

Capital Improvement Plan
City of Corpus Christi, Texas

2023 *thru* 2025

Project # 22407
Project Name ONSWTP Flocculation Upgrades & Baffling



Type Reconditioning-Asset Longevity **Department** Water Department
Useful Life 40 years **Contact** Director of Water Utilities
Category Water Treatment **Priority** 2 Critical- Asset Condition\longevity

Status Active

Description

The purpose of this project is to upgrade the existing walking beam flocculators in basins 1 and 2 at O.N.Stevens Water Treatment Plant. The existing equipment is obsolete, causes operational issues and are high-maintenance. This has necessitated need of replacing aging equipment with more reliable, low-maintenance equipment like paddle wheel flocculator. Preliminary design will be carried out to evaluate the best suited alternative followed by detailed design and construction. This equipment will provide adequate mixing and prevent floc carryover into other areas of the treatment process and ensure the water treatment plant can continue to meet state and federal drinking water standards. This project will also add baffle walls to Plant 1 Secondary Basins 1 and 2. These baffle walls are intended to provide adequate chemical mixing and even out flow distribution.

Justification

The flocculators in basins 1 and 2 should be upgraded from walking beams to paddle wheels due to high maintenance and obsolete equipment. Baffle walls to be added to Plant 1 Secondary Basins 1 and 2 are required for adequate chemical mixing and even flow distribution.

Expenditures	Prior Years	2023	2024	2025	Total
Construction/Rehab			5,650,000	5,800,000	11,450,000
Testing		100,000	200,000	150,000	450,000
Design		1,100,000			1,100,000
Contingency		150,000			150,000
Eng, Admin Reimbursements		150,000	500,000	700,000	1,350,000
Total		1,500,000	6,350,000	6,650,000	14,500,000

Funding Sources	Prior Years	2023	2024	2025	Total
Revenue Bonds		1,500,000	6,350,000	6,650,000	14,500,000
Total		1,500,000	6,350,000	6,650,000	14,500,000

Budget Impact/Other

There is no projected operational impact with this project at this time. A reassessment will be done upon completion of project to determine on-going or maintenance costs.