

ENVIRONMENTAL IMPACT STATEMENT

Pursuant to Montgomery Township Municipal Ordinance [Sec. 16-8(c)]

**THE HAVEN AT PRINCETON
BLOCK 37003 * LOT 7
MONTGOMERY TOWNSHIP,
SOMERSET COUNTY, NEW JERSEY**

PREPARED FOR:

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I. INTRODUCTION

DuBois and Associates, LLC (DuBois) was retained by D.S. Engineering, P.C. (DSE) to conduct a comprehensive environmental inventory and impact analysis for the proposed residential development project. This report is the result of an Environmental Assessment and Inventory on the 74.4-acre property identified as Block 37003, Lot 7 within Montgomery Township, Somerset County, New Jersey. Field investigations were conducted on the site by DuBois personnel in 2016 through 2018.

This report presents an inventory of existing environmental conditions at the project site, an analysis of consequential impacts that the proposed project will impose on the site, and an overview of mitigative and restorative efforts toward attenuation or elimination of any adverse impacts. This evaluation and report have been prepared in accordance with Ordinance No. 16-8.4(c) of the Montgomery Township municipal code and ordinance, which references information and studies necessary to demonstrate compliance with the Environmental Impact Statement (EIS) requirements.

This EIS has been prepared to document the decision-making process used to formulate and render a professional opinion concerning the subject site and development project. This report has been prepared through on-site field investigations of existing natural resources located upon the site and desktop review of the following material:

- Montgomery Township Land Use Ordinance;
- Montgomery Township Master Plan;
- Montgomery Township Natural Resource Inventory;
- NJ State Plan;
- NJDEP Bureau of Geographic Information Systems;
- NJDEP NJ-GeoWeb Map Viewer;
- NJDEP Historical Preservation Office;
- NJDEP Natural Heritage Database;
- NJDEP Bureau of Stormwater Management;
- Somerset County Soil Survey;
- Federal sources including USDA, USFWS, USEPA and FEMA;
- Project materials supplied by the project engineer, including:
 - Cover Sheet;
 - Existing Conditions Plan;
 - Site Plan;
 - Grading and Utility Plan;
 - Lighting and Landscaping Plan;
 - Profiles and Details;
 - Stormwater Management Report

DuBois performed comprehensive site investigations of the entire site on numerous occasions from 2016 to 2018. On-site hydrology, freshwater wetlands, soils, vegetation communities, wildlife, ecotone areas, and existing and surrounding land uses were evaluated in direct relation to probable or potential impacts that may be imposed upon these resources by the proposed project. Field visits were conducted during the spring, fall and winter seasons during variable weather conditions.

II. PROJECT DESCRIPTION

A. Site Location

The site is located on Sheet 56 of the official tax map of Montgomery Township (refer to *Figure 1: Montgomery Township Tax Map*). The property contains approximately 2,900 feet of property frontage along River Road, and is south of Washington Street and north of Andover Circle (refer to *Figure 2: New Jersey Road Map*). It is located on the Rocky Hill U.S. Geological Survey Quadrangle with NAD 83 state plane coordinates of E(x) 455,099 N(y) 568,131 at the approximate center of the site (refer to *Figure 3: Rocky Hill USGS Quadrangle Map*). The site is located in the Millstone Watershed Management Area (WMA 10), the Millstone River (below/incl Carnegie Lake) watershed (10BB), and

within the Millstone River (Beden Bk to Heathcote Bk) subwatershed (10BB03) (HUC 14: 02030105110030).

The site is composed of an existing single-family dwelling, outbuildings, and inground pool, which has been converted to the office facility for Trap Rock Industries, Inc. A driveway accesses the site from River Road, and a parking lot is located north of the facilities. The existing structures, parking area and driveway are surrounded by an expansive maintained lawn area that is associated with few canopy trees. Refer to *Figure 4: Aerial Map* for a depiction of the land coverage present on and in the vicinity of the site. Surrounding the existing development are wooded upland and wetland communities, and regulated waters identified as the Van Horn Brook waterway along the northern property boundary. Representative photographs of the site are presented in *Appendix A*.

Surrounding Land Use

DuBois analyzed surrounding land use in the vicinity of the subject site via field inspection and geospatial analysis. The regional land use is industrial, residential and undeveloped areas. Multi-family residential development is to the west and south of the property, and single-family residential homes are to the north along Princeton Avenue. To the east of River Road is undeveloped forested upland and wetland communities along the mapped Millstone River, and further the east opposite the waterway is the active industrial Trap Rock Industries quarry.

B. Proposed Project

The proposed project includes residential development that will include a total of 154 dwelling units, comprised of 122 townhome units in 24 buildings, and 32 affordable housing dwelling units within two (2) apartment buildings. The overall development will include a central greenway area with associated pedestrian walkway. A total of 125 total parking spaces are provided associated with the apartment buildings and townhomes. Three (3) stormwater management basins are proposed surrounding the development in the vicinity of existing wooded communities to remain.

The proposed project is presented on the site plan set prepared by DSE, entitled “Preliminary and Final Major Subdivision and Site Plan with Construction Plans prepared for Lot 7 in Block 37003 situated in the Township of Montgomery, Somerset County, New Jersey” dated 4/14/2020 (Sheets 1 through 34). Additional details regarding the proposed project are presented throughout this EIS report. This EIS is to support the preliminary and final major site plan and subdivision request for the project as discussed.

C. Master Plan Discussion

Municipal Zoning

The proposed project site lies within the Apartment/Townhouse Residential (APT/TH) Zone as identified by the Montgomery Township Zoning Map (refer to *Figure 5: Montgomery Township Zoning Map*). Following is information and a description regarding use and characteristics of the referenced district/zone according to the Montgomery Township Land Use Ordinance, Chapter XVI, Land Development, Subchapter 16-4.4. Pursuant to this ordinance section townhomes, apartments, and public playgrounds are Principal Permitted Uses, and Accessory Uses Permitted include, but are not limited to, recreational areas, off-street parking, fences/walls, and signs (Chapter XVI-16-4.4)). Additional zoning requirements and conditions specific to the apartment and townhouse use include a building height restriction of a maximum 35 feet, and demonstration that all development is more than 100-linear feet from the Van Horn Brook.

The proposed project is a residential development composed of both townhomes and affordable housing apartment units, and has been designed and proposed to be compliant with a majority of all bulk requirements of the Ordinance zoning conditions. Two (2) variances are being requested for relief of certain zoning requirements. The list and reference to each Ordinance section for the variances being requested is presented on the Cover Sheet of the referenced site plan set. To summarize, this includes one (1) design waiver request from section 16-6.5.d specific to an open space requirement. This requirement calls for one contiguous open space area large enough to be within a circle diameter of 250 feet (49,087 SF). A central greenway is proposed that is 100 feet wide and an average length of 600 feet (60,000 SF). The second request is a bulk variance for section 16-4.4.c for maximum building height.

State Planning Area

According to the New Jersey State Development and Redevelopment Plan (NJSDRP), prepared by the State Planning Commission in June 1992, and re-adopted in March 2001, the site lies within a Suburban Planning Area (refer to *Figure 6: State Planning Area Map*).

In the Suburban Planning Area, the State Plan's intention is to:

- provide for much of the state's future development.
- promote growth in Centers and other compact forms.
- protect the character of existing stable communities.
- protect natural resources.
- redesign areas of sprawl.
- reverse the current trend toward further sprawl.
- revitalize cities and towns.

As per the NJSDRP, the existing inventory of undeveloped and underdeveloped land in the Suburban Planning Area provides sufficient land area to absorb much of the market demand for development in the state. While the less developed Fringe, Rural and Environmentally Sensitive Planning Areas can provide for modest levels of additional development, the Suburban Planning Area is a key area for accommodating market forces and demand for development. The intent of the NJSDRP regarding the Suburban Planning Area is to reverse the current trend towards further sprawl and to guide both redevelopment and new development into more efficient and serviceable patterns. New development in the Suburban Planning Area should not promote additional sprawl. It should focus on existing Centers before moving to greenfield sites. Internally oriented, mixed-use Centers will ensure a higher quality of life and heightened community identity, while promoting fiscal responsibility, efficient and effective infrastructure, reasonable-cost housing, reduced congestion and balanced economic development.

The Land Use Policy Objectives of the Suburban Planning Area as defined in the NJSDRP is to guide development and redevelopment into more compact forms, including the following: Centers and former single-use developments that have been retrofitted or restructured to accommodate mixed-use development, redevelopment, services and cultural amenities. To plan and zone for a wide range of land uses and users, in order to achieve more balanced communities. Seek to better integrate different land uses and remove or mitigate physical barriers between them. Encourage densities capable of supporting transit, and preserve the environs as park land, farmland, or partially developed low-density uses without compromising the Planning Area's capacity to accommodate future growth.

The Economic Development Policy Objectives of the Suburban Planning Area is to guide opportunities for economic development into Centers or existing pedestrian- and transit-supportive single-use areas and target new jobs to these locations.

The Natural Resource Conservation Policy Objectives of the Suburban Planning Area is to conserve continuous natural systems, strategically locate open space, buffer Critical Environmental Sites, use open space to reinforce neighborhood and community identity, and protect natural linear systems, including regional systems that link into other Planning Areas.

Planning, Zoning, Master Plan & Demographics impact assessment

The proposed project is consistent with the intentions and policy objectives of the Suburban Planning Area in which it is situated. The site is located in an area of the Township that includes developed environs and will be reflective of the surrounding multi-dwelling residential development that this community will be a part of. Public utilities to service the proposed development include water,, sewer, electric, gas, telephone and cable, which are available and located along the immediate roadway frontage and extension of Salisbury Road. The development will provide improvements to existing infrastructure associated with the roadway extension, and will contribute to the municipal tax base.

The purpose of the Montgomery Township Apartment and Townhouse residential development is to provide multi-family residential development permitted within the limits of design and environmental regulations. This includes apartments and townhomes that are identified as principal uses. The proposed development is expressly permitted within the APT/TH Zoning District, which will meet the standards of both the State Planning Area and the Montgomery APT/TH District. As such, the project is consistent with the Township of Montgomery Land Use Development ordinances and Municipal Land Use Law. The project is also consistent with the relevant goals and principals of the Master Plan.

The proposed development is not located within or proximate to lands which are identified as open or preserved land based on the open space mapping as identified on the Montgomery Township Open Space, Paths and Hunting interactive GIS map (refer to *Figure 7: Montgomery Township Open Space Map*). The parcel is mapped as proposed greenway, with unrestricted future development.

The residential development will result in an increase to use of municipal services. This will include an increase in school aged students and impact to the school system, additional use of municipal services such as public water, sewer, electric and gas.

Steps taken to minimize environmental impacts

The proposed project has been designed to avoid critical environmental resources. Impacts to streams, riparian corridors, wetlands, and transition areas have been evaluated and avoided to the maximum extent practicable. The stormwater management system has been designed to eliminate direct flow or discharge into any wetlands or transitions areas. A freshwater wetland Transition Area Waiver – Averaging Plan is applicable for modification of the wetland buffer, resulting in compensation and preservation of wetland buffer areas associated with wetland communities. The project site does not lie within an area targeted for preservation or Land Conservation Zone in the Montgomery Township Land Use and Development standards or within Open Space or Recreation areas. Discussion of on-site natural resources and their probable or potential impacts and minimization measures are discussed further within the context of this report.

The proposed project is located in the vicinity of surrounding similar residential developments and is proposed in areas of the site largely disturbed and developed; as such minimal impacts to the rural or scenic nature in this portion of Montgomery Township will occur. The development specific to this evaluation is associated with the existing dwelling that is currently utilized as an office, surrounding maintained lawn areas, and parking lot that is used to support the commercial use. The office was previously used as the Trap Rock Corporate office, and was relocated in 2019 from the site. The project will therefore not result in the displacement of any businesses or viable farms, will not disrupt desirable community and regional growth areas, and will minimize destruction of manmade and natural resources. Minimal impacts to health, safety and welfare of the public will result from the project. All major utilities are available at this location to service the proposed project. The site is located proximal to a range of Township services while having a minimal impact on environmental resources.

The project will result in an increase in the demand of local of services, however will also support and increase the municipal tax base to support these increases. Garbage collection will be a local private vendor, and will not impact public support services.

As designed, the proposed project is an appropriate form of development and consistent with the objectives and goals of the Suburban Planning Area and Montgomery Township Master Plan and is expressly permitted within the APT/TH Zone of Montgomery Township.

III. SITE DESCRIPTION AND INVENTORY

Following is a discussion of the existing environmental conditions on the project site, as outlined in the Code requirements at 16-8.4c.2(b). Information obtained is based on an assessment of available background information based on municipal, state references and GIS information. Site specific information is based on field investigations conducted by DuBois personnel from 2016 through 2018.

A. Soils

According to the SSURGO GIS data layer provided by the USDA Natural Resources Conservation Service (NRCS), five (5) soil types representing three (3) soil series are mapped on the subject site (refer to *Figure 8: Somerset County Soil Survey Map*). The following descriptions are referenced directly from the NRCS Soil Data Mart (USDA NRCS 2012).

Map unit: (RorAt) Rowland silt loam, 0 to 2 percent slopes, frequently flooded

The Rowland, frequently flooded component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on piedmonts. The parent material consists of red and brown fine-loamy alluvium derived from sandstone and shale and/or conglomerate. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is frequently ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, November, and December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 5w. This soil does not meet hydric criteria.

Map unit: Neshaminy silt loams (NehEb, NemCb, & NehB)

The Neshaminy series has a slope range of 0 to 70 percent. This series is typically in wooded areas that are composed of boulders and stone. The series is developed in materials weathered from diabase and other dark colored basic rocks. The depth to bedrock is 48 inches. The natural drainage class is well drained. Runoff is slow to very rapid. This soil does not meet hydric criteria.

Map unit: (MopCb) Mount Lucas-Watchung silt loams, 6 to 12 percent slopes, very stony

The Mount Lucas, very stony component makes up 60 percent of the map unit. Slopes are 6 to 12 percent. This component is on hills, piedmonts. The parent material consists of dark colored basic rocks or loamy residuum weathered from diabase. Depth to a root restrictive layer, bedrock, lithic, is 48 to 99 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, November, and December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6s. This soil does not meet hydric criteria.

The Watchung, very stony component makes up 40 percent of the map unit. Slopes are 6 to 12 percent. This component is on depressions on piedmonts. The parent material consists of fine-silty residuum weathered from diabase. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during January, February, March, April, May, June, and December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7s. This soil meets hydric criteria.

The proposed development is proposed entirely within the Neshaminy silt loam soil map unit (NehB). Table 1 below presents the suitabilities and limitations of this map unit for proposed development.

Table 1: Physical properties, suitabilities and/or limitations of on-site soils in regards to building site development

Soil Name	Shallow Excavations	With Basements	W/O Basements	Local Roads and Streets	Lawns and Landscaping	Erosion Hazard
Neshaminy	Hard bedrock to a depth of 4 to more than 5 feet	Moderate-hard bedrock	Moderate – frost action potential	Moderate potential frost action	Slight	Slight

* Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Moderate" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Severe" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Soil Survey mappings are an approximation as to the extent of on-site soil types, and field verification is necessary to determine the accuracy of the mappings

B. Topography and Slope

The majority of the site can be described as moderately sloping downward to the north along the Van Horn Crook waterway. According to the survey prepared by Fisk Associates, P.A. (Fisk) entitled "Map of Survey; Wetland Delineation Plan; 460 River Road; Lot 7 Block 37003; Township of Montgomery, Somerset County, New Jersey", dated October 9, 2017, a high contour elevation of 131 is present in the southern section of the property, and a low contour elevation of 54 is present in the northernmost section of the site in the vicinity of the delineated wetlands and waterway. The wetlands drain through a mapped feature in the southern section of the site that connects off-site to the west to the

Van Horn Brook waterway. The wetlands are also associated with drainage seeps. Grading and impacts to topography and slope are presented below in Section IV.A. with regards to soil erosion and sediment control compliance.

C. Geology

Bedrock Geology

The site lies within the Piedmont Plateau Physiographic Province. The Piedmont Plateau Province is mainly underlain by slightly folded and faulted sedimentary rocks of Triassic and Jurassic age (240 to 140 million years old) and igneous rocks of Jurassic age (New Jersey Geological Survey). According to the Geographic Information Systems (GIS) data layer entitled “Bedrock Geology for New Jersey”, provided by the NJDEP New Jersey Geological Survey (NJGS), the site is underlain by the Jurassic Diabase (Jd) throughout a majority of the site, and the Passaic (JTrp) Formation in the northern section of the site (refer to *Figure 9: New Jersey Geology Map*). The site is mapped with any geologic faults, dikes, mines, or folds.

The Jurassic Diabase Formation consists of fine-grained silts and medium-grained, discordant, sheet-like intrusion of dark-gray to dark greenish gray diabase. Thickness of the Palisades Sill diabase in the quadrangle is approximately 1,300 feet (Monteverde, 2011). The Passaic Formation predominantly consist of red beds consisting of argillaceous siltstone; silty mudstone; argillaceous, very fine-grained sandstone; and shale; mostly reddish-brown to brownish-purple, and grayish-red. The Passaic is mostly playa and alluvial fan deposits resulting from the rifting of Pangea. The red color is often evidence that the sediments were deposited in arid conditions (Faill).

The Passaic and Jurassic Diabase Formations are not classified by the NJDEP as geologic formations with potential to contain acid producing soil deposits.

Bedrock Aquifer

The site is located in the Diabase Aquifer System, a non-coastal plain aquifer in the Newark Group. The Diabase Aquifer System consists of hard and dense igneous rocks (New Jersey Geologic Survey). Groundwater is stored and transmitted in fractures, and water is usually fresh, slightly to highly alkaline, moderately hard, and of the calcium-bicarbonate type. There are few high capacity wells.

Surface Geology

According to the GIS data layer entitled “Surface Geology for New Jersey”, provided by the NJDEP NJGS, the surficial geology underlying the site is composed of “weathered diabase”. This surficial geologic formation is characterized as clayey sand to silty clay with diabase fragments and boulders of reddish yellow, yellow, brown and light gray. The formation may be as much as 20 feet thick. (NJGS 2006).

Connection to public water negates the need for individual subsurface wells. This ensures no local drawdown of the ground water aquifer table. Proper grading will protect against soil loss from erosion, enhance establishment of permanent vegetative cover and help to properly manage stormwater runoff all of which will reduce off-site discharge of pollutants.

D. Vegetation

DuBois investigated the biotic communities throughout the site to conduct a detailed floral inventory, the species of which are presented in below. A background investigation was also conducted based on available GIS Natural Heritage Grid Map information regarding any rare, threatened or endangered plant species documented on or in the vicinity of the site. Results of these field and background investigations are presented below.

Vegetation Inventory

For each ecological community identified on-site, DuBois evaluated physiognomy, species composition with a list of most abundant plant species by strata, successional stage, slope degrees and aspect. Photographs of the project area and surrounding land use and biotic communities taken in and 2017 are presented in *Appendix A*. The NJDEP Land-use/Land-coverage map indicates the vegetation communities present throughout a majority of the development area is characterized as “other urban or built up land” and “commercial services” (refer to *Figure 10: Land Use/Land Cover Map*). Areas surrounding the development area are classified as “deciduous forest > 50% crown closure”. The biotic communities identified on the site based on field investigations are generally consistent with the mapping. The surrounding areas include “extractive mining”, “residential, rural, single unit”, “residential, high density, or multiple dwelling”, “deciduous wetlands”, and “transportation/communications/utilities”.

Vegetation throughout a majority of the development area is classified as maintained lawn with few shade canopy trees, landscaping, and developed areas. Community is consistent with the mapped land use coverage and is not a natural biotic community.

The vegetation within the wetland areas on site consisted of species such as red maple (*Acer rubrum*), sycamore (*Platanus occidentalis*), black gum (*Nyssa sylvatica*), and arrowwood (*Viburnum dentatum*) in the overstory, subcanopy, and understory. Japanese stiltgrass (*Microstegium vimineum*), softrush (*Juncus effusus*), woodreed (*Cinna arundinacea*), and skunk cabbage (*Symplocarpus foetidus*) are herbaceous species. This vegetation is consistent with that of hydrophytic species found in wetlands and exceeds the 50% dominance criterion.

Vegetation located within the upland areas of the site characterized as a mixed hardwood community include red oak (*Quercus rubra*), white oak (*Quercus alba*), sassafras (*Sassafras albidum*), ironwood (*Carpinus caroliniana*), wineberry (*Rubus phoenicolasius*), dogwood (*Cornus florida*), and barberry (*Berberis vulgaris*). Christmas fern (*Polystichum acrosticoides*) and Japanese stiltgrass are herbaceous species. The upland vegetation does not exceed the 50 percent dominance criteria for the presence of hydrophytic vegetation.

Background Analysis

DuBois reviewed the NJDEP Natural Heritage Grid Map (*November 2019 Version*) for data on rare plant species and ecological communities. The Natural Heritage Grid Map divides each U.S.G.S. Quadrangle map into 100 cells, with each cell ranging from 358 to 372 acres in size. If a rare plant or ecological community is documented anywhere within a cell, then the entire cell will be coded for the occurrence. Each grid cell is coded into one (1) of four (4) categories: 1) S – the location is precisely known within the cell; 2) M – the location is not precisely known but the documented location is only known to within 1.5 miles; 3) BOTH – both precisely known and less precise occurrences are found within the same cell; and 4) NONE – the cell does not contain any aforementioned documented records.

Based on this review, there are no Natural Heritage Grid Map cells on or in the vicinity of the site. The closest area with mapped plant species is located approximately 900 l.f. south of the site. A

request was submitted to the NJDEP, Office of Natural Lands Management (ONLM), Natural Heritage Program (NHP) for a request of documented sightings or critical habitat for rare, threatened or endangered plant species. The NHP lists the Virginia pennywort (*Obolaria virginica*) in the vicinity of the site at the Autumn Hill Reservation, which is consistent with the grid cell mapping. A copy of the NHP response is provided in *Appendix B*. This species is not listed as a state or federally threatened or endangered. Therefore, lack of mapping within a quarter mile of the site indicates that the project site is not considered a core habitat for any listed rare, threatened or endangered plant species.

E. Wildlife

DuBois reviewed Landscape Project Version 3.3 data for threatened/endangered wildlife species potential in the area. The Landscape Project was developed by the NJDEP, Division of Fish and Wildlife, Endangered and Non-Game Species Program (ENSP) as a wildlife-habitat mapping program that is used to identify and map critical habitats for endangered, threatened, and special-concern wildlife. Version 3.3 applies a species-based habitat layer which identifies imperiled and special concern wildlife within each Landscape Region of New Jersey; Atlantic Coastal, Delaware Bay, Piedmont Plains, Pinelands, Skylands and Marine. The Landscape Project uses documented sightings of listed wildlife and, based on a species-specific model, designates areas of suitable habitat contiguous to the sighting as critical habitat. Each species has a specific set of land use/land cover (LU/LC) classes that are combined into a potential layer relating to that species' habitat requirements. Version 3.3 also provides detailed information on the type of occurrence, called a feature label, which includes foraging and breeding, among others, as well as the last year of documented occurrence. The Landscape Project habitat patches are ranked based on the status of a species record, if present, within or near a polygon. The ranking system applied is as follows:

Rank 1: assigned to species-specific habitat patches that meet habitat-specific suitability requirements such as minimum size or core area criteria for endangered, threatened or special concern wildlife species, but that do not intersect with any confirmed occurrences of such species.

Rank 2: assigned to species-specific habitat patches containing one or more occurrences of species considered to be species of special concern.

Rank 3: assigned to species-specific habitat patches with one or more occurrences of State threatened species.

Rank 4: assigned to species-specific patches containing one or more occurrences of State endangered species.

Rank 5: assigned to species-specific habitat patches containing one or more occurrences of wildlife listed as endangered and threatened pursuant to the Federal Endangered Species Act of 1973.

An endangered species is a species or subspecies of wildlife whose prospects for survival or recruitment are in jeopardy or are likely within the foreseeable future to become so due to any of the following factors: (1) the destruction, drastic modification, or severe curtailment of its habitat, or (2) its over-utilization for scientific, commercial or sporting purposes, or (3) the effect on it of disease, pollution, or predation, or (4) other natural or manmade factors affecting its prospects of survival or recruitment within the State, or (5) any combination of the foregoing factors. Threatened species are generally defined to be species that may become endangered if conditions surrounding them begin or continue to deteriorate. Species of special concern are species that warrant special attention by the NJDEP because of inherent vulnerability to environmental deterioration or habitat modification that would result in its becoming threatened if conditions surrounding the species begin or continue to deteriorate (N.J. Division of Fish and Wildlife 2012).

According to the Landscape Project mapping, all wooded areas in the northern and southern sections of the site are classified as a Rank 3 habitat, indicating that the site is potentially critical habitat

for a state threatened species (refer to *Figure 11: Landscape Project (v 3.3) and NHP Grid Map*). The mapping identifies the Piedmont species for the deciduous forest on and in the vicinity of the site as potentially suitable habitat for the state threatened red-headed woodpecker (*Melanerpes erythrocephalus*). The mapped habitat extends to the east of the site opposite River Road associated with the Millstone River forested corridor.

A request has been submitted to the NHP for documentation and correspondence regarding any threatened and endangered species on and within one quarter mile of the project site to confirm the Landscape Project mapping. The NHP response is consistent with the Landscape Project mapping and identifies breeding sighting on the site for the red-headed woodpecker. The NHP also identifies potentially suitable foraging habitat for the bald eagle within one (1) mile of the site, as per the Flood Hazard Area Control Act Rules (FHA Rules) (N.J.A.C.7:13). The bald eagle is not identified as a species that is “critically dependent on regulated waters for survival” per the FHA Rules. A copy of the NHP response is included in *Appendix B*.

DuBois field investigations for all EIS inventories and reports includes a comprehensive wildlife survey of all species encountered and identified. In addition to a general wildlife inventory, a presence/absence call playback and nest survey was performed by DuBois in 2017 for the state listed red-headed woodpecker as a supplemental report submitted to the NJDEP, Division of Land Use Regulation (DLUR) as part of the Letter of Interpretation (LOI) application for verification and resource value classification of the wetland limits. The study methodology and results are presented in report prepared by DuBois entitled Red-headed Woodpecker Survey Report; Trap Rock Property....” dated June 18, 2017. Results of the study did not result in the positive identification of any red-headed woodpecker individuals, call responses, or nests. However, the NJDEP, DLUR, Threatened and Endangered Species Unit (T & E Unit) advised that the known sighting is in the forested complex east of the site opposite River Road. Therefore, forested wetlands on the site are determined to be potentially suitable critical habitat for the red-headed woodpecker.

All wildlife species encountered on the site during field investigations is presented in Table 2 below:

Table 2: Wildlife Observed on the Haven at Princeton Property (2016 – 2017)

Common Name	Scientific Name	Common Name	Scientific Name
Tufted Titmouse	<i>Baeolophus bicolor</i>	White-tailed Deer	<i>Odocoileus virginiana</i>
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Downy Woodpecker	<i>Picoides pubescens</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>	Scarlet Tanager	<i>Piranga olivacea</i>
Northern Flicker	<i>Colaptes auratus</i>	Black-capped Chickadee	<i>Poecile atricapillus</i>
Eastern Wood Peewee	<i>Contopus virens</i>	Raccoon	<i>Procyon lotor</i>
American Crow	<i>Corvus brachyrhynchos</i>	Easter Gray Squirrel	<i>Sciurus caroliniana</i>
Blue Jay	<i>Cyanocitta cristata</i>	Ovenbird	<i>Seiurus aurocapilla</i>
Gray Catbird	<i>Dumetella carolinensis</i>	Eastern Bluebird	<i>Sialia sialis</i>
Hairy Woodpecker	<i>Leuconotopicus villosus</i>	Yellow Warbler	<i>Setophaga petechia</i>
Wood Thrush	<i>Hylocichla mustelina</i>	White-breasted Nuthatch	<i>Sitta carolinensis</i>
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	Carolina Wren	<i>Thryothorus ludovicianus</i>
Northern Mockingbird	<i>Mimus polyglottos</i>	American Robin	<i>Turdus migratorius</i>
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	Red-eyed Vireo	<i>Vireo olivaceus</i>

It is the determination of DuBois that the wooded wetlands and uplands on the site meet the criteria of suitable red-headed woodpecker, a state threatened species. These wooded wetland and upland

communities also exhibit habitat for other wildlife species. Wildlife observed on the site was primarily observed in the undeveloped forested communities, and did not include the open maintained lawn and developed area.

It is therefore the determination of DuBois that the maintained lawn and developed area of the site is not characterized as a critical wildlife habitat area. NJDEP, DLUR has conducted a preliminary review of the concept plan and advised that the proposed site design would meet the requirements of the Transition Area Waiver permit pursuant to the Freshwater Wetlands Protection Act Rules (N.J.A.C.7:7A).

F. Subsurface and Surface Water

Based on the NJDEP GIS mapped wetlands information, there are wetlands mapped in the northernmost section of the site along the Van Horn Brook tributary (refer to *Figure 12: NJDEP Freshwater Wetlands Map*). DuBois delineated the wetlands throughout the site based on the methodology utilized to determine the presence of wetlands was the “Three Parameter Approach for Wetland Delineation” as described within the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*, published by the Federal Interagency Committee for Wetlands Delineation, January 1989. Wetlands were delineated throughout the northern and southern sections of the site, the limits of which are more expansive than the NJDEP mapped wetlands. The limit of wetlands on the project site were verified by the NJDEP pursuant to a Letter of Interpretation – Line Verification issued for the site, dated October 24, 2018 (NJDEP# 1813-17-0006.1), a copy of which is presented in *Appendix C*. The wetland limits and reference to the NJDEP verification associated with the Haven at Princeton site are included on the referenced plan set prepared by DSE.

The site is located in the Millstone Watershed Management Area (WMA 10), the Millstone River (below/incl Carnegie Lake) watershed (10BB), and within the Millstone River (Beden Bk to Heathcote Bk) subwatershed (10BB03) (HUC 14: 02030105110030). According to the NJDEP GIS digital data layer entitled “NJDEP Surface Water Quality Standards of New Jersey”, the Van Horn Brook is classified as FW2-NT (Non-trout) by the NJDEP. Non-trout waters do not have the physical, chemical or biological makeup to support trout, however may play host to a variety of other fish species.

The project site will be serviced by public water from an existing water main located through the extension along Salisbury Road, to be serviced by the American Water Company. Therefore, no wells are proposed for the project. DuBois has reviewed the New Jersey Geological and Water Survey GIS metadata information for the Well Head Protection Areas (WHPA), which is a “map area calculated around a Public Community Water Supply well in New Jersey that delineates the horizontal extent of ground water captured by a well pumping at a specific rate over a two (2), five (5), and 12 (twelve) year period of time for confined wells”. According to the NJDEP GIS mapping for WHPA, the project site is located approximately 1,200 feet from the Tier 3 well head protection area associated with a community well located north of the site. No wells are proposed as part of this project, therefore no impacts to water supply associated the community well will result from the project.

G. Distinctive Scenic & Historic Features

DuBois reviewed the Geographic Information System data layers entitled “NJDEP Historic Properties of New Jersey” and “NJDEP Archaeological Site Grid of New Jersey, Edition 20080422”. The Historic Properties data layer displays historic properties that are included in the New Jersey or National Registers of Historic Places, eight have been determined Eligible for inclusion through federal or state processes as administered by the New Jersey Historic Preservation Office (HPO), or have been identified through federal or state processes as administered by the HPO. The Archeological Site Grid data layer

displays historic districts that are either included in the New Jersey or National Registers of Historic Places, have been determined Eligible for inclusion through federal or state processes as administered by the New Jersey Historic Preservation Office (HPO), or have been identified through federal or state processes as administered by the HPO.

There are no historic districts, historic properties, and/or archaeological grid maps on the project site. Mapped resources in the vicinity of the site include the Rocky Hill Historic District (HD) immediately north of the site, which is associated with numerous mapped historic properties (refer to *Figure 13: NJ Historic and Archaeological Map*). Archaeological grid maps are mapped at the northern corner of the site and throughout areas of the Rocky Hill HD. The historic and archaeological mapped resources are located north of the site opposite of the wetland and waterway corridor that are to remain undisturbed on the site.

H. Existing Development Features

The site includes an existing residence and outbuildings utilized as a commercial office complex, and is associated with an access drive and parking area. These existing development features are surrounded by an expansive area of maintained lawn. The northern and southern undeveloped areas of the site are composed of deciduous upland and wetland communities. The property is surrounded by residential development to the north, west and south. To the east is River Road, and undeveloped forested complex, and further to the west a quarry.

I. Air Quality

Each year, the NJDEP Bureau of Air Monitoring produces an Air Quality Report, which summarizes air quality data for the entire State. The most recent report available is based on 2018 data. This report provides concentrations of individual pollutants and compares them to the National and New Jersey Ambient Air Quality Standards (AAQS). As stated in this report, the major objectives of monitoring air pollutant levels are:

- To provide an early warning system for pollutant levels that may have the potential to endanger public health;
- To assess air quality in light of established public health and welfare standards; and
- To track air pollution trends and changes in ambient air quality due to changes in the amount of pollutants emitted.

New Jersey has been divided into nine (9) Pollutant Standards Index reporting regions with a total of 32 ambient air monitoring stations in 2018. An air quality summary and forecast, known as the Pollutant Standards Index (PSI) is reported daily for each region in New Jersey. Each pollutant monitored in the region is given a numerical PSI rating based on the concentration recorded for the previous day. The total PSI for the region is equal to the highest rating given to any pollutant within that region. A PSI rating of one hundred (100) or greater indicates that at least one pollutant has reached or exceeded the applicable primary ambient air quality standard.

Montgomery Township is located within the Suburban Reporting Region of the Central New Jersey section. In this region, monitoring stations in the vicinity of the site are located at Rutgers University, and measures for Nitrogen Dioxide and Nitric Oxide (NO_x), ozone (O₃), meteorological parameters (MET²), and photo assessment measure for ozone parameters (PAMS).

Table 3: National and New Jersey Ambient Air Quality Standards

	<u>Primary</u>	<u>Secondary</u>
Total Suspended Particulates ($\mu\text{g}/\text{m}^3$)		
12-month geometric mean ^b	75 $\mu\text{g}/\text{m}^3$ ^a	60 $\mu\text{g}/\text{m}^3$ ^b
Average 24-hour concentration ^b	260 $\mu\text{g}/\text{m}^3$ ^c	150 $\mu\text{g}/\text{m}^3$ ^c
Inhalable Particulates (PM_{10}) ($\mu\text{g}/\text{m}^3$)		
Annual arithmetic mean	50 $\mu\text{g}/\text{m}^3$	50 $\mu\text{g}/\text{m}^3$
24-hour average	150 $\mu\text{g}/\text{m}^3$	150 $\mu\text{g}/\text{m}^3$
Sulfur Dioxide (SO_2) ($\mu\text{g}/\text{m}^3$)		
12-month arithmetic mean	80 $\mu\text{g}/\text{m}^3$ (0.03 ppm)	60 $\mu\text{g}/\text{m}^3$ (0.02 ppm) ^b
Average 24-hour concentration	365 $\mu\text{g}/\text{m}^3$ (0.14 ppm) ^a	260 $\mu\text{g}/\text{m}^3$ (0.10 ppm) ^a
Average 3-hour concentration	-	1300 $\mu\text{g}/\text{m}^3$ (0.50 ppm) ^a
Average 1-hour concentration	75 ppb ^d	-
Daily average	0.14 ppm (365 $\mu\text{g}/\text{m}^3$) ^b	-
Nitrogen Dioxide (NO_2) ($\mu\text{g}/\text{m}^3$)		
12-month arithmetic mean	100 $\mu\text{g}/\text{m}^3$ (0.053 ppm)	100 $\mu\text{g}/\text{m}^3$ (0.053 ppm)
Annual average	100 $\mu\text{g}/\text{m}^3$ (0.053 ppm)	100 $\mu\text{g}/\text{m}^3$ (0.053 ppm)
1-hour average guideline	47 $\mu\text{g}/\text{m}^3$ (0.25 ppm)	-
1-hour average	190 $\mu\text{g}/\text{m}^3$ (0.100 ppm)	-
Carbon Monoxide (CO) ($\mu\text{g}/\text{m}^3$)		
Average 8-hour concentration	10 mg/ m^3 (9 ppm)	10 mg/ m^3 (9 ppm) ^f
Average 1-hour concentration	40 mg/ m^3 (35 ppm)	40 mg/ m^3 (35 ppm) ^f
Ozone (O_3) ($\mu\text{g}/\text{m}^3$)		
Maximum daily 1-hour average	235 $\mu\text{g}/\text{m}^3$ (0.12 ppm) ^f	-
1-hour average	-	160 $\mu\text{g}/\text{m}^3$ (0.08 ppm) ^b
8-hour average	0.075 ppm	0.075 ppm
Lead (Pb) ($\mu\text{g}/\text{m}^3$) ^g		
3-month average ^b	0.052 $\mu\text{g}/\text{m}^3$	0.052 $\mu\text{g}/\text{m}^3$
Quarterly Mean ^d	0.008 $\mu\text{g}/\text{m}^3$	0.008 $\mu\text{g}/\text{m}^3$

* $\mu\text{g}/\text{m}^3$ - micrograms per cubic meter

* ppm - parts per million

* ppb - parts per billion

* mg/ m^3 - milligrams per cubic meter**Notes:**

- New Jersey standards are not to be exceeded more than once in any 12-month period, while National short-term standards are not to be exceeded more than once in a calendar year.
- New Jersey standard only.
- Intended as guideline for achieving short-term standards.
- National Ambient Air Quality Standard.
- National standards uses block averages, midnight to midnight, rather than moving averages.
- Maximum daily 1-hour average: averaged over a three (3) year period, the expected number of days above the standard must be less than or equal to one.
- Source: New Jersey Department of Environmental Protection, Bureau of Air Monitoring, 2018 Air Quality Report

The Air Quality Report includes a listing of the Highest Pollutant Standards Index with the location for days that were Good, Moderate, Unhealthy for Sensitive Groups, Unhealthy and Very Unhealthy. The 2018 Annual Summary reports that 145 days were classified as Good; 198 days were classified as Moderate; 19 days were classified as Unhealthy for Sensitive Groups; 3 days were classified as Unhealthy; and 0 days were classified as Very unhealthy.

This information is existing air quality data. Impacts and recommendations regarding the need for further analysis is presented in Section IV.J below.

J. Noise Levels

Consistent contributors to existing local and regional noise levels in the area are primarily associated with the traffic from adjacent roadways, surrounding existing commercial development, and residential development. Noise levels will likely increase along River Road during peak traffic hours in the morning and evening time periods during the week. Additional noise contributors are associated with the quarry and construction equipment used to the east of the site. Traffic and standard noise surrounding the site associated with other residential development.

This information is existing noise information. Impacts and recommendations regarding the need for further analysis is presented in Section IV.K below.

IV. ENVIRONMENTAL IMPACT

Following is a discussion of the evaluated and anticipated environmental impacts on the subject site as a result of the proposed development, as outlined in the Ordinance requirements at 16-8.4c.2(c). Information obtained is based on an assessment of available background information based on municipal, state references and GIS information, and site plans and reports prepared by other professionals with regards to the proposed development.

A. Soil Erosion & Sedimentation

Soils Impact assessment

The proposed development project will remove topsoil and will result in the displacement of soils through grading, subsurface utility installation, foundation construction, stormwater basin construction, and associated earth disturbances. The Neshaminy soils pose only moderate limitations for foundations without and without basements and roadways and exhibits slight erosion hazard. The soils have been impacted by prior land use associated with the existing residence, pool, parking area, and surrounding cleared and maintained areas, and do not pose limitations to the proposed construction activities.

The site will be graded as necessary to accommodate the development, which minimally will change existing topographic contours in the area of proposed development. Areas with moderate sloping and drainage features within wetlands and buffer areas associated with the Van Horn Brook are not proposed to be disturbed. The proposed development is situated at the higher and level areas of the site.

Steps taken to minimize environmental impacts

The project will include soil stabilization measures necessary to ensure soil stability and prevent erosion. This will be achieved by following the *Standards for Soil Erosion and Sediment Control in New Jersey* and adhering to an approved Soil Erosion and Sediment Control Plan. Grade changes will result in

de minimus disturbance to surface and subsurface soils. BMPs for soil erosion and sediment control will be followed to mitigate the negative effects of exposed and displaced soil. Measures to be employed will be standard best management practices, as discussed below. Silt fence will be placed around the entire limit of disturbance. All topsoil stripped from the development area will be stockpiled, temporarily stabilized and redistributed throughout the site.

All excavation and grading shall be done in accordance with an approved site plan which contains soil erosion and sediment control provisions to prevent the displacement and translocation of exposed geologic sediments. A total of three (3) stormwater management features are proposed, which will be compliant with all BMP's and stormwater management requirements. The 24 townhouse buildings, two (2) apartment buildings, parking areas, and access drive encompass approximately 8.47 acres of new impervious coverage from the existing 1.23 acres. The applicant will adhere to the state Soil Erosion and Sediment Control Plan requirements contained within the *Standards for Soil Erosion and Sediment Control in New Jersey*. This is necessary to avoid adverse impacts of displaced soil (geologic substrate) on adjacent lands, particularly wetland areas and surface water bodies. It will include engineering standards and vegetative standards to control land disturbance activities. Standards to be employed include:

- installing sediment barriers (silt fence) around the entire development envelope to intercept and detain potential transported sediment;
- temporary stabilization by spreading seed, mulch and salt hay to reduce potential damage from wind and water erosion until permanent stabilization is accomplished;
- permanent vegetative cover of grass seed mix after final grading;
- if necessary, water will be applied to prevent the establishment of dust from exposed soil surfaces;
- stabilized pad of clean crushed stone located at points where traffic will be accessing a construction site;

Details of the proposed soil erosion and sediment control measures are depicted on Sheet 9 and 31 of the referenced plan set prepared by DSE.

B. Flooding and Flood Plain Disruption

Based on the Federal Emergency Management Agency (FEMA) flood insurance rate map, the northern section of the site along the Van Horn Brook waterway is within the mapped AE flood zone with base flood hazard elevations ranging from 55 to 66 feet along the length of the waterway (refer to *Figure 14: FEMA Flood Map*). The project design does not propose any development within or in the vicinity of the mapped and FEMA studied flood hazard area.

The Van Horn Brook waterway and associated tributary extending to the south are considered regulated waters subject to the Flood Hazard Area Control Act Rules (FHA Rules) (N.J.A.C.7:13) and Township requirements. The tributary extending to the south is associated with the 100-foot Montgomery Township stream corridor buffer that is to remain undeveloped and maintained. According to the NJDEP GIS digital data layer entitled "NJDEP Surface Water Quality Standards of New Jersey", the Van Horn Brook is classified as FW2-NT (Non-trout) by the NJDEP. Non-trout waters do not have the physical, chemical or biological makeup to support trout, however may play host to a variety of other fish species. The waterway does not drain to any trout maintenance (TM), trout production (TP), and/or Category One (C1) waterways within the HUC14 subwatershed. The waterway also does not drain downstream to any threatened or endangered wildlife or plant species that are "critically dependent on regulated waters for survival" according to the referenced NHP documentation. The riparian zone therefore is determined to

be 50-foot from the centerline or top of bank, the limits of which are less expansive than the Township 100-foot stream corridor buffer.

Floodplain impact assessment

The proposed project has been designed in compliance with state and local regulations, and will not result in any development or disturbance to waterways, flood hazard area, floodway, or riparian zone and stream corridor buffer. All proposed development, inclusive of stormwater outfall and discharge points, are outside of regulated areas associated with the stream corridor and floodplain area. The proposed project is also in compliance with the state stormwater management regulations. Therefore, the project has minimized impact to any regulated floodplain areas to the maximum extent practicable.

Steps taken to minimize environmental impacts

The project has been specifically designed to avoid any disturbance or development in regulated waterway, flood hazard area, floodplain, and/or riparian zone and Township stream corridor buffer. A significant area of wetlands and upland community is also to remain undisturbed between the proposed development and waterway. There are no outfalls or other discharge proposed into the contiguous wetlands, stream corridor, or buffer area that could be authorized subject to a flood hazard area or wetlands permits pursuant to the FHA Rules (N.J.A.C.7:13) and Freshwater Wetland Protection Act Rules (N.J.A.C.7:7A), respectively. Based on this, design and location of the project development features on the site have minimized environmental impacts to flood hazard areas to minimize flood plain disruption.

C. Surface Water Quality

As presented above in Section IV.B, the Van Horn Brook and associated tributary are located in the northern section of the site. The proposed project will not result in any disturbance to this regulated water. Soil erosion and sedimentation during construction activities will be minimized due to project design that maintains wetland buffers and the stream corridor buffer, and by implementing standard soil erosion and sediment control measures. Installation of silt fence and other procedures will ensure no soil is transported to wetlands or surface waters, or the stormwater management basins and features that would ultimately discharge to any regulated waters.

The overall site is composed of approximately 1.23 acres of existing impervious coverage that includes the existing structures, access drive and parking area. The 24 townhouse buildings, two (2) apartment buildings, parking areas, and access drive encompasses approximately 8.47 acres of new impervious coverage. Due to the area of disturbance and proposed impervious cover that will exceed one (1) acre, the project is considered a “major development” pursuant to the Stormwater Management Rules (N.J.A.C.7:8). Details of the project’s compliance with the Stormwater Management Rules is presented in the drainage report prepared by DSE, as referenced above.

Surface water quality impact assessment

The project does not propose any development or disturbance within the stream corridor, tributary, and associated wetlands. All development in the vicinity of the waterway to the north has been proposed outside of the wetlands and buffers contiguous with the stream corridor, and is also associated with an additional wetland buffer compensation area. Stormwater discharge outfalls are also proposed outside of the waterway, wetlands and transition areas and stormwater treatment will be subject to water quality control standards of the Stormwater Management Rules. No adverse impacts from the project

should result to surface water quality. The project will also be in compliance with the Water Pollution Control Act (N.J.A.C.7:14), and all divisions of the New Jersey Pollution Discharge Elimination System (N.J.A.C.7:14A-1).

Steps taken to minimize environmental impacts

As presented, the project has been designed to limit development within the existing developed and maintained area, and reducing development and impacts to surrounding wetlands, waterways, and forested communities. The proposed development is situated more than approximately 400-feet from the main Van Horn Brook waterway. The intervening wetlands and forested uplands are to largely remain undeveloped and provide a vegetative buffer. Stormwater discharge has also been designed to avoid direct discharge into the waterway and wetlands. Compliance with all applicable state and local water quality standards and regulations ensures minimization of impacts to surface water quality.

D. Groundwater Pollution and Capabilities

The proposed project will be serviced by public water and sewer utilities, and therefore will not be associated with a private well or individual subsurface sanitary sewer system. There will be no groundwater withdrawal or wastewater disposal on the site. Potable water for the site will be provided by New Jersey American Water Company, and the wastewater will be discharged to the Stage II Sewage Treatment Plant operated and owned by Montgomery Township. The daily estimated water demand will be based number of dwellings and units, and will be subject to approval and verification of capacity and will serve from American Water Company.

Recharge to the aquifer system occurs primarily through the infiltration of precipitation in upland areas, as well as throughout the wetland communities that will remain undeveloped. Currently precipitation filters naturally to the groundwater table and into the wetlands and drainage features in the northern and southern sections of the site. The project will result in more than one (1) acre of disturbance and one quarter acre of additional impervious cover, and therefore is considered a “major development” and exceeds the threshold of new impervious surface to require stormwater management analysis and implementation of the necessary features to address water quantity and quality to minimize impacts. The development will adhere to the “Stormwater Management Report for Haven at Princeton; Block 37003, Lot 7; Montgomery Township, Somerset County, New Jersey” prepared by DSE dated April 2020, which follows Best Management Practices (BMPs) outlined by the State/Township standards. Details of the stormwater management features and details are presented on Sheets 9 and 28 of the referenced plan set. Well-head protection areas are areas that delineate the horizontal extent of groundwater captured by a well pumping at a specific rate over two-, five-, and twelve-year periods of time. According to the NJDEP Geo-Web Map Viewer application, there are no community or non-community public water supply wells or well head protection areas located on or in the immediate vicinity of the site (F. X. Browne, Inc. 2010). The nearest community well head protection area is approximately 1,200 l.f. north of the site. The proposed development will connect to existing public water service within C.R. 605 (River Road) and will not require an on-site well.

Groundwater pollution impact assessment

No individual subsurface sewer facilities or well features that would adversely impact groundwater or other geologic features are proposed. The water purveyor for Montgomery Township is the New Jersey American Water Company. The New Jersey American Water supplies its NJAW Raritan System 2 customers with a combination of water from several sources. Source water for this public community system comes from seven intakes on the Raritan River, Millstone River, Delaware & Raritan

Canal, and approximately 98 wells in the Brunswick, Passaic, Stockton, Glacial Drift and Basalt Aquifers (New Jersey American Water).

The proposed development will minimally increase demand on potable water supply, which ultimately increases demand for water that is present in the Raritan River, Millstone River, Delaware and Raritan Canal and subsurface aquifer systems. Connection to public water, however as opposed to individual wells, will not impose any drawdown of the water-table aquifer in the local area, thereby avoiding subsurface hydrologic flow impacts to the ground water table and adjacent wetlands and waterways.

Steps taken to minimize environmental impacts

The increase in impervious coverage should not have an adverse impact on the recharge of groundwater on the site. No subsurface wells are proposed. The project site has been designed to connect to public water, and the capacity will be subject to review and approval by the utility provider. The existing and proposed stormwater management measures will be compliant with applicable state and local regulations, and will not impact groundwater resources.

E. Sanitary Sewer Facilities

The project site is located in a portion of Montgomery Township that is within a mapped sewer service area. Therefore, the site will be serviced by public sanitary sewer and wastewater will be routed to the Stage II Sewage Treatment Plant owned and operated by Montgomery Township through an existing sanitary sewer line in River Road, and extending through the proposed Salisbury Drive. The daily estimated wastewater generated is based on the number of dwelling units and bedrooms, information of which is presented on the site plan of the referenced DSE plan set (Sheet 4). Based on the breakdown listed, there is a 7,200 gallons per day (GPD) for the affordable housing units and 43,800 GPD for the townhouse units. Available sewer for the project is 37,725 GPD, and therefore per the breakdown of 37,735 GPD from 43,800 GPD, a sewer service amendment for 6,075 GPD will be necessary for Phase II of the development. This will be for 21 three (3) bedroom townhouse units.

Sanitary sewer impact assessment

The proposed development will result in the increase in demand to the sanitary sewer system as provided by Montgomery Township. A majority of the project will be within the available sanitary sewer service capacity. The remaining development outside of the available capacity (21 townhouse units) will be subject to Phase II of the project and a sanitary sewer service amendment and approval.

Steps taken to minimize environmental impacts

The project has been designed to utilize public sanitary sewer, and therefore will not require individual subsurface septic systems. This minimizes impacts to surrounding on-site environmentally sensitive areas. The sanitary sewer capacity will be subject to capacity approval from Montgomery Township, and the Phase II sewer amendment.

F. Solid Waste Disposal

The project involves a residential development composed of townhouse units/buildings and affordable housing apartment buildings. Each townhouse garage will have an area for the garbage and recycling receptacles. The waste will be transported off-site by a private hauler once a week and will be

compliant with state and local regulations and standards. Recycling service will be provided by the Somerset County Department of Public Works every two (2) weeks.

The site will not be associated with any commercial or industrial use and will not be subject to the discharge of petroleum or any other hazardous substances pursuant to N.J.A.C.7:1E-1.1 et seq. Use of pesticides may be limited to standard lawn maintenance for open space areas, and will be subject to compliance per N.J.A.C.7:30. No environmental cleanup is required per N.J.A.C. 7:1E-1.1 et seq. for use of the site, therefore this regulation is not applicable for the project.

G. Vegetation

A complete vegetation inventory was compiled for the site, and a background investigation was conducted to ensure the site is not associated with any rare, threatened or endangered floral species, as presented above in Section III.D. Based on this review, it was determined that the area of project development is primarily associated with existing disturbed and maintained areas within the central section of the site associated with the office building, outbuildings, parking area, and expansive maintained lawn area. Surrounding communities are deciduous forested wetland and upland communities in the northern and southern sections of the site. The Natural Heritage Grid map database does not identify any threatened or endangered plant species on or in the vicinity of the site. Clearing of the site will largely result in the removal of maintained lawn areas.

Vegetation impact assessment

The site development will primarily result in clearing of the maintained lawn and developed areas, which are not classified as natural biotic communities. Disturbance of forested areas is limited to 3.8 acres of the overall 21.6-acre project area. A total of approximately 50 acres of forested wetland and upland communities are to remain undeveloped and preserved. The site is absent of any documented or mapped rare, threatened or endangered floral species. Therefore, it is the determination of DuBois that the proposed project will not result in adverse impacts to vegetation of natural or critically environmentally sensitive biotic communities.

Steps taken to minimize environmental impact

The project has been designed to utilize existing areas of disturbance and development, reducing the impact to surrounding environmentally sensitive vegetation communities. A total of approximately 50 acres (68%) of the site will be maintained and preserved, minimizing impact to environmentally sensitive vegetative communities.

H. Wildlife

An inventory of wildlife species was conducted on the site during the field investigations by DuBois personnel, the list of which is presented in Section III.B. The development area is primarily characterized as a maintained lawn and is not associated with any suitable biotic communities that are identified as critical or suitable wildlife habitat due to the existing development and maintained lawn in the central section of the site and development area. Based on a review of the Landscape Project GIS database and NHP response, the site is mapped as red-headed woodpecker habitat. A full study was completed by DuBois that resulted in the absence of any documented red-headed woodpecker breeding, foraging or resting habitat. The NJDEP T & E Unit has confirmed the documented sighting is to the east opposite River Road.

Wildlife impact assessment

The development will primarily result in disturbance to maintained and developed areas, which will not result in the disturbance to critical wildlife habitat. A total of 3.8 acres of forested community will be disturbed in the northwest section of the site. A total of approximately 50 acres of forested wetland and upland communities will remain undisturbed and preserved from future development, which are those habitat areas determined to be optimal for the wildlife species observed and recorded on the site.

Steps taken to minimize environmental impact

The project development has been situated in an area of existing maintained lawn and developed areas, and has avoided impact to identified suitable wildlife habitat to the maximum extent feasible. Stormwater outfall design and location has been proposed to minimize extension into the wooded communities. Furthermore, stormwater basins are proposed between the wooded communities in the northern section of the site and the proposed residences, which will provide a static buffer between remaining wildlife habitat and dwellings. This has been determined by NJDEP to be a suitable mitigative practice to minimize impacts to habitat. It is the determination of DuBois that project design, minimization of 3.8 acres of disturbance to suitable wildlife habitat, and compensatory 50 acres of habitat preservation demonstrates the minimization of impacts.

I. Scenic & Historic Features

Based on a review of the “NJDEP Historic Properties of New Jersey” and “NJDEP Archaeological Site Grid of New Jersey, Edition 20080422” mapping, the project site does not contain any mapped Eligible, National or State registered historic property, archaeological grid maps, or historic districts. The nearest mapped features are discussed above in Section III.G. The site is currently associated with views from River Road of the forested communities in the southern and northern sections of the site, and central maintained lawn and office complex. Scenic views from surrounding developments are of the wooded wetlands to the north and south, and the maintained lawn and narrow forested area from the multi-family residential development to the west.

Scenic and historic resources impact assessment

The proposed project will not result in any development or disturbance in the vicinity of the any resources located off-site. Furthermore, the project site is primarily throughout an existing maintained lawn and developed area. Therefore, it is the determination of DuBois based on the lack of mapped historic or archaeological features on the site that there will be no impacts to historic features.

The scenic views from the surrounding residential developments to the north and south will remain, as there is no proposed development within these forested communities. This proposed development will be contiguous and consistent with the residential development to the west. Salisbury Road will be extended through the site from the development to the west to River Road. The development will be consistent with the type and scenic views.

Steps taken to minimize environmental impact

There are no impacts to historic features anticipated as a result of the proposed development. Therefore, no further Phase 1A or II cultural or archaeological studies should be required to be conducted. Furthermore, no impacts to scenic resources will result due to the preservation of expansive wooded

communities in the northern and southern sections of the site, and connection of the project to the residential neighborhood to the west.

J. Air Quality

The proposed project will result in the construction of a residential development of 154 total family units. A total of 115 parking spaces are proposed for townhouse and apartment building parking. Daily traffic will be associated with residences of the development, and will primarily be associated with morning and afternoon peak hours. The site is currently accessed by employees of the existing office, and by new vehicles that are stored in the parking area. Pollutant emissions and impacts to air quality will be primarily limited to effects resulting from the construction of the residential project that will require use of trucks and other vehicle traffic. According to the traffic report prepared by McDonough and Rea Associates (MRA) addressed to the Montgomery Township Planning Board, dated April 28, 2020, traffic generation from the site will be distributed to three (3) surrounding intersections with 165 total trips per day (peak hours) and will continue to operate at acceptable levels of service at the affected intersections (Level of Services A and B). A copy of the traffic report will be presented to the Montgomery Township Planning Board under separate cover.

Air quality impact assessment

Therefore, due to continued acceptable levels of service and distribution of traffic throughout three (3) intersections in the area, there are no anticipated direct and ongoing impacts to air quality after construction is complete. Furthermore, based on information provided the project should not result in “a significant net emission increase of an air contaminant listed in Table 3 of the N.J.A.C.7:27-18.7” of Subchapter 18 of the Air Pollution Control regulations.

Steps taken to minimize environmental impact

Due to the acceptable level of service per the traffic report, an air quality impact analysis and further mitigative measures should not be required for this project.

K. Noise Levels

The site is located in an existing residential area of Montgomery Township, with industrial land use to the east opposite River Road associated with the quarry. Contributors to local noise levels are from adjacent roadways, surrounding residential development, and equipment and work conducted at the quarry.

Noise impact assessment

During the construction phase of this project, noise levels will be temporarily increased from heavy equipment, trucks, and various construction practices. Construction activities will occur during permitted working hours to minimize impacts. The anticipated increases in local noise levels with the post-construction conditions of the facility will be consistent with residential use, inclusive of traffic primarily during peak morning and evening hours, and other standard uses such as lawn care, snow plowing, and green space use. The noise levels are anticipated to consistent with surrounding residential use to the north, east and west of the site. The project is in compliance with the residential requirements presented in the Noise Control regulations at N.J.A.C.7:29. Furthermore, the noise levels will be associated with intermittent movement of cars into and out of the site, and will not be associated with a “continuous airborne sound”. Residential noise should not impact any surrounding development to the

north and south due to the remaining expansive forested communities to remain undeveloped and a noise buffer to surrounding communities that are not to be contiguous and part of this residential community.

Steps taken to minimize environmental impact

The project will not result in any significant generation of noise, as presented. Therefore, a noise analysis and additional mitigative measures should not be required for this project.

L. Energy Utilization

The proposed project involves the development of 154 dwelling units, comprised of 122 townhome units in 24 buildings, and 32 affordable housing dwelling units within two (2) apartment buildings. Energy utilization will be limited to standard electric and gas usage for the residential units. The building will be serviced by PSE&G for electric, Comcast for cable, and Century Link for telephone. The usage will be consistent with surrounding residential development and will be served by extensions of existing utility lines along Salisbury Road from the west. There will be no adverse impacts to the site or surrounding areas and existing development as a result of energy utilization for the project.

V. ENVIRONMENTAL PERFORMANCE CONTROLS

The project has been designed to be consistent with and utilize the existing maintained and developed land use on the site in an effort to minimize and eliminate negative impacts on and off site resulting from the proposed development. Following is an itemized summary of the measures to be employed during the planning, construction, and operation phases of the proposed development to minimize impacts.

A. Drainage

The project site is associated with an existing central prior residence currently utilized as an office, with surrounding expansive maintained lawn area and parking lot. The northern and southern sections of the site are wooded wetland and upland communities, that are to primarily remain undeveloped and preserved. The project will be compliant with the referenced Stormwater Management Rules upon completion of the site design per Township and NJDEP, Division of Land Use Regulation approval. Project site drainage is presented in the report prepared by DSE entitled “Stormwater Management Report Prepared For Haven and Princeton....”, dated April, 2020. The project has been designed in compliance with local and state stormwater management regulations, and all applicable environmental performance controls will be implemented as part of the stormwater management design. The project has been designed to avoid any direct outfalls or discharge into regulated wetland or buffer areas. All soil erosion and sediment control measures to be implemented will ensure no impacts to surrounding waterways south of the site, and will be in place until construction is complete and any exposed soils are stabilized.

B. Sewage Disposal Techniques

The site will be serviced by an existing sanitary sewer main within Salisbury Road that extends from the existing residential development to the west. The wastewater will be directed to an existing sanitary sewage treatment plant owned and operated by Montgomery Township. No on-site individual subsurface sanitary sewer facilities or septic fields are proposed on-site, therefore no impacts are anticipated as a result of wastewater generation or discharge and implementation of specific environmental performance controls are not necessary for this project. The project has identified current

capacity for 43,800 gallons per day (GPD). As a result, 21 dwelling units will be constructed as part of Phase 2 of the development subject to a sanitary sewer amendment and approval.

C. Water Supply and Conservation

The site will be serviced by public water to be supplied from the American Water Department. There will be no private wells and therefore no impacts to onsite groundwater resources. Water use will be standard for residential units and is determined to have an acceptable service capacity from American Water.

D. Energy Conservation Measures

The proposed residential development has been designed consistent with township and state standards and requirements. A detailed lighting plan is presented on Sheet 17 of the referenced site plan set, and is compliant with the Montgomery Township standards and requirements. Lighting will be the minimum necessary for safety and protection of the site. There will be no on or off-site negative impacts from the lighting due to compliance with Township standards and the surrounding similar land use. It is noted that all lighting is designed and proposed to reduce glare onto neighboring properties.

E. Noise Reduction

All measures will be implemented to avoid noise impacts as a result of the project construction and operation. All construction activities and use of machinery will be limited to standard operating work hours, and all construction equipment will be in good working order. The project is consistent with surrounding residential land use with similar noise levels, and therefore should not result in significant adverse impacts to surrounding properties. Noise generated will be standard residential uses, including peak traffic and standard maintenance activities. Therefore, any noise levels will be minimal and consistent with the surrounding residential uses. Furthermore, expansive natural biotic community buffers will remain to the north and south that will minimize any noise impacts to surrounding residential development.

VI. LICENSES, PERMITS, AND OTHER APPROVALS

Following is a list and status of all permits, approvals, and licenses required from the Township, County, and State agencies for approval of the project.

AGENCY

STATUS

New Jersey Department of Environmental Protection

Wetland Letter of Interpretation
Line Verification

Issued October 24, 2018

Freshwater Wetland Transition Area Waiver
Freshwater Wetland General Permit #6

To Be Submitted

Soil Conservation District

Soil Erosion and Sediment Control Plan Certification

To Be Submitted

Somerset County Planning Board

Montgomery Township Zoning/Planning Board

Preliminary and Final Major Site Plan Approval

To Be Submitted

DuBois reviewed all available reports, plans, maps, and other written information in order to prepare this Environmental Impact Statement for the project. This includes, but is not limited to, the traffic report, site plan set, GIS mapping, and local and state zoning information. All written and electronic sources consulted and referenced are cited in the References Section below (Section VIII).

VII. SUMMARY

As determined within the context of this report, the proposed project should have a minimal adverse impact on the natural environment due to the proper planning, implementation of the proposed project, existing site conditions and surrounding land use, and preservation of approximately 50 acres of forested upland and wetland communities.

The development of the residential development is consistent with the surrounding land use, Township zoning, and will result in minimal impacts to the environmental resources, public safety, and surrounding land use. The project has been designed to preserve and avoid environmentally sensitive areas to the maximum extent practicable, and therefore the site development will result in minimal impacts to wetlands, wetland buffer, flood hazard areas, riparian buffers, or any other regulated areas. Careful planning, construction, and management of the project shall limit the possibility of future adverse environmental impacts.

VIII. REFERENCES

Alfredson, R.J. and May, D.N., 1978, "Construction Equipment Noise," Handbook for Noise Assessment.

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D.S. Engineering, P.C. April, 2020. "Stormwater Management Report Prepared For Haven at Princeton; Block 37003 Lot 7; Montgomery Township, Somerset County, New Jersey"

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Environmental Impact Statement

The Haven at Princeton

Block 37003 * Lot 7

Montgomery Township, Somerset County, New Jersey

April 14, 2020

Page **26** of **26**

New Jersey Department of Agriculture, 1987, Standards for Soil Erosion and Sediment Control in New Jersey.

New Jersey State Planning Commission. March 1, 2001. The New Jersey State Development and Redevelopment Plan. Available online at: <http://www.nj.gov/state/planning/docs/stateplan030101.pdf>

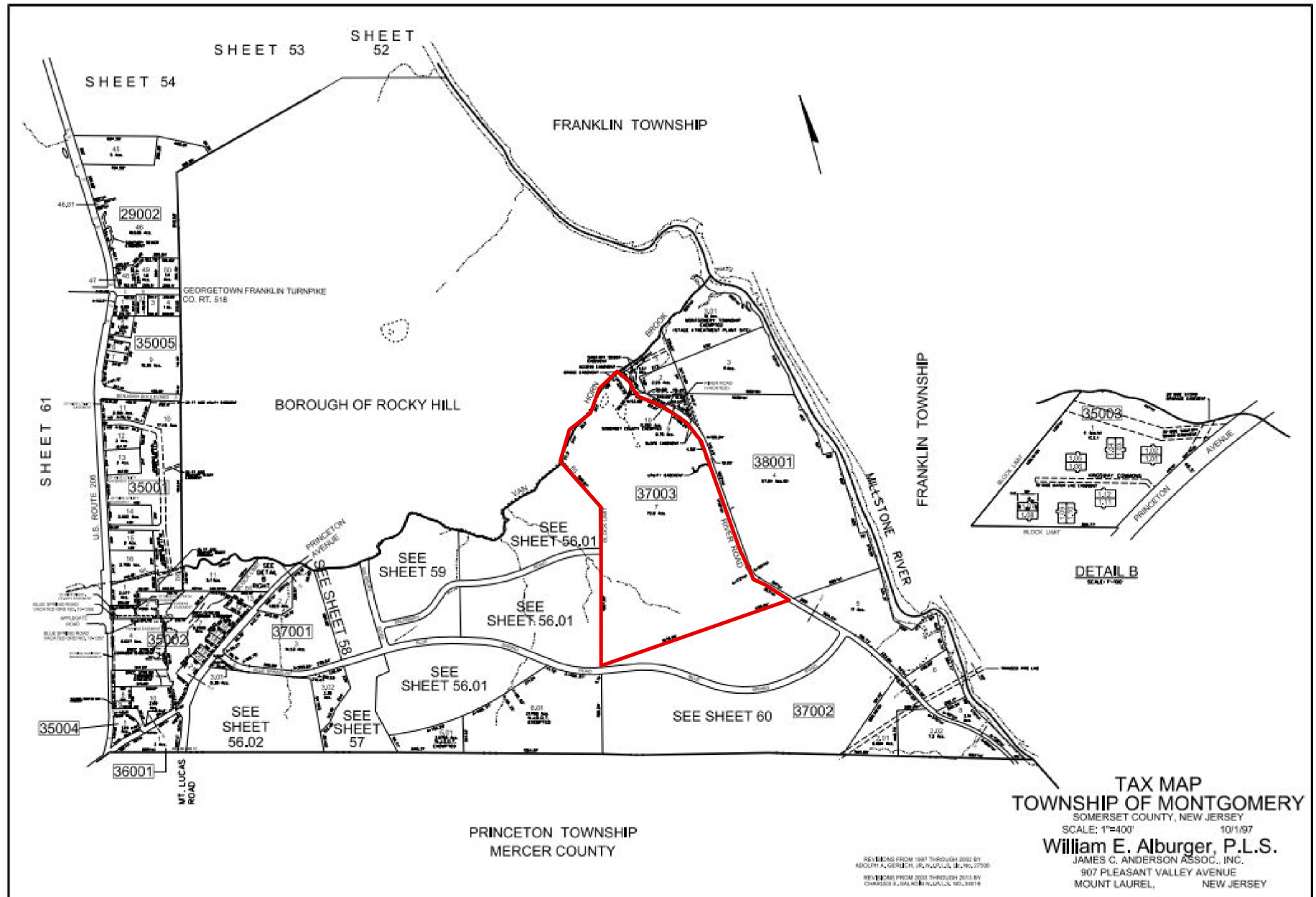
U.S. Department of Agriculture, Soil Conservation Service, et. al., 1987, Soil Survey of Somerset County, New Jersey.

U.S. Department of the Interior, U.S. Geologic Survey. Mineral Resources Online Spatial Data. <http://mrdata.usgs.gov/geology/state/sgmc-unit.php?unit=NJJTRp;2>

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FIGURES



Montgomery Township Tax Map

Block 37003 * Lot 7
 Montgomery Township, Somerset County, NJ



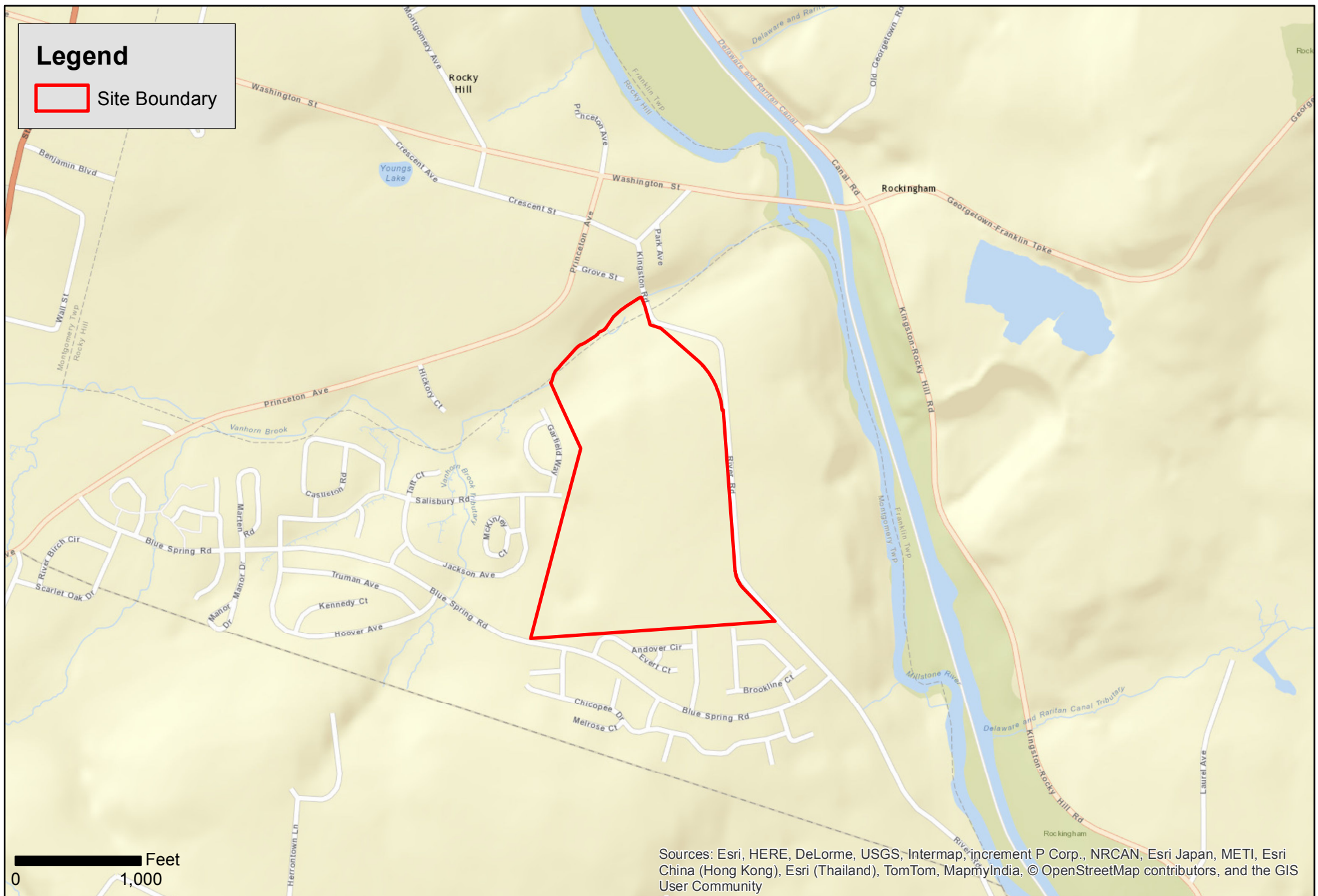
Figure 1



Job No.: D1350.001

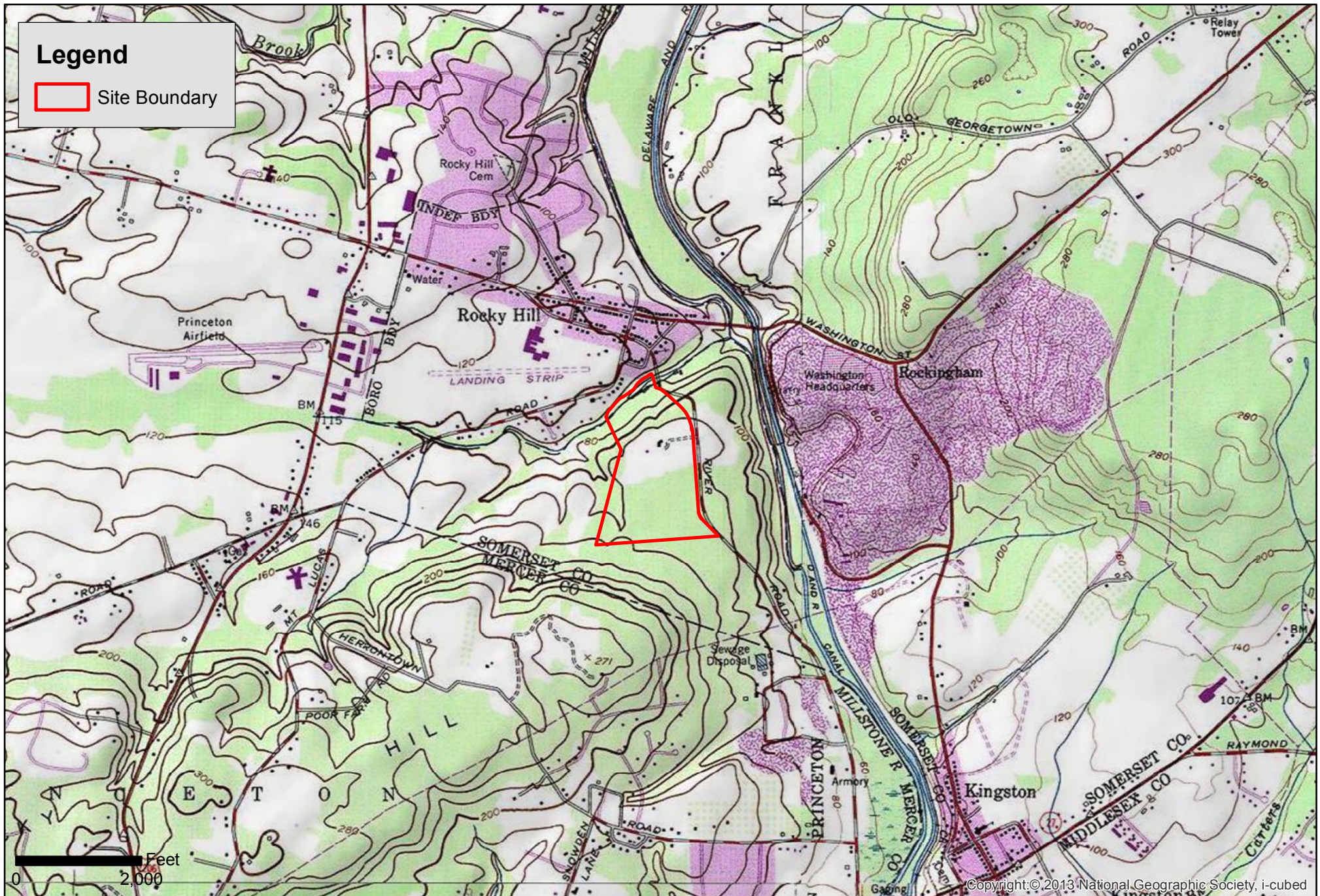
Scale: 1 in = 1,000 ft

Date: 11/13/2017

Drawn By: TK



 <p>DuBois Environmental Consultants</p>	<h1>New Jersey Road Map</h1> <p>Block 37003 * Lot 7</p> <p>Montgomery Township, Somerset County, NJ</p>	 <p>NORTH</p>	Job No.: D1350.001
			Scale: 1 in = 1,000 ft
			Date: 11/11/2016
			Drawn By: TK



Copyright © 2013 National Geographic Society, i-cubed



SE Rocky Hill NJ U.S.G.S. Quadrangle Map


Block 37003 * Lot 7
Montgomery Township, Somerset County, NJ

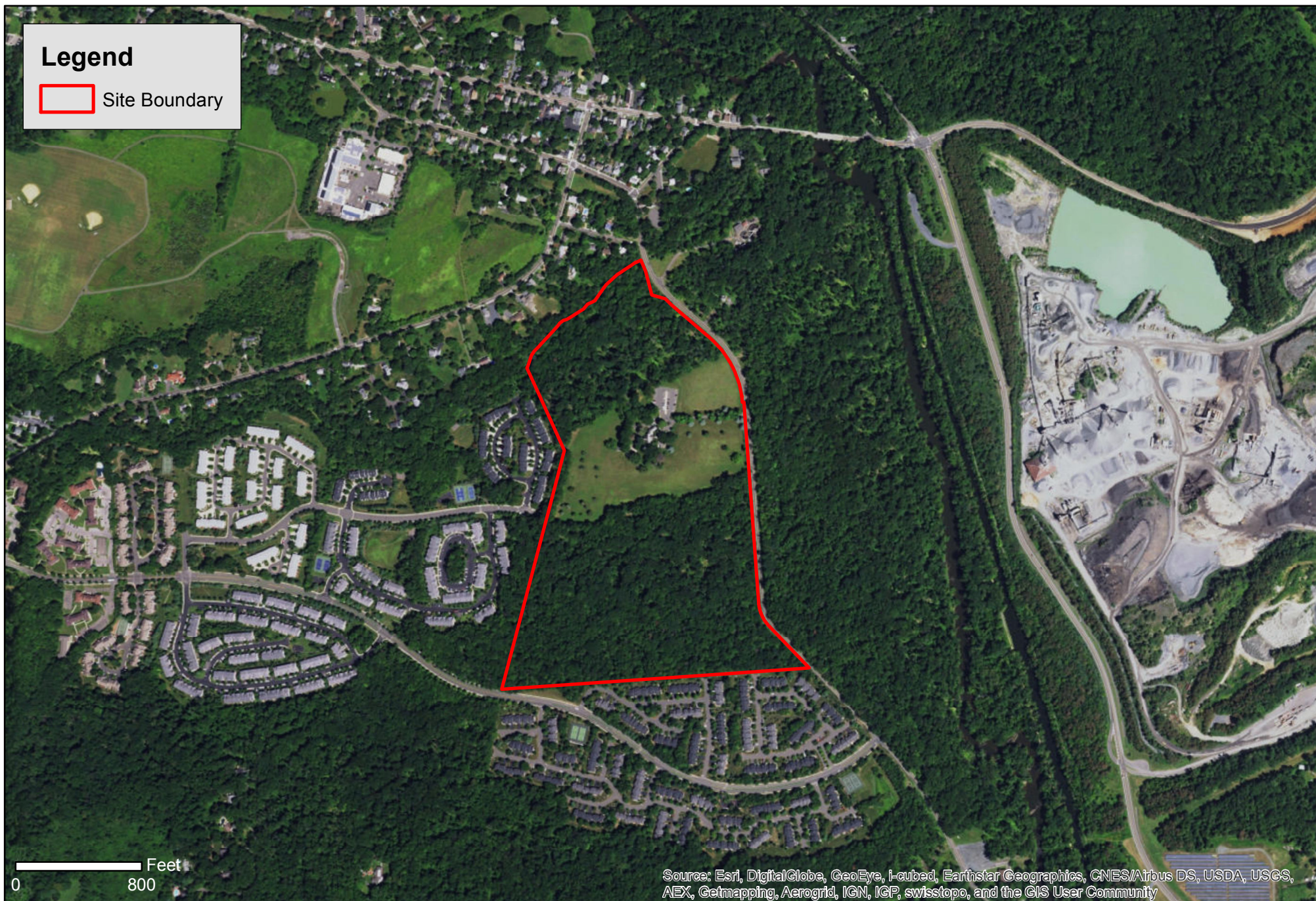


Figure 2

Job No.: D1350.001
Scale: 1 in = 2,000 ft
Date: 3/6/2017
Drawn By: TK

Legend

 Site Boundary



Aerial Map

Block 37003 * Lot 7
Montgomery Township, Somerset County, NJ



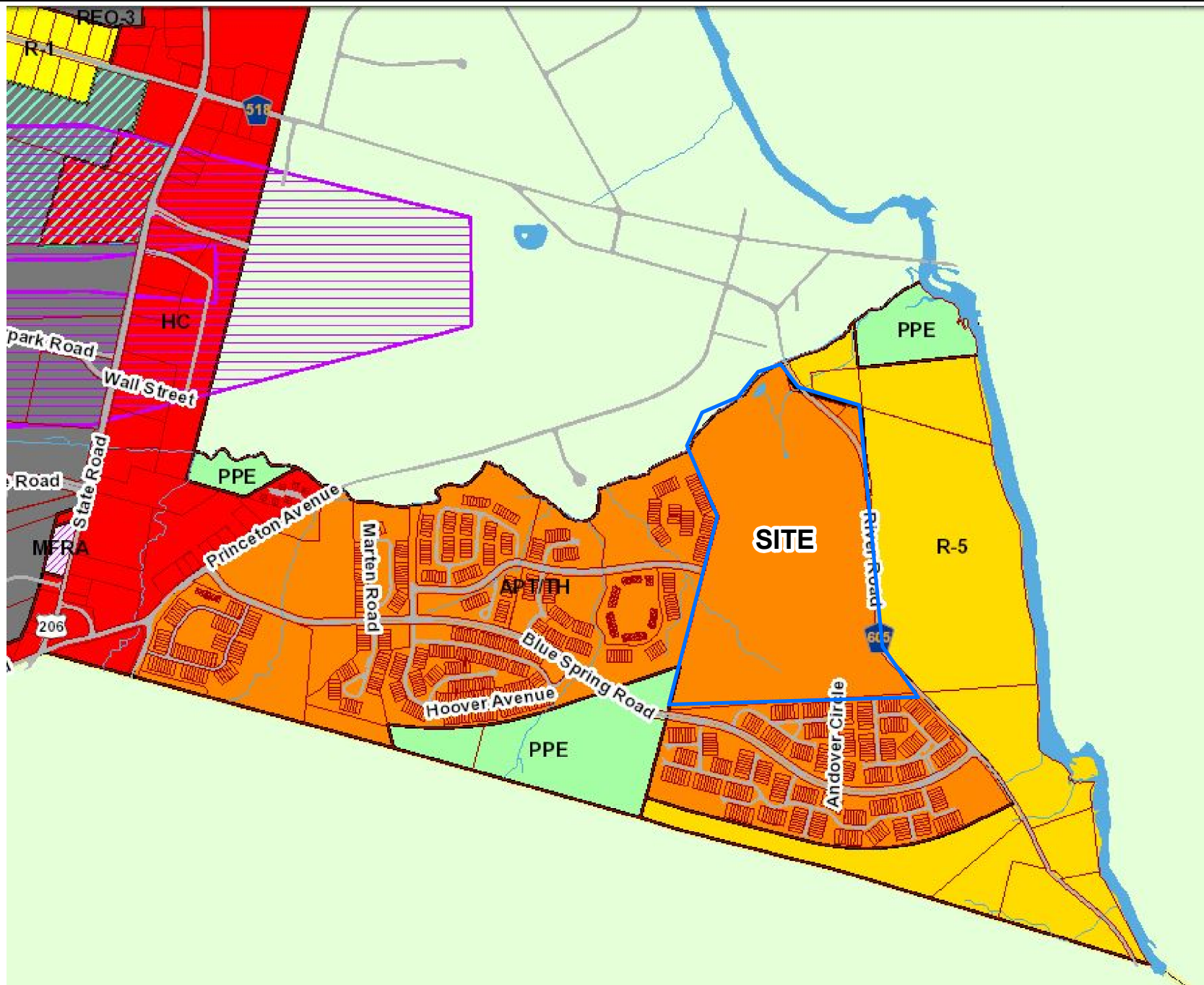
Figure 4

Job No.: D1350.001

Scale: 1 in = 800 ft

Date: 3/6/2017

Drawn By: AJ



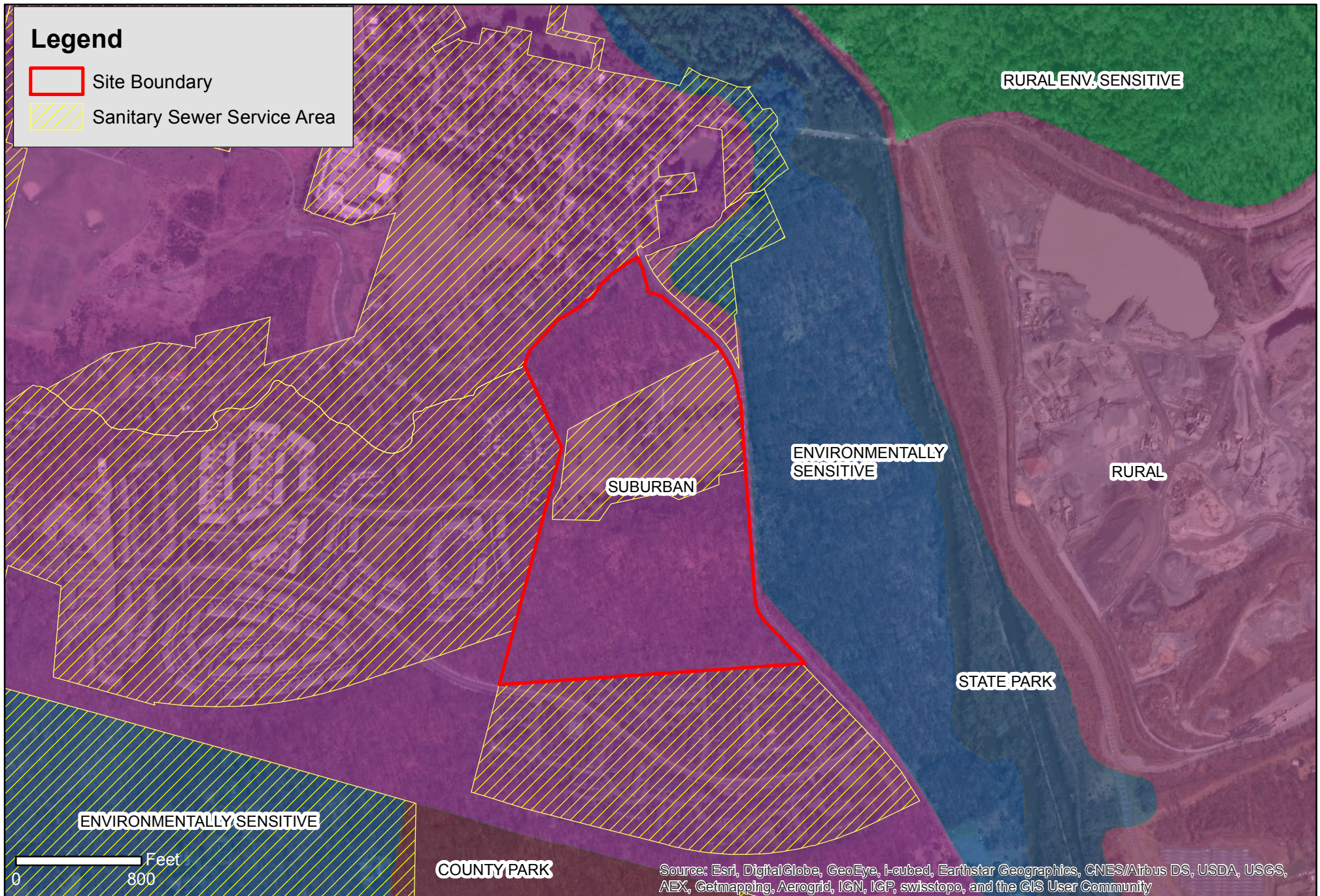
Montgomery Township Zoning Map



Block 37003 * Lot 7
Montgomery Township, Somerset County, NJ

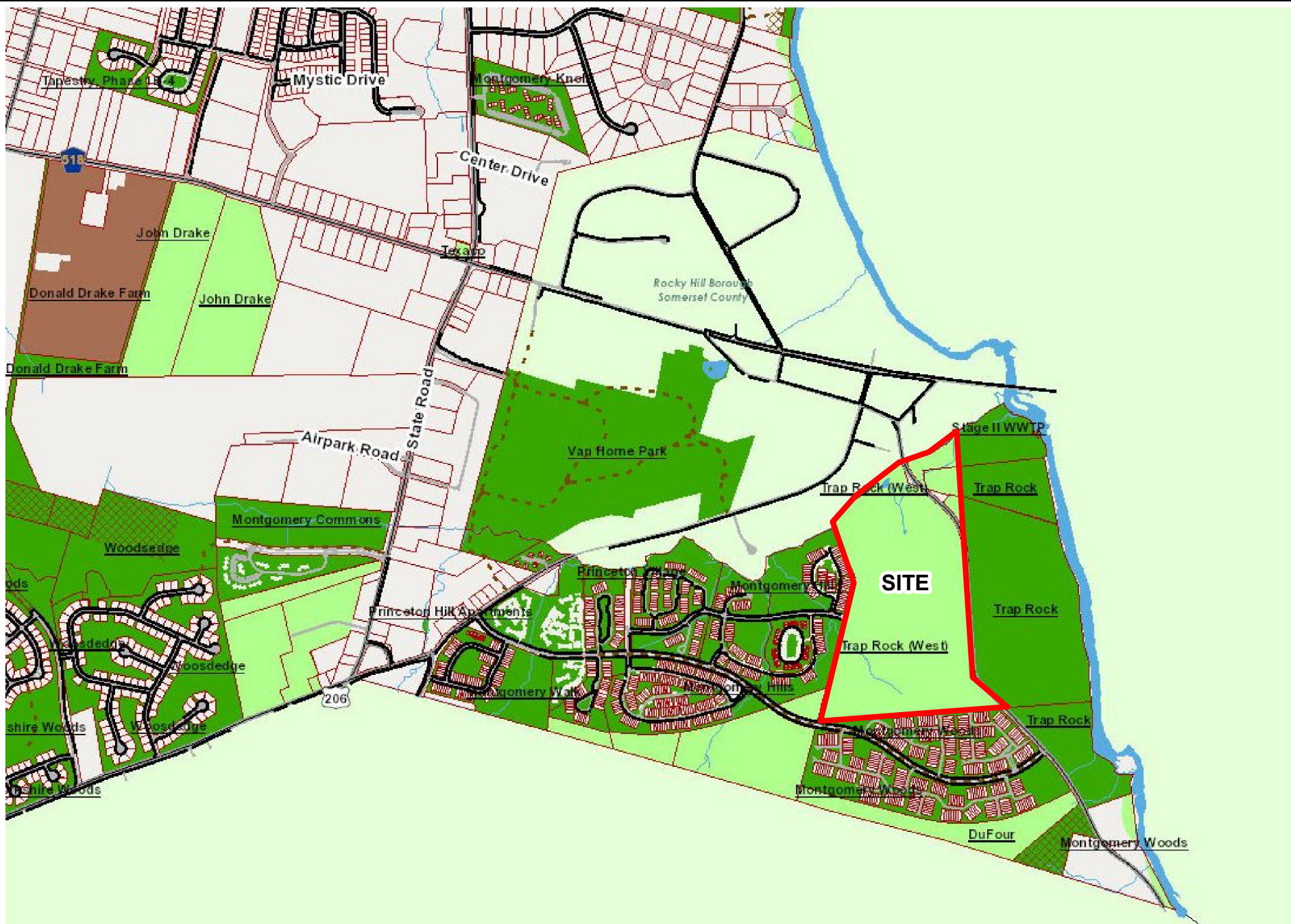


Figure 5

Job No.: D1350.001
Scale: 1 in = 1,000 ft
Date: 4/22/2019
Drawn By: AJ



 <p>DuBois Environmental Consultants</p>	<h1>NJ State Planning Area Map</h1> <p>Block 37003 * Lot 7</p> <p>Montgomery Township, Somerset County, NJ</p>	 <p>NORTH</p>	<p>Job No.: D1350.001</p>
		<p>Figure 6</p>	<p>Scale: 1 in = 800 ft</p>
		<p>Date: 4/22/2019</p>	<p>Drawn By: AJ</p>



Montgomery Township Open Space Map

Block 37003 * Lot 7
Montgomery Township, Somerset County, NJ



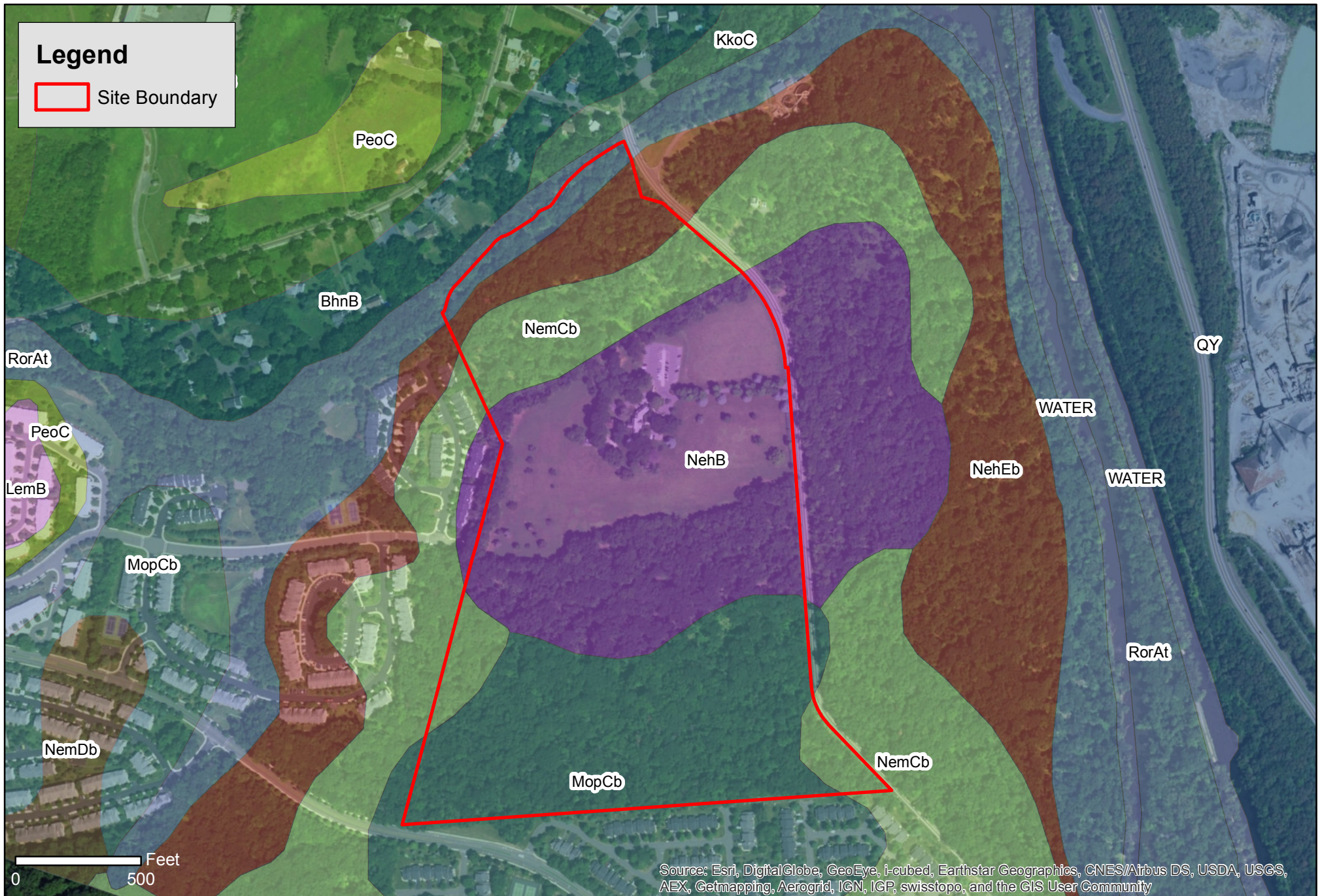
Figure 7



Job No.: D1350.001

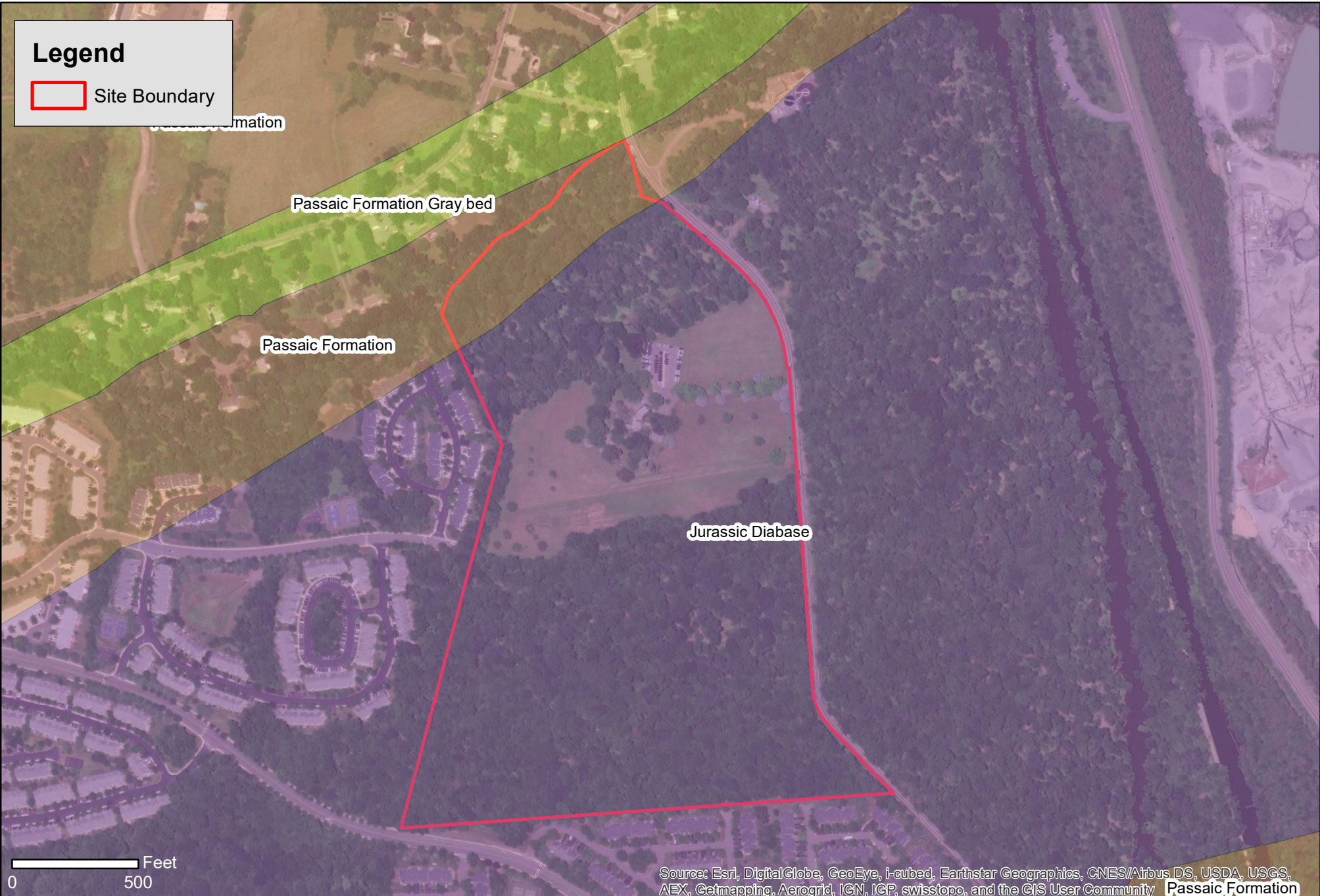
Scale: 1 in = 1,000 ft

Date: 4/22/2019

Drawn By: AJ



 <p>DuBois Environmental Consultants</p>	<h1>Somerset County Soil Survey Map</h1> <p>Block 37003 * Lot 7</p> <p>Montgomery Township, Somerset County, NJ</p>	 <p>NORTH</p>	<p>Job No.: D1350.001</p>
		<p>Figure 8</p>	<p>Scale: 1 in = 500 ft</p>
		<p>Date: 3/6/2017</p>	<p>Drawn By: AJ</p>



Legend

 Site Boundary

Passaic Formation Gray bed

Passaic Formation

Jurassic Diabase

0 500 Feet

Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Passaic Formation

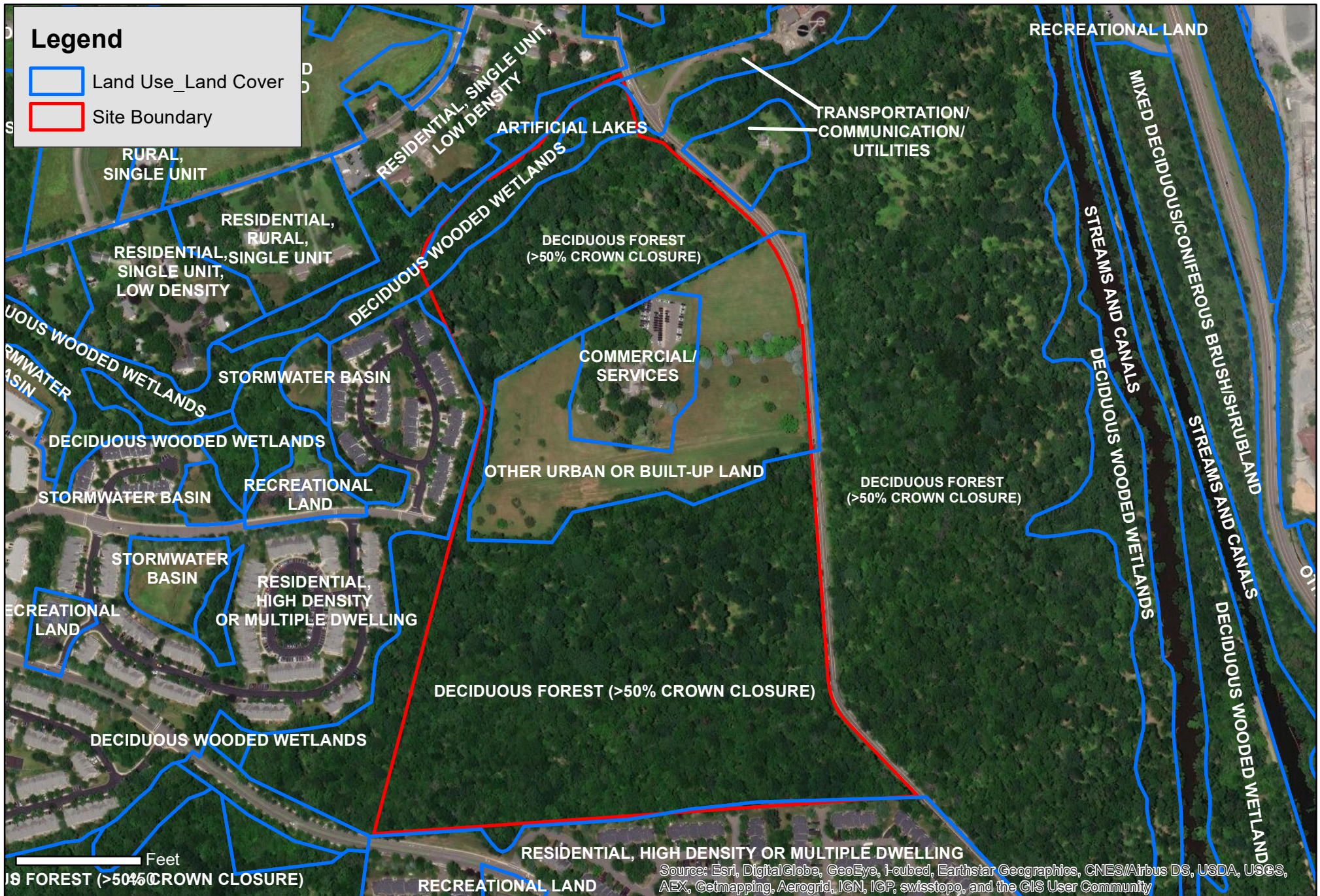


NJ Geology Map
Block 37003 * Lot 7
Montgomery Township, Somerset County, NJ



Figure 9

Job No.: D1350.001
Scale: 1 in = 500 ft
Date: 4/24/2020
Drawn By: AJ



Vegetation Communities Map

Block 37003 * Lot 7
Montgomery Township, Somerset County, NJ



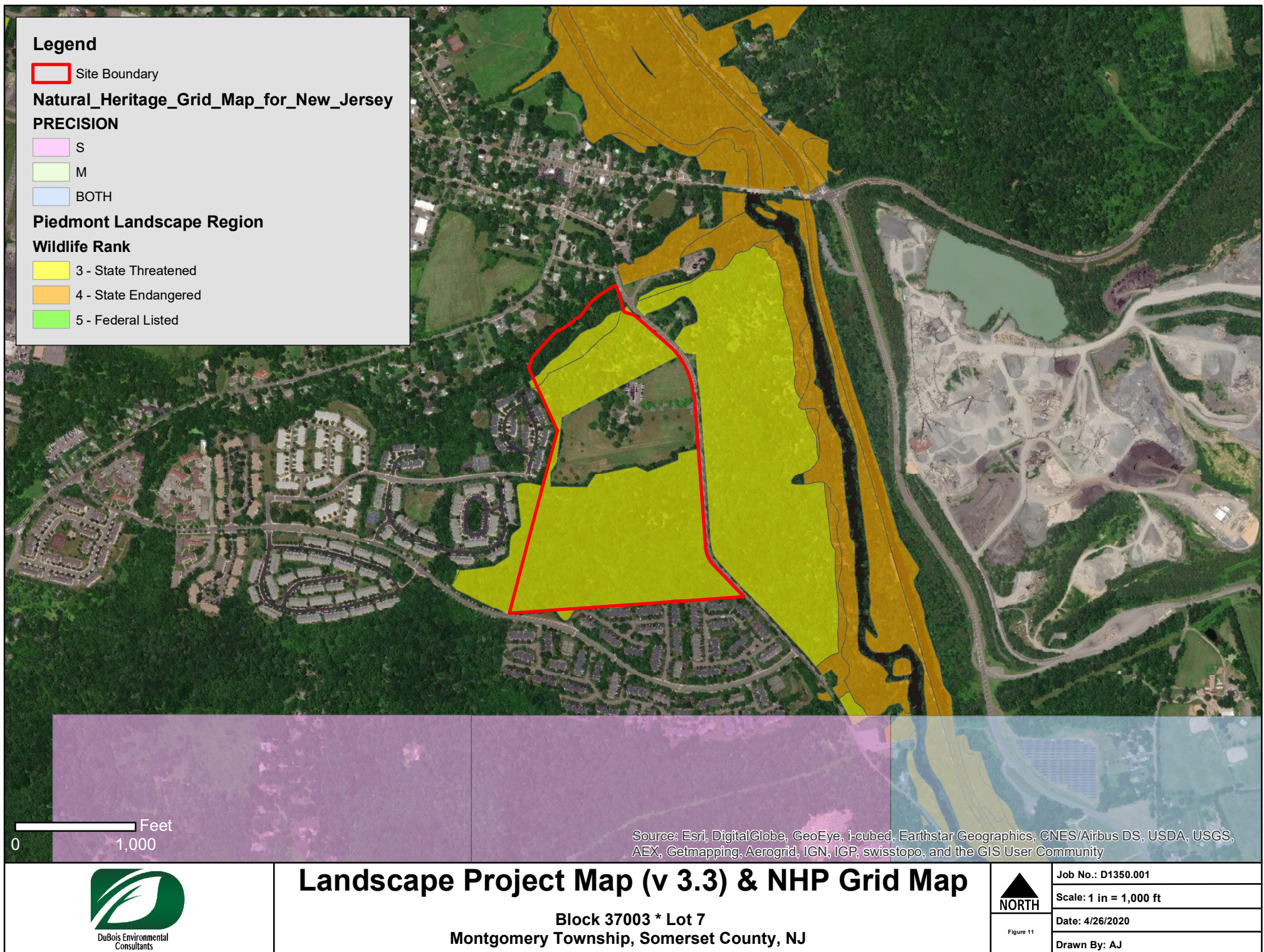
Figure 10

Job No.: D1350.001

Scale: 1 in = 450 ft

Date: 4/26/2020

Drawn By: AJ





NJDEP Freshwater Wetlands Map

Block 37003 * Lot 7
Montgomery Township, Somerset County, NJ



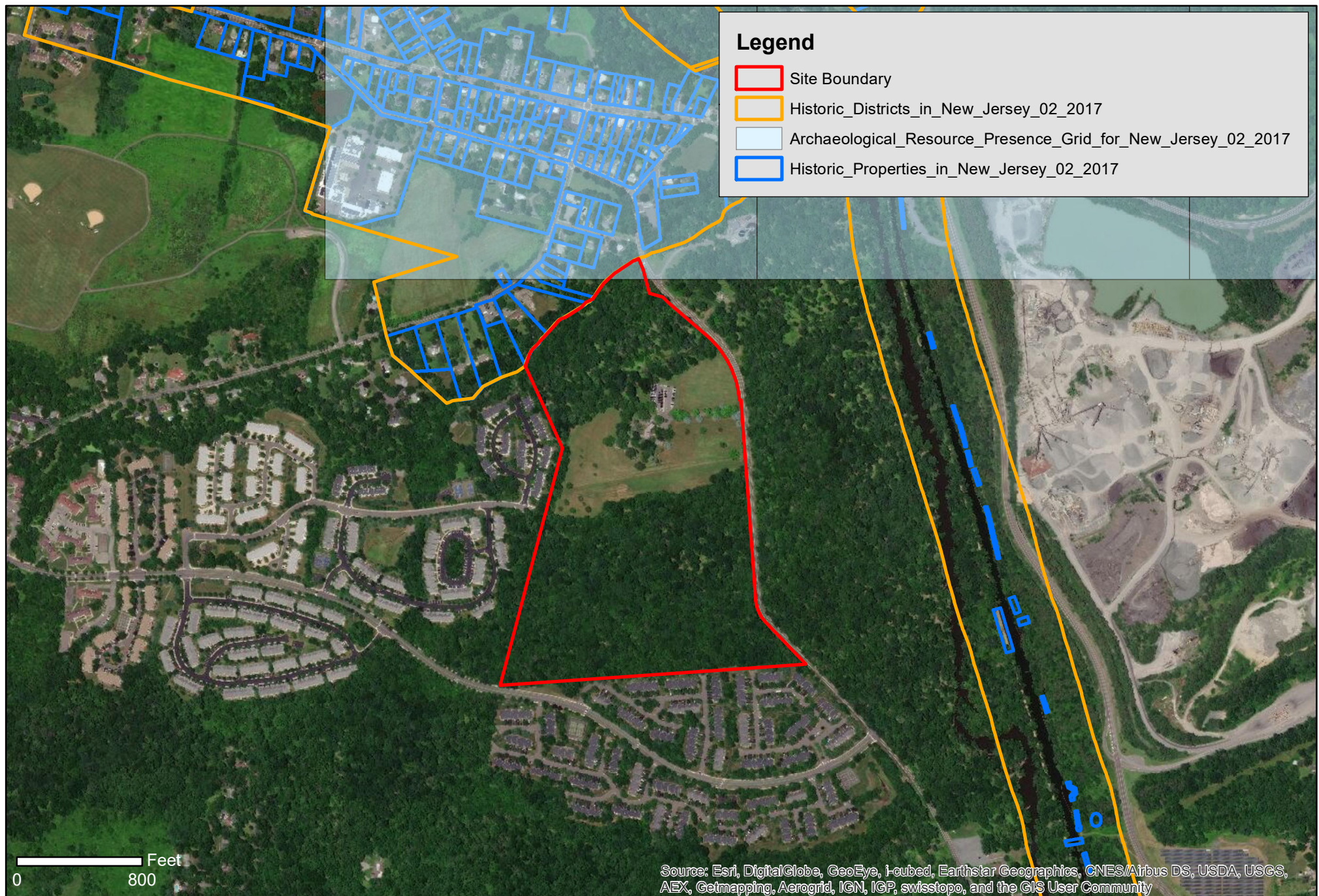
Figure 12

Job No.: D1350.001

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Date: 3/6/2017

Drawn By: AJ



NJ Historic and Archaeological Map

Block 37003 * Lot 7
Montgomery Township, Somerset County, NJ



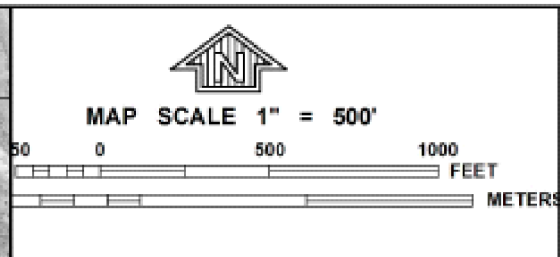
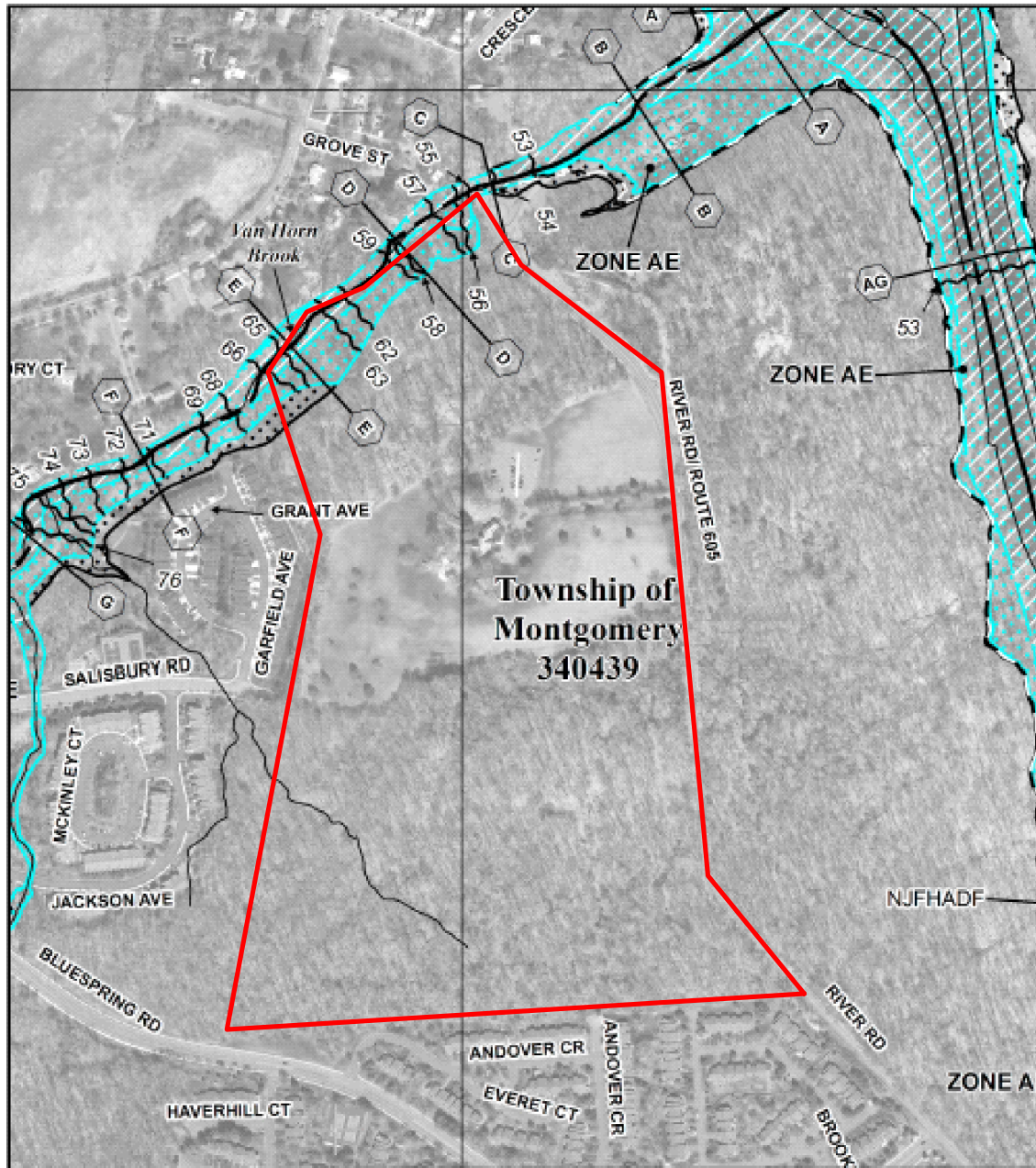
Figure 13

Job No.: D1350.001

Scale: 1 in = 800 ft

Date: 4/26/2020

Drawn By: AJ



NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0244F

FIRM

FLOOD INSURANCE RATE MAP

**SOMERSET COUNTY,
NEW JERSEY
(ALL JURISDICTIONS)**

PANEL 244 OF 301

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
FRANKLIN TOWNSHIP OF	340434	0244	C
MONTGOMERY TOWNSHIP OF	340435	0244	F
ROCKY HILL BOROUGH OF	340433	0244	F

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
34035C0244F

MAP REVISED
NOVEMBER 4, 2016

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



FEMA FIRM Map

Block 37003 * Lot 7

Montgomery Township, Somerset County, NJ



Figure 14

Job No.: D1350.001
NTS
Date: 4/27/2020
Drawn By: AJ

APPENDIX A

SITE PHOTOGRAPHS



1. Representative photograph of the existing residence/office building on the site and surrounding maintained lawn area.



2. Photograph of the parking lot on-site, facing north.



3. Facing east toward River Road along the existing access driveway.



4. Representative photograph of the wetland at the end of the swale feature near the existing parking lot.



5. Facing south along the swale feature extending from the Van Horn Brook.



6. Representative photograph of the Van Horn Brook waterway along the northern property boundary.



7. Facing north showing representative view of the forested wetlands in the northern section of the site along the Van Horn Brook.



8. Facing south through the wooded uplands in the northern section of the site.



9. Representative view of the expansive maintained lawn areas surrounding the existing development on the site.



10. Representative photograph of the forested wetlands in the southern section of the site.

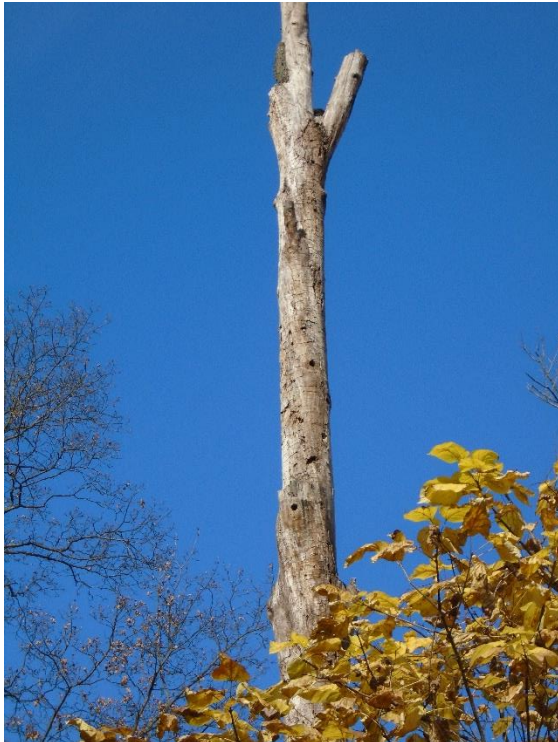


11. Representative photograph of the wooded uplands in the southern section of the site.



12. Photograph of the intermittent stream/swale mapped in the southern section of the site.

Representative Photographs of Snags Identified Throughout the Site



APPENDIX B

NJDEP Natural Heritage Program Correspondence



State of New Jersey

MAIL CODE 501-04

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF PARKS & FORESTRY

NEW JERSEY FOREST SERVICE

OFFICE OF NATURAL LANDS MANAGEMENT

P.O. BOX 420

TRENTON, NJ 08625-0420

Tel. (609) 984-1339 Fax (609) 984-0427

PHILIP D. MURPHY

Governor

SHEILA Y. OLIVER

Lt. Governor

CATHERINE R. McCABE

Commissioner

September 4, 2019

Amy Jones
DuBois Environmental Consultants, LLC
190 North Main Street
Manahawkin, NJ 08050

Re: The Haven at Princeton
Block(s) - 37003, Lot(s) - 7
Montgomery Township, Somerset County

Dear Ms. Jones:

Thank you for your data request regarding rare species information for the above referenced project site.

Searches of the Natural Heritage Database and the Landscape Project (Version 3.3) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Natural Heritage Data Request Form into our Geographic Information System. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Landscape Project habitat mapping and the Biotics Database for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Database was searched for occurrences of rare plant species or ecological communities that may be on the project site. Please refer to Table 1 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented on site. A detailed report is provided for each category coded as 'Yes' in Table 1.

We have also checked the Landscape Project habitat mapping and Biotics Database for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Database was checked for occurrences of rare plant species or ecological communities within ¼ mile of the site. Please refer to Table 2 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented within the immediate vicinity of the site. Detailed reports are provided for all categories coded as 'Yes' in Table 2. These reports may include species that have also been documented on the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1 and 2 (attached) to determine if any priority sites are located on or in the immediate vicinity of the site.

A list of rare plant species and ecological communities that have been documented from the county (or counties), referenced above, can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html>. If suitable habitat is present at the project site, the species in that list have potential to be present.

Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2010.pdf.

Beginning May 9, 2017, the Natural Heritage Program reports for wildlife species will utilize data from Landscape Project Version 3.3. If you have questions concerning the wildlife records or wildlife species mentioned in this response, we

NHP File No. 19-4007446-17437

recommend that you visit the interactive web application at the following URL, <https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=0e6a44098c524ed99bf739953cb4d4c7>, or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

For additional information regarding any Federally listed plant or animal species, please contact the U.S. Fish & Wildlife Service, New Jersey Field Office at <http://www.fws.gov/northeast/njfieldoffice/endangered/consultation.html>.

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf>.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,



Robert J. Cartica
Administrator

c: NHP File No. 19-4007446-17437

Mail Code 501-04 Department of Environmental Protection New Jersey Forest Service Office of Natural Lands Management P.O. Box 420 Trenton, New Jersey 08625-0420 Tel. (609) 984-1339 Fax. (609) 984-1427		<h1 style="text-align: right; margin: 0;"><i>Invoice</i></h1>	
		Date	Invoice #
		9/4/2019	17437
Bill to: DuBois Environmental Consultants, LLC 190 North Main Street Manahawkin, NJ 08050		Make check payable to: DEP - Office of Natural Lands Management <u>Forward with a copy of this statement to:</u> Mail Code 501-04 Office of Natural Lands Management P.O. Box 420 Trenton, New Jersey 08625-0420	
Quantity (hrs.)	Description	Rate (per hr.)	Amount
1	Natural Heritage Database search for locational information of rare species and ecological communities. Project: 19-4007446-17437	\$ 70.00	\$ 70.00
Amy Jones Project Name: The Haven at Princeton		Total	\$ 70.00

Table 1: On Site Data Request Search Results (6 Possible Reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites On Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.3	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species On the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

<p>Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.3 Species Based Patches</p>
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Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<hr/>								
<i>Aves</i>								
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Red-headed Woodpecker	Melanerpes erythrocephalus	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N

Table 2: Vicinity Data Request Search Results (6 possible reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	1 page(s) included
2. Natural Heritage Priority Sites within the Immediate Vicinity	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat In the Immediate Vicinity of Project Site Based on Search of Landscape Project 3.3	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species In the Immediate Vicinity of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	No	0 pages included

Immediate Vicinity of the Project Site
Based on Search of Natural Heritage Database
Rare Plant Species and Ecological Communities Currently Recorded in
the New Jersey Natural Heritage Database

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Vascular Plants</i>									
Obolaria virginica	Virginia Pennywort			HL	G5	S2	Y	2009-04-15	Autumn Hill Reservation, Princeton. North of the pipeline right-of-way, approximately 0.5 mile north-northeast of the intersection of Snowden Lane with Herrontown Road. From the parking area take the Green Trail and then turn right onto the eastern branch of the Green Trail. Plants are scattered along both sides of the Green Trail and the Yellow Trail and up to the Orange Trail.

Total number of records: 1

<p align="center">Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches</p>

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<hr/>								
<i>Aves</i>	Bald Eagle	Haliaeetus leucocephalus	Foraging	4	NA	State Endangered	G5	S1B,S2N
	Cooper's Hawk	Accipiter cooperii	Nest	2	NA	Special Concern	G5	S3B,S4N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Red-headed Woodpecker	Melanerpes erythrocephalus	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N

**Vernal Pool Habitat
In the Immediate Vicinity of
Project Site Based on Search of
Landscape Project 3.3**

Vernal Pool Habitat Type

Vernal Pool Habitat ID

Potential vernal habitat area

1726

Total number of records: 1

APPENDIX C

NJDEP Letter of Interpretation



State of New Jersey

PHILIP D. MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

CATHERINE R. McCABE
Commissioner

SHEILA Y. OLIVER
Lt. Governor

Division of Land Use Regulation
Mail Code 501-02A
P.O. Box 420
Trenton, New Jersey 08625-0420
www.nj.gov/dep/landuse

OCT 24 2018

William H. Stavola
P.O. Box 419
Kingston, NJ 08528

RE: Freshwater Wetlands Letter of Interpretation: Line Verification
File No.: 1813-17-0006.1
Activity Number: FWW170001
Applicant: WILLIAM H. STAVOLA
Block: 37003; Lot: 7
Montgomery Township, Somerset County

Dear Mr. Stavola:

This letter is in response to your request for a Letter of Interpretation to have Division of Land Use Regulation (Division) staff verify the boundary of the freshwater wetlands and/or State open waters on the referenced property.

In accordance with agreements between the State of New Jersey Department of Environmental Protection (NJDEP), the U.S. Army Corps of Engineers (USACOE) Philadelphia and New York Districts, and the U.S. Environmental Protection Agency (USEPA), the Division is the lead agency for establishing the extent of State and Federally regulated wetlands and waters. The USEPA and/or USACOE retain the right to reevaluate and modify the jurisdictional determination at any time should the information prove to be incomplete or inaccurate.

Based upon the information submitted, and upon site inspections conducted by Division staff on April 25, 2018, and August 2, 2018, the Division has determined that the wetlands and waters boundary line(s) as shown on the plan map entitled: "MAP OF SURVEY WETLAND DELINEATION PLAN 760 RIVER ROAD LOT 7 BLOCK 37003 TOWNSHIP OF MONTGOMERY SOMERSET COUNTY ~ NEW JERSEY", consisting of one (1) sheet, dated October 9, 2017, last revised October 1, 2018, and prepared by Stephen M. Fisk, New Jersey Professional Land Surveyor of Fisk Associates, P.A., is accurate as shown.

The freshwater wetlands and waters boundary line(s), as determined in this letter, must be shown on any future site development plans. The line(s) should be labeled with the above file number and the following note:

"Freshwater Wetlands/Waters Boundary Line as verified by NJDEP"

Wetlands Resource Value Classification ("RVC")

In addition, the Division has determined that the resource value and the standard transition area or buffer required adjacent to the delineated wetlands are as follows:

State Open Waters [No wetland buffer]:

1. Field points WD-1 through WD-3 to WD-5
2. Field points WC-3 to WC-6; WCC-3 to WCC-7
3. Within the delineated wetlands

Intermediate [50 foot wetland buffer]:

1. Field points WCC-1 to WCC-3; WC-1 to WC-3
2. Field points WA-13 through WA-24 and continuing to WA-36
3. Field points WB-1 through WB-7; and then from WB-7 through WB-16 to WB-1

Exceptional [150 foot wetland buffer]:

1. The wetlands denoted by the remaining field points

The Department has determined that the wetlands classified as Exceptional resource value are a documented and suitable habitat for a State threatened/endangered species. In addition, the Department has determined that the wetlands denoted by field points WCC-1 to WCC-3, WC-1 to WC-3 and the State open waters denoted by field points WC-3 to WC-6, WCC-3 to WCC-7 are isolated and not part of any surface water tributary system. RVC may affect requirements for wetland and/or transition area permitting. This classification may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-9 and 10), the types of Statewide General Permits available for the property (see N.J.A.C. 7:7A-5 and 7) and any modification available through a transition area waiver (see N.J.A.C. 7:7A-8). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules for additional information.

Wetlands resource value classification is based on the best information available to the Division. The classification is subject to reevaluation at any time if additional or updated information is made available, including, but not limited to, information supplied by the applicant.

Under N.J.S.A. 13:9B-7a(2), if the Division has classified a wetland as exceptional resource value, based on a finding that the wetland is documented habitat for threatened and endangered species that remains suitable for use for breeding, resting or feeding by such species, an applicant may request a change in this classification. Such requests for a classification change must demonstrate that the habitat is no longer suitable for the documented species because there has been a change in the suitability of this habitat. Requests for resource value classification changes and associated documentation should be submitted to the Division at the address at the top of this letter.

General Information

Pursuant to the Freshwater Wetlands Protection Act Rules, you are entitled to rely upon this jurisdictional determination for a period of five years from the date of this letter unless it is determined that the letter is based on inaccurate or incomplete information. Should additional information be disclosed or discovered, the Division reserves the right to void the original letter of interpretation and issue a revised letter of interpretation.

Regulated activities proposed within a wetland, wetland transition area or water area, as defined by N.J.A.C. 7:7A-2.2 and 2.3 of the Freshwater Wetlands Protection Act rules, require a permit from this office unless specifically exempted at N.J.A.C. 7:7A-2.4. The approved plan and supporting jurisdictional limit information are now part of the Division's public records.

Please be advised that any surface water features on the site or adjacent to the site may possess flood hazard areas and/or riparian zones and development within these areas may be subject to the Flood Hazard Area Control Act rules at N.J.A.C. 7:13. The Division can verify the extent of flood hazard areas and/or riparian zones through a flood hazard area verification under the application procedures set forth at N.J.A.C. 7:13-5.1.

This letter in no way legalizes any fill which may have been placed, or other regulated activities which may have occurred on-site. This determination of jurisdiction extent or presence does not make a finding that wetlands or water areas are "isolated" or part of a surface water tributary system unless specifically called out in this letter as such. Furthermore, obtaining this determination does not affect your responsibility to obtain any local, State, or Federal permits which may be required.

Recording

Within 90 calendar days of the date of this letter, the applicant shall submit the following information to the clerk of each county in which the site is located, and shall send proof to the Division that this information is recorded on the deed of each lot referenced in the letter of interpretation:

1. The Department file number for the letter of interpretation;
2. The approval and expiration date of the letter of interpretation;
3. A metes and bounds description of the wetland boundary approved under the letter of interpretation;
4. The width and location of any transition area approved under the letter of interpretation; and
5. The following statement: "The State of New Jersey has determined that all or a portion of this lot lies in a freshwater wetland and/or transition area. Certain activities in wetlands and transition areas are regulated by the New Jersey Department of Environmental Protection and some activities may be prohibited on this site or may first require a freshwater wetland permit. Contact the Division of Land Use Regulation at (609) 292-0060 or <http://www.nj.gov/dep/landuse> for more information prior to any construction onsite."

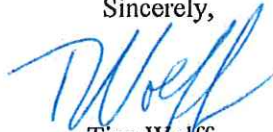
Failure to have this information recorded in the deed of each lot and/or to submit proof of recording to the Division constitutes a violation of the Freshwater Wetlands Protection Act rules and may result in suspension or termination of the letter of interpretation and/or subject the applicant to enforcement action pursuant to N.J.A.C. 7:7A-22.

Appeal Process

In accordance with N.J.A.C. 7:7A-21, any person who is aggrieved by this decision may request a hearing within 30 days of the date the decision is published in the DEP Bulletin by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, Mail Code 401-04L, P.O. Box 402, 401 East State Street, 7th Floor, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist found at www.state.nj.us/dep/landuse/forms. Hearing requests received after 30 days of publication notice may be denied. The DEP Bulletin is available on the Department's website at www.state.nj.us/dep/bulletin. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see the website www.nj.gov/dep/odr for more information on this process.

Please contact Mark Harris of our staff by e-mail at Mark.Harris@dep.nj.gov or by phone at (609) 633-6563 should you have any questions regarding this letter. Be sure to indicate the Department's file number in all communication.

Sincerely,



Tina Wolff

Environmental Specialist 3
Division of Land Use Regulation

c: Montgomery Township Clerk
Montgomery Township Construction Official
Amy Jones, DuBois Environmental Consultants, L.L.C.- Agent

APPENDIX D

STATEMENT OF QUALIFICATIONS

Amy Jones
Senior Biologist/Project Manager
ajones@denviro.com



190 North Main
Street
Manahawkin, NJ 08050
609-488-2857

Education:

B.S. Ecology
Juniata College – 2000

Certifications:

Professional Wetland Scientist-
Society of Wetland Scientists

Qualified Specialist (Ecologist &
Ornithologist) able to certify
ESA Protection Plans

USFWS Recognized Qualified
Bog Turtle Surveyor – NJ

NJDEP ENSP Recognized
Qualified Venomous Snake
Monitor

Continuing Education:

Rutgers University
Methodology for Delineating
Wetland & Wetland Vegetation
Identification

Threatened and Endangered
Species of Northern and
Southern New Jersey (field and
classroom courses)

Richard Stockton College of NJ
Ornithology

Shepherd College
Shorebird Management &
Ecology

Bowman's Hill Wildflower
Preserve
Identification of Cool Season
Grasses, Sedges and Rushes
Plant Stewardship Index (PSI)

Professional Affiliations:

The Wildlife Society
-National Member
-NJ Chapter Member
-NJ Chapter Secretary
2007 – 2014
-NJ Chapter Board Member
2014 – 2016
-NJ Chapter Newsletter Editor
2017 – present

Fields of Competence:

Amy Jones has over 20 years of experience in the fields of biology, ecology, wetland science, and land use regulatory compliance. She conducts various environmental site assessments, development feasibility studies, wetland delineations, rare species habitat evaluations and population surveys. She has extensive experience in managing a variety of projects from the initial field study stage through various regulatory application and approval processes, including extensive coordination with regulatory personnel. Mrs. Jones has a respected professional relationship with various municipal and county agencies, NJDEP, USFWS and USDA NRCS personnel.

Professional Experience:

Mrs. Jones is a senior biologist and project manager with the firm of DuBois and Associates. She manages all aspects of a project and coordinates specifically with a variety of clients to organize projects and proposals. Mrs. Jones manages each individual project to ensure all appropriate and applicable regulations and tasks are implemented to facilitate successful completion/approval of the project.

Mrs. Jones is responsible for conducting development feasibilities, wetland delineations, natural resource inventories, threatened/endangered species habitat assessments and directed surveys, and monitoring activities. Mrs. Jones has extensive experience with the survey and sampling protocols required under the jurisdiction of the USFWS, NJDEP, PAFBC, and Pinelands Commission for threatened and endangered species surveys. This survey work includes experience in various snake and salamander species drift fence trapping, numerous raptor and woodpecker nest investigations and breeding vocalization broadcast surveys, opportunistic and visual encounter turtle surveys, amphibian monitoring and call detection/playback surveys, and bat studies. Mrs. Jones has received numerous scientific collection permits from regulatory agencies as both the primary permittee and sub-permittee.

Specific experience and responsibilities includes ecological and environmental monitoring activities for various linear development and improvement projects. This monitoring oversight and coordination ensures the construction activities are in compliance with county, state, and federal conditions and standards, and all best management practices are implemented as required. Monitoring activities also serve to ensure the construction activities will not result in adverse impacts to environmentally sensitive areas, or rare faunal or floral habitats and/or populations.

Mrs. Jones conducts vegetation inventories within a variety of biotic communities throughout New Jersey. These have included species specific surveys for numerous target plants considered rare or State and/or Federally listed. Mrs. Jones has conducted numerous botanical investigations for rare plant species within the jurisdiction of the Pinelands Commission and NJDEP. Specifically, these directed evaluations have included surveys for the Federally listed swamp pink, sea beach amaranth, and Knieskern's beaked rush plants, results of which have been accepted by all regulatory state agencies and the USFWS.

Mrs. Jones is responsible for performing wetland delineations under the jurisdiction of multiple agencies, which are conducted pursuant to the interagency evaluation procedures. This includes expertise in analyzing the vegetation and technical indicators of hydrology and soils. She authors Freshwater Wetland Delineation Reports and prepares Freshwater Wetland Letter of Interpretation applications for submittal to the NJDEP for verification of the delineated wetland limits.

Amy Jones
Senior Biologist/Project Manager
ajones@denviro.com



190 North Main
Street
Manahawkin, NJ 08050
609-488-2857

NJ Builders Association

-Environmental Commission
2016 – present

The Society of Women

Environmental Professionals

-Greater Philadelphia
2017 - present

Career Positions:

U.S. Fish & Wildlife Service
E.B. Forsythe NWR
Brigantine, NJ-
Wildlife Biologist
2000-2002

Habitat Management & Design,
Inc.
Trenton, NJ-
Sr. Environmental Consultant
2002-2007

Water's Edge Environmental,
LLC
Ocean City, NJ-
Senior Biologist
2007-2014

DuBois and Associates, LLC
Manahawkin, NJ –
Sr. Biologist/Environmental
Scientist
2014 – Present

Mrs. Jones coordinates directly with professional engineers, attorneys, clients, and regulatory agencies to evaluate compliance and design of projects pursuant to various environmental regulations, inclusive of the Freshwater Wetlands Protection Act Rules, Flood Hazard Area Control Act Rules, and coastal/waterfront development regulations. Based on these permit analyses and project designs, she prepares the applicable permit applications pursuant to the NJDEP and USACOE regulations.

Mrs. Jones has also conducted numerous volunteer survey efforts in coordination with the NJDEP, NJ Audubon Society, and NJ Conserve Wildlife Foundation. These survey efforts include State directed Bog Turtle surveys, participation in grassland bird surveys as part of the Landowner Incentive Program, the Calling Amphibian Monitoring Program (CAMP), and regional Wood Turtle monitoring surveys.

Representative Projects of Relevance:

Burlington County Park Projects

Ecological and environmental work was completed to assist Burlington County in conducting environmental constraints evaluations and permit analyses for improvements on numerous County owned park and greenway projects. Mrs. Jones works directly with the landscape architects and engineers in assisting with design of the project to ensure compliance of proposed improvements pursuant to State waterfront development, freshwater wetlands, and flood hazard regulations. Mrs. Jones also coordinates with the NJDEP and USACOE with regard to permit requirements and to ensure no adverse impacts to documented state and federal threatened and endangered species habitat, including the bald eagle and bog turtle. Mrs. Jones prepared all necessary permit applications and ensured continued cooperative coordination with the regulatory agencies to ensure receipt of the applicable permit approvals for the park projects. Mrs. Jones has respected professional relationship with Burlington County and is involved in ongoing and future park improvement projects.

Holly Realty Project

Conducted red-headed woodpecker, barred owl, red-shouldered hawk, and northern long eared bat surveys in order to determine presence/absence and evaluate compliance with the New Jersey coastal regulations. These included nest cavity searches and call playback surveys for the red-headed woodpecker, barred owl, and red-shouldered hawk, and mist net surveys for the northern long-eared bat. These surveys were conducted pursuant to accepted state and federal survey methods. Survey methodology and results summaries have been prepared for the client and state agency review for continued impact and mitigation review.

New Jersey Department of Transportation Roadway Improvement Projects

Coordination with the NJDOT and project engineer to conduct the necessary field investigations and prepare full permit applications pursuant for various roadway and bridge improvement and development projects throughout the state. This has included wetland delineations, vegetation and wildlife inventories, and preparation and submission of state wetland and flood hazard permit and waiver applications, USACOE permit applications, and coastal and waterfront development permit applications.

Atlantic Cape Community College – Cape May Campus

Mrs. Jones conducted extensive monitoring of habitat mitigation measures implemented as part of CAFRA approval for construction the Cape May campus facilities. This included eastern tiger salamander trapping to evaluate success of the constructed breeding pond on the site. Monitoring resulted in the positive capture and identification of juvenile tiger salamanders, demonstrating success of the breeding pond. Additional monitoring and surveys included barred owl call playback surveys and long term avian point count surveys to evaluate impacts.