

Sagamore Avenue Sewer Extension

Portsmouth Conservation Commission

NHDES Wetlands and Conditional Use Permit

March 10, 2021



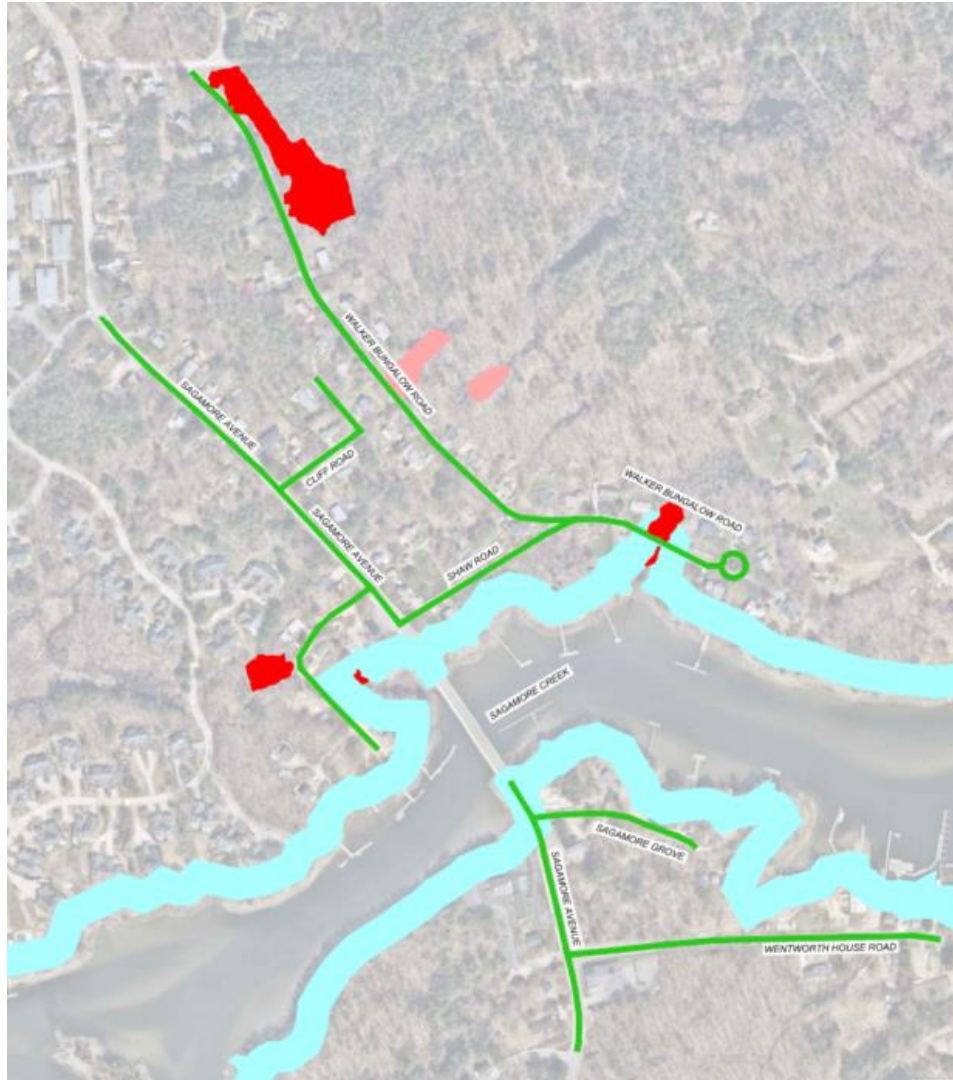
Terry Desmarais, PE (City of Portsmouth)
Zachary Cronin, EIT (City of Portsmouth)
Kevin Garvey, PE (Wright-Pierce)
Britt Eckstrom, PE (Wright-Pierce)



Presentation Overview

Introductions
Project Location & Need
Proposed Project
Contact Information
Thank You

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

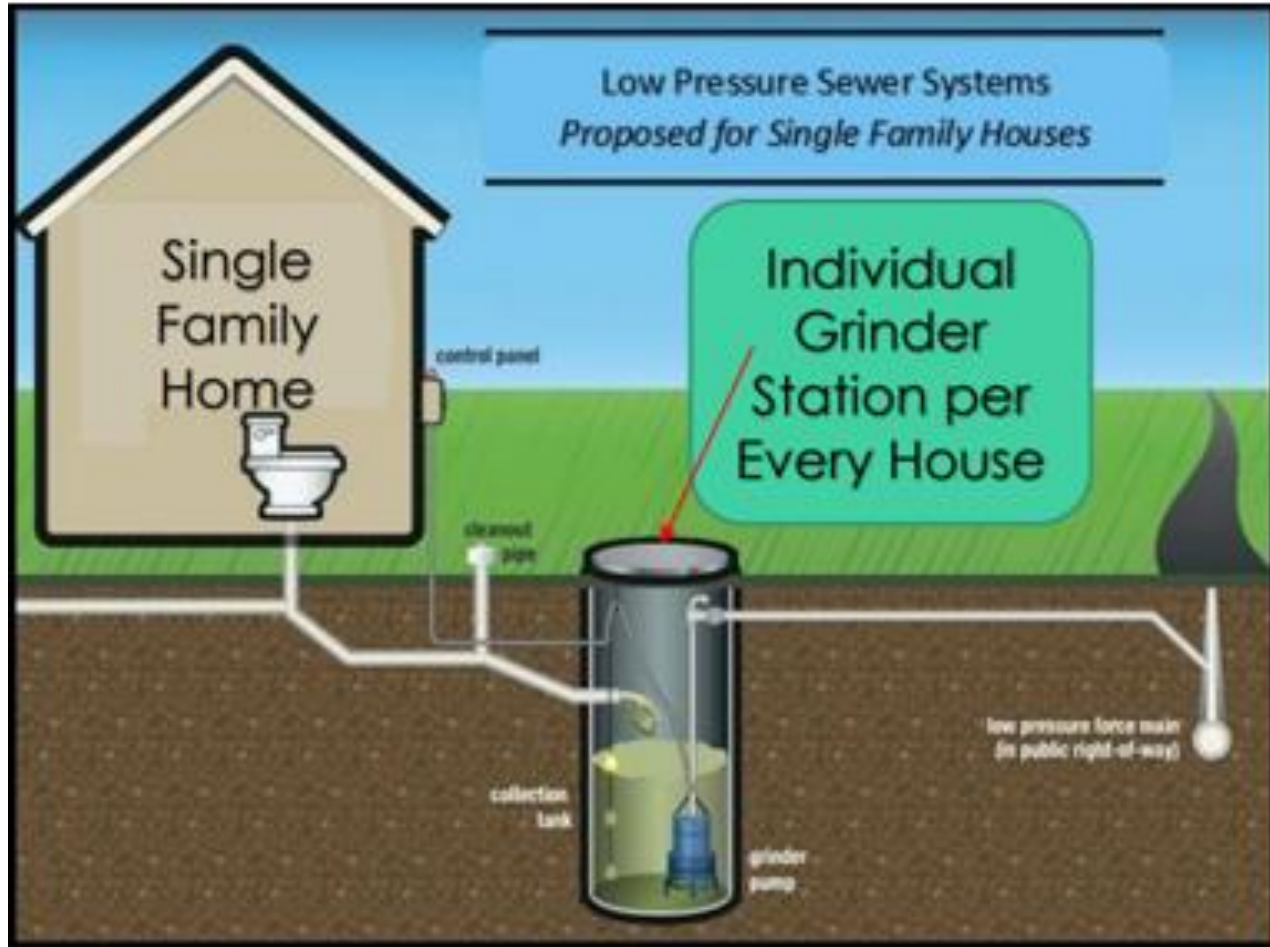
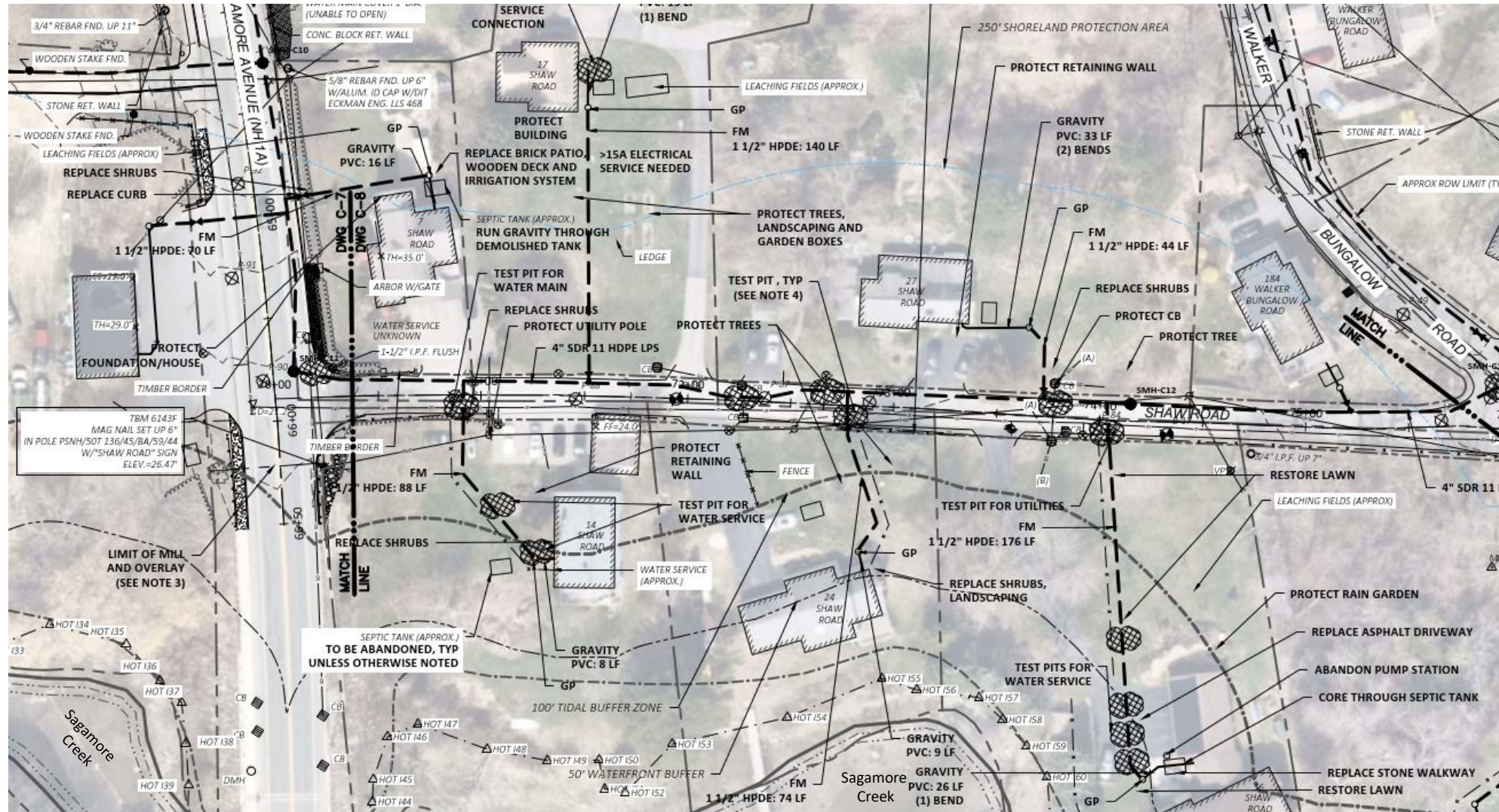


Photo credit to Engenuity Group Inc. and the Town of Ocean Ridge Florida

- 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

Proposed Project – Example Plan



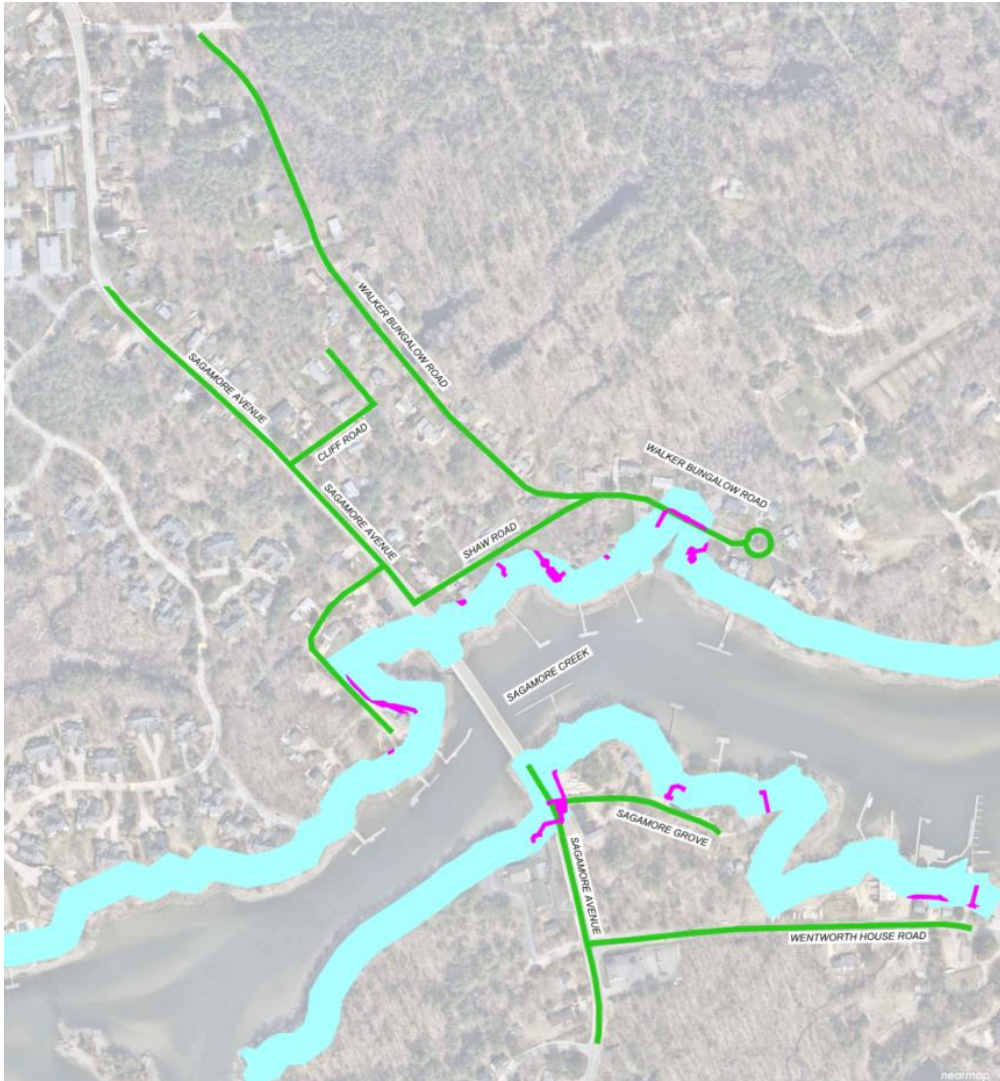
Sample E-One Station



Sample E-One Station



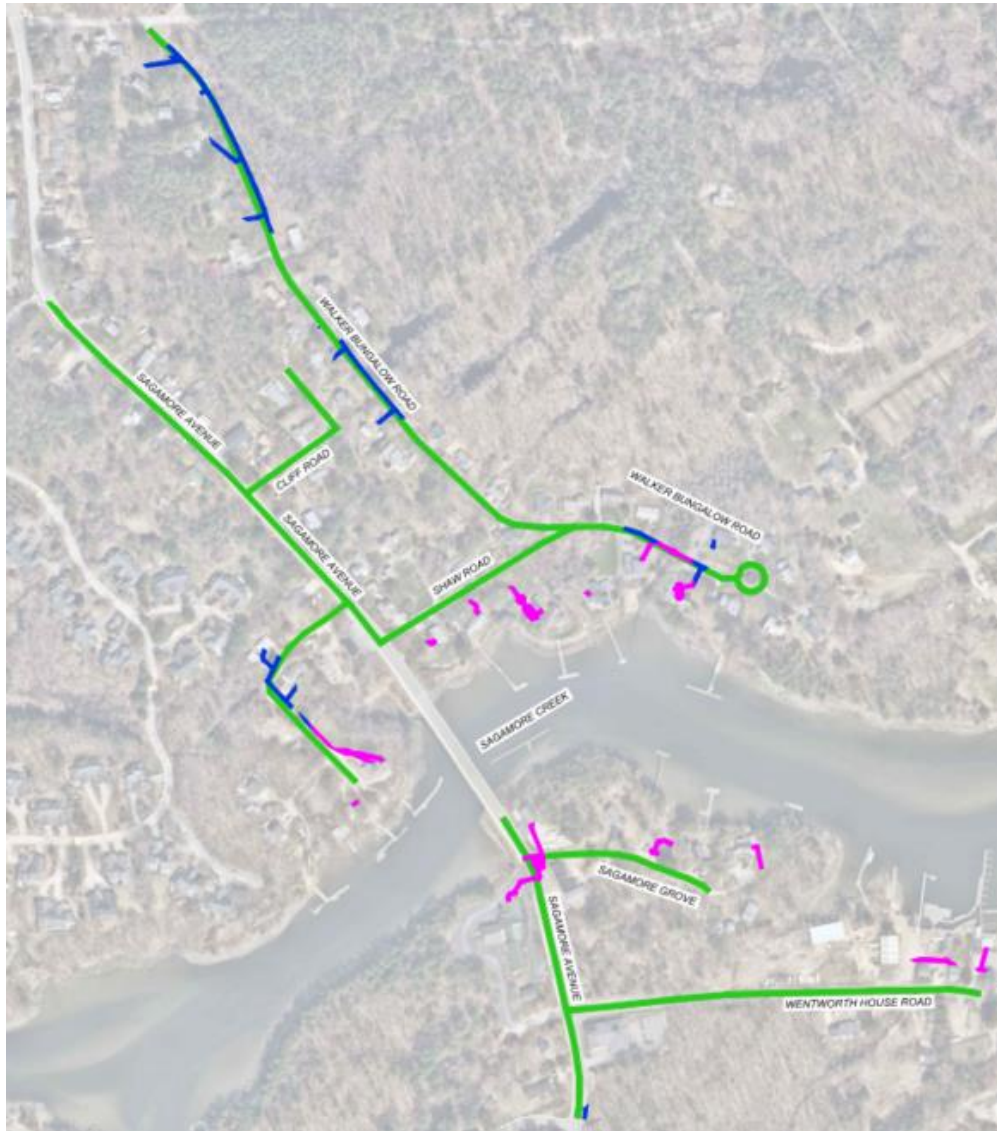
Proposed Project – NHDES Wetlands Permit



Activity	Temporary Previously Developed Tidal Buffer Zone (sq ft)	Permanent Previously Developed Tidal Buffer Zone (sq ft)
Trench Disturbance (ROW)	4,525	0
Trench Disturbance (Private Property)	13,455	0
Grinder Pump Manhole ¹ Covers	0	56
Total	17,980	56

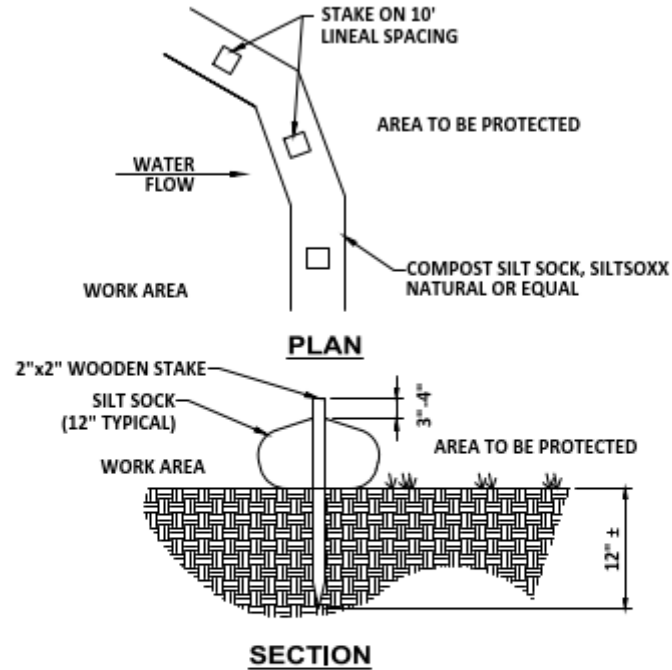
¹ MH covers considered permanent impact where they are proposed over an existing pervious surface

Proposed Project – Conditional Use Permit



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
3. SILT SOCK DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER
4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST SILT SOCK DETAIL

SCALE: NTS

- 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.

Proposed Project - Anticipated Schedule

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

Contact Information

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THANK YOU
