

Project Descriptions for July 11, 2018

Board of Trustees Meeting

Clean Water Commitments

Fall River CW-18-07

The proposed project involves modifications of storm drain infrastructure, including: enlargement and rerouting of storm drains to relieve public health risks and nuisance flooding; reactivation of abandoned drainage swale; sewer separation on Vincent, Burke, and Acacia Streets; and water quality improvements with BMP retrofits where possible. The project increases storm drain capacity for a future sewer separation project on New Boston Road and Robeson Streets.

Grafton CW-17-18

The Town relies on both the Arcadia Street and Worcester Street pumping stations to convey wastewater from the majority of the sewered portion of the Town to the Grafton Wastewater Treatment Plant (WWTP). The stations are currently in severe disrepair. The Arcadia Street Pumping Station experiences overflows as a result of failed equipment and alarms. The Worcester Street Pumping Station experiences severe flooding and has equipment below the flood level. The stations are in need of a major renovation to replace equipment and systems that have functioned well beyond their expected life. This work will improve efficiency and ensure adequate wastewater treatment and system capacity.

Drinking Water Commitments

New Bedford DW-17-06

This Large Meter and Advanced Metering Infrastructure (AMI) Upgrade Program includes two distinct but related elements: (1) The City will conduct testing, repair, and/or replacement of some of its largest consumer meters. These meters are older and are under registering, leading to increased unaccounted- for water and decreased revenue. (2) The City will upgrade its meter reading equipment for the entire water system, to apply the latest technology and eliminate the current high frequency of estimated meter reads (and therefore reduce unaccounted for water and lost revenues) due to failing Meter Transmission Units (MTUs).

New Bedford DW-17-07

The High Hill Reservoir Rehabilitation project will perform much needed and required structural repairs to the reservoir and its roof, replace inoperable inlet and outlet valves, clean the entire reservoir, remove accumulated sediment on the reservoir floor, install a new mixing system in the reservoir to improve circulation and water age, and perform other needed repairs and upgrades. Recent inspections identified serious deficiencies with the reservoir's roof and support system, including failed beam connections, broken anchor bolts, and beams that have moved on their supports. The roof is in danger of failure and collapse, and inoperable inlet and outlet valves that need to be replaced. This work will improve water quality and ensure reliability and flow capacity in the distribution system.

Clean Water Agreements**Billerica CW-17-15**

Sewer Contract 36 is the third priority Needs Area from the Town's Comprehensive Wastewater Management Plan. The project consists of areas of sewer replacement, extension of new sewer, removal of failing and/or improperly operating septic systems and connection to sewer, and the construction of two new pump stations. The Project will aid in reducing degradation to the water resources in the Concord River Watershed and the Shawsheen River Basin, as well as protect the public health from the chronic septic failures documented in the area. The Project includes approximately 5.3 miles of new sewer, 2.8 miles of sewer replacement and construction of two new pump stations. The Project is designed and shovel ready once spring Town Meeting approves it and all SRF paperwork is complete.

Fall River CWP-18-07

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Fall River CWP-18-07-A

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New Bedford CWP-17-16

The pumping station upgrades involved in this project are for three pumping stations in the City of New Bedford that are high priority for the near future. These recommendations are based on an Integrated Plan currently being developed. Upgrades are necessary to ensure adequate system capacity and effective wastewater treatment.

New Bedford CWP-17-16-A

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New Bedford CWP-17-17

The Wastewater Collection System Improvements project includes several improvements to the City's infrastructure. Projects include an interceptor and collector sewer rehabilitation program, a lateral sewer rehabilitation program, an illicit discharge removal program, and an over-under access manhole program. The progression of these programs will further the City's progressive efforts to dramatically lessen or eliminate Infiltration/Inflow (I/I) issues, reduce CSOs, reinforce the critical components of the city's sewer system, address Capacity, Management, Operations and Maintenance (CMOM) and regulatory requirements, and eliminate illicit discharges. These programs will address needs identified in the City's Integrated Plan.

Revere CWP-17-26

The continuation of the implementation through construction contracts of the Illicit Connection and Sump Pump Removal Program is essential for the City of Revere to meet its goals and comply with the Consent Decree. There is a significant number of illicit sump pumps, roof drains, roof leaders, driveway drains, yard drains, etc. connections from private homes and businesses that must be removed from the sewer in order to remove inflow and increase the wastewater capacity of the City's sewer system. These contracts become the mechanism to remove inflow.

Revere CWP-17-27

The Phase VIII Construction Project will include the removal of inflow/infiltration (I/I) from the City's sewer system. Infiltration and inflow contributes excess volume to the sanitary sewer, which contributes to overflows and capacity issues. Construction will include the redirection of public and private inflow sources discovered during Phase VIII Field Investigations, Illicit Discharge Detection and Elimination (IDDE) source removal, and drainage improvements. Construction will also include pump station improvements (both stormwater and wastewater), CIPP (Cured in Place Pipe) lining, sewer spot repairs, replacements, new sewer lines, cleaning, and additional wastewater metering.

Drinking Water Agreements**Fall River DWP-17-12**

This project will allow the City to implement an “Advance Meter Infrastructure” (AMI). The AMI system will allow the City to remove meter reading vehicles from the street, along with vehicle overhead, emissions and safety issues. Personnel costs and meter reading errors can be controlled with precise daily and hourly meter reads. Combined with the replacement of commercial and industrial meters, the project will enhance the water department’s revenue, streamline office procedures, provide the means for continued investment. The AMI system offers leak detection notification, which in turn leads to water conservation and less pumping costs. Rate payers will be better served, and at the same time the department becomes more efficient.

New Bedford DWP-17-06

This Large Meter and Advanced Metering Infrastructure (AMI) Upgrade Program includes two distinct but related elements: (1) The City will conduct testing, repair, and/or replacement of some of its largest consumer meters. These meters are older and are under registering, leading to increased unaccounted- for water and decreased revenue. (2) The City will upgrade its meter reading equipment for the entire water system, to apply the latest technology and eliminate the current high frequency of estimated meter reads (and therefore reduce unaccounted for water and lost revenues) due to failing Meter Transmission Units (MTUs).

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Revere DWP-17-14

This project involves the replacement of approximately 600 lead services throughout the City of Revere. The City has identified 250 active lead services to date throughout the ongoing automatic meter replacement program. Based on the number of properties in the City that have been inspected, and extrapolating that value based on identified lead services found to date, an estimation of citywide lead services needing replacement has been determined to be approximately 600 services. The adverse health effects of lead exposure in children and adults are well documented, and no safe blood level threshold in children has been established. Lead exposure causes neurological and cognitive impairments in children and fetuses and can cause high blood pressure and kidney problems in adults. Removal of lead service connections addresses a critical public health challenge.

Wareham Fire District DWP-17-09

This project includes the construction of a 3.0MGD ground water treatment plant, expandable to 4.5MGD, which includes: iron and manganese removal for compliance with secondary standards; disinfection with ultraviolet light, and/or free chlorine to address the groundwater rule or possible reclassification as groundwater under the influence of surface water; and corrosion control. This work will remove the public health threats posed by various contaminants and ensure excellent drinking water quality.