

Restoration of SEA District Water Features - Water Garden

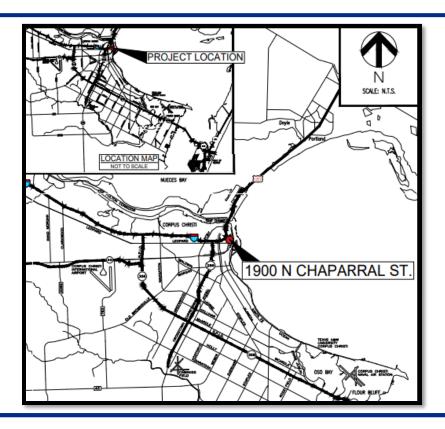


City Council Presentation April 25, 2023



Project Location

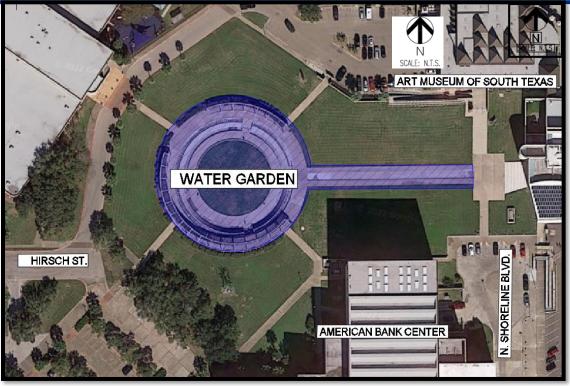






Project Vicinity







Project Background









Project Background



- The Water Garden was originally built in 1987.
- The electrical and mechanical equipment is housed in an underground vault that relies on sump pumps to prevent equipment flooding. Power outages have resulted in frequent equipment damage due to flooding.
- The Water Garden suffered the latest catastrophic flooding following Hurricane Harvey in 2017 and has been unserviceable since that time.
- In 2019, the City awarded a design contract to completely replace the electrical and mechanical equipment. The equipment was to be installed in a new aboveground pumphouse building with fully redundant pumps. The project was advertised for bid in March 2020, but no bids were received.
- The FY21 Seawall CIP request was amended to provide adequate funding for the Water Garden and Bayshore Fountain restoration. The Type A Board was unwilling to fund the Water Garden project at the requested amount and the project was removed from the FY21 CIP.



Project Background



- The City subsequently engaged in a value engineering exercise to reduce the cost of the Water Garden project. The engineer developed a design concept that they believed could be implemented for a budget of \$4.5 million rather than the previously sought \$10M (Water Garden and Shoreline Fountain).
- On May 10, 2021, the new concept was advertised as a Design-Build procurement, to which the city received only a single response that was rejected due to lack of competition.
- The Type A Board and City Council restored the Water Garden funding in the FY22 Seawall CIP at the \$4.5M level.



Project Procurement



- The project was re-advertised as a Design-Build procurement on October 18, 2021. The City received responses from SpawGlass Contractors Inc. and Fulton Construction Inc.
- As a design-build procurement, the contractor team is selected based on relevant qualifications.
- The evaluation committee consisted of representatives from City of Brownsville, City of Moncton, City of Ports Mouth, City of Riverside, and staff from City of Corpus Christi, Engineering Services and City Manager's office as advisory(non-scoring member).
- Fulton Construction Inc., was selected as the most qualified design-build contractor.
- City Council approved the design phase of a Design-Build contract on June 14, 2022.



Project Scope



- Current effort will provide full design drawings and specifications.
- The project will update and replace all electrical and mechanical equipment currently housed underground.
- New electrical and chemical treatment equipment will be relocated to an aboveground structure.
- All supply piping will be replaced.



Current Status



• Fulton Construction has submitted their 60% design package which includes their estimated price. The current estimate exceed available funds. Staff is requesting to add \$3.5M to the CIP project to be able to fund currently estimated costs.



Maintenance Budget



Expenditures	Cost	
Chemicals: Chlorine, acid, sodium bicarbonate, shock, stabilizer	\$	175,000
Lakeside receptacles 30 gallon can liners	\$	56,900
Contingency	\$	50,000
Trailer-mounted pressure washer	\$	12,250
Maintenance and repairs	\$	10,000
100 gallon salt brine skid sprayer	\$	7,350
Tools and equipment	\$	5,000
Cleaning supplies	\$	1,160
Dog waste stations	\$	1,150
Backpack blower	\$	980
Graffiti remover	\$	760
Total	S	320,550



Future Work



BWWTP is 0.5 miles from Water Garden. There is potential to feed the feature with recycled water in the future.







Questions?