



Staff Report

TO: City Council
FROM: Todd Parton, Assistant City Manager
DATE: December 21, 2021
SUBJECT: **City Council Approval of the Third Amendment to the Webb Engineering Contract for the Wastewater Treatment Plant and Brine Line Project in an Amount of \$530,809 for the Design and Construction Services for a MBR Replacement System for a Total Contract Not to Exceed \$4,250,699**

Background and Analysis:

The City of Beaumont has constructed an upgrade/expansion project at the existing wastewater treatment plant (WWTP). A crucial part of this project is the conversion to membrane bioreactor (MBR) treatment technology.

It is recommended that the City transition to and install the Suez MBR System. The Suez system is a hollow fiber membrane formerly known as Zenon and GE.

Webb is estimating that this total effort for design and construction oversight services will be \$530,809. Below are the details of the tasks.

Design

- a) Evaluation of the existing blowers, permeate pumps and piping to determine what will work with the new system,
- b) Develop a phasing plan for the systematic removal and replacement of the MBR system to ensure ongoing treatment,
- c) Demolition plans to remove existing MBR system,
- d) Coordination with Suez regarding new MBR system mechanical, structural, electrical and instrumentation design,
- e) Structural changes to influent channel to utilize membrane basins 5 and 6,
- f) Prepare specifications and construction documents for the replacement project, and
- g) Review and evaluation of various equipment for the project.

Construction Management, Inspection and Engineering Services During Construction

- a) Provide construction management and contract oversight during construction;
- b) Provide on-site inspection during construction;
- c) SCADA Programming to integrate the new MBR system into the Plant SCADA;
- d) Submittal, shop drawings, and RFI review and comments;
- e) Commissioning and startup assistance;
- f) Project closeout, record drawings, O&M manual updates; and
- g) Coordination with the City Operations Staff and Department of Drinking Water regarding Recycled Water Permit.

The anticipated schedule and project milestones will be as follows:

- Authorize a change order with W.M. Lyles to proceed with ordering the Suez equipment and installation of the Suez system – December 21, 2021,
- Begin field construction – 2nd week of February 2022,
- Receive membrane equipment from Suez – 2nd week of March 2022,
- Complete installation of Trains 5 and 6 with Suez equipment – April 2022, and
- Remaining Trains will follow the successful startup of Trains 5 and 6.

Fiscal Impact:

Wastewater Treatment Plant Expansion/Renovation:

| WWTP | Budget Amount | Paid to Date | Remaining |
|-------------------------|------------------------|------------------------|-----------------------|
| Design | \$2,697,942.63 | \$2,557,938.51 | \$140,004.12 |
| Construction Management | \$6,034,572.75 | \$5,756,198.83 | \$278,373.92 |
| Equipment | \$252,906.00 | \$256,216.13 | \$(3,310.13) |
| Permits | \$324,776.76 | \$121,450.10 | \$203,326.66 |
| Construction | \$53,910,737.00 | \$50,690,174.97 | \$3,220,562.03 |
| Contingency | \$11,624,252.52 | \$3,994,286.68 | \$1,629,965.84 |
| Unallocated | \$1,489,244.72 | \$ - | \$1,489,244.72 |
| Total | \$76,334,432.38 | \$62,376,265.22 | \$6,958,167.16 |

Recommended Action:

Approval of the Third Amendment to the Webb Engineering Contract for the Wastewater Treatment Plant and Brine Line Project in an amount of \$530,809 for the design and construction services for a MBR replacement system for a total contract not to exceed \$4,250,699.

Attachments:

- A. Third Agreement to Professional Services Agreement
- B. Webb Engineering Proposal