

ENVIRONMENTAL IMPACT STATEMENT

For

*BPS Development Company, LLC
Proposed Assisted Living & Memory Care Facility*

*Hartwick Drive & Village Drive
Block 28003, Lot 211
Montgomery Township, Somerset County, New Jersey*

Prepared by:



**DYNAMIC
ENGINEERING**

1904 Main Street
Lake Como, NJ 07719
(732) 974-0198

A handwritten signature in blue ink, appearing to read 'Jeffrey S. Haberman', is written over a horizontal line. The signature is fluid and cursive.

Jeffrey S. Haberman, PE
NJ Professional Engineer License #53560

December 2022
DEC# 4496-22-01857

TABLE OF CONTENTS

A.	Project Description	1
B.	Site Description and Inventory	2
1)	Types of Soils	2
2)	Topography	2
3)	Geology	3
4)	Vegetation	3
5)	Wildlife	3
6)	Subsurface Water	3
7)	Distinctive Scenic and/or Historic Features	4
8)	Existing Development Features	4
9)	Miscellaneous	4
C.	Impact During and After Construction	4
1)	Soil Erosion and Sedimentation Resulting from Surface Runoff	4
2)	Flooding and Flood Plain Distribution	5
3)	Degradation of Surface Water Quality	5
4)	Ground Water Pollution	5
5)	Reduction of Ground Water Capabilities	5
6)	Sewage Disposal	6
7)	Solid Waste Disposal	6
8)	Vegetation Destruction	6
9)	Wildlife	7
10)	Destruction or Degradation of Scenic and Historic Features	7
11)	Air Quality Degradation	7
12)	Noise Levels	7
13)	Energy Utilization	8
D.	Environmental Performance Controls	8
E.	Licenses, Permits and Other Approvals Required by Law	9
F.	Documentation	9

APPENDIX

- Tax Map
- Zoning Map
- USGS Map
- FEMA Flood Insurance Rate (FIRM) Map
- NRCS Soils Survey Map
- NJDEP GeoWeb – Aerial Photo Map
- NJDEP GeoWeb – Bedrock Geology Map
- NJDEP GeoWeb – Historic Areas Map
- NJDEP GeoWeb – Landscape Region Map
- NJDEP GeoWeb – Landscape Species Map
- NJDEP GeoWeb – State Plan Centers Map
- NJDEP GeoWeb – State Planning Area Map
- NJDEP GeoWeb – Streams Map
- NJDEP GeoWeb – Sub-Watershed (HUC) 14 Map
- NJDEP GeoWeb – Surface Water Quality Map
- NJDEP GeoWeb – Well Head Protection Area Map
- NJDEP GeoWeb – Wetlands Map
- Preliminary Environmental Constraints Investigation
- Utility Will Serve Letters
- Report of Preliminary Geotechnical & Stormwater Basin Investigation (Under Separate Cover)
- Township of Montgomery Ordinance, Section §16-8.4.c

A. Project Description

This Environmental Impact Statement has been prepared in accordance with the requirements of the Township of Montgomery Environmental Impact Statement Ordinance, Section (§16-8.4.c) in support of the Preliminary and Final Major Site Plan Application for the proposed development on Block 28003 in Lot 211, as shown on Township of Montgomery Tax Map Sheet #55.02, Somerset County, New Jersey. The scope of the study includes the proposed development of the parcel with one new assisted living and memory care facility with accompanying lighting, landscaping, grading, walkways, driveways, utilities, parking, and associated items.

The purpose of this statement is to summarize, highlight or otherwise qualify, the extent of the effects that the proposed development will have on the ecological systems and the environment of the subject property and the lands of the Township of Montgomery.

The Major Site Plan drawings and associated Traffic Impact Analysis, Stormwater Management Report, Stormwater Basin Soils Investigation, and Operation & Maintenance Manual have been submitted as part of the Application package to the Township of Montgomery.

The subject site is specifically identified as Lot 211 in Block 28003, as shown on the official Tax Maps of the Township of Montgomery, Somerset County, New Jersey. The site is 4.43 acres and currently consists of undeveloped land, mostly of gravel and open space areas with a small portion being wooded. According to the Official Zoning Map of the Township of Montgomery, the property is located within the ARH (Age Restricted Housing) District. The Applicant proposes to develop the lot with an 80-unit assisted living and memory care facility, with additional improvements including lighting, landscaping, grading, walkways, driveways, utilities, parking, and other associated improvements and site amenities as shown on the accompanying Site Plan drawings.

The site is bound to the north by residential uses, to the west by Hartwick Drive with residential uses beyond, to the south by Hartwick Drive with residential uses and Georgetown-Franklin Turnpike beyond, and to the east by Village Drive and the Montgomery Crossing residential development that is currently under construction beyond.

The following represents a listing of the project's compatibility in relation to the:

- **Township Master Plan:** The property is located within the ARH (Age Restricted Housing) District. The project is consistent with the ARH zoning regulations and the Township Master Plan.
- **Montgomery Township Natural Resources Inventory:** It appears that the steep slopes on the site are a result of construction activity and the existing detention basin. According to the Montgomery Township Critical Areas Map, it does not appear that there are any other documented natural resources, including wetlands, flood hazard areas, threatened and endangered species, etc. that will be impacted by the proposed

development. Please note that a Steep Slope Analysis Plan has been prepared which is based upon a topographic survey that was conducted for this site. Portions of the critical slopes will be removed for the construction of the proposed development.

- **Master Plan of Adjacent Municipalities:** The development is consistent with the residential character of the surrounding lots and similar uses on the CR 518 roadway corridor in surrounding Municipalities. Therefore, it is anticipated that the proposed development is consistent with the Master Plans of surrounding Municipalities.
- **Somerset County Master Plan:** The project is consistent with the Somerset County Master Plan regarding development along the Georgetown Franklin Turnpike (CR 518) corridor. An application will be submitted to the Somerset County Planning Board for Site Plan Approval.
- **Regional and State Planning Guides:** The proposed development meets its fair share obligation through a share of affordable housing units within the facility

B. Site Description and Inventory

1) Types of Soils

Based on a review of the NRCS Web Soil Survey, the soil types native to the site include:

SOIL TYPE	SOIL TYPE NAME	HYDROLOGIC SOIL GROUP
BhnB	Birdsboro silt loam, 2 to 6 percent slopes	B
RoyB	Royce silt loam, 2 to 5 percent slopes	C

**Dynamic Earth, LLC performed numerous test pits within the site to establish seasonal high groundwater table characteristics and percolation tests were conducted for on-site soils to confirm soil classification per the County Soil Survey. The soils encountered during the site investigation consisted of clayey silt, and groundwater and evidence of seasonal high water table were not encountered in test pits. Therefore, it is anticipated that on-site soils will generate permeability readings that are characteristic of a ‘D’ soil rating. For the purposes of this study, on-site disturbed soils are assumed to have a ‘D’ soil classification and therefore are unable to infiltrate stormwater runoff. Supplemental test pit location maps and permeability test results will be provided under separate cover for justification.

2) Topography

In existing conditions, the slopes generally range from flat to moderate with elevations ranging from 130 feet mse near the southerly property line to 104 mse near the northeastern property line. Pursuant to the Montgomery Township Critical Areas Map, areas of critical slope (>15%) were not identified on-site, however, the recent survey shows areas with slopes >15% which were a result of previous construction activity and the existing detention basin.

3) Geology

The subject site is situated within the Piedmont physiographic province of New Jersey, characterized by a low rolling plain dissected by higher ridges. Specifically, the site is underlain by the Lower Jurassic/Upper Triassic-aged Passaic Formation which consists, primarily, of red beds of argillaceous siltstone, mudstone, and sandstone. The overburden soils include natural Pennsauken Formation deposits as well as residual deposits that were formed from the weathering of the parent rock.

4) Vegetation

In existing conditions, a majority of the subject property consists of primarily of gravel and open space, with a small portion being wooded area. The Demolition and Steep Slopes Analysis Plan depicting the sizes of trees to be preserved or removed have been prepared and is provided within the Preliminary and Final Major Site Plan drawings, as submitted under separate cover.

5) Wildlife

As previously stated, the existing site primarily consists of undeveloped gravel and open space with some wooded area. Per NJDEP GeoWeb Mapping, it does not appear that any unique habitats of endangered or protected species are located on the subject site. Existing vegetation and wildlife are typical of a New Jersey suburban condition and will relocate to surrounding wooded areas.

6) Subsurface Water

Per NJDEP GeoWeb mapping, there is an uncoded tributary stream to the northeast of the subject parcel. However, there is the intervening "Hillside at Montgomery" development to the north of the parcel which has already established a conservation easement for the stream and will not be impacted by this development.

An NJDEP Letter of Interpretation: Presence/Absence Determination is pending to confirm that there are no wetlands on-site. Please note that a Preliminary Environmental Constraints Investigation was performed which concluded that there are no wetlands on site. A copy of the same can be found in the Appendix of this Report.

Pursuant to the Report of Preliminary Geotechnical and Stormwater Basin Investigation provided under separate cover, groundwater or evidence of seasonal high groundwater was not encountered. Groundwater control is preliminarily expected to include temporary control of trapped and/or perched groundwater. Groundwater levels are expected to fluctuate seasonally and following periods of significant precipitation. A summary of the seasonal high groundwater

levels and permeability testing are presented in the Report of Preliminary Geotechnical and Stormwater Basin Investigation.

Per the FEMA Flood Insurance Rate Map (FIRM), the subject site is not located within a Flood Hazard Area.

7) Distinctive Scenic and/or Historic Features

Per NJDEP GeoWeb Mapping and the Montgomery Township Mapping Database, it does not appear that there are any distinctive scenic or historic features within the vicinity of the subject site.

8) Existing Development Features

The subject parcel currently consists of an undeveloped lot. Per historical photographs, it appears that the lot was partially cleared in 2008 to allow for the construction of the existing stormwater basin, and then again around 2015 to its current state.

9) Miscellaneous

The subject parcel consists of undeveloped gravel and open space. Therefore, the site has little to no adverse impact to existing air quality. Existing air quality surrounding the site is typical of a New Jersey suburban setting. There are existing hazardous air pollutants (HAP's) which come from cars, heavy duty trucks, buses and other highway vehicles from the surrounding roadway network. These vehicles may produce diesel particulate matter, diesel exhaust and/or carbon monoxide. There are known health standards associated with these pollutants.

Being that there is currently no existing use on the lot, there is no noise generated by the existing use.

C. Impact During and After Construction

1) Soil Erosion and Sedimentation Resulting from Surface Runoff

There will be an unavoidable increase in sedimentation and siltation as a result of construction activities. The proposed development, however, has been designed in accordance with the 2014 Standards for Soil Erosion and Sediment Control in New Jersey in order to mitigate any impacts of sedimentation and siltation resulting from surface runoff as much as possible. Moreover, proposed grading has been designed to match existing drainage patterns.

In addition, the development proposes one (1) small scale bioretention basin to collect stormwater runoff and sedimentation from a majority of the parcel. The basin will be regularly maintained to remove excess sedimentation. The proposed basin discharges to the existing stormwater facility to the north which is a stabilized discharge point.

2) Flooding and Flood Plain Distribution

This project consists of more than one acre of land disturbance, and therefore, it qualifies as a “major” development per NJAC 7:8. The development has been designed to meet the water quantity and water quality requirements set forth in N.J.A.C. 7:8 by utilizing one (1) small scale bioretention basin. Please refer to the Stormwater Management Report, submitted under separate cover, for detailed calculations.

Per the FEMA Flood Insurance Rate Map (FIRM), the subject site is not located within a Flood Hazard Area.

3) Degradation of Surface Water Quality

Per NJDEP GeoWeb mapping, there is an uncoded tributary stream to the northeast of the subject parcel. However, there is the intervening “Hillside at Montgomery” development to the north of the parcel which has already established a conservation easement for the stream and will not be impacted by this development.

Furthermore, the development proposes one (1) bioretention basin that has been designed to drain within 72 hours. According to the standards set forth by the NJ Stormwater Best Management Practices, the proposed bioretention basin produces a TSS Removal Rate of 80%, therefore satisfying the water quality standards set forth by NJAC 7:8.

4) Ground Water Pollution

The proposed development proposes one (1) bioretention basin that has been designed to drain within 72 hours. According to the standards set forth by the NJ Stormwater Best Management Practices, the proposed bioretention basin produces a TSS Removal Rate of 80%, therefore satisfying the water quality standards set forth by NJAC 7:8. In addition, there are no areas of high pollutant area loading or hazardous waste that will be generated by residents of the proposed development.

5) Reduction of Ground Water Capabilities

Dynamic Earth, LLC performed numerous test pits within the site to establish seasonal high groundwater table characteristics and percolation tests were conducted for on-site soils to confirm soil classification per the County Soil Survey. The soils encountered during the site investigation consisted of clayey silt, and groundwater and evidence of seasonal high-water table were not encountered in test pits. Therefore, it is anticipated that on-site soils will generate permeability readings that are characteristic of a ‘D’ soil rating. For the purposes of the stormwater management design,

on-site disturbed soils are assumed to have a 'D' soil classification and therefore are unable to infiltrate stormwater runoff. Therefore, due to the assumption of a lack of infiltration in existing conditions, it is assumed that groundwater capabilities will not be altered by the proposed development. Supplemental test pit location maps and permeability test results are provided under separate cover.

6) Sewage Disposal

The subject parcel is within a sanitary sewer service area. In existing conditions, sanitary sewer service was not provided on site. There is public sanitary sewer infrastructure within Hartwick Drive in the immediate vicinity of the project site.

A Treatment Works Approval was previously granted for the sanitary sewer system that was designed and constructed for the "Hillside at Montgomery" development to the north of the parcel. The existing sanitary sewer collection systems are under the ownership of the Township of Montgomery Department of Public Works.

The development proposes 6 inch SDR-35 PVC sanitary sewer lateral which conveys sewerage from the facility to the existing main within Hartwick Drive. The proposed sewerage facilities will comply with State and Municipal Health Regulations and will be treated by the Skillman Village Wastewater Treatment Plant. The treatment plant is expected to have the capacity to handle the additional generated wastewater from the proposed development.

It is anticipated that the downstream sanitary sewer mains will have the capacity to handle the additional generated wastewater from the proposed development. In addition, the existing pump stations that are downstream of the proposed development were constructed with additional capacity for development on this subject parcel. If required, the pump station will be upgraded to accommodate the additional wastewater that is generated. Please refer to the Water and Sewer Engineer's Report for additional information and calculations.

Upon approval from the Township, our office will submit a formal application for a Treatment Works Approval to the NJDEP to ensure the proposed sewer disposal facilities are in compliance with State Regulations.

7) Solid Waste Disposal

The project proposes an exterior trash enclosure for recycling/garbage and a private hauler will be contracted regularly to pick up trash. It is not anticipated that the facility will produce hazardous waste.

8) Vegetation Destruction

In existing conditions, a majority of the site consists of gravel, open space, and wooded area. As such, there will be an unavoidable impact due to the removal of trees and underbrush throughout the parcel. However, existing trees will be preserved to the maximum extent feasible.

In addition to preserving existing trees where feasible, the development proposes an abundance of new trees, shrubs, and groundcover plantings. The landscaping design has been prepared to provide an 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 Montgomery Ordinance requirements.

9) Wildlife

It is anticipated that any local species impacted by the removal of vegetation and the construction and the operation of the facility will relocate to surrounding areas. Therefore, it is anticipated that the proposed development will not have an adverse effect on wildlife within the vicinity of the parcel.

Furthermore, it is important to note that per NJDEP GeoWeb Mapping, it does not appear that any unique habitats of endangered or protected species are located on the subject site. Existing vegetation and wildlife are typical of a New Jersey suburban condition

10) Destruction or Degradation of Scenic and Historic Features

Per NJDEP GeoWeb Mapping, it does not appear that there are any scenic or historic resources within the vicinity of the subject site.

11) Air Quality Degradation

The development will impose negligible air quality impacts for the additional traffic generated along the US Route 206 and Georgetown Franklin Turnpike (CR 518) corridors. There may be some temporary airborne dust particulates associated with the construction process but these conditions will be localized and will dissipate with the stoppage of each workday. Dust will be controlled through daily watering of the construction entrance/exits and circulation aisles and cleaning of the streets in close proximity to same, as necessary.

12) Noise Levels

There will be an unavoidable increase in noise generated by construction equipment. However, this effect is mitigated once construction is complete.

In comparison to the existing commercial and residential uses surrounding the parcel, any impacts on ambient noise levels due to the proposed improvements would be negligible. Therefore, the noise generated by the proposed development will not adversely impact the quality of life on the site or in close proximity thereof.

13) Energy Utilization

There will be an unavoidable increase in energy utilization during and following construction activities. Vehicles and equipment will utilize energy during construction, and following construction, the proposed facility and associated residents and employees will utilize the energy of a typical assisted living facility.

The proposed lighting design for the development will be an LED specification which is an energy-efficient type of fixture.

Additionally, all of the development will take part in recycling of those materials accepted for the Township of Montgomery.

D. Environmental Performance Controls

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, 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 Hartwick Drive will reduce the amount of soil being brought off-site.
- One (1) small scale bioretention system will be utilized to collect runoff from a majority of the site improvements. The basin has been designed to detain stormwater runoff in order to reduce the peak flow runoff rates for the 2, 10 and 100 year storm frequencies for the subject parcel in accordance with NJAC 7:8, thereby providing a benefit to the site's drainage conditions and surrounding uses. Furthermore, the bioretention basin has been designed in accordance with the BMP Manual, therefore it provides a TSS Removal Rate of 80%, satisfying the water quality standards set forth by NJAC 7:8. Stormwater from the bioretention basin is discharged to the existing basin to the northeast in order to maintain existing drainage patterns.
- The proposed development will connect to the existing sanitary sewer collection system within the "Hillside at Montgomery" development. The development proposes sanitary sewer laterals which convey sewerage from the proposed development to the existing main within Hartwick Drive. Sewerage from this point will ultimately be conveyed through the existing sewer system in the Hillside development to the Skillman Village Wastewater Treatment Plant for treatment. Furthermore, please refer to the Sanitary Sewer Engineer's Report for additional information and calculations. Our office will submit a formal application for a Treatment Works

Approval to the NJDEP to ensure the proposed sewer disposal facilities are in compliance with State Regulations.

- The water service connection will provide a meter pit in accordance with New Jersey American Water standards and specifications. The subject development proposes the installation of one (1) fire hydrant located within the northwest portion of the site in accordance with Montgomery Township Fire Department. The fire hydrant will be serviced by an 8” water service lateral. Please refer to the Potable Water Engineer’s Report for additional information and calculations.
- Construction is anticipated to take place during normal business hours in order to avoid noise levels during non-business hours.
- Every reasonable effort will be made to protect the existing natural environment and noise levels with the ultimate goal of providing for minimal disruption throughout the course of construction and after completion.

E. Licenses, Permits and Other Approvals Required by Law

The following represents a list of all known licenses, permits and other forms of approval required:

Township of Montgomery Planning Board	Preliminary and Final Major Site Plan Approval
Somerset County Planning Board	Site Plan Approval
Somerset Union Soil Conservation District	Soil Erosion & Sediment Control Certification
NJDEP Bureau of Water Quality	Treatment Works Approval – Sanitary Sewer Service
New Jersey American Water	Water Connection Approval
Township of Montgomery Engineering Dept.	Sanitary Sewer Approval
Delaware and Raritan Canal Commission	Site Plan Approval
Montgomery Shade Tree Commission	Site Plan Approval

F. Documentation

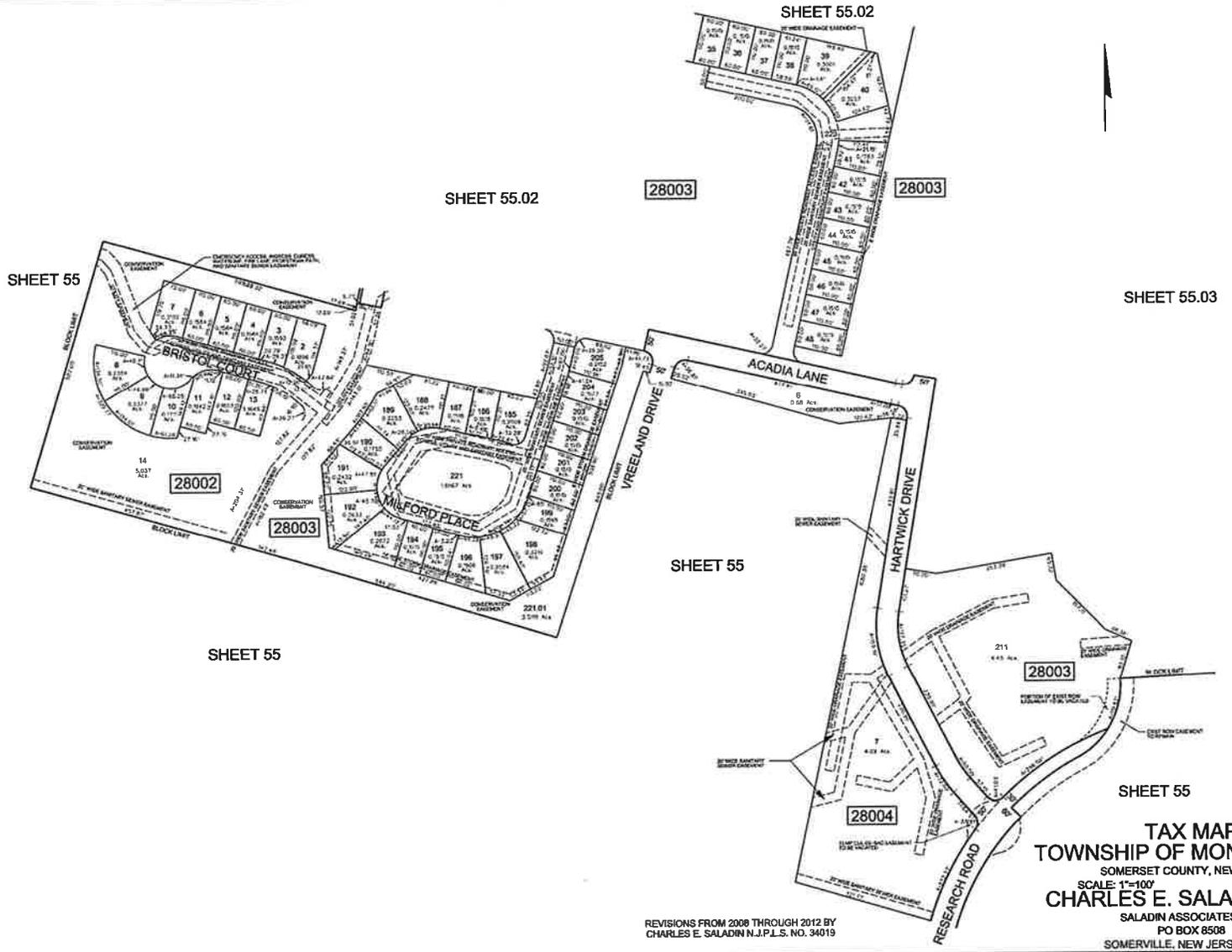
The following represents a list of documentation utilized for the compilation of this report:

- **Township of Montgomery Ordinance**
- **Township of Montgomery Tax Maps**
- **Township of Montgomery GIS Database**
- **Google Aerial Mapping**
- **NJDEP GeoWeb Mapping**

- **FEMA Flood Insurance Rate Maps (FIRM)**
- **NRCS Web Soil Survey**
- **NJDEP NJAC 7:8**
- **Preliminary Environmental Constraints Investigation**
- **ALTA/NSPS Land Title Survey**
- **Preliminary and Final Major Subdivision & Site Plan Drawings**
- **SMW Report**
- **Sewer/Water Report**

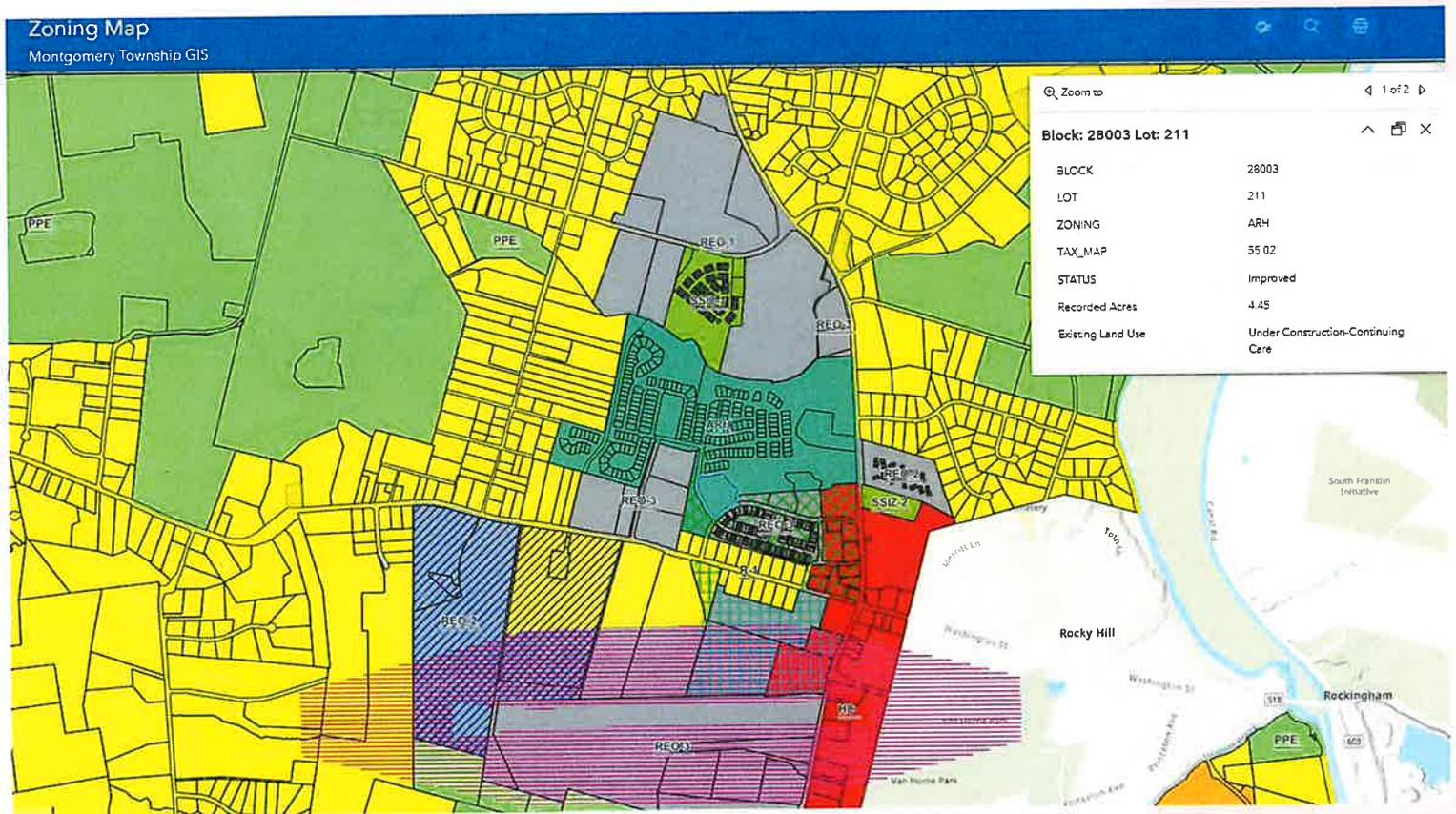
APPENDIX

TAX MAP



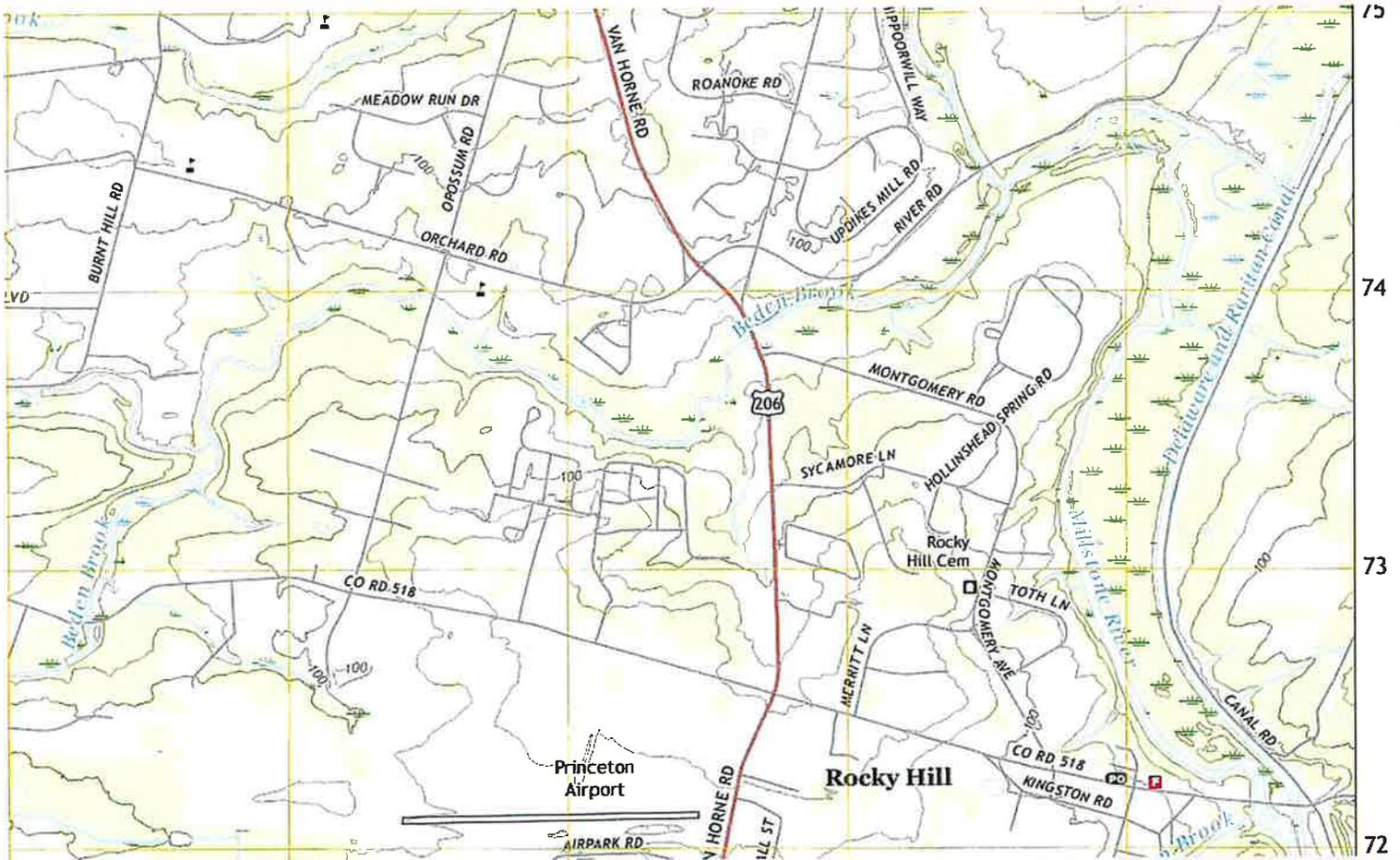
ZONING MAP

Zoning Map
Zone ARH



USGS MAP

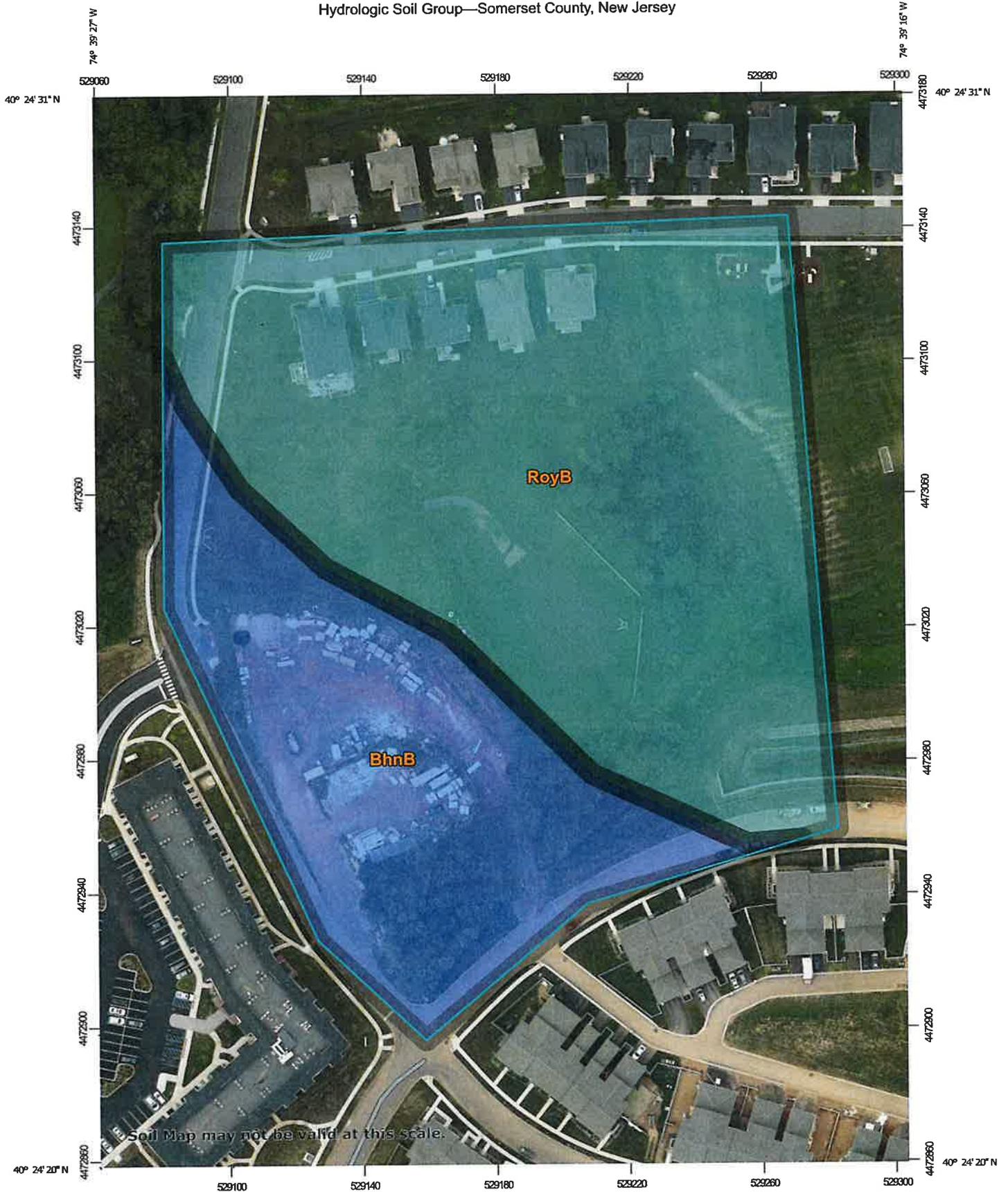
USGS Map
(Rocky Hill Quad)



FEMA FLOOD INSURANCE RATE MAP (FIRM)

NRCS SOILS SURVEY MAP

Hydrologic Soil Group—Somerset County, New Jersey



Map Scale: 1:1,560 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



Hydrologic Soil Group—Somerset County, New Jersey

MAP LEGEND

-  Area of Interest (AOI)
- Soils**
- Soil Rating Polygons**
-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available
- Soil Rating Lines**
-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available
- Soil Rating Points**
-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available
- 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: Somerset County, New Jersey
 Survey Area Data: Version 20, Aug 30, 2022

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

Date(s) aerial images were photographed: Mar 13, 2021—Sep 14, 2021

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BhnB	Birdsboro silt loam, 2 to 6 percent slopes	B	3.3	33.8%
RoyB	Royce silt loam, 2 to 6 percent slopes	C	6.4	66.2%
Totals for Area of Interest			9.6	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

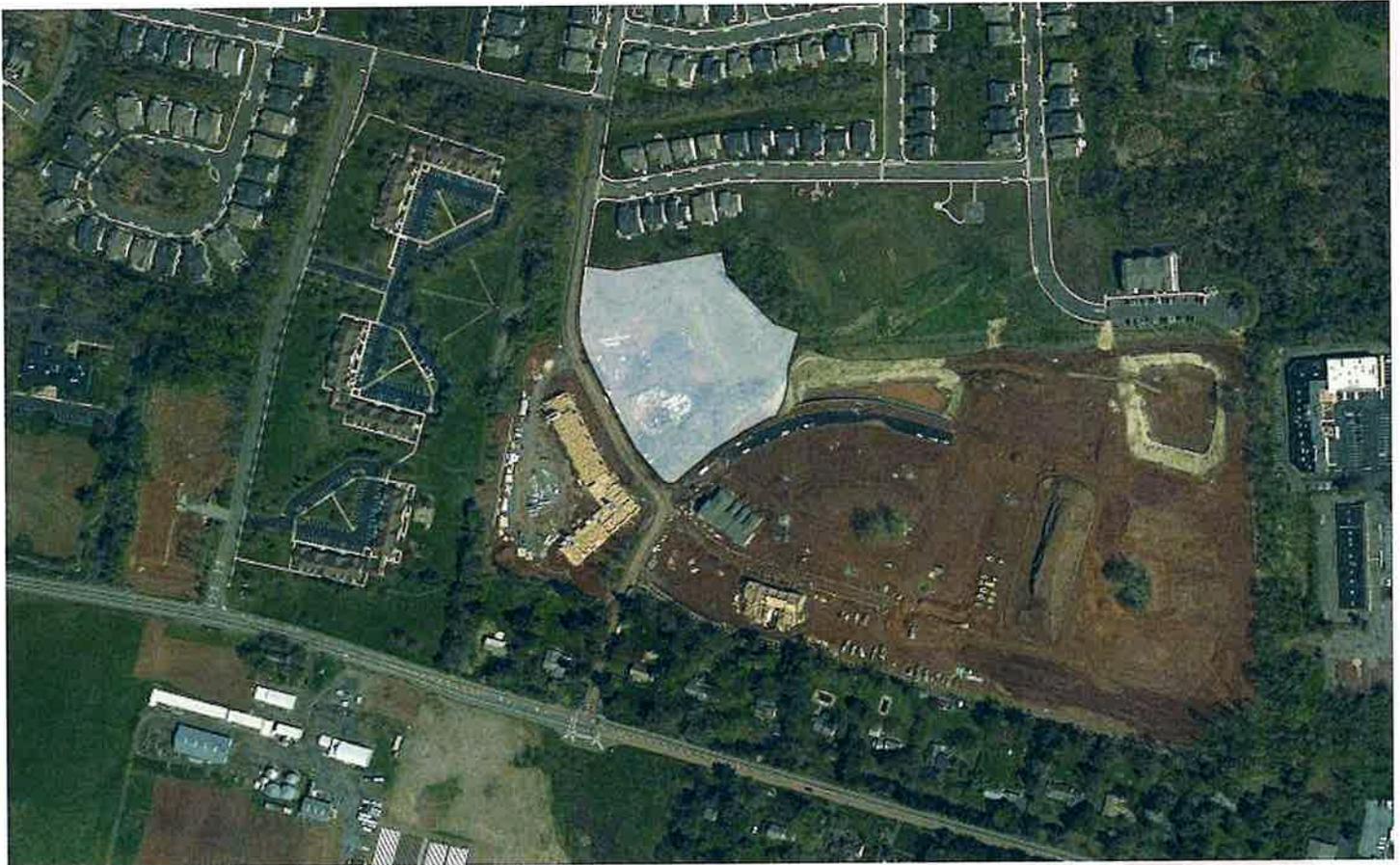
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

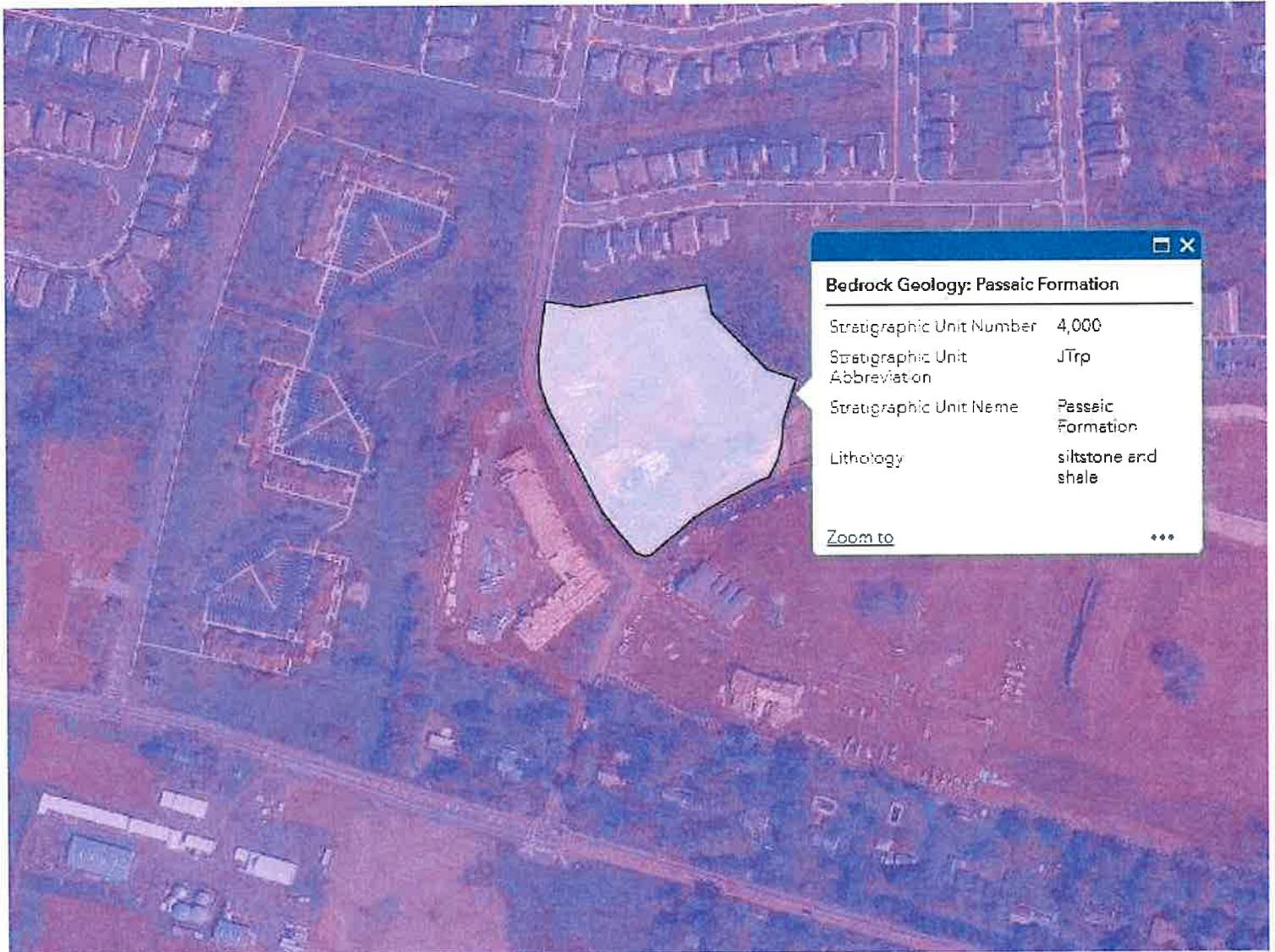
NJDEP GEOWEB – AERIAL PHOTO MAP

NJDEP Geoweb – Aerial Photo Map



NJDEP GEOWEB – BEDROCK GEOLOGY MAP

NJDEP Geoweb – Bedrock Geology



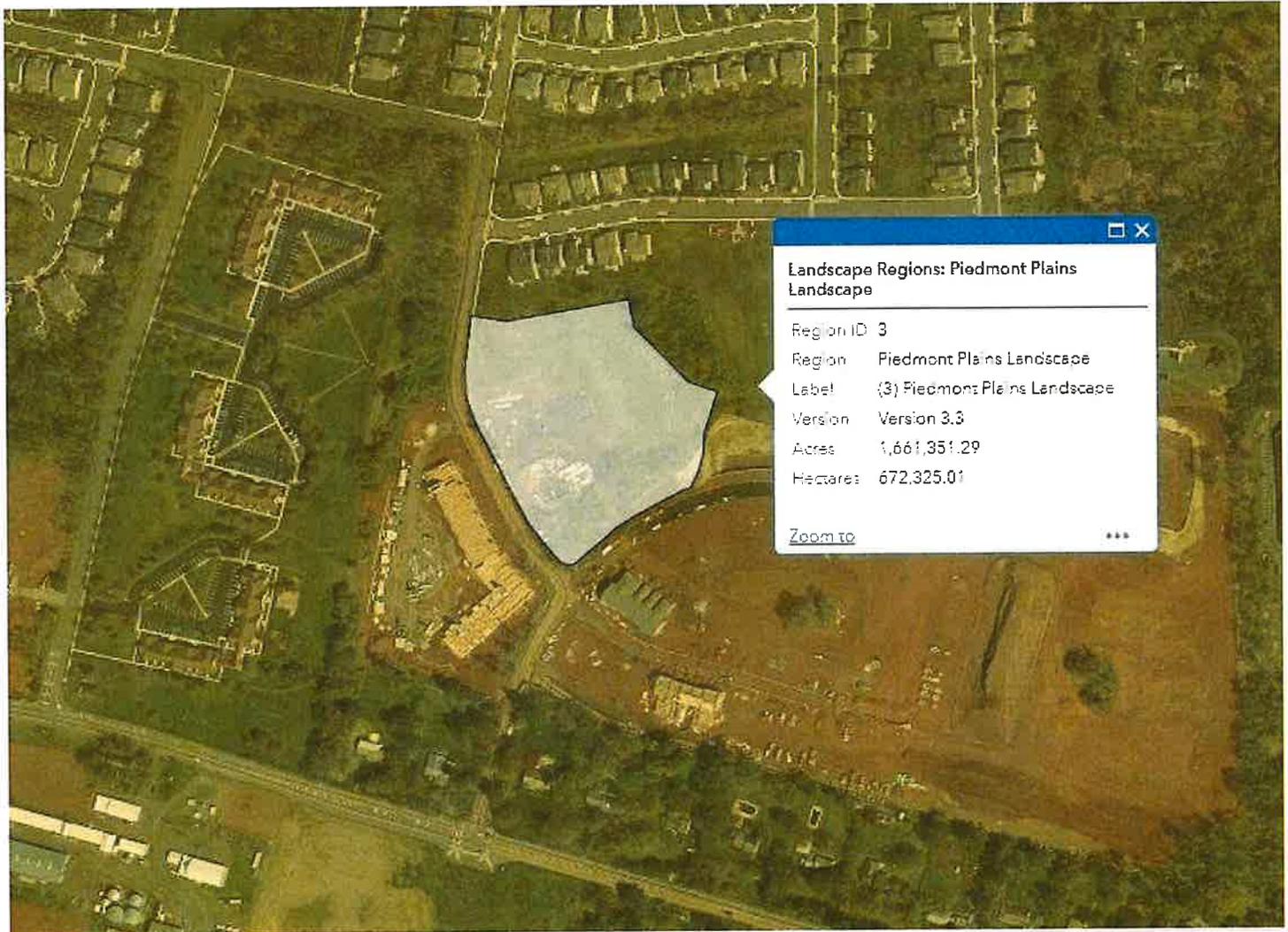
NJDEP GEOWEB – HISTORIC AREAS MAP

NJDEP Geoweb – Historic Areas



NJDEP GEOWEB – LANDSCAPE REGION MAP

NJDEP Geoweb – Landscape Region



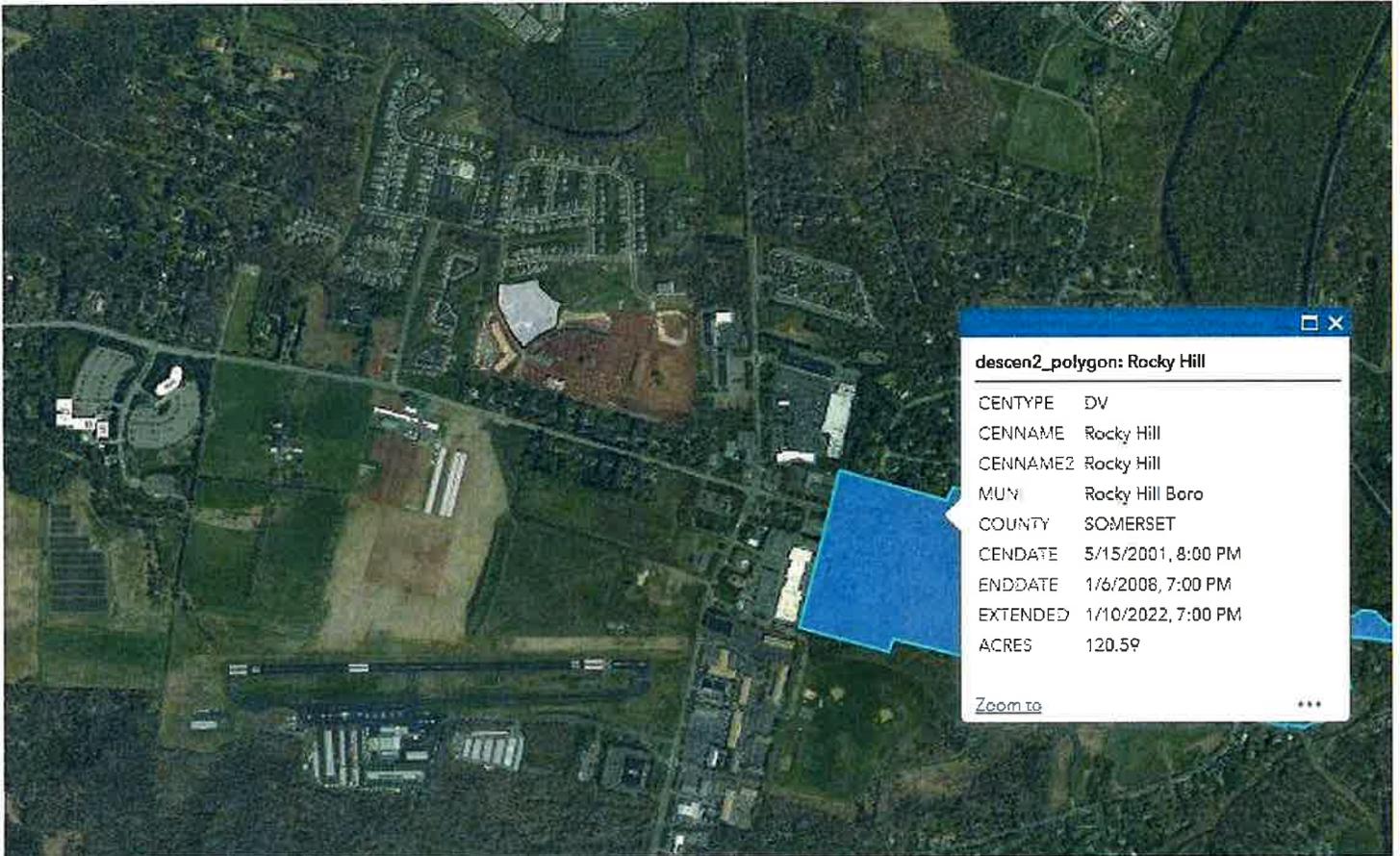
NJDEP GEOWEB – LANDSCAPE SPECIES MAP

NJDEP Geoweb – Landscape Species



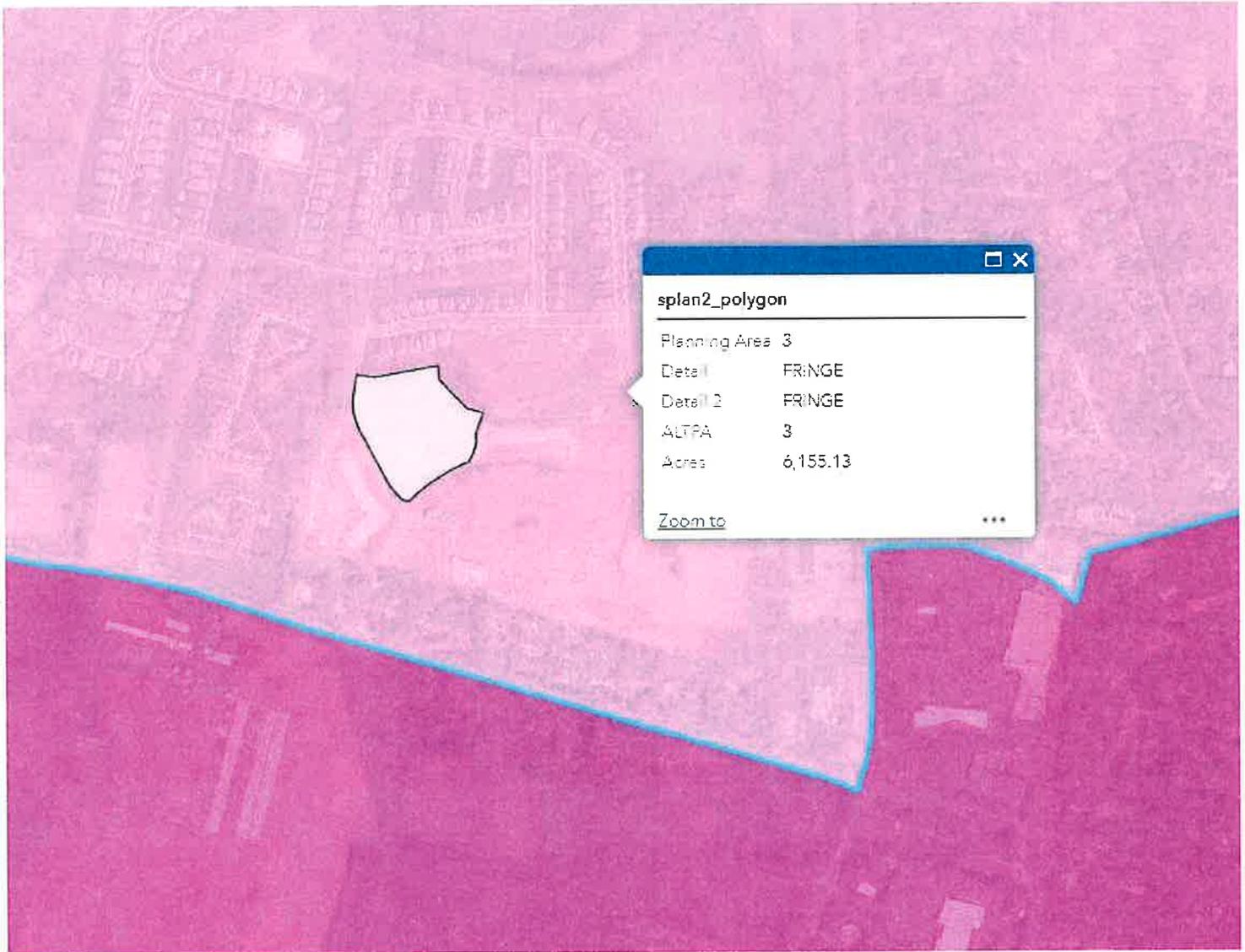
NJDEP GEOWEB – STATE PLAN CENTERS MAP

NJDEP Geoweb – State Plan Center



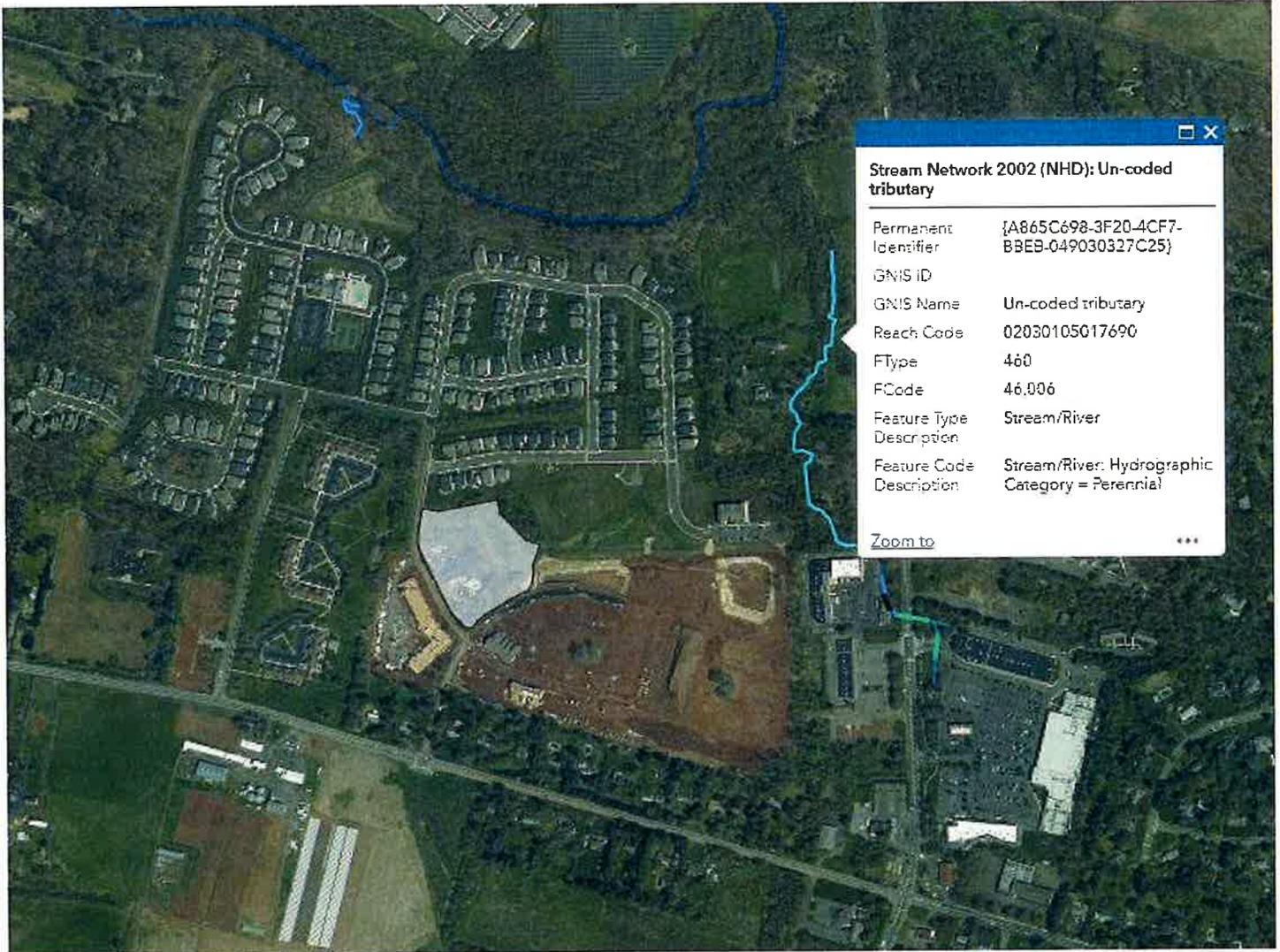
NJDEP GEOWEB – STATE PLANNING AREA MAP

NJDEP Geoweb – State Planning Area



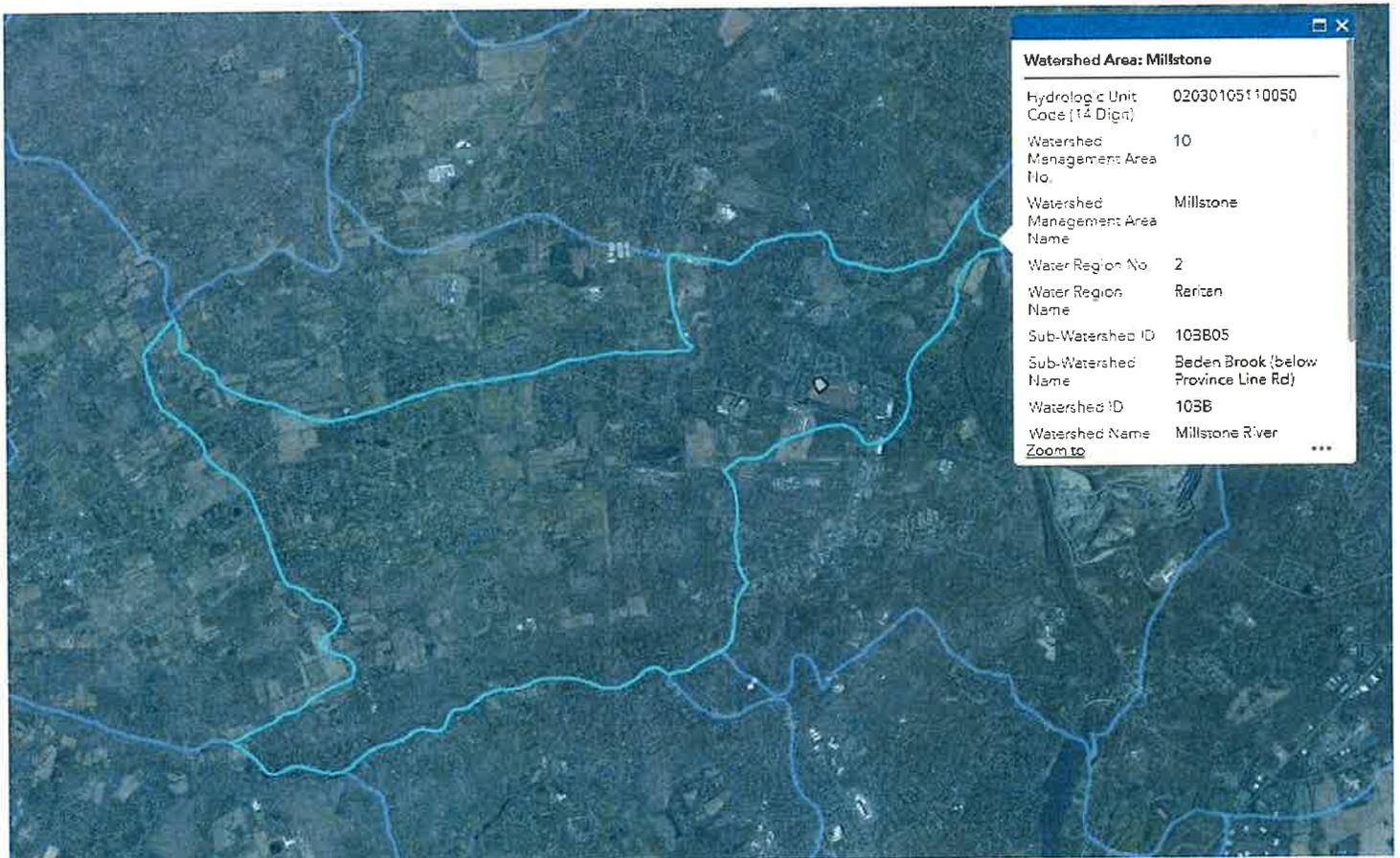
NJDEP GEOWEB – STREAMS MAP

NJDEP Geoweb – Streams



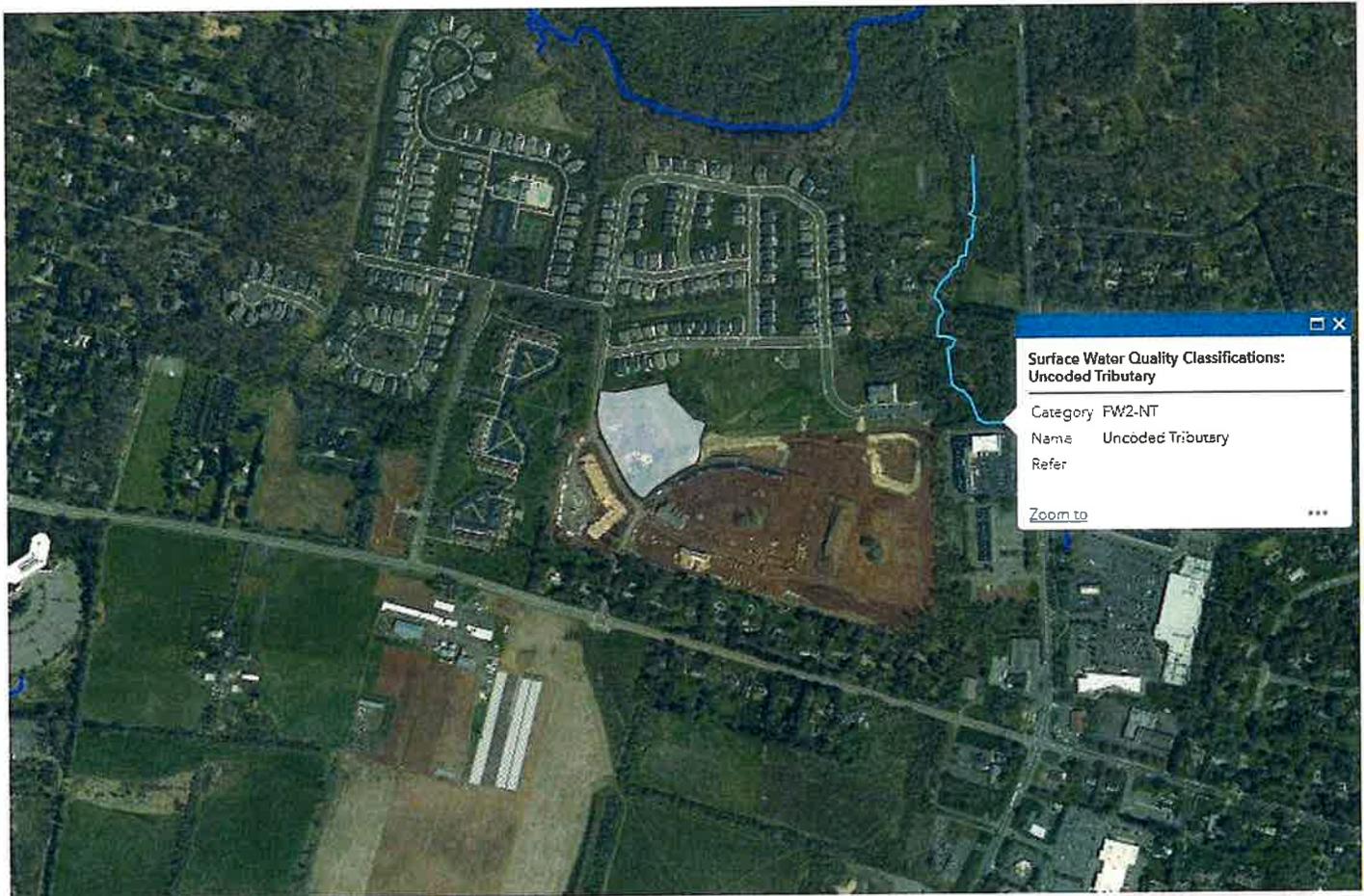
NJDEP GEOWEB – SUB-WATERSHED (HUC) 14 MAP

NJDEP Geoweb – Sub-Watershed (HUC) 14



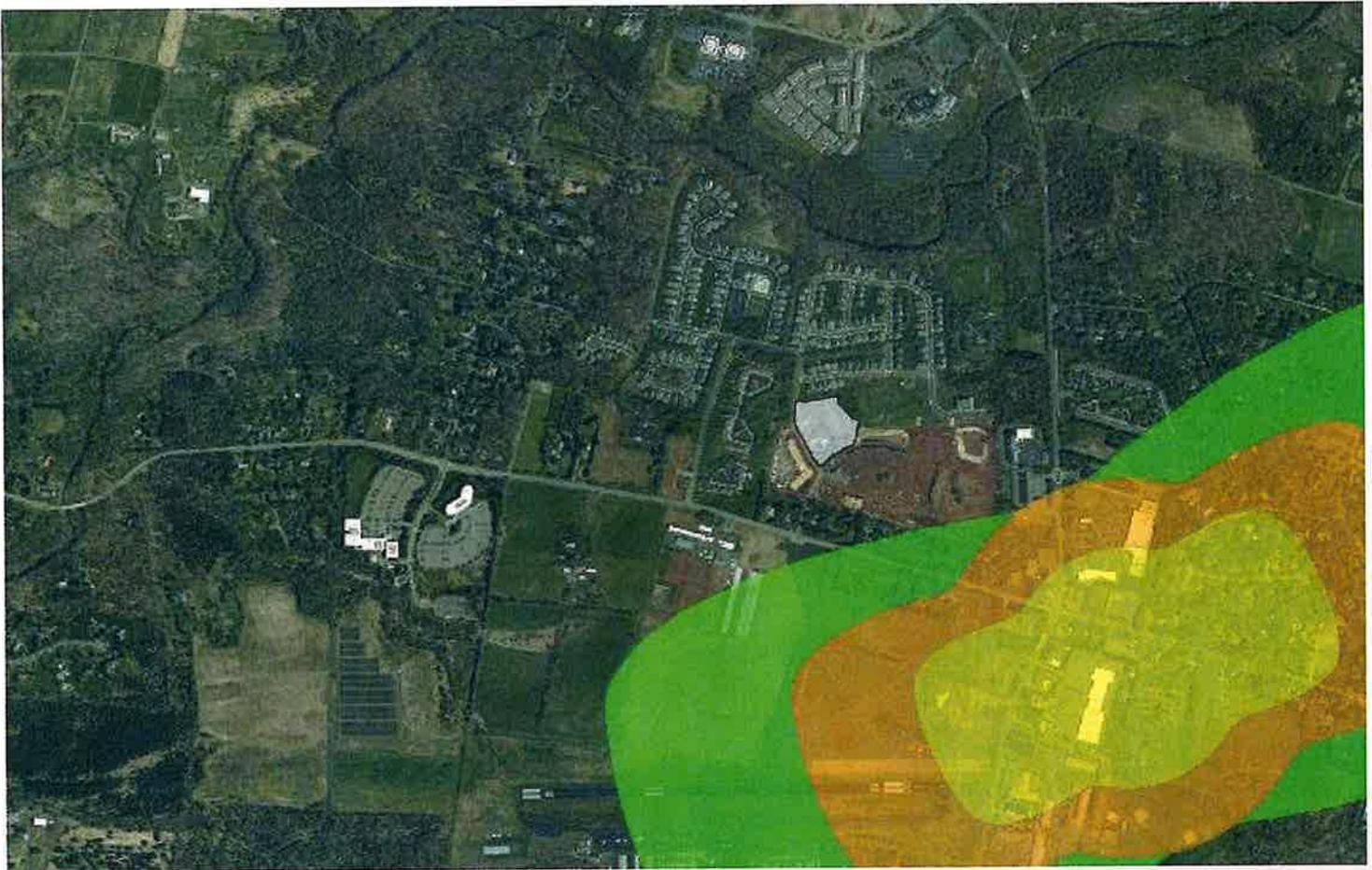
NJDEP GEOWEB – SURFACE WATER QUALITY MAP

NJDEP Geoweb – Surface Water Quality



NJDEP GEOWEB – WELL HEAD PROTECTION AREA MAP

NJDEP Geoweb – Well Head Protection Area



NJDEP GEOWEB – WETLANDS MAP

NJDEP Geoweb – Wetlands



**PRELIMINARY ENVIRONMENTAL CONSTRAINTS
INVESTIGATION**



D1027.380
October 31, 2022

Alec Farrell
Dynamic Engineering
1904 Main Street
Lake Como, NJ 07719

**Re: Preliminary Environmental Constraints Investigation
East Hartwick Drive
Block 28003 * Lot 211
Montgomery Township, Somerset County, New Jersey**

Dear Mr. Farrell:

As per your request, our office has inspected the aforementioned property for wetlands and environmental constraints due to the proximity of wetlands. The site consists of approximately 4.4 acres and contains approximately 100 feet of frontage along Hartwick Drive in Montgomery Township, Somerset County (*Figure 1: New Jersey Road Map*). It can be found on the SE Rocky Hill NJ United States Geological Survey (USGS) Quadrangle with NAD 1983 state plane coordinates (feet) of E(x) 448,626 and N(y) 573,290 at the approximate center of the site (refer to *Figure 2: SE Rocky Hill NJ U.S.G.S Quadrangle Map*).

Property boundaries were not observed, only estimated in the field. The New Jersey Department of Environmental Protection (NJDEP) Freshwater Wetland Geographic Information Systems (GIS) digital mapping does not depict freshwater wetlands on site (Refer to *Figure 3: NJDEP Freshwater Wetlands Map*). As the NJDEP GIS digital mappings are not ground-truthed, rather an approximation of the location and extent of wetlands, the property was investigated for the presence or absence of wetlands by our firm on October 27, 2022. Based upon the site inspection, it is concluded that wetland mappings presented by the NJDEP are accurate and the property does not contain freshwater wetlands. The closest mapped wetlands are located over 580 feet to the northwest of the site. The methodology utilized to determine the presence or absence of wetland areas was the Three Parameter Approach set forth in a manual entitled *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*, published under the Federal Interagency Committee for Wetland Delineation (FICWD), 1989. This involves the evaluation of three parameters, which includes hydrology, vegetation, and soils, to determine the presence or absence, and extent if applicable, of freshwater wetlands.

Currently, the site is undeveloped and consists of recently cleared subdivision. The area surrounding the site is composed of mostly residential homes and forested land. Please refer to *Figure 4: Aerial Map* for a depiction of the land coverage present on and in the vicinity of the subject site.

Hydrology

Within wetland areas, hydrologic indicators include, but are not limited to, the direct observation of surface waters, a high water table 12-inches or less below the surface, soil saturation 12-inches or less from the soil surface, iron deposits, water-stained leaves, and water-borne drift deposits. Positive hydrologic indicators indicative of a wetland area are absent from this site. Hydrology varies with the season and amount of recent precipitation. Therefore, the hydrology criteria cannot always be a major determining factor, but it assists in the final verification of a wetland limit.



Soils

The Somerset County Soil Survey identifies two (2) soil types as underlying the subject property (Figure 5: Somerset County Soil Survey Map). Identified soils are mapped as Royce silt loam, 2 to 6 percent slopes (RoyB), and Birdsboro silt loam, 2 to 6 percent slopes (BhnB). Hydric soils are those soils that are formed under conditions of saturation, ponding or flooding long enough during the growing season to develop anaerobic conditions in the upper part. According to the USDA 2015 New Jersey Hydric Soil List, RoyB and BhnB are not listed as hydric soils. Hydric soils exhibit characteristic morphologies that result from repeated periods of saturation or inundation. Typical hydric soil indicators include low chroma colors (Munsell notations 1 and 2) combined with redoximorphic features (mottles), including iron concentrations within the soil matrix as well as along root linings. Borings throughout the site displayed matrix soils of 10 YR 4/4 Munsell notation at zero (0) to six (6) inches and 10YR 4/6 Munsell notation at six (6) to fourteen (14) inches. These soils are indicative of upland soil conditions.

Vegetation

A hydrophyte is macrophytic plant life growing in water, soil or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. The vegetation on the project site was identified and classified in accordance with the interagency 2014 National Wetland Plant List which is the list that is currently utilized for all jurisdictional wetland determinations. Plants are assigned an indicator based on the associated physiographic region; the subject site is located in the Coastal Plain region. Plant classifications listed are as follows:

Obligatory (OBL)	Almost always is a hydrophyte, rarely in uplands
Facultative Wetland (FACW)	Usually is a hydrophyte but occasionally found in uplands
Facultative (FAC)	Commonly occurs as either a hydrophyte or non-hydrophyte
Facultative Upland (FACU)	Occasionally is a hydrophyte but usually occurs in uplands
Upland (UPL)	Rarely is a hydrophyte, almost always in uplands

Within the disturbed areas of the site associated with residential dwelling species such Norway maple (*Acer platanoides*, UPL), sugar maple (*Acer saccharum*, FACU), black walnut (*Juglans nigra*, FACU), shagbark hickory (*Carya ovata*, FACU), Norway spruce (*Picea abies*, NL), and red maple (*Acer rubrum*, FAC). Understory species identified are multiflora rose (*Rosa multiflora*, FACU), and spicebush (*Lindera benzoin*, FAC). Japanese stiltgrass (*Microstegium vimineum*, FAC), white snakeroot (*Ageratina altissima*, FACU), poison ivy (*Toxicodendron radicans*, FAC), garlic mustard (*Alliaria petiolata*, FACU), Virginia creeper (*Parthenocissus quinquefolia*, FACU), and mugwort (*Artemisia vulgaris*, UPL) are herbaceous species. The underlying soils however were bright and did not display hydric soil indicators.

Flood Hazard Area Control Act Rules (N.J.A.C.7:13)

The site is not associated with any mapped or field identified regulated surface waters. The nearest mapped surface water feature is located approximately 1,200 feet east of the site. There are no field identified drainage features, swales, or ditch features that are associated with any wetlands that are connected to a surface water system. Due to the lack of waterways on and in the vicinity of the property, it is the opinion of DuBois that there are no flood hazard area or riparian buffers regulated pursuant to the Flood Hazard Area Control Act Rules (N.J.A.C.7:13) on the site.



Conclusion

Based on a detailed field investigation, it is determined that the site does not exhibit positive hydrology, hydrophytic vegetation, and/or hydric soil characteristics indicative of wetlands. The site is composed of uplands. The vicinity of the site was investigated for offsite wetlands that could have transition area buffers that could potentially come onto the site. There were not wetlands observed within the immediate vicinity of the site. It is noted that property boundaries were not observed during the field investigation, and all conclusions stated herewith are based on mapped GIS parcel boundaries. These determinations are subject to NJDEP review and verification.

DuBois recommends to obtain a Freshwater Wetlands Letter of Interpretation – Presence/Absence Determination from the NJDEP in accordance with N.J.A.C. 7:7A-3 which should result in an ‘absence’ of freshwater wetlands on the site. This wetland evaluation is preliminary and intended for initial guidance with regards to overall environmental constraints and developability of the property. This is an approximate determination and should not be utilized for any detailed concept plan preparation or site development. Attached please find figures depicting the site. Should you have any questions or require additional information, please do not hesitate to contact this office.

Sincerely,

Bryon DuBois, PWS
Sr. Biologist

FIGURES



Legend

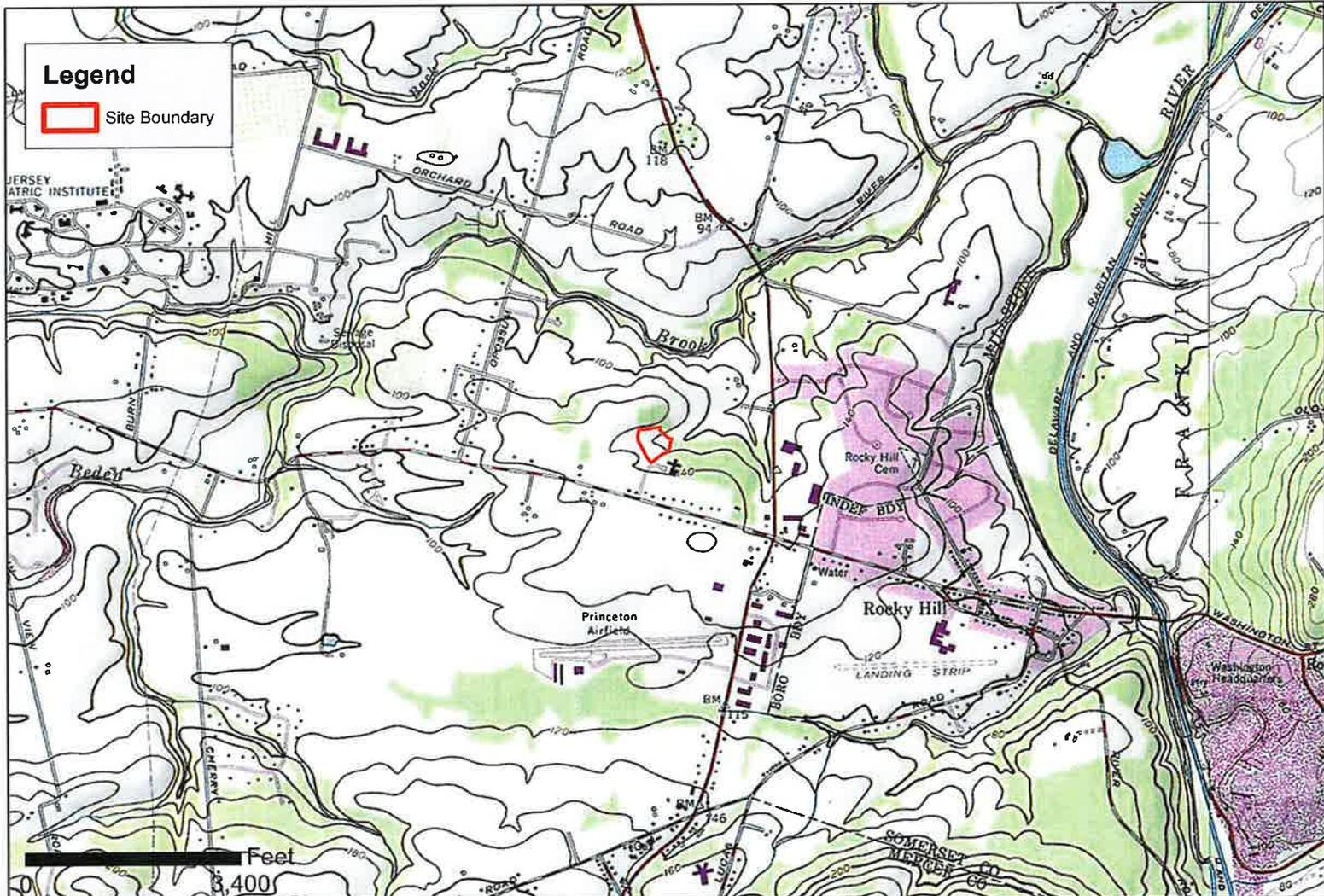
Site Boundary

0 600 Feet



New Jersey Road Map
 Block 28003 * Lot 211
 Montgomery Township, Somerset County, NJ

 NORTH <small>Sheet No. 1 of 1</small>	Job No.: D1027.380
	Scale: 1 in = 350 ft
	Date: 10/25/2022
	Drawn By: KO



Legend

Site Boundary

DuBois
& ASSOCIATES

SE Rocky Hill NJ USGS Quadrangle Map

Block 28003 * Lot 211
Montgomery Township, Somerset County, NJ

 <small>North</small>	Job No.: D1027.380
	Scale: 1 in = 2,000 ft
	Date: 10/25/2022
	Drawn By: KO



Legend

Site Boundary

Feet
600



NJDEP Freshwater Wetlands Map

Block 28003 * Lot 211
Montgomery Township, Somerset County, NJ



Sheet No. 1 of 1

Job No.: D1027.380
Scale: 1 in = 200 ft
Date: 10/25/2022
Drawn By: KO



Legend

 Site Boundary

Feet
0 300



Aerial Map

Block 28003 * Lot 211
Montgomery Township, Somerset County, NJ



NORTH

Sheet No. 1 of 1

Job No.: D1027.380

Scale: 1 in = 100 ft

Date: 10/25/2022

Drawn By: KO



Legend

 Site Boundary

0 Feet 600



Somerset County Soil Survey Map

Block 28003 * Lot 211
 Montgomery Township, Somerset County, NJ



Job No.: D1027.360
Scale: 1 in = 200 ft
Date: 10/25/2022
Sheet No. 1 of 1
Drawn By: KO

UTILITY WILL SERVE LETTERS

Public Service Electric & Gas Company

Construction Inquiry-North & South
PO Box 710 Newark, NJ 07101-0710
Phone: 800-722-0256 Fax: 908-497-1762

Will Serve Electric and Gas



DYNAMIC Engineering

09/2/2022

Allison Nevulis
1904 Main Street
Lake Como, New Jersey, 07719

Service Address

**East Hartwick Drive & Village Drive
Montgomery Twp., New Jersey, 08502**

Project Reference Number: Block 28003, Lot 211

Dear Ms. Nevulis,

Please be advised, gas and electric service can be made available for the service address above consistent with service requirements and PSE&G's tariffs for gas and electric services.

Please notify PSE&G Construction Inquiry at 800-722-0256 if you have any questions or concerns.

PSE&G appreciates the opportunity to service your energy needs and thanks you for your business.

Thank You,
Construction Inquiry
Public Service Electric & Gas Company

**REPORT OF PRELIMINARY GEOTECHNICAL &
STORMWATER BASIN INVESTIGATION
(UNDER SEPARATE COVER)**

**TOWNSHIP OF MONTGOMERY ORDINANCE
SECTION §16-8.4.C**

c. *Environmental Impact Statement.*

1. General Provisions. The impact on the environment generated by land development projects necessitates a comprehensive analysis of the variety of problems that may result and the actions that can be taken to minimize the problems. It is further recognized that the level of detail required for various types of applications will vary depending on the size of the proposal, the nature of the site, the location of the project and the information already in the possession of the Township. Therefore, having determined that some flexibility is needed in preparing the Environmental Impact Statement, the requirements for such a document pertaining to different types of development applications are listed below:
 - (a) All agricultural operations conducted in accordance with a plan approved by the Soil Conservation District and all silviculture operations conducted in accordance with a plan prepared by a professional forester are specifically exempt from the Environmental Impact Statement requirements.
 - (b) All variance applications submitted to the Board of Adjustment pursuant to N.J.S.A. 40:55D-70d shall require an Environmental Impact Statement in accordance with the requirements of this section. Any other variance applications to the Zoning Board of Adjustment shall not require an Environmental Impact Statement unless specifically requested by the Board.
 - (c) Any application for subdivision approval where ten (10) lots or less are involved and all applications for minor site plan approval, either to the Planning Board or to the Zoning Board of Adjustment, as the case may be, shall not require an Environmental Impact Statement unless specifically requested by the Board.
 - (d) All preliminary major subdivision and/or preliminary major site plan applications shall be accompanied by an Environmental Impact Statement.
2. Submission Format. When an Environmental Impact Statement is required, the applicant shall retain one (1) or more competent professionals to perform the necessary work. The qualifications and background of the professionals shall be provided, and the method of investigation shall be described. All applicable material on file in the Township pertinent to evaluation of regional impacts shall also be considered including the Township Master Plan and Natural Resources Inventory. Furthermore, as much original research as necessary shall be conducted to develop the Environmental Impact Statement. All Environmental Impact Statements shall consist of written and graphic materials which clearly present the required information utilizing the following format:
 - (a) Project Description. Indicate the purpose and scope of the proposed project. Enumerate the benefits to the public which will result from the proposed project and describe the suitability of the site for the intended use. A description of the proposed project shall be presented to indicate the extent to which the site must be altered, the kinds of facilities to be constructed and the uses intended. The resident population, working population and visitor population shall be estimated. The compatibility or incompatibility of the proposed project shall be described in relation to the following:
 - (1) Township Master Plan.
 - (2) Montgomery Township Natural Resources Inventory.
 - (3) Master Plan of Adjacent Municipalities.
 - (4) Somerset County Master Plan.
 - (5) Regional and State Planning Guides.
 - (6) Other Pertinent Planning Documents.
 - (b) Site Description and Inventory. Provide a description of environmental conditions on the site which shall include the following items:
 - (1) Types of Soils. List and describe each soil type on the site. If applicable, provide percolation data. Where the proposed area of land disturbance will involve soils

with moderate or severe limitations relative to the type of project proposed, a complete mapping of all soil types where the moderate and severe limitations exist.

- (2) Topography. Describe the topographic conditions on the site.
 - (3) Geology. Describe the geologic formations and features associated with the site as well as depth to bedrock conditions. Delineate those areas where bedrock is within two (2) feet of the surface as well as major rock outcroppings.
 - (4) Vegetation. Describe the existing vegetation on the site. A map shall be prepared showing the location of major vegetative groupings such as woodlands, open fields and wetlands. Where woodlands are delineated, the forest types shall be indicated.
 - (5) Wildlife. Identify and describe any unique habitats of endangered or protected species.
 - (6) Subsurface Water. Describe the subsurface water conditions on the site both in terms of depth to ground water and water supply capabilities. The location, depth, capacity and water quality of all existing water wells on the site and within five hundred (~00) feet of the site shall be indicated.
 - (7) Distinctive Scenic and/or Historic Features. Describe and map those portions of the site that can be considered to have distinctive scenic and/or historic qualities.
 - (8) Existing Development Features. Describe any existing features on the site that are not considered to be part of the natural environment. This may include, but not necessarily be limited to, roads, driveway accesses, housing units, accessory structures, utility lines, etc.
 - (9) Miscellaneous. When warranted, an analysis should be conducted of existing air quality and noise levels as prescribed by the New Jersey State Department of Environmental Protection.
- (c) Impact. Discuss both the adverse and positive impacts during and after construction. Indicate those adverse impacts that are unavoidable. The specific concerns that shall be considered include the following and shall be accompanied by specific quantitative measurements where possible and necessary:
- (1) Soil erosion and sedimentation resulting from surface runoff.
 - (2) Flooding and flood plain disruption.
 - (3) Degradation of surface water quality.
 - (4) Ground water pollution.
 - (5) Reduction of ground water capabilities.
 - (6) Sewage disposal.
 - (7) Solid waste disposal.
 - (8) Vegetation destruction.
 - (9) Disruption of wildlife habitats of endangered and protected species.
 - (10) Destruction or degradation of scenic and historic features.
 - (11) Air quality degradation.
 - (12) Noise levels.
 - (13) Energy utilization.
- (d) Environmental Performance Controls. Describe what measures will be employed during the planning, construction and operation phases which will minimize or eliminate adverse impacts that could result from the proposed project. Of specific interest are:
- (1) Drainage plans which shall include soil erosion and sedimentation controls.
 - (2) Sewage disposal techniques.
 - (3) Water supply and water conservation proposals.
 - (4) Energy conservation measures.
 - (5) Noise reduction techniques.

- (e) Licenses, Permits and Other Approvals Required by Law. The applicant shall list all known licenses, permits and other forms of approval required by law for the development and operation of the proposed project. The list shall include approvals required by the Township, as well as agencies of the County, State and Federal governments. Where approvals have been granted, copies of said approvals shall be attached. When approvals are pending, a note shall be made to that effect.
 - (f) Documentation. All publications, file reports, manuscripts or other written sources of information which were first consulted and employed in compilation of the Environmental Impact Statement shall be listed. A list of all agencies and individuals from whom all pertinent information was obtained orally or by letter shall be listed separately. Dates and locations of all meetings shall be specified.
3. Disposition by the Board. The Board shall review the information furnished in the Environmental Impact Statement in the context of the overall design of the proposed development and the relationship of the proposed development to the environment. The information is to be used solely to help insure that the proposed development will cause no reasonably avoidable damage to any environmental resource.