



Barnstable Town Council

Water Resources Management Update

Department of Public Works
October 20, 2022

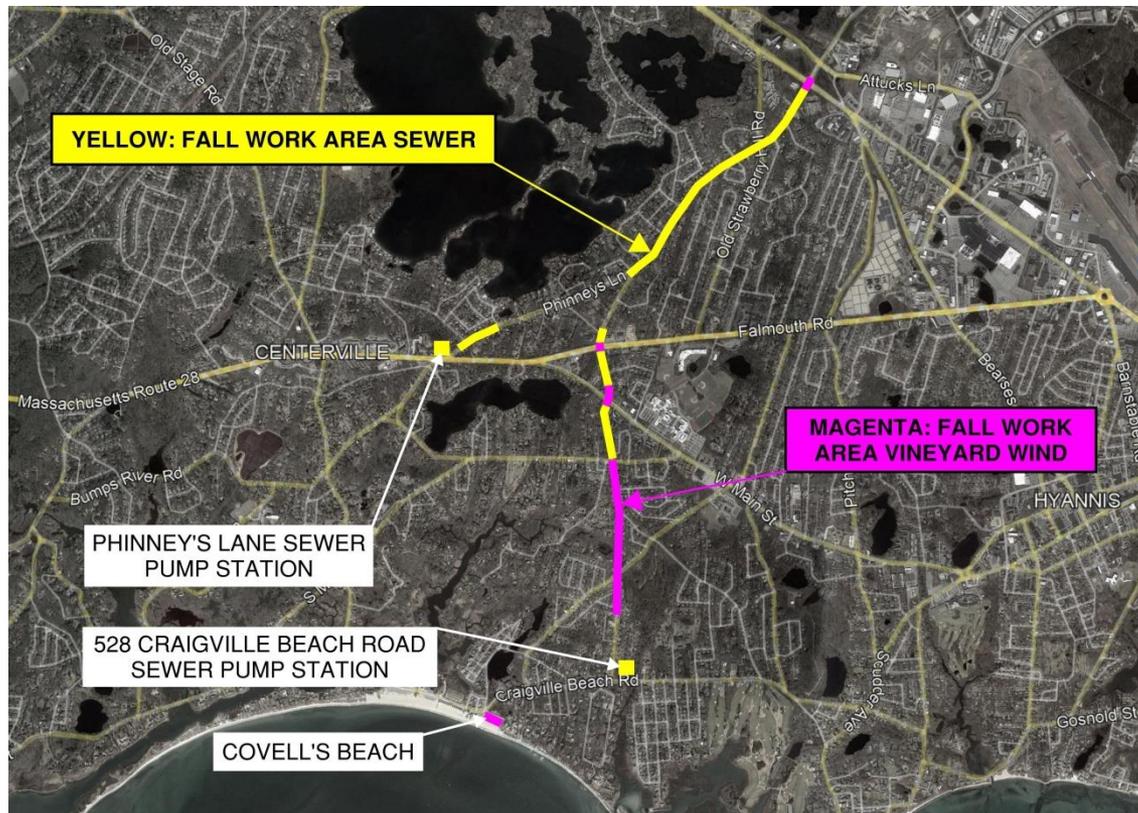


CWMP Construction Updates

Active Construction Projects



- **Strawberry Hill Road Sewer Expansion**
- **Route 28 East Sewer Expansion**
 - Includes *Phinney's Lane Pump Station*
- **Vineyard Wind Construction**

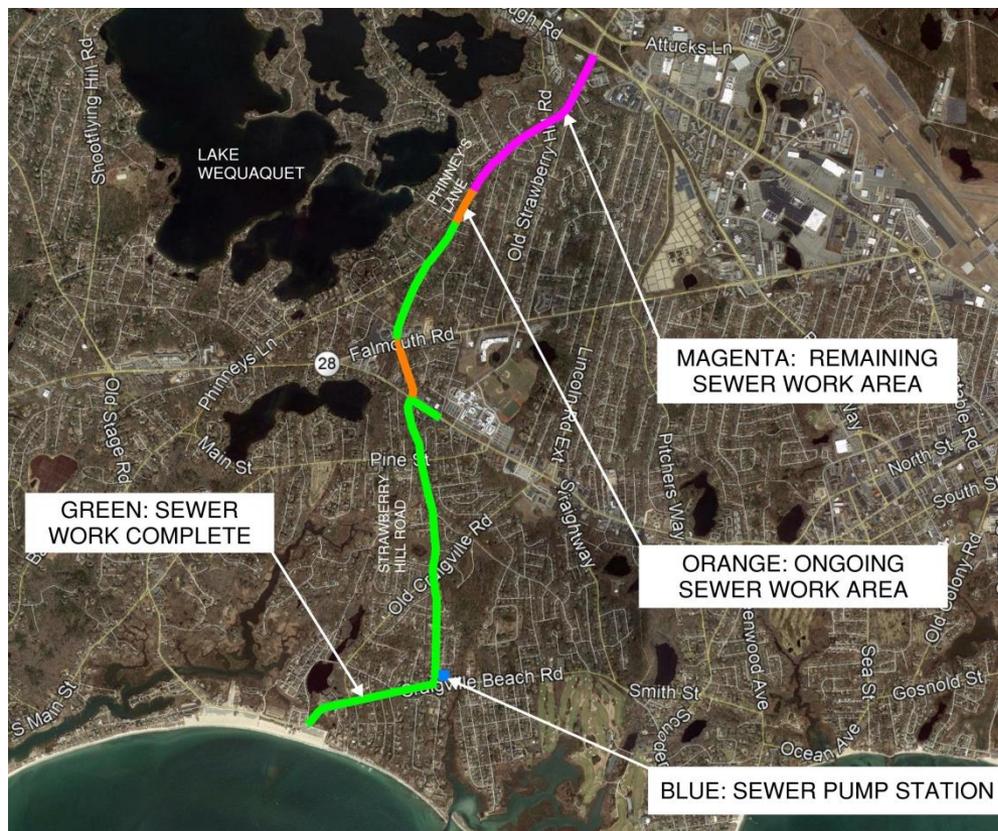




CWMP Construction Updates Strawberry Hill Road Sewer Project



- Project on schedule for completion this Spring
- Construction completed to date:
 - ±16,700 LF (±65%) of gravity sewer main installed to date
 - Sewer work on Craigville Beach Road complete.
 - Sewer work on Strawberry Hill Road, south of Pine Street, complete.
- On-going construction
 - Sewer construction on-going on Phinneys Lane between Center Lane and Huckins Neck Road.
 - Water bypass system online
 - New 12" water main being installed on Phinneys Lane at Longview Drive proceeding north to Rte 132.
 - Pump station @ 528 Craigville Beach Road dewatering and excavation ongoing.



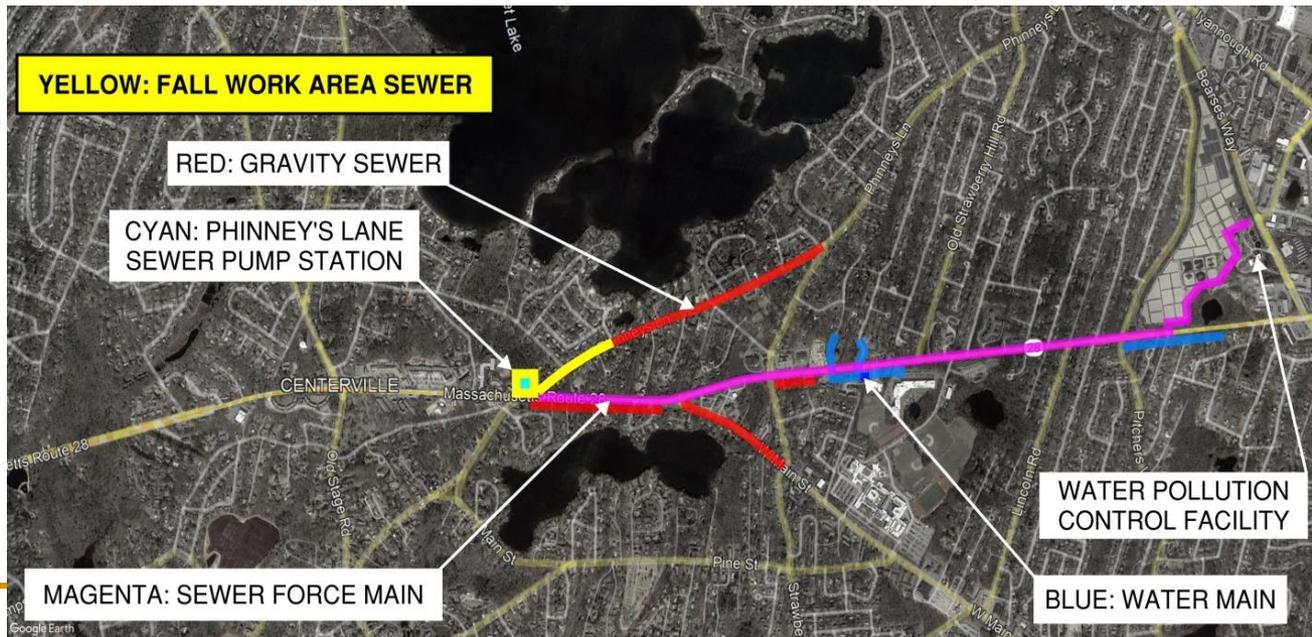


CWMP Construction Updates

Route 28 East Sewer Expansion



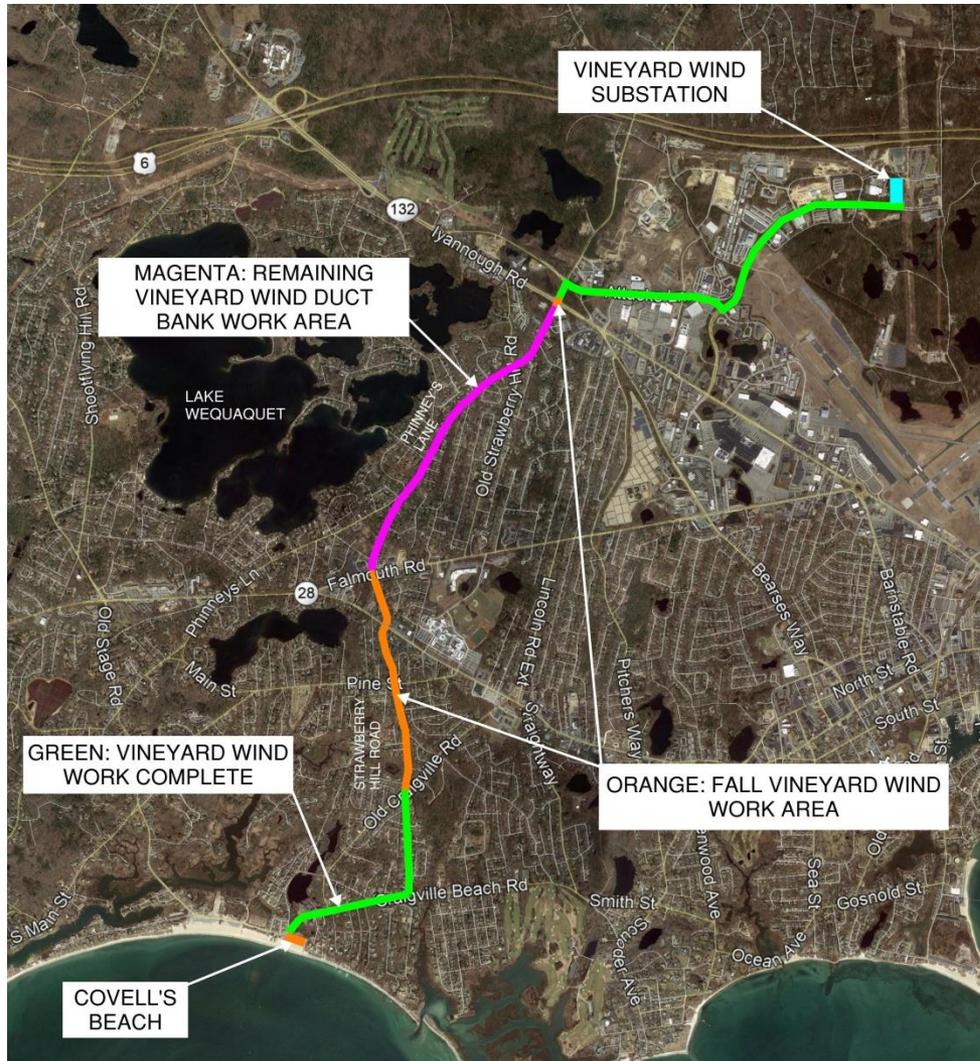
- *Phinney's Lane Pump Station construction underway*
 - *Support of Excavation work (driving of sheeting) complete.*
 - *Excavation depth of 40 feet required for foundation --- 5 feet of excavation remaining.*
 - *Dewatering required throughout excavation and foundation construction*
- *Sewer Construction anticipated to commence early November 2023*
 - *Start date dependent on pump station excavation completion.*
 - *Start on Phinney's at pump station site and work north. Deep construction (+/- 20')*
 - *Work in Route 28 scheduled to start in Spring 2023*
 - *Project completion anticipated Winter 2023*



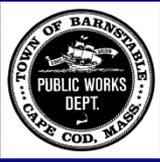


CWMP Construction Updates

Vineyard Wind Project



- Project on-schedule for completion this Spring
- On-going construction this fall:
 - Duct Bank and Water Main on Strawberry Hill Road
 - Construction at Covells Beach Parking Lot
 - VW Mobilized on 9/15/22, work anticipated to be complete late Winter 2023
 - Testing and wire pulling along route
- Anticipated final paving schedule of disturbed roadways:
 - Fall 2022:
 - Craigville Beach Road
 - West Main Street
 - Independence Drive
 - Attucks Lane
 - Spring 2023:
 - Strawberry Hill Road
 - Fall 2023:
 - Phinney's Lane
 - Wequaquet Lane



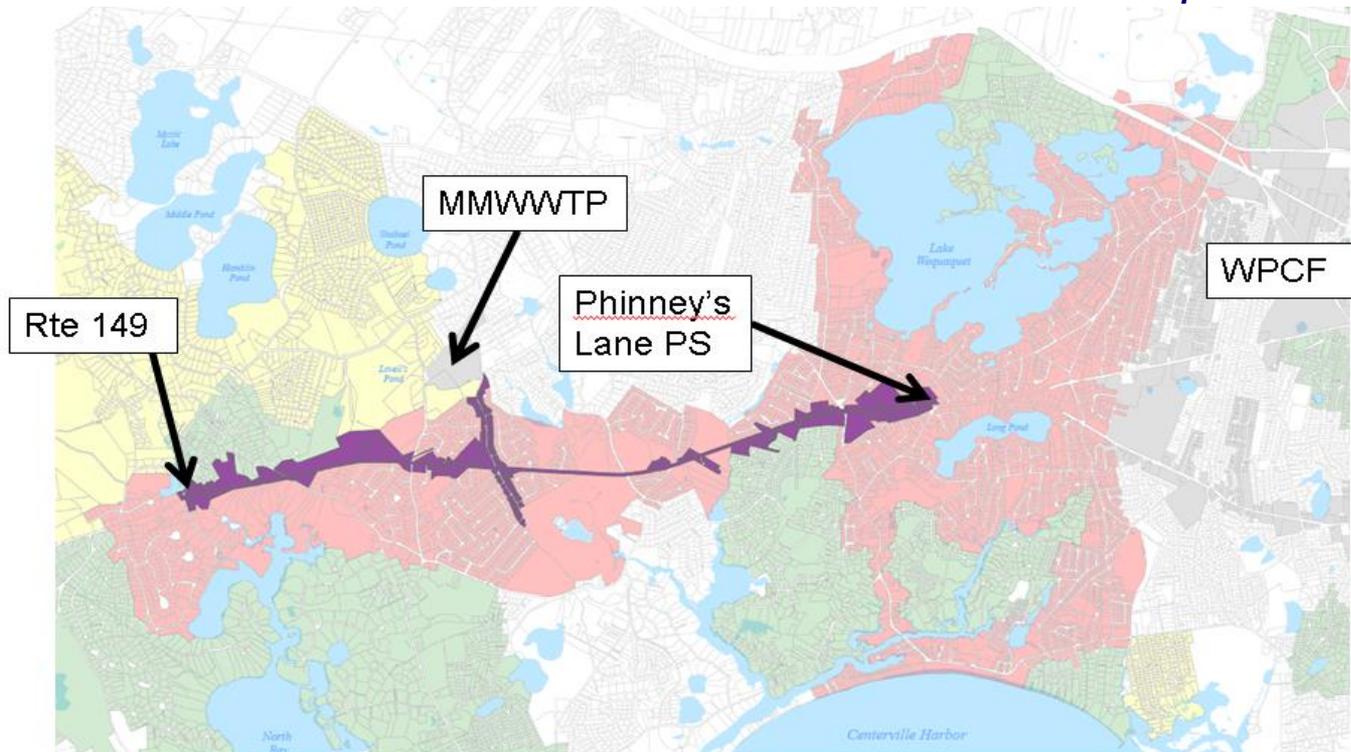
CWMP Design Project Updates

Route 28 West



- **Route 28 “West” Sewer Expansion**

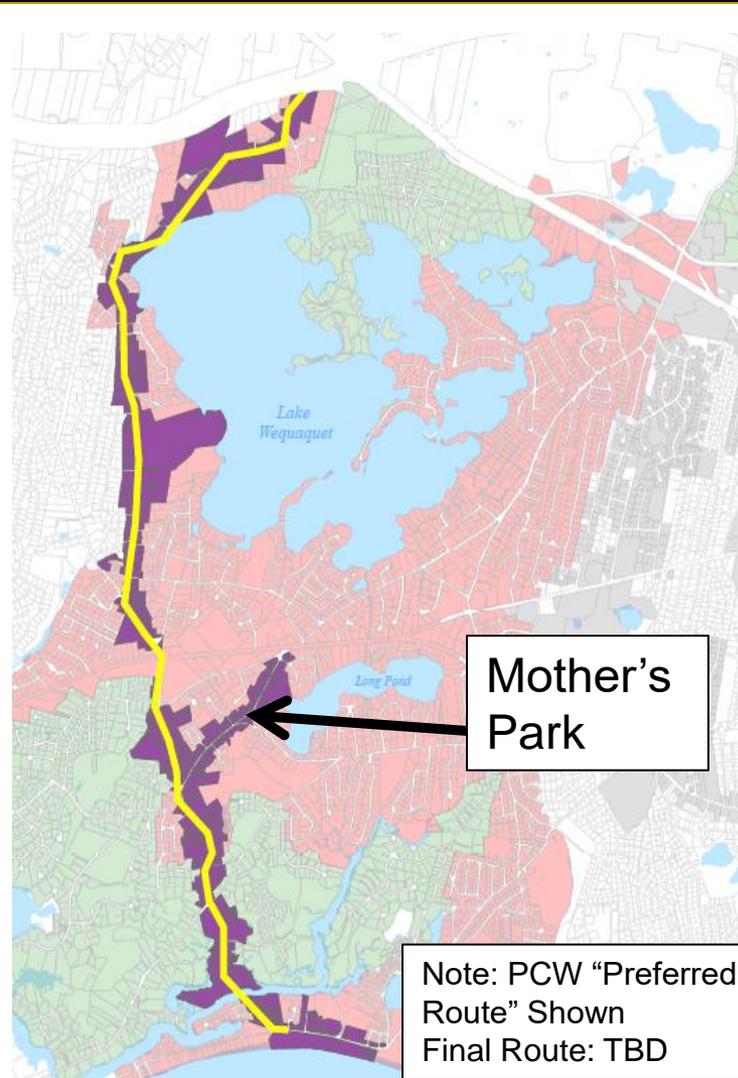
- Project extends sewers westerly within Route 28 from Phinney’s Lane into the Three Bay’s Watershed to Route 149. Infrastructure is the backbone for necessary sewer expansion in the westerly portion of Town, particularly the Three Bays Watershed.
- Design services contract awarded to Weston & Sampson for \$1,460,000.
- Construction scheduled to commence in FY2025 and be completed in FY2027.





CWMP Design Project Updates

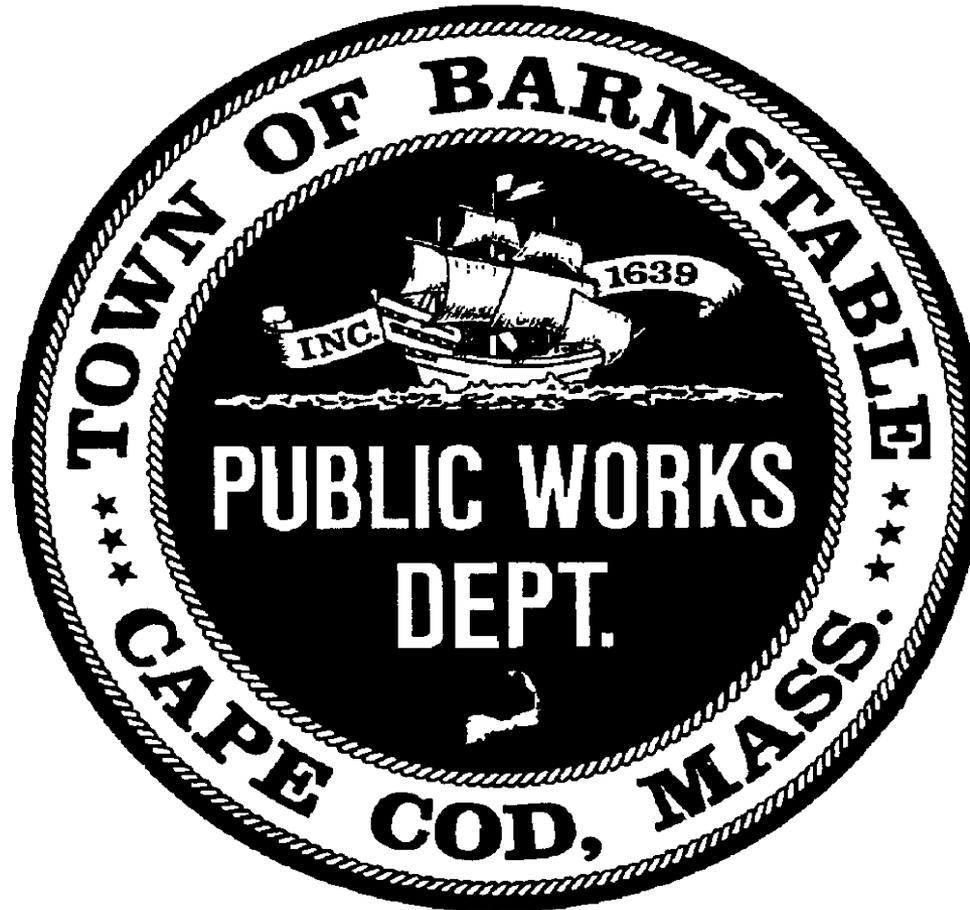
Park City Wind Route



- **Park City Wind Route Sewer Expansion**
 - Design services contract awarded to Stantec (\$1,337,646).
 - DPW continues to meet w/ PCW staff weekly to coordinate design efforts.
 - Pending PCW route decision.
 - DPW continues to coordinate w/ legal team re: pump station at Mother's Park Road and associated intersection improvements.
 - Sewer project anticipated to include 6 sewer pump stations (including Mother's Park Road).
 - Land acquisition anticipated to be necessary for 1-3 sites.
 - Construction currently anticipated to start in Fall/Winter 2023.



Discussion?

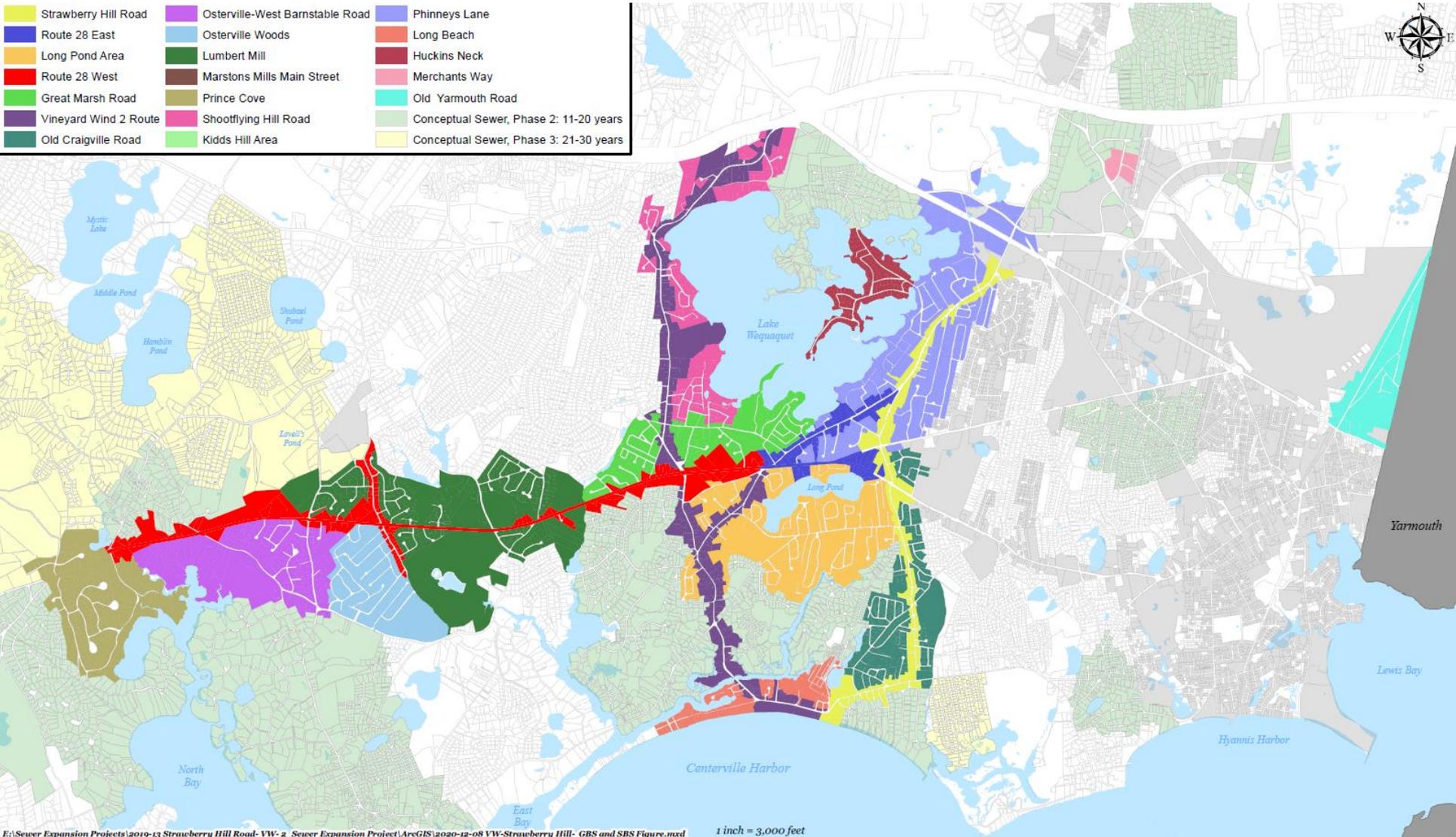




Phase 1 Implementation Plan



- | | | |
|-----------------------|---------------------------------|--|
| Strawberry Hill Road | Osterville-West Barnstable Road | Phinneys Lane |
| Route 28 East | Osterville Woods | Long Beach |
| Long Pond Area | Lumbert Mill | Huckins Neck |
| Route 28 West | Marstons Mills Main Street | Merchants Way |
| Great Marsh Road | Prince Cove | Old Yarmouth Road |
| Vineyard Wind 2 Route | Shootflying Hill Road | Conceptual Sewer, Phase 2: 11-20 years |
| Old Craigville Road | Kidds Hill Area | Conceptual Sewer, Phase 3: 21-30 years |





Phase 1 Schedule



Sewer Expansion Collection System Projects - Phase 1															
Project	Phase 1										Phase 2		TOTAL		
	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30		FY31	FY32
Merchants Way															\$0
Strawberry Hill Road		\$835,000	\$10,600,000												\$11,435,000
Route 28 East		\$800,000		\$22,000,000											\$22,800,000
Vineyard Wind 2 Route				\$2,500,000		\$28,000,000									\$30,500,000
Phinneys Lane	\$315,000	\$735,000					\$32,000,000								\$33,050,000
Route 28 West		\$612,000		\$3,500,000			\$35,000,000								\$39,112,000
Old Yarmouth Road					\$275,000	\$600,000		\$7,150,000							\$8,025,000
Old Craigville Road					\$600,000	\$1,400,000		\$17,000,000							\$19,000,000
Long Pond Area	\$402,000	\$938,000							\$35,000,000						\$36,340,000
Shootflying Hill Road					\$375,000		\$875,000		\$7,150,000						\$8,400,000
Long Beach						\$300,000	\$700,000		\$8,000,000						\$9,000,000
Great Marsh Road							\$500,000	\$1,200,000		\$15,500,000					\$17,200,000
Osterville Woods							\$550,000	\$1,250,000		\$17,000,000					\$18,800,000
South County Road								\$300,000	\$700,000		\$13,000,000				\$14,000,000
Prince Cove									\$400,000	\$1,000,000		\$15,500,000			\$16,900,000
Huckins Neck									\$300,000	\$700,000		\$9,000,000			\$10,000,000
Lumbert Mill										\$700,000	\$1,500,000		\$20,225,000		\$22,425,000
TOTAL COSTS	\$717,000	\$3,920,000	\$10,600,000	\$28,000,000	\$1,250,000	\$30,300,000	\$69,625,000	\$26,900,000	\$51,550,000	\$34,900,000	\$14,500,000	\$24,500,000	\$20,225,000	\$0	\$316,987,000
NEW PARCELS CONNECTED	0	7	0	0	238	91	0	351	278	1,032	441	1,352	349	418	4,557
COMBINED FLOW (GPD)	1,670,000	1,670,000	1,670,000	1,670,000	1,716,500	1,732,000	1,732,000	1,798,000	1,870,500	2,035,500	2,084,500	2,320,500	2,388,500	2,451,000	781,000

5-Year CIP (FY23-FY27)



Park City Wind Route



LEGEND

- Preferred Route (Anticipated Construction in 2023)
- Alternative Routes
- New Vineyard Wind Substation Site
- West Barnstable Substation (Existing Interconnection Point)

Scale 1:21,000
1 inch = 1,750 feet

0 875 1,750 Feet

Basemap: DigitalGlobe Aerial Imagery, May 2018

(Map Source: Office of Geographic Information, Massachusetts Department of Transportation, Aerial Imagery, December 2018)