

825251 - Mary/Carson Water Plant Upgrade

Originating Year:	2006	Project Type:	Water	Department:	270 - Environmental Services
Planned Completion Year:	2025/26	Category:	Infrastructure	Project Manager:	Marlon Quiambao Jr.

Project Description/Scope/Purpose

This project will replace all of the mechanical and electrical components of the Mary-Carson Water Plant, including associated pump house structure and foundation, seismic upgrades and soundproofing, access to and around the structure, and emergency backup power to the plant. In October 2013, HydroScience completed a Potable Water System Comprehensive Preliminary Design Study Report. The report provided condition assessments and specific recommendations for items needing repair/replacement at all City water plants and well facilities. This pump station should be upgraded to allow for all three pumps to be electric-driven with a single generator for standby power. Landscape improvements shall also be incorporated to address large pine trees adjacent to the pump station building which are causing root damage to the hardscape next to the building.

The mechanical and electrical systems associated with the Mary-Carson Water Plant were built in 1966 and have exceeded their 40 year life expectancy. As referenced in Chapter 8 of the City's Water Utility Master Plan, equipment replacements and upgrades are necessary to maintain system integrity, conform to new Supervisory Control and Data Acquisition (SCADA) specifications, and to minimize the impact of emergency engine operation on local air quality.

Minor repairs have been done to the Mary-Carson roof. However, this building has structural and foundation problems associated with tree roots and will require re-roofing. This project is revised to include roof and building repairs as part of the mechanical and electrical portion of the water plant renovation and will need to consider sound proofing of building due to proximity to residential homes.

Associated site improvements are also required, such as paving and repairs to the overflow moat and draining of the site and access to the structure housing the mechanical and electrical components, which are in need of replacement.

Project Evaluation and Analysis

Improvements associated with the tanks and tank anchorage will be addressed in Project 830170 Refurbishment of Water Tanks. This is a substantial improvement. The completion year is anticipated in FY 2025/26 to account for lead times, work warranty periods, and punch list/closeout.

Fiscal Impact

This project is funded by the Water Supply and Distribution Fund. Ongoing operating costs are not expected to increase, and could potentially decrease as we will be replacing old equipment with state of the art components.

Funding Sources

Water Supply and Distribution Fund Revenues

Plans and Goals

EM - Environmental Management - EM-3: Reliable and Safe Water Distribution

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	171	-	-
2022-23	7,767,302	-	-
2023-24	-	-	-
2024-25	-	-	-
2025-26	-	-	-
2026-27	-	-	-
2027-28	-	-	-
2028-29	-	-	-
2029-30	-	-	-
2030-31	-	-	-
2031-32	-	-	-
2032-33	-	-	-
2033-34	-	-	-
2034-35	-	-	-
2035-36	-	-	-
2036-37	-	-	-
2037-38	-	-	-
2038-39	-	-	-
2039-40	-	-	-
2040-41	-	-	-
2041-42	-	-	-
2042-43	-	-	-
20 Year Total	-	-	-
Grand Total	7,767,472	-	-