Resolutions, Commissioner McClure seconded. All in favor 4-0, Resolution passed.

Chairman Farmer then recognized Johnny Lunsford to present Resolution No. 23-27 Waiving Competitive Bidding for Trench Boxes. Lunsford explained that RWU solicited and received three competitive quotes for trench boxes. RWU would like to waive the competitive bidding process so that RWU can purchase the specific trench boxes that are lighter weight and preferred by the utility. Commissioner Greene made a motion to approve Resolution No. 23-27 Waiving Competitive Bidding for Trench Boxes, Commissioner McClure seconded. All in favor 4-0, Resolution passed.

Chairman Farmer then recognized Brian Sartain for a motion to approve the City of Rogers bid results on the 13th Street Pedestrian Improvements and the Poplar & 13th Roundabout construction projects. Sartain showed the Commission drawings of the two projects and the RWU utility construction costs for each contract. Sartain stated that it appears construction pricing may be moving down from the highs experienced during Covid. This project is not in the budget since RWU did not anticipate this project being let this fiscal year and the fact that RWU was constrained on our sewer budget. RWU recommends awarding these two projects to Brothers Construction. Commissioner Greene made a motion to approve the award of these projects to Brothers Construction, Commissioner McClure seconded. All in favor, motion carried 4-0.

Sartain continued and presented a motion to recommend approval of a Facilities Extension Agreement for Prairie Creek PUD. Brian presented project plans showing the area of development to the Commission. The development is approximately 30 acre and will result in 24 estate lots. This development is outside the city limits of Rogers but resides within the RWU service boundary. Our specifications state that any water line extension outside the City of Rogers must come before the Water and Sewer Commission for approval. This project requires no monetary participation from RWU. Staff recommends approval of a Facilities Extension Agreement for Prairie Creek PUD. Commissioner Carmichael asked where the existing water main is located and where the development will connect. Chairman Farmer asked if RWU were going to require an extension of this development to loop the water line with an existing main offsite to the North. Sartain explained that it appears that the developer is planning to extend the development at some time and that this would be a better time to request this of the developer. Commissioner Carmichael asked who pays for the extension of the main. Sartain replied that the developer does. Chairman Farmer inquired of when RWU requires extensions of offsite main. Sartain responded that we look at each development on an individual basis, but the intent is to always provide for service to the next parcel for continuity. Commissioner McClure made a motion to approve the Facilities Extension Agreement for Prairie Creek PUD. Commissioner Greene seconded. All in favor, motion carried 4-0.

Dobler then asked Robert Frazier to go over the options available for the Commission to approve a new Water and Sewer Commissioner to fill Roger Surly's vacated position. Commissioner Carmichael asked if

the Commission could make the decision today. Mr. Frazier confirmed that the Commission could indeed do this. Commissioner Carmichael asked Dobler if he had a recommended candidate, Dobler stated that he did, and that it was Paige Sultemeier who was in attendance. Commissioner Carmichael made a motion to approve the appointment of Paige Sultemeier to fill the unexpired term of Roger Surly's vacated position. Commissioner Greene seconded the motion. Motion carried, 4-0.

With no further items on the Agenda, Chairman Farmer adjourned the meeting at 5:12 pm.

Respectfully submitted,

Brent Dobler, Acting Secretary
File: rwwscmin82123

Brent,

Gaines is scheduled to resume the audit next week starting on either Monday or Tuesday.

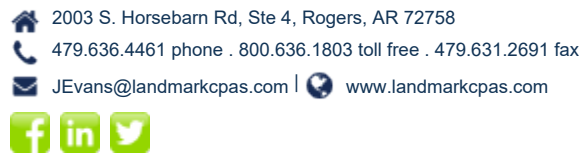
Based on the time-lines laid out by Robert Frazier, I'm more comfortable promising the report will be completed by Monday, November 6, 2023 for approval at the commission's November 20th meeting.

We are running later this year than usual due to some staffing situations on our end and also the departure of the prior controller of RWU. However, no major issues have been brought to my attention and its just a matter getting back on the job to complete it.

Let me know if you have any questions.

Thanks,
John

John Evans, CPA
Member



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Rogers Pollution Control DMR Summary

2023

	Limits	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Phosphorus Mo Avg lbs/day	117	8.19	15.75	20.73	7.61	16.50	10.46	8.93	7.70				
Phosphorus 30 Day Mo Avg mg/l	1	0.10	0.15	0.15	0.10	0.22	0.15	0.14	0.11				
Phosphorus Max 7 day Avg mg/l	2	0.16	0.23	0.15	0.31	0.37	0.20	0.17	0.16				
May - Oct	Limits												
Total Suspended Solids lbs/day Mo Avg	1,751					125.2	65.1	67.0	56.1				
Total Suspended Solids Mo Avg	15					1.7	0.9	1.1	0.8				
Total Suspended Solids 7 day Avg	23					2.5	1.1	1.3	1.0				
Nov- April													
Total Suspended Solids lbs/day Mo Avg	2,335	132.6	456.5	395.8	77.4								
Total Suspended Solids Mo Avg	20	1.7	4.2	4.2	1.1								
Total Suspended Solids 7 day Avg	30	2.5	7.4	4.2	11.2								
April	Limits												
Ammonia lbs/day Mo Avg	234				<18.50								
Ammonia Mo Avg mg/l	2.0				<.25								
Ammonia max 7 day Avg mg/l	4.5				<.27								
May- Oct	Limits												
Ammonia lbs/day Mo Avg	175					<18.42	<18.02	<15.56	<20.03				
Ammonia Mo Avg mg/l	1.5					<.25	<.25	<.25	<.28				
Ammonia max 7 day Avg mg/l	2.3					<.26	<.25	<.25	<.37				
Nov- March	Limits												
Ammonia lbs/day Mo Avg	350	<20.42	<32.44	<42.68									
Ammonia Mo Avg mg/l	3.0	<.26	<.31	<.31									
Ammonia max 7 day Avg mg/l	4.5	<.29	<.34	<.54									
May - Oct	Limits												
CBOD Mo Avg lbs/day	1,168					107.2	123.4	61.0	69.2				
CBOD Mo Avg mg/l	10					1.40	1.80	1.00	1.00				
CBOD Max 7 day Avg. mg/l	15					1.70	1.40	1.20	1.20				
Nov- April	Limits												
CBOD Mo Avg lbs/day	1,751	<202.6	<389.2	<296.9	<123.6								
CBOD Mo Avg mg/l	15	<2.5	<3.6	<2.4	<4.1								
CBOD Max 7 day Avg. mg/l	23	<3.3	<4.9	<2.6	<1.6								



Monthly Summary of Industrial Pretreatment Activities August 2023

# of industrial control monitoring activities:	0
Industries control monitored:	n/a
# of self monitoring reports processed:	9
# of industrial inspection activities:	2
Industries inspected:	Tyson Chick'N Quick, Ozark Mt Poultry
# of short site visits:	0
Industries visited:	n/a
# of Notices of Violation:	0
Notices of Violation:	n/a

Surcharges July 2023 issued in August 2023

User Name	Monthly Flow MG	TSS ppm	TSS \$ Charge	CBOD ppm	CBOD \$ Charge	NH3N ppm	NH3N \$ Charge	TPhos ppm	TPhos \$ Charge	Total \$ Charge
Ozark Mt Poultry	3.914163	46.3	0.00	688.7	2,074.04	121.83	2,441.23	12.07	1,337.77	5,853.04
SE Poultry	2.620368	146.3	0.00	535.8	954.01	40.97	397.24	4.28	30.75	1,382.00
Tyson CNQ	5.222590	106.8	0.00	426.6	1,283.08	3.74	0.00	5.00	220.82	1,503.90
Tyson of Rogers	4.434004	106.0	0.00	143.5	0.00	124.2	2,827.11	7.65	684.74	3,511.85
WestRock	0.053585	1.0	0.00	420.0	12.78	6.25	0.00	0.20	0.00	12.78
Sum \$										12,263.57

Surcharge thresholds in mg/L and cost per pound of loading

Pollutant	TSS	CBOD	NH3N	TPhos
mg/L threshold	200	200	15.00	4.00
\$ per pound	0.14	0.13	0.70	5.08

The amount surcharged for results submitted during the 2023 – 2024 budget year is \$12,263.57 (User data submitted for one month).

The Tyson Chicken Quick inspection covered the following information:

- Repairs to the older aeration tank continue to be postponed. The tank should be repaired by 2025.
- Stormwater floods the area west of the older aeration tank where there is a gap between two buildings. The Distribution Center building's foundation and siding are water damaged. TCQ plans on installing a larger diameter stormwater line and sump pumps to address this problem.
- The waste marinade holding tank is no longer being used and it will be removed soon. The waste marinade is now added to the offal trailer instead.
- Two new weep pads (a location for collecting liquid draining from the back of parked trailers) are being built. Any liquid collected will be pumped to pretreatment. However, during rain events, the pumps will be turned off after 30 minutes.

- A new gate and barrier have been added to protect the surge tank and bulk chemical loading area.
- Emergency Stop cords have been added to all three DAF units.
- The installation of a new V-notch Weir is also planned. It will be the same dimensions as the current one.
- The average water usage per month is 14.641 million gallons. The average wastewater effluent total discharge per month is 5.627 million gallons.
- TCQ continues to track water usage with respect to gallons of water used per pound of finished product. Ten years ago, the rate was 0.77 gallons/pound. Currently, the rate is 0.50 gallons/pound.
- Spilled chemicals continue to damage the floor in the PSSI bulk chemical and storage area. The mixing station “sinks” are too small and allows chemicals to end up on the floor. Adding secondary containment was discussed.
- Similar to last year, in the Revo Drum Washroom, each Revo Drum wash unit has two chemical containers side by side. The KC400 is an acid and the KC555 is a base. Several of the KC555 containers had a crusty layer of sodium hydroxide built up on them. When not in use the chemicals should be capped and separated.

It was recommended that TCQ should work on improving the chemical issues listed above.

The Ozark Mountain Poultry inspection report is still being edited.

Report prepared by Paul Burns, Pretreatment Coordinator



FOG Inspection Report Monthly Summary for August 2023

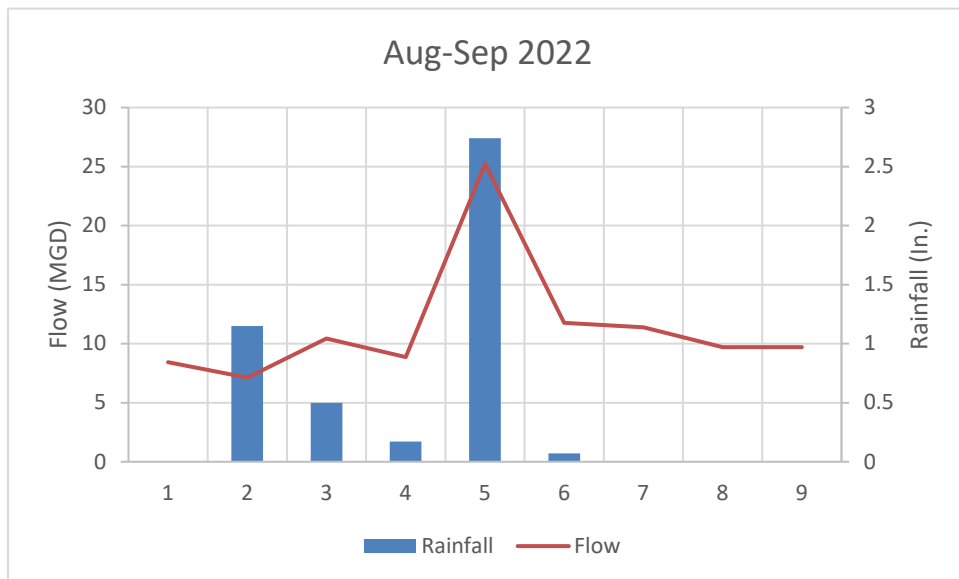
- 57 known FSE's were pumped in August. A list of serviced establishments can be generated upon request.
- We had a second meeting for the FOG ordinance and policy review. I have been making the changes that were discussed along with other updates. I hope to have a wrap up meeting before sending it on to Robert Frazier.
- Superior Collision connected to the City's sewer and abandoned their septic tank. They currently use a closed loop system that reclaims and filters/chlorinates their wash bay areas wastewater. That system will be removed, and a new Striem OT-500 oil separator will be installed.
- I had my final inspection at Tidal Wave Auto Spa. I will go and speak to the Site Leader about their oil separator once they open.
- I met with the new owner of City Pump to discuss our fats, oils and grease program. He already informed the grease interceptor pumpers of the change, so his service schedule was never interrupted. I was unaware of Taco Casa's new ownership and they ran into some plumbing issues.
 - City works will hopefully improve my response time with new ownership. Currently I am unaware of the changes unless the old owner informs me, I see an announcement sign or perform an inspection at the right moment.
- Most of my inspections were normal. I did have a few establishments that need to address securement issues with their green plastic lids or missing cleanout caps. Another location is having issues with employees not following best management/clean kitchen practices. The district managers have been informed of the issues and I will be back to see how things are improving.
- Shakes off walnut is finally open. I stopped by to discuss the program and will be back in a month or two to perform my official inspection.
- Paul Burns and I conducted an annual industrial inspection at Tyson Chick'N Quick and Ozark Mountain Poultry.
- I continue to help with plan reviews and have been involved in pre-construction meetings with Risk Reduction and RWU when grease interceptors/oil water separators are involved.

Amber Owens
F.O.G. Inspector
Rogers Pollution Control Facility
(479) 273-7378 Ext. 301

Pollution Control Facility Significant Events

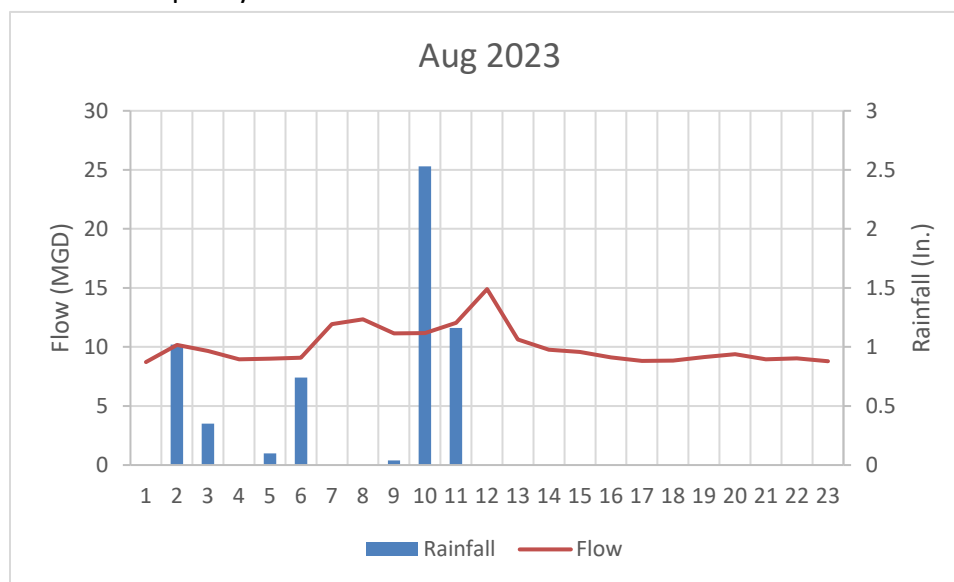
August 2023

1. Solids handling project completed equipment bid and review.
2. Continue to work on Citiworks implementation.
3. We treated 297 MG in August. $31 \times 8.5 \text{ MGD} = 263.5 \text{ MG}$. That means we treated approximately 34 MG from I and I. These flows included 5.94" of rain over 7 events. The historical average rainfall for August is 3.34".
4. I looked back at last August and found a 2 + inch rain event to see what our I and I looked like and found that event crossed into September:

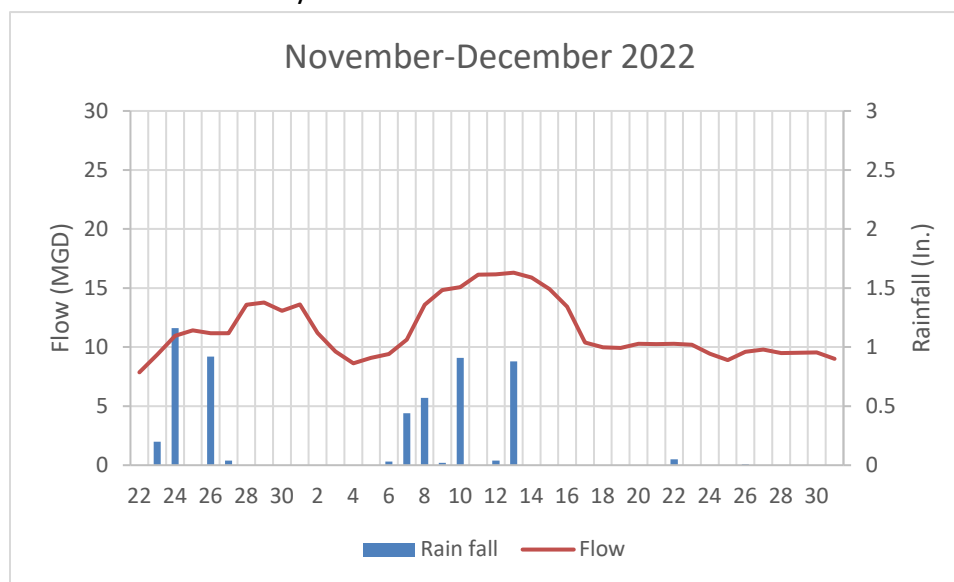


- a. I compared it to the one we had this August and keeping in mind that the immediacy of effluent flow peak depends on equalization available found they weren't much different reactions looking at how long to return to normal flow

and worked pretty well:



- b. I went forward until I found where our problems began to show and found that Nov into December the recovery to normal flow and even the size of reaction to small events was really drastic:

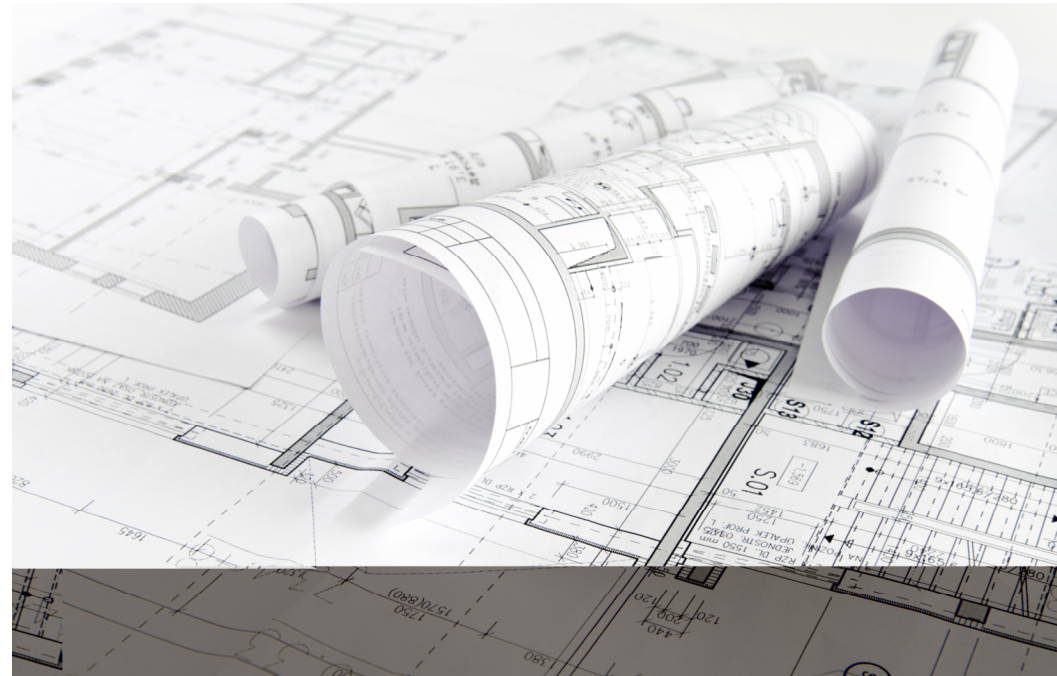


- c. These small events that didn't overwhelm our storm drains did not lead to inflow, the problem was saturated ground and rising water table and creek flow infiltrating the system. Both late summer graphs show getting back to high 8 MGD flows within 2 or 3 days. The previous winter graph does not return to that for months. As we move toward those saturated ground months, I want to thank Engineering and Operations for their efforts this summer to address our known issues and determination to find new ones to address. I want to thank the commission for helping us craft a policy to get private repairs done.

Operating the plant near max flow for months on end is very stressful on staff and equipment and costs the ratepayers significantly. I'm hopeful we will see the fruits of that effort this winter.

Engineering Report

Brian Sartain, Utility Engineer
9/18/23





August Development Plan Review

- 12 Plumbing Reviews

Plumbing / CCC Review

Project Name	Submittal #	Reviewed	Business Type
First Baptist Church Ph. 5	1st Review	8/1/2023	Business
Asain Market- 3724 W Walnut St	2nd Review	8/2/2023	Business
Olive Nature School	1st Review	8/4/2023	Business
Horse Barn 2	1st Review	8/4/2023	Professional Offices
Dr Lafferty	1st Review	8/10/2023	Business
Thai Restaurant Remodel	1st Review	8/18/2023	Business
Rogers Little Theater-116 S 2nd	1st Review	8/18/2023	Business
Swigs	1st Review	8/18/2023	Business
Venture Park Garage Suites of Arkansas	1st Review	8/18/2023	Garages
Glide Xpress	1st Review	8/21/2023	Business
Dunkin Donuts- 2110 W Walnut	1st Review	8/22/2023	Business
Van Dyke Center Warehouses	1st Review	8/31/2023	Warehouse



August Development Plan Review

- 33 Civil Plan Reviews

Civil Review

Project Name	Submittal #	Reviewed	Business Type
Fields at Pinnacle - Lot 2 Mixed Use	7th Review	8/2/2023	Leased Commercial
First Baptist Church Ph. 5	1st Review	8/2/2023	Business
Mercy Temporary Office Trailer	2nd Review	8/3/2023	Business
CarMax	2nd Review	8/3/2023	Auto Dealer
NWA Industrial Partners Warehouse Ph. 1	2nd Review	8/4/2023	Business
Horse Barn 2	3rd Review	8/4/2023	Professional Offices
Olrich Sewer Main Extension	2nd Review	8/4/2023	Business
Olive Nature School	4th Review	8/7/2023	Business
Cottages at Magnolia Farms East	1st Rev TR	8/7/2023	Business
Soaring at Scissortail	3rd Review	8/7/2023	Business
Forty32 Vet Clinic	6th Review	8/8/2023	Veterinary Clinic
First Baptist Church Ph. 5	3rd Review	8/9/2023	Business
Saint Vincent de Paul School Expansion	2nd Review	8/10/2023	Business
2nd Street Commercial Park 2023	3rd Review	8/11/2023	Warehouse
Pinnacle Springs-SJ Collins	7th Review	8/15/2023	Commercial Mixed Use
Norwood Sewer Extension	1st Review	8/15/2023	Business
Pinnacle Springs-SJ Collins	6th Review	8/15/2023	Commercial Mixed Use
PLP Parking Lot Expansion	2nd Review	8/16/2023	Business



August Development Plan Review

Civil Review

Project Name	Submittal #	Reviewed	Business Type
Assembled Products Corporation	1st Rev TR	8/18/2023	Business
Glide Xpress	1st Rev TR	8/18/2023	Business
Lisa Academy Ph. 2	2nd Review	8/18/2023	Business
Reserve on Dixieland	9th Review	8/18/2023	Apartments/Leased
Cottages at Magnolia Farms - West	1st Rev TR	8/18/2023	Business
M&D Adventures	4th Review	8/23/2023	Animal Boarding
Founders East	2nd Review	8/24/2023	Multi-Use
Saint Vincent de Paul School Expansion	3rd Review	8/25/2023	Business
8th Street Retail	1st Rev TR	8/25/2023	Business
Van Dyke Center Warehouses	4th Review	8/25/2023	Warehouse
CarMax	3rd Review	8/25/2023	Auto Dealer
Pinnacle Village Retail & Office	2nd Review	8/25/2023	Mixed Use
Cottages at Magnolia Farms East	2nd Review	8/25/2023	Business
Heights at Magnolia Farms	2nd Review	8/25/2023	Business
NWA Industrial Partners Warehouse Ph.1	3rd Review	8/29/2023	Business

Fire Sprinkler Review

Project Name	Submittal #	Reviewed	Business Type
Whitney Plaza (Lin Brothers)	1st Review	8/8/2023	Leased Retail Space
Whitney Plaza (Lin Brothers)	2nd Review	8/9/2023	Leased Retail Space
Vlora Warehouse/The Place	1st Review	8/14/2023	Warehouse



Project Status

Status Change
Currently on Hold

Pre-Design / Concept (2)

- RPCF Capacity Improvement Project
- Water Transmission Corridor / Emergency Conn Study

In Design (14)

- RPCF Solids Handling Facility, Ph. II
- Hwy 112 Lift Station
- Sanitary Sewer Improvements – Chateau Dr. to 24th
- Arkansas St. (Chestnut to Union)
- W. Poplar St. (7th to 1st)
- 4th St. Water & Sewer Replacements – Olrich to Oak
- 7th St. & Will Rogers Water & Sewer Replacement
- Hwy 12 E Waterline Replacement
- Blossom Way Sewer Improvements
- Blossom Way Trib 2 Sewer Improvements
- S. 28th Place
- N. 2nd St. Streetscape & Overlay (Downtown)
- S. 3rd St. Reconstruction (Downtown)

Out to Bid (1)

- Walnut St. Widening (8th to Dixieland)

Bids Received (1)

- RPCF Solids Handling Facility, Ph. II (Dryer Equip. RFP)

Under Construction (11)

- Pinnacle & Champions Sewer Improvements
- E. Pine St.
- Centennial Park
- Mt. Hebron & Garrett Rd. Improvements
- JB Hunt Dr.
- Uptown & Oak St. Overpasses
- Banz Addition Sewer Replacement
- 2023 Misc. Waterline Replacements
- Sewer Repairs (Blossom Way, 24th & Olive, Dixieland & Town West
- Bent Tree & Berry Farm Lift Station Decommissioning
- Arkansas St. (North of Chestnut)
- Poplar & 13th St. Roundabout / 13th St. Pedestrian Imp.

Completed (0)

- Mills Sewer/ 2nd St. Water & Sewer / Saltgrass Waterline



Administrative / Notable Events

- Staffing
 - Filled position for Sr. Engineering Technician
 - Filled position for Design Technician (moved from inspection)
 - Advertised position for Construction Inspection Technician
- Cityworks / GIS
 - GIS working on reconciliation of approx. 7,500 service addresses to match between Cityworks/GIS & Tyler
 - PLL Training week of Sept. 25th
 - AMS Training week of Oct. 2nd
 - Go-Live the week of October 9th
- Notable Events
 - Walnut Widening bid (Scheduled for Sept. 20th) was withdrawn by ArDOT due to the inability to maintain 4 lanes of traffic throughout the duration of construction.
 - Blossom Way Sewer has been held up due to gas line laid over sewer and in the way of excavation.
 - Received dryer bids and updated cost sitework estimates

Blossom Way Sewer at Rife Medical





Material Storage Improvements

Completion of Material
Storage Improvements



September 14, 2023

Mr. Brian Sartain, P.E.
Utility Engineer
Rogers Water Utilities
P. O. Box 338
Rogers, Arkansas 72757

Re: Rogers PCF Phase II Solids Handling Improvements
Thermal Sludge Dryer Equipment Bid Recommendation
HW Project No. 2020043

Dear Mr. Sartain:

Per your request, we have evaluated and performed a life cycle cost analysis on the two (2) bids received on Tuesday, August 22, 2023, for the proposed Thermal Sludge Drying Equipment at the Rogers Pollution Control Facility (PCF). The results of this review and a summary of the Life Cycle Cost Analysis are enclosed with this letter.

Based on this review of the bids and the Life Cycle Cost Analysis, we recommend that RWU enter into negotiations with Huber Technology for the purchase of the Thermal Sludge Drying Equipment for the Rogers PCF. Huber Technology's bid had both the lowest capital cost and the lowest expected life cycle cost.

We understand that you will be presenting this recommendation and requesting permission to negotiate from the Rogers Waterworks and Sewer Commission at the September meeting. Please let us know if you would like us to attend the meeting and be available to answer any questions.

Sincerely,

HAWKINS-WEIR ENGINEERS, INC.



Joshua S. Durham, P.E.

JSD/gch
Enclosures Equipment Bid Review Matrix
Life Cycle Cost Analysis Summary

cc: Mr. Brent Dobler, Superintendent, Rogers Water Utilities

Staff recommends acceptance of the bid by Huber technology in the amount of \$12,280,042, allowing staff to negotiate the final form and content of the equipment purchase agreement.

110 So. 7th Street • P.O. Box 648 • Van Buren, AR 72957 • Ph: (479) 474-1227 • Fax: (479) 474-8531

211 Natural Resources Drive • Little Rock, AR 72205 • Ph: (501) 374-4846

516 East Millsap Road • Suite 103 • Fayetteville, AR 72703 • Ph: (479) 455-2206

403 Garrison Avenue • Suite 101 • Fort Smith, AR 72901 • Ph: (479) 242-4685

BID COMPARISON		
Bid Section	Comments	
	Huber	Komline-Sanderson (Wyse)
Exhibit A - Bid Form	Equipment Bid - \$12,280,042.00	Equipment Bid - \$14,981,946.00
	Material Supply Bond - \$92,797.00	Material Supply Bond - \$ 319,115.00
	Total Base Bid - \$12,372,839.00	Total Base Bid - \$15,301,061.00
	Did not include a time delivery for the MCC	Did not include sales tax as required by the Invitation to Bid. With Rogers current sales tax rate of 9.5% this would add \$1,423,284.87 to the Equipment Bid and raise the Total Base Bid to \$16,724,345.87
		With Sales Tax the cost difference is \$4,351,506.87
Exhibit D - Life Cycle Cost Worksheet	Energy Efficiency: Estimated natural gas use of 1,585 Btu/lb of water evaporated (@ 4,800 lb of water evaporation per dryer).	Energy Efficiency: Estimated natural gas use of 8,850 ft ³ /h per dryer equates to 1,844 Btu/lb of water evaporated (@ 4,800 lb of water evaporation per dryer). The overall energy efficiency of the unit is 0.00054 lb of water per Btu, which is lower than the performance requirement of 0.00063 lb of water per Btu - Will have a considerable impact on life cycle costs.
	Startup Time: Huber recommends maintaining dryer in an idle mode to reduce startup time - wasted energy during non-operating periods (10 h/d).	Startup Time: K-S recommends maintaining dryer temperature at operating temperature to reduce startup time - wasted energy during non-operating periods (10 h/d). If the dryer cools down, may take longer to get up to the required temperature to start feeding (120 min per K-S, but could take longer).
	Shutdown Time: Huber estimates 120 minutes to empty the dryer.	Shutdown Time: K-S estimates 300 minutes to empty the dryer. In Exhibit F - Technical Exceptions, K-S has clarified that shutdown time will not be achievable while attended and that unattended shut down procedure would be utilized to accommodate this requirement - unattended emptying of material from the dryer is not recommended.
Exhibit E - Itemized Parts List	No Spare Parts are listed as being provided for the Centrifugal Pumps (11135-1.05.A), or heating water boilers (15525-1.05.A).	No spare parts are listed as being provided for the Baghouse (11924-1.08.A), Live Bottom Bins (13204-1.05.A), or Conveyors (14552-1.04.A)

Bid Section	Comments	
	Huber	Komline-Sanderson (Wyse)
Exhibit F - Requested Revisions	Proposed custom built motor control panels in place of Motor Control Center. Noted expected time savings of 4 months	Komline-Sanderson did not review the ban on Telecommunications Equipment and takes exception to this requirement
	Insufficient information was provided to evaluate proposed Motor Control Panels including conformance with National Electrical Code	Liquidated Damages limited to 3% (459,031.83 based on Total Bid). This equals 91.8 days at \$5,000 per day.
	No costs were provided to include an MCC in lieu of the proposed Motor Control Panels	RWU is responsible for notification of non-conforming goods within 24 hours of receipt
	The use of Motor Control Panels may require additional safety disconnects in classified spaces	Bid did not include taxes (\$1,423,284.87)
	The time savings with a Motor Control Panel will not decrease the project delivery time as either an MCC or distribution panelboard for the building supplied by Crossland Heavy will drive the schedule	Warranty repairs are FOB at the manufacturing location
		Does not provide shop drawings, dryer sizing calculations, catalog sheets, bearing calculations, or subassembly drawings.
		Komline-Sanderson does not carry product liability insurance
		Cancellation charge is cost of work to date plus 25%
		Komline-Sanderson reserves the right to charge for additional engineering hours and costs to address coordination items with the Fire Marshall
Other Comments	Equipment cost as of January 2023 included in 15% Budget Validation by Crossland Heavy - \$11,935,500 with Tax	Equipment cost as of January 2023 included in 15% Budget Validation by Crossland Heavy - \$10,832,747 with Tax
	Base Bid appears to include five (5) years of spare parts	Included vertical feed conveyor for dewatered sludge. 14552-2.02.A requires a maximum slope of 25 degrees
	Warranty limited to 12 months from startup or 18 months from delivery. Section 01783-1.01.D requires 2 years from delivery	Requires cooling feed water at less than 65 degrees F. Specifications and Addendum No. 1 clarifies that cooling water can be up to 90 degrees F in the summer.
	Included a 5 year Maintenance Protection Program in Base Bid which includes annual site visits and a 10% discount on parts	The submittal will not include engineering calculations or 3D drawings. Specification Section 01161 requires that seismic calculations be provided and Section 01300-2.01.A.1 requires 3D drawings compatible with Revit 2019.

Bid Section	Comments	
	Huber	Komline-Sanderson (Wyse)
	15% equipment cost as of January 2023 did not include a polymer system. Based on feedback from Springdale an injection ring would help the cake flow better and reduce pump discharge pressure. Huber says it is not needed but followed the spec and provided a system. They are using polymer rather than water for the system.	Only one (1) digital copy of the O&M Manual will be provided with a license to create copies. Section 01782-1.03.C requires four (4) paper copies be provided
		Equipment Deficiencies (Not meeting Specifications): TEFC Motor provided for the lumpbreaker and dryer drive mechanism - Specification called for an explosion proof motor (due to high dust environment). All motors must be rated for the location classification
		Equipment Deficiencies (Not meeting Specifications): Bolted access panels for maintenance access not included. (K-S Comment: Need further conversation with the engineer about the best suited design for operation with the utility).
		Equipment Deficiencies (Not meeting Specifications): Several deficiencies noted for the dust baghouse - 1) No rotary airlock for physical isolation to prevent a deflagration from propagating , 2) Compressed air system not provided for pulsing/cleaning the bags, 3) Vibrators not provided to prevent bridging inside the baghouse, 4) Not clear from the submittal if deflector plate is included for the deflagration vent - typically provided when venting horizontally to direct a deflagration upwards to prevent injury to personnel or damage to property.
		Equipment Deficiencies (Not meeting Specifications): Instrumentation & Control - 1) Missing level sensors in the cake hoppers, 2) Missing differential pressure sensors in the baghouse (to detect plugged bags), 3) local disconnects and HOA excluded
		Dust Collector Baghouse (\$1,250,000) - No information was provided about which requirements were added to increase the price. No deviations of the specification were proposed. The main bid document did not list all baghouse items in detail.

Bid Section	Comments	
	Huber	Komline-Sanderson (Wyse)
		Third Party On-Site DHA (\$450,000) - This was discussed during the design process but apparently was never included in the requested budget pricing
		Ductwork, Insulation, and Thermal Expansions (\$1,000,000) - This ductwork is part of the drying system and required for recirculation and heating of the air. This was included to ensure a single source of responsibility for the equipment. Stainless Steel was specified due to the moist, abrasive nature of the exhaust. If this duct was not in the original quote it should have been in Crossland's cost which can now be removed.
		Exterior Deflagration Deflector Duct (\$300,000) - This is a standard safety measure when deflagration vents are located above areas where people could be located to prevent injuries in the event of an explosion.



LIFE CYCLE COST ANALYSIS
DRYER PROPOSAL COMPARISON



Rogers Water Utilities
Rogers PCF Phase II Solids Handling Improvements
B&V Project No: 406493
HWEI Project No. 2020043

Prepared By: L. Overhaug
Date: 8/30/2023
Updated By: M. Hockenberger
Date: 9/14/2023
Verified By: L. Overhaug
Date: 9/14/2023

	Huber	Komline-Sanderson	Price Difference	Higher Supplier
DRYER EQUIPMENT	\$ 28,045,196	\$ 32,723,703	\$ 4,678,507	Komline-Sanderson
FACILITY COST FACTORS	\$ 4,497,098	\$ 4,549,795	\$ 52,697	Komline-Sanderson
TOTAL CAPITAL COST	\$ 32,542,294	\$ 37,273,498	\$ 4,731,204	Komline-Sanderson
ANNUAL OPERATING COST FACTORS (NG/POWER)	\$ 386,094	\$ 492,113	\$ 106,019	Komline-Sanderson
ANNUAL MAINTENANCE	\$ 91,760	\$ 81,000	\$ 10,760	Huber
NET PRESENT VALUE	\$ 7,111,180	\$ 8,526,481	\$ 1,415,301	Komline-Sanderson
TOTAL	\$ 39,653,474	\$ 45,799,979	\$ 6,146,505	Komline-Sanderson

Staff recommends approval of the design amendment with hourly fees in amount not to exceed \$2,555,000, allowing staff to negotiate the final form and content of the agreement.

AMENDMENT NO. 4
To The
AGREEMENT FOR PROFESSIONAL SERVICES
Between
ROGERS WATER UTILITIES
And
HAWKINS-WEIR ENGINEERS, INC.

In accordance with the **AGREEMENT** for **PROFESSIONAL SERVICES** dated September 2, 2020, (hereinafter called **AGREEMENT**) between the Rogers Water Utilities (hereinafter called **OWNER**) and Hawkins-Weir Engineers, Inc. (hereinafter called **ENGINEER**) in connection with the **Rogers Pollution Control Facility (PCF) Solids Handling Improvements, Phase II (HWEI Project Number 2020043)** (hereinafter called **PROJECT**), OWNER hereby authorizes ENGINEER to proceed with the following additional services:

SECTION 1 – SCOPE

Rogers Water Utilities has directed the Engineer to amend services included in the AGREEMENT on the PROJECT. These amended services include Preliminary and Final Design of the proposed Thermal Sludge Drying Facility based on the Thermal Sludge Drying Equipment Selected by the Owner. Detailed services are included in the attached Exhibit A, Amendment No. 4 Scope of Services.

OWNER shall compensate the ENGINEER for providing the services set forth herein in accordance with the terms of the Agreement. ENGINEER's Lump Sum charges for this Amendment shall be as provided as shown on the attached Exhibit B, Amendment No. 4 Lump Sum Fee Proposal.

SECTION 2 – PERIOD OF SERVICE

The scope of Services as defined in Section 1 will be completed within **12-months** of the effective date of this Amendment No. 4. Engineer will proceed with providing the services set forth herein immediately upon receiving the Notice to Proceed for this Amendment.

SECTION 3 – COMPENSATION

OWNER shall compensate ENGINEER on a Lump Sum basis for providing the additional services set forth herein in accordance with the terms of the AGREEMENT. Total compensation shall be increased with this Amendment by **Two Million Five Hundred Fifty-Five Thousand and 00/100 Dollars (\$2,555,000.00)**. The total compensation from the original AGREEMENT plus Amendment No. 4 described herein shall not exceed **Three Million Two Hundred Seven Thousand and 00/100 Dollars (\$3,207,000.00)** without written approval of OWNER.

IN WITNESS WHEREOF, the parties to these presents have executed this contract in three (3) counter parts, each of which shall be deemed an original, in the year and day first above mentioned.

ENGINEER:

OWNER:

HAWKINS-WEIR ENGINEERS, INC.

ROGERS WATER UTILITIES

By: _____
Brett D. Peters, P.E., President

By: _____
Brent Dobler, Superintendent

Date Signed: _____

Date Signed: _____

END OF AUTHORIZATION



Exhibit A
Amendment No. 4 Scope of Services
Solids Handling Improvements Phase II
Rogers Water Utilities
HWEI Project No. 2020043
September 14, 2023



PROJECT DESCRIPTION

Hawkins-Weir Engineers, Inc. (Consultant) and its Subconsultant (Black & Veatch) will complete the Preliminary and Final Design of the proposed Thermal Sludge Drying Facility based on the Thermal Sludge Drying Equipment selected by Rogers Water Utilities (Owner). This Amendment will also cover the design of the replacement Maintenance Building, the proposed Sludge Mixing Structure, repairs to the medium voltage power loop, and the replacement of the existing emergency standby generator.

As part of this Amendment, the Consultant and Subconsultant will also assist, as needed, the Construction Manager at Risk (CMAR) during the advertising and bidding phase of the project.

SCHEDULE

The project will be completed within twelve (12) months of execution of this Amendment.

SCOPE OF WORK

The Scope of Services includes the following task series:

- A. Task 8 – Preliminary Design
 - 1. Conduct an Internal Design Team Kickoff Workshop
 - a. Prepare a Meeting Summary
 - 2. Conduct six (6) periodic Design Team meetings with the Owner and CMAR
 - a. Prepare Meeting Summaries
 - 3. Manage a Geotechnical Investigation by our subconsultant, GTS, Inc.
 - 4. Supplement existing survey data, as necessary
 - 5. Prepare 50% preliminary design drawings based on the Thermal Sludge Drying Equipment selected by the Owner for the following improvements:
 - a. Thermal Sludge Dryer Building
 - b. Maintenance Building
 - c. Sludge Mixing Structure
 - d. Standby Power System
 - e. Medium Voltage Power Distribution System Repairs
 - 6. Deliver electronic copies of the Plans to the Owner and CMAR
 - 7. Coordinate with the CMAR to develop early bid packages for the following items:
 - a. Pre-Engineered Metal Buildings
 - b. Electrical Switchgear
 - c. Standby Generator
 - 8. Assist the CMAR with the preparation of Underground Fuel Storage Tank Removal permitting
 - 9. Assist the CMAR as needed with the development of the 50% cost estimate
 - a. Review the estimates prepared by the CMAR and provide comments



Exhibit A
Amendment No. 4 Scope of Services
Solids Handling Improvements Phase II
Rogers Water Utilities
HWEI Project No. 2020043
September 14, 2023



10. Participate in the 50% Design Review Meeting
 - a. Prepare Meeting Summaries
- B. Task 9 – Final Design
 1. Conduct six (6) periodic Design Team meetings with the Owner and CMAR
 - a. Prepare Meeting Summaries
 2. Prepare 90% design drawings, construction details, and technical specifications incorporating the comments received from the Owner and CMAR on the preliminary design drawings
 - a. Prepare Technical Specifications based on the Engineer's standard format
 - b. Coordinate with equipment manufacturers during design to confirm that required products can meet the American Iron & Steel (AIS) requirements
 - c. Deliver electronic copies of the Plans and Technical Specifications to the Owner and CMAR
 3. Assist the CMAR, as needed, with the development of the 90% cost estimate
 4. Prepare NPDES Construction Permit Application for submission to the Arkansas Division of Environmental Quality (DEQ)
 5. Participate in a 90% Design Review Meeting
 - a. Prepare a Meeting Summary
 6. Prepare Final Plans and Technical Specifications incorporating comments from the Owner and CMAR
 7. Submit plans for review by Owner, CMAR, Arkansas Natural Resources Division (NRD), and Arkansas Department of Health (ADH)
 8. Submit Plans to the City of Rogers Planning Department, and address their permitting requirements
 9. Perform internal QAQC review
 10. Revise Plans based on comments received from the Owner, NRD, ADH, and QAQC Review
 11. Deliver two (2) full-size copies of the final design documents sealed by a Professional Engineer licensed in the State of Arkansas to the Owner for their use
- C. Task 10 – CMAR Coordination
 1. Assist the CMAR with the development of the bid packages
 2. Respond to questions during the bidding process and prepare any necessary addenda
 3. Attend the Pre-Bid Conference and Site Visit conducted by the CMAR
 4. Attend the Bid Opening conducted by the CMAR
 5. Assist the CMAR with the review of the bids as needed

Exclusions to the Scope of Services:

1. Construction Phase Services
2. Design of Odor Control Equipment beyond conceptual space requirements
3. Air Permitting through the Arkansas Division of Environmental Quality



Exhibit B
Amendment No. 4 - Scope of Services and Fee Proposal
Solids Handling Improvements Phase II
Rogers Water Utilities
HWEI Project No. 2020043
September 14, 2023

A. Task 8 - Preliminary Design

Solids Handling Improvements Phase II (HWEI Project No. 2020043)

Task	Engr VIII \$240	Engr VII \$220	Engr VI \$200	Engr IV \$150	Engr III \$130	Tech IV \$100	Survey Crew \$175	Tech I \$65	Total Hours	Total Cost
Billing Rate (Effective thru 08/10/2024)										
1. Conduct an Internal Design Team Kickoff Workshop	4	4	8	8	4				28	\$5,160
a. Prepare a Meeting Summary	2		2		4			4	12	\$1,660
2. Conduct six (6) periodic Design Team meetings with the Owner and CMAR	24	24	48	48	24				168	\$30,960
a. Prepare Meeting Summaries	12		12		32			24	80	\$11,000
3. Manage a Geotechnical Investigation by our subconsultant, GTS, Inc.			8				8	2	18	\$3,130
4. Supplement existing survey data, as necessary			8				32		40	\$7,200
5. Prepare 50% preliminary design drawings based on the Thermal Sludge Drying Equipment selected by the Owner for the following improvements:									0	\$0
a. Thermal Sludge Dryer Building	80	20	160	40	160	320		40	820	\$117,000
b. Maintenance Building	48	24	40	40	80	160		24	416	\$58,760
c. Sludge Mixing Structure	32	24	40	8	80	40		24	248	\$38,120
d. Standby Power System		160	40	120		40		16	376	\$66,240
e. Medium Voltage Power Distribution System Repairs		160		120		80		16	376	\$62,240
6. Deliver electronic copies of the Plans to the Owner and CMAR			2					2	4	\$530
7. Coordinate with the CMAR to develop early bid packages for the following items:	8		40						48	\$9,920
a. Pre-Engineered Metal Buildings	2	40	200	40	40	124		40	486	\$75,480
b. Electrical Switchgear		120		120				24	264	\$45,960
c. Standby Generator		120		120				16	256	\$45,440
8. Assist the CMAR with the preparation of Underground Fuel Storage Tank Removal permitting			16			8			24	\$4,000
9. Assist the CMAR, as needed, with the development of the 50% cost estimate	8	8	16						32	\$6,880
a. Review the estimates prepared by the CMAR and provide comments	8	8	16						32	\$6,880
10. Participate in the 50% Design Review Meeting	8	8	16	16	8				56	\$10,320
a. Prepare Meeting Summaries	4		8		8			8	28	\$4,120
Total Hours	240	720	680	680	440	772	40	240	3812	
Total Cost - Task 8 Preliminary Design	\$57,600	\$158,400	\$136,000	\$102,000	\$57,200	\$77,200	\$7,000	\$15,600		\$611,000

B. Task 9 - Final Design

Solids Handling Improvements Phase II (HWEI Project No. 2020043)

Task	Engr VIII \$240	Engr VII \$220	Engr VI \$200	Engr IV \$150	Engr III \$130	Tech IV \$100	Survey Crew \$175	Tech I \$65	Total Hours	Total Cost
Billing Rate (Effective thru 08/10/2024)										
1. Conduct six (6) periodic Design Team meetings with the Owner and CMAR	24	24	48	48	24				168	\$30,960
a. Prepare Meeting Summaries	12		12		32			24	80	\$11,000
2. Prepare 90% design drawings, construction details, and technical specifications incorporating the comments received from the Owner and CMAR on the preliminary design drawings	80	200	400	200	80	440		16	1416	\$228,640
a. Prepare Technical Specifications based on the Engineer's standard format		80	80	80	56			80	376	\$58,080
b. Coordinate with equipment manufacturers during design to confirm that required products can meet the American Iron & Steel (AIS) requirements		16	40	24	40			16	136	\$21,360
c. Deliver electronic copies of the Plans and Technical Specifications to the Owner and CMAR	2		2					2	6	\$1,010
3. Assist the CMAR, as needed, with the development of the 90% cost estimate	8	28	40						76	\$16,080
4. Prepare NPDES Construction Permit Application for submission to the Arkansas Division of Environmental Quality (DEQ)	16		40					12	68	\$12,620
5. Participate in a 90% Design Review Workshop	4	4	8	8	4				28	\$5,160
a. Prepare a Meeting Summary	2		4		4			4	14	\$2,060
6. Prepare Final Plans and Technical Specifications incorporating comments from the Owner and CMAR	40	40	160	80	40	160		40	560	\$86,200
7. Submit plans for review by Owner, CMAR, Arkansas Natural Resources Division (NRD), and Arkansas Department of Health (ADH)	2		4					4	10	\$1,540
8. Submit Plans to the City of Rogers Planning Department, and address their permitting requirements	16		80			40		24	160	\$25,400
9. Perform internal QA/QC review	40	40							80	\$18,400
10. Revise Plans based on comments received from the Owner, NRD, ADH, and QA/QC Review	8	8	40	40		40		40	176	\$24,280
11. Deliver two (2) full-size copies of the final design documents sealed by a Professional Engineer licensed in the State of Arkansas to the Owner for their use	2		2					2	6	\$1,010
Total Hours	256	440	960	480	280	680	0	264	3360	
Total Cost - Task 9 Final Design	\$61,440	\$96,800	\$192,000	\$72,000	\$36,400	\$68,000	\$0	\$17,160		\$543,800



Exhibit B
Amendment No. 4 - Scope of Services and Fee Proposal
Solids Handling Improvements Phase II
Rogers Water Utilities
HWEI Project No. 2020043
September 14, 2023

C. Task 10 - CMAR Coordination

Solids Handling Improvements Phase II (HWEI Project No. 2020043)

Task	Engr VIII \$240	Engr VII \$220	Engr VI \$200	Engr IV \$150	Engr III \$130	Tech IV \$100	Survey Crew \$175	Tech I \$65	Total Hours	Total Cost
Billing Rate (Effective thru 08/10/2024)										
1. Assist the CMAR with the development of the bid packages	8	8	40	4	8			16	84	\$14,360
2. Respond to questions during the bidding process and prepare any necessary addenda	16	24	60	24	24	80	8	24	260	\$38,800
3. Attend the Pre-Bid Conference and Site Visit conducted by the CMAR	4	4	8	8	4				28	\$5,160
4. Attend the Bid Opening conducted by the CMAR	4		4						8	\$1,760
5. Assist the CMAR with the review of the bids as needed	8	4	8	4	4				28	\$5,520
Total Hours	40	40	120	40	40	80	8	40	408	
Total Cost - Task 10 Bidding	\$9,600	\$8,800	\$24,000	\$6,000	\$5,200	\$8,000	\$1,400	\$2,600		\$65,600

D. Reimbursable Expenses

Solids Handling Improvements Phase II (HWEI Project No. 2020043)

Item	Description	Total
1. Reproduction & Printing		\$5,000
2. Outside Services	Black & Veatch, Inc.	\$1,302,600
3. Outside Services	GTS, Inc. - Geotechnical Investigation	\$23,000
4. Outside Services	Safety and Environmental Investigations, Inc. - Lead Paint and Asbestos Survey	\$4,000
Total Estimated Reimbursable Expenses		\$1,334,600

ENGINEERING SERVICES SUMMARY

Solids Handling Improvements Phase II (HWEI Project No. 2020043)

A. Task 8 - Preliminary Design	\$611,000
B. Task 9 - Final Design	\$543,800
C. Task 10 - CMAR Coordination	\$65,600
D. Reimbursable Expenses	\$1,334,600
Total Engineering Fee - Lump Sum	\$2,555,000

- Exclusions to the Scope of Services
- 1. Construction Phase Services
 - 2. Design of Odor Control Equipment beyond conceptual space requirements
 - 3. Air Permitting through the Arkansas Division of Environmental Quality

AMENDMENT NO. 4
TO THE
AGREEMENT BETWEEN ENGINEER AND SUBCONSULTANT
FOR PROFESSIONAL SERVICES

This is an Amendment attached to and made a part of the professional services agreement dated September 2, 2020 (hereinafter called AGREEMENT) between Hawkins-Weir Engineers, Inc. (ENGINEER) and Black & Veatch Corporation (SUBCONSULTANT).

Engineer has entered into Addendum No. 4 dated _____, 2023 to the Engineer's Basic Scope of Services defined in Exhibit A of the Agreement for Professional Services, in connection with the Rogers Pollution Control Facility (PCF) Solids Handling Improvements, Phase II (HWEI Project Number 2020043) (hereinafter called Project), with the Rogers Water Utilities (OWNER).

SECTION 1 - SCOPE

The scope of services subject to the Agreement is being expanded to include detailed design of the new dryer process and necessary facilities. This effort will include development of design documents and Construction Manager at Risk (CMAR) coordination. Detailed services are included in Attachment A Amendment 2 Scope of Services.

SECTION 2 - COMPENSATION

For the Scope of Services described in Attachment A, an amount equal to the Engineer's salary billings plus reimbursable expenses and subcontract billings. The maximum billed for these services shall not exceed One Million Three Hundred Two Thousand Three Hundred Eighty-One Dollars (\$1,302,381) without further authorization. The schedule of hourly billing rates and charges by job classification are shown below.

<u>Title</u>	<u>2023-2024 Billing Rates (per hour)</u>
Principal/Project Director	\$350.00
Project Manager	\$244.00
Senior Engineering Manager	\$296.00
Engineering Manager	\$236.00
Mechanical Technical Specialist	\$303.00
Building Mechanical Director/QC	\$250.00
Sr. Mechanical Engineer	\$238.00
Mechanical Design Engineer	\$192.00
Civil Design Engineer	\$130.00
Process Technical Specialist	\$345.00
Process Director/QC	\$395.00
Sr. Architect/QC	\$254.00
Architect	\$184.00
BIM Coordinator	\$165.00

BIM Manager/QC	\$212.00
BIM Sr. Technician	\$166.00
BIM Technician	\$120.00
Startup/Commissioning	\$258.00
Sr. Estimating	\$260.00
QC Admin/Senior Eng.	\$296.00
Project Controls	\$164.00
Project Support/Billing	\$98.00
Finance	\$127.00

Compensation for reimbursable expense items and other charges incurred in connection with the performance of the work shall be in accordance with the following schedule:

<u>Expense Item</u>	<u>Unit Cost</u>
Travel, Subsistence, and Incidental Expenses	Net Cost
Automobile/Motor Vehicles – Local Mileage	\$0.625/mile
Automobile/Motor Vehicles – Rental	Net Cost
Telephone and Telegraph Costs	*
Reproduction of Reports, Drawings & Specifications	*
Postage & Shipping Charges of Job-Related Materials	*
Computer Services	*
Photograph and Video Reproductions	*
Sub-Consultant Fees	Net Charge x 1.05

*Included in \$8.75 hourly expense rate.

The Schedule of Hourly Billing Rates and Charges indicated herein is effective for service in 2023. The Schedule of Hourly Billing Rates and Charges will be revised and re-issued in March of subsequent years.

NOW THEREFORE, in consideration of the promises contained in the Agreement, Consultant and Engineer agree to amend the Agreement as stipulated in this Amendment No. 4 and Attachments A.

IN WITNESS WHEREOF, the parties have executed this Amendment No. 4 and its effective date shall be _____.

Engineer:
Hawkins-Weir Engineers, Inc.

Subconsultant:
Black & Veatch Corporation

By: _____

By: _____.

Title: _____

Title: _____

Date: _____

Date: _____.

AMENDMENT NO. 4
ATTACHMENT A
SCOPE OF SERVICES

Project Title: Rogers Pollution Control Facility (PCF) Phase II Solids Handling Improvements

PROJECT DESCRIPTION

Black & Veatch (Subconsultant) will support in the development of design documents and Construction Manager at Risk (CMAR) coordination regarding the installation of two belt dryers, a new dryer facility, material conveyance, sludge mixing box, and the new maintenance building at the Pollution Control Facility (PCF).

SCHEDULE

The project schedule for major milestones and deliverables is as follows:

Detailed Design Notice to Proceed	_____, 2023
50% Document Deliverable	
50% Document Review Workshop	
90% Document Deliverable	
90% Document Review Workshop	
Final Construction Document Deliverable	
Construction Notice to Proceed	

SCOPE OF WORK

TASK SERIES 1.0 – PROJECT MANAGEMENT

- a. **Task 1.1: Project Administration and Management.** Subconsultant will provide project management services necessary to successfully manage and complete the work, including project correspondence and consultation with the

- Client and Engineer related to the scope of services; supervision and coordination of services; scheduling and assignment of personnel resources; invoicing; monitoring work progress; and quality control of services provided.
- b. **Task 1.2 – Monthly Invoicing.** Subconsultant will prepare monthly invoices with a project status report to appraise Engineer on progress of the work.

TASK SERIES 2.0 – PROJECT MEETINGS

- a. **Task 2.1 – Kickoff Meetings.** Subconsultant will attend an internal kickoff meeting and site visit. A total of eight (8) professionals will attend including management and design process leads. Meeting will be held at Consultant’s facilities one day with the site visit on the following day.
- b. **Task 2.1 – Progress Meetings.** Subconsultant will lead monthly meetings with Engineer, Owner, and CMAR to discuss the project progress. Project Manager and Engineering Manager will attend a total of six (6) monthly review meetings in person at the Owner’s facility. All other meetings will be attended virtually. Subconsultant will prepare meeting summaries.
- c. **Task 2.2 – Coordination Meetings.** Subconsultant will lead weekly meetings with Engineer to coordinate discipline design details. Engineering Manager and Building Mechanical Engineer will attend all meetings. Meetings will be virtual. Subconsultant will prepare meeting summaries.
- d. **Task 2.3 – Dryer Manufacturer Coordination Meetings.** Subconsultant will lead design coordination meetings with Dryer Manufacturer as needed. Meetings will be held virtually. Subconsultant will prepare meeting summaries.
- e. **Task 2.3 –Design Review Workshop.** Following the 50% and 90% design document deliverable, Subconsultant shall lead a design review workshop described herein. Subconsultant will prepare meeting summaries.

TASK SERIES 3.0 – DETAILED DESIGN

- a. **Task 3.1 – System Design**
1. The following systems shall be designed by Subconsultant:
 - i. Conveyance system from existing centrifuge cake conveyors to hopper
 - ii. Cake hopper

- iii. Two sludge dryers and accessories
- iv. Dried sludge conveyance system
- v. Odor control system space required coordination and plumbing
- vi. HVAC system
- vii. Plumbing water systems
- viii. Plumbing drains
- ix. Architectural work associated with a prefab metal buildings (dryer equipment and maintenance)
- x. Sludge mixing box
- xi. Piping, valves, and appurtenances

b. Task 3.2 – 50% Design Drawings and Specifications.

1. The 50% Design Document deliverables are as follows:
 - i. Dryer, primary process equipment, prefabricated metal buildings, HVAC and plumbing technical specifications.
 - ii. Facility spatial and equipment layouts.
 - iii. HVAC layouts and schedules
 - iv. Plumbing layouts and schedules
 - v. Architectural layouts and schedules
2. One electronic copy of the drawings and specifications will be provided to Owner for review.
3. Subconsultant to coordinate with Engineer on site plans, structural plans, power and lighting plans, Process Flow Diagram (PFD) and P&IDs.
4. Subconsultant and Engineer to coordinate with CMAR for a project constructability review and design considerations.
5. Complete a quality control review of design documents prior to submittal to Owner and revise documents as necessary to reflect decisions at this level.
6. Subconsultant will provide drafting for architectural, process and building mechanical models.

c. Task 3.3 – 90% Design Drawings and Specifications

1. The 90% Design Document deliverables are as follows:

- i. Final dryer, process equipment, architectural, HVAC and plumbing technical specifications.
 - ii. Facility spatial and equipment layouts.
 - iii. HVAC layouts and schedules
 - iv. Plumbing layouts and schedules
 - v. Architectural layouts and schedules
 - vi. Final set of drawings and specifications
- 2. One electronic copy of the drawings and specifications will be provided to Owner for review.
- 3. Subconsultant to coordinate with Engineer on site plans, structural plans, power and lighting plans, PFD, and P&IDs.
- 4. Subconsultant and Engineer to coordinate with CMAR for a project constructability review and design considerations.
- 5. Complete a quality control review of design documents prior to submittal to Owner and revise documents as necessary to reflect decisions at this level.
- 6. Incorporate Owner and CMAR comments from the 90% review along with any regulatory agency comments to prepare final construction documents.
- d. **Task 3.4 – 100% Design Drawings and Specifications.** The 100% Design Document deliverable will incorporate all CMAR and Owner comments.
- e. **Task 3.5 – Permit Review.** Subconsultant and Engineer to create a list of permits that must be obtained by Owner and/or CMAR. All permit fees will be paid by Owner unless otherwise agreed with CMAR.
- a. **Task 3.6 – Early Procurement Submittal Review.** Review of early procurement submittals required due to long lead times. Review of submittals will be limited to the review of the first submittal and a review of one resubmittal if required. Review of prefabricated buildings, dryer package and major electrical components (switchgear and standby generator) shop drawings and data submittals will be reviewed plus one resubmittal for each if required.

- f. **Task 3.7 – Constructability Review.** Coordinate constructability review at 50% design level and incorporate CMAR comments to the design. Review will consist of a meeting to discuss comments from CMAR. Constructability modifications agreed upon in the meeting will be incorporated into the 90% design documents. CMAR to lead discussion. Project Director, Project Manager and Engineering Manager will attend in person. All other discipline leads will attend virtually as needed.
- g. **Task 3.5 – 50% & GMP Cost Estimate Review.** Review of 50% and guaranteed maximum price (GMP) cost estimates. Provide recommendation to the Owner regarding acceptability of each.

TASK SERIES 4.0 – CMAR Coordination

To be added by future amendment.

TASK SERIES 5.0 – Startup and Commissioning

To be added by future amendment.

TASK SERIES 6.0 – SUPPLEMENTAL SERVICES

Any work requested by the Owner or Engineer that is not included in one of the items listed in the Scope of Services shall be classified as Supplemental Services. Supplemental Services shall include, but are not limited to:

- a. Value Engineering reviews and services.
- b. Visits to the construction site or to Owner's location in excess of the number of such trips and the associated time set forth in other phases.
- c. Preparation or review of monthly progress reports.
- d. Review, approval, or process CMAR's progress payments.
- e. Assisting with inspection at substantial and/or final completion.
- f. Special reports requested by Owner concerning facilities operation and personnel matters during the operation startup period.
- g. Evaluation of unusually complex or unreasonably numerous claims submitted by CMAR or others in connection with the work.
- h. Review and analysis of claims for differing subsurface and physical conditions submitted by the CMAR or others in connection with the work.

- i. Where field conditions differ from the conditions indicated in the construction contract documents or soil boring reports, preparing sketches of construction work for approval by Owner, to supplement the drawings and specifications as may be required; and providing redesign or relocation information if required by underground obstructions, utilities, or other conditions.
- j. Services for making revisions to drawings and specifications made necessary by the acceptance of substitutions proposed by the CMAR; and services after the award of each contract for evaluating and determining the acceptability of substitutions proposed by the CMAR.
- k. Services resulting from significant delays, changes, or price increases caused by directly or indirectly by shortages of materials, equipment, or energy.
- l. Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) a significant amount of defective or neglected work by any CMAR, (3) acceleration of the progress schedule involving service beyond normal working hours, (4) default by any CMAR, and (5) failure of the CMAR to complete the work within the construction contract time.

GENERAL CLARIFICATIONS

- a. **BIM Scope.**
 - 1. Subconsultant to host a shared sited for Engineer and one additional Subconsultant.
 - 2. Subconsultant will provide coordination of responsibility within the model between the Engineer's Structural team and Subconsultant.
 - 3. The Subconsultant's BIM standards will be used.
 - 4. Modeling will be 3D utilizing Revit.
- b. **Specifications.** Engineer is responsible for the Division 00 and Division 01 specifications.
- c. **System Design.** The water systems on the project will have sufficient pressure and flow for the project needs without requiring a booster system.

Schedule

- a. **Detailed design.** The design period will be twelve (12) months.

PHASE/Task																							
			Project Director	Project Manager	Project Admin	Project Control	Finance	Project Billing	Sr. Estimating	Sr. Engineering Manager	Engineering Manager	Civil Design Engineer	Sr. Architect	Architect	Mech Process Technical Specialist	Mech Process Director/QC	HVAC Mech Design Engineer	Sr. Mech Design Engineer	Mech Design Engineer	Mech Equip Technical Specialist	Sr. Mech Equip Design Engineer	Mech Equip Design Engineer	Process Tech Specialist
			\$356.00	\$247.00	\$103.00	\$169.00	\$131.00	\$99.00	\$272.00	\$303.00	\$241.00	\$132.00	\$254.00	\$184.00	\$275.00	\$240.00	\$194.00	\$240.00	\$194.00	\$317.00	\$240.00	\$194.00	\$349.00
(Billing Rate, \$\$,Hr.)																							
WORK BREAKDOWN STRUCTURE	TASK																						
PROJECT MANAGEMENT	1.0	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Project Administration and Management		3	52	40	64	27	18	-	-	-	20	-	-	-	-	-	-	-	-	-	-	-	-
Monthly Invoicing		4	-	18	-	-	-	27	-	-	36	-	-	-	-	-	-	-	-	-	-	-	-
PROJECT MEETINGS	2.0	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kickoff Meetings		7	16	16	-	-	-	-	-	-	16	16	-	16	-	16	-	-	-	-	-	16	16
Progress Meetings		8	18	48	-	-	-	-	-	-	48	20	-	12	-	-	-	-	-	-	-	-	32
Coordination Meetings		9	20	40	-	-	-	-	-	-	40	20	-	8	-	10	10	-	15	-	-	70	18
Dryer Manufacturer Coordination Meetings		10	8	8	-	-	-	-	-	-	8	20	-	-	-	-	-	-	-	-	-	-	40
Design Review Workshops (50% and 90%)		11	16	16	-	-	-	-	-	-	16	20	-	4	-	4	-	-	4	-	-	-	23
DETAILED DESIGN	3.0	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50% Design Drawings and Specifications		21	30	100	-	-	-	-	-	80	200	120	20	104	40	115	128	-	35	40	18	180	100
90% Design Drawings and Specifications		22	26	65	-	-	-	-	-	60	130	90	32	80	40	115	128	-	35	40	16	166	40
100% Design Drawings and Specifications		23	18	30	-	-	-	-	-	10	50	20	4	12	16	35	42	-	35	16	2	50	-
Permit review		24	-	-	-	-	-	-	-	-	8	-	-	16	-	5	5	-	3	-	-	-	8
Conformed Documents		25	2	8	-	-	-	-	-	-	16	-	-	8	3	6	6	-	5	-	-	40	-
Early Procurement Submittal Review		26	4	20	-	-	-	-	-	-	30	50	-	40	-	8	-	-	-	-	-	40	40
Constructability Review (50%) and Incorporate Comments		27	32	52	-	-	-	-	-	20	36	-	-	-	10	12	12	6	-	-	-	28	24
50% and GMP Cost Estimate Review		28	4	32	-	-	-	-	16	40	48	-	-	-	-	-	-	-	-	-	-	-	-
Total, Hours			246	493	64	27	18	27	16	210	702	376	56	300	109	326	331	6	132	96	36	590	341
Total, Billings			\$ 87,576	\$ 121,771	\$ 6,592	\$ 4,563	\$ 2,358	\$ 2,673	\$ 4,352	\$ 63,630	\$ 169,182	\$ 49,632	\$ 14,224	\$ 55,200	\$ 29,975	\$ 78,240	\$ 64,214	\$ 1,440	\$ 25,608	\$ 30,432	\$ 8,640	\$ 114,460	\$ 119,009

PHASE/Task		Process Director/QC	BIM Coordinator	BIM QC	BIM Manager	Sr. BIM Tech (Mech)	BIM Tech (Mech)	Sr. BIM Tech (Arch)	SUBTOTAL, Hours	SUBTOTAL, Billings \$	EXPENSES			SUBTOTAL, EXPENSES	TOTAL Billings
											Hourly Expense By Rate	Travel/Per Diem Expenses	Other Expenses		
		\$395.00	\$166.00	\$212.00	\$212.00	\$166.00	\$120.00	\$166.00			\$ 8.75				
(Billing Rate, \$\$,Hr.)															
WORK BREAKDOWN STRUCTURE	TASK														
PROJECT MANAGEMENT	1.0	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Project Administration and Management		-	-	-	-	-	-	-	221	\$ 46,725	\$ 1,934	\$ -	\$ -	\$ 1,934	\$ 48,659
Monthly Invoicing		-	-	-	-	-	-	-	81	\$ 15,795	\$ 709	\$ -	\$ -	\$ 709	\$ 16,504
PROJECT MEETINGS	2.0	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Kickoff Meetings		-	-	-	-	-	-	-	128	\$ 31,088	\$ 1,120	\$ 5,000	\$ -	\$ 6,120	\$ 37,208
Progress Meetings		-	-	-	-	-	-	-	178	\$ 45,848	\$ 1,558	\$ 3,000	\$ -	\$ 4,558	\$ 50,406
Coordination Meetings		-	-	-	-	-	-	-	251	\$ 57,864	\$ 2,196	\$ 2,000	\$ -	\$ 4,196	\$ 62,060
Dryer Manufacturer Coordination Meetings		-	-	-	-	-	-	-	84	\$ 23,352	\$ 735	\$ -	\$ -	\$ 735	\$ 24,087
Design Review Workshops (50% and 90%)		-	-	-	-	-	-	-	103	\$ 26,643	\$ 901	\$ 2,000	\$ -	\$ 2,901	\$ 29,544
DETAILED DESIGN	3.0	-	-	-	-	-	-	-	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
50% Design Drawings and Specifications		20	85	4	8	185	165	144	1,921	\$ 403,886	\$ 16,809	\$ -	\$ -	\$ 16,809	\$ 420,695
90% Design Drawings and Specifications		-	51	3	3	119	99	85	1,423	\$ 297,937	\$ 12,451	\$ -	\$ -	\$ 12,451	\$ 310,388
100% Design Drawings and Specifications		-	19	1	1	37	37	31	466	\$ 97,058	\$ 4,078	\$ -	\$ -	\$ 4,078	\$ 101,136
Permit review		-	-	-	-	-	-	-	45	\$ 10,416	\$ 394	\$ -	\$ -	\$ 394	\$ 10,810
Conformed Documents		-	11	1	1	22	22	19	170	\$ 31,871	\$ 1,488	\$ -	\$ -	\$ 1,488	\$ 33,359
Early Procurement Submittal Review		-	-	-	-	-	-	-	232	\$ 51,194	\$ 2,030	\$ -	\$ -	\$ 2,030	\$ 53,224
Constructability Review (50%) and Incorporate Comments		-	-	-	-	-	-	-	232	\$ 62,178	\$ 2,030	\$ 1,500	\$ -	\$ 3,530	\$ 65,708
50% and GMP Cost Estimate Review		-	-	-	-	-	-	-	140	\$ 37,368	\$ 1,225	\$ -	\$ -	\$ 1,225	\$ 38,593
Total, Hours		20	166	9	13	363	323	279	5,675						
Total, Billings		\$ 7,900	\$ 27,556	\$ 1,908	\$ 2,756	\$ 60,258	\$ 38,760	\$ 46,314		\$ 1,239,223	\$ 49,658	\$ 13,500	\$ -	\$ 63,158	\$ 1,302,381

Rogers Water Utilities

Western Corridor Alignment Study



Rogers Water Utilities
Rogers, Arkansas

Prepared by:



2049 E. Joyce Blvd., Suite 400
Fayetteville, AR 72703

September 2023

Garver Project No. 21W01361

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Appendices

Appendix A	Emergency Connection Analysis Technical Memorandum
Appendix B	Western Corridor Alternatives Analysis Technical Memorandum
Appendix C	Route Study Technical Memorandum

1.0 Executive Summary

1.1 Introduction

A key component of Rogers Water Utilities' (RWU) mission statement is "to enhance the quality of life for Rogers Water Utilities customers by delivering high-quality water and dependable service that exceed customer expectations". Additionally, RWU values "protecting and ensuring a long-term water supply for future generations". Accordingly, RWU began working with Garver to develop plans to establish emergency connections with adjacent purveyors and determine the most feasible way to secure an additional connection with the new Beaver Water District (BWD) Western Corridor infrastructure. Our team included several RWU staff members that played an integral role on this project.

1.2 Project Background

In 2016 and 2022 RWU and Garver developed a Water Master Plan (WMP) and update, respectively. The 2016 version focused primarily on accommodating increases in demand due to growth within city limits as well as a significant expansion of the western water service boundary. The expansion area, shown on Figure 1-1 below, was a significant driver for improvements to the water distribution system.

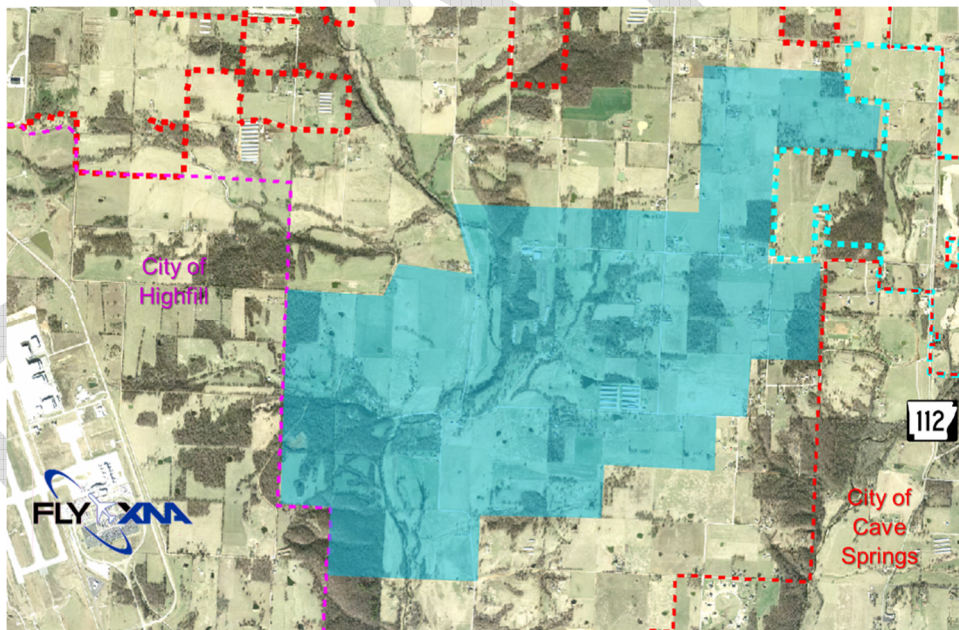


Figure 1-1. Water Service Expansion Area (2016 Water Master Plan)

In the 2022 WMP update, the effort shifted toward risk mitigation as there were no longer any significant areas being considered for service area expansion and RWU was reliant on a single source of supply. The sole source of supply is the BWD High Service Pump Station (HSPS) pumping water through two

parallel transmission lines to the RWU distribution system. The 2022 WMP update identified that if RWU experienced an outage in the transmission lines or the HSPS, RWU could only maintain service for approximately 30 hours. Promptly after the WMP, RWU began efforts to remedy these concerns by proceeding with this study to secure an additional source of supply.

The primary objectives of this study include the following:

- Determine feasibility of emergency connections with adjacent purveyors (enclosed in Appendix A)
- Identify and compare two Western Corridor Transmission Main alternatives (enclosed in Appendix B)
- Perform route study on selected alternative (enclosed in Appendix C)

1.3 Emergency Connection Analysis

The Emergency Connection Analysis Technical Memorandum (TM) analyzed the feasibility as well as the amount of water available through these potential connections with Bentonville Water Utilities (BWU), Springdale Water Utilities (SWU), Benton County Water Authority (BCWA) No. 5, and Benton Washington Regional Public Water Authority (BWPRWA). Additionally, this TM also evaluated the water available through existing connections with BWU. The hydraulic analysis was performed by evaluating the response of both RWU's system as well as the adjacent purveyor's system to a range of flows.

Garver determined that an additional emergency connection at the future Mount Hebron Tank site with BWU would provide the most benefit during a disruption of the system's BWD supply. However, many of the options presented benefit RWU as well as the neighboring systems by allowing additional emergency flow to and from each system in the case of an emergency.

1.4 Western Corridor Alternatives

BWD is nearing completion of the new Western Corridor Pipeline (WCP) that will convey water by gravity to the new BWD Western Corridor Pump Station (WCPS) which presents RWU with the opportunity to secure an additional source of water supply. BWD has currently awarded contracts for the WCPS and WCP, and construction is scheduled to be complete in 2026.

During a workshop with Garver and RWU staff on October 27, 2022, the potential routes for the new transmission main (from BWD's WCPS to RWU's distribution system) were discussed. Two routes were selected for an alternatives analysis. The first and second alternative are illustrated in Figure 1-2 and Figure 1-3, respectively.

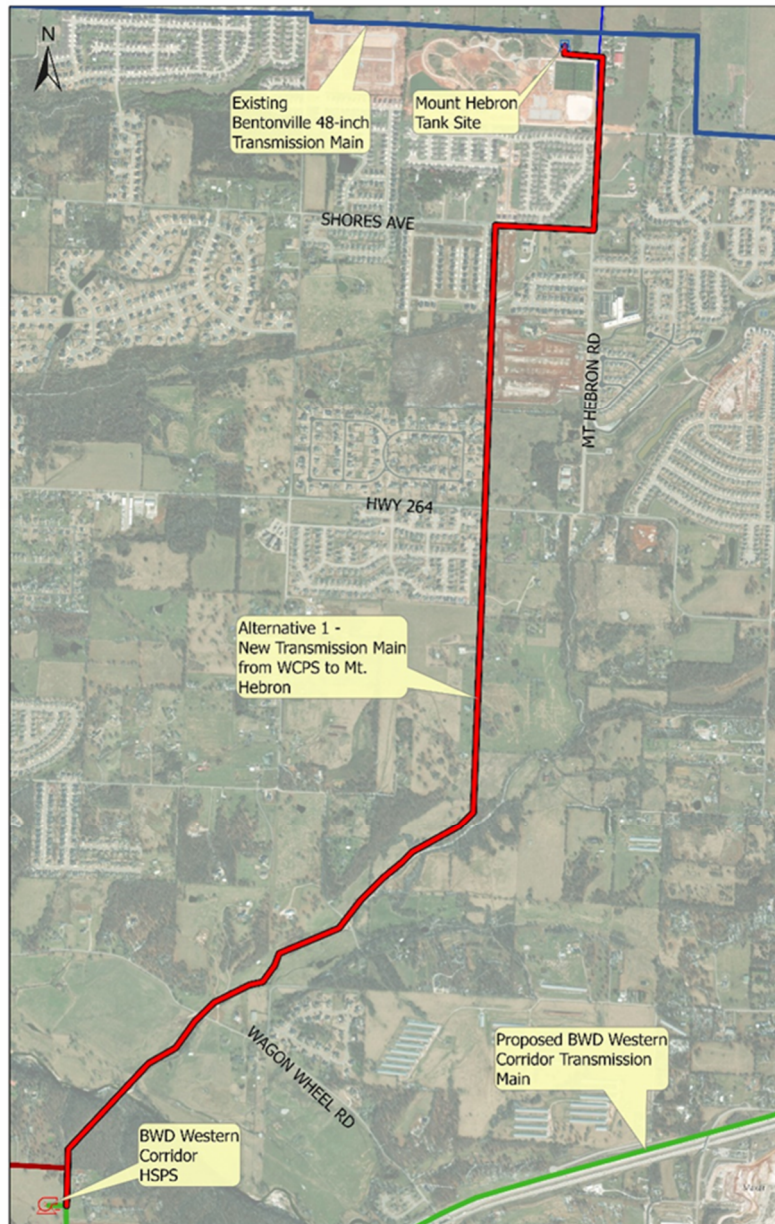


Figure 1-2. Alternative 1 Preliminary Alignment

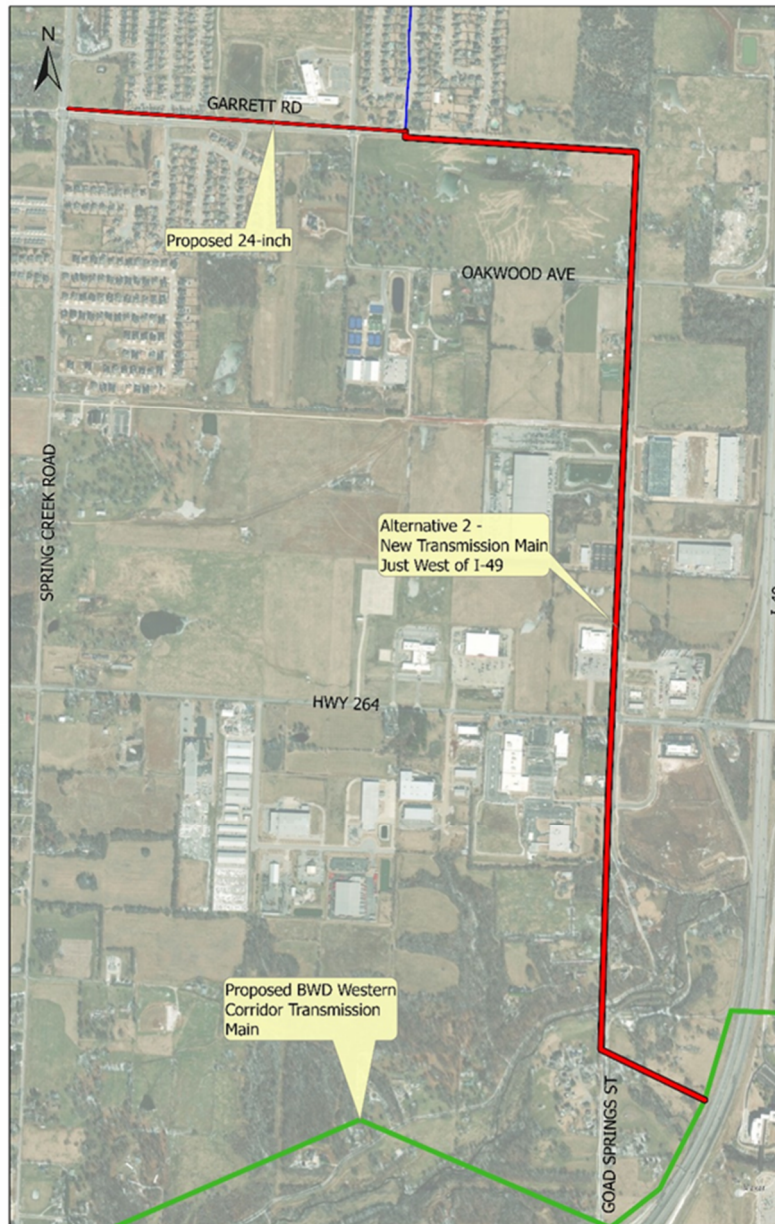


Figure 1-3. Alternative 2 Preliminary Alignment

Garver used a variety of criteria to compare the two alternatives which included both non-monetary and monetary considerations. For non-monetary criteria, Garver and RWU collaborated to determine weighted scores for the different criterion to take into account the level of importance for each alternative. The criterion for non-monetary considerations include:

1. Expansible
2. Redundancy
3. Reliability
4. Flexibility
5. Implementability
6. Water Quality/Compatibility
7. Environmental Impacts
8. Public Acceptance
9. Independence

The summary of the non-monetary evaluation is illustrated in Table 1-1. While the two alternatives' scores were close, Alternative 2 scored slightly higher, or better, than Alternative 1.

Table 1-1. Alternatives Non-Monetary Evaluation

Criterion	Weight	Alternative 1		Alternative 2	
		Score	Item Total	Score	Item Total
Expansible	2.63	4.5	11.8	3.5	9.2
Redundancy	2.63	4.0	10.5	4.0	10.5
Reliability	2.50	3.0	7.5	4.0	10.0
Flexibility	2.38	4.0	9.5	3.5	8.3
Implementability	2.38	4.5	10.7	4.0	9.5
Water Quality/Compatibility	2.38	4.0	9.5	4.0	9.5
Environmental Impacts	1.69	2.5	4.2	4.5	7.6
Public Acceptance	1.13	3.5	4.0	4.0	4.5
Independence	1.08	3.5	3.8	4.0	4.3
Total			71.5		73.4

Monetary considerations were evaluated using both up-front capital costs as well as life cycle costs (LCC) in terms of net present value (NPV). The summary of up-front capital costs are illustrated in Table 1-2. The rough order of magnitude (ROM) cost estimate showed that Alternative 2 would be nearly \$4 million cheaper than Alternative 1.

Table 1-2. Alternatives Up-Front Capital Costs

Alternate	Description	Cost
Alternative 1	New Transmission Main from WCPS to Mount Hebron Tank Site	\$30.9 million
Alternative 2	New Transmission Main from 60" BWD Transmission Main Connection just West of I-49 to 24" Transmission Main on 28 th Street	\$27.1 million

The results of the 20-year LCC NPV evaluation favored Alternative 2 by \$3 million despite higher operations and maintenance (O&M) costs associated with Alternative 2 (cost summary shown in Table 1-3). However, projecting NPV of costs associated with the two alternatives further, Garver found that the break-even point would occur around year 35 with Alternative 1 being favored in successive years.

Table 1-3. Alternatives 20-Year LCC NPV Summary

Alternate	Description	NPV of O&M + Capital Costs	NPV of O&M Costs
Alternative 1	New Transmission Main from WCPS to Mount Hebron Tank Site	\$63.9 million	\$8.5 million
Alternative 2	New Transmission Main from 60" BWD Transmission Main Connection just West of I-49 to 24" Transmission Main on 28 th Street	\$60.9 million	\$12.3 million

1.4.1 Beaver Water District Coordination

On March 30, 2023, RWU met with BWD to discuss feasibility of the two alternatives. BWD addressed RWU's request for a connection to the WCP in a letter dated April 10, 2023, stating that BWD would only allow connections to the WCPS. Due to BWD's response letter and that the breakeven cost was 35 years, a subsequent route study was conducted for Alternative 1.

1.5 Route Study

The route study includes the comparison of two different alignments for the selected alternative above. Both alternatives begin at the WCPS and terminate near the Mount Hebron Tank Site. RWU had the foresight to install a 24-inch water line from the Mount Hebron Tank Site to Garrett Road, ahead of the park improvements. The Route Study alternatives are illustrated in Figure 1-4.

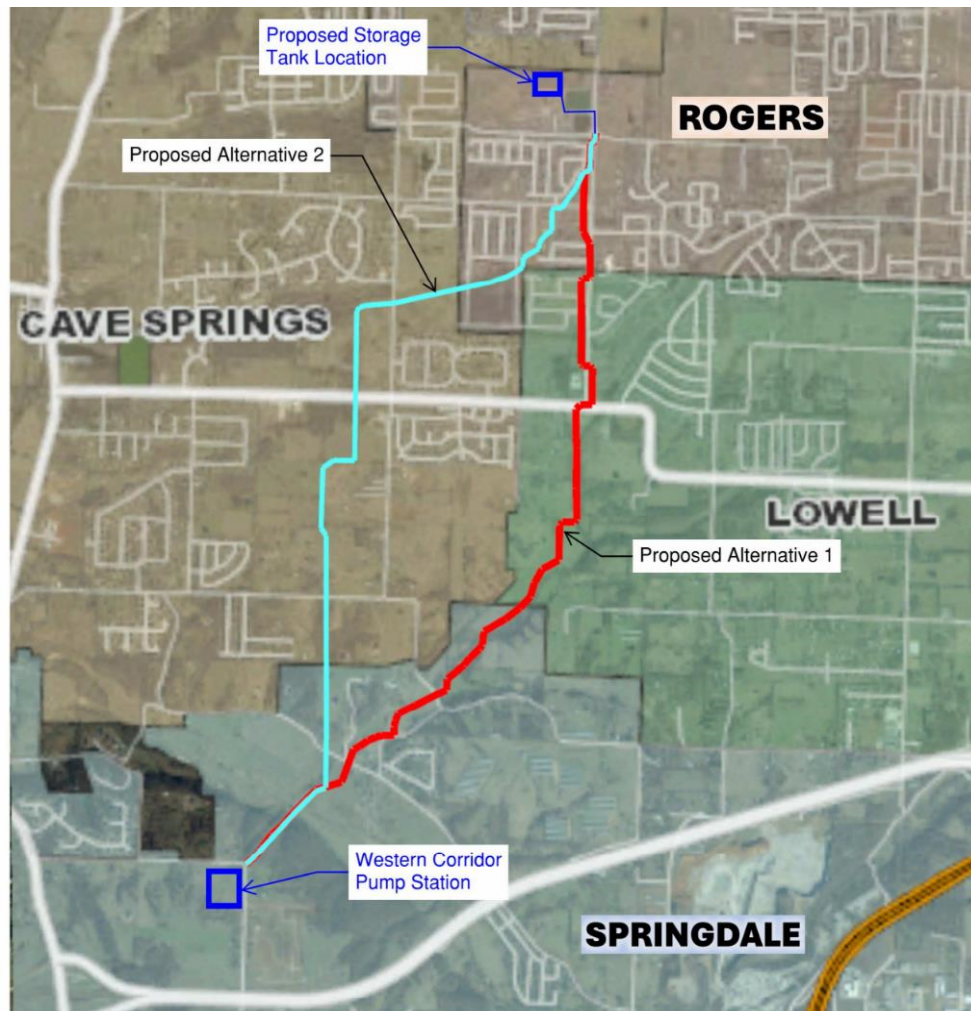


Figure 1-4. Route Study Alternatives

Similar to the Western Corridor Alternatives TM, the two alternatives in the Route Study were evaluated using non-monetary and monetary criteria. Additionally, each alternative was divided into five segments to allow refinement in the evaluation.

Garver used a triple bottom line evaluation to determine the route most viable for RWU. This analysis includes:

- Economic Factors
 - Capital costs and operation and maintenance (O&M) costs
- Social Factors

- Traffic, easement acquisition, impacts to fences, driveways, trees/landscaping, schools/churches, utility conflicts (fiber, OHE, gas, water, telecom, sewer)
- Environmental Factors
 - Wetlands and stream crossings
 - Cultural resources

Like the analysis performed for the Western Corridor Alternatives TM, criteria were weighted based of level of emphasis from 1 to 3, 3 being the highest level of emphasis. Additionally, each alternative was ranked 1 or 2 based on the preferred alternative for each respective factor. For example, if an alternative is given a 1 for Capital Costs, it is the cheaper option. Each alternative was then given a Weighted Score, which can be seen in Table 1-4. The results of the analysis indicate that Alternative 2 is the more favorable option, lowest score.

Table 1-4. Alternatives Comparison for Monetary and Non-Monetary Factors

Item	Alternative 1	Alternative 2	Weight Factor	Weighted Score (Alt. 1)	Weighted Score (Alt. 2)
Economic Factors					
Capital Costs	2	1	2	4	2
O&M Costs	1	2	2	2	4
Social Factors					
Traffic Effects	2	1	1.75	3.5	1.75
Properties Affected	2	1	1.75	3.5	1.75
Churches/Schools	1	1	1.25	1.25	1.25
Driveways	2	1	1.50	3	1.5
Trees/Landscaping	1	1	1.25	1.25	1.25
Utility Crossings	2	1	1.75	3.5	1.75
Other Structures	1	2	1.25	1.25	2.5
Environmental Factors					
Wetlands	1	1	1.75	1.75	1.75
Stream Crossing	1	2	1.75	1.75	3.5
Totals:				26.75	23.0

1.6 Recommendation

After taking both monetary and non-monetary criteria into consideration, Route Study Alternative 2 is the recommended route. Primarily because of road crossings and associated steel encasements and bends, Alternative 2 has a lower opinion of probable construction cost, about \$1.8 million. Alternative 1 parallels the creek and is within portions of the floodplain, and this not preferred from an O&M standpoint. Additional O&M for air valves on Alternative 2 is not a major concern. As development is rapidly occurring in the area, securing easements is recommended as soon as possible. Future service with Cave Springs should be considered in the design of the recommended alternative. In addition to securing easements, proceeding with emergency connections between BWRPWA, BWU, and SWU is recommended.

We greatly appreciate the opportunity to work with the dedicated staff at RWU and the opportunity to serve the Rogers Water Utilities Commission and its customers.

DRAFT

RESOLUTION NO. 23-28

A RESOLUTION APPROVING THE PURCHASE OF OBIC POLYURETHANE LINER SYSTEMS FOR CLARIFIERS AT THE ROGERS POLLUTION CONTROL FACILITY; AUTHORIZING EXPENDITURE OF FUNDS FOR THE PURCHASE; WAIVING COMPETITIVE BIDDING; AND FOR OTHER PURPOSES.

WHEREAS the Rogers Waterworks and Sewer Commission has been empowered by the Rogers City Council to oversee efficient operation of the Rogers Water Utilities, and has full authority to set policies and procedures for the Rogers Water Utilities in a manner consistent with existing law and public policy: and

WHEREAS there is a need to purchase and install OBIC Polyurethane Liner Systems in certain Clarifiers at the Rogers Pollution Control Facility (“RPCF”); and

WHEREAS an OBIC Polyurethane Liner System allows a Clarifier to be out of operation for only one day for preparation and one day for application, thus increasing the operational time of the Clarifier and enhancing the operation of the RPCF; and

WHEREAS Midwest Infrastructure Coatings of Jefferson City, MO (“Midwest Infrastructure Coatings”) is the only contractor trained in application of OBIC Polyurethane Liner Systems in this area; and

WHEREAS soliciting bids for the OBIC Polyurethane Liner Systems would be unlikely to result in competing bids for providing these items; and

WHEREAS an exceptional situation exists such that seeking the OBIC Polyurethane Liner Systems through competitive bidding is not feasible or practical; and

WHEREAS Midwest Infrastructure Coatings can provide the needed OBIC Polyurethane Liner Systems.

NOW THEREFORE, BE IT RESOLVED BY THE ROGERS WATERWORKS AND SEWER COMMISSION OF THE CITY OF ROGERS, ARKANSAS:

Section 1. The Rogers Waterworks and Sewer Commission hereby authorizes the Rogers Water Utilities to purchase the needed OBIC Polyurethane Liner Systems from Midwest Infrastructure Coatings and authorizes the expenditure of up to, and including, One Hundred Fifty-Two Thousand, Six Hundred Fifty Dollars (\$152,650), plus applicable taxes, shipping, and related charges, if any, for the purchase. The Superintendent of the Rogers Water Utilities, or his designated representative, is authorized to execute any purchase orders and/or other contract documents necessary to complete the purchase, consistent with the authority given under this Resolution, the final form and content of any purchase order or other contract document to be approved by the Superintendent of the Rogers Water Utilities, his approval being evidenced by his signature thereon, or by the signature of his designated representative.

Section 2. For the reasons stated in the recitals above, The Rogers Waterworks and Sewer Commission hereby determines that an exceptional situation exists such that seeking the OBIC Polyurethane Liner Systems through competitive bidding is not feasible or practical and hereby waives the requirements of competitive bidding for the purchase of the OBIC Polyurethane Liner Systems.

Section 3: Severability Provision- In the event that any section, paragraph, subdivision, clause, phrase, or other provision or portion of this Resolution shall be adjudged invalid or unconstitutional, the same shall not affect the validity of this Resolution as a whole, or any part or provision, other than the part so decided to be invalid or unconstitutional, and the remaining provisions of this Resolution shall be construed as if such invalid, unenforceable or unconstitutional provision or provisions had never been contained herein.

Section 4: Repeal of Conflicting Resolutions- All resolutions of the Rogers Waterworks and Sewer Commission, or parts of resolutions of the Rogers Waterworks and Sewer Commission, in conflict herewith are hereby repealed to the extent of such conflict.

PASSED AND APPROVED this 18th day of September 2023.

Peter Farmer, Chairman

ATTEST:

Brent Dobler, Acting Secretary



10007 Marina Rd Jefferson City Mo 65101
417-631-7064

RE: Rogers Water Utilities

We are pleased to present the following proposal:

Install the OBIC Armor 1000, aromatic polyurea coating system. We are a certified Applicator of OBIC materials.

- This quote is good for 30 days
- Pricing is for installation of the Multi-Layer Liner System including surface preparation, & Supervision
- Off road locations may require assistance from owner for access.
- DOT Traffic Control to be provided by others if required. Our crew will supply cones for the immediate work area.
- Water source, nearest hydrant or spigot to be made available.
- Permits, Fees and Inspector Rates are not included in this quote.
- Client is responsible for all applicable sales tax.

OBIC Polyurethane Liner System Installation of 2872 SQFT of the Flow Channel of Clarifier 1. Washed dried 80 Mills of Poly Applied, water level must be lower than channel

Clarifier %5 increase	\$75,075.00
Mobilization	\$2500.00
Total Price	\$77,575.00

The OBIC Liner System Has a 10 Year Limited Warranty.

Upon agreeing to the terms, we ask you acknowledge in the area below and fax to our office. Should you have any questions regarding this proposal, please feel free to call me.

Thank You,
Bryon Baker
Midwest Infrastructure Coatings
bbaker@midwestinfrastructurecoatings.com
417-631-7064

Company Name _____

Name _____

Signature _____

P.O. # _____

Sales Quote



Vermeer®

MidSouth

580 Jean Mary Ave, Springdale, AR, 72762-9625

Phone: (479) 361-9110 Fax:

Salesperson: Jimmy White

Order Date: 05/04/2023

Order Type: Quote Order

Status: Quote

Page No.: Page 1 of 2

Quote No.: 230504EYO629A

Bill To: ROGERS WATER UTILITIES

Attn. To:

Address: 601 S 2nd ST
Rogers, AR 72756

Phone: (479) 531-2315

Fax:

Ship To: ROGERS WATER UTILITIES

Attn. To:

Address: 601 S 2nd ST
Rogers, AR 72756

Ship Via: Vermeer Truck

Quoted Items

Item	Description	Unit	Quantity	Unit Price	Ext. Price
1	HTV1059 HTV873PTO W/ BOOM, 2X200 GAL WTR TANKS	Each	1.00	121,177.00	121,177.00
	All HTV PTO Series Include: PTO Driven off Truck Chassis, 1000 CFM Vacuum Pump (High-CFM), Baghouse, Hydraulic Pump, Debris Tank with Hydraulic Tilt, High Pressure Water System (4 GPM @ 3000 PSI), Anti-Freeze Tank, Air Gap, Pull Down Ladder, Reverse Pressure to off-load liquids and dislodge debris in hose, Polymer liner on bottom half of tank for easy dumping and cleanout, 30' x 4" Suction Hose and Suction Tool with Side Hose Storage, Hydraulically operated full open and locking rear door, Water Knife and Clean-up wand, Storage Package (Tool Box), 3" LED Directional Board, Back-up Camera, Recirculation Kit				
					\$121,177.00
2	HTV4208 INTERNAL TANK WASH-OUT 800 GAL	Each	1.00	899.00	899.00
					\$899.00
3	HTV4660 HIGH VISIBILITY STROBE LIGHT KIT	Each	1.00	6,010.00	6,010.00
					\$6,010.00
4	HTV4681 ACCESS STEP W/ BOOM	Each	1.00	1,329.00	1,329.00
					\$1,329.00
5	HTV4831 DIESEL HOT BOX W/ RECIRCULATION KIT- 172K BTUS	Each	1.00	9,670.00	9,670.00
					\$9,670.00
6	HTV2500 FORD F-650 270 HP DIESEL TRUCK, REGULAR CAB (HYDRAULIC BRAKES, 26K GVWR)	Each	1.00	90,768.75	90,768.75
					\$90,768.75
Sub-total for Quoted Items:					\$229,853.75

Options

Item	Description	Unit	Quantity	Unit Price	Ext. Price
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Sales Quote



Vermeer®
MidSouth

580 Jean Mary Ave, Springdale, AR, 72762-9625

Phone: (479) 361-9110 Fax:

Salesperson: Jimmy White

Order Date: 05/04/2023

Order Type: Quote Order

Status: Quote

Page No.: Page 2 of 2

Quote No.: 230504EYO629A

HTVPL3 3 YR PARTS & LABOR WARRANTY \$ 5,323.00

Each 1.00 5,323.00 5,323.00

Sub-total for Options: \$5,323.00

Additional Comments

This Quote Dose Not Include Sales Tax Or Frt...

Pricing May Change..

If You Have Any Questions Call 479-886-4982 Jimmy

Thank You..

Terms:

Prices are valid for 30 days with signed Quotation.

Customer Signature

Date

Vermeer Signature

Date

Subtotal: \$229,853.75

: \$0.00

Tax: \$0.00

Freight and Prep: \$0.00

Grand Total: \$229,853.75

The new equipment warranty for Vermeer Industrial Products is attached to this Sales Order and is part of this contract. Please read it carefully before signing. No express warranty is made unless identified on this Sales Order. YOUR RIGHTS AND REMEDIES PERTAINING TO THIS PURCHASE ARE LIMITED AS INDICATED ON BOTH SIDES OF THIS PURCHASE ORDER. WHERE PERMITTED BY LAW, NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS IS MADE.

Product Description	QTY	UNIT COST	TOTAL
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TWO TON TRUCK	2	\$97,065 ⁰⁰ / ₁₀₀	\$194,130 ⁰⁰ / ₁₀₀
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SHIPPING (IF APPLICABLE) _____

GRAND TOTAL BID \$ 194,130⁰⁰/₁₀₀

DELIVERY: MUST BE IN STOCK AND READY FOR IMMEDIATE DELIVERY

LEAD TIME ARO: 120-180 DAYS / MUST BE ORDERED

ALL SPECIFICATIONS ARE FULLY MET: ☒ YES ☐ NO

SUBMITTED:

SUPERIOR AUTOMOTIVE GROUP

Company Name

490 HWY 412, SILOAM SPRINGS, AR 72761

Company Address



Authorized Signature

GARY DAVIDSON / FLEET SALES

Print Name & Title

Product Description	QTY	UNIT COST	TOTAL
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ONE TON TRUCK	1	\$91,275 ⁰⁰ / ₁₀₀	\$91,275 ⁰⁰ / ₁₀₀
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SHIPPING (IF APPLICABLE) _____

GRAND TOTAL BID \$ 91,275⁰⁰/₁₀₀

DELIVERY: MUST BE IN STOCK AND READY FOR IMMEDIATE DELIVERY

LEAD TIME ARO: 120-180 DAYS / MUST BE ORDERED

ALL SPECIFICATIONS ARE FULLY MET: ☒ YES ☐ NO

SUBMITTED:

SUPERIOR AUTOMOTIVE GROUP

Company Name

490 HWY 412, SILVER SPRING, AR 72761

Company Address



Authorized Signature

GARY DAVIDSON / FLEET SALES

Print Name & Title