

# ONSWTP Navigation Pump Station Improvements

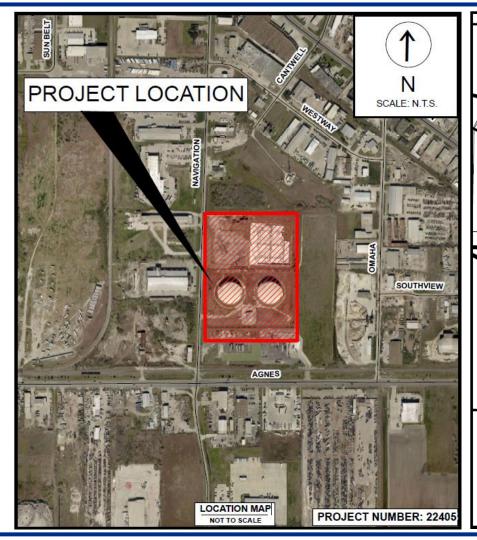


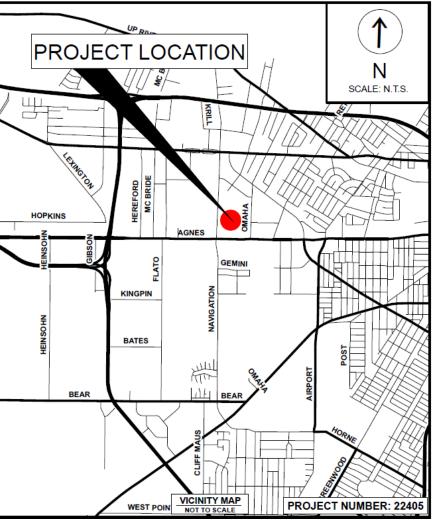
Council Presentation December 20, 2022



### Project Location



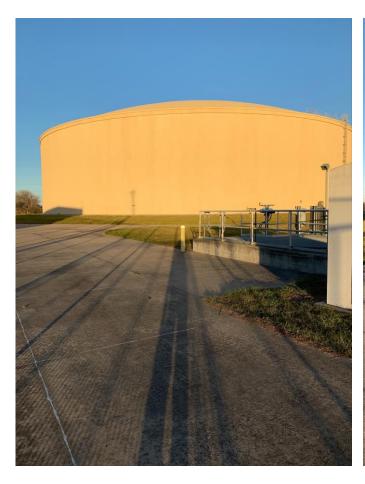






#### Overview













## Project Scope



The City of Corpus Christi owns the Navigation Pump Station (PS), located at 152 North Navigation Blvd, Corpus Christi, Texas, which consists of 2 - 10 MG tanks. Under the current distribution system set up, the pump station does not contribute to maintenance of system pressure and was taken out of service in 2018. This project includes changes to Navigation Pump Station and surrounding distribution piping to help the city improve water delivery and water quality in the distribution system. An Engineering Letter Report by design will be carried out for these improvements. The major anticipated improvements for this project include upgrades to existing three pumps, one new pump and four new VFDs, and potential transmission main upgrades.

The Preliminary Engineering Report will provide recommendations and 30% design drawings on the following topics:

- Hydraulic studies to determine new hydraulic grade line for the station.
- Re-routing of supply and discharge line to improve water quality.
- Replacement of pressure/flow control valves.
- Replacement of existing pumps.
- Replacement of tank isolation actuators.
- Evaluate need for on-site back-up power and freeze protection.
- Hydraulic Model Update and Calibration.

- Motion authorizes a professional services contract with CP&Y Inc., San Antonio, Texas, to provide a 30% Preliminary Engineering Report for Navigation Pump Station Improvements in an amount not to exceed \$280,213.00, with FY 2023 funding available from Water Capital Fund.
- Major anticipated improvements for this project include upgrading the pumping and control equipment along with potential transmission main upgrades.
- These improvements will bring a City asset back into service, optimize pump station operations and add to the water supply by increasing ground storage.



## Project Schedule



2022-2024	2024	2024-2025
December - March	April - June	July - October
Design	Bid/Award	Construction

Project schedule reflects City Council award of design services in December 2022 with anticipated construction completion by October 2025.