



ITEM REPORT UTILITIES COMMISSION

Agenda Date: 6/8/2022
Agenda Section: Business Item

Department Origination: Public Works

Agenda Item: Accept the KLM Inspection Report for the 400,000 Gallon South Water Tower and budget \$65,000 in the Water Enterprise Fund for Repairs/Maintenance to Structures for the 2023 budget.

Approval Required: Simple Majority Vote

BACKGROUND

The City of Baxter had requested that KLM Engineering perform a dry tank cleanout evaluation and disinfection of the 400,000-gallon South Water Tower prior to placing the water tower into service.

The South Water Tower has been out of service for the past several years because the capacity available with North Water Tower and the East Water Tower can adequately accommodate the City's water needs. Last year was an exception as the South Water Tower was utilized for various reasons with the Interconnect building being the sole supply for the City's water system.

KLM completed the inspection of the South Tower when they were disinfecting the tower to put it back into service so the warranty work on the North tower and the scheduled repairs on the East Tower can be completed. The North Tower warranty work is expected to take two weeks to complete, the tower will need to be drained and cleaned to complete the work. Two weeks after the work on the North Tower is complete the East Tower will be drained and cleaned for the scheduled repairs. Before winter sets in the South Tower will be decommissioned again as it is not needed when the other two towers are in service.

The most common water storage maintenance is repainting. The life of a coating system varies based on the type of product, method of application, and the recoating application. Generally, recoating's are needed within a time span of 15-30 years from the initial application. The inspection report identifies the need to complete spot repairs on the interior wet coating and power washing on the exterior of the water tower within the next year or two.

FINANCIAL IMPLICATIONS

For budgetary purposes, if spot repairs were performed to the interior wet coating and the exterior was washed, the estimated current cost would be between \$55,000 and \$65,000. If the City wanted to improve the exterior appearance in addition to the wash, the tower is likely a candidate for a full overcoat of paint, which would increase the cost by approximately \$60,000 to \$70,000. These costs do include engineering and inspection services. Performing proper spot repairs and a possible overcoat now could greatly extend the service life of the coating system and appearance of the tower for as much as ten years, or more as determined by future inspections, for a fraction of the cost of full reconditioning. Not only would this extension provide plenty of time to prepare and budget for the next full reconditioning, but it could result in significant savings by undergoing fewer reconditioning cycles over the life of the tower.

If the City of Baxter elects to forego any repairs, it should be anticipated the interior coating may require replacement in approximately five (5) to seven (7) years, depending on corrosion advancement. At which time, the exterior should also be planned for replacement even if it remains in better conditions than the interior. Under most circumstances, reconditioning the interior and exterior at the same time is the most cost-effective long-term

approach to tower rehabilitation and keeps future rehabilitations on the same schedule. The estimated current cost to completely recondition the tower is approximately \$575,000 to \$625,000.

STAFF RECOMMENDATIONS

Staff recommends budgeting \$65,000.00 in the Water Enterprise Fund for Repairs/Maintenance to Structures for the 2023 South Water Tower Improvements.

COUNCIL ACTION REQUESTED

Motion to accept the KLM Inspection Report for the 400,000 Gallon South Water Tower and budget \$65,000 in the Water Enterprise Fund for Repairs/Maintenance to Structures for the 2023 budget.