

MINUTES
MURFREESBORO WATER RESOURCES BOARD
June 22, 2021

The Murfreesboro Water Resources Board met on Tuesday, June 22, 2021 in the conference room at the Operations and Maintenance Building, 1725 S. Church Street. Present at the meeting were Board members: Mr. John Sant Amour, Dr. Al Carter, Mr. Ron Crabtree, Mr. Brian Kidd, Ms. Sandra Trail, Ms. Kathy Nobles, Mr. Kirt Wade, and Ms. Madelyn Scales-Harris. Also present were Darren Gore, Valerie Smith, Mary Lancaster, Doug Swann, Marshall Fall, Roman Hankins, Steve Tate, Matt Powers, Joe Russell, John Strickland, Donald Hughes, Alan Cranford, Travis Wilson, Luke Williams, Jay Bradley, Saya Qualls, Ronnie Martin, and Lonnie Puterbaugh along with other members of the public.

Item A was removed from the Consent Agenda.

Items B, C, and D of the Consent Agenda were presented for the following considerations:

B. Consider renewal of Memorandum of Understanding with MTSU –

Public education and participation are a requirement of the State-issued stormwater discharge permit under which the City of Murfreesboro operates. The City’s annual report to TDEC includes a record of the outreach and education done during the year; and auditors in 2019 examined the City’s records of outreach and education.

In 2011, the City and MTSU entered a memorandum of understanding (MOU) for MTSU to do education projects for us related to stormwater and surface water quality. We have continued with that MOU by annual renewals since then. The MOU sets a base amount of \$45,000 and allows up to \$60,000 in payments by the City to MTSU.

Each year MTSU and the City plan for a set of projects and events that MTSU will work. These include education and outreach targeted to selected businesses or properties (for example, adjacent a stream); activities (TV spots, stream clean-up events, tree-planting, and follow-up education, etc.); classroom teaching; and setting up and staffing outreach events (Earth Day, school field days, etc.). Projects vary from year to year.

Staff recommended the Board recommend to City Council renewal of the MOU.

The 2021-22 fiscal year budget includes \$50,000 for the MTSU education services and would be paid out of stormwater funds.

C. Consider water easement abandonment for Lowe’s Home Improvement –

Buckel Design Group, LLC on behalf of Lowe’s Home Improvement is requesting the abandonment of portions of an existing water easement. This easement was dedicated by plat for the water main installed with the Lowe’s in 1998. Lowe’s intends to relocate a portion of the water line in order to

build a Tool Rental Addition to the eastern side of the building. At this same time we have requested that we collectively “clean up” the easement boundaries around the existing water and sewer mains and for them to dedicate water and sewer easement as necessary for the easements to be centered over the existing mains.

Staff recommended that the Board recommend to City Council approval of abandoning this existing water easement once the new water main and water and sewer easements are in place.

D. Consider hardware/software upgrades –

MWRD has several servers and virtual servers that need to be updated. Some of these servers affect mission-critical operations at the Water and Wastewater plants and also our Customer Service and Advanced Metering Infrastructure (AMI) software servers. We (or the city) do not have sufficient staff to handle all the necessary upgrades in a timely and efficient manner. The current cyber environment makes this an important matter.

Staff recommended the Board approve the use of Waypoint Business Solutions to perform the necessary upgrades to our VmWare systems at the both Water and Wastewater plants and also our VxRail servers. The work will take approximately two weeks to complete.

Cost of the work will be paid from FY21 or FY22 Operating Budget depending on the timing of completion of the work. The cost is not expected to exceed \$17,000. Costs will be shared by Water plant, Wastewater plant, and Administration department.

A motion was made by Sandra Trail to accept Items B, C, and D of the Consent Agenda as presented and it was seconded by Kirt Wade. The Board voted unanimously to approve.

Item A removed from the Consent Agenda was discussed and voted on as an individual item.

A. Consider 20/21 Sanitary Sewer Rehab Project Design budget revision –

At the February Board meeting an Engineering Task Order with LJA was approved to design our upcoming Sewer Rehabilitation project through our Master Services Agreement with LJA. LJA was designing the project with a targeted project size of \$3.0M. Once LJA reviewed all of information provided by staff, both staff and LJA have determined that it will be difficult to hit the targeted \$3.0M due to the number of high priority repairs. Therefore, staff is requesting a re-budgeted amount for the project not to exceed \$4.2M which would include the incorporation of five sewer pump station wetwell cleanings. It is anticipated that the wetwell cleaning may be approximately \$200,000.

Staff recommended the Board recommend approval of the re-budget and target project amount of \$4.2M.

Funding for the Engineering, Construction Administration, Inspection and Construction is proposed from a combination of the 2021/2022 Budget in the amount of \$1M and Working Capital Reserves \$3.2M.

A motion was made by Sandra Trail to accept Item A of the Consent Agenda as presented and it was seconded by Kirt Wade. The Board voted unanimously to approve.

The May 25, 2021 Board Minutes were unanimously accepted as presented.

The Board considered SSR Engineering Task Order 19-41-021.0 Amendment No. 1, High Service Pump Station and Membrane Feed Improvements.

Staff brought this project to the January 2020 Board meeting regarding the need for renovations and improvements to the High Service Pump Station and Membrane Feed Pump Station. Staff wanted to update the Board on the costs associated with this project as the design is complete and advertisements for the project will take place at the end of this month.

SSR and staff have worked to ensure that the improvements for the High Service Pump Station and Membrane Feed Pump Station would meet the current and future needs of the Department. This included the need for detailed research of potential new variable frequency drives (VFDs) for the remaining existing two high service pumps, one new high service pump, existing backwash pump and four membrane pumps. In the past the VFDs at the water plant were Allen Bradley/Rockwell drives. Unfortunately, the plant has experienced numerous issues with AB/Rockwell for the past couple of years. This led to investigating VFDs that we were not as familiar with and determining which drives would meet the needs of the plant. In addition, the plant is looking to pilot a new PLC for the HSPS that is cyber secure, reportedly does not go obsolete, as well as better expectations of support than the current AB/Rockwell PLCs that we have been used in the past.

Due to modifications that have taken place for research and design, and the extended time for the design portion of the contract, some of the costs associated with engineering services has increased. The overall costs for the project have increased by \$175,000 of which \$26,000 are increased engineering services provided by SSR. Of the \$175,000 cost increase, \$149,000 is due to increases in market costs for materials. The probable construction cost has increased from \$2,049,000 to \$2,198,000.

The budgeted amount for the project is \$2,561,000. The revised estimate for the entire project is within budget; estimated at \$2,365,000.

Staff recommended the Board recommend City Council to approve amendment no. 1 to SSR Task Order 1941021.0.

Madelyn Scales-Harris made a motion to approve. Kathy Nobles seconded. The motion unanimously passed.

The Board considered revised JB&S Task Order 21-03, Oakleigh Pump Station.

At the April Board meeting, the Board approved the Task Order for the replacement of the Oakleigh Subdivision Pump Station, PS#37. Because of the location, the number of complaints received and the proximity to the homes, staff agreed to look into the price of installing a different and more upscale style pump station housing rather than the normal green fiberglass enclosures. Staff requested and received updated pricing from John Bouchard for this Task Order. The original task order was in the amount of \$273,890. The revised task order amount is \$296,042 for a difference and increase of \$22,152.

Staff recommended the Board recommend to City Council approval of the Revised JBS Task Order No. 21-03 for the replacement of this pump station and upgraded housing. Funding is requested to come from Working Capital Reserves.

Dr. Carter made a motion to approve. Kathy Nobles seconded. The motion unanimously passed.

The Board considered Cedar Glade Brews connection fees.

It is proposed for the building at 906 Ridgely Road to become Cedar Glade Brews & Tap House (CGB). A building permit has been applied for to remodel the space for the CGB's as well as 4-5 small offices for rent. Typically, per the City Code, each tenant is charged a water and sewer connection fee, however, it has been for larger "store front" tenants such as the retail strip centers. The most recent use found for this building was a church youth meeting location and CGB's would be considered a change in use. Staff did an extensive search over multiple addresses to determine any record of previous connection fees for this building. Staff did not find any record of previous fees.

CGB's does have seating and typically this classification has been considered under the category of a restaurant and where the amount of seating isn't in the amount that it meets the minimum water and sewer connection fee, the minimum is charged. However, since CGB doesn't have any cooking equipment and will only serve prepacked food, they feel like that this shouldn't necessarily be considered the same as a restaurant. Also, there are not any other Tap and Brew Houses of the same size and nature as this where water usage data is available to determine the water and sewer connection fees.

The standard water and sewer connections fees are:

Water Connection Fee	\$1,200 per single family unit (sfu)
Sewer Connection Fee	\$2,550 per sfu

Since there is some ambiguity with the category and the amount of the fee based on similar type businesses, staff is considering Section 33-50 (A)(2) of the City Code which states:

When the applicant for sewer service does not fit into one of the foregoing categories, the connection fee shall be based upon the equivalent usage as a single-family residence (sfu) whose average daily demand is two hundred sixty (260) gallons per day (gpd).

In order to determine the equivalent usage, the Department is requesting that CGB be given 12-18 months to become fully operational so that a full year's worth of water and sewer usage may be collected to determine its singly family unit equivalency. CGB has agreed to pay for one standard water and sewer connection fee and at the end of the monitoring period, the tenant agrees to pay for any additional fees based on the average water usage in accordance with the Code. The Department does have some recourse if the tenant does not pay the fees since they are our water customer.

Staff recommended approval of the deferral of possible remaining water and sewer connection fees until an 18-month average usage can be determined.

Sandra Trail made a motion to approve. Dr. Carter seconded. The motion unanimously passed.

The Board considered SSR Engineering Task Order 2141008.0, WRRF Full-Scale Thermal Dryer Evaluation and Preliminary Design.

As a result of the Gryphon small-scale biosolids dryer having failed to meet the performance guarantee, staff has requested Smith Seckman and Reid (SSR) to conduct a study and report that recommends a vendor and process for full scale biosolids drying operations, as well as preliminarily designing those drying operations within pre-existing facilities at the City's Water Resource Recovery Facility (WRRF).

In 2019 the Department contracted with Gryphon Environmental, LLC for the installation of a small-scale dryer at the WRRF. The project was to demonstrate the dryer's capacity to produce Class A EQ biosolids from the departments dewatered sludge while meeting performance metrics. Ultimately, the installation did not meet several key requirements. In this case, the Department has the right to a refund for the dryer.

Staff is seeking alternative paths forward to test other biosolids dryers prior to moving into full-scale implementation.

SSR's dryer evaluation will include analysis of up to five different equipment manufacturers and three different drying processes (belt, drum, and paddle). The evaluation will include up to three dryer facility visits; similar in process to the WRRF; to inspect equipment and discuss the technologies with facility operation and maintenance personnel. The evaluation will include consideration of dryer capacity, capital costs, O&M costs, and ease of operation and maintenance.

Once the preferred equipment is selected, SSR will prepare a conceptual or preliminary design for the full-scale dryer. The design will be based around the preferred dryer at the optimal capacity that will fit inside the existing Biosolids Building truck bay.

Staff recommended the Board recommend to City Council approval of SSR Task Order 2141008.0.

The estimated cost for the engineering evaluation and conceptual design services is \$267,010; \$170,055 for the study and report, \$9,525 site visits, and \$67,290 for preliminary design of the full-scale biosolids dryer. Funding is requested to come from the Department's working capital reserves.

Sandra Trail made a motion to approve. Kathy Nobles seconded. The motion unanimously passed.

Staff presented and discussed the Water Resources Dashboard Performance for May 2021.

Staff presented the Financial Reports for the year ending May 31, 2021.

There being no further business, the meeting was adjourned.