



AGENDA ITEM SUMMARY

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| Agenda Date | December 10, 2024 |
| Requested Action | APPROVE RESOLUTION NO. 2024-R107; A RESOLUTION OF THE CITY OF BOERNE, TEXAS, AUTHORIZING THE CITY MANAGER TO ENTER INTO AND MANAGE AN PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF BOERNE AND HDR ENGINEERING, INC. FOR DESIGN OF UPGRADES TO OLD SAN ANTONIO ROAD WASTEWATER TREATMENT AND RECYCLING CENTER (WWTRC) FOR AN AMOUNT NOT TO EXCEED \$4,345,790.00. |
| Contact Person | Michael Mann – Utilities Director |
| Background Information | <p>The Old San Antonio Road Wastewater Treatment and Recycling Center (WWTRC) was constructed in 2013 to provide wastewater treatment services for Boerne and nearby areas. Designed with an initial capacity of 1.4 million gallons per day (MGD), the plant’s ultimate design allows for expansions up to 5.2 MGD. However, regulatory requirements and anticipated growth necessitate timely expansions to ensure compliance and meet future needs.</p> <p><u>Regulatory Requirements</u></p> <p>The Texas Commission on Environmental Quality (TCEQ) mandates:</p> <ol style="list-style-type: none">1. Planning for expansion when a plant reaches 75% of its permitted capacity.2. Construction of the expansion by the time the plant reaches 90% capacity. <p>Based on projected flows, WWTRC is expected to reach 75% capacity in 2025, triggering the planning requirement.</p> <p><u>Challenges and Growth Needs</u></p> <ul style="list-style-type: none">• Customer Growth: Increases in residential and commercial development have driven higher wastewater flows.• Esser Road Plant Limitations: To avoid costly upgrades at the older Esser Road facility (1.2 MGD capacity), the City plans to transfer flows to the WWTRC.• Reclaimed Water Demand: Increased growth within the |

reclaimed utility footprint requires additional storage and pumping capabilities.

Proposed Project Scope

HDR Engineering, Inc. has been selected for its expertise and familiarity with the WWTRC to design a phased expansion plan. The project includes:

1. Reclaimed Water Storage and Pumping:

- Add a third pump and double on-site reclaimed water storage capacity.
- Improve reclaimed water production to support City irrigation and future customer needs.

2. 2.2 MGD Re-Rating:

- Install additional sludge press, effluent filtration, and disinfection equipment to increase the plant's capacity to 2.2 MGD.
- Obtain a TCEQ discharge permit amendment to reflect the new capacity.

3. Future 3.9 MGD Expansion (Pre-Design):

- Prepare for the next expansion phase to streamline construction when growth demands it.

Financial Considerations

HDR's fee for the design and permitting work is \$4,345,790. This amount is included in the current fiscal year's operational budget.

1. Preliminary Construction Cost Estimates:

- Reclaimed Water Storage and Pumping: \$2.6M–\$5.4M
- 2.2 MGD Re-Rating: \$8.3M–\$17.7M
- 3.9 MGD Expansion: \$26M–\$55M

The City's latest Capital Improvement Plan (CIP) included estimates of \$1.6M, \$11.5M, and \$15.9M for these projects, which will be updated as design progresses. Rate adjustments will be evaluated in future rate models to account for actual costs.

The proposed upgrades to the WWTRC ensure compliance with TCEQ capacity requirements, meeting the City's legal and regulatory obligations. Strategically, the project prepares the facility to accommodate increased flows resulting from both customer growth and the planned transfer of capacity from the Esser Road plant. By consolidating these upgrades into a phased approach, the City aims to

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| | enhance efficiency and reduce long-term costs. Additionally, the enhancements will improve reclaimed water availability, benefiting both City operations and customer needs. |
| Item Justification | <input checked="" type="checkbox"/> Legal/Regulatory Obligation <input checked="" type="checkbox"/> Infrastructure Investment <input type="checkbox"/> Reduce Costs <input type="checkbox"/> Customer Pull <input type="checkbox"/> Increase Revenue <input checked="" type="checkbox"/> Service Enhancement <input type="checkbox"/> Mitigate Risk <input type="checkbox"/> Process Efficiency <input checked="" type="checkbox"/> Master Plan Recommendation <input type="checkbox"/> Other: |
| Strategic Alignment | F1 – Committing to strategic, responsible and conservative financial management F2 – Investing in and maintaining high-quality infrastructure systems and public assets B1 - Utilizing data to drive smart decision making B2 – Advancing mater plan recommendations |
| Financial Considerations | Funding for the proposed HDR work is included in our current fiscal year budget and future FY budget planning. |
| Citizen Input/Board Review | N/A |
| Legal Review | Our master service agreement with HDR has been approved by the City Attorney’s office, as has this proposed task order. |
| Alternative Options | 1. Delay Design Work: This would risk non-compliance with TCEQ permitting requirements and jeopardize service continuity. 2. Re-Initiate Consultant Selection Process: Restarting the RFQ process would result in significant delays and higher costs. |
| Supporting Documents | Resolution No. 2024-R107 Map of WWTRC site. Proposed HDR task order. Preliminary Estimate of Probable Construction Costs. |