



→ **Dan Pelletier**
Water/Wastewater Superintendent
Jeff Gregg
GHD Inc – Project Manager

Harwich Phase 3 Sewer Project

Public Meeting: March 7, 2024

Welcome



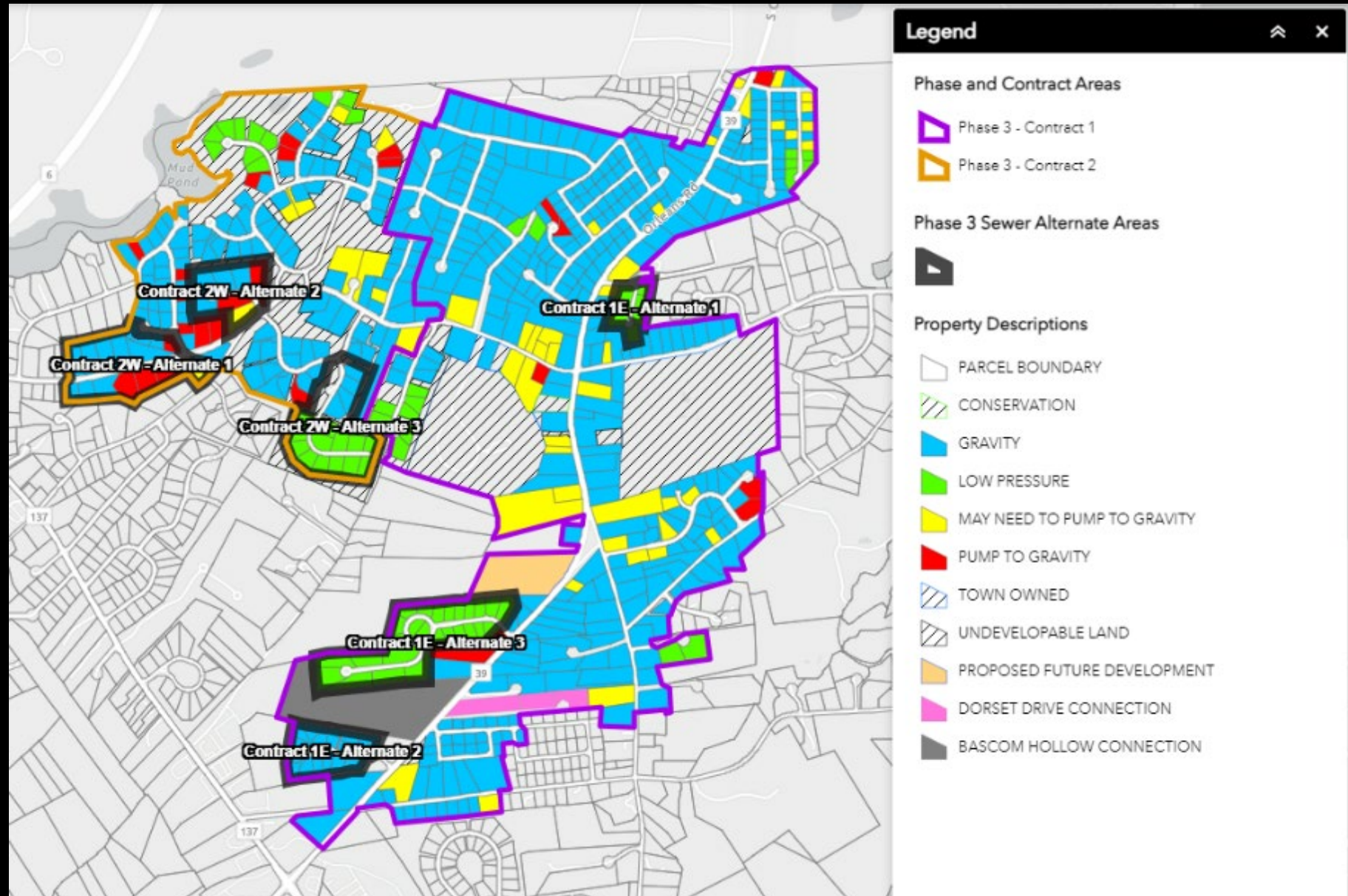
Harwich Phase 3

→ Update

- Agenda
 - Review of Sewer Construction Contracts
 - Process for identifying sewer service type & location
 - Sewer Stub Location
 - Pump Station Locations
 - Traffic Control
 - What to expect during construction
 - What to expect after construction



Sewer Service Area Parcels

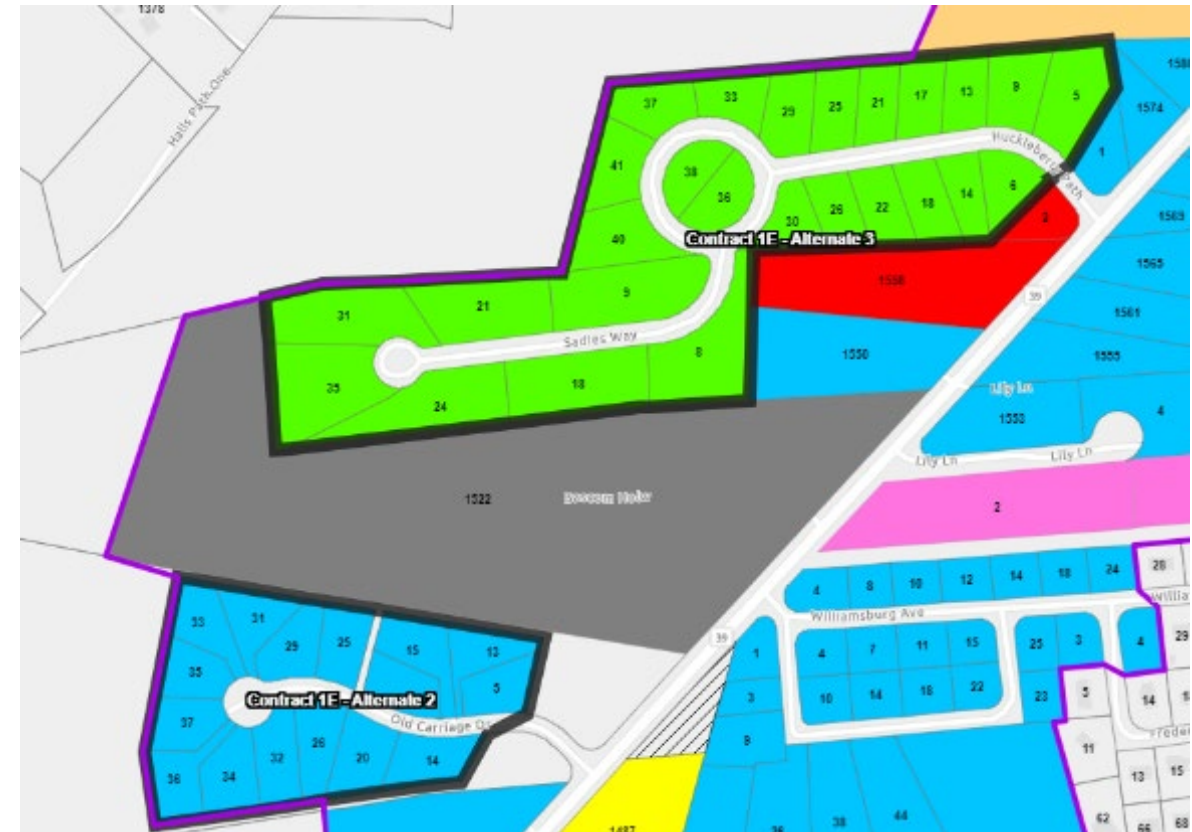


Contract 1-E Proposed Bid Alternates



Alt 1- Victoria Road

- Small neighborhood
- Easy to partition for Contractors
- Pressure sewers only

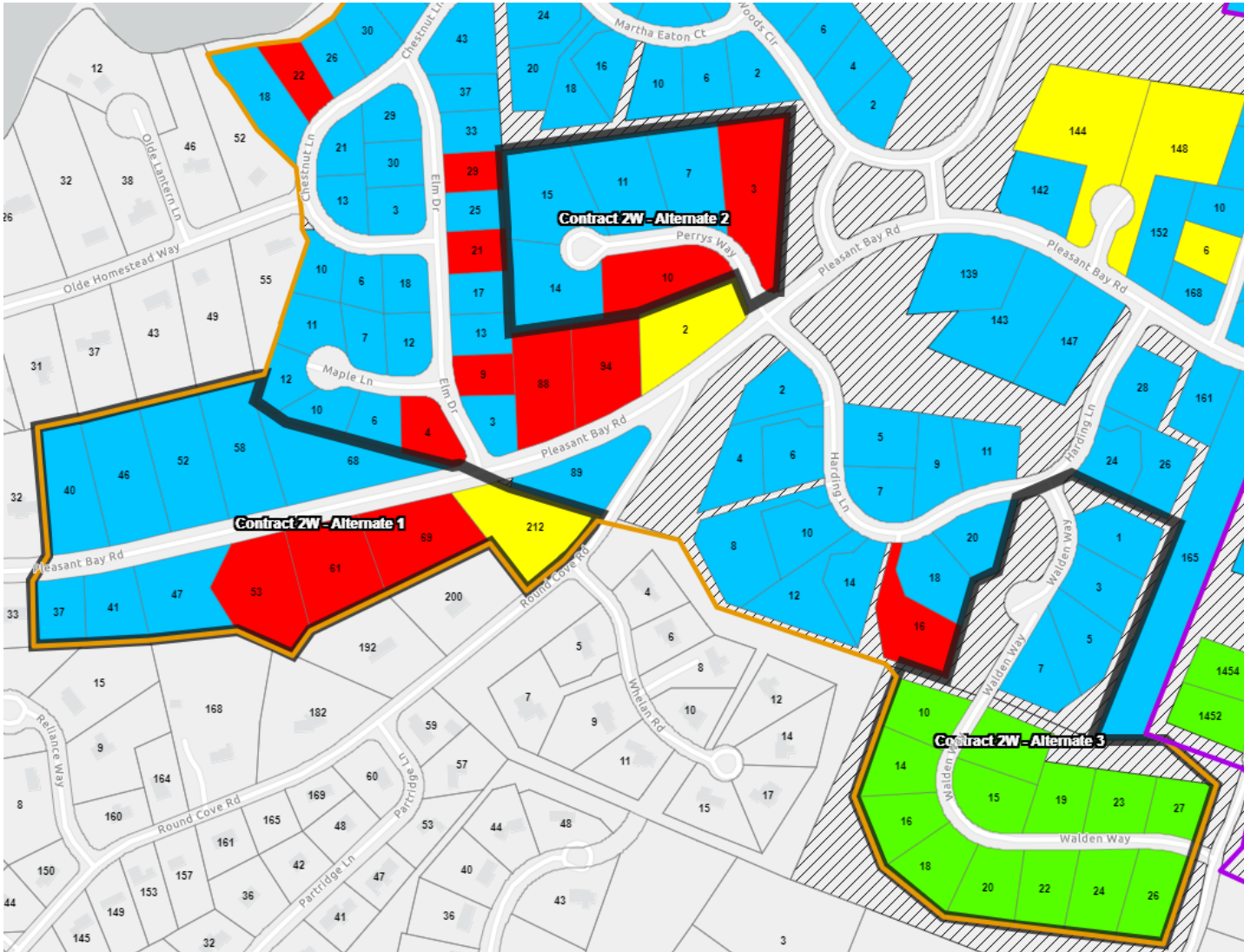


Alt 2- Old Carriage Dr.

Alt 3- Huckleberry Path & Sadie's Way

- Within Upper and Lower Muddy Creek sub-watersheds which are already projected to meet TMDL requirements based on Phase 2 Sewer Area

Contract 2-W Proposed Bid Alternates



Alt 1- Pleasant Bay (W. of Elm)

- Easy to partition for Contractors

Alt 2- Perry's Way

- Small neighborhood
- Easy to partition for Contractors

Alt 3- Walden Way

- Easy to partition for Contractors
- Primarily pressure sewers

Process for Identifying Proposed Sewer Lateral Locations

Each property was examined to try to identify potential locations for sewer laterals for design and bidding.

Final locations will be determined during construction.

Property Lateral Locations

- Board of Health Records to provide available site records
- Google earth and some site visits to consider “existing” conditions
- Utility records from available sources
- GIS and survey data obtained during design

Process (in general terms)

1. Sewer design and layout in street
2. Consideration of location of septic system (based on available information)
3. Identification of utility conflicts, topography and landscaping based on survey
4. Maintain 2% slope from house to sewer main

Lateral Location During Construction

General Procedure

- Plans available to review at time of Bidding
- Property owners can review the locations and may consult with a plumbers/engineer if they have special circumstances (basement bathroom, long retaining walls, first floor located below road elevation, etc.) and then reach out to the Town.
- Contractor will notify Town which roads are scheduled for construction
- Contractor will mark each lateral location and notify property owners at least 2 weeks prior to the start of construction
- Contractor will provide the following notice to each property owner with a stake to mark the property owners preferred location of the sewer lateral, if different than proposed design.
- Resident Project Representative from the Town's Engineer and Contractor will work with neighbors to assist in addressing questions and concerns.
- Property owner's requests for change will be documented in a "Property Owner Request" form.

IMPORTANT NOTICE

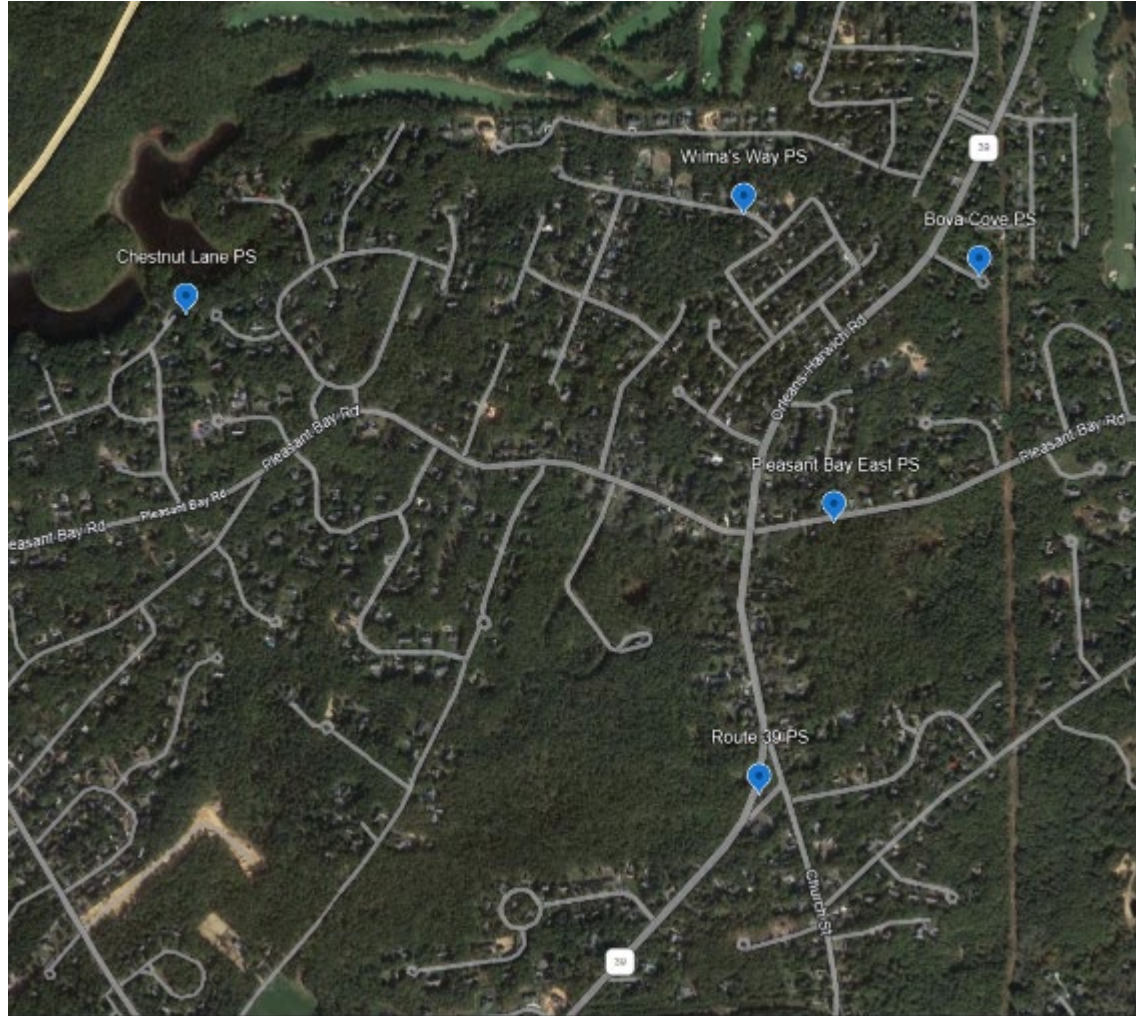
A sanitary sewer will be constructed on your street shortly. A service connection and service lateral will be installed from the main sewer to the edge of the street right-of-way or permanent easement to serve your property or house as applicable.

Please install this stake with attached card in the area where you want the new service lateral to be located, either at the pre-marked location or property owner's preferred location. Please notify (Contact) at (Contact's email address) if the stake is relocated. You may also request a specific depth at which you would like your lateral installed. Owners requesting a change in depth or with special site constraints should consult an engineer or plumber to advise on changes in location and/or depth.

IF THIS STAKE AND CARD IS NOT IN PLACE when the sewer construction starts in front of your property, the service connection and service lateral will be located as shown on the Engineer's Contract Drawings and marked in the field. Sewer connection from your structure to the lateral at the edge of the road right-of-way are the property owner's responsibility and are required to be installed in accordance with the Town of Harwich regulations.

Please be patient with the construction, as your street and property will be restored after the installation of the sanitary sewer system.

Pumping Station Locations



Pumping Stations – Contract 1E

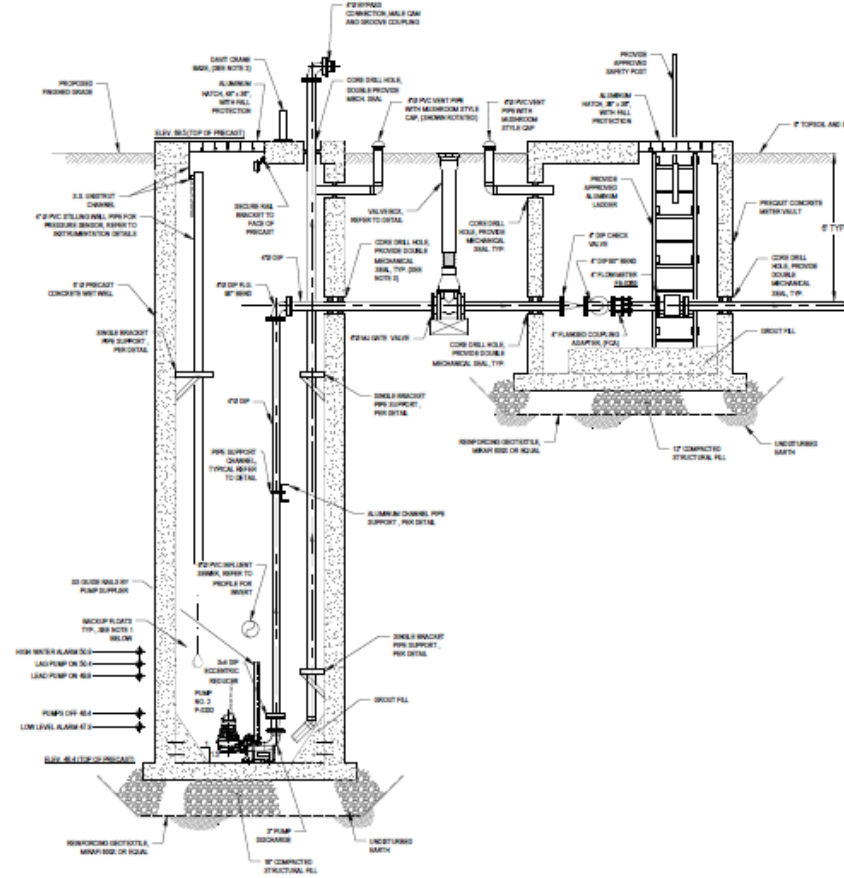
- Pleasant Bay East – building, suction lift type
- Route 39 – electrical enclosure, submersible type
- Bova Cove - electrical enclosure, submersible type
- Wilma's Way - electrical enclosure, submersible type

– Contract 2W

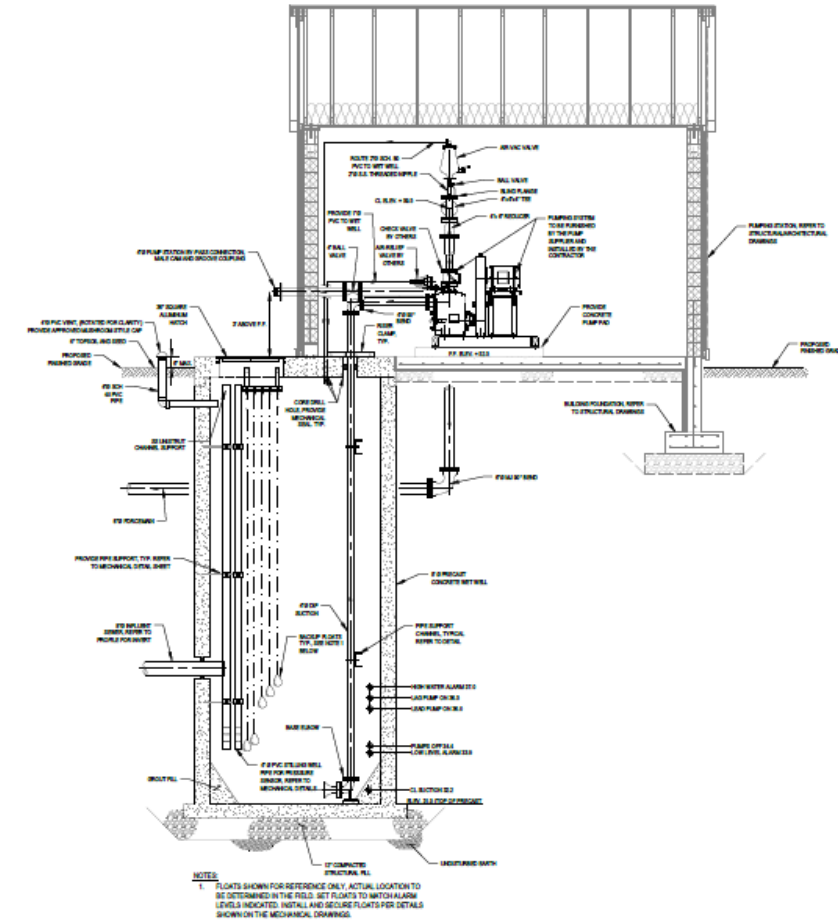
- Chestnut Lane – building, suction lift type

Pumping Station Components

- Suction Lift type pumps (duplex configuration)
 - Pumps located in building
- Submersible type pumps (duplex configuration)
 - Pumps located in wet well
- Level float controls and alarms
- Bypass piping
- Backup generator
- Backup generator connection
- Carbon filters on vents
- 24/7 remote monitoring and alarming to Wastewater Department



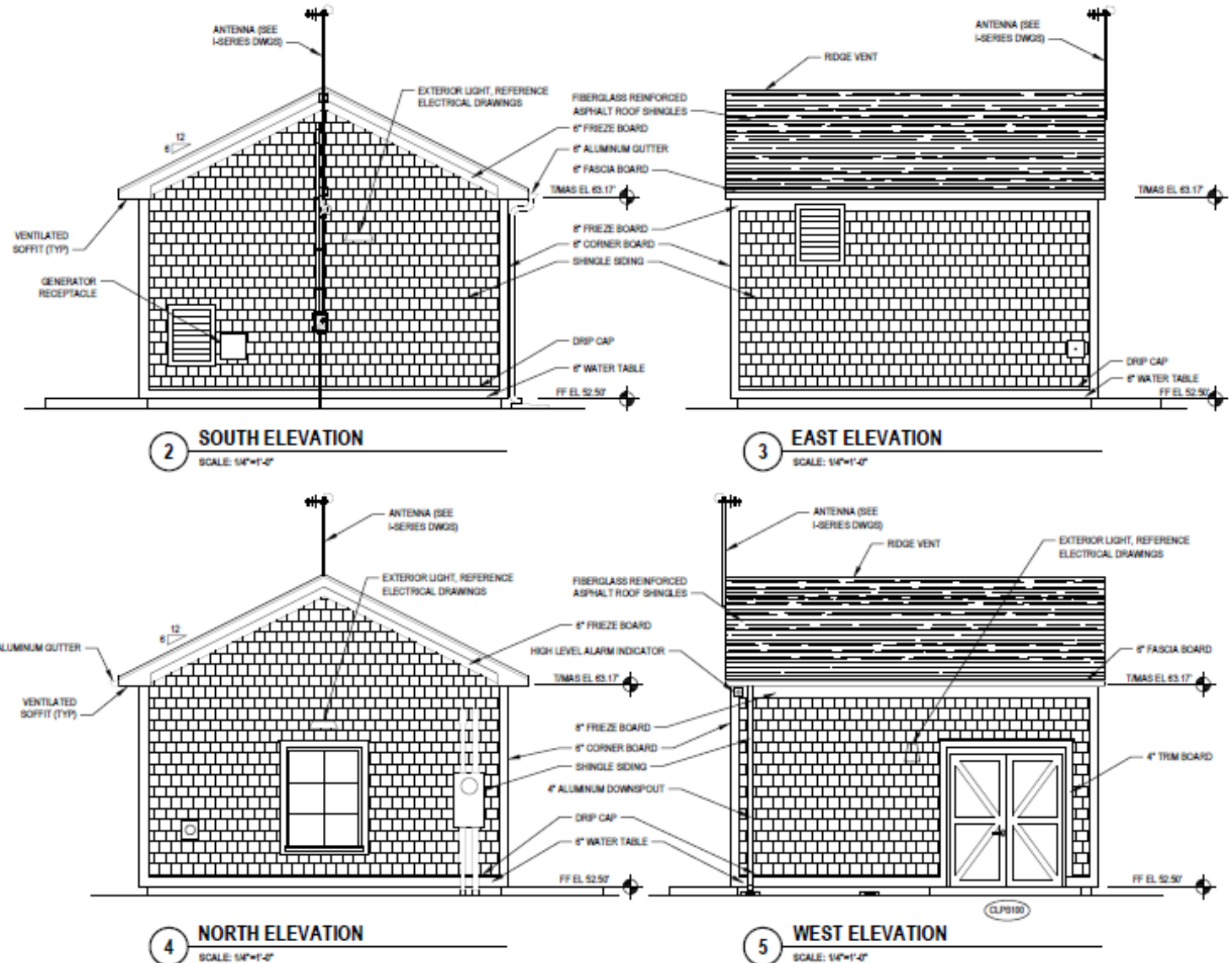
WILMAS WAY PUMPING STATION SECTION
SCALE: 3/8" = 1'



CHESTNUT LANE PUMPING STATION SECTION
SCALE: 3/8" = 1'

Pumping Station Components

- Asphalt Shingle Roof
- Cedar Shingle Siding
- White PVC Trim
- Generator located outside
- Similar appearance to Town's other stations



CHESTNUT LANE

EXISTING TREES TO REMAIN AND BE PROTECTED, TYP.

ADJUST TREES AS NECESSARY TO ACHIEVE MIN CLEARANCE FROM UTILITIES, TYP.

5 - CLE ALN
3 - RHO MAX
2 - PRU MAR

7 - ILE GLA
2 - PIC GLA
5 - CLE ALN
6 - RHO MAX
1 - QUE COC
4 - MOR PEN
3 - PIC GLA

3 - CLE ALN
2 - PRU MAR
3 - MOR PEN
2 - PIN STR
5 - MOR PEN

MU-01
K-01
MU-01

SCREEN FENCE, BY OTHERS
GRAVEL MULCH, SEE DETAIL
GRAVEL AND ROCK MULCH DETAIL

MAP 112 LOT C5-65
STAND 1 - PRU MAR
HOMEOWNERS 1 - PIN STR
2 - PIC GLA
3 - CLE ALN
3 - PIC GLA

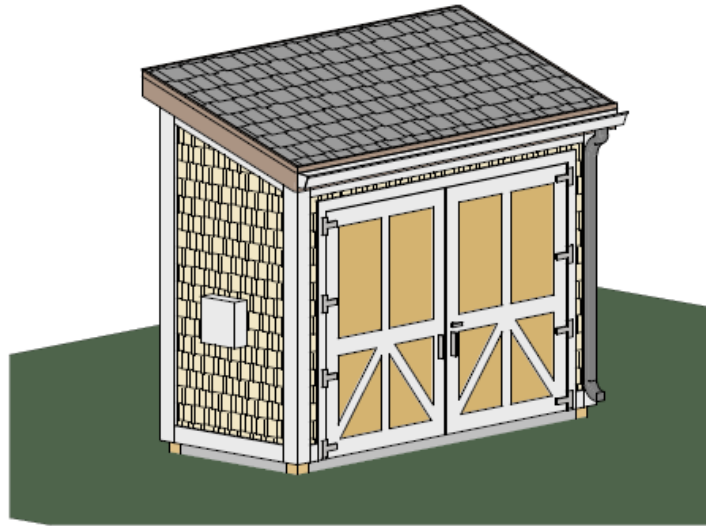
MAP 113 LOT C5-64
STAND 1 - L500

EXISTING EASEMENT

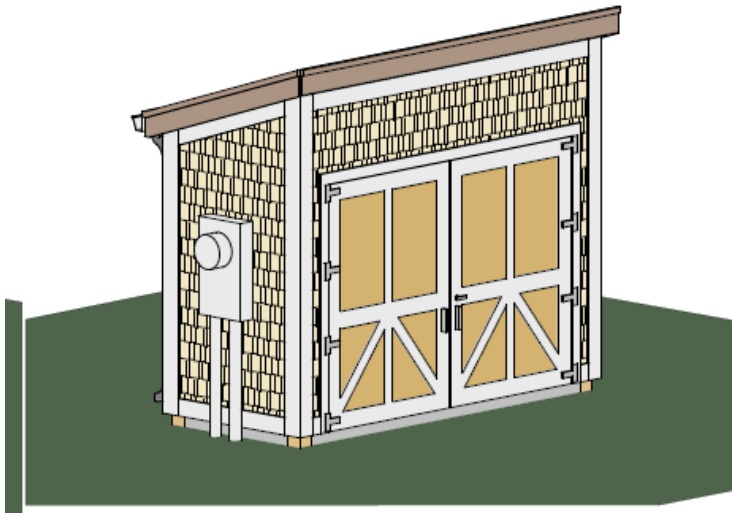
F.F.E.A.



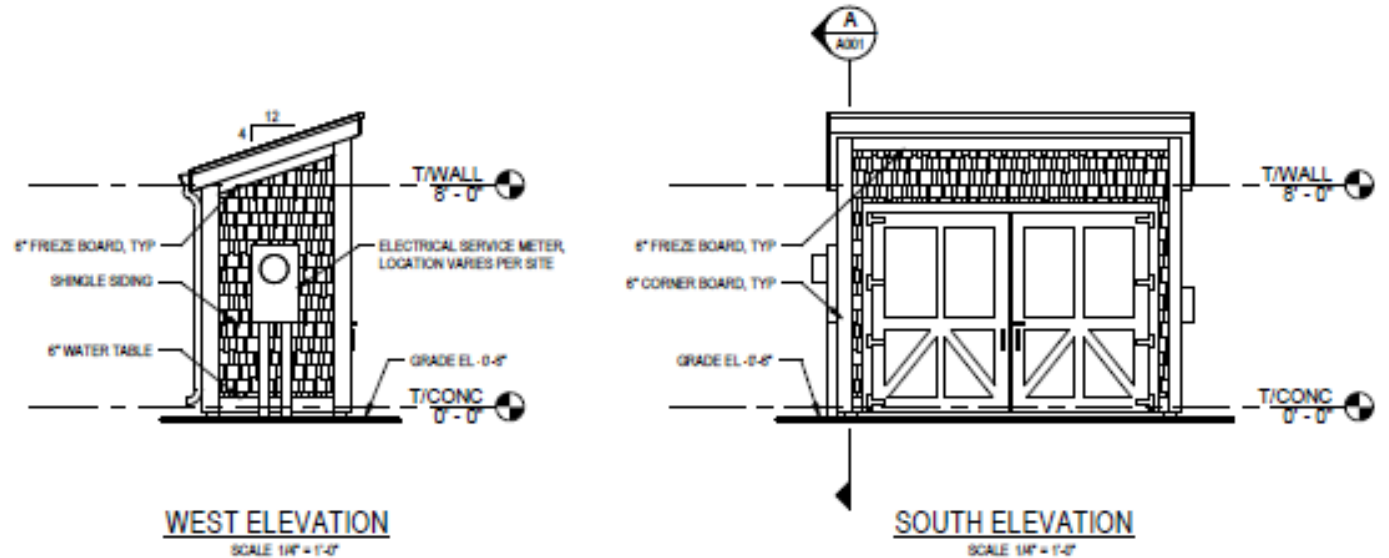
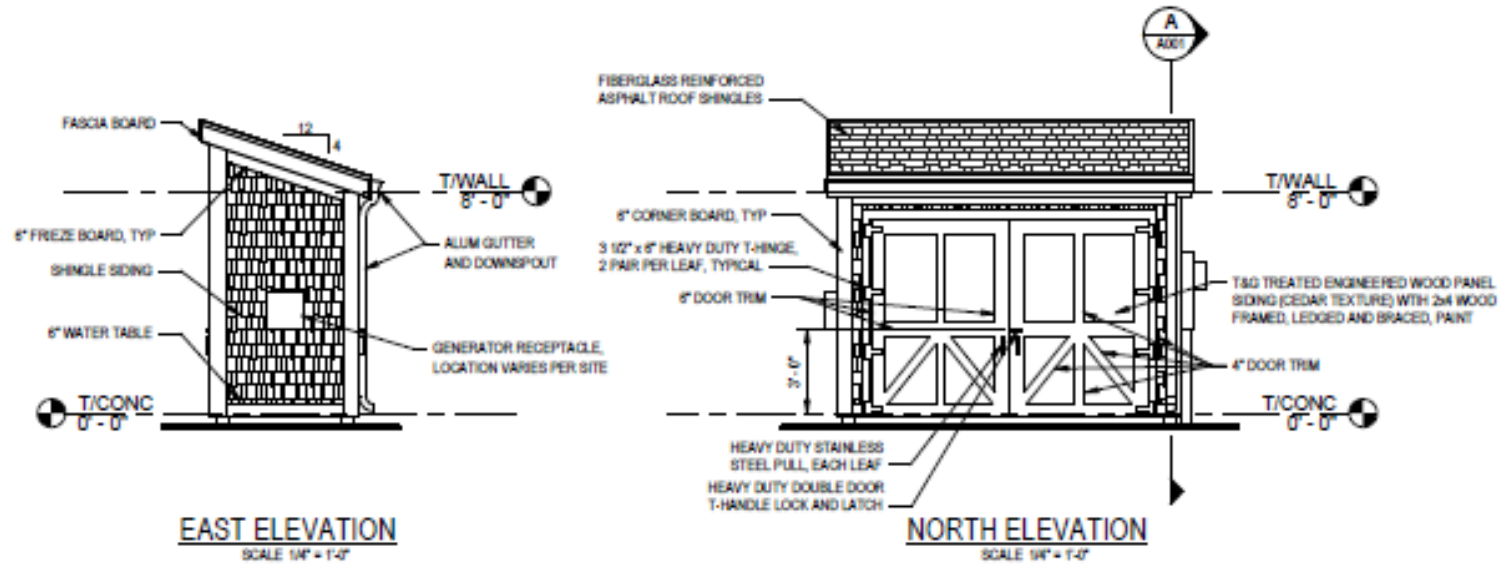
Submersible Station Electrical Enclosure



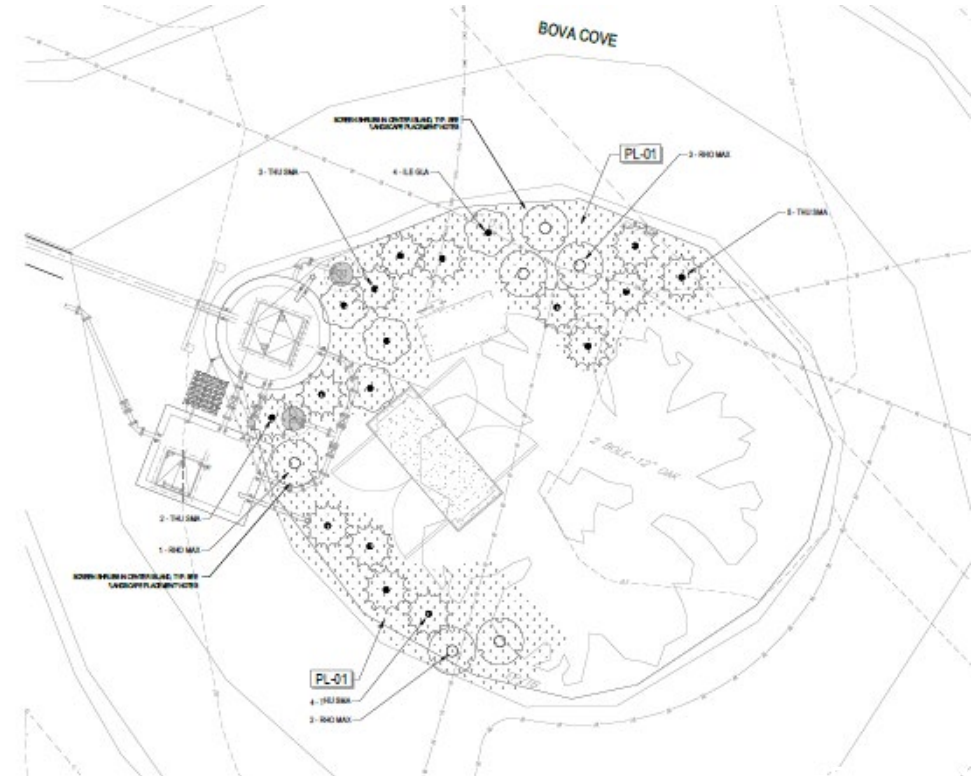
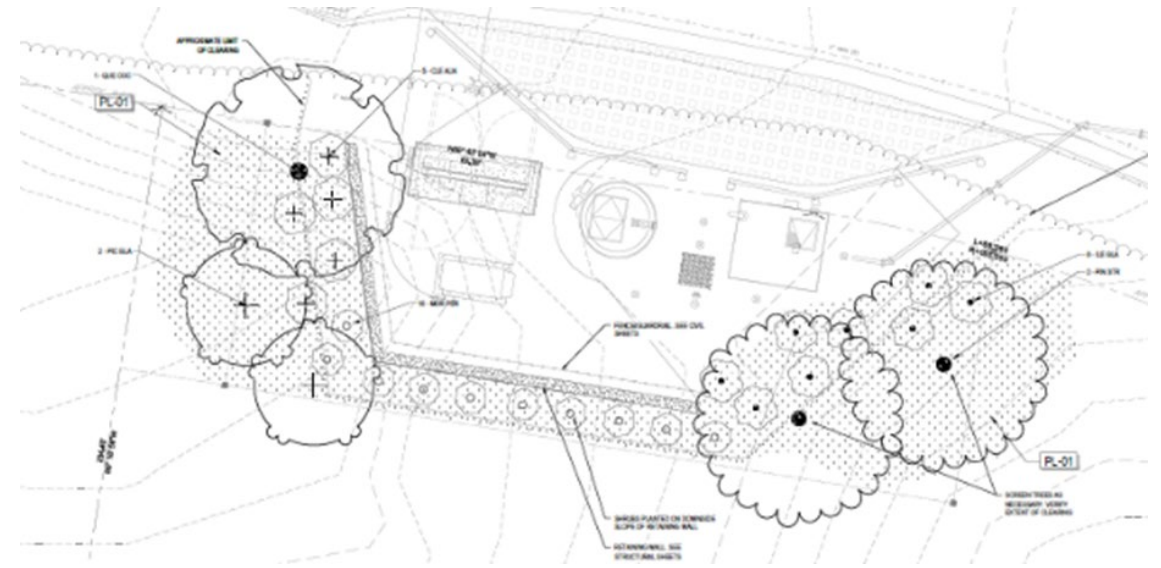
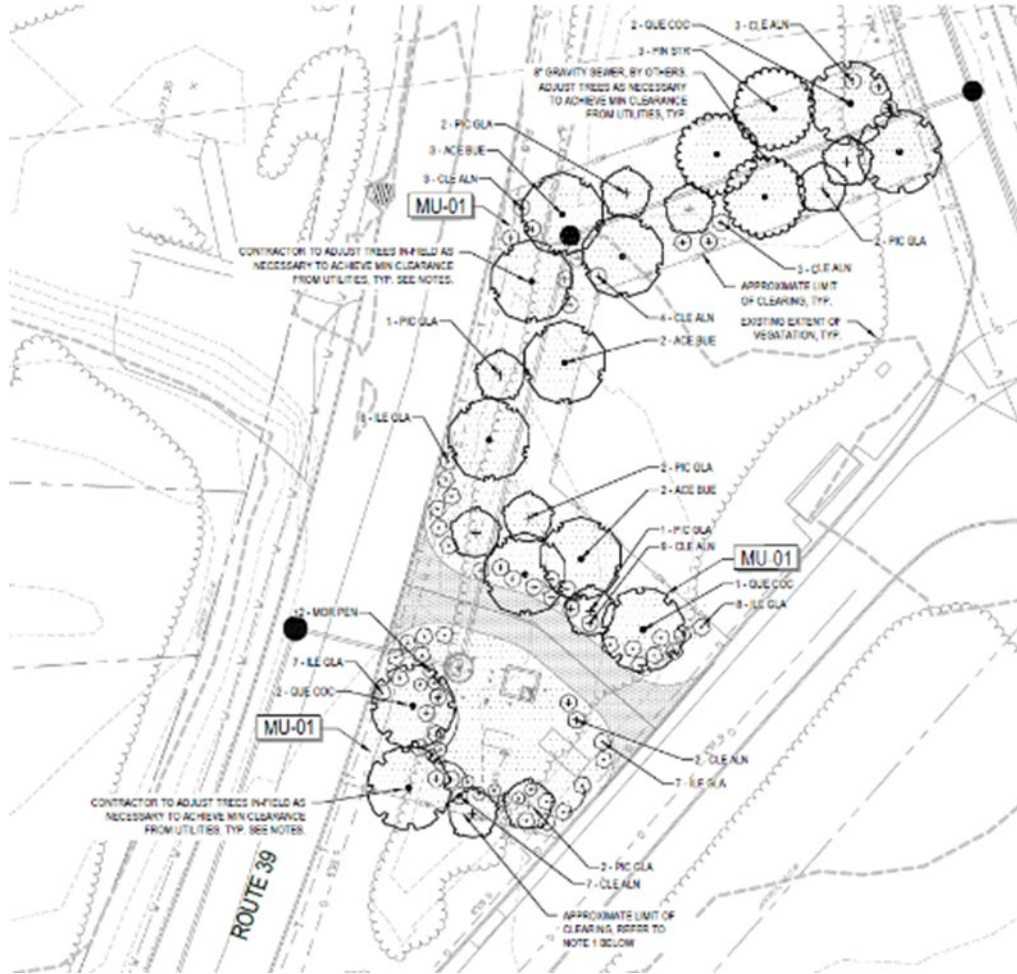
NORTHEAST ISOMETRIC
NOT TO SCALE



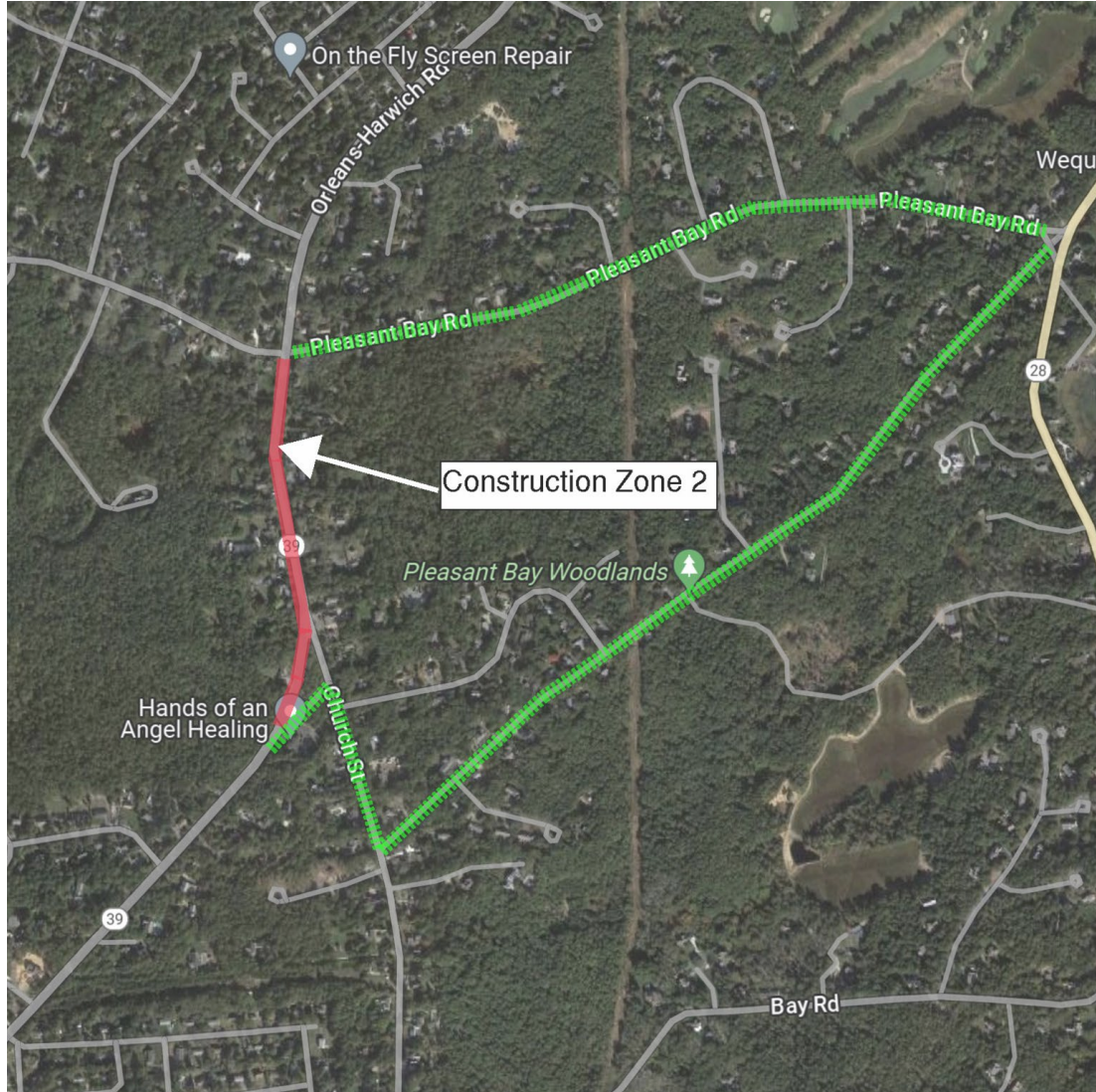
SOUTHWEST ISOMETRIC
NOT TO SCALE



Bova Cove, Wilma's Way and Route 39 PS



Traffic Control



Various Construction Zones

- Each contract will have multiple construction zones (main roads)
- Contractors will be limited on what main road work can occur when mainline detours are in effect
- Time of year restrictions
 - No major road construction in summer on Route 39 or Pleasant Bay Road
 - One lane alternating traffic for lateral installation on Bay Road, Kendrick, and Church

Detour Routes for each Construction Zones will be posted on Town web page.

- Maps will be available online as Contractor Schedules are obtained and updated

What to Expect During



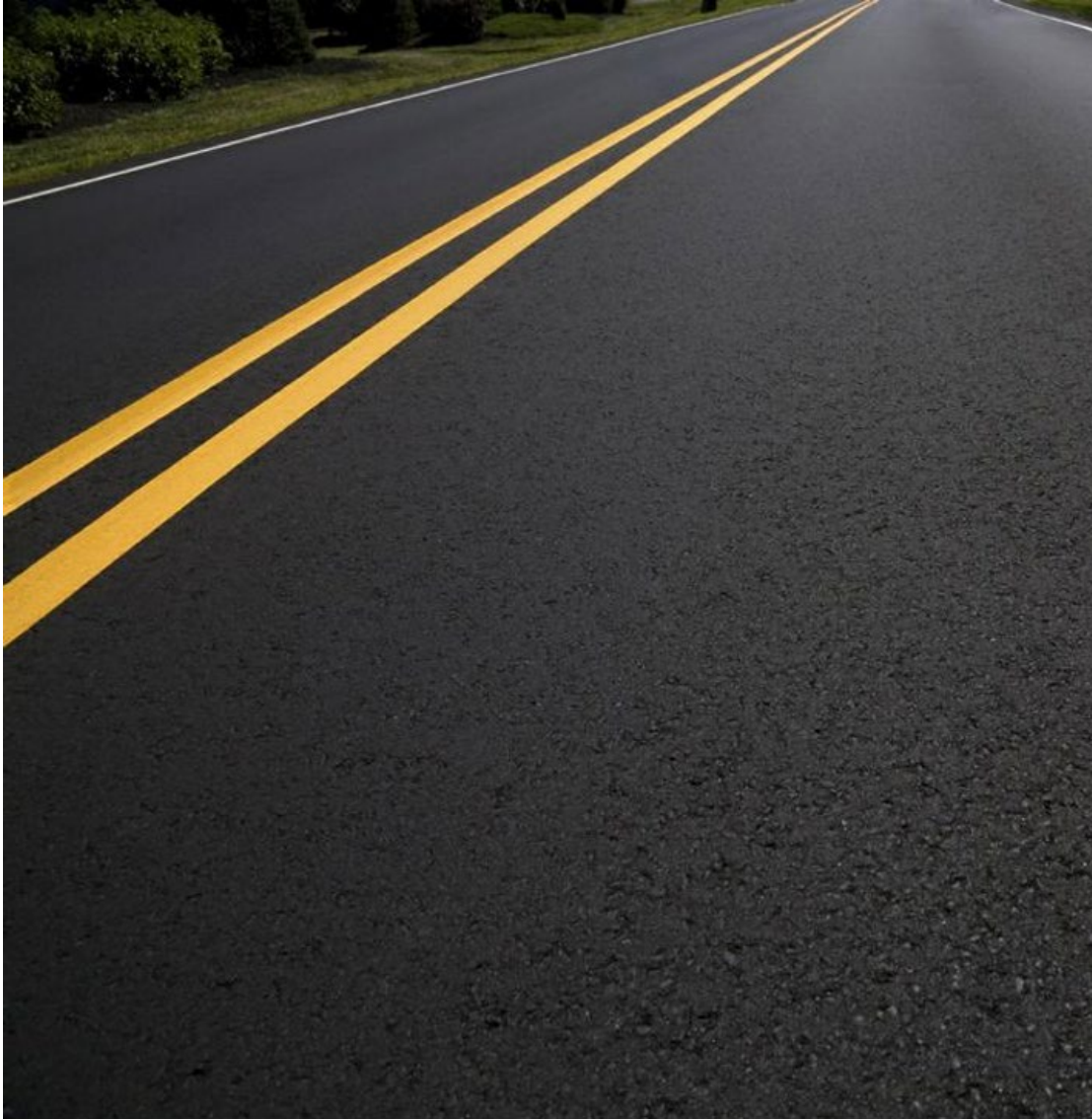
Construction may impact roads multiple times

- main line sewer installation
- lateral installation
- stormwater improvements (Town)
- temporary paving
- final paving
- force mains
- restoration

Water main work may also occur:

- (off street) Chestnut to Martha Eaton
- or water main relocation due to utility conflicts

What to Expect After



- Official project closeout
- DEP approval – clear water test
- Connection Notices
 - Welcome Package
 - List of Local Engineer's/Sanitarians for Design
 - List of Licensed Utility Installers
 - Sewer billing and irrigation deduct meters
- Sewer Connection
 - Sewer Service Application
 - Septic System Abandonment
- Financial
 - Tax Credits Available
 - Cape Cod Aqua Fund (County Loan Program)
 - Local assistance
- Grinder Pumps
 - Purchased by Town and provided to Residents

Schedule

- Submittal to the State for Funding Review
 - October 13, 2023 - *Complete*
- Easement and permitting finalization
 - Fall/Winter 2023 (~March) *In Process*
- Bidding
 - Spring 2024 (~April) *Pending*
- Start of Construction
 - Spring/Summer/Fall 2024
- Construction Duration
 - 2 to 2.5 Years
- Property Connection Letters
 - Issued after construction completion – 2 years to connect.



Additional information

- Wastewater Info Button

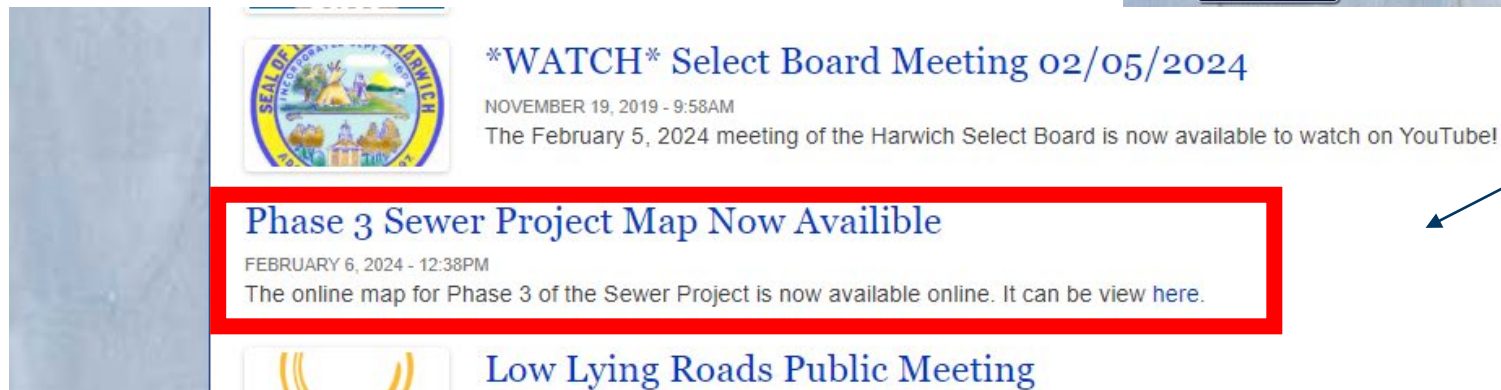
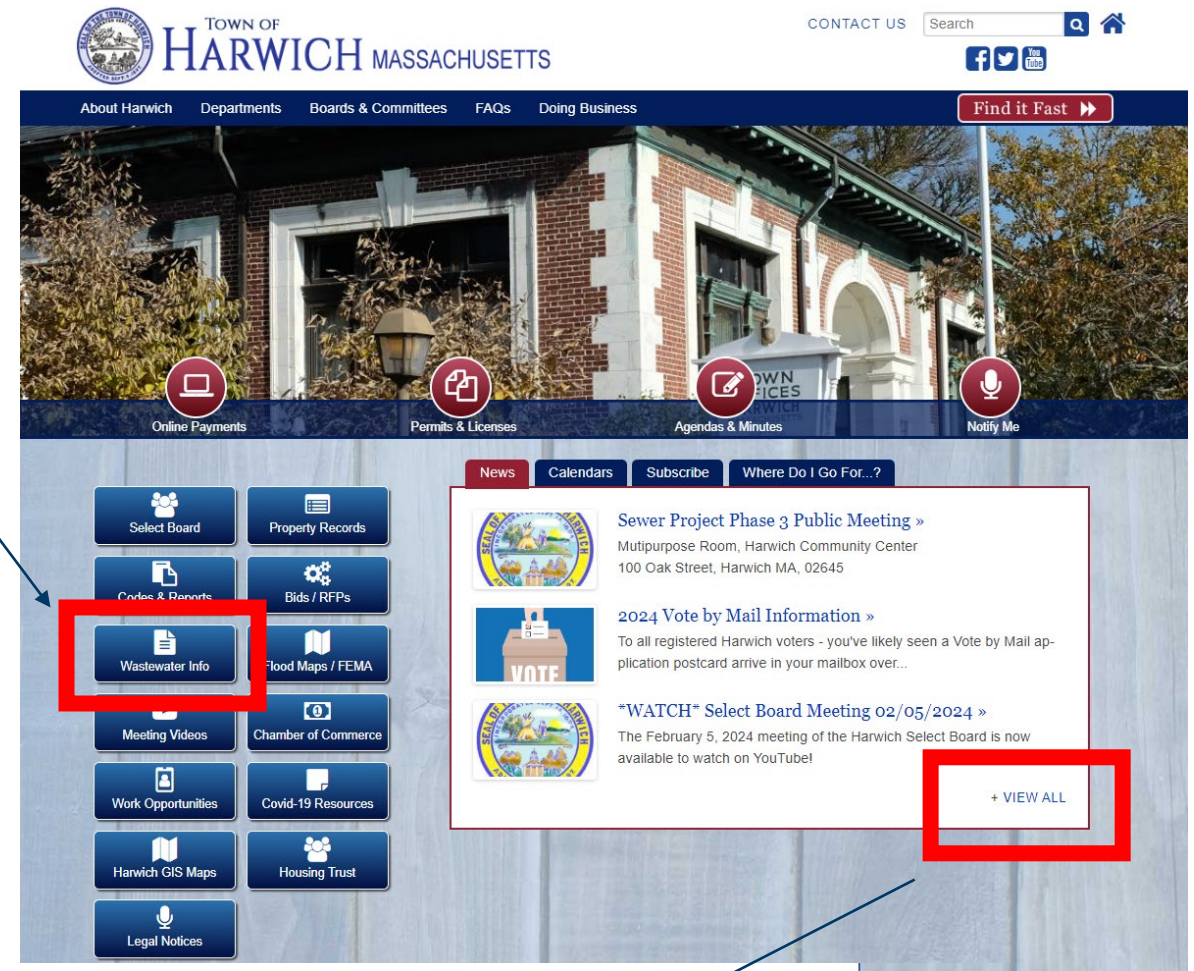
<https://www.harwich-ma.gov/wastewater-information>

- Existing Septic System Plans

<https://www.harwichwater.com/wastewater/phase-3.html>

- Phase 3 GIS Map

<http://tinyurl.com/Hrwch1>





*** Thank You**