

ENVIRONMENTAL IMPACT STATEMENT

For

**Ashbel Associates, LLC
Greenwich Residential Development**

**Texas Road & Greenwood Road
Block 119, Lot 16
Township of Marlboro
Monmouth County, NJ**

Prepared by:



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A handwritten signature in black ink, appearing to read 'Steven R. Cattani', written over a horizontal line.

**Steven R. Cattani, PE, CFM, CME
NJ Professional Engineer License #40014**

January 2021
DEC# 2841-99-001

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- U. PRELIMINARY AND FINAL SITE PLANS PREPARED BY DYNAMIC ENGINEERING
CONSULTANTS, PC DATED JANUARY 20, 2021, (SEPARATE COVER)

I. PROJECT DESCRIPTION

The project site consists of Block 119, Lot 16, located on the northwest corner of Texas Road & Greenwood Road in the Township of Marlboro, Monmouth County, New Jersey. Currently the site is vacant and forested. The subject site is 1,515,452 square feet (34.79 acres). The site is bordered to the north & west by vacant forested land; to the east by a commercial warehouse use (Life Storage); to the south by a residential use; and the east by a residential use and a Junkyard (Baron's Auto Wrecking Inc.). The project consists of developing the parcel with five (5) multi-family residential dwelling units and one (1) community building, with two hundred & thirty five (235) total vehicle parking spaces, driveways, landscaping, stormwater management facilities, and other related site improvements and structures. The site is located on Wetlands and is bordered to the Northwest by Matawan Creek.

The existing conditions of the tract have been verified by the Boundary & Topographic Survey prepared by Dynamic Survey, LLC, dated July 30, 2020

II. EXISTING ENVIRONMENTAL CONDITIONS

A. Groundwater – Per the Report of Geotechnical and Stormwater Basin Area Investigation prepared by Dynamic Earth, LLC, dated November 12, 2020 located in Appendix S, evidence of seasonal high groundwater was encountered at depths ranging between approximately 0.9 feet and 4.1 feet below the ground surface. It is important to note that the design provides that finished floors will be at least 1 FT above the seasonal high groundwater table.

The planned development proposes to utilize three (3) manufactured treatment devices and four (4) above ground detention basins. As documented in the accompanying Stormwater Management, Water Quality & Groundwater Recharge Analysis prepared by Dynamic Engineering Consultants, PC Dated January 2021 located in Appendix T, the NJGRS Spreadsheet and soils investigation show the site does not have any recharge deficits. The spreadsheet can be found in the Stormwater Report Appendix.

Therefore, the proposed development is not anticipated to have any negative impacts on the groundwater conditions or aquifer recharge areas.

B. Air Quality - Existing air quality surrounding the site is typical of a central New Jersey suburban setting. There are existing hazardous air pollutants (HAP's) which come from cars, heavy duty trucks, buses and other roadway vehicles. These vehicles produce diesel particulate matter, diesel exhaust, and or carbon monoxide. There are known health standards associated with these pollutants. Current air quality taken from the surrounding areas report the presence of pollutants such as PM2.5 and at an Air Quality Index (AQI) of 21. The Air Quality Index is based on a value of 100 where 100 would be exceeding the health standard limit. Therefore, the pollutants measured are approximately five (5)

times less than allowable. AQI readings in Marlboro Township can be expected to be similar to these recorded in the surrounding areas.

- C. Site Geology** – Based on the Surficial Geology of New Jersey, surficial geology in the western corner & Northeast side of the site consists of Alluvium comprised of fine to coarse sand to clayey sand, gravel, silt, and minor clay and peat. Surficial geology across the rest of the site consists of Weathered Coastal Plain Formations comprised of exposed sand and clay Coastal Plain bedrock formations. Includes thin, patchy alluvium and colluvium, and pebbles left from erosion of surficial deposits. Other information regarding the site geology is provided in the Report of Geotechnical and Stormwater Basin Area Investigation prepared by Dynamic Earth, LLC, dated November 12, 2020 located in Appendix S.
- D. Soils** – Information regarding the site soils is provided in the Report of Geotechnical and Stormwater Basin Area Investigation prepared by Dynamic Earth, LLC, dated November 12, 2020 located in Appendix S.
- E. Ground Cover** – The subject parcel is currently undeveloped and relatively heavily wooded with trees and brush, and grass
- F. Flora & Fauna** – According to the NJGeoWeb database, there is no presence of endangered species based on the Natural Heritage Priority Map located in Appendix L.
- G. Drainage** – Information regarding the existing drainage is provided in the Stormwater Management, Water Quality & Groundwater Recharge Analysis prepared by Dynamic Engineering Consultants, PC Dated January 2021 located in Appendix T.
- H. Land Use** – As stated previously, the subject parcel is currently undeveloped and relatively heavily wooded with trees, brush, and grass.
- I. Vegetation** – The existing site vegetation consist of undeveloped, and relatively heavily wooded with trees, brush, and grass.
- J. Wildlife** – As previously stated, the existing site consists of undeveloped, wooded area.

The proposed development will include a detention basin at both the north, east, and southwest portions of the lot. These basins will not serve as a habitat for water dependent wildlife.

- K. Archaeological & Historic Features** – It is not anticipated that the proposed development will have a negative impact on any archaeological and/or historic features due to the fact that the existing site consists of undeveloped, wooded area.

According to NJDEP GIS mapping, the site is located on a historic district or historic property.

III. SEWERAGE FACILITIES

According to our correspondence with the Western Monmouth Utilities Authority & Bayshore Regional Sewerage Authority, the existing sanitary sewer line is located northeast and southeast of the subject property on the northeast bound side of Texas Road & the southeast bound side of Greenwood and the sewer plant has plenty of capacity. There is an 8” sewer line running down Texas Road 14 feet deep.

The estimated commercial sewer demand for the development as per NJAC 7:14A-23(a) is as follows:

Apartment (1 Bedroom) = (150 GPD/ Unit) * (30 Units) = 4,500 GPD

Apartment (2 Bedroom) = (225 GPD/Unit) * (80 Units) = 18,000 GPD

Apartment (3 Bedroom) = (300 GPD/Unit) * (10 Units) = 3,000 GPD

TOTAL = approx. 25,500 GPD (0.0255 MGD)

IV. WATER SUPPLY

Water service will be provided to the development by way of connection to an existing 8” water main through Texas Road and Greenwood Road. An 8” water line will be present onsite to service all 6 buildings. The water installation will be coordinated with and under the guidelines, regulations and specifications of CME Associates and the Township of Marlboro.

The NJDEP standard for domestic water demand for a one, two, and three-bedroom apartment unit is 120, 175, and 275 gallons per day (GPD) per unit respectively, as specified in NJAC 5:21-5.2, Table 5.1. As such, the estimated domestic water demand for the development is as follows:

Apartment (1 Bedroom) = (120 GPD/ Unit) * (30 Units) = 3,600 GPD

Apartment (2 Bedroom) = (175 GPD/Unit) * (80 Units) = 14,000 GPD

Apartment (3 Bedroom) = (275 GPD/Unit) * (10 Units) = 2,750 GPD

TOTAL = approx. 20,350 GPD

The subject site is within the Marlboro Township Water Utility Division service area. Our office has received a ‘will serve’ letter dated August 10, 2020, indicating that safe and proper water service is available for the proposed project from the existing 8” water main located within Texas Road.

V. SURFACE DRAINAGE

The surface runoff from the majority of the subject site in the existing conditions is Matawan Creek located to the northwest of the subject parcel.

The proposed stormwater management facilities for this project have been designed to mitigate the impacts on stormwater runoff from the proposed development in accordance with applicable aspects of the Marlboro Township Land Use Ordinance and NJAC 7:8.

Stormwater runoff from the majority of the proposed development is conveyed to the three (3) proposed above ground basins. The proposed detention basins have been designed to detain and release stormwater runoff, through an outlet control structure at a controlled rate, in order to satisfy the stormwater quantity requirements set forth by NJAC 7:8. In addition, according to the standards set forth by the NJ Stormwater Best Management Practices, a manufactured treatment device with 80% TSS removal will be installed prior to discharging to the wetlands. With this in place, the runoff meets the 80% TSS removal requirement set forth by NJAC 7:8 for water quality.

Furthermore, the stormwater management design facilities attenuate peak flow rates for the proposed development area that satisfy the minimum peak flow reduction for the 2, 10 and 100-year storm frequencies as dictated by NJAC 7:8. With this stated, it is evident that the proposed development will not have a negative impact on the existing stormwater management system, water quality, or groundwater recharge on site or within the vicinity of the subject parcel.

Please refer to the accompanying Stormwater Management, Water Quality and Groundwater Recharge Analysis for further information.

VI. STREAM ENCROACHMENTS

Matawan Creek is located just inside the northwest boundary of Block 119 Lot 16. It is important to note that the proposed project will not fill or divert a water channel, alter a stream, or repair or construct a bridge, culvert, reservoir, dam, wall, pipeline, or cable crossing. Our office is coordinating has submitted an NJDEP LOI Verification Application to verify that the subject parcel is located within a freshwater wetlands and/or transition area.

VII. SOLID WASTE DISPOSAL

The proposed development will be serviced by the Township of Marlboro Department of Public Works Solid Waste/Recycling Bureau. According to the Marlboro Township website, trash shall be picked up one a week and recycling shall be picked up every other week.

VIII. CRITICAL IMPACTS

A. Stream Corridors & Streams – Matawan Creek is located inside the northwest border of the subject parcel. Our office is coordinating with DuBois Environmental Consultants, LLC to submit a NJDEP LOI Verification

Furthermore, the design of the project satisfies the water quality, stormwater quantity and groundwater recharge requirements set forth by NJAC 7:8 and the Township of Marlboro Land Use Ordinance.

- B. Wetlands** – According to the NJDEP NJ-GeoWeb freshwater wetlands are present on the subject parcel. A Letter Of Interpretation has been submitted to the NJDEP to verify if there is a presence or absence of wetlands or transition areas on the site.
- C. Estuaries** - There are no estuaries near the subject site.
- D. Slopes Greater Than 20 Percent** - The subject parcel contains small isolated areas where the slope of land is greater than 20%. Soil erosion and sediment control measures shall be put into place in order to ensure steep slopes shall be stabilized. The proposed project serves to preserve the existing slopes greater than 20% to the maximum extent possible.
- E. High Acid or Highly Erodible Soils** – Based on the Report of Geotechnical and Stormwater Basin Area Investigation prepared by Dynamic Earth, LLC, dated November 12, 2020 located in Appendix S, there are no high acid or high erodible soils located on the subject parcel.
- F. Areas of High-Water Table** - As previously stated, according to the Report of Geotechnical and Stormwater Basin Area Investigation prepared by Dynamic Earth, LLC, dated November 12, 2020 located in Appendix S, the seasonal high groundwater was encountered at depths ranging between approximately 0.9 feet and 4.1 feet below the ground surface from the test pits performed throughout the site. It is important to note that all finished floors for the proposed development will be at least 1 FT above the groundwater table.

The proposed development proposes three (3) aboveground basins to store stormwater runoff from the site. As documented in the accompanying Stormwater Management, Water Quality & Groundwater Recharge Analysis prepared by Dynamic Engineering Consultants, PC Dated January 2021 located in Appendix T, the proposed basins have been designed to not have a negative impact on the existing drainage pattern or water quality on site or within the vicinity of the subject parcel. The detention basins are a minimum of one (1) foot above the seasonal high-water table.

Therefore, the proposed development is not anticipated to have any negative impacts on the groundwater conditions or aquifer recharge areas in the surrounding area.

- G. Mature Stands of Native Vegetation** – The parcel is wooded which may contain some mature stands of native vegetation. The proposed project will preserve as much of the existing mature native vegetation as feasible. The project will utilize a silt fence and tree protection fences to ensure that

vegetation located outside the limit of disturbance shall not be harmed. Additional soil erosion and sediment control measures shall be utilized to protect the existing vegetation.

Furthermore, the proposed landscaping design has been prepared to provide aesthetic improvement to the interior and perimeter of the site through use of approved native species and other low maintenance vegetation. Landscaping improvements incorporated into the development meet the Township of Marlboro Ordinance requirements.

H. Aquifer Recharge and Discharge Areas - Based on information obtained from the NJDEP NJ-GeoWeb, there is no surficial aquifer present at the site.

As previously mentioned, the proposed development has been designed with provisions for the safe and efficient control of stormwater runoff in a manner that will not adversely impact the existing drainage patterns, adjacent roadways, or adjacent parcels. The TSS removal obligations set forth by the Marlboro Township Land Use Ordinance and NJAC 7:8 have been satisfied by utilizing a manufactured treatment device to achieve the 80% TSS required removal rate for the development.

Maintenance activities include inspection of outfalls, inspection of outlet control structures, inspection of basin bottoms and implementation of remediation activities to address and mitigate conditions that would otherwise negatively affect operations of the stormwater management facility.

I. Archaeologically Sensitive Areas – According to NJDEP GeoWeb Mapping, the subject site does contain Archaeologically Sensitive Areas.

J. List of Permits, Licenses & Approvals:

- Marlboro Township Planning Board
- Monmouth County Planning Board
- Freehold Soil Conservation District
- Bayshore Regional Sewerage Authority
- Western Monmouth Utilities Authority
- NJDEP Wetlands LOI Verification

IX. SUMMARY ENVIRONMENTAL ASSESSMENT

The Matawan Creek is located inside the northwest border of the subject parcel; however, the proposed development will not adversely affect the runoff associated with The Matawan Creek and its tributaries.

Freshwater wetlands are present on the subject parcel and is currently pending an LOI Verification.

The stormwater runoff quantity and water quality standards set forth by the Stormwater Management Regulations (NJAC 7:8) have been satisfied by proposing three (3) detention basins to mitigate the impact of the proposed development on stormwater runoff. The proposed stormwater management facilities serve

to provide for water quality measures that meet and exceed the design standards set forth by the NJ Stormwater Best Management Practices and therefore provides a minimum TSS Removal Rate of 80%.

The proposed project will be serviced by the Western Monmouth Utility Authority's sanitary sewer system and Marlboro Township Water Utility Division water supply and shall comply with all State and Municipal guidelines, regulations and specifications required.

The proposed development will be serviced by the Township of Marlboro Department of Public Works Solid Waste/Recycling Bureau, according to the Marlboro Township website, trash shall be picked up once a week and recycling shall be picked up every other week.

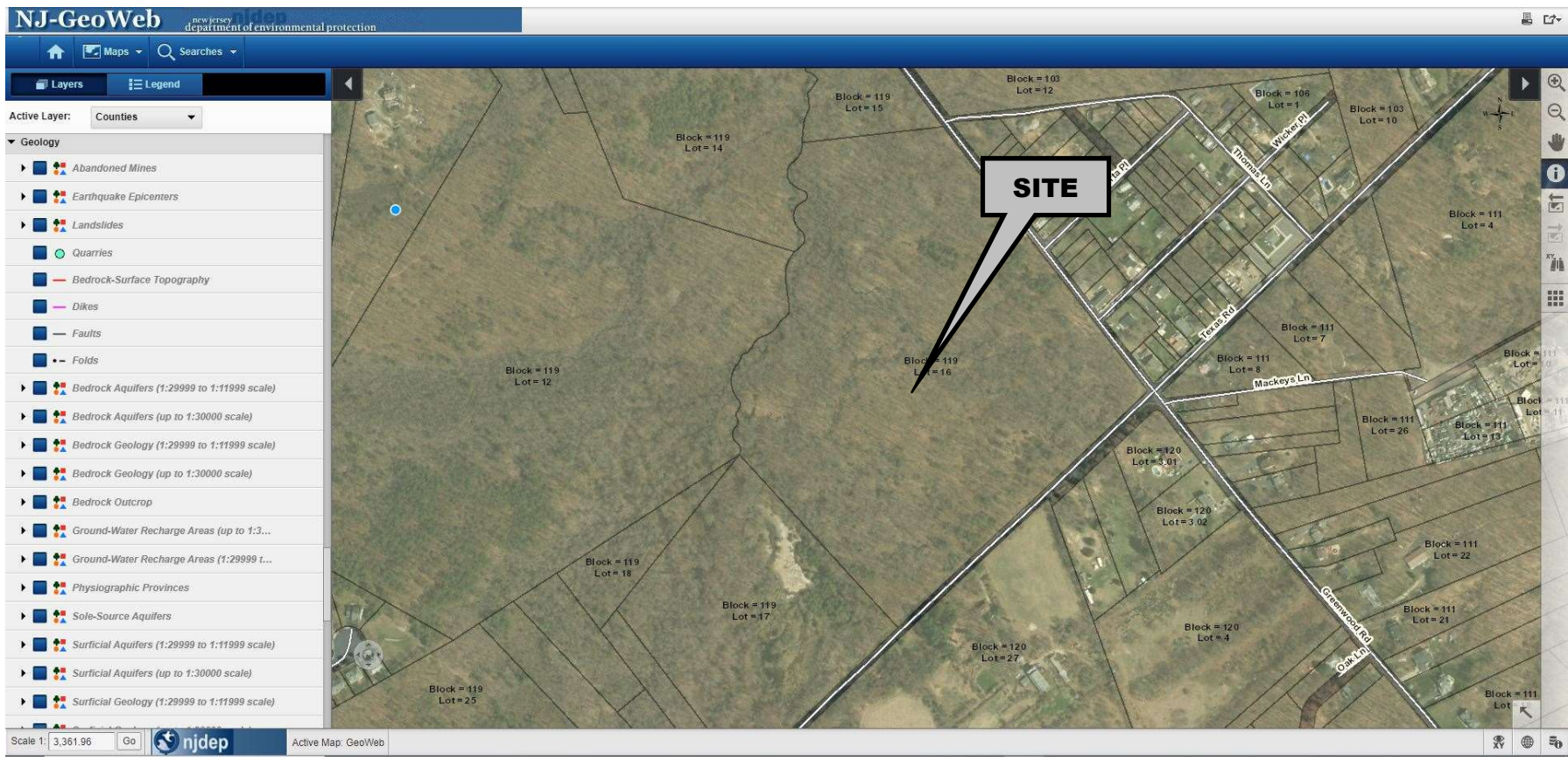
The following steps will be taken to avoid/minimize adverse environmental impacts during construction and operation:

- Effective implementation of soil erosion and sediment control measures, including tree preservation fencing, haybales, silt fencing, and inlet filters, as well as, utilization of Stormwater best management practices should successfully minimize the site development's impact on existing natural resources.
- Strict adherence to the limits of disturbance parameters and stabilizing the construction entrances on Texas Road to reduce the amount of soil being brought off-site.
- Every reasonable effort will be made to protect the existing natural environment with the ultimate goal of providing for minimal disruption throughout the course of construction and after completion.

APPENDIX

A. AERIAL MAP

NJDEP GeoWeb – Aerial Map



The screenshot displays the NJ-GeoWeb interface. The top navigation bar includes 'NJ-GeoWeb' and 'new jersey department of environmental protection'. Below this is a search bar and a 'Layers' panel. The 'Layers' panel is expanded to show a list of geological features under the 'Geology' category, including Abandoned Mines, Earthquake Epicenters, Landslides, Quarries, Bedrock-Surface Topography, Dikes, Faults, Folds, Bedrock Aquifers (at various scales), Bedrock Geology (at various scales), Bedrock Outcrop, Ground-Water Recharge Areas (at various scales), Physiographic Provinces, Sole-Source Aquifers, and Surficial Aquifers (at various scales). The main map area shows an aerial view with overlaid property boundaries and block/lot numbers. A callout box labeled 'SITE' points to a specific location on the map. The bottom status bar shows a scale of 1:3,361.96 and the NJDEP logo.

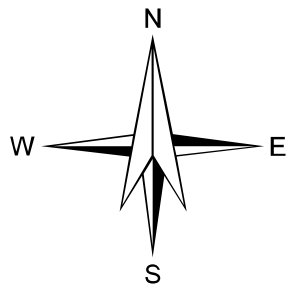
1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229
 8 Robbins Street, Suite 102, Toms River, NJ 08753 T. 732-974-0198
 826 Newtown Yardley Rd., Suite 201, Newtown, PA 18940 T. 267-685-0276

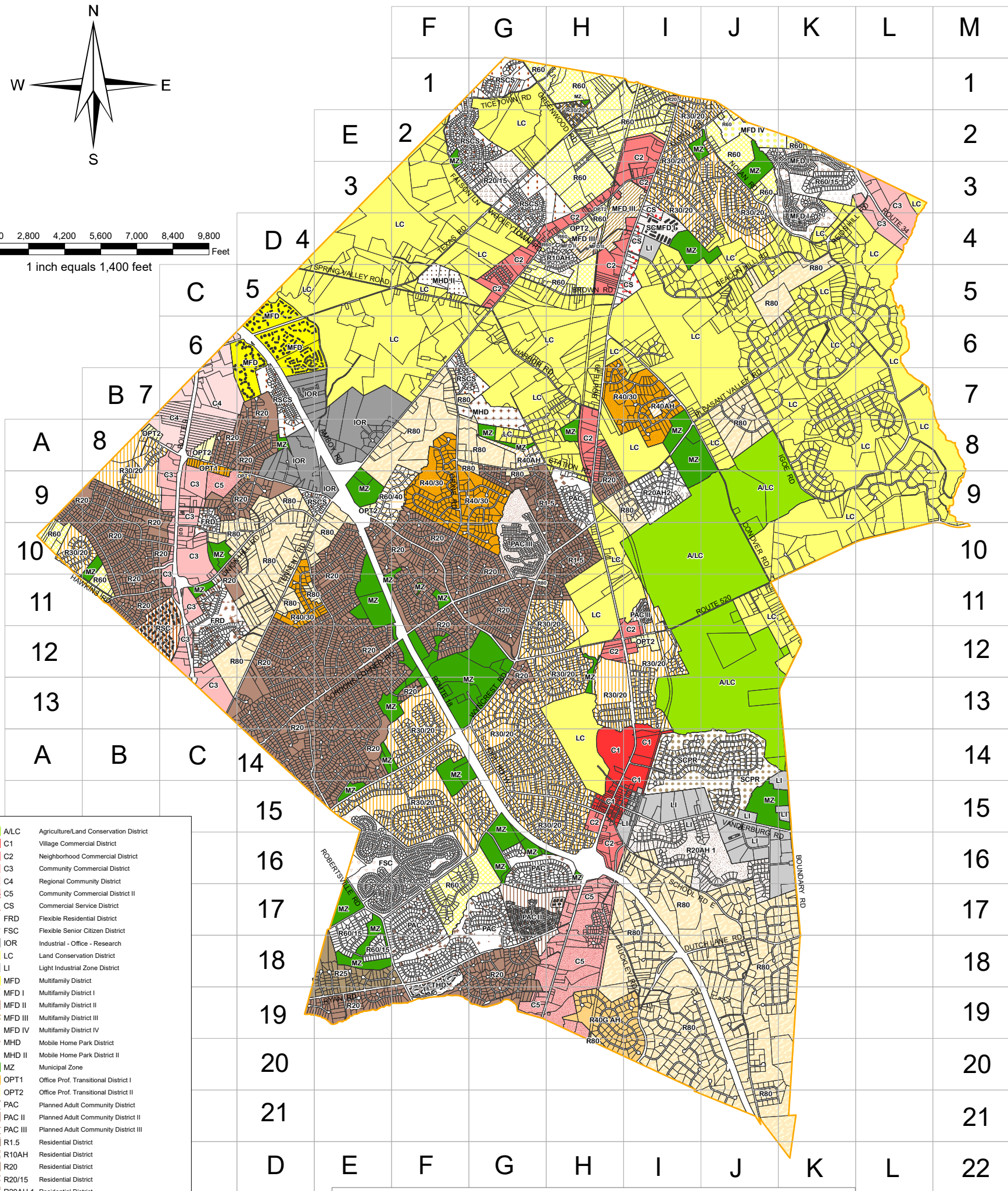
100 NE 5th Avenue, Suite B2, Delray Beach, FL 33483 T. 561-921-8570
 14521 Old Katy Road, Suite 270, Houston, TX 77079 T. 281-789-6400
 714 S. Greenville Avenue, Suite 100, Allen, TX 75002 T. 972-534-2100

B. ZONE MAP

ZONING MAP MARLBORO TOWNSHIP



0 1,400 2,800 4,200 5,600 7,000 8,400 9,800 Feet
1 inch equals 1,400 feet



- | | | |
|--|---------|---|
| | A/LC | Agriculture/Land Conservation District |
| | C1 | Village Commercial District |
| | C2 | Neighborhood Commercial District |
| | C3 | Community Commercial District |
| | C4 | Regional Community District |
| | C5 | Community Commercial District II |
| | CS | Commercial Service District |
| | FRD | Flexible Residential District |
| | FSC | Flexible Senior Citizen District |
| | IOR | Industrial - Office - Research |
| | LC | Land Conservation District |
| | LI | Light Industrial Zone District |
| | MFD | Multifamily District |
| | MFD I | Multifamily District I |
| | MFD II | Multifamily District II |
| | MFD III | Multifamily District III |
| | MFD IV | Multifamily District IV |
| | MHD | Mobile Home Park District |
| | MHD II | Mobile Home Park District II |
| | MZ | Municipal Zone |
| | OPT1 | Office Prof. Transitional District I |
| | OPT2 | Office Prof. Transitional District II |
| | PAC | Planned Adult Community District |
| | PAC II | Planned Adult Community District II |
| | PAC III | Planned Adult Community District III |
| | R1.5 | Residential District |
| | R10AH | Residential District |
| | R20 | Residential District |
| | R20/15 | Residential District |
| | R20AH 1 | Residential District |
| | R20AH2 | Residential District |
| | R25 | Residential District |
| | R30/20 | Residential District |
| | R40/30 | Residential District |
| | R40AH | Residential District |
| | R40G AH | Residential District |
| | R60 | Residential District |
| | R60/15 | Residential District |
| | R60/40 | Residential District |
| | R80 | Residential District |
| | RSC | Senior Citizen Residential District |
| | RSCS | Senior Citizen Residential & Single Family District |
| | SCMFD I | Senior Citizen Multifamily District I |
| | SCPR | Stream Corridor Preservation Residential District |
| | THD | Townhouse District |

Zoning Map



Township of Marlboro
Engineering Department
Geographic Information System

Greg Valesi, PE, PP, CME, Township Engineer
Dean Staknys, PE, Assistant Township Engineer
Charles Brady, Assistant Civil Engineer

1979 Township Drive, Marlboro, New Jersey, 07746
Phone: (732) 536-0200
Fax: (732) 972-7697

New Jersey State Plane Coordinate System
North American Datum 1983/92
North American Vertical Datum 1988

Photography Date: Winter 2008/2009
Photography Scale: 1"=660'

Date: 8-25-2011
Last Revised: 03-22-2017

Output Size: E
Scale: 1" = 1400'

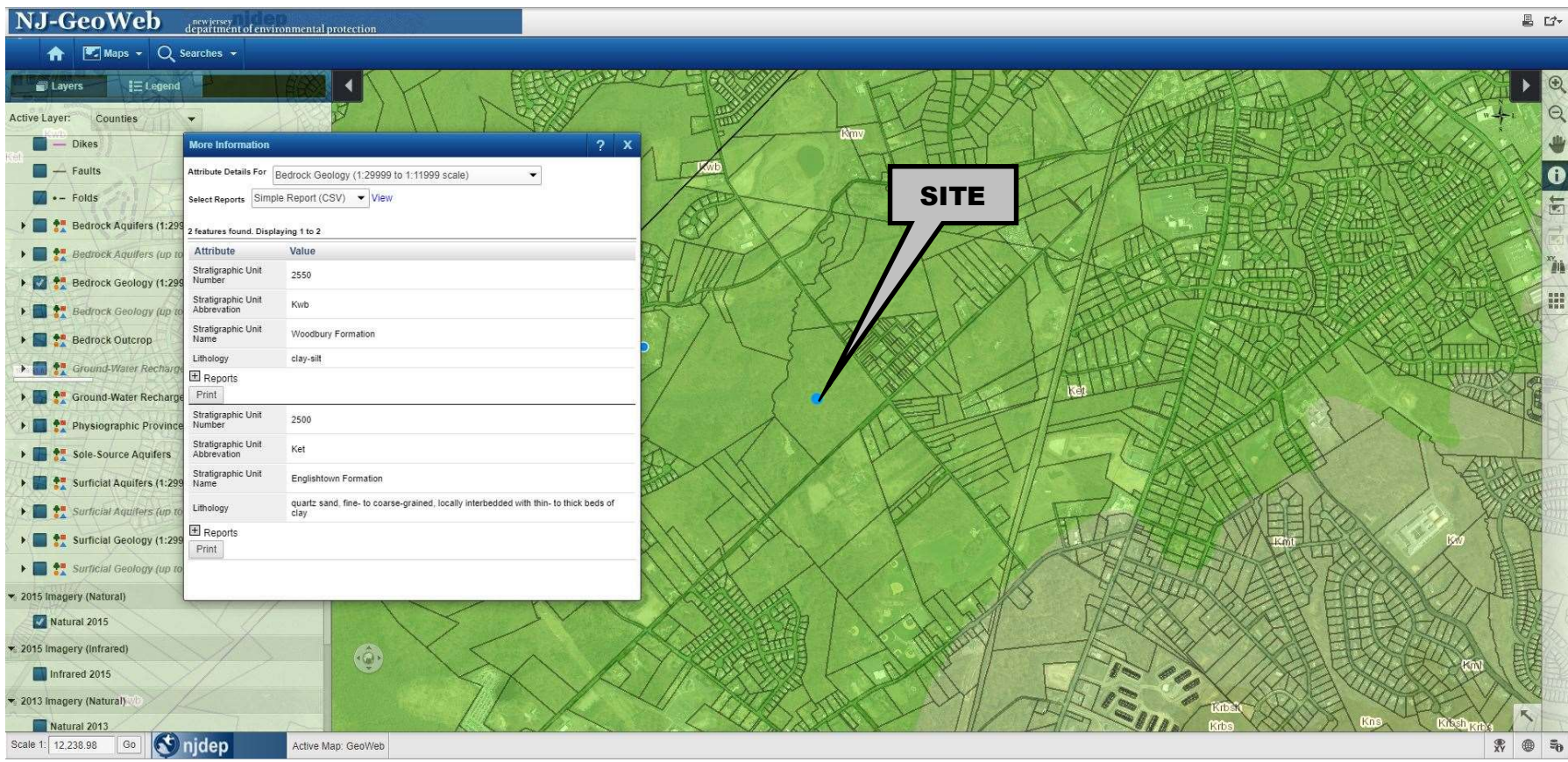
Drawn By: C. Brady
File: Marlboro_Zoning_Map.mxd

C. FEMA FIRM MAP



D. NJDEP GIS MAPPING – BEDROCK GEOLOGY MAP

NJDEP GeoWeb – Bedrock Geology Map



The screenshot displays the NJ-GeoWeb interface. The main map area shows a green-toned bedrock geology map with various units labeled (e.g., Kwb, Ket, Kni, Kns). A blue dot on the map is labeled 'SITE' with a callout box. An information popup window is open over the map, showing details for 'Bedrock Geology (1:29999 to 1:11999 scale)'. The popup lists two features, with the first one selected. The popup content is as follows:

Attribute	Value
Stratigraphic Unit Number	2550
Stratigraphic Unit Abbreviation	Kwb
Stratigraphic Unit Name	Woodbury Formation
Lithology	clay-silt

Below the table, there is a 'Reports' section with a 'Print' button. The interface also includes a 'Layers' panel on the left with various map layers like 'Dikes', 'Faults', 'Folds', 'Bedrock Aquifers', 'Bedrock Geology', 'Bedrock Outcrop', 'Ground-Water Recharge', 'Physiographic Province', 'Sole-Source Aquifers', 'Surficial Aquifers', and 'Surficial Geology'. The bottom status bar shows the scale as 1:12,238.98 and the active map as 'GeoWeb'.

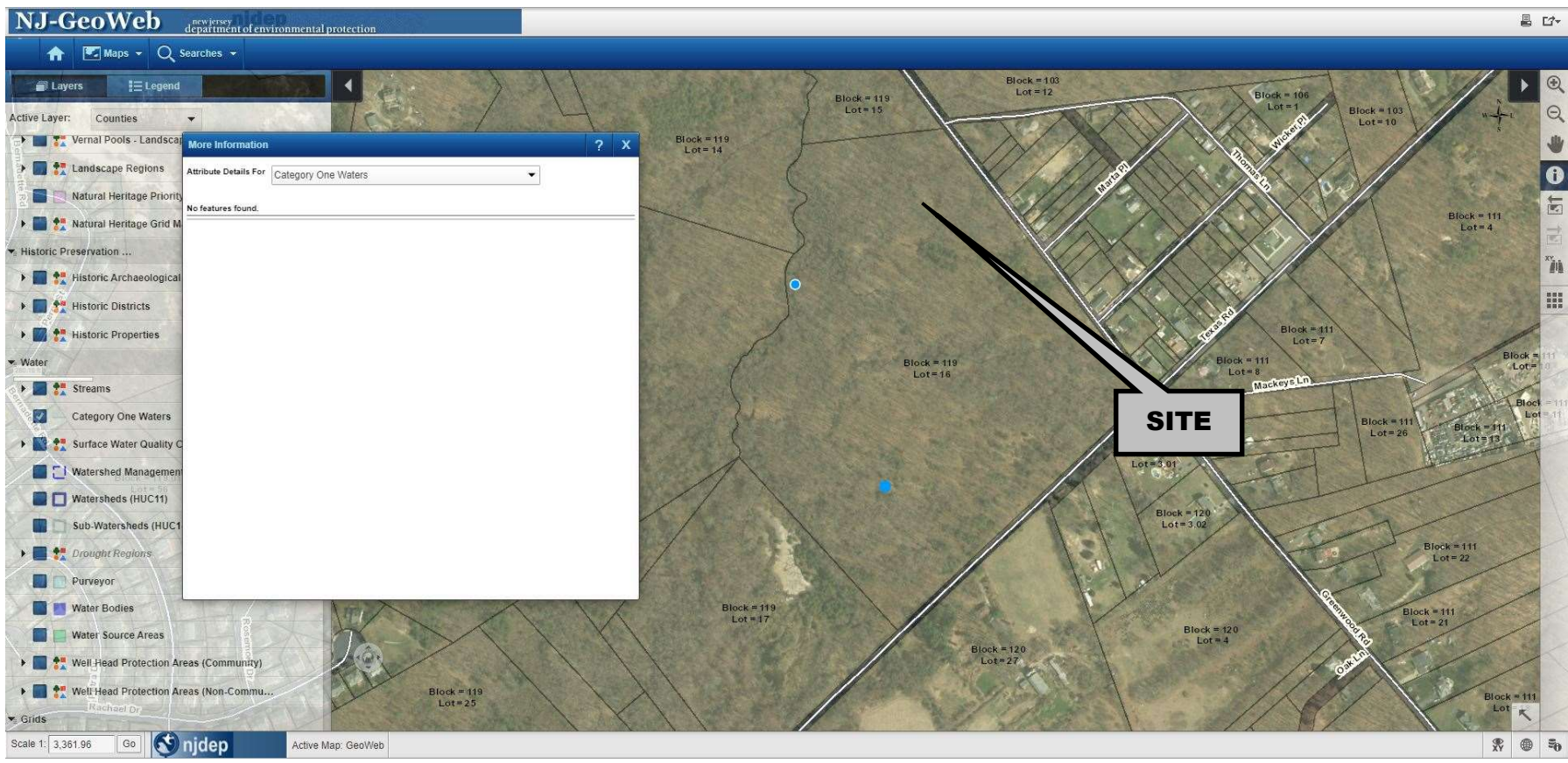
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**E. NJDEP GIS MAPPING – CATEGORY 1 WATERS &
HUC14 MAP**

NJDEP GeoWeb – Category 1 Waters Map

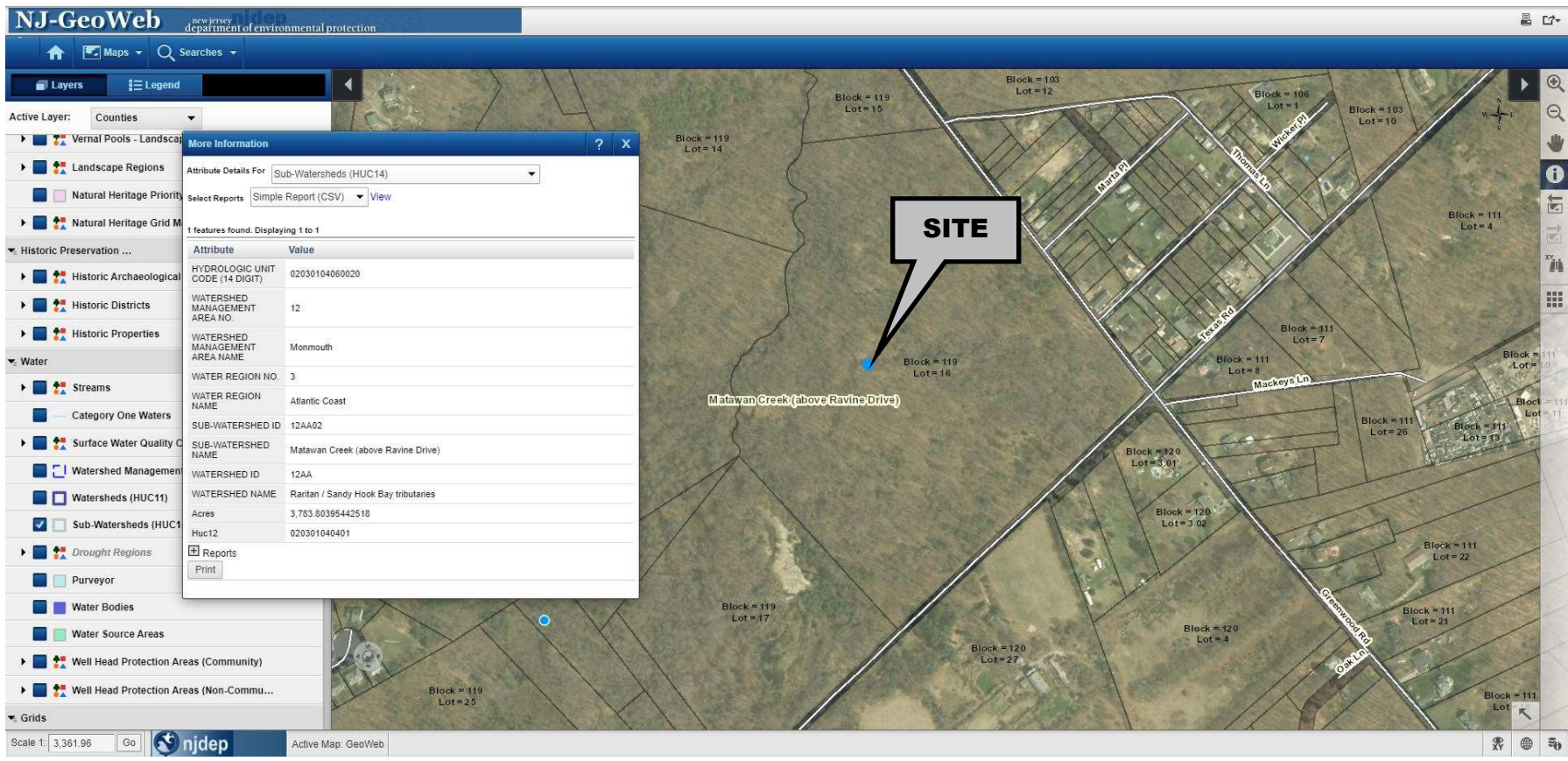


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NJDEP GeoWeb – HUC 14 Map



The screenshot shows the NJ-GeoWeb interface with a map of HUC 14. A blue dot on the map is labeled 'SITE' with a callout box. An information popup window is open, displaying details for the selected feature.

Attribute	Value
HYDROLOGIC UNIT CODE (14 DIGIT)	02030104060020
WATERSHED MANAGEMENT AREA NO.	12
WATERSHED MANAGEMENT AREA NAME	Monmouth
WATER REGION NO.	3
WATER REGION NAME	Atlantic Coast
SUB-WATERSHED ID	12AA02
SUB-WATERSHED NAME	Matawan Creek (above Ravine Drive)
WATERSHED ID	12AA
WATERSHED NAME	Raritan / Sandy Hook Bay tributaries
Acres	3,783.80395442518
Huc12	020301040401

Additional map details include a scale of 1:3,361.96 and the NJDEP logo in the bottom left corner.

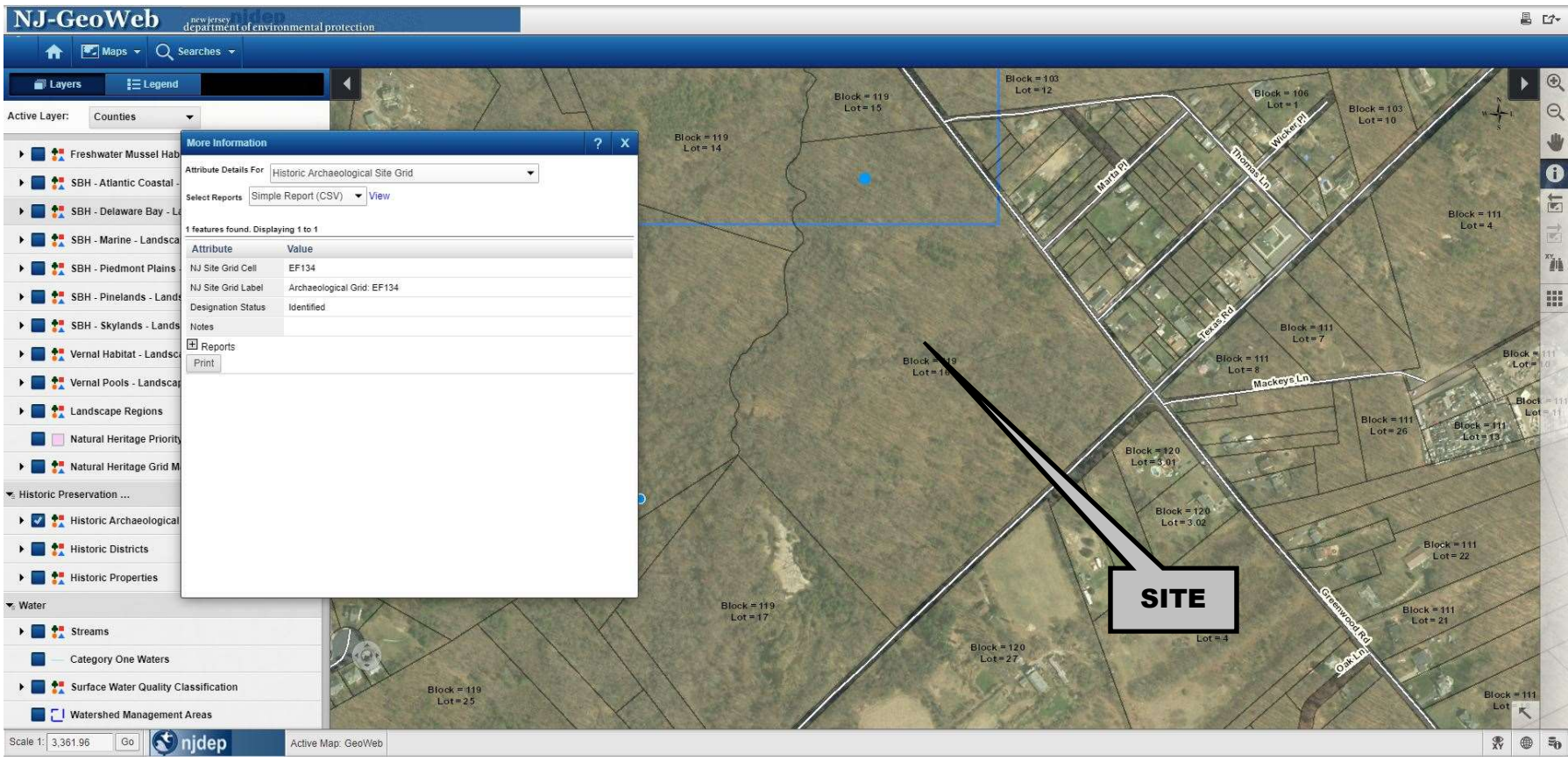
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F. NJDEP GIS MAPPING – HISTORIC PROPERTIES MAP

NJDEP GeoWeb – Historic Archaeological Site Grid



The screenshot shows the NJ-GeoWeb interface with a map of a residential area. A 'More Information' pop-up window is open, displaying details for 'Historic Archaeological Site Grid'. The map shows various blocks and lots, with a 'SITE' label pointing to a specific location. The pop-up window contains the following information:

Attribute	Value
NJ Site Grid Cell	EF134
NJ Site Grid Label	Archaeological Grid: EF134
Designation Status	Identified

Additional information from the pop-up window includes:

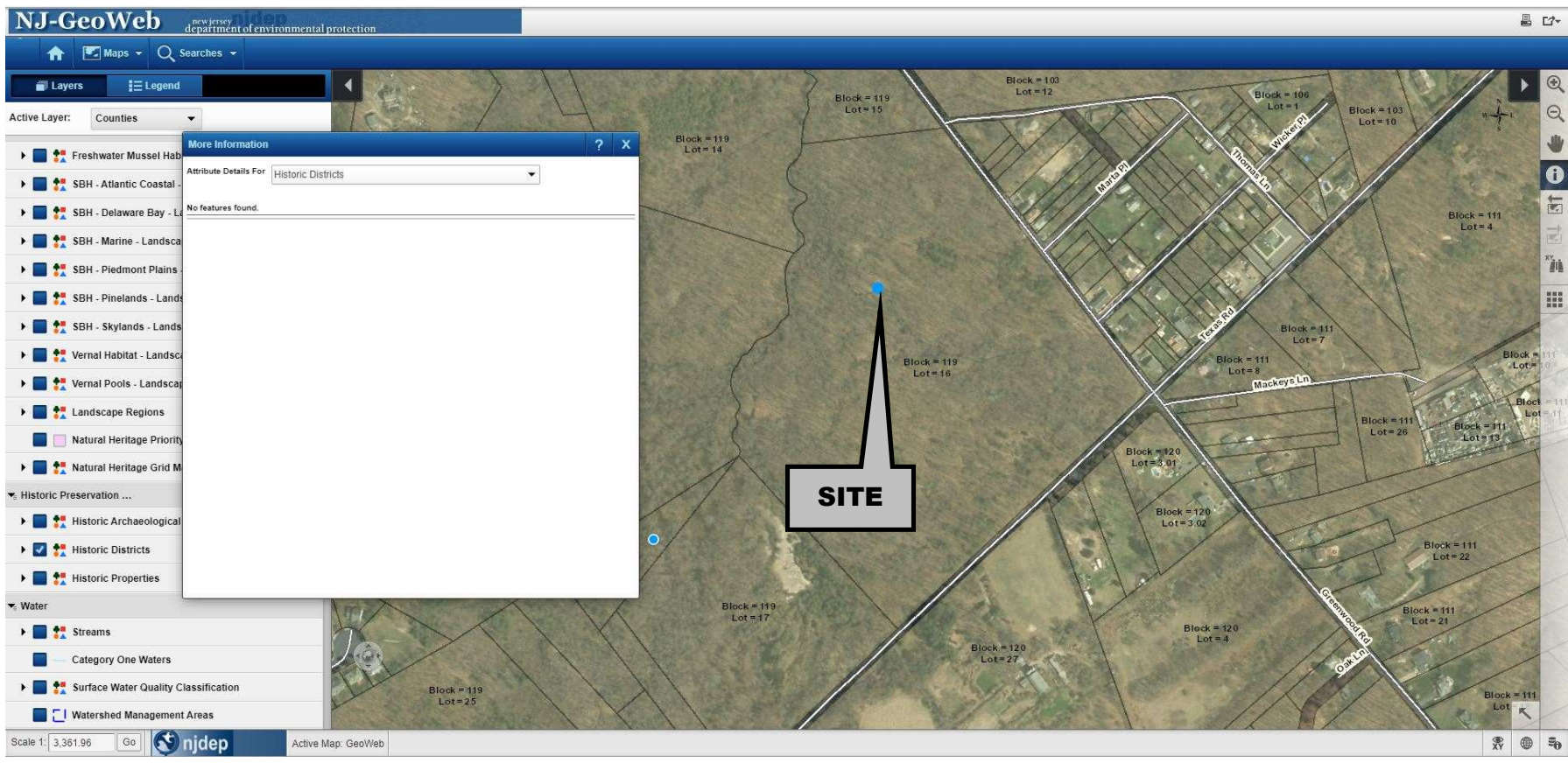
- 1 features found. Displaying 1 to 1
- Select Reports: Simple Report (CSV) View
- Notes
- Reports: Print

1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

245 Main Street, Suite 110, Chester, NJ 07930 T. 908-879-9229
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100 NE 5th Avenue, Suite B2, Delray Beach, FL 33483 T. 561-921-8570
 14521 Old Katy Road, Suite 270, Houston, TX 77079 T. 281-789-6400
 714 S. Greenville Avenue, Suite 100, Allen, TX 75002 T. 972-534-2100

NJDEP GeoWeb – Historic Districts

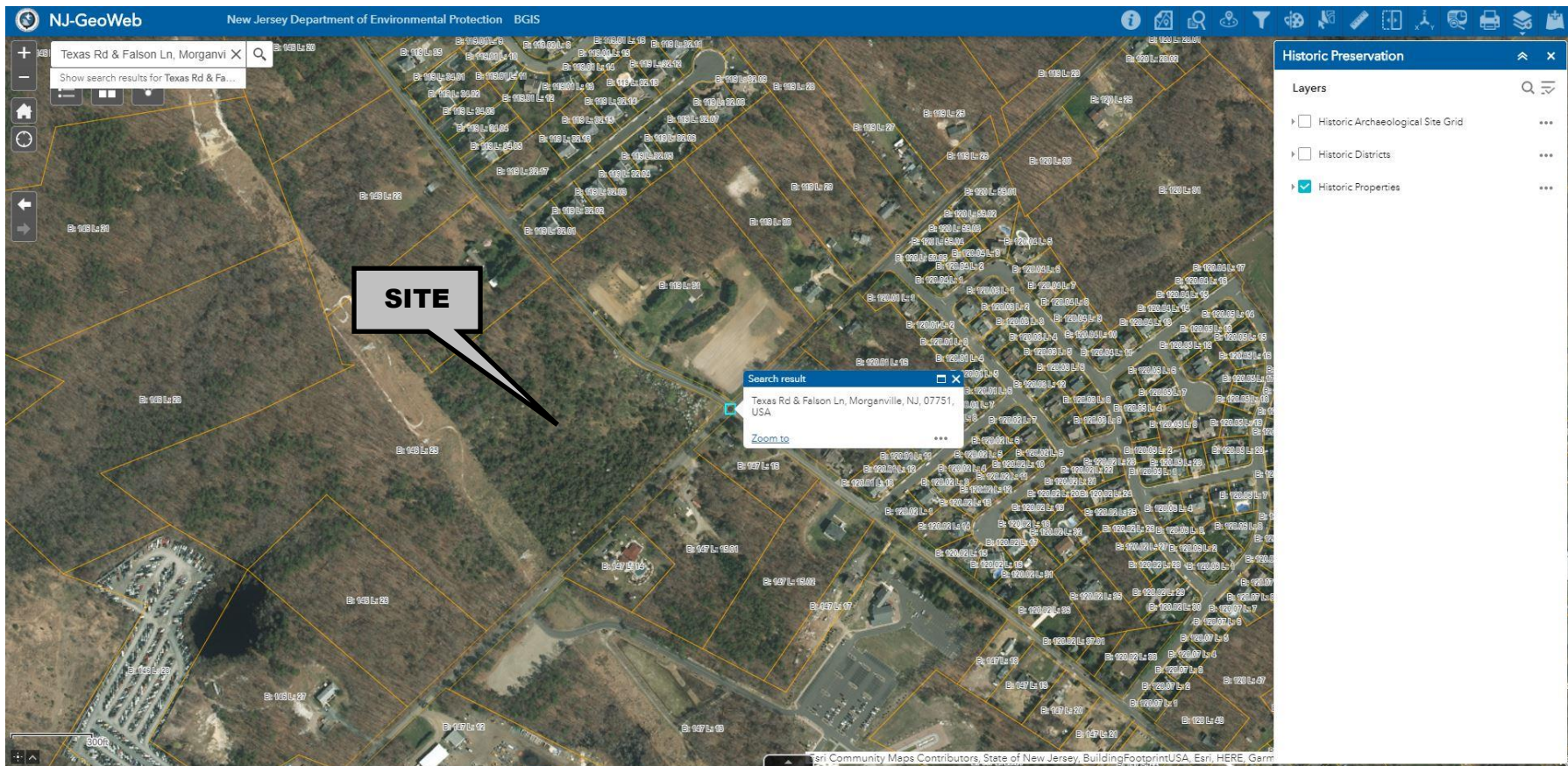


1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

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NJDEP GeoWeb – Historic Properties



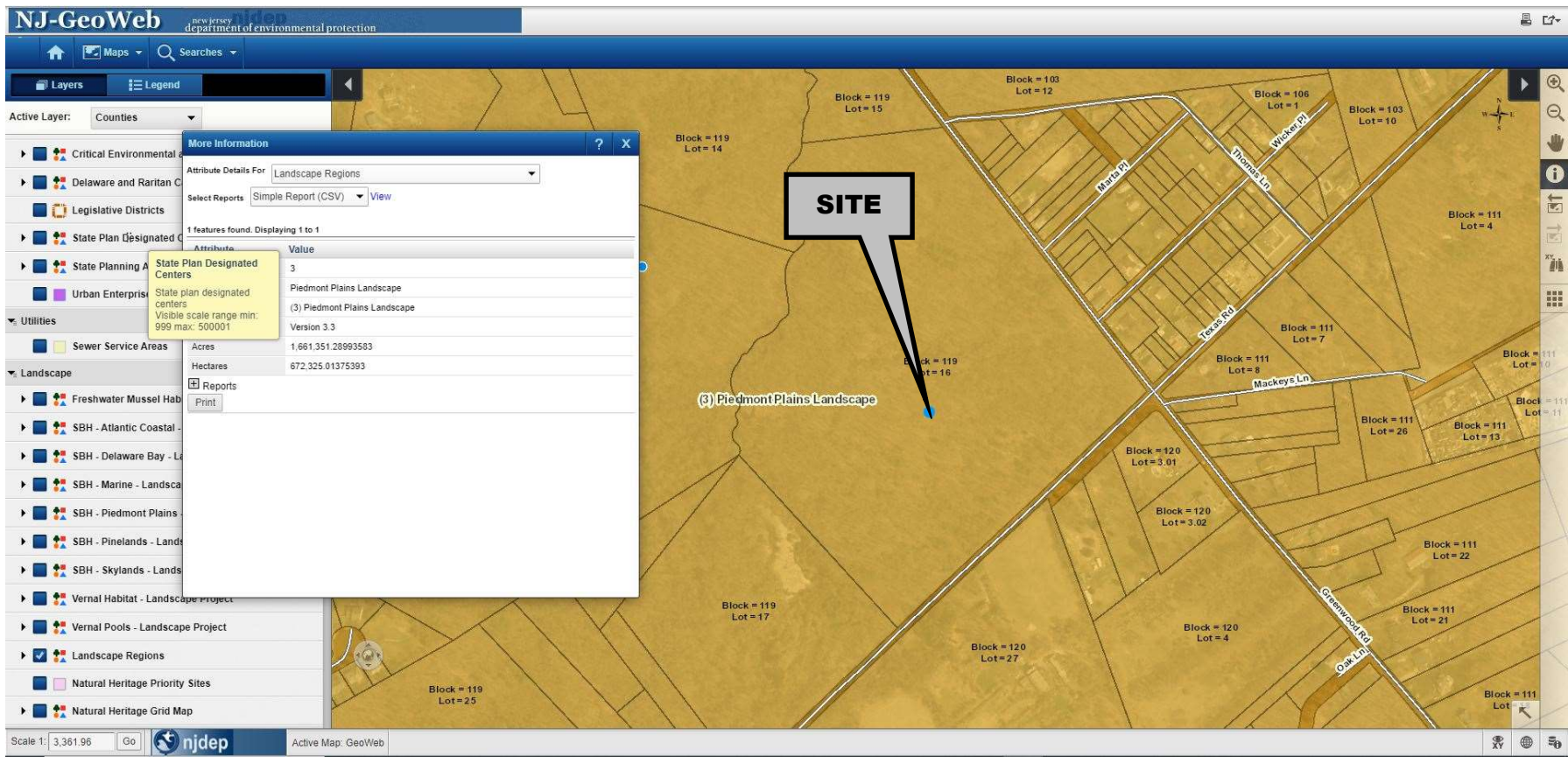
1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

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G. NJDEP GIS MAPPING – LANDSCAPE MAP

NJDEP GeoWeb – Landscape Map



The screenshot displays the NJ-GeoWeb interface. The main map area shows a landscape map with various blocks and lots labeled, such as Block = 119 Lot = 15, Block = 103 Lot = 12, and Block = 111 Lot = 4. A callout box labeled 'SITE' points to a specific area on the map. A 'More Information' popup window is open, showing details for 'Landscape Regions'. The popup includes a table with the following data:

Attribute	Value
State Plan Designated Centers	3
State plan designated centers	Piedmont Plains Landscape
Visible scale range min:	(3) Piedmont Plains Landscape
Visible scale range max:	Version 3.3
Acres	1,661,351.28993583
Hectares	672,325.01375393

The interface also shows a 'Layers' panel on the left with various map layers like 'Critical Environmental', 'Delaware and Raritan C', 'Legislative Districts', 'State Plan Designated Centers', 'State Planning A', 'Urban Enterprise', 'Utilities', 'Sewer Service Areas', 'Landscape', 'Freshwater Mussel Hab', 'SBH - Atlantic Coastal', 'SBH - Delaware Bay - L', 'SBH - Marine - Landsc', 'SBH - Piedmont Plains', 'SBH - Pinelands - Lands', 'SBH - Skylands - Lands', 'Vernal Habitat - Landscape Project', 'Vernal Pools - Landscape Project', 'Landscape Regions', 'Natural Heritage Priority Sites', and 'Natural Heritage Grid Map'. The bottom status bar shows 'Scale 1: 3,361.96' and 'Active Map: GeoWeb'.

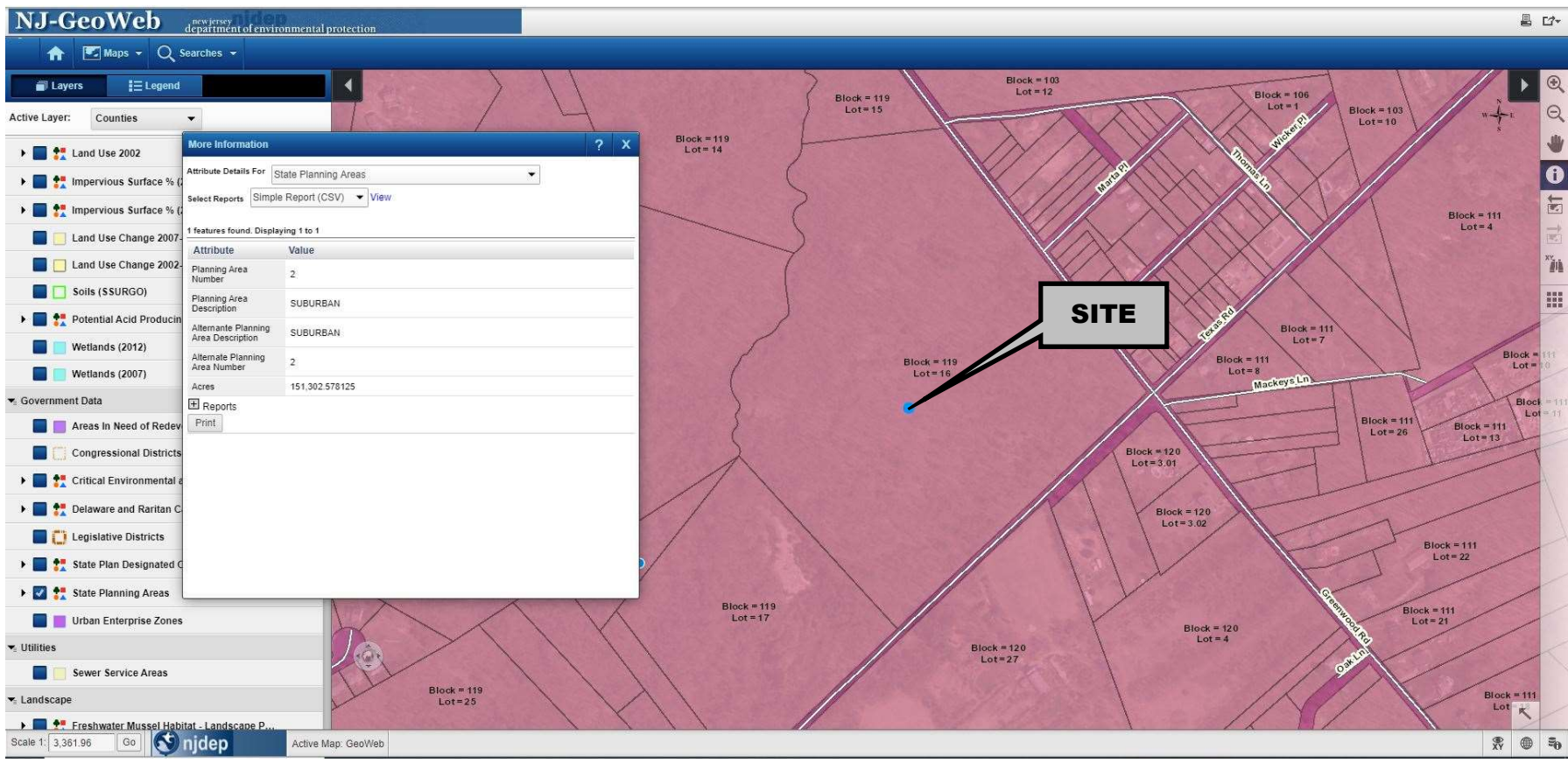
1904 Main Street, Lake Como, NJ 07719 T. 732-974-0198

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**H. NJDEP GIS MAPPING – STATE PLANNING AREAS
MAP**

NJDEP GeoWeb – State Planning Area Map



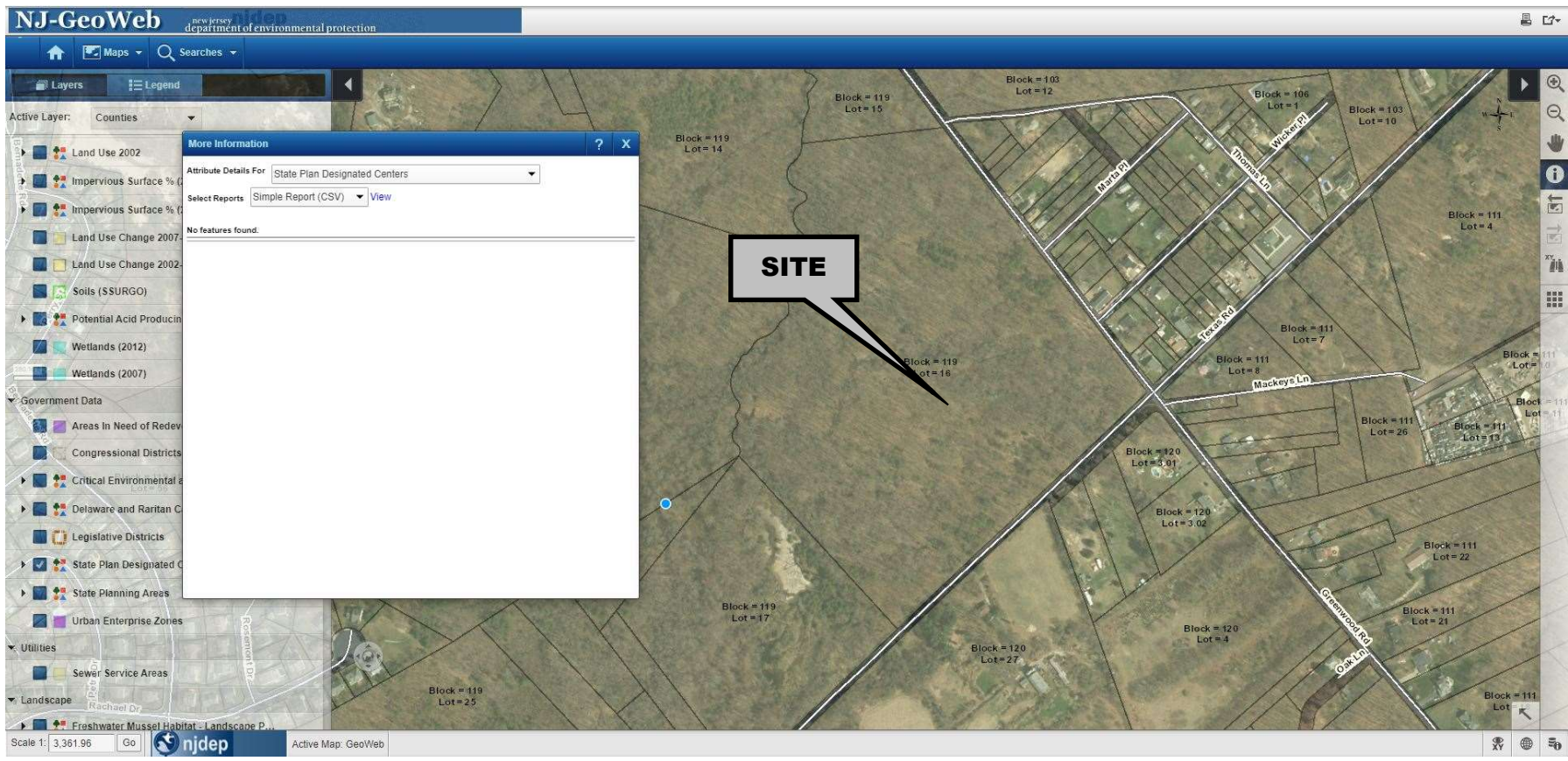
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I. NJDEP GIS MAPPING – STATE PLAN CENTERS MAP

NJDEP GeoWeb – State Plan Centers Map



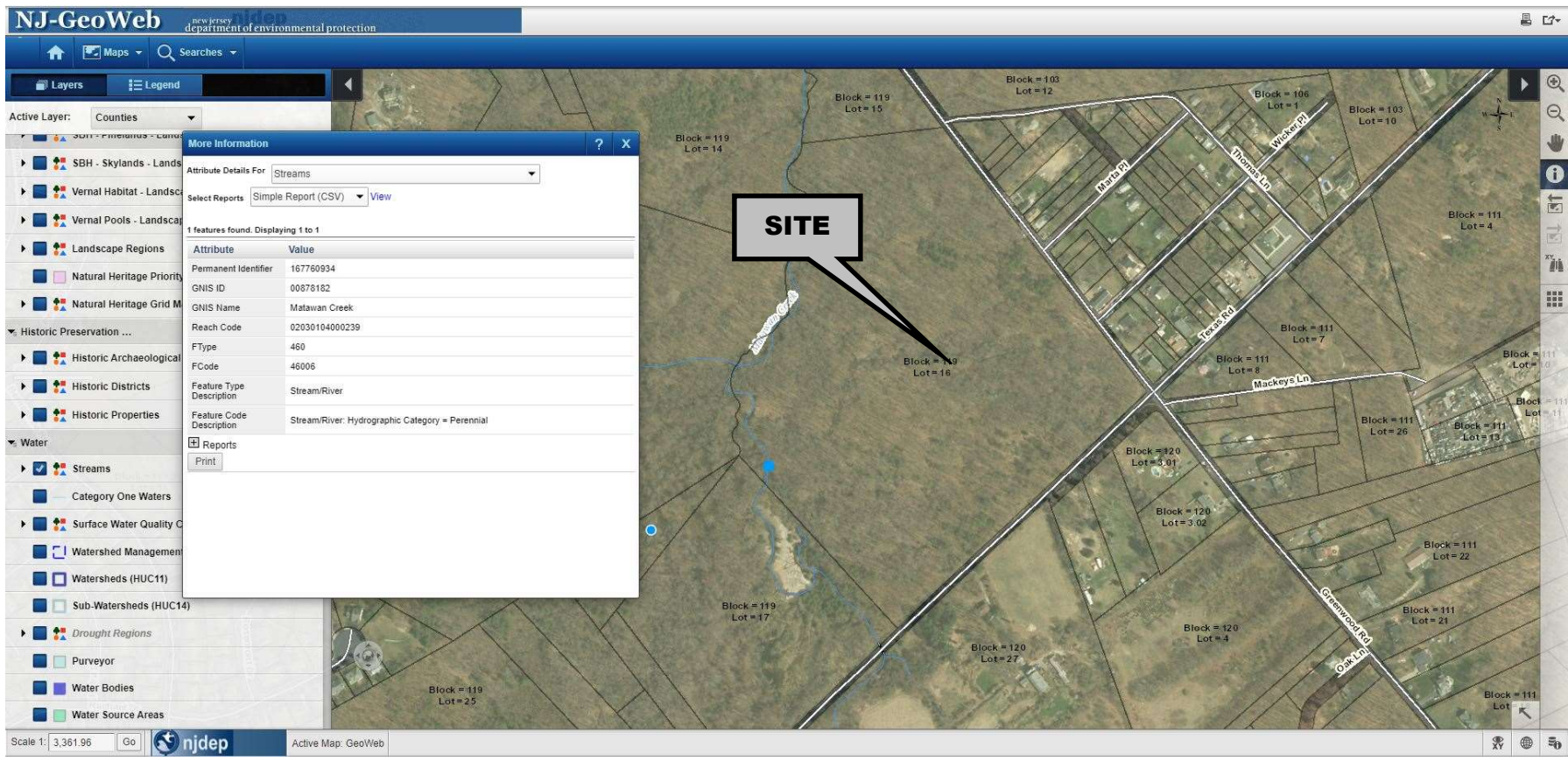
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**J. NJDEP GIS MAPPING – STREAMS AND
WATERBODIES MAP**

NJDEP GeoWeb – Streams and Waterbodies Map



The screenshot shows the NJ-GeoWeb interface with the following elements:

- Header:** NJ-GeoWeb, new jersey department of environmental protection
- Navigation:** Home, Maps, Searches, Layers, Legend
- Active Layer:** Counties
- Water Layer:** Streams (checked), Category One Waters, Surface Water Quality C, Watershed Management, Watersheds (HUC11), Sub-Watersheds (HUC14), Drought Regions, Purveyor, Water Bodies, Water Source Areas
- Attribute Details Window:**

Attribute	Value
Permanent Identifier	167760934
GNIS ID	00878182
GNIS Name	Matawan Creek
Reach Code	02030104000239
FType	460
FCode	46006
Feature Type Description	Stream/River
Feature Code Description	Stream/River: Hydrographic Category = Perennial
- Map:** Aerial view of a residential area with a stream. A callout box labeled 'SITE' points to a specific location on the stream. Block and lot numbers are visible on the map.
- Scale:** 1: 3,361.96
- Footer:** njdep Active Map: GeoWeb

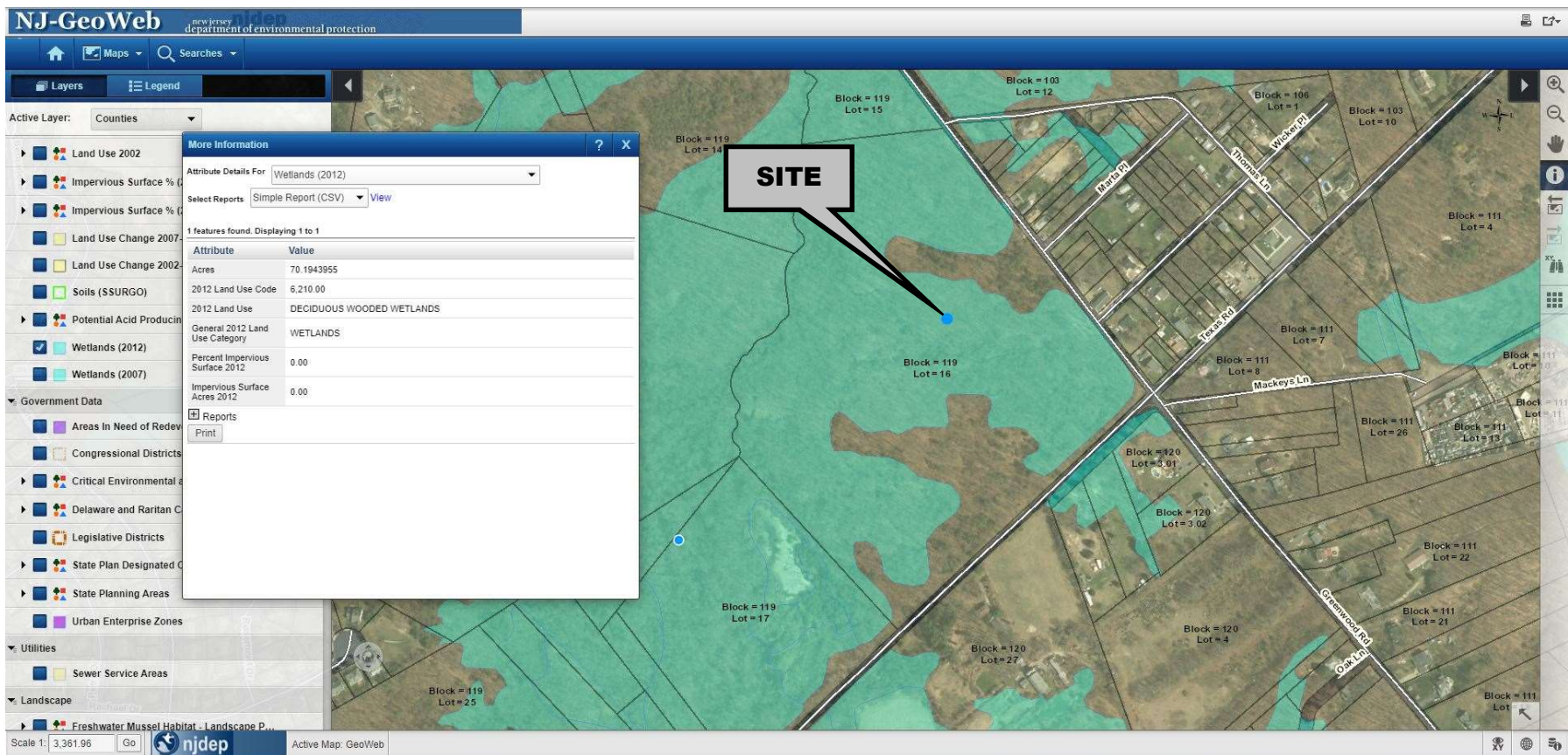
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K. NJDEP GIS MAPPING – SURFICIAL AQUIFER

NJDEP GeoWeb – Wetlands (2012)



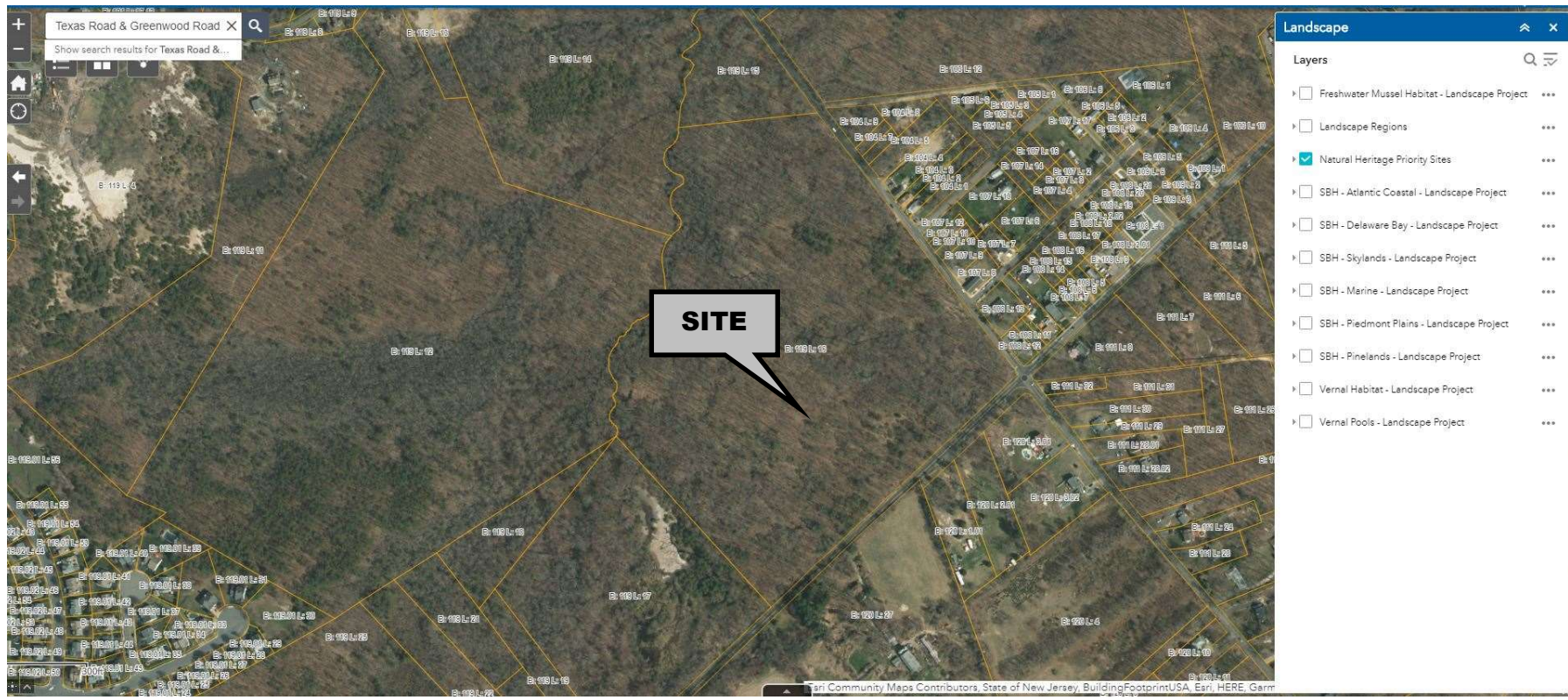
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**L. NJDEP GIS MAPPING – NATURAL HERITAGE
PRIORITY SITES MAP**

NJDEP GeoWeb – Natural Heritage Priority Map



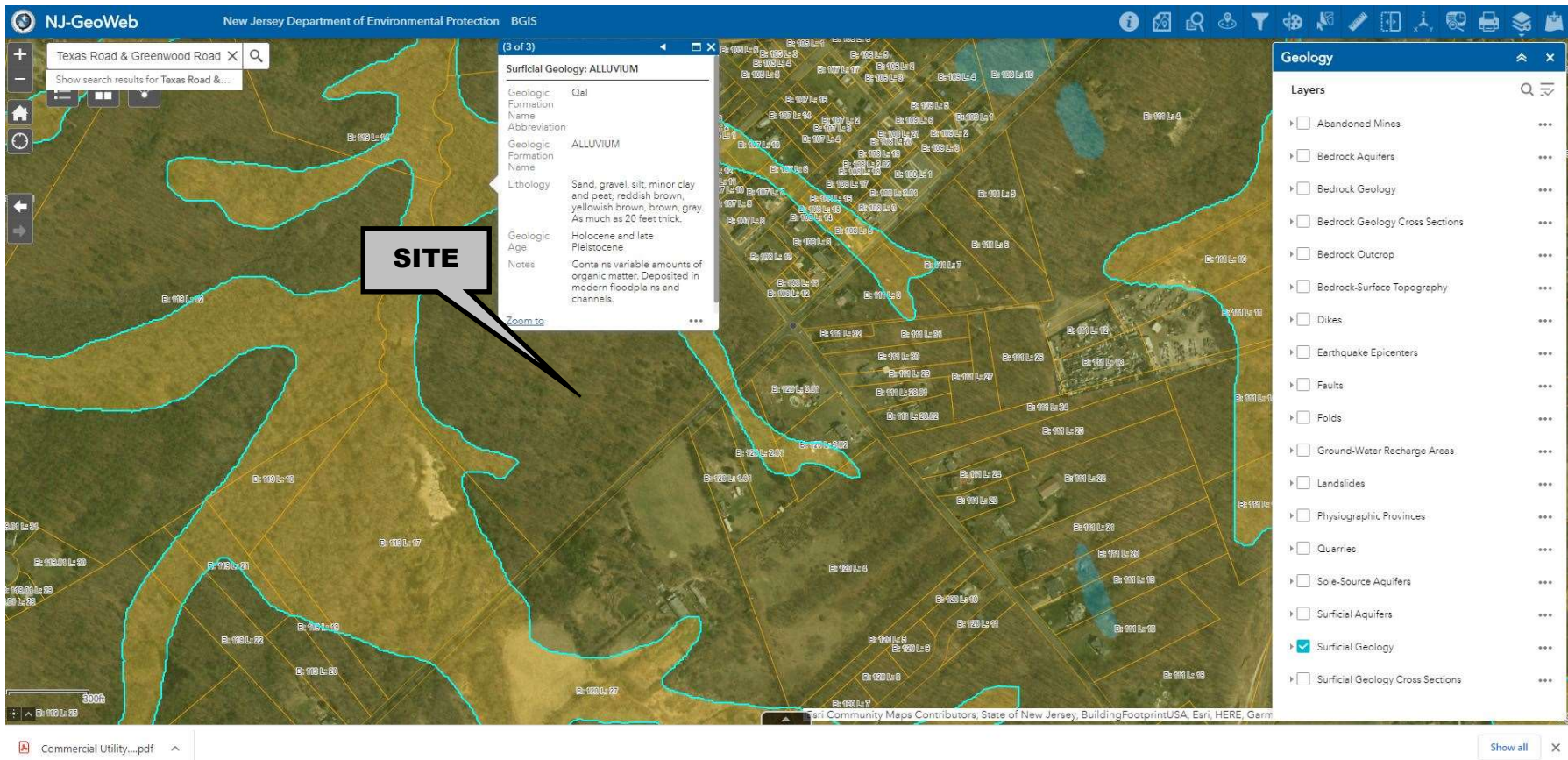
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**M. SURFICIAL GEOLOGY MAPS (NJDEP GEOWEB NJ
GEOLOGY)**

NJDEP GeoWeb – Surficial Geology Map



Surficial Geology: ALLUVIUM

Geologic Formation Name	Qal
Abbreviation	ALLUVIUM
Geologic Formation Name	ALLUVIUM
Lithology	Sand, gravel, silt, minor clay and peat; reddish brown, yellowish brown, brown, gray. As much as 20 feet thick.
Geologic Age	Holocene and late Pleistocene
Notes	Contains variable amounts of organic matter. Deposited in modern floodplains and channels.

Geology Layers

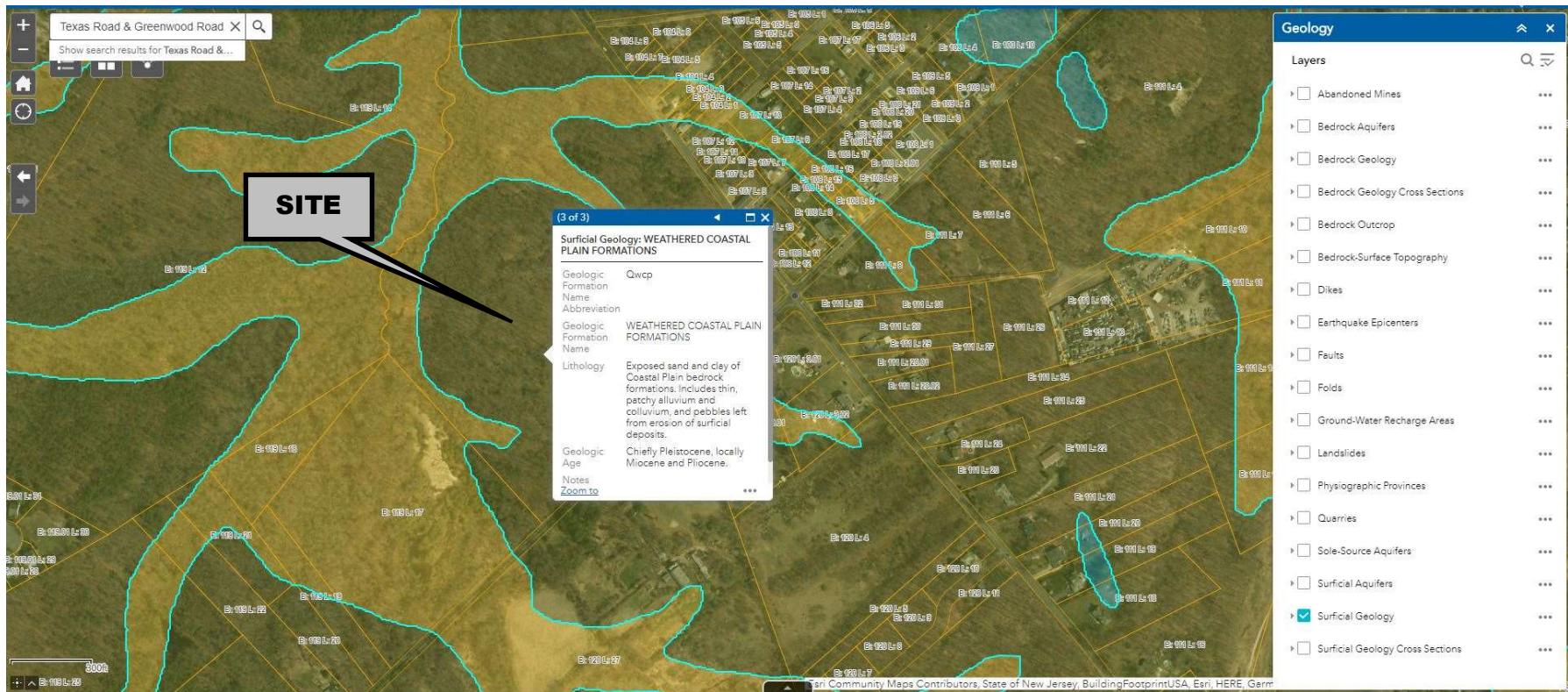
- Abandoned Mines
- Bedrock Aquifers
- Bedrock Geology
- Bedrock Geology Cross Sections
- Bedrock Outcrop
- Bedrock-Surface Topography
- Dikes
- Earthquake Epicenters
- Faults
- Folds
- Ground-Water Recharge Areas
- Landslides
- Physiographic Provinces
- Quarries
- Sole-Source Aquifers
- Surficial Aquifers
- Surficial Geology
- Surficial Geology Cross Sections

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NJDEP GeoWeb – Surficial Geology Map



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N. USGS MAP WITH SITE IDENTIFIED

USGS MAP
South Amboy Quad



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O. CME ASSOCIATES WILL SERVE LETTER

JOHN H. ALLGAIR, PE, PP, LS (1983-2001)
DAVID J. SAMUEL, PE, PP, CME
JOHN J. STEFANI, PE, LS, PP, CME
JAY B. CORNELL, PE, PP, CME
MICHAEL J. McCLELLAND, PE, PP, CME
GREGORY R. VALES, PE, PP, CME



TIM W. GILLEN, PE, PP, CME (1991-2019)
BRUCE M. KOCH, PE, PP, CME
LOUIS J. PLOSKONKA, PE, CME
TREVOR J. TAYLOR, PE, PP, CME
BEHRAM TURAN, PE, LSRP
LAURA J. NEUMANN, PE, PP
DOUGLAS ROHMEYER, PE, CFM, CME
ROBERT J. RUSSO, PE, PP, CME
JOHN J. HESS, PE, PP, CME

Via Email
August 10, 2020

Dynamic Engineering
826 Newtown Yardley Road – Suite 201
Newtown, Pennsylvania 18940

Attention: Samantha Myers – Design Engineer.

Re: Block: 146, Lots: 25 & 26
Block: 119, Lots: 16
Township of Marlboro

Ms. Myers:

The Marlboro Township Water Utility Division (MTWUD) has received your “Will Serve Letter” request for the above referenced project.

Please be aware, the MTWUD does not issue “Will Serve Letters”, however, there is an 8-inch water main located in Falson Lane and an 8-inch water main in Texas Road in close proximity to the property. Please submit an application (available on the Township website) for water service as described in the MTWUD Rules and Regulations; this includes a three phase application process (Preliminary, Tentative, and Final reviews).

After the MTWUD completes its review and issues Final Approval, capacity in the water system will be reserved for the project and the applicant will be required to install all water infrastructure required to service the project.

If you should have any questions or require additional information, please do not hesitate to contact this office.

Very truly yours,
CME Associates

Joseph N. Gemmell, P.E.
Office of the Township Engineer

JNG:

cc: Jonathan Capp, Business Administrator
Robert Miller, Superintendent of Public Works
Kurt Eifert P.E. – Water Utility Division Engineering Projects Manager
Rachel Seliber – Community Development
Laura Neumann P.E. – CME Associates

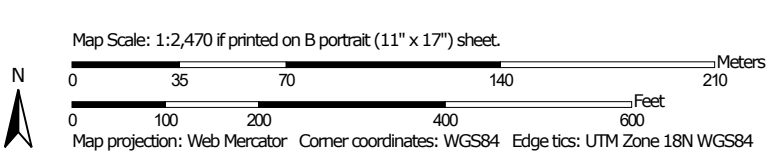
F:\WPROCK-Q\Marlboro Township\PMR00016.20 - 2020 Water Utility Services\Water Connection Requests\20_0810_Myers_JNG_Response to Will Serve Request - B 146, L 25-26, B 119, L 16.docx

P. NRCS HYDROLOGICAL SOIL GROUP

Soil Map—Monmouth County, New Jersey
(Ashbel Soils Map)



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Monmouth County, New Jersey
Survey Area Data: Version 14, Jun 1, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 29, 2019—Jul 16, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AtsA	Atsion sand, 0 to 2 percent slopes, Northern Coastal Plain	2.6	6.2%
EkaAr	Elkton loam, 0 to 2 percent slopes, rarely flooded	12.6	29.8%
KkgB	Klej loamy sand, 0 to 5 percent slopes	4.4	10.5%
KkgkB	Klej loamy sand, clayey substratum, 0 to 5 percent slopes	1.9	4.6%
MakAt	Manahawkin muck, 0 to 2 percent slopes, frequently flooded	19.7	46.7%
PHG	Pits, sand and gravel	0.9	2.1%
Totals for Area of Interest		42.2	100.0%

**Q. BOUNDARY & TOPOGRAPHIC SURVEY
PREPARED BY DYNAMIC SURVEY, LLC, DATED
JULY 30, 2020, LAST REVISED NOVEMBER 2, 2020**

**R. WMUA RESOLUTION FOR WQMP DATED
MARCH 24, 2020**

**RESOLUTION CONSENTING TO A PROPOSED WATER QUALITY
MANAGEMENT (WQM) PLAN AMENDMENT FOR THE INCLUSION OF
VARIOUS PROPERTIES IN MARLBORO TOWNSHIP
BLOCK 119, LOT 16 AND BLOCK 146, LOTS 25 AND 26**

WHEREAS, the Commissioners of the Western Monmouth Utilities Authority desire to provide for the orderly development of wastewater facilities within the Township of Marlboro; and

WHEREAS, the Township of Marlboro entered into a settlement agreement dated April 10, 2019 with various builders' remedy plaintiffs, including Ashbel Associates, LLC and Pallu Associates, LLC, which settlement agreements were approved by court order entered on May 14, 2019 and April 30, 2019; and

WHEREAS, said settlement agreement discusses, among other things, providing sanitary sewer service for various properties with the Township of Marlboro; and

WHEREAS, the Township of Marlboro approved via resolution #2019-348, their support of including various properties into a sewer service area; and

WHEREAS, the New Jersey Department of Environmental Protection (NJDEP) requires that proposed wastewater treatment and conveyance facilities and wastewater treatment service areas, as well as related subjects, be in conformance with an approved WQM plan; and

WHEREAS, the NJDEP has established the WQM plan amendment procedure as the method of incorporating unplanned facilities into a WQM plan; and

WHEREAS there is an area designated as the Bayshore Regional Sewerage Authority Sewer Service Area located within the Township of Marlboro, and

WHEREAS, the Western Monmouth Utilities Authority owns and operates the sanitary sewer collection system located within said area of the Bayshore Regional Sewerage Authority Sewer Service Area located within the Township of Marlboro

WHEREAS Block 146, Lots 25 and 26 and Block 119, Lot 16 is located adjacent to the Bayshore Regional Sewerage Authority Sewer Service Area and currently not in the sewer service area of the Bayshore Regional Sewerage , and

WHEREAS the Township of Marlboro supports this amendment to the Monmouth County Water Quality Management Plan, to specifically include Block 146, Lots 25 and 26 and Block 119, Lot 16 into the sewer service area.

NOW THEREFORE, BE IT RESOLVED on this 24th, day of March, 2020, by the governing body, the Commissioners of the Western Monmouth Utilities Authority that:

1. The Commissioners of the Western Monmouth Utilities Authority hereby consent to the amendment as proposed by Marlboro Township, for the purpose of its incorporation into the Bayshore Regional Sewerage Authority Sewer Service Area of the Monmouth County WQM plan.
2. This consent shall be submitted to: Marlboro Township, Monmouth County and the NJDEP in accordance with N.J.A.C. 7:15-3.4.

DATE: MARCH 24, 2020

<u>Commissioner</u>	<u>Motion</u>		<u>Recorded Vote</u>			
	<u>1st</u>	<u>2nd</u>	<u>Aye</u>	<u>Nay</u>	<u>Abstain</u>	<u>Absent</u>
McENERY		X	X			
MENDEZ			X			
ROSEN	X		X			
PERNICE			X			

**S. REPORT OF GEOTECHNICAL AND STORMWATER
BASIN AREA INVESTIGATION PREPARED BY
DYNAMIC EARTH, LLC DATED NOVEMBER 12, 2020
(SEPARATE COVER)**

**T. STORMWATER MANAGEMENT, GROUNDWATER
RECHARGE & WATER QUALITY ANALYSIS
PREPARED BY DYNAMIC ENGINEERING
CONSULTANTS, PC DATED JANUARY 2021
(SEPARATE COVER)**

**U. PRELIMINARY AND FINAL SITE PLANS
PREPARED BY DYNAMIC ENGINEERING
CONSULTANTS, PC DATED JANUARY 20, 2021**