



Water Resources Management Update

Barnstable Town Council

**Department of Public Works
February 16, 2023**

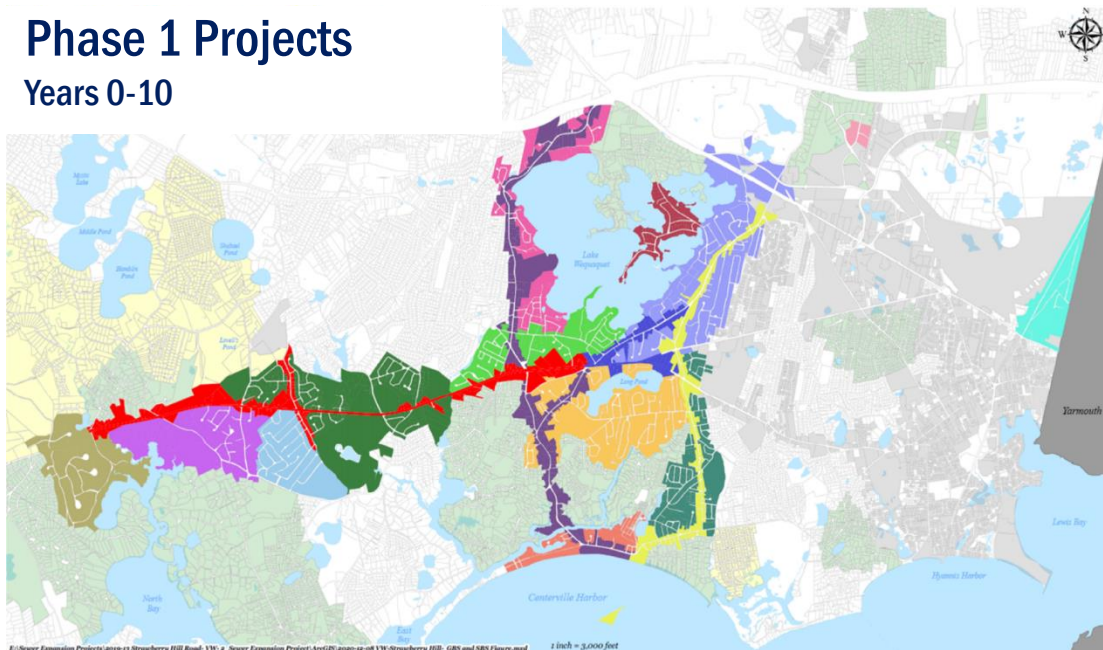


CWMP Construction Updates

Phase 1 Implementation Progress

Phase 1 Projects

Years 0-10



Key Milestones

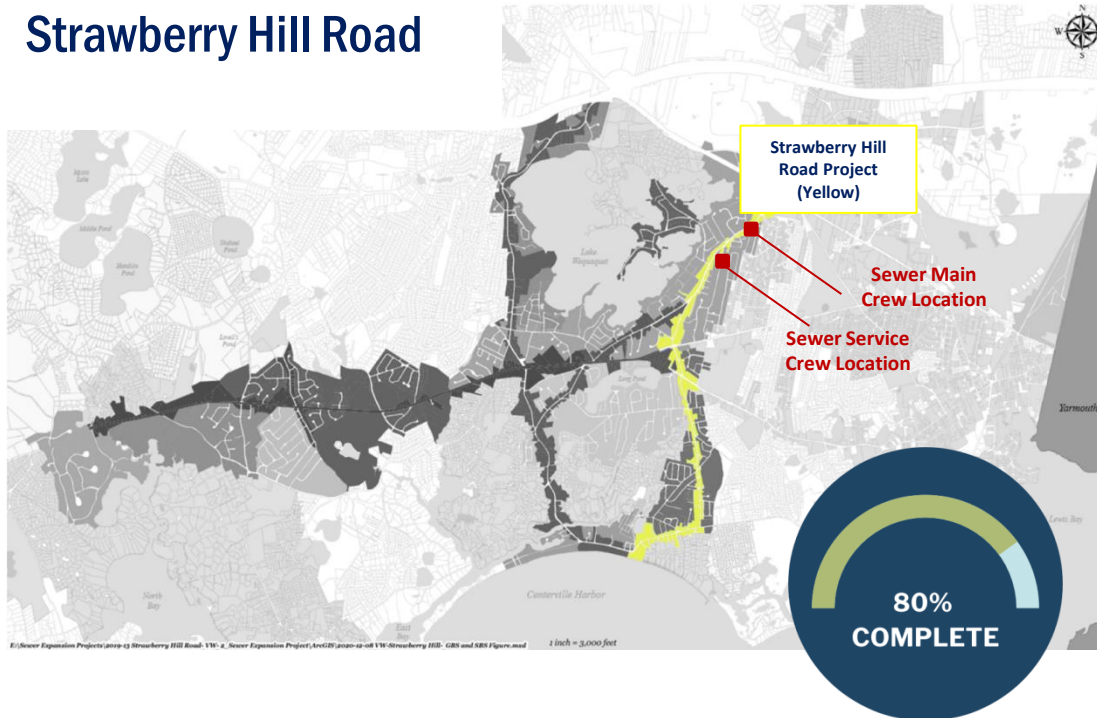
- Year 2 of 10
- Strawberry Hill Road Project, ~80% complete
- Route 28 East Project, ~15% complete
- Nitrogen addressed: Completion of these current construction projects will remove roughly 8% of the total nitrogen to be in Phase 1
- 53% of Phase 1 projects are actively in design or construction
- Centerville River Watershed treated by current Phase 1 projects



CWMP Phase 1 Implementation

Strawberry Hill Road Project

Strawberry Hill Road



Project Status: On schedule for completion Spring 2023

Current construction:

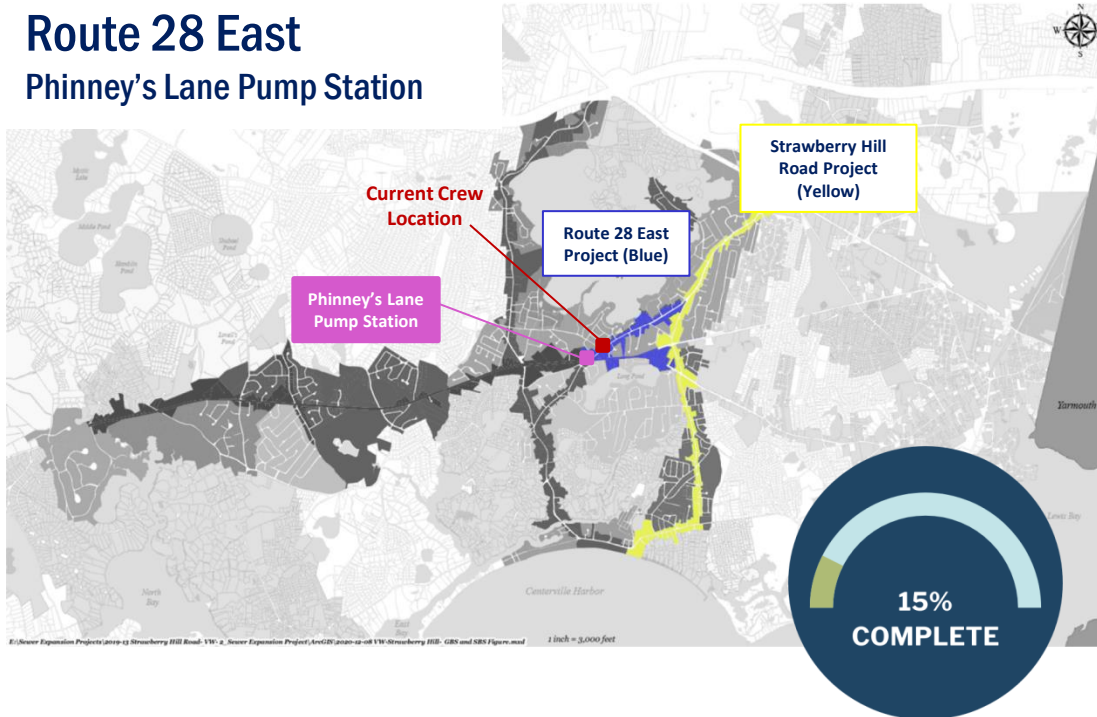
- Sewer main installation advancing north of Old Strawberry Hill Road
- Sewer lateral installation continuing north of Huckins Neck Road, providing services to each parcel along the route
- Pump station at 528 Craigville Beach Road; installing valve structure



CWMP Phase 1 Implementation

Route 28 East Project

Route 28 East Phinney's Lane Pump Station



**Project Status: On schedule
for completion Winter 2023**

Current construction:

- Sewer installation progressing along the southern portion of Phinney's Lane, proceeding north from Great Marsh Road toward Pond Street
- Construction in Route 28 roadway anticipated to start late March 2023

Phinney's Lane Pump Station:

- Continuing concrete work for foundation and influent channel



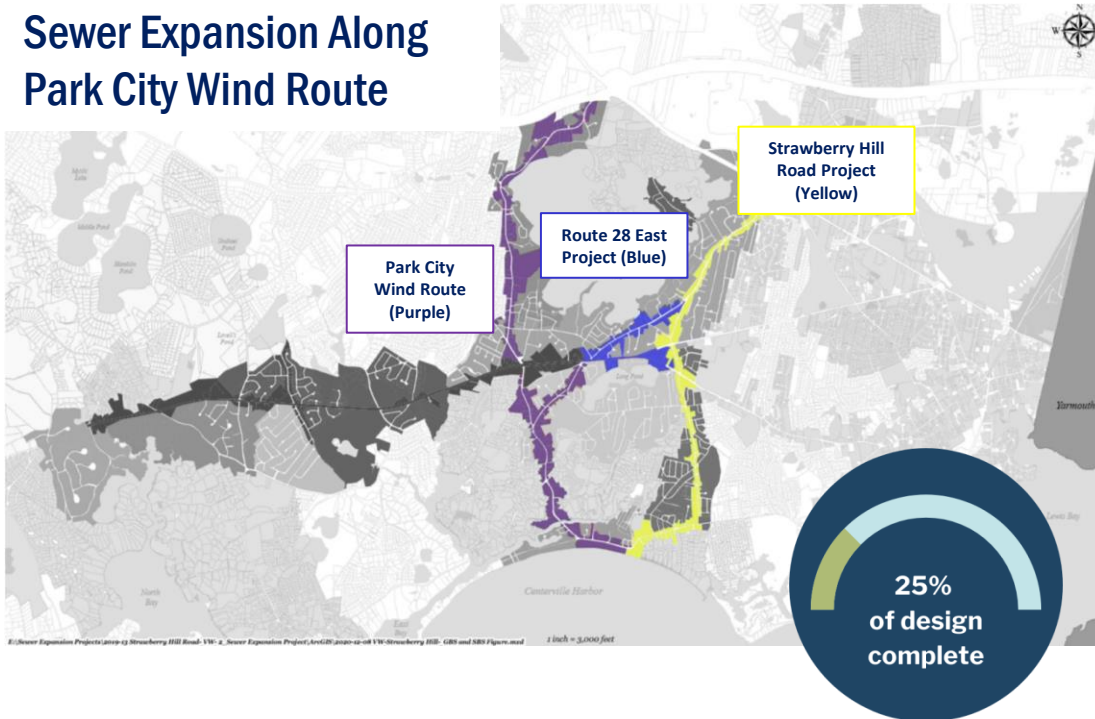
February 2023



CWMP Phase 1 Implementation

Park City Wind Project

Sewer Expansion Along Park City Wind Route



**Construction anticipated to
commence in Fall/Winter 2023**

Sewer expansion along Park City Wind Project route:

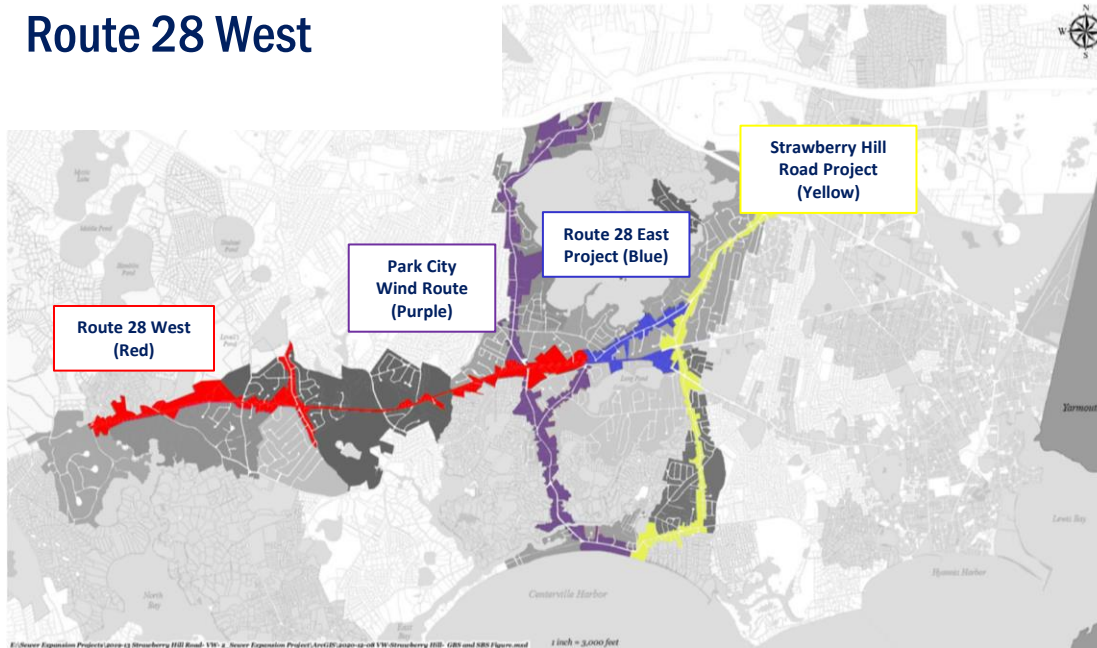
- Design coordination with PCW staff
- Continued coordination with legal team regarding pump station at Mother's Park Road and associated intersection improvements
 - Informational Meeting to be scheduled for early March
- Sewer project anticipated to include 6 sewer pump stations (including Mother's Park Road)
- Land acquisition anticipated to be necessary for 1-3 pump station sites



Phase 1 Implementation

Route 28 West Project

Route 28 West



Construction anticipated to commence in late 2025

Project status:

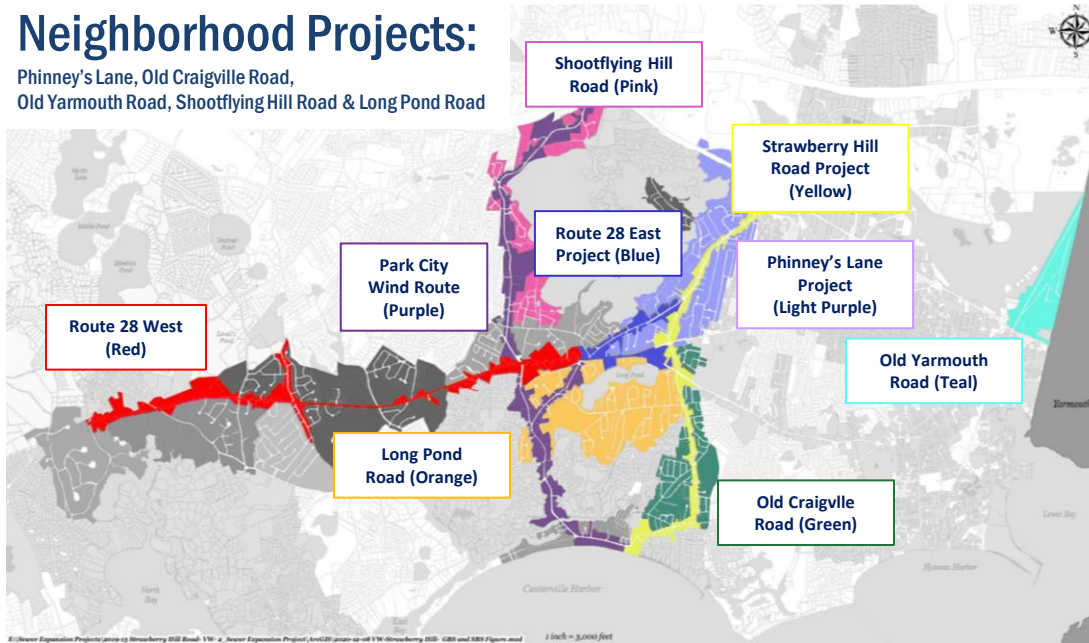
- Design contract awarded to Weston Sampson
- Survey work in progress

CWMP Phase 1 Implementation

Neighborhood Projects

Neighborhood Projects:

Phinney's Lane, Old Craigville Road,
Old Yarmouth Road, Shootflying Hill Road & Long Pond Road



Current Survey & Design

Phinney's Lane Project:

- Neighborhoods on east and west side of Phinney's Lane
- Preliminary in-house design complete and undergoing internal review
- Water and sewer easement taking for ±40 private roads in project area; first 7 at this evening's Town Council

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

- Preliminary design funding approved in FY23 CIP Budget
- Survey RFP has been issued

Long Pond Road Project

- Survey complete
- Preliminary in-house design on-going
- Construction anticipated to commence in FY27



CWMP Phase 1 Implementation

Private Road Utility Easements

Sewer and Water Utility Easements

- First 7 private road takings presented at this evening's Town Council meeting
- In order to secure financing and ultimately construct sewer within these private roads, it is necessary that the Town take sewer and water utility easements over the roadway
- These easements grant the Town unobstructed access to install, operate and maintain the proposed utilities within the private roadway
- Does not change the status of the road, private roads will remain private
- DPW performed direct-mail outreach to identified property owners
- Most projects moving forward include private roads and will require these takings

Next Steps

- Further communication will be provided to residents as construction proceeds, currently scheduled for late 2025
- Expected to come before Town Council approximately every other month with these easement requests, as project design and construction evolves



Water Pollution Control Facility Projects

Nitrogen Removal and Headworks Improvements:

- Design RFP issues, responses due March 3, 2023
- Construction anticipated to start in FY25

Effluent Disposal Evaluation

- CDM Smith conducting refined modeling evaluation of identified options

Solids Processing Facility Upgrades

- Construction on-going
- Scheduled to be completed before end of calendar year

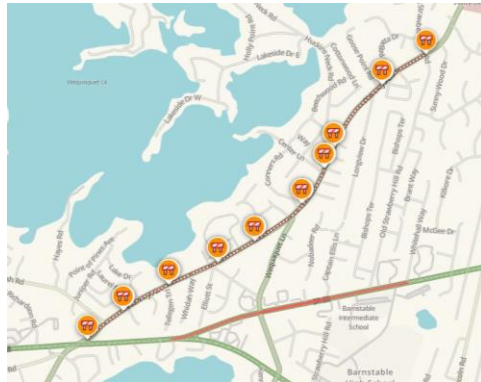
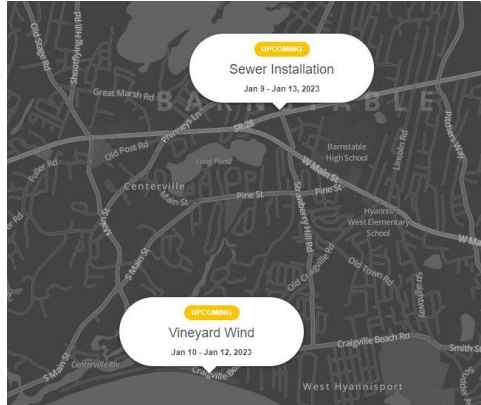
WPCF Engineering Facility Study

- Study on-going



CWMP Communications

Waze Partnership: Real-Time Traffic Management



Waze for Cities Partnership:

- Allows DPW to re-open and close roads in real-time resulting in more efficient traffic flow
- Integrates with Google Maps

Progress

- Successful early re-opening of closures, and extension of closures when needed, providing accurate alerts to motorists during rush-hour commutes
- Addition of Vineyard construction activities, providing complete road closures across all projects

Next Steps

- Waze Live Map embed on Barnstable Water Resources website
- Leverage Waze for Cities Data to make relevant traffic and infrastructure decisions
- Develop use case for crisis event support (i.e. natural disasters and severe weather)



Existing Sewer Infrastructure Improvements

720 Main Street Pump Station Replacement

Project Status:

- Existing 720 Main Street Pump Station does not have the capacity to handle peak design flows and is at the final stage of its intended design life
- Sewers on South Street are approaching capacity; if unaddressed, would restrict growth within the Downtown Hyannis Growth Incentive Zone (GIZ)
- Infrastructure improvement project scope includes construction of new replacement pump station located on Town property at 725 Main Street
- Project listed on 2022 CWSRF Intended Use Plan
- Conservation Commission approved project at January 10, 2023 hearing
- Construction anticipated to start in Fall 2023

Public Meeting:

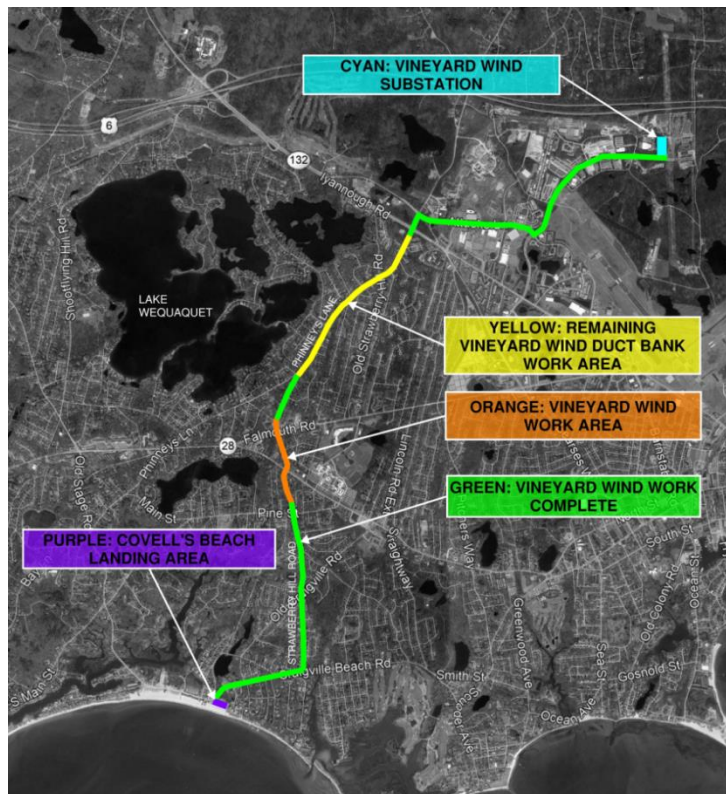
- Public presentation of project and proposed designs presented at February 15, 2023 Informational Meeting
- Public feedback received through Friday, March 3, 2023 via email to Kelly.Collopy@town.barnstable.ma.us



Looking South from Main Street



Vineyard Wind Project



Project Status: On schedule for completion Spring 2023

On-going construction:

- Duct bank installation at intersection of Route 28 and Strawberry Hill Road during February school vacation week, with request for Saturday work
 - A portion of this work will require a detour around the construction zone, please follow posted detour signage
- Construction at Covell's Beach parking lot continues
- Testing and electrical cable pulling along route, second offshore cable pull complete

Anticipated final paving schedule of disturbed roadways:

- Spring 2023:
 - Attucks Lane
 - Craigville Beach Road – Top course
 - Strawberry Hill Road
- Fall 2023:
 - Phinney's Lane
 - Wequaquet Lane





Questions or Feedback?