

Water Resources Management Update

Barnstable Town Council

November 21, 2024
Town Hall Hearing Room



Town of Barnstable
Department of Public Works



CWMP Regulatory Compliance

Watershed Permit

- Submitted on September 1, 2023, with the request for a Watershed Permit covering the entire Town of Barnstable, and to remain on the previously approved 30-year implementation schedule.
- Completed Massachusetts Department of Environmental Protection (MassDEP) Administrative Review on August 1, 2024.
- Technical Review meeting held with MassDEP on September 16, 2024.
- Responded to minor comments/questions from MassDEP.
- Scheduling meeting to review draft permit.

Five-Year Adaptive Management Plan Update

- A Comprehensive Wastewater Management Plan (CWMP) Ad Hoc Advisory Committee was established by Town Council on September 5, 2024.
- The committee is meeting monthly, with recordings on Barnstable Government Access.
- This Committee will be instrumental in preparing policy and adaptive management recommendations to be presented as part of the five-year update.

Strawberry Hill Road Sewer Expansion Project

Project Status: Connections Ongoing;
151 parcels eligible.

Strawberry Hill Road
Sewer Expansion Project
(Green)

COMPLETE

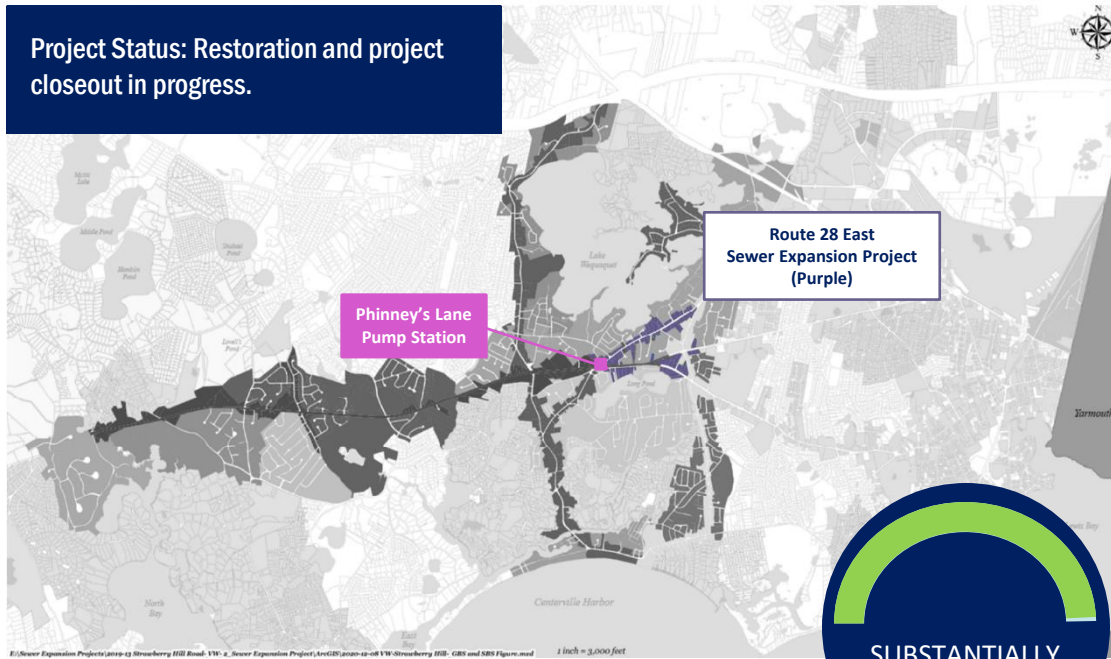
CONNECTIONS
AVAILABLE

Status: Project Closeout

- Contractor is working through remaining project punch list items
- Sewer Connections are on-going
 - 151 parcels (220 individual dwelling units) currently eligible for connection
 - As of the date of this report:
 - 59 sewer connections completed
 - 29 active sewer connection permits open and in review, preparing for construction and inspection

Route 28 East Sewer Expansion Project

Project Status: Restoration and project closeout in progress.



Status: Substantially Complete

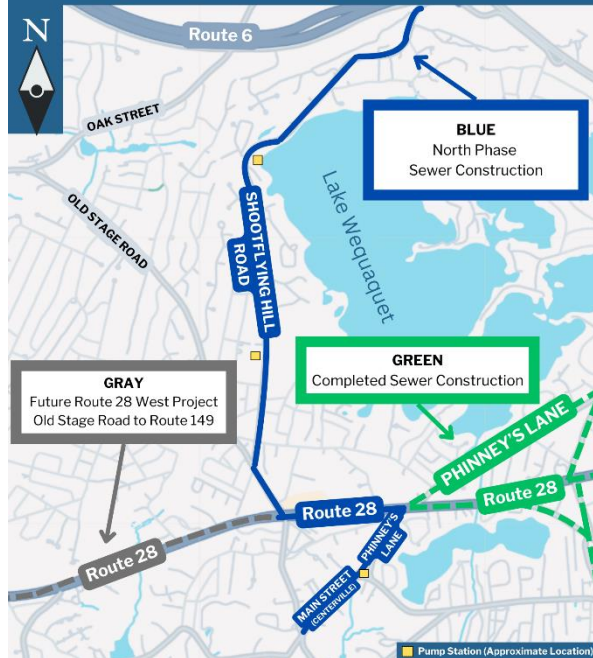
- Contractor is working through remaining project punch list items
- Sewer connections anticipated to be available by the end of the calendar year
- Communications cadence will follow the same format utilized for the Strawberry Hill Road Project:
 - *Project Closeout Letter* – distributed by DPW
 - *Estimated Assessment* – to be distributed by Treasurer/Tax Collector
 - *Notice of Sewer Hook-up* – to be distributed by Health Division, sent via Certified Mail
 - *Final Sewer Assessment* – to be distributed by Treasurer/Tax Collector

Phinney's Lane Pump Station:

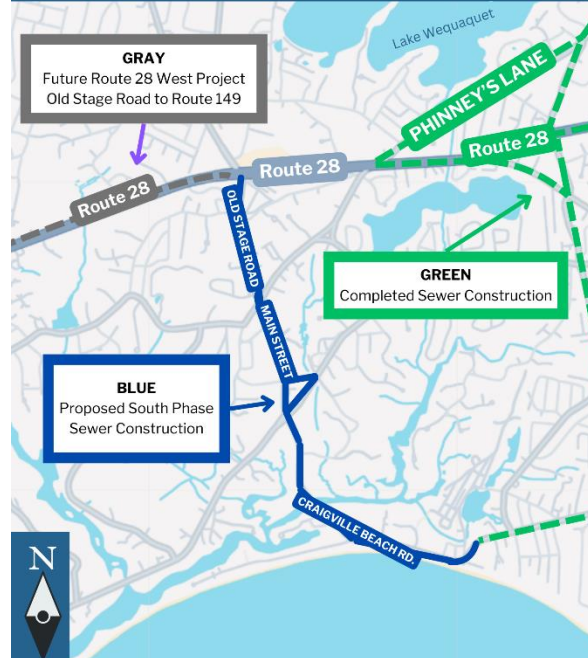
- Contractor is working through remaining project punch list items

Centerville Village Sewer Expansion Project

Centerville Village Sewer Expansion Project North Phase



Centerville Village Sewer Expansion Project South Phase



North Phase:

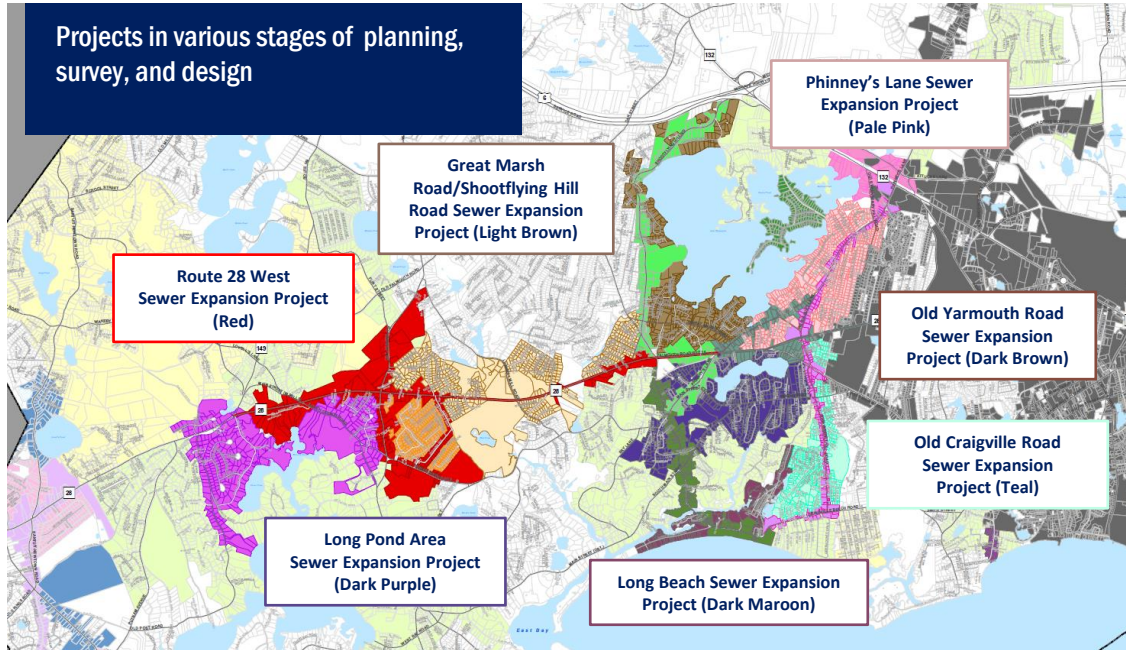
- Contract has been awarded to C.C. Construction, Inc. for \$20,380,342.14
- Some Pre-Construction activity in December 2024
- Construction to begin January 2025
- Scheduled to be completed in Spring 2027

South Phase:

- Reviewing 50% Design Plans
- Anticipate informational meeting in Spring 2025
- Construction anticipated to commence in Fall 2025

Additional Sewer Expansion Projects In Design

Projects in various stages of planning, survey, and design



Route 28 West

- 50% design plan review completed
- SRF Loan Application Submitted
- Public informational meeting anticipated for Spring 2025
- Construction anticipated to commence in Fall 2025

Phinney's Lane Neighborhoods

- Final design awarded to Weston Sampson
- Third round of private road utility easement taking courtesy notifications distributed
- Construction anticipated to commence in Fall 2026

Long Pond Area and Long Beach Road Projects

- Preliminary design and survey on-going
- Construction anticipated to commence in 2027

Great Marsh Road/Shootflying Hill Road Neighborhoods

- 75% survey plan received and in review
- Construction anticipated to commence in 2028

Old Yarmouth Road Project

- Survey complete & preliminary design on-going
- Construction anticipated to commence in 2028

Old Craigville Road Project

- Survey complete & preliminary design on-going
- Construction anticipated to commence in 2030

720 Main Street Pump Station Replacement Project

Project Details:

- Part of the Town's Sewer Pump Station Rehabilitation Program
 - Will address capacity concerns within the Town's Growth Incentive Zone (GIZ) as well as replace aging infrastructure

Pump Station Construction:

- On-site work continues
 - On-site work hours: 7:00AM – 4:00PM
 - Building expected to be weather-tight by December

In-Road Sewer Construction:

- In-road work to resume December 2024, to include:
 - Dumont Drive connection into pump station
 - South Street @ Sea Street connection
 - Sewer tie-ins on Main Street
- Construction anticipated to be completed in Spring 2025
- Project remains on schedule and on budget



Water Pollution Control Facility

Nitrogen Removal and Headworks Improvements

- #1 ranked project in 2024 Draft Clean Water Fund Intended Use Plan (IUP)
 - Appropriation and Loan Order 2024-112 for funding the Water Pollution Control Facility Upgrades Project on April 25, 2024
- 60% design review complete
- MBR Manufacturer Committee has recommended Veolia Zeeweed MBR
- Construction anticipated to commence in Fall 2025
- SRF Loan Application submitted

Effluent Disposal Evaluation

- Water Reuse and Disposal Alternatives Analysis in progress with CDM Smith
- Hosting monthly meetings with MassDEP



Straightway & Hyannisport Water Treatment Facilities Improvements

Project Purpose

- Maximize the permitted capacity of the Hyannis Water System
- Restore the amount of water that the wells can supply to permitted capacity
- Allow the water treatment facility to operate year-round
- Improve the water treatment process to further improve water quality
- Protect the wells and buildings from flooding
- Improve overall system resiliency

Project Status & Next Steps

- Current: Final Design & Permitting Stage
- Spring/Summer 2025: Bidding/Contract
- Fall 2025: Construction Begin

- Project page available on Town of Barnstable website, under DPW > Water Supply:
<https://townofbarnstable.us/Departments/watersupply/Straightway-Water-Treatment-Plant.asp>

Water Quality

Cyanobacteria Monitoring Program

- 2024 Sampling Season concluded on October 23, 2024
- Will Resume Spring 2025

Clamshell Cove Road and Old Shore Road, Cotuit Stormwater Improvement Projects

- Continue to advance designs
- Construction anticipated to begin Fall 2025
- Design plans for both sites are available for review at <https://barnstablewaterresources.com/stormwater/>

Long Pond Marstons Mills, Floating Treatment Wetland Pilot Project

- UMass Dartmouth's School for Marine Science & Technology (SMAST)
- Project is stored for winter
- Samples to be taken in Spring and Fall 2025; Final Report due in 2026

Lovell's Pond Management Plan Update

- 2022 Study shows negative impact due to excess phosphorous loading
 - From internal sediment (58%) and septic systems (35%).
- Alum treatment is recommended-most efficient & cost-efficient
- Septic systems addressed in CWMP



