

Project Descriptions for June 29, 2022

Board of Trustees Meeting

Asset Management Planning Commitment

Billerica CW-22-10

The Town of Billerica seeks to develop an Asset Management Plan to prepare an inventory of Town culverts, document institutional knowledge, develop a risk-based capital improvement program through field assessments of culverts and Best Management Practices, define appropriate level of service goals, and perform a stormwater funding analysis.

Clean Water Commitments

Adams CW-21-24

The Town of Adams' construction project includes the repair, replacement, and refurbishment of various systems of the Adams WWTF as defined in the 2020 Capital Needs Assessment Report to address stringent NPDES permit limits, reduce nutrient discharges, and ensure the integrity of the plant. The Adams WWTF has been in operation since 1968, with limited capital improvements occurring in 2006. The Town of Adams has performed general maintenance and rebuilt equipment to maintain WWTF operation; however, many components have far exceeded their anticipated life expectancy. This project serves to repair and replace aging process equipment and infrastructure to allow the WWTF to continue serving the community and reliably protecting the environment in the future.

Great Barrington CW-21-53

The Town of Great Barrington's project is part of a 20-year Capital Improvement Plan (CIP) to upgrade and modernize the Great Barrington Wastewater Collection System. The Town recently completed a long-term planning study (CWMP) that recommended improvements to its pump stations to extend their lifespan, ensure long-term functionality, and permit compliance (federal and state). The key components of the project include upgrades to pump stations at the following four locations: Cone Avenue, Risingdale, South Main Street, and Fairgrounds.

Haverhill CW-21-40

The City of Haverhill's project will repair and rehabilitate the historic sewer system by addressing structural deficiencies and/or operational and maintenance deficiencies identified during recent inspections.

South Essex Sewerage District CW-20-35

SESD operates a regional WWTF that was originally constructed in 1972 and upgraded in the 1990s. Average daily flows at the WWTF are approximately 30 MGD, with a peak capacity of 99 MGD. The WWTF discharges effluent to Salem Sound. The primary treatment process consists of 7 underground cast-in-place concrete tanks with precast concrete roofs. The concrete surface in the headspace of the tanks has corroded over the years and has reached a point where the issue needs to be addressed. If this issue is not addressed, there is a risk that the primary clarifiers could structurally fail. The goal of this project is to restore the impacted concrete within all 7 primary clarifiers to ensure long term structural reliability of the tanks.

Springfield Water & Sewer Commission CW-21-39

The Springfield Water and Sewer Commission's Locust Transfer and Flow Optimization project will advance the Integrated Wastewater Plan Phase 3 goal for system redundancy between the Main Interceptor Sewer (MIS) and Connecticut River Interceptor (CRI). The project will include design and construction of approximately 2,300 linear feet (LF) of sewer upgrades on Locust Street and York Street and installation of flow optimization / junction structures to allow for flow to be transferred from the MIS to the CRI adding overall system redundancy. In addition, approximately 3 MG of CSO reduction will be achieved through upgrades implemented on the MIS system near CSO Regulator 019 and the Dickenson Siphon.

Drinking Water Commitments**Haverhill DW-21-15**

The project involves cleaning and cement lining of 8,000 linear feet of 20-inch transmission main as the third and final phase of a three-phase improvement plan to provide redundancy from the City of Haverhill's water treatment facility and main storage tank to the distribution system. The project also involves the replacement of 12,650 linear feet of undersized water main and replacement of 2 lead service lines.

Lowell DW-21-14

The City of Lowell's Transmission Main Connection project involves installation of approximately 4,000 linear feet of transmission main as an extension to a previously installed water main needed to provide redundancy from the Water Treatment Facility to the existing distribution system.

Asset Management Planning Agreement**Billerica CWA-22-10**

The Town of Billerica seeks to develop an Asset Management Plan to prepare an inventory of Town culverts, document institutional knowledge, develop a risk-based capital improvement program through field assessments of culverts and Best Management Practices, define appropriate level of service goals, and perform a stormwater funding analysis.

Clean Water Agreements**Adams CWP-21-24**

The Town of Adams' construction project includes the repair, replacement, and refurbishment of various systems of the Adams WWTF as defined in the 2020 Capital Needs Assessment Report to address stringent NPDES permit limits, reduce nutrient discharges, and ensure the integrity of the plant. The Adams WWTF has been in operation since 1968, with limited capital improvements occurring in 2006. The Town of Adams has performed general maintenance and rebuilt equipment to maintain WWTF operation; however, many components have far exceeded their anticipated life expectancy. This project serves to repair and replace aging process equipment and infrastructure to allow the WWTF to continue serving the community and reliably protecting the environment in the future.

Adams CWP-21-24-A

The Town of Adams' construction project includes the repair, replacement, and refurbishment of various systems of the Adams WWTF as defined in the 2020 Capital Needs Assessment Report to address stringent NPDES permit limits, reduce nutrient discharges, and ensure the integrity of the plant. The Adams WWTF has been in operation since 1968, with limited capital improvements occurring in 2006. The Town of Adams has performed general maintenance and rebuilt equipment to maintain WWTF operation; however, many components have far exceeded their anticipated life expectancy. This project serves to repair and replace aging process equipment and infrastructure to allow the WWTF to continue serving the community and reliably protecting the environment in the future.

Barnstable CWP-21-49

The Town of Barnstable's project includes construction of approximately 11,000 linear feet of gravity sewer and a new pump station. Once operational, the new infrastructure will handle approximately 1.5 million gallons per day (MGD) of average daily flow. This project is the critical element toward building an extensive wastewater collection system that will eventually serve more than 7,000 properties during the town's thirty-year phased Comprehensive Wastewater Management Plan.

Barnstable CWP-21-49-A

The Town of Barnstable's project includes construction of approximately 11,000 linear feet of gravity sewer and a new pump station. Once operational, the new infrastructure will handle approximately 1.5 million gallons per day (MGD) of average daily flow. This project is the critical element toward building an extensive wastewater collection system that will eventually serve more than 7,000 properties during the town's thirty-year phased Comprehensive Wastewater Management Plan.

Great Barrington CWP-21-53

The Town of Great Barrington's project is part of a 20-year Capital Improvement Plan (CIP) to upgrade and modernize the Great Barrington Wastewater Collection System. The Town recently completed a long-term planning study (CWMP) that recommended improvements to its pump stations to extend their lifespan, ensure long-term functionality, and permit compliance (federal and state). The key components of the project include upgrades to pump stations at the following four locations: Cone Avenue, Risingdale, South Main Street, and Fairgrounds.

Haverhill CWP-21-40

The City of Haverhill's project will repair and rehabilitate the historic sewer system by addressing structural deficiencies and/or operational and maintenance deficiencies identified during recent inspections.

Haverhill CWP-21-40-A

The City of Haverhill's project will repair and rehabilitate the historic sewer system by addressing structural deficiencies and/or operational and maintenance deficiencies identified during recent inspections.

Orange CWP-21-52

The Town of Orange recently completed a three-year annual Flow Monitoring Program to evaluate the amount of infiltration and inflow (I/I) throughout the collection system. Additionally, a 2013 long-term planning study (CWMP) recommended I/I removal projects based on current recommendations and investigations. Based on the results of this Program and recommendations from the CWMP, the Town has elected to replace sanitary sewer mains located in North Main Street prior to a road reconstruction project in the same location. Water mains located on North Main Street will also be replaced as part of this Project. The key components of the project include the replacement of gravity sewer mains and water mains along North Main Street.

Orleans CW-19-33

The construction Project includes a new collection system, PS, WWTF and effluent disposal for the Downtown Area consisting of about 1,087 users to address water quality in the various estuaries. In general, the project includes a WWTF (influent screening and flow measurement; flow equalization; biological process (SBR); effluent filters; post equalization; effluent pumps; UV disinfection; odor control; septage receiving and processing; solids storage and thickening); effluent disposal (wicks); about 30,800 lf of 8" to 12" GS and appurtenances, about 2,000 lf of 1 1/2" to 2-1/2" LPS and appurtenances, about 9,200 lf of 8" effluent FM, 3 PS, and about 9,200 lf of 6" and 8" FM main and appurtenances for the estimated flow of 250,000 gpd.

Quincy CWP-21-37

The City of Quincy's project will implement the recommendations from the 2020 Sewer System Evaluation Survey (SSES) to cost effectively remove I/I and rehabilitate approximately 3.25 miles of sewer pipe in the City of Quincy through open cut repairs and cured-in-place pipe (CIPP) lining. This project will reduce infiltration and inflow to the system, supporting the regional I/I reduction program and reducing the risk of sanitary sewer overflows and backups.

Quincy CWP-21-37-A

The City of Quincy's project will implement the recommendations from the 2020 Sewer System Evaluation Survey (SSES) to cost effectively remove I/I and rehabilitate approximately 3.25 miles of sewer pipe in the City of Quincy through open cut repairs and cured-in-place pipe (CIPP) lining. This project will reduce infiltration and inflow to the system, supporting the regional I/I reduction program and reducing the risk of sanitary sewer overflows and backups.

South Essex Sewer District CWP-20-35

SESD operates a regional WWTF that was originally constructed in 1972 and upgraded in the 1990s. Average daily flows at the WWTF are approximately 30 MGD, with a peak capacity of 99 MGD. The WWTF discharges effluent to Salem Sound. The primary treatment process consists of 7 underground cast-in-place concrete tanks with precast concrete roofs. The concrete surface in the headspace of the tanks has corroded over the years and has reached a point where the issue needs to be addressed. If this issue is not addressed, there is a risk that the primary clarifiers could structurally fail. The goal of this project is to restore the impacted concrete within all 7 primary clarifiers to ensure long term structural reliability of the tanks.

Springfield Water and Sewer Commission CWP-21-39

The Springfield Water and Sewer Commission's Locust Transfer and Flow Optimization project will advance the Integrated Wastewater Plan Phase 3 goal for system redundancy between the Main Interceptor Sewer (MIS) and Connecticut River Interceptor (CRI). The project will include design and construction of approximately 2,300 linear feet (LF) of sewer upgrades on Locust Street and York Street and installation of flow optimization/junction structures to allow for flow to be transferred from the MIS to the CRI adding overall system redundancy. In addition, approximately 3 MG of CSO reduction will be achieved through upgrades implemented on the MIS system near CSO Regulator 019 and the Dickenson Siphon.

Springfield Water and Sewer Commission CWP-21-39-A

The Springfield Water and Sewer Commission's Locust Transfer and Flow Optimization project will advance the Integrated Wastewater Plan Phase 3 goal for system redundancy between the Main Interceptor Sewer (MIS) and Connecticut River Interceptor (CRI). The project will include design and construction of approximately 2,300 linear feet (LF) of sewer upgrades on Locust Street and York Street and installation of flow optimization/junction structures to allow for flow to be transferred from the MIS to the CRI adding overall system redundancy. In addition, approximately 3 MG of CSO reduction will be achieved through upgrades implemented on the MIS system near CSO Regulator 019 and the Dickenson Siphon.

Drinking Water Agreements**Dighton Water District DWP-21-17**

The Dighton Water District's project includes installation of approximately 11,600 linear feet (LF) of 12-inch ductile iron (DI) water main, 100 LF of 10-inch DI water main and 60 LF of 8 inch DI water main including hydrants, gate valves and service connections along Main Street between Williams Street and the intersection with Pleasant Street and Somerset Avenue.

Dudley DWP-21-16

The Town of Dudley's PFAS Water Treatment Plant project includes construction of a new PFAS water treatment plant (WTP) on the existing Pump Station No. 6 parcel, which would remove PFAS from the water of Pump Station No. 3 (and adjacent proposed Well No. 7) and Pump Station No. 6. In addition, this project includes upgrades to Pump Station No. 6 and Pump Station No. 3.

Eastham DWP-21-10

The Town of Eastham's Water System - Phase 2D project consists of constructing the third well field at District H and installation of 11 miles of water main for the newly built Town-wide municipal water system.

Haverhill DWP-21-15

The project involves cleaning and cement lining of 8,000 linear feet of 20-inch transmission main as the third and final phase of a three-phase improvement plan to provide redundancy from the City of Haverhill's water treatment facility and main storage tank to the distribution system. The project also involves the replacement of 12,650 linear feet of undersized water main and replacement of 2 lead service lines.

Lowell DWP-21-14

The City of Lowell's Transmission Main Connection project involves installation of approximately 4,000 linear feet of transmission main as an extension to a previously installed water main needed to provide redundancy from the Water Treatment Facility to the existing distribution system.

Orange DWP-22-04

The Work consists of replacement of approximately 2,300 linear feet of existing water mains with new ductile iron pipe along North Main Street. Included with this Work is replacement of water services, valves, hydrants and similar appurtenances associated with the project.