



AGENDA MEMORANDUM

Action Item for the City Council Meeting of March 30, 2021

DATE: March 30, 2021

TO: Peter Zaroni, City Manager

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<p style="text-align: center;"><u>Construction Contract Award</u> Allison Wastewater Treatment Plant Lift Station and Plant Improvements</p>

CAPTION:

Motion awarding a construction contract to Associated Construction Partners, Ltd., Boerne, Texas, for the Allison Wastewater Treatment Plant Lift Station and Plant Improvements upgrades to the lift station, aeration basins, clarifiers, effluent filter, disinfection system, aerobic digester, pre- and post-thickeners, belt press building, and a new blower-electrical control room building, located in Council District 1, in an amount of \$17,745,523.13, with FY 2021 funding available from the Wastewater Capital Fund.

SUMMARY:

This motion approves a construction contract for the Allison Wastewater Treatment Plant (WWTP) Lift Station and Plant Improvements. The project provides for upgrades to the lift station, aeration basins, clarifiers, effluent filter, disinfection system, aerobic digester, pre- and post-thickeners, belt press building, and a new blower-electrical control room building.

BACKGROUND AND FINDINGS:

The Allison WWTP is one of six wastewater treatment plants that the City owns and operates. The Allison WWTP serves the Calallen area and a significant portion of the Northwest area of Corpus Christi. The Allison WWTP is located along the Nueces River at the end of Allison Road. It was originally constructed in 1965 as a two million gallons per day (MGD) average daily flow capacity and was expanded in 1984 to its current capacity of five MGD. The Allison WWTP is over 30 years old and the plant equipment is very antiquated making the replacement parts for

equipment very difficult to find. Maintenance and upkeep projects have been performed over the years to improve treatment quality, but the existing electrical and mechanical equipment are beyond their service life and are failing. This is affecting plant operations and safety of the plant operators. Additionally, some of the buildings and concrete structures are also in need of repairs.

This project scope includes the listed below critical upgrades and replacement of deteriorated equipment at the Allison WWTP.

- Allison Plant Lift Station upgrade: Convert from wet pit/dry pit type to submersible lift station and provide new odor control unit.
- West Aeration Basins upgrades: Convert the treatment from activated sludge to the Integrated Fixed Activated Sludge process and replace isolation gates, valves and weirs.
- East Aeration Basins upgrades: Replace isolation gates, stairs, valves, weirs and convert to fine bubble aeration.
- Final Clarifiers replacement: Replace existing scraper equipment completely with trough type hydraulic differential equipment.
- New Waste Activated Sludge (WAS)Pumps: Add WAS pumps at the Clarifiers to draw off and waste solids to the digestive system. Remove existing WAS airlift pumps from Aeration Basins.
- Effluent Filter upgrade: Remove existing equipment and convert to cloth media type filter to match that provided at the White Cap WWTP.
- Chlorine Contact Chamber upgrades: Remove existing inoperable drain valves and provide new drain valves with electric actuators.
- New Disinfection System: Replace existing chemical tanks and replace existing vacuum tube disinfection system with new peristaltic pumping system.
- Aerobic Digester upgrades: Clean out basins, replace airbridge supports and refurbish aeration system.
- Pre and Post Thickeners upgrades: Replace existing scraper equipment and scum baffles in both units.
- Belt Press Building upgrades: Replace polymer system, refurbish existing building and provide new gravity drain system for filtrate to the Plant Lift Station.
- New Blower-Electrical Control Room (ECR) Building: Construct new Blower-ECR Building to house the five new geared turbo blowers and two multi-stage centrifugal blowers. A climate controlled Electrical Control Room will be provided in this building to house all the new electrical gear.
- Maintenance Building Rehabilitation: Remove existing 1984 blowers and air piping and convert this building to the Maintenance Building.

The proposed improvements will maintain the plants current processing capacity of five MGD, with a two-hour peak flow of 15 MGD.

PROJECT TIMELINE:

20	2021												2022												23
D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J
Bid/ Award				Construction																					

Project schedule reflects City Council award in March 2021 with anticipated completion in January 2023.

COMPETITIVE SOLICITATION PROCESS

The Contracts and Procurement Department issued a Request for Bids. On January 27, 2021, the City received bids from four bidders. The City analyzed the bids in accordance with the contract documents and determined Associated Construction Partners, Ltd. is the lowest responsive and responsible bidder. Associated Construction Partners, Ltd. has successfully completed numerous City utility projects since 2012 including Greenwood WWTP 2011 Improvements, Greenwood WWTP Lift Station Force Main, and Laguna Madre WWTP Headworks and Bar Screen Improvements. A summary of the bids is provided below:

BID SUMMARY	
CONTRACTOR	BASE BID
Associated Construction Partners, Ltd.	\$17,745,523.13
Reytec Construction Resources, Inc.	\$18,251,000.00
CSA Construction	\$18,347,000.00
Garney Companies, Inc.	\$18,428,363.13
<i>Engineer's Opinion of Probable Construction Cost</i>	<i>\$13,758,439.13</i>

ALTERNATIVES:

The alternative is not to award the construction contract to the low-bidder, Associated Construction Partners, Ltd. This would delay improvements to the wastewater treatment plant and create more costly maintenance in the future. Not awarding the construction contract would also cause TCEQ permit violations and fees.

FISCAL IMPACT:

Currently, the FY 2021 CIP does not have the complete construction budget of \$17,745,523.13. The project will be funded over a two-year period. The FY 2021 CIP has an amount of

\$7,000,000.00 in total with funding available from the Wastewater Capital Fund. The initial budgeted cost estimate was \$3,545,523.13 below the FY 2022 CIP budgeted amount and the FY 2022 budgeted amount will be adjusted from \$7,200,000 to \$10,745,523.13.00 during the FY 2022 annual budget process.

FUNDING DETAIL:

The funds for this project will be certified each fiscal year. For FY 2021, \$7,000,000.00 will be certified with the passage of this motion, \$10,745,523.13 will be budgeted and certified with FY 2022 Capital Budget.

Fund: Wastewater 2021 CIP (Fund 4258)
Mission Elem: Wastewater Collection System (042)
Project: Allison WWTP Lift Station Upgrade and Process Improvements (Project No. E10043)
Account: Construction (550910)
Activity: E10043-01-4258-EXP
Amount: \$17,745,523.13

Year 1: \$ 7,000,000.00
Year 2: \$ 10,745,523.13

RECOMMENDATION:

Staff recommends awarding the construction contract for the Allison WWTP Lift Station and Plant Improvements project to Associated Construction Partners, Ltd., in the amount of \$17,745,523.13. The construction duration is planned for 21 months from issuance of the Notice to Proceed to begin construction in April 2021.

LIST OF SUPPORTING DOCUMENTS:

Location and Vicinity Map
Contract