



**Water, Sewer, and Solid Waste Committee**

**8 Aug 2023**

**5:30 P.M.**

(Or immediately following City Council Agenda Session)

**Committee:** Council Member Teresa Turk, Council Member D’Andre Jones, Council Member Mike Wiederkehr, Council Member Scott Berna

**Copy to:** Mayor Lioneld Jordan, Paul Becker, Susan Norton, Kara Paxton, Kit Williams, Chris Brown, Alan Pugh, Terry Gulley, Ross Jackson, Peter Nierengarten, Brian Pugh, Corey Granderson, Aaron Watkins, Cody Ashworth, Greg Weeks, Jan Guy, Mayo Miller, Josh Alleman, Aleks Kupe, Logan Trifone, Mike Larson, Jason Alexander, Stan Boshart

**From:** Tim Nyander, Utilities Director

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**CALL TO ORDER**

**UPDATES**

**OLD BUSINESS:**

**1. Rate Study Update**

Paul Becker – Chief Financial Officer

**INFORMATIONAL ITEM**

**NEW BUSINESS:**

**2. Change Order – Sewer Repair Under Interstate-49**

In 2021 City Water/Sewer Staff performed an inspection of the 48-inch gravity sewer line that extends from Gregg Avenue to Sunshine Road. Visual inspections of each manhole were conducted, and a ‘boat’ was constructed to float down each line segment and record video. Overall, the line was in excellent shape, however, one area in the vicinity of Interstate-49 has experienced damage at some point during its 15-years of service. This segment of line cannot be repaired with typical excavation techniques due to its location under the Southbound Highway-112 Exit Ramp on I-49.

City Council approved a design-build contract (Res. 6-23) with Structural Preservation Systems, LLC (SPS), a national leader in trenchless pipe point repairs, to develop a plan for repairs in this

location. Once mobilized, SPS created a bypass system to dry the work zone, then entered the pipe for initial shoring and sanitizing. Then a detailed engineering in-pipe investigation was conducted to determine exact location and extent of repairs necessary. During this investigation, the pipe and tunnel system were found to be “unsafe in its current condition” and “subject to imminent collapse.”

The root cause of the failure of this pipeline is the lack of grouting in the annular space outside the pipe, between the pipe wall and the tunnel encasement and tunnel walls. Without this grout the original steel tunnel liner plates have corroded, and the tunnel has started to collapse, thereby crushing the sewer pipe.

The original design-build contract cost (Res. 6-23) was \$2,477,644.00 with a \$375,000.00 contingency. SPS proposes a solution to completely rehabilitate the pipeline and stabilize the tunnel, filling all void spaces. This solution will require four months additional construction time and a change order cost of **\$7,500,000.00**.

Staff has considered alternatives to this proposed change order. For example, installing a new, independent sewer line in a new parallel tunnel. This option could be a lower cost at first glance. However, it would take approximately two years to design, permit, and construct. All the while the active sewer would be bypass pumping, at risk of failure, and at a significant operational cost. Furthermore, the existing line would still need a high-cost grouting abandonment. Other pipe-lining technologies have been considered as well such as cured in place pipe. However, these technologies would likely create a very deformed final pipe shape due to existing deflections and failed pipe segments. Furthermore, these liners would not address existing void spaces nearby the tunnel that could contribute to surface settlement. Finally, these liners would require all existing safety shoring in the pipe to be removed, a very high life-safety risk.

Staff recommends approval of a change order to the Design-Build contract with Structural Preservation Systems, LLC in an amount not to exceed \$7,500,000.00.

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

**3. ARDOT Utilities Relocation Agreement for I-49 MLK Blvd. Interchange**

ARDOT has requested utility relocations to prepare for the widening of Martin Luther King, Jr. Blvd. (Highway-62) from S. Leflar Way to S. Sang Ave. including reconstruction of the interstate overpass and creation of a new overpass at 15th Street.

ARDOT will phase the project, to begin in just the vicinity of 15th Street. The water and sanitary sewer relocations for this first phase are estimated to cost approximately \$5,308,725.00, subject to public bidding, inclusive of engineering fees and easement acquisitions. The relocations are estimated to be 100% reimbursable to the City of Fayetteville by ARDOT. This agreement is primarily to establish the reimbursable percentage for both parties.

Hawkins-Weir Engineers, Inc. was selected for and has completed design of the utility relocations necessary for the 15th Street phase of this project. Arkansas Department of Health project review and easement acquisition is underway, then the project can proceed to bidding.

There are no budget impacts currently. Funds would be obligated to this project at the time a construction bid award were presented. Staff recommends approval of the agreement with the

Arkansas Department of Transportation related to the Interstate-49 MLK Interchange Improvements ARDOT Project 040846.

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

**4. Resolution to Oppose Issuance of ADEQ Permit to Synagro**

Chair Teresa Turk sponsored a resolution to oppose any request from Synagro or other company that would allow the land application or release of industrial waste or similar materials containing nutrients and/or phosphorus by Synagro or other company within either the Illinois River basin or watershed or the White River basin or watershed which flows into Beaver Lake. Discussion on this topic.

**INFORMATIONAL ITEM**

**5. Mission Cottages Discussion**

Discussion of this development's wastewater treatment system

**INFORMATIONAL ITEM**

**6. West Transmission Waterline Update**

Update on Construction Manager at Risk (CMAR) selection process and next steps.

**INFORMATION ONLY**

**7. Overview of WWTP Monthly Report**

June 2023 Monthly WWTP Report

**PRESENTATIONS**

48-inch HOBAS Sewer Pipe Repair

**ATTACHMENTS**

HOBAS Repair Presentation  
Structural Preservation Change Order Request  
Structural Preservation Change Order Unsigned  
Cost Estimate 15<sup>th</sup> St. – Hawkins Weir  
Relocation Agreement – MLK  
MLK Project Map  
Resolution 156-23 Oppose Synagro Permit Request  
June Monthly WWTP Report

**ADJOURN**

Next Water, Sewer, Solid Waste Committee meets on Tuesday, September 12, 2023, at 5:30 p.m.