Sagamore Avenue Sewer Extension

Portsmouth Planning Board Conditional Use Permit

March 25, 2021



Terry Desmarais, PE (City of Portsmouth)
Zachary Cronin, EIT (City of Portsmouth)
Kevin Garvey, PE (Wright-Pierce)
Britt Eckstrom, PE (Wright-Pierce)



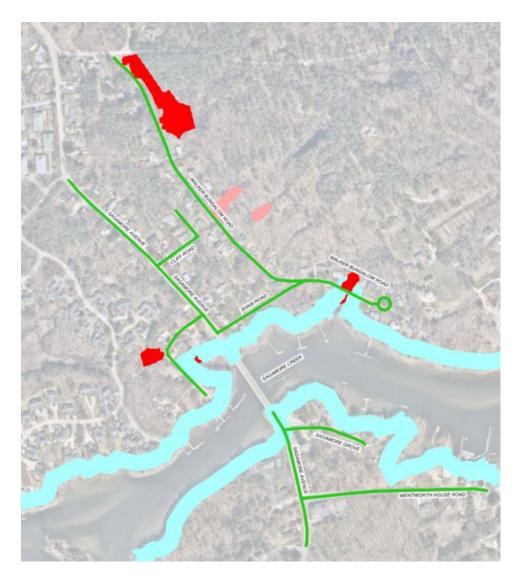


Presentation Overview

Introductions
Project Location & Need
Proposed Project
Contact Information



Project Location



- Low pressure installed within 9,000 ft of roadway
- Portion of the project within the 100 ft tidal buffer zone



Project Background

- No existing municipal sewer infrastructure within the project area
- 2016 EPA/NHDES Consent Decree Second Modification
 - Project complete by December 2022
- Project addresses failed septic systems and historic bacterial water quality issues



Proposed Project - Low Pressure Sewer System (LPSS)

Proposed LPSS

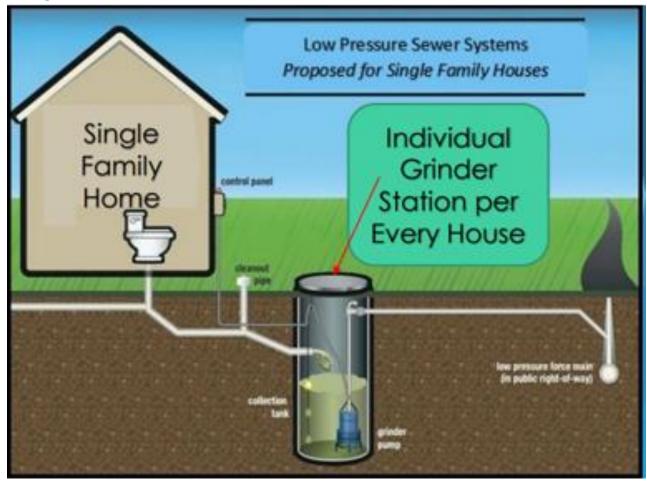
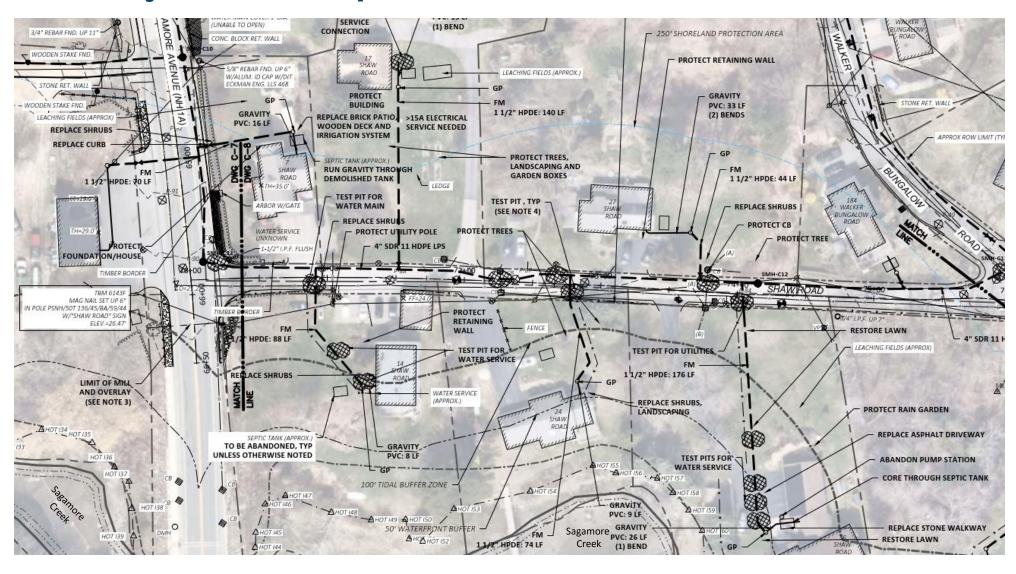


Photo credit to Engenuity Group Inc. and the Town of Ocean Ridge Florida

- Install sewer force main and service connections within road
- Temporary impact areas for installing sewer services and force main (10 ft wide)
- Install grinder pump for each building
- Permanent impacts for grinder pump covers (25-inch Diameter - 3.4 sq. ft.)
- Impacted areas restored to match existing conditions



<u>Proposed Project – Example Plan</u>





Sample E-One Station







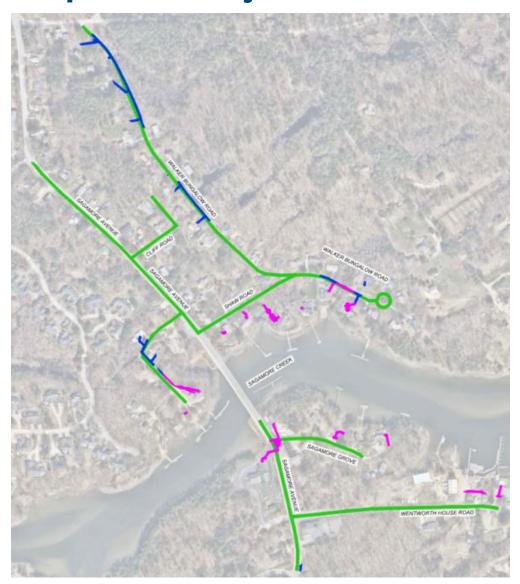
Sample E-One Station







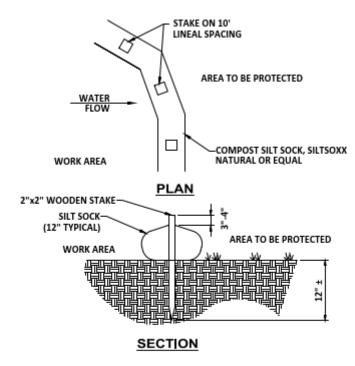
<u>Proposed Project – Conditional Use Permit</u>



Activity	Location	100' Tidal Buffer (sq ft)		100' Wetland (Inland) Buffer (sq ft)	
		Temp	Perm	Temp	Perm
Trench Disturbance	ROW	4,235	0	11,980	0
	Private Property	13,380	0	6,405	0
Grinder Pump / Manhole ¹ Covers	Private Property	0	56	0	4
Total		17,615	56	18,385	4



Proposed Project - Construction



NOTES:

- 1. ALL MATERIAL TO MEET SPECIFICATIONS
- 2. SILT SOCK COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS
- SILT SOCK DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER
- COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST SILT SOCK DETAIL

- Impact areas dependent on whether private property owners opt to connect
- Sedimentation and erosion control measures
 - Perimeter controls
 - Dust control
 - Monitoring (SWPPP)
- Surface restoration to same condition as existing
 - ROW pavement restoration
 - Private Property match existing lawn, landscaping, etc.



<u>Proposed Project - Anticipated Schedule</u>

- Final Design & Permitting Spring 2021
- Bidding Spring 2021
- Anticipated Construction
 - Start Construction June 2021
 - Sewer Main December 2022
 - Site Restoration Summer 2023



Contact Information

- Wright-Pierce
 - Kevin Garvey, PE Project Manager
 - kevin.garvey@wright-pierce.com
 - Direct phone (603) 570-7102
 - Britt Eckstrom, PE Permitting Specialist
 - britt.eckstrom@wright-pierce.com
 - Direct phone (603) 570-7126
- City of Portsmouth
 - Terry Desmarais, Jr., PE City Engineer
 - tldesmarais@cityofportsmouth.com
 - Phone (603) 766-1421
 - Zach Cronin, EIT Assistant City Engineer
 - zmcronin@cityofportsmouth.com
 - Phone (603) 610-7304



THANK YOU

