

Water Resources Management Update

Barnstable Town Council

Department of Public Works August 17, 2023



Comprehensive Wastewater Management Plan Recent Initiatives

Finalizing the FY23 CWMP Annual Report

• Intend to submit this month

State Revolving Fund Project Evaluation Forms (PEFs)

- Five projects were submitted as Clean Water projects:
 - 1. Nitrogen Removal Improvements & New Headworks Facility
 - 2. 2024 Wastewater Pump Station Improvements
 - 3. Phinney's Lane Neighborhoods Sewer Expansion Project
 - 4. Route 28 West Sewer Expansion Project
 - 5. Culvert Asset Management Plan

Preparation for Fall Construction Season

- Reviewing proposed traffic management plans
- Resumed traffic coordination calls with key stakeholders



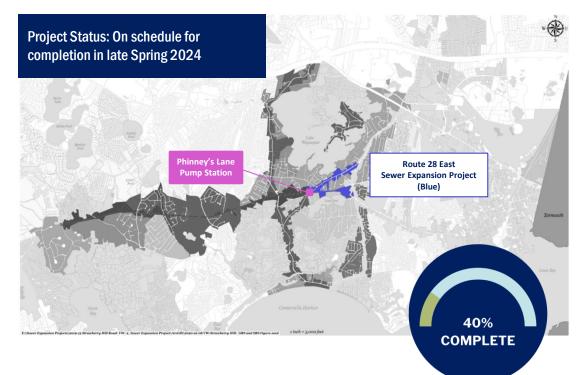
Town of Barnstable, Massachusetts Comprehensive Wastewater Management Plan

FY2023 Annual Report

August 2023 Prepared by: Barnstable Department of Public Works



Route 28 East Sewer Expansion Project



Project Status:

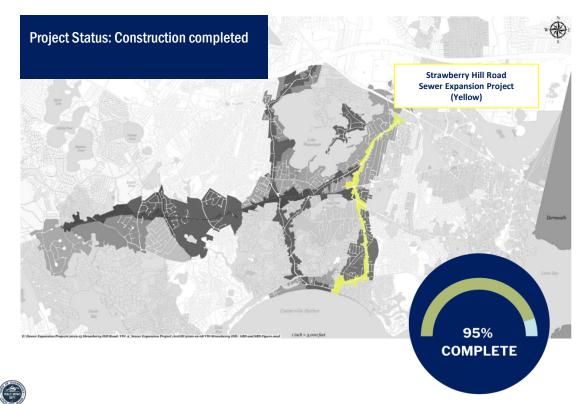
- Off-road sewer construction
 - Barnstable Intermediate School COMPLETE
 - Water Pollution Control Facility projected completion 8/31
 - In-road construction within Route 28 to resume after Labor Day

Phinney's Lane Pump Station:

- Removal of sheeting, piles and dewatering efforts are complete
- First level column installation has commenced



Strawberry Hill Road Sewer Expansion Project



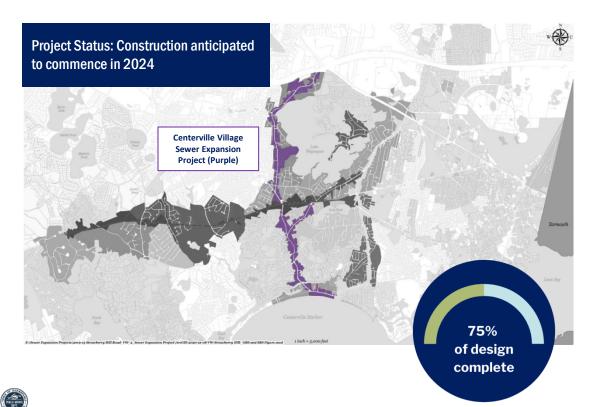
Project Status:

- Sewer service riser construction anticipated this Fall
 - Public hearing anticipated at 8/17 Town Council (Item #2024-003)
 - Proposed work will occur in the shoulder
 - Specified for a targeted section of properties, south of Route 28
- Anticipated sewer availability for first connections in Spring 2024

Strawberry Hill Road Sewer Pump Station:

• Electrical service for the pump station anticipated to be completed this fall

Centerville Village Sewer Expansion Project



Expedites sewer expansion with roadways along proposed Park City Wind on-shore duct bank installation route

Project Details:

- Currently reviewing 75% sewer design plans
- Continuing efforts to site pump station locations and associated easement options

Outreach Efforts:

- Initial public comment periods have closed
- Evaluating all feedback and formalizing public comment summary, to be published on BarnstableWaterResources.com

Water Pollution Control Facility

Solids Processing Facility Upgrades

- Solids holding tanks rehabs continue
- 3 out of 4 sludge holding tanks have been rehabilitated
- Work continues on polymer blend units and aeration blowers
- Electrical, mechanical and process equipment installations continue
- Project anticipated to reach completion before the end of 2023

Nitrogen Removal and Headworks Improvements

- Nutrient removal conceptual design in review
- Clean Water project SRF application submitted

Effluent Disposal Evaluation

• Contracting for next phase of work



Water Quality Monitoring

Cyanobacteria Monitoring

- On-going monitoring at 27 ponds, will continue through September
 - Public Health Advisories at Long Pond, Marstons Mills and Parker Pond, Osterville
 - Pet Advisories at Lovells Pond, Cotuit

Estuaries Monitoring

- Summer 2023 Estuaries Sampling has resumed
 - The third of four rounds of sampling was completed
 - The fourth round of sampling is scheduled for August 21st and 22nd

Ponds and Lakes Monitoring and Management Plan Program

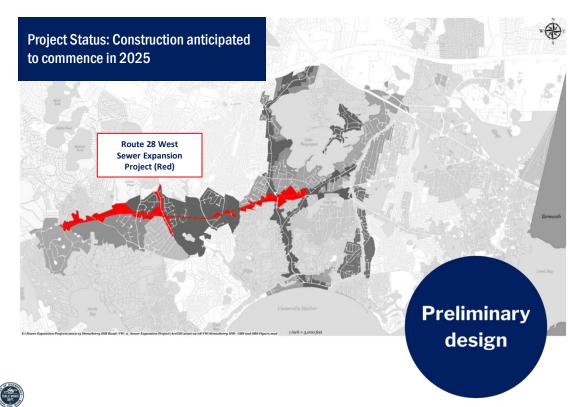
- Lovells Pond Nutrient Diagnostic Assessment & Management Plan report anticipated Fall 2023
- Conservation Commission hearing for Long Pond Marstons Mills Floating Treatment Wetland Pilot Study Notice of Intent – COMPLETE
 - Deployment anticipated for Spring 2024





Resources

Route 28 West Sewer Expansion Project

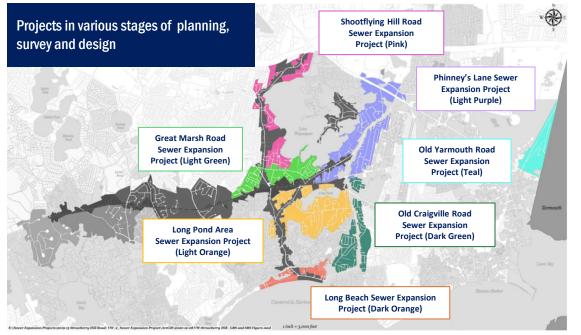


Extends sewer on Route 28 from Phinney's Lane to Route 149

Project Details:

- Preliminary design continues
- Reviewing sewer alignments and continuing efforts to site pump station locations and associated easement options

Additional Sewer Expansion Projects in Design



Phinney's Lane Neighborhood Project:

- Internal design team has completed 30% design
- Continuing private roadway utility easement takings and siting of sewer pump stations
- Construction anticipated to commence in 2025

Old Craigville Road, Old Yarmouth Road & Shootflying Hill Road Projects

- Survey efforts ongoing
- Construction anticipated to commence in 2026 (Old Craigville), 2026 (Old Yarmouth) and 2027(Shootflying Hill)

Long Pond Area Project

- Survey complete & design on-going
- Construction anticipated to commence in 2027

Long Beach and Great Marsh Road Projects

- Preliminary design funding proposed in FY24 Capital Budget
- Construction anticipated to commence in 2027 (Long Beach) and 2028 (Great Marsh)

Vineyard Wind Project



Project Status: Duct bank installation and cable pulling complete

Remaining work:

- Cable splicing and testing along the project route
- Requires single-lane alternating traffic
- Will resume testing after Labor Day

Anticipated final paving schedule of disturbed roadways:

- Fall 2023:
 - Attucks Lane scheduling in progress
 - Strawberry Hill Road (Pine Street to Route 28)
 - Phinney's Lane
 - Wequaquet Lane

