




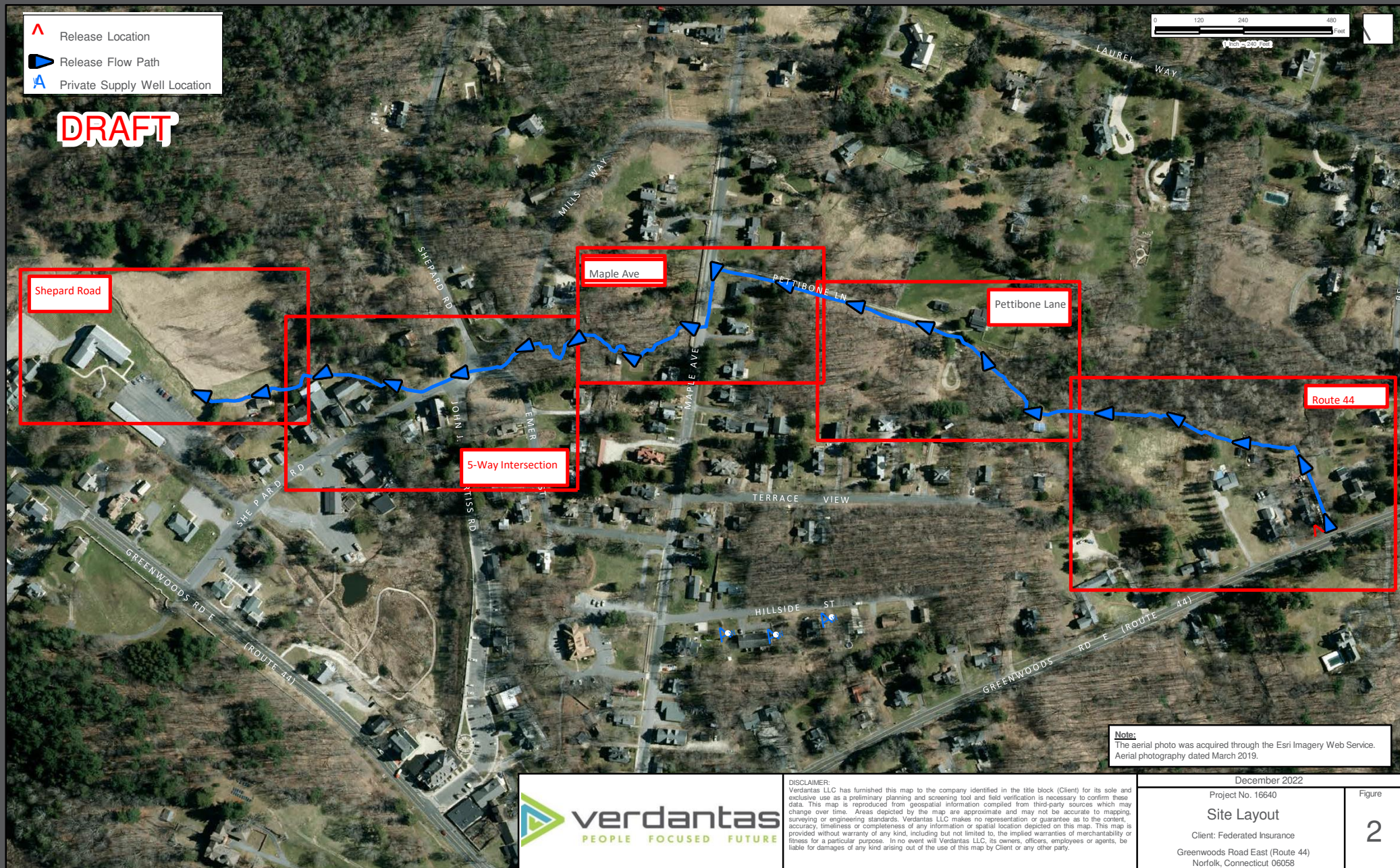


Norfolk Spill Response Informational Update Meeting

December 20, 2022 – 7:00 PM

-  Release Location
-  Release Flow Path
-  Private Supply Well Location

DRAFT

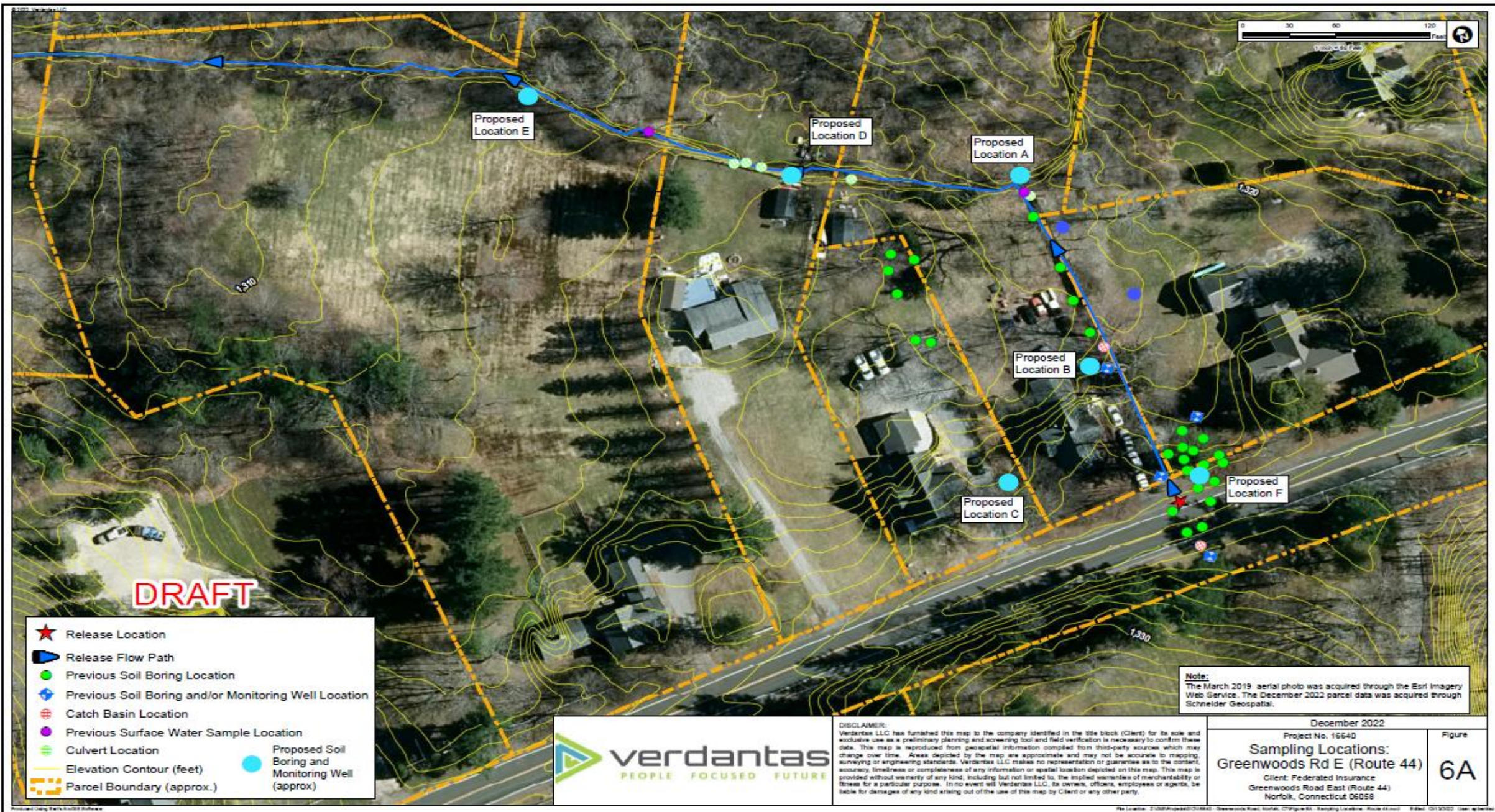


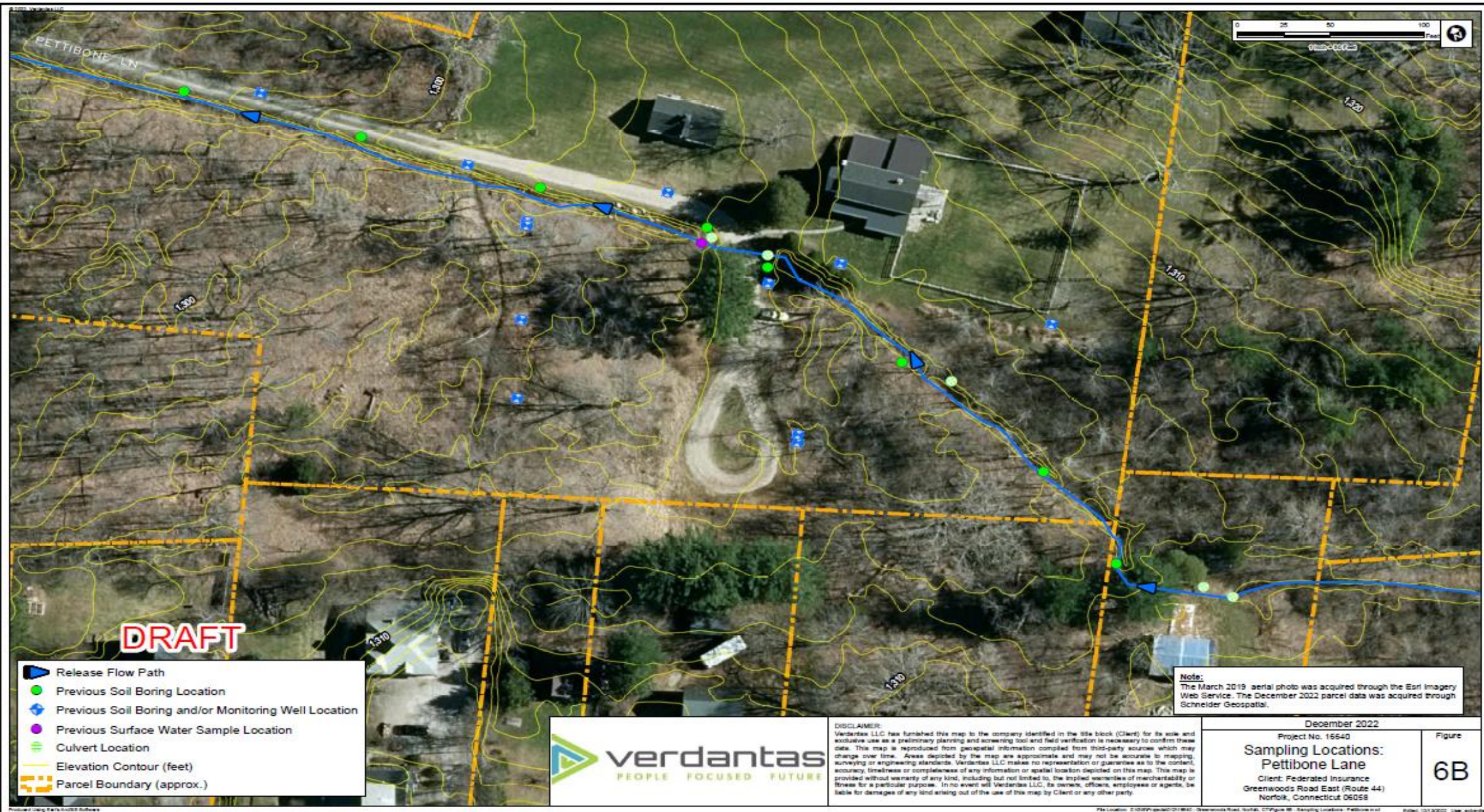
Note:
The aerial photo was acquired through the Esri Imagery Web Service.
Aerial photography dated March 2019.

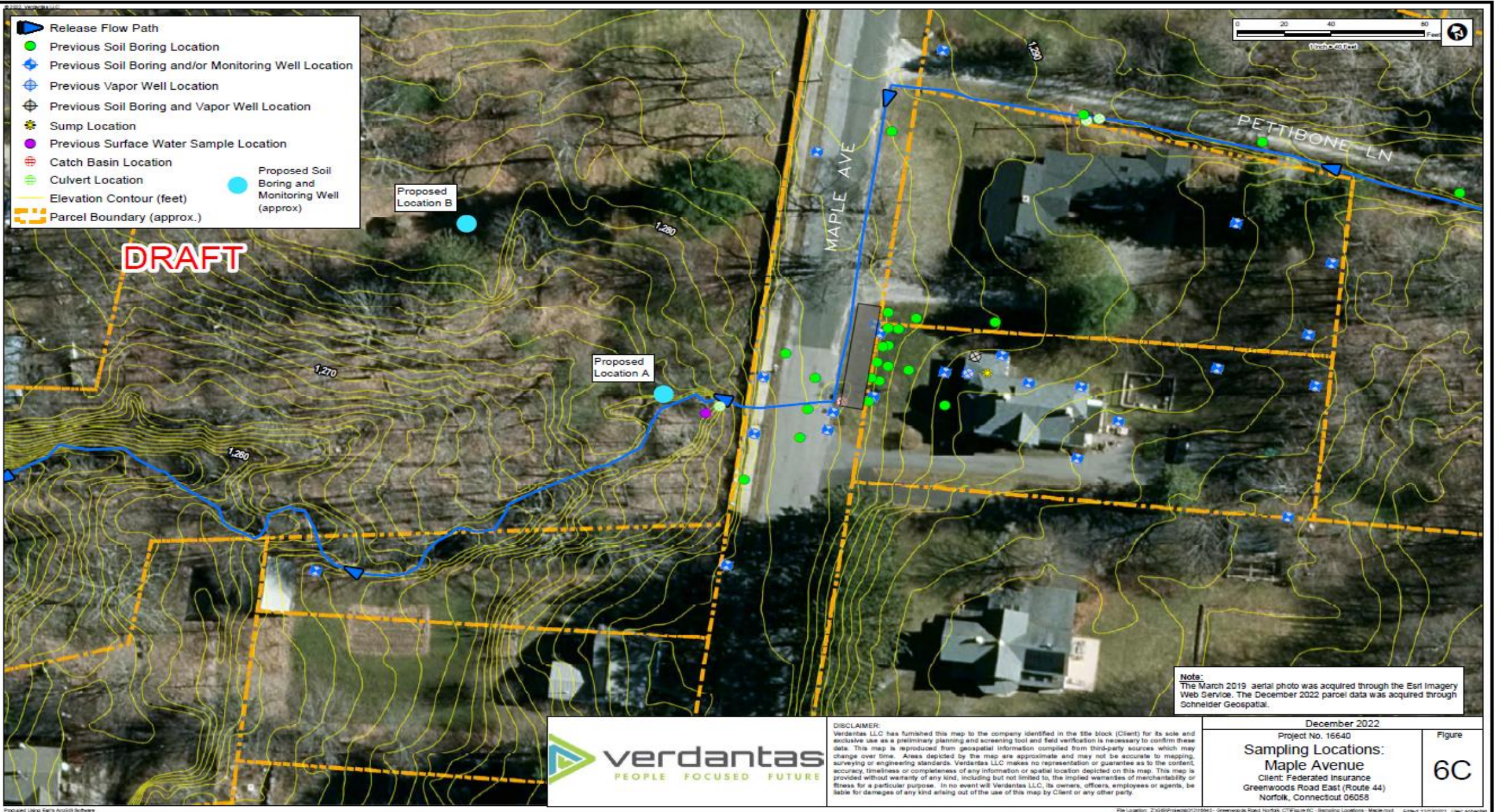


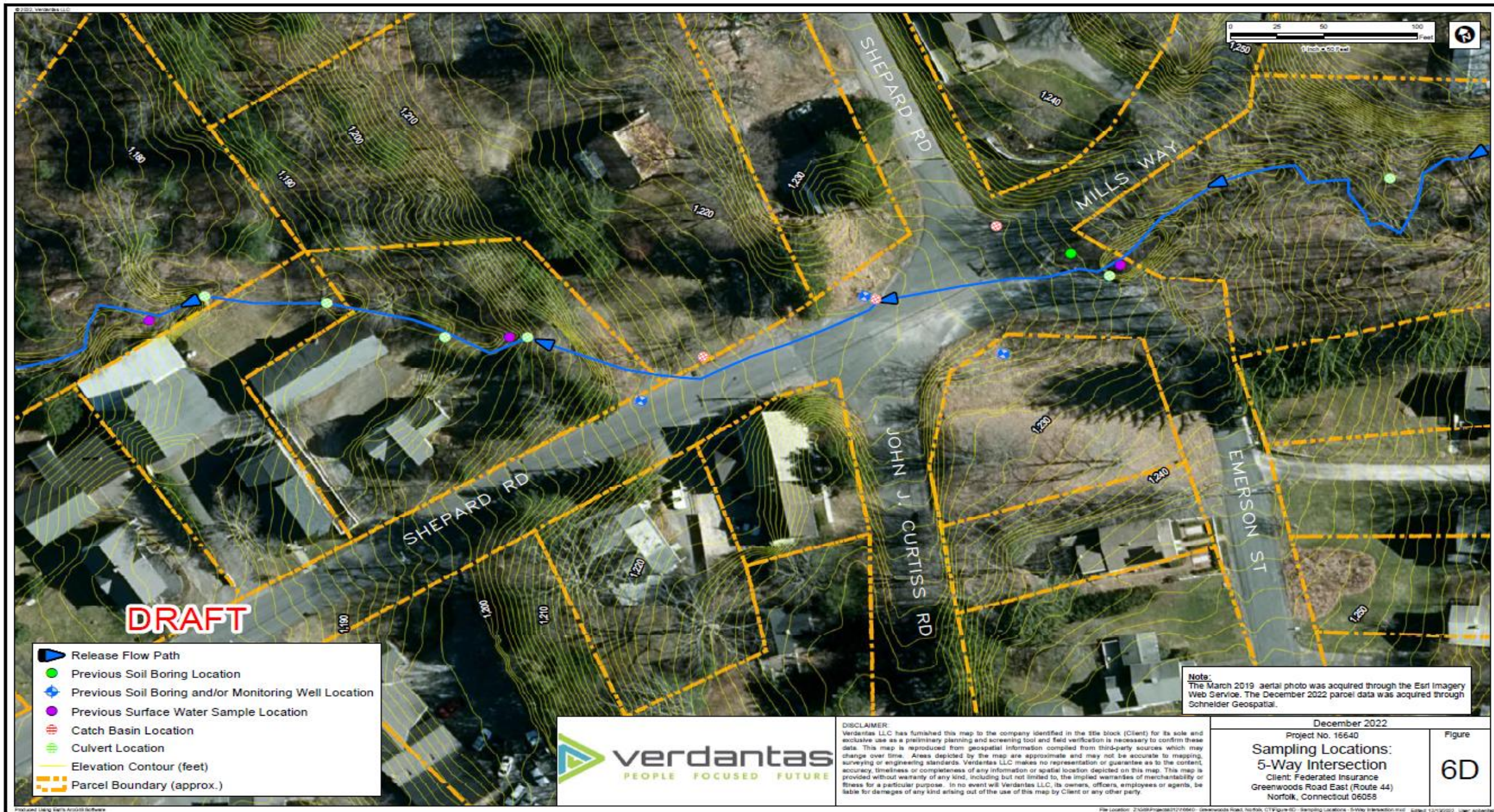
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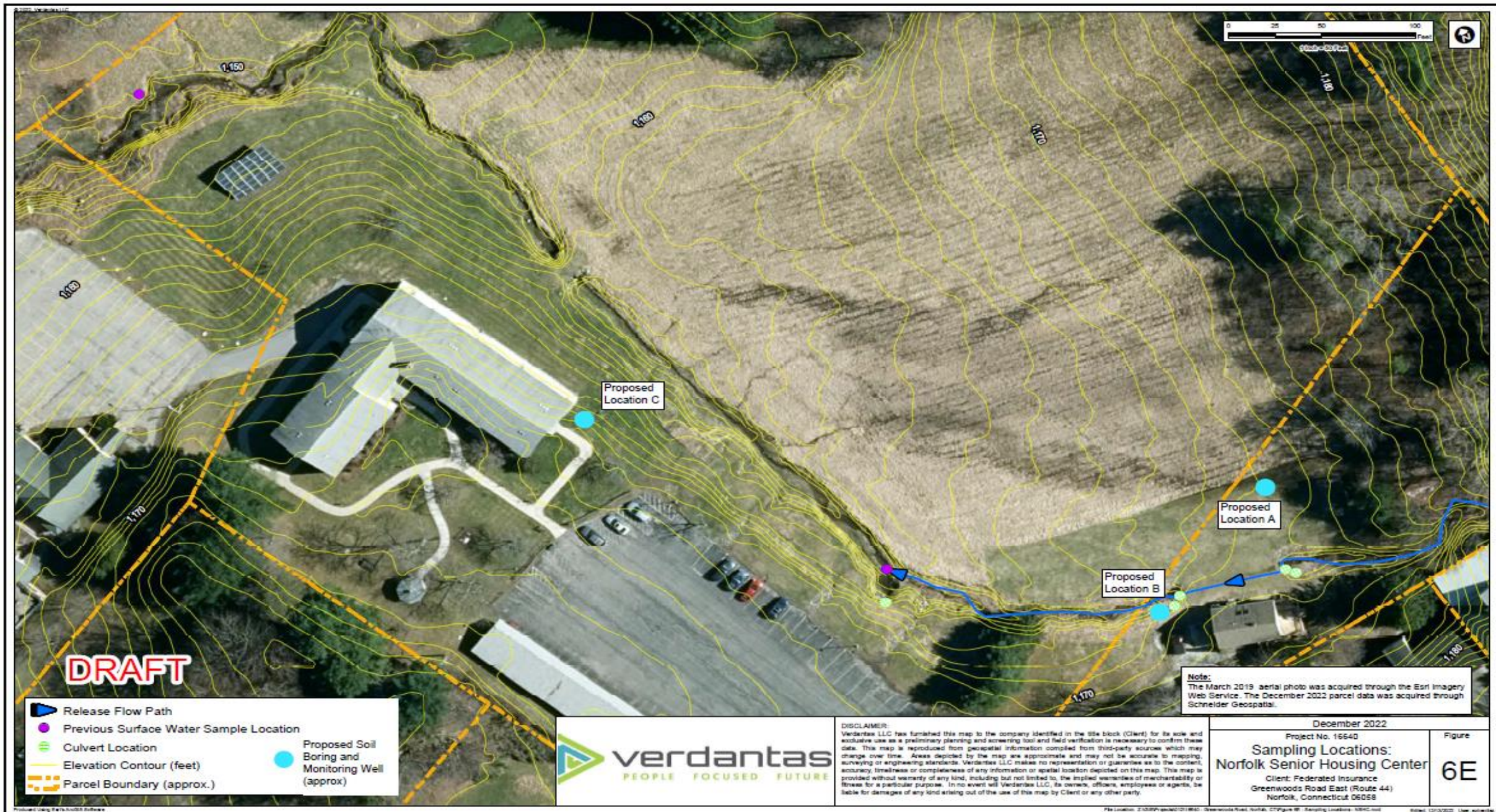
December 2022	
Project No. 16640	Figure
Site Layout	
Client: Federated Insurance	
Greenwoods Road East (Route 44)	
Norfolk, Connecticut 06058	
2	

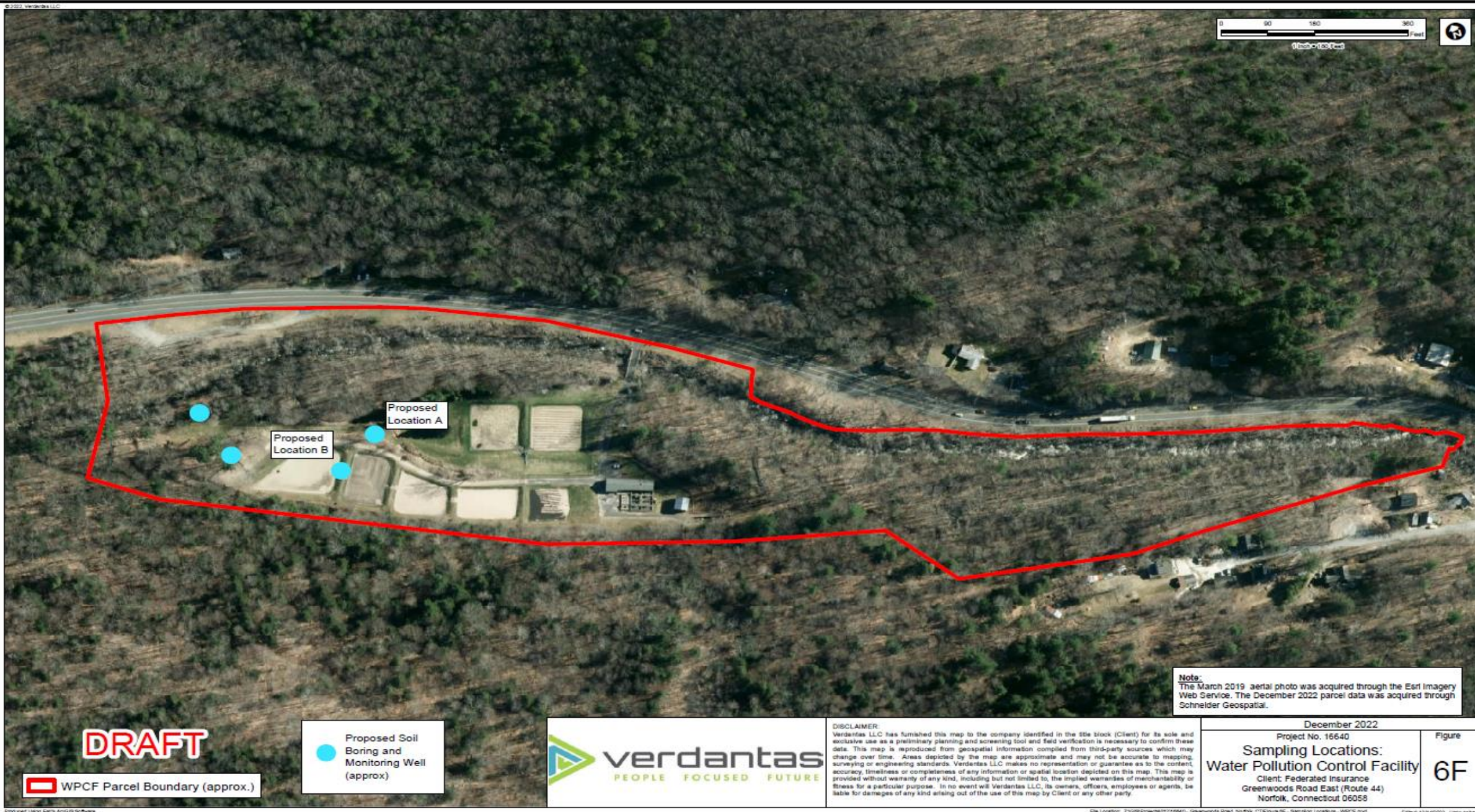












Note:
The March 2019 aerial photo was acquired through the Esri Imagery Web Service. The December 2022 parcel data was acquired through Schnelder Geospatial.

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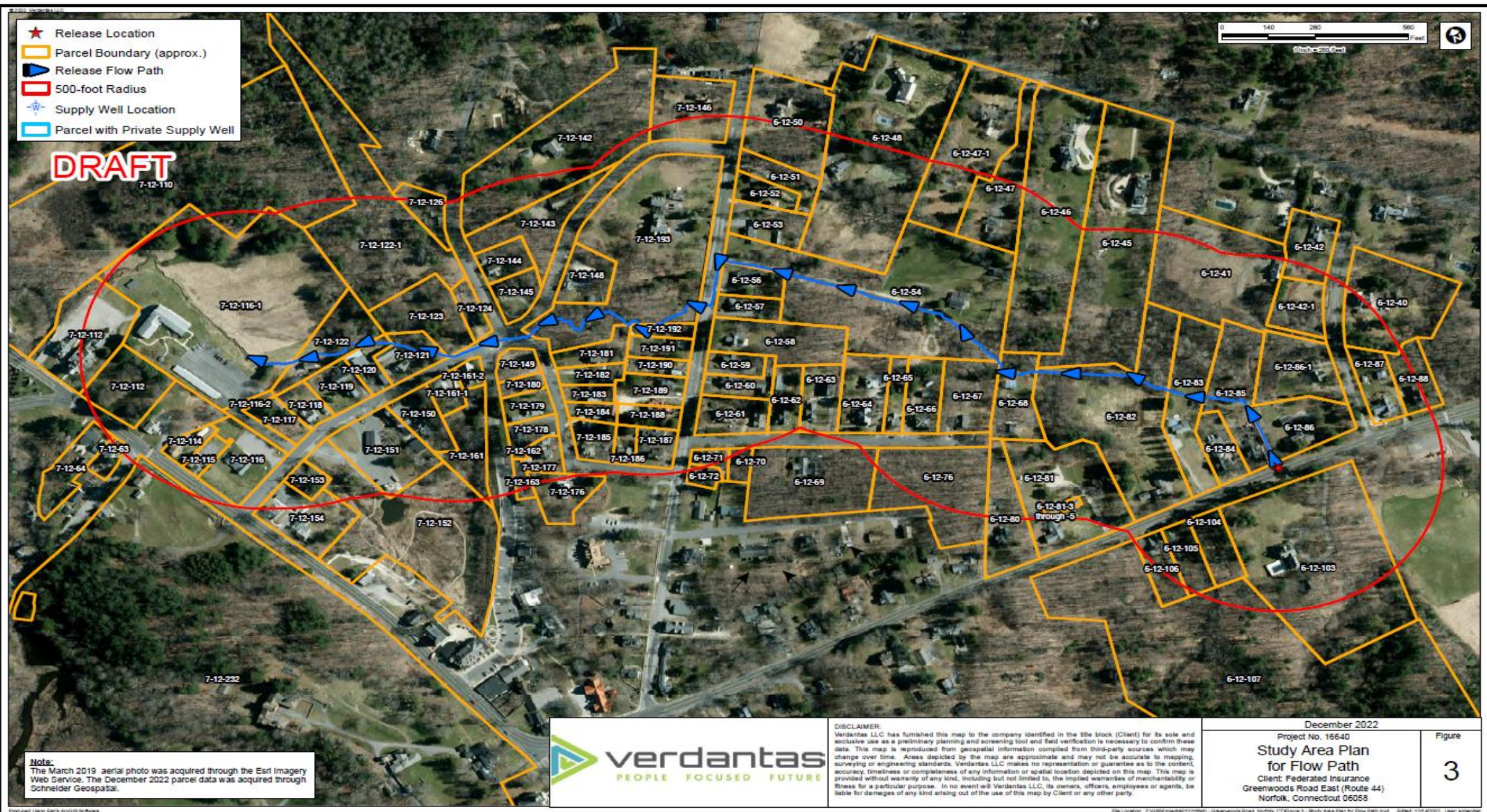
WPCF Parcel Boundary (approx.)

Proposed Soil Boring and Monitoring Well (approx.)



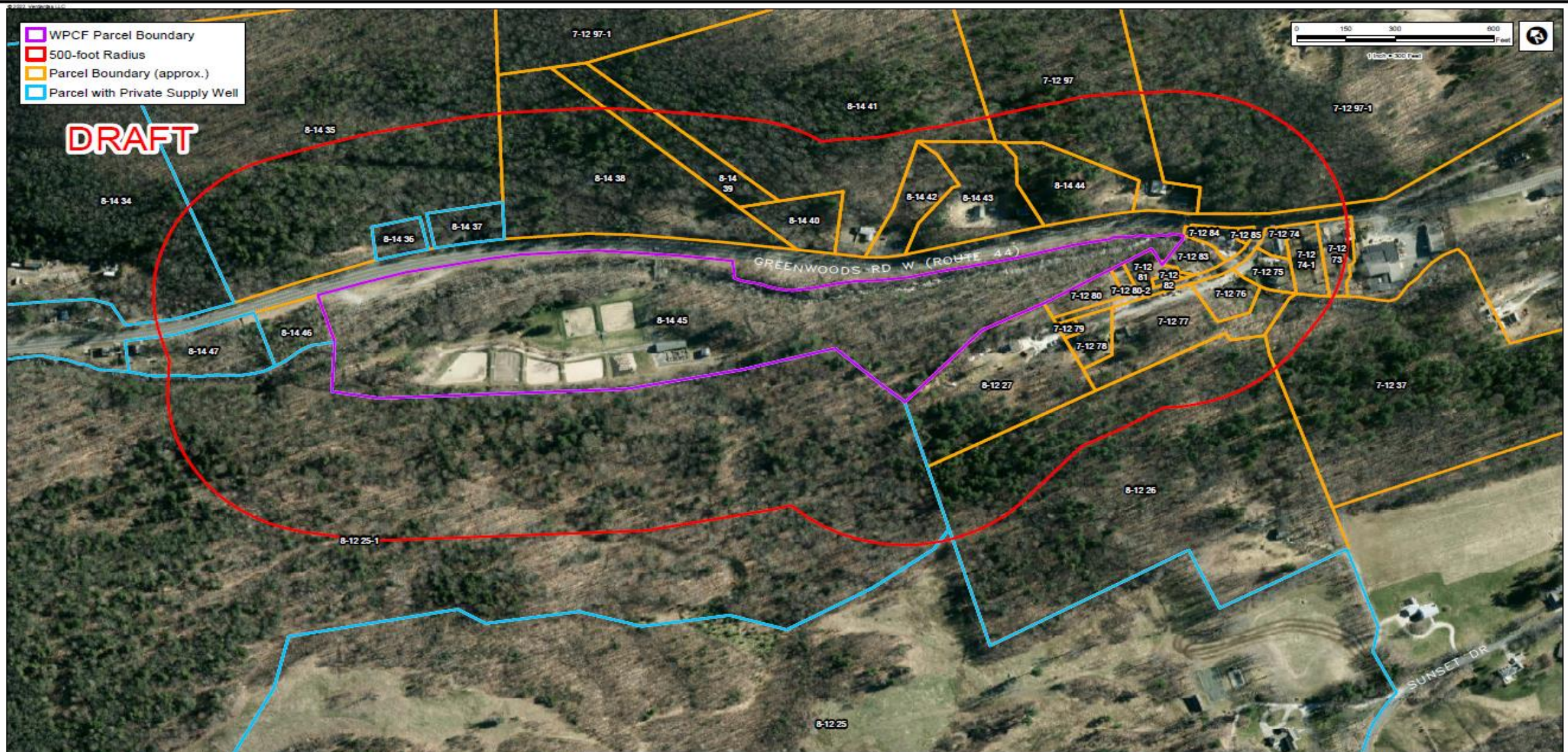
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December 2022	
Project No. 16640	
Sampling Locations:	
Water Pollution Control Facility	
Client: Federated Insurance	
Greenwoods Road East (Route 44)	
Norfolk, Connecticut 06058	
Figure	6F



- WPCF Parcel Boundary
- 500-foot Radius
- Parcel Boundary (approx.)
- Parcel with Private Supply Well

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Note:
The March 2019 aerial photo was acquired through the Esri Imagery Web Service. The December 2022 parcel data was acquired through Schneider Geospatial.



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December 2022
Project No. 16640
**Study Area Plan for
Water Pollution Control Facility**
Client: Federated Insurance
Greenwoods Road East (Route 44)
Norfolk, Connecticut 06058

Figure
5

NORFOLK GASOLINE SPILL HEALTH & SAFETY SERVICES

Introduction:

Robert Brown, Certified Industrial Hygienist

Pennoni Associates

203-988-0771

rbrown@pennoni.com

- Working with Verdantas and CTDEEP to evaluate safety and health of homeowners, community and workers engaged in remediation efforts

1. *Indoor air sampling*
2. *Sub-slab vapor sampling*
3. *Interpretation of indoor test results*
4. *Advice on safe work practices*



Norfolk Gasoline Spill

Indoor Air and Vapor Sampling

Baseline Air Sampling

Soil Vapor Sampling

Post-Remediation Sampling

3-STEP PROCESS

1. Baseline Air Sampling conducted in homes where gasoline odors are reported and/or homes determined by Verdantas to be in the pathway of spill
2. Sub-Slab Soil Vapor Sampling conducted in homes where gasoline may have seeped underneath the floor slab
3. Post-Remediation Air Sampling conducted in homes after remediation is completed on the house lot

Baseline and post-remediation sampling

Sample Locations:

- *Basement*
- *First Floor*
- *Outdoors*

Sampling Apparatus:

- *Summa Canister*
- *6.0 Liter Capacity*
- *24 Hour Flow Regulator*



Baseline & Post-Remediation Air Sample Analysis

♦ Laboratory Analysis of 4 Signature Compounds Found in Gasoline

Test results compared with Connecticut's 1995 Target Indoor Air Concentrations

• Benzene	3.25 ug/m ³
❖ Toluene	417 ug/m ³
❖ Ethylbenzene	1,040 ug/m ³
❖ Xylenes	313 ug/m ³

Post-Remediation samples air samples may also be analyzed for Air-Phase Petroleum Hydrocarbons (results interpreted with assistance from toxicologists at Connecticut Department of Public Health)

Soil Vapor Survey

Sample Locations:

- *Basement of First Floor of homes with no basement*

Sampling Apparatus:

- *Summa Canister*
- *6.0 Liter Capacity*
- *4 Hour Flow Regulator*



Soil Vapor Survey

BTEX Air Sample Analysis

♦ Laboratory Analysis of 4 Signature Compounds Found in Gasoline

Test results compared with Connecticut's 2021 Residential Volatilization Criteria

• Benzene	2,500 ug/m ³
❖ Toluene	160,000 ug/m ³
❖ Ethylbenzene	40,000 ug/m ³
❖ Xylenes	170,000 ug/m ³

Norfolk Gasoline Spill

Indoor Air Testing to Date

(As of 12/20/22)

Baseline Air Sampling

Completed at three homes

Sub-Slab Soil Vapor Sampling

Completed at one home

Post-Remediation Air Sampling

Partially-complete at one home

