

806351 - Land Development and Capital Construction

Originating Year:	1998	Project Type:	Water	Department:	270 - Environmental Services
Planned Completion Year:	Ongoing	Category:	Capital	Project Manager:	Joseph De La Cruz

Project Description/Scope/Purpose

This project provides support for construction activities involved with land development and capital construction projects. The project will allow for the purchase of construction services, miscellaneous equipment parts and repairs, and general supplies. In addition, the project will allow for the rental or lease of specialized equipment to support construction activities.

The project will allow for the purchase of water meters and meter box/lids, to be used for new development and capital projects. Depending on the meter size, the cost range to purchase individual meters is between \$150 to \$15,000 each. The water meter budget is based on the rate of development activity.

Project Evaluation and Analysis

This project allows staff to purchase materials, equipment, and meters ahead of time, so when new developments are being constructed the time period for them to be occupied is not delayed.

In general, meters and meter appurtenances are frequently purchased in bulk, which allows the City to lower its purchasing cost due to better pricing. The cost of the water meters and construction activities is paid by developers or by capital project allocated funding. This project allows the City to purchase and control the type of meters and water system appurtenances installed.

Based on future development and capital projects that have been approved by the City, staff has estimated an increase in the need to order meters and other construction material for project support through FY 2024/25.

Fiscal Impact

This project is funded by utility fees collected from developers for the cost to purchase water meters, vaults, and other materials.

Funding Sources

Water Supply and Distribution Fund

Plans and Goals

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

EM - Environmental Management - EM-1: Adequate Water Supplies

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	2,958,229	-	-
2022-23	442,236	-	-
2023-24	400,000	-	-
2024-25	400,000	-	-
2025-26	124,184	-	-
2026-27	127,910	-	-
2027-28	131,747	-	-
2028-29	135,700	-	-
2029-30	139,771	-	-
2030-31	143,964	-	-
2031-32	148,283	-	-
2032-33	152,731	-	-
2033-34	157,313	-	-
2034-35	162,032	-	-
2035-36	166,893	-	-
2036-37	171,900	-	-
2037-38	177,057	-	-
2038-39	182,369	-	-
2039-40	187,840	-	-
2040-41	193,474	-	-
2041-42	199,278	-	-
2042-43	205,257	-	-
20 Year Total	3,707,703	-	-
Grand Total	7,108,168	-	-

834380 - Fire Hydrant Replacement

Originating Year:	2019	Project Type:	Water	Department:	270 - Environmental Services
Planned Completion Year:	Ongoing	Category:	Capital	Project Manager:	Joseph De La Cruz

Project Description/Scope/Purpose

The City has approximately 3,500 fire hydrants. The estimated cost of replacement per hydrant is \$1,600 for parts, with labor performed by City crews. This request for annual funding will enable the City to continue the hydrant replacement program at an approximate rate of six to seven per month.

Project Evaluation and Analysis

This is a proactive hydrant replacement program, which allows City crews to replace old hydrants that have reached the end of their useful life. The City is anticipated to replace over 80 old rusted out hydrants annually. The project will ensure the City attends to fire hydrant replacements before possible complete failure of hydrants (inability to use the hydrant) during firefighting activities.

Fiscal Impact

This project is funded by the Water Supply and Distribution Fund. The ongoing cost of painting the hydrants every few years is included in the Department's operating budget.

Funding Sources

Water Supply and Distribution Fund

Plans and Goals

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

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	265,125	-	-
2022-23	120,000	-	-
2023-24	-	-	-
2024-25	60,000	-	-
2025-26	60,000	-	-
2026-27	60,000	-	-
2027-28	60,000	-	-
2028-29	60,000	-	-
2029-30	60,000	-	-
2030-31	60,000	-	-
2031-32	60,000	-	-
2032-33	60,000	-	-
2033-34	60,000	-	-
2034-35	60,000	-	-
2035-36	60,000	-	-
2036-37	60,000	-	-
2037-38	60,000	-	-
2038-39	60,000	-	-
2039-40	60,000	-	-
2040-41	60,000	-	-
2041-42	60,000	-	-
2042-43	60,000	-	-
20 Year Total	1,140,000	-	-
Grand Total	1,525,124	-	-

825301 - Pressure Reducing Valve Replacement

Originating Year:	2006	Project Type:	Water	Department:	270 - Environmental Services
Planned Completion Year:	Ongoing	Category:	Infrastructure	Project Manager:	Joseph De La Cruz

Project Description/Scope/Purpose

This project will replace, repair, and evaluate the City's 60 existing pressure-reducing valves (PRVs). In addition, this project will connect the PRVs to the Supervisory Control and Data Acquisition (SCADA) System to allow City staff to remotely monitor and control water system pressures, turn valves on and off quickly in emergencies, and in general, better manage and maintain water quality. PRVs are an integral part of the water distribution system as they maintain balanced water pressure between the City's three pressure zones.

Annual budgeted amounts are based on the historical average cost of repairing two PRVs per year. Actual costs will vary depending upon the size of the valve and whether the work involves total replacement or minor repair. As part of the annual evaluations, staff will determine whether each PRV is essential to the overall system. If certain PRVs are determined to be unnecessary, staff will remove them from the system.

Project Evaluation and Analysis

This project is necessary to maintain existing essential infrastructure of the Water Utility and is referenced in the City's Water Utility Master Plan 2.1.2. Properly functioning PRVs help reduce the number of main breaks caused by high pressure. Proper functioning PRVs are necessary to maintain pressure at customers' premises to avoid pressure spikes that could cause water leaks and water heater malfunctioning.

Fiscal Impact

This project is funded by the Water Supply and Distribution Fund revenues. This approach will result in savings of \$1.167 million over 20 years. A major cost factor in this project is the cost of the material required such as valves, fittings and electronic components that require to be replaced.

Funding Sources

Water Supply and Distribution Fund

Plans and Goals

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

Project Financial Summary

	Project Costs	Revenues	Operating Costs
Prior Actual	887,045	-	-
2022-23	200,000	-	-
2023-24	-	-	-
2024-25	205,000	-	-
2025-26	-	-	-
2026-27	210,000	-	-
2027-28	-	-	-
2028-29	215,000	-	-
2029-30	-	-	-
2030-31	220,000	-	-
2031-32	-	-	-
2032-33	225,000	-	-
2033-34	-	-	-
2034-35	230,000	-	-
2035-36	-	-	-
2036-37	235,000	-	-
2037-38	-	-	-
2038-39	240,000	-	-
2039-40	-	-	-
2040-41	245,000	-	-
2041-42	-	-	-
2042-43	250,000	-	-
20 Year Total	2,275,000	-	-
Grand Total	3,362,045	-	-