

**TITLE:** Water Treatment Plant Filter #1 and #2 Underdrain Replacement (21NEW3)

**STATUS:** Future

**PROGRAM DESCRIPTION:** Improvement project consisting of removal of filter media, filter bottom replacement and installation of an air-scour system for both filters #1 and #2 at the Water Treatment Plant. These filter underdrains were originally installed in 1980, and the filter media was last replaced in 1993. This project will improve the daily treatment flow (hydraulic performance) at the Water Treatment Plant and reduce filter treatment restrictions currently encountered when the plant is operating at a high flow rate.

**OPERATING IMPACT:** Filter #1 and #2 will be constructed with air and water backwash which will allow for greater bed expansion during filter backwashing operations. Also, increasing filter bed depth will allow for higher filtration rates and improve negative head conditions.

**GOAL ADDRESSED:** 2012 Town Plan

- Community Facilities and Services Objectives 5 and 6 call for providing adequate water supply to meet state and federal criteria. This project replaces aged filter underdrain systems with a newer efficient design that improves operation of the filters and the water plant.



**Significant Dates**

UTILITY RELOCATION START	CONSTRUCTION START	ESTIMATED COMPLETION
N/A	Fall 2020	Spring 2021

**Funding Sources**

Sources	Total Required Project Funding	Funded through 6/30/19	Year						Total for 6 Yr CIP	Future Funds Required
			2020	2021	2022	2023	2024	2025		
Utilities Bonds	\$ 525,000	—	—	\$ 525,000	—	—	—	—	\$ 525,000	—
PAY-GO Utilities	429,900	—	—	429,900	—	—	—	—	429,900	—
<b>Total Sources</b>	<b>\$ 954,900</b>	—	—	<b>\$ 954,900</b>	—	—	—	—	<b>\$ 954,900</b>	—

**Planned Uses**

Uses	Total Project Cost	Expended through 6/30/19	Year						Total for 6 Yr CIP	Future Project Cost
			2020	2021	2022	2023	2024	2025		
Project Management	\$ 54,900	—	—	\$ 54,900	—	—	—	—	\$ 54,900	—
Design/Engineering	200,000	—	—	200,000	—	—	—	—	200,000	—
Construction	700,000	—	—	700,000	—	—	—	—	700,000	—
<b>Total Uses</b>	<b>\$ 954,900</b>	—	—	<b>\$ 954,900</b>	—	—	—	—	<b>\$ 954,900</b>	—

**Operating Impact**

Operating/Maintenance	2020	2021	2022	2023	2024	2025	Total for 6 Yr CIP
General Maintenance	—	—	—	—	—	\$ 500	\$ 500
<b>Total Impact</b>	—	—	—	—	—	<b>\$ 500</b>	<b>\$ 500</b>