



Water, Sewer, and Solid Waste Committee

8 June 2021

5:30 P.M.

(Or immediately following Equipment Committee Session)

This is a Virtual Meeting

Committee: Chairman Mark Kinion; Council Member Sloan Scroggin, Council Member Teresa Turk, Council Member D'Andre Jones,

Copy to: Mayor Lioneld Jordan, Paul Becker, Kara Paxton, Susan Norton, Chris Brown, Alan Pugh, Terry Gulley, Peter Nierengarten, Jeff Coles, Brian Pugh, Mark Rogers, Corey Granderson, Aaron Watkins, Greg Weeks, Monty Sedlak, Matthew Benton, Nick Batker

From: Tim Nyander, Utilities Director

CALL TO ORDER

ROLL CALL

UPDATES

OLD BUSINESS:

NEW BUSINESS:

1. Supplemental Agreement No. 1 for West Water Transmission Line

The City of Fayetteville owns and operates two parallel water transmission lines from Beaver Water District (BWD) in Lowell that enter the northeast corner of the City. These lines are a 36-inch pipe installed in 1967 and a 42-inch pipe installed in 1993. The BWD intends to build a western clear well distribution point near HWY-112 and the newly constructed Springdale Northern Bypass, HWY-612. This clear well will supply a western water transmission feed to all four customer cities, helping with hydraulics, critical redundancy, and overall utility resiliency. This 11-mile connection has been identified in water master plans for many years, but the timeline was unknown.

In 2012, the City of Fayetteville hired McClelland Consulting Engineers (MCE) to establish a preliminary alignment for a waterline along this western corridor (Res. 120-12) and begin easement acquisitions. The remaining funds from this original agreement have been slowly used to appraise and acquire 15 of 68 easements required for the alignment.

The BWD has been notified by Springdale Water Utility (SWU) that a connection to the western clear well delivery point is desired by 2025. The BWD and SWU have begun final design for alignments and pump stations to make this project a reality. The City of Fayetteville desires a connection to this facility by 2030. With this in mind, the easement corridor should be acquired by 2025 so that engineering and construction of the 11-mile pipeline can occur between 2025 and 2030. The pipeline may cost approximately \$30M-\$40M, dependent on many variables.

Once a timeline for connection to this facility was recognized, a detailed plan to complete easement acquisition was created by City Staff and MCE. Amendment No. 1 will provide the necessary funds to acquire the remaining 53 easements over the next 3-years. This amendment consists of \$160,000 in engineering services and \$101,000 in appraisals and reimbursable expenses for a total cost of **\$261,000.00**.

STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR CONSIDERATION FOR APPROVAL

2. Harmonic Filters & Variable Frequency Drives at the West Side WWTP (\$48,985.88)

We are seeking to replace 8 VFD-Harmonic Filter Units at the West Side facility, 6 on the return activated sludge pumps and 2 on blowers #1 and #2 in the odor control building. The existing VFDs are obsolete with replacement parts and servicing unavailable. We are also beginning to have issues with failing HMI (Human Machine Interface) panels, thus limiting VFD control and adjustment capability.

This project was sent out for sealed bids with two bids received. The bid opening occurring on April 28, 2021. Mayer Electric Supply, Inc provided a low bid of \$48,985.88 plus applicable taxes and freight charges.

Mayer Electric Supply	\$48,985.88
Wade Company	\$89,955.00

Funds are available in the Plants, Pumps & Equipment - WWTP Projects Project.

STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR CONSIDERATION FOR APPROVAL

3. BMS Ribbon Blender Purchase (\$19,625)

In 2020, Jacobs was approved to replace the existing 10-year old surge bin at the Biosolids Management Site as a scheduled 2021 CIP. After further evaluation, it was determined that an in-house refurbishment will be more economical, and the scope of the project was

modified. Jacobs will purchase the material needed and provide the labor to refurbish the surge bin. The City will provide the ribbon blender needed to complete the rebuild.

We have obtained a quote from AIT Services, Inc for a new carbon steel ribbon blender at \$19,625.00 plus applicable taxes & freight charges. Additionally, due to the volatile nature of materials purchases that is currently occurring in the market, it is requested to add a 20% contingency of \$3925.

Ordinance 6147, signed on February 5, 2019 waives competitive bidding through December 21, 2021 for dryer repair through AIT Services.

Funds are available in the Plants, Pumps & Equipment - WWTP Projects Project.

STAFF REQUESTS THIS BE FORWARDED TO THE CITY COUNCIL FOR CONSIDERATION FOR APPROVAL

4. Replace Clarifier Scum Pump at Noland WWTP

Within the past year, clarifier scum pump #1 has seized (one or more of the moving parts fail to turn) and repair is no longer feasible due to its age and previous rebuilds.

This item was sent out for sealed bids in April, and the bid opening occurred on May 5th. Environmental Technical Sales provided a low bid of \$12,150.00 plus applicable taxes and freight charges. We do believe this item qualifies for tax exemption as specified by the Arkansas Department of Finance Arkansas Tax Rules, but a determination is pending.

Environmental Technical Sales	\$12,150
Haynes Pump & Process LLC	\$13,986
Instrument & Supply, Inc.	\$20,832

Funds are available in the Plants, Pumps & Equipment - WWTP Projects Project.

For Information Only

5. Failure of the Noland WWTP Standby Generator

The emergency standby generator at the Noland Plant had an annual inspection on May 1, 2021 for switch gear and automatic transfer switch operation, which was good. On May 10, 2021, the generator was exercised on the monthly PM (preventive maintenance) schedule to include a load test to ensure full operability and functionality of switch gear, which all went well. On May 26th, 2021, an additional test of the 2 MW generator at the Noland WW was performed to ensure the system was prepared for load shedding. During this test, the generator failed to operate.

Something was wrong in the control system. It was possible to get it started but it would not run for any length of time. Caterpillar representatives worked on it that same day but could not solve the problem. During this same time, the hospital lost a generator, so they begin

working on that more critical need. Due to those circumstances, the Jacobs staff obtained a quote for a rental generator from Cat that can be utilized while the Noland generator is repaired. It was approximately \$14,000 to get the generator delivered and set up, and approximately \$8,000 a week thereafter for rental. This expenditure will also include a 10% markup by Jacobs.

This action was taken for several reasons. First, it was unknown at the time what was wrong with the generator and how much lead time it would take to get parts. Second, there is always the possibility of a power failure at any time that would leave the Noland plant unable to provide full treatment full treatment. Third, we are on the cusp of load shedding requirements beginning on June 1st, and failure to be off the grid at designated times when the peak demand is set results in a huge penalty. The City saves approximately \$300,000 each year by load shedding.

Cat came back and worked on the generator. They isolated the problem to the potentiometer on the main control panel that controls the RPM's on the engine which in turn controls the amount of fuel that feeds the generator causing it to stall out.

Staff requested that the potentiometer be replaced instead of cleaned or repaired. Also, Caterpillar provided a service report with all the troubleshooting findings and repairs.

For Information Only

6. Overview of WWTP Monthly Report

Discussion of April's Monthly WWTP Report

PRESENTATIONS

ATTACHMENTS

Amendment No. 1 – McClelland
Western Corridor Vicinity Map
VFDs & Harmonic Filters Bid Tabulation
Mayer Electric Bid
BMS Ribbon Blender Quote
Ordinance 6147 – Dryer Repair
Clarifier Scum Pump Bid Tabulation
Environmental Tech. Sales Bid
Generator Rental Agreement
April 2021 WWTP Report

ADJOURN

Next Water, Sewer, Solid Waste Committee meets on
Tuesday, July 13, 2021, 5:30 p.m.