

Greenwood Wastewater Treatment Plant

Dissolved Air Flotation Unit Rehabilitation and Odor Control Project

Corpus Christi City Council – April 29, 2025



Background

Greenwood Wastewater Treatment Plant (WWTP)

- Constructed in 1957
- Average daily treatment capacity is 8MGD, peak flow capacity is 24 MGD

2014 through 2018

- All major WWTP improvements placed on hold while City considered diverting all wastewater flows to a new single WWTP

2017

- Proposed Wastewater Management Plan presented to City Council recommended consolidating wastewater treatment to four plants including the replacement of the Greenwood WWTP with a new plant at a nearby location

May 23, 2017

- City Council passed resolution directing staff to implement an alternative that kept all six wastewater treatment plants, including the Greenwood plant at the current location, and making necessary investments at those facilities rather than constructing new WWTPs



Greenwood WWTP Current Status



- Significant physical obsolescence and maintainability issues
- Recent failures in structures and piping
- Clarifier #1 center column is collapsed
- Numerous complaints and TCEQ violations due to odors emanating from the plant

Greenwood WWTP requires significant upgrades and re-capitalization to ensure operability and maintainability, mitigate plant infrastructure failures, remain compliant with the discharge permit and other TCEQ requirements.

Project Scope

Includes upgrading, repairing and replacing aging and deteriorating infrastructure, changing treatment processes to mitigate odors, and provide operational resiliency and reliability. The treatment process will eliminate the primary clarifiers and remove the anerobic digesters, moving the plant to an aerobic process.

- Replacement of existing mixed liquor flow distribution box
- New aeration basin
- New final clarifier and final clarifier flow distribution structures
- Replacement of existing WAS pumps and RAS pumps
- New dewatering pump building
- New electrical control rooms/generators/transformers
- Yard piping and hydraulic improvements
- Site access roadways and driveways
- Rehabilitation of existing aeration basins, existing final clarifiers and existing RAS pump station
- Conversion of primary digestors Nos. 2 and 3 to aerated WAS holding
- Rehabilitation of existing blower building
- Modifications to sludge dewatering building
- Upgraded blowers and pumps to improve treatment process efficiency, lower maintenance costs, and reduce overall energy needs

Allison WWTP Energy Savings

Allison WWTP - kWh Usage			
Month	2023	2024	2025
January	246,600	369,600	291,000
February	296,400	256,800	294,000
March	325,200	239,400	267,600
April	382,200	261,000	
May	338,400	252,000	
June	403,200	277,800	
July	419,400	262,200	
August	372,000	274,200	
September	638,400	294,000	
October	378,600	271,200	
November	340,800	280,800	
December	435,000	324,600	
Grand Total	4,576,200	3,363,600	852,600



Competitive Solicitation Process

- October 2024 – Request for Bids issued
- December 2024 – City receives three bids
- March 2025 – Low bidder notified of determination of non-responsiveness based on failure to satisfy the minimum number of years in business and levels of comparable project experience by the company; low bidder files protest answered by Legal Department
- March 2025 – City Manager meets with low bidder
 - Based on information presented at the follow-up administrative hearing regarding the financial capacity of the firm and experience of the personnel, the City Manager concluded any risk of awarding contract to low bidder was more than offset by the cost differential between the first and second bids

Project Timeline

2018 - 2024	2024 - 2025	2025 - 2029
March - September	October - April	May - January
Design	Bid/Award	Construction

Construction duration is planned for 56 months from issuance of the Notice to Proceed to begin construction in May 2025 with anticipated completion by January 2029.

Fiscal Impact

\$69,800,000.00 in FY25 with funding available from the Wastewater Capital Fund. Remaining funds will be incurred in FY26 in an amount of \$32,200,000.00.

Staff Recommendation

Staff recommends awarding construction contract for Greenwood WWTP Dissolved Air Flotation Unit Rehabilitation and Odor Control project to RAVA Construction, LLC, of Houston, TX, in the amount of \$102,000,000.00.

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Thank you!

