

5142.0002

Revised: December 1, 2021

September 29, 2021

ENVIRONMENTAL IMPACT STATEMENT

BLOCK 41 * LOTS 17, 27 & 28
HOWELL TOWNSHIP,
MONMOUTH COUNTY NEW JERSEY

PREPARED FOR:

IPP SOLAR, LLC
299 BROADWAY, SUITE 1501
NEW YORK, NY 10007



Kyle Weise
Director of Land Use Services

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I. INTRODUCTION

An Environmental Impact Statement (EIS) report has been prepared for Block 41 * Lots 17, 27 & 28 in Howell Township, Monmouth County, New Jersey.

This report presents a summary of current as well as future environmental conditions for this project site. Included is an analysis of substantial impacts that the expected project may inflict on this site; and an overview of the mitigation and restorative efforts toward attention or eliminating any potential adverse effects.

This assessment was prepared to document the decision-making process to formulate a professional opinion concerning the property and project site. The included information was based on onsite investigations and a review of available maps and documents.

Site Visit Log			
Date	Time	Weather	Location
11/05/2020	9:00 am	65°F/Sunny	Review wetlands on Lot 17
08/27/2021	11:00 am	90°F/Sunny	Review entire property
09/02/2021	9:00 am	75°F/Sunny	Soil boring/ review property

II. PROPOSED DEVELOPMENT

The proposed development will remove the existing forest area to construct a ground-mounted photovoltaic system. The proposed improvements include building a 5.6 MW ground-mounted solar system, equipment pads, electrical conduit, and fencing. Please refer to the Preliminary and Final Major Site Plan prepared by FWH Associates, P.A., for further detail.

III. PROJECT SITE LOCATION

Site Location:

Block 41, Lots 17, 27 & 28 consists of 28 acres located along Victory Road in Howell Township. The property is situated in an area of Howell Township containing industrial developments, undeveloped parcels, and residential homes.

Current Uses of Adjoining Properties:

- North: Disanti Concrete
- South: Undeveloped land & Commercial Development
- East: New Jersey Natural Gas Company facility & Undeveloped land
- West: Residential development & Undeveloped
-

IV. EXISTING CONDITIONS

The property is currently 28 acres of undeveloped forested uplands and wetlands. The following is an assessment of current site conditions and adjacent areas.

A. Geology

This site is located in Monmouth County, which lies within the Atlantic Coastal Plain physiographic province. The Lower Member of Kirkwood Formation underlies the site. Kirkwood beds vary in character by region; however, they consist primarily of fine micaceous quartz sand. In many places, there are delicate bands of yellow and salmon pink throughout the beds. In parts of New Jersey, the Kirkwood at its outcrop comprises of quartz sand, locally with clay laminae, thicker lens-shaped beds of light-colored clay, and occasional gravel lenses. This formation covers a broader surface area of Coastal Plain in New Jersey than any other formation.

B. Soils Mapping

Our office reviewed the United States Department of Agriculture, Natural Resources Conservation Service, Web Soil for the proposed site and found the site is mapped to be underlain by three (3) soil types. The following descriptions are referenced directly from the NRCS Soil Data Mart (USDA NRCS 2021).

AtsAO – Atsion sand, 0 to 2 percent slopes, Northern Tidewater Area

Component: Atsion (90%), Berryland, occasionally flooded (5%), Lakehurst (5%)

The Atsion component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats, coastal plains. The parent material consists of sandy eolian deposits and/or fluviomarine deposits. Depth to a restrictive root layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. The shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 2 inches (depth from the mineral surface is 0 inches) during March, April. Organic matter content in the surface horizon is about 85 percent. Nonirrigated land capability classification is 5w. This soil meets hydric criteria. There are no saline horizons within 30 inches of the soil surface.

EveB – Evesboro sand, 0 to 5 percent slopes

Component: Evesboro (80%), Atsion (5%), Lakehurst (5%), Mullica, rarely flooded (5%), Downer (5%)

The Evesboro component makes up 80 percent of the map unit. Slopes are 0 to 5 percent. This component is on low hills on North Atlantic coastal plains. The parent material consists of sandy eolian deposits and/or sandy fluviomarine deposits. Depth to a restrictive root layer is greater than 60 inches. The natural drainage class is excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. The shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This soil does not meet hydric criteria.

LakB – Lakehurst sand, 0 to 5 percent slopes

Component: Lakehurst (85%), Quakerbridge (5%), Atsion, rarely flooded (5%), Berryland, rarely flooded (5%)

The Lakehurst component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on flats on North Atlantic coastal plains, dunes. The parent material consists of sandy fluviomarine deposits. 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 high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches (depth from the mineral surface is 28 inches) during January, February, March, April. Organic matter content in the surface horizon is about 85 percent. Below this thin organic horizon, the organic matter content is about 2 percent. This soil does not meet hydric criteria.

C. Hydrology

The proposed site lies within the Manasquan River Watershed. The closest waterway to the site is the Squankum Brook, located approximately 875 ft north. There are no streams located on the subject property.

D. Topography

The property gently slopes from north to south. No steep slopes are located onsite.

E. Wetlands

Freshwater wetlands and wetland transition areas have been identified on lot 17 by the NJDEP. The NJDEP issued a Letter of Interpretation file No. is 1319-18-0011.1 on September 12, 2018, and revised November 26, 2019. The LOI verified the extent of the wetlands and transition area that encompass the site. A Letter of Interpretation dated August 18, 2017, was received for lots 27 & 28 that determined the site does not contain freshwater wetland or buffers. A description of the wetland characteristics can be found in Appendix C.

F. Flood Plains

The project area is mapped on the FEMA panel 34025C0320F to be located within Zone X (minimum flood hazard) on the FEMA flood mapping. Therefore, no flood plains are located on the site.

G. Vegetation

Our office reviewed the historic aerials from 1930 to 2020. The review showed that most of the site had been cleared and disturbed for fifty years, from 1930 to 1984. Our site visits determine that the site consists of a mid-successional oak/pine forest. The general vegetation on the site consists of a native overstory of White Oaks (*Quercus alba*, FACU), Sassafras (*Sassafras albidum*, FACU), Pitch Pine (*Pinus rigida*, FACU), Northern Red Oaks (*Quercus rubra*, FACU), Chestnut Oaks (*Quercus prinus*, UPL), Sweetgum (*Liquidambar styraciflua*, FAC) and Red Maples (*Acer rubrum*, FAC) Blackgum (*Nyssa sylvatica*, FAC). The understory generally consists of overstory saplings, lowbush blueberry (*Vaccinium angustifolium*, FACU), and roundleaf Greenbrier (*Smilax rotundifolia*, FAC).

H. Wildlife

The property currently does provide habitat to local wildlife in the 28 acres of the undeveloped western portion of the site. The wildlife habitat is part of an approximate 220 acres undeveloped

upland/wetland forest area. A list of species expected to currently be utilizing the property are listed below.

BIRDS

<u>Common Name</u>	<u>Scientific Name</u>
American Crow	<i>Corvus brachyrhynchos</i>
American Robin	<i>Turdus migratorius</i>
Blue Jay	<i>Cyanocitta cristata</i>
Common Grackle	<i>Quiscalus quiscula</i>
Field Sparrow	<i>Spizella pusilla</i>
Gray Catbird	<i>Dumetella carolinensis</i>
House Finch	<i>Carpodacus mexicanus</i>
House Sparrow	<i>Passer domesticus</i>
Mourning Dove	<i>Zenaida macroura</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Red-tail Hawk	<i>Buteo jamaicensis</i>
Turkey Vulture	<i>Cathartes aura</i>

MAMMALS

<u>Common Name</u>	<u>Scientific Name</u>
Eastern Chipmunk	<i>Tamias striatus</i>
Gray Squirrel	<i>Sciurus carolinensis</i>
Groundhog	<i>Marmota monax</i>
White-tail Deer	<i>Odocoileus virginianus</i>
White-footed Mouse	<i>Peromyscus leucopus</i>
Raccoon	<i>Procyon lotor</i>

TURTLES

<u>Common Name</u>	<u>Scientific Name</u>
Eastern Box Turtle	<i>Terrapene carolina</i>

I. Endangered or Threatened Species

Trident Environmental reviewed Landscape Project Version 3.3 data for threatened/ endangered wildlife species potential in the area. The Landscape Project was developed by the New Jersey Division of Fish and Wildlife (NJDEP), Endangered and Non-Game Species Program (ENSP) as a wildlife habitat mapping program used to identify and map critical habitats for endangered, threatened, and special concern wildlife. The ranking system is applied 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 does 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 wildlife occurrences listed as endangered and threatened under the Federal Endangered Species Act of 1973.

The entire site is located within the Pinelands Landscape Region. According to the NJDEP Landscape Project, the entire site is mapped as Rank 3 habitat. In addition, the NJDEP Landscape Project and Natural Heritage Database Report identified the area to contain habitat for Pine Barrens Treefrog (*Hyla andersonii*) based on a 1984 sighting in the general area.

J. Air Quality

The site is currently undeveloped and does not contribute any air contaminants to the area.

K. Noise Levels

The property is undeveloped and does not contribute noise to the surrounding area.

L. Cultural, Historical, and Archeological Resources

Our office reviewed the NJDEP Historic Preservation GIS Layers. There are no historic properties or archaeological site grids mapped on the site. The New Jersey Southern Railroad Historic District is located between lots 17 & 27, and 28. immediate vicinity.

V. PROJECT IMPACTS

Adverse and positive impacts will occur during and after construction. They were determined as follows:

A. Geology

There will be no need to blast or ripping bedrock to accommodate allowable grade tolerances for roads, buildings, or utilities within the project area during the construction process. However, surface geology will be disturbed because of grading. While all proposed land forming for any site preparation is sensitive to extensive grade alterations, this project is designed to consider responsible site engineering tolerances and conformance with the Soil Conservation District's site stabilization measures.

B. Soil/Soil Erosion

The project will impact the onsite soil by introducing posts for the solar array and grading. The soils do not pose limitations in constructing the proposed solar field construction. Construction operations will be performed following an approved Soil Erosion and Sediment Control Plan to help eliminate adverse impacts of soil erosion, sedimentation, windblown dust, and odor problems. These practices will use techniques recommended by the Soil Conservation District.

C. Degradation of Surface Water Quality

The proposed project is not anticipated to have an adverse impact on local hydrology.

D. Ground Water Pollution/Reduction of Ground Water Capabilities

There is no anticipated significant reduction of groundwater recharge capabilities. The project will collect and recharge stormwater generated by the site into the approved stormwater system designed for the project.

E. Topography

The development will impact the existing topography due to grading for the proposed project. In addition, the elevation will be shifted to accommodate new drainage patterns from the proposed development.

F. Vegetation/Wildlife Habitat

The site will be cleared of existing natural vegetation within the proposed solar field. Removing the overstory will reduce the amount of wildlife habitat located on the site. The project will keep 5.32 acres of undeveloped forested uplands and wetlands upon completion. The approximate 200 acres of habitat adjacent to the site will continue to provide habitat for the local wildlife population.

G. Endangered and Threatened Species

The NJDEP Landscape Project and Natural Heritage Database Report identified the site to contain habitat for Pine Barrens Treefrog (*Hyla andersonii*). In addition, the wetland was determined to be an exceptional resource wetland with a one hundred (150) feet transition area. The project has been designed to minimize any disturbance to the wetland and 150 feet transition area located on the property. Based on the current layout and proposed use of the property, the project is not anticipated to have an adverse impact on any Pine Barrens Treefrog populations.

Eastern States Environmental Associates Inc. prepared a Critical Wildlife Habitat Evaluation Report dated June 21, 2019, assessing the habitat characteristics of lot 17 with regards to Pine Barrens Treefrog. The evaluation report determined that the wetland areas do not contain the vegetative or water characteristics specifically preferred by the Pine Barrens Treefrog. It was determined that even though wetland area WE does not contain the specific habitat requirements for Pine Barrens Tree Frog, it possesses a potential for Pine Barrens Treefrog to use the wetland complex.

The habitat evaluation conducted three (3) site visits in April, May, and June 2019 to determine if Pine Barrens Treefrogs are utilizing the wetland areas. A visual and vocalization survey of the wetland areas did not find that Pine Barrens Treefrog was utilizing any wetlands based on visual and vocalization surveys. A copy of the Eastern States Environmental Associates Inc. prepared a Critical Wildlife Habitat Evaluation Report dated June 21, 2019, can be reviewed in Appendix C.

H. Wetlands

The project proposed to fill portions of the isolated wetland WA and WB located near Victory Road on lot 17. A Freshwater Wetlands Application General Permit No. 6 was submitted to the NJDEP to fill the isolated wetlands on November 22, 2021. The file no. for the application is 1319-18-0001.2.

The Critical Wildlife Habitat Evaluation Report reviewed the four (4) wetland areas to determine if they met the criteria as a vernal habitat. It was determined that Wetland area WE was the only wetland of the four (4) assessed to possess the required characteristics to be classified as vernal habitat. No other wetland areas were determined to be vernal habitats during the habitat evaluation. Therefore, the project will not disturb the Wetland Area WE or the one hundred and fifty (150) feet buffer associated with the wetland.

I. Air Quality Degradation

There will be temporary effects on the surrounding environment from fumes, dust, and odors from machinery during the construction of the proposed property. Upon completing the proposed project, a slight localized increase in air pollutants may be detectable from traffic emissions to and from the property.

J. Noise Levels

The proposed property will cause an increase in noise levels before, during, and after construction. Temporary noise levels will increase due to machinery and construction activities. The project is anticipated to operate within normal noise levels for a solar development of this size.

K. Aesthetics

The proposed development of the site will bring change to the existing aesthetics. The proposed project will remove natural vegetation to construct a solar field and associated improvements. The project has been designed to include natural buffers along the property's perimeter. The project will also be landscaped with native vegetation where necessary.

L. Cultural, Historical, and Archeological Resources

The project will not disturb any cultural, historical, and archeological resources. The New Jersey Southern Railroad Historic District is not a national historical landmark and will not be disturbed or altered due to the proposed project.

M. Solid Waste Disposal

All disposals will be per Howell Township and State regulations.

N. Traffic

Traffic conditions within the project site area will increase during the construction. However, no increase in traffic is anticipated upon completion of the development.

VI. COMMITMENT OF RESOURCES

A. Vegetation Destruction

The project will preserve existing vegetation wherever feasible within the contexts of the proposed plan.

VII. ADVERSE ENVIRONMENTAL IMPACTS THAT CAN NOT BE AVOIDED

Several undesirable environmental impacts are unavoidable during and after construction. They are as follows:

1. The permanent removal of a portion of natural land will eliminate some wildlife habitat areas, thus resulting in some species' displacement.
2. Locally, a slight increase in noise and air pollutants will be encountered because of site clearing and demolition, heavy machinery, construction, and increased traffic conditions upon completion of the project.

VIII. SUMMARY

The proposed development is anticipated to have a minimal adverse impact on the natural environment and the surrounding communities. Careful planning, construction, and management of the project will help to limit any adverse environmental impacts from the proposed development.

IX. REFERENCES

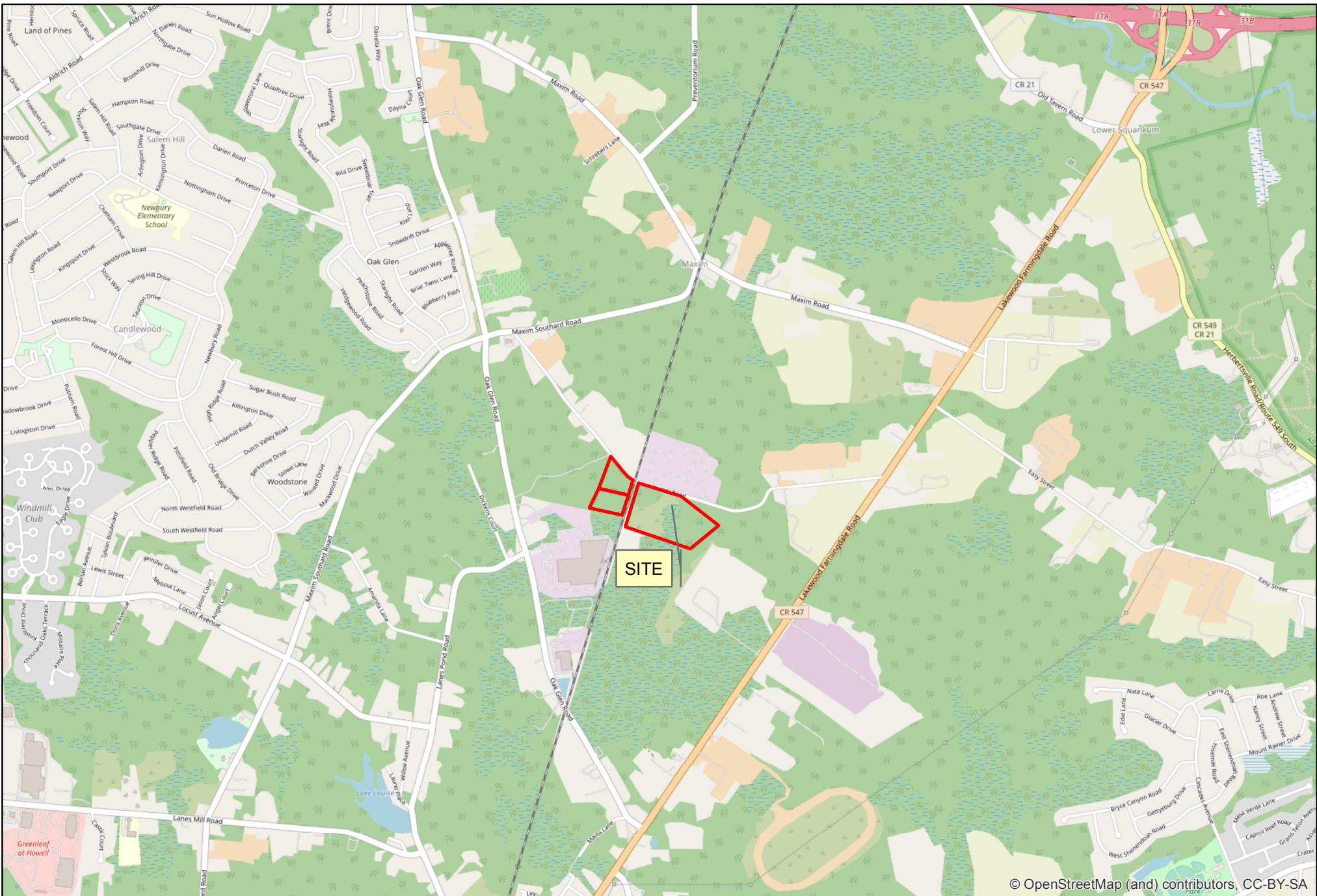
Howell Township Land Use Regulations Ordinance

NETR Online, 2021. Historical Aerials by Nationwide Environmental Title Research, LLC. Available online at <http://www.histrociaerials.com/>.

New Jersey Department of Environmental Protection, Bureau of Geographical Information Systems, <http://nj.gov/dep/gis/>.

United States Department of Agriculture, Natural Resources Conservation Service, Soil Survey Geographic (SSURGO) Database, Soil Data Mart. Available online at <http://soildatamart.nrcs.usda.gov/>.

FIGURES



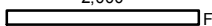
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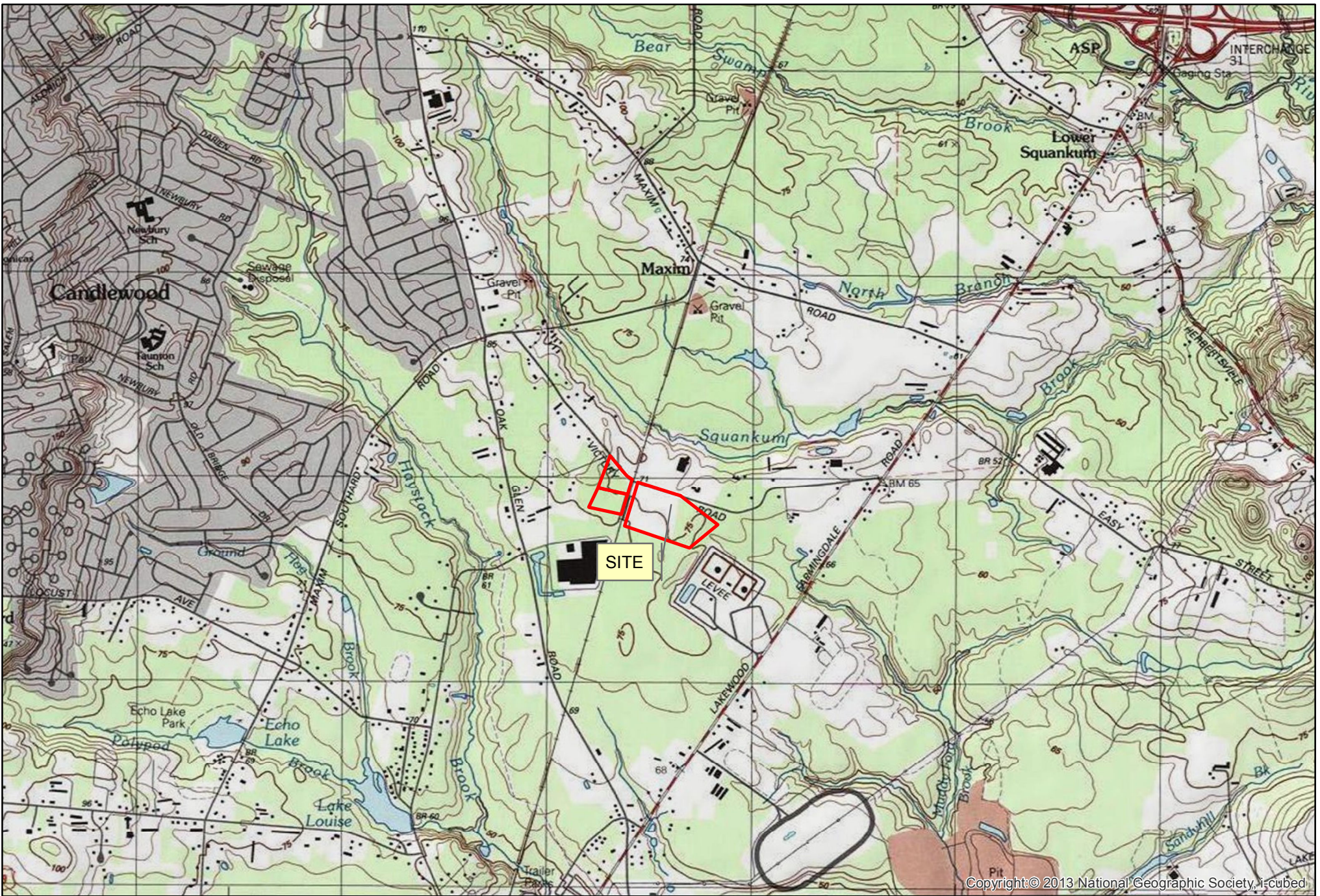
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ROAD MAP

Victory Road
Block 41 * Lots 17, 27 & 28
Howell Twp., Monmouth Co., NJ

DRAWN BY: KW	DATE: 9/29/2021
FIGURE: 1	JOB NO.: 5142.0002
SCALE: 1 inch = 2,000 feet	
	





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FARMINGDALE USGS QUADRANGLE

Victory Road
Block 41 * Lots 17, 27 & 28
Howell Twp., Monmouth Co., NJ

DRAWN BY: KW	DATE: 9/29/2021	
FIGURE: 2	JOB NO.: 5142.0002	
SCALE: 1 inch = 2,000 feet		
2,000		Feet

Legend

- Rank 1 - Habitat specific requirements
- Rank 2 - Special Concern
- Rank 3 - State Threatened
- Rank 4 - State Endangered
- Rank 5 - Federal Listed




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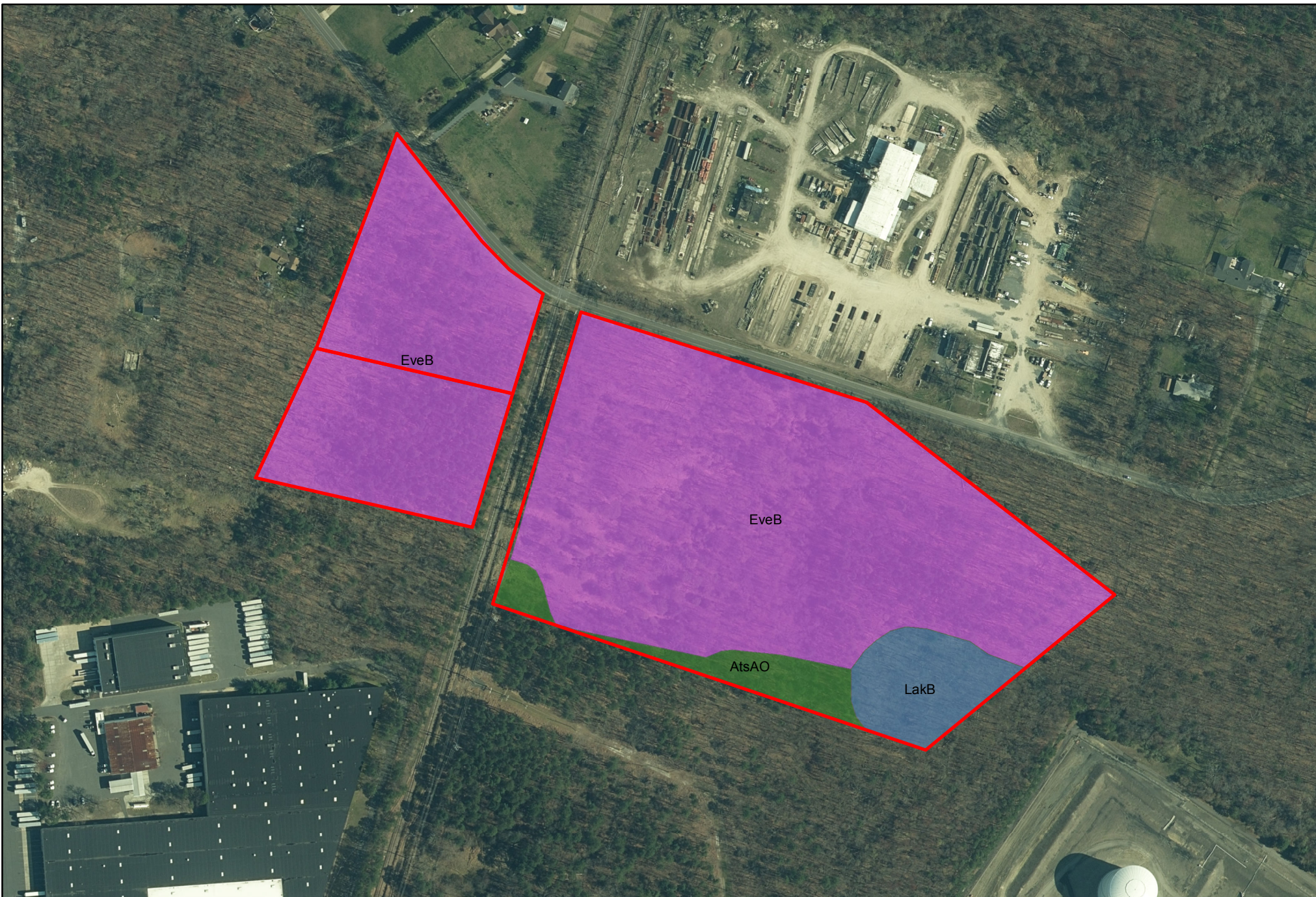
LANDSCAPE PROJECT VERSION 3.3

Victory Road
Block 41 * Lots 17, 27 & 28
Howell Twp., Monmouth Co., NJ

DRAWN BY: KW	DATE: 9/29/2021
FIGURE: 3	JOB NO.: 5142.0002



SCALE: 1 inch = 300 feet
300 Feet




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SOILS MAP

Victory Road
Block 41 * Lots 17, 27 & 28
Howell Twp., Monmouth Co., NJ

DRAWN BY: KW	DATE: 9/29/2021
FIGURE: 4	JOB NO.: 5142.0002



SCALE: 1 inch = 300 feet
 300
 Feet



Victory Rd



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AERIAL MAP-2020

Victory Road
Block 41 * Lots 17, 27 & 28
Howell Twp., Monmouth Co., NJ

DRAWN BY: KW	DATE: 9/29/2021
FIGURE: 5	JOB NO.: 5142.0002



SCALE: 1 inch = 300 feet
300 Feet

APPENDIX A

Site Photographs



Photograph 1: View of vegetation assemblage on lot 28



Photograph 2: View of railroad tracks from lot 28

**Victory Road
Howell Twp., Monmouth Co., NJ**



Photograph 3: Victory from front of lot 28



Photograph 4: Victory Road looking west

**Victory Road
Howell Twp., Monmouth Co., NJ**



Photograph 5: Victory Road to the east



Photograph 6: Vegetation on lot 17



Photograph 7: vegetation in the southeast corner of lot 17



Photograph 8: Wetland located along Victory Road on Lot 17

APPENDIX B

Natural Heritage Report



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

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PHILIP D. MURPHY

Governor

SHEILA Y. OLIVER

Lt. Governor

SHAWN M. LATOURETTE

Acting Commissioner

April 12, 2021

Jillian Aldridge
Trident Environmental Consultants, Inc.
1856 Route 9
Toms River, NJ 08755

Re: Victory Road
Block(s) - 41, Lot(s) - 17, 27 & 28
Howell Township, Monmouth County

Dear Ms. Aldridge:

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 map(s) submitted with the Natural Heritage Data Request Form into our GIS. 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.

We have also checked the Landscape Project habitat mapping and Biotics Database for all occurrences of rare wildlife species or wildlife habitat within one mile of the referenced site. Please refer to Table 3 (attached) to determine if any rare wildlife species or wildlife habitat is documented within one mile of the project site. Detailed reports are provided for each category coded as 'Yes' in Table 3. These reports may include species that have also been documented on the project site.

For requests submitted in order to make a riparian zone width determination as part of a Flood Hazard Area Control Act (FHACA) rule application, we report records for all rare plant species and ecological communities tracked by the Natural Heritage Program that may be on, or in the immediate vicinity of, your project site. A subset of these plant species is also covered by the FHACA rules when the records are located within one mile of the project site. One mile searches for FHACA plant species will only report precisely located occurrences for those wetland plant species identified under the FHACA regulations as being critically dependent on the watercourse. Please refer to Table 3 (attached) to determine if any precisely located rare wetland plant species covered by the FHACA rules have been documented. Detailed reports are

provided for each category coded as 'Yes' in Table 3. These reports may include species that have also been documented on, or in the immediate vicinity of, 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, 2 and 3 (attached) to determine if any priority sites are located on, in the immediate vicinity, or within one mile of the project 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 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. 21-4007422-21788

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	Yes	1 page(s) 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

**Rare Wildlife Species or Wildlife Habitat on the
Project Site Based on Search of
Landscape Project 3.3 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Amphibia</i>								
	Pine Barrens Treefrog	Hyla andersonii	Occupied Habitat	3	NA	State Threatened	G4	S2
	Pine Barrens Treefrog	Hyla andersonii	Vernal Pool Breeding	3	NA	State Threatened	G4	S2
<i>Aves</i>								
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N

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

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Vernal habitat area	2821
Total number of records:	1

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	No	0 pages 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

**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**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Amphibia</i>								
	Pine Barrens Treefrog	Hyla andersonii	Occupied Habitat	3	NA	State Threatened	G4	S2
	Pine Barrens Treefrog	Hyla andersonii	Vernal Pool Breeding	3	NA	State Threatened	G4	S2
<i>Aves</i>								
	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N

**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

Vernal habitat area	2821
Potential vernal habitat area	1420
Total number of records:	2

**Table 3: Within 1 Mile for Riparian Zone Width Determination
(6 possible reports)**

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Rare Plant Species Occurrences for Riparian Zone Width Determination (Flood Hazard Area Control Act Rule Application) - Within One Mile of the Project Site Based on Search of Natural Heritage Database	Yes	1 page(s) included
2. Natural Heritage Priority Sites for Riparian Zone Width Determination - Within One Mile of the Project Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.3 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.3	Yes	1 page(s) included
5. Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Search of Landscape Project 3.3 Stream Habitat File	No	0 pages included
6. Other Animal Species for Riparian Zone Width Determination - Within One Mile of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	Yes	1 page(s) included

**Rare Plant Species Occurrences for Riparian Zone Width Determination
(Flood Hazard Area Control Act Rule Application)
Within One Mile of the Project Site
Based on Search of Natural Heritage Database**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed
-----------------	-------------	---------------------------	-------------------------	-----------------	-------	-------	------------	---------------

Vascular Plants

Diodia virginiana var. virginiana	Larger Buttonweed		E	LP, HL	G5T5	S3	Y	2013-08-20
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Total number of records: 1

<p>Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination Within One Mile 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
<i>Amphibia</i>								
	Pine Barrens Treefrog	Hyla andersonii	Occupied Habitat	3	NA	State Threatened	G4	S2
	Pine Barrens Treefrog	Hyla andersonii	Vernal Pool Breeding	3	NA	State Threatened	G4	S2
<i>Aves</i>								
	Barred Owl	Strix varia	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	Black-crowned Night-heron	Nycticorax nycticorax	Foraging	3	NA	State Threatened	G5	S2B,S3N
	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
	Veery	Catharus fuscescens	Breeding Sighting	2	NA	Special Concern	G5	S3B,S4N
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G4	S3B,S4N

**Vernal Pool Habitat for Riparian Zone Width Determination
Within One Mile of the Project Site
Based on Search of Landscape Project 3.3**

Vernal Pool Habitat Type	Vernal Pool Habitat ID
Vernal habitat area	2821
Potential vernal habitat area	1420
Potential vernal habitat area	1421
Potential vernal habitat area	1427
Total number of records:	4

**Other Animal Species for Riparian Zone Width Determination
 Within One Mile of the Project Site
 Based on Additional Species Tracked by
 Endangered and Nongame Species Program**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Grank	Srank
-----------------	-------------	---------------------------	-------------------------	-------	-------

Invertebrate Animals

Grammia placentia	Placentia Tiger Moth			G3G4	S1S3
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Total number of records: 1

APPENDIX C

Critical Wildlife Habitat Evaluation



CRITICAL WILDLIFE HABITAT EVALUATION

PINE BARRENS TREEFROG HABITAT ASSESSMENT

Block 41 - Lot 17

Howell Township

Monmouth County, New Jersey

Specializing in the Assessment and Management of the Ecological Resources

315 Mountain View Drive, Kunkletown, Pennsylvania 18058
Phone: (610) 681-6030 • Fax: (610) 681-6031



**ENVIRONMENTAL ASSOCIATES
INC.**

*Specializing in the Assessment and Management
of the Ecological Resources*

315 Mountain View Drive
Kunkletown, Pennsylvania 18058
Phone: (610) 681-6030
Fax: (610) 681-6031

CRITICAL WILDLIFE HABITAT EVALUATION

PINE BARRENS TREEFROG HABITAT ASSESSMENT

Block 41 - Lot 17

Howell Township

Monmouth County, New Jersey

Prepared For:

Stavola Realty Company

**620 Tinton Avenue; Suite B200
Tinton Falls, New Jersey 07724**

Prepared By:

Eastern States Environmental Associates, Inc.

June 21, 2019

**CRITICAL WILDLIFE HABITAT
EVALUATION**

TABLE OF CONTENTS

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III. Pine Barrens Treefrog Preferred Habitat Characteristics	2
IV. Site Specific Habitat Evaluation	3
V. Site Specific Observations/Documentations	5
VI. Determinations Concerning Pine Barrens Treefrog Habitat Suitability	7
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I. INTRODUCTION

This Critical Wildlife Habitat Evaluation Report is prepared pertaining to the conducted research of the Subject Property presently known as *Block 41 - Lot 17* in *Howell Township, Monmouth County, New Jersey* (Property).

On September 12, 2018, the New Jersey Department of Environmental Protection (NJDEP) issued a Wetlands Letter of Interpretation (LOI) (NJDEP #: 1319-19-0011.1 FWW180001) (Appendix A) which verified the limits of jurisdictional wetlands on the Property. According to the Wetlands LOI, said wetlands included two depressional areas in the northern region of the Property (WA and WB) and a depressional area in the southeastern corner of the Property (WC). Other wetland areas were verified immediately adjacent to the eastern border (WD) and southeastern corner (WE) of the Property. In accordance with email correspondence between NJDEP and Menlo Engineering dated October 15, 2018, it is understood that the NJDEP considers the WA, WB and WC wetland areas to be isolated wetlands. In addition, the Wetlands LOI classifies the WB, WC and WE wetland areas as Exceptional Resource Value as a result of anticipated suitable habitat for the Pine Barrens Treefrog (*Hyla andersonii*) (State Threatened). The other identified wetlands were classified as Intermediate Resource Value.

This evaluation has been conducted to determine if preferred habitat characteristics of the Pine Barrens Treefrog are indeed associated with the WB, WC and WE wetland areas which have been identified on and immediately adjacent to the Property. This evaluation has also been conducted in order to document any utilization of these wetland areas associated with the Property by the Pine Barrens Treefrog.

II. PROPERTY LOCATION AND SPECIFICATIONS

This Property is located Howell Township, Monmouth County and includes approximately 19.9 acres. This Property is situated on the southern (eastbound) side of Victory Road approximately 3,700 feet west of the intersection of Victory Road with Lakewood-Farmingdale Road.

The New Jersey State Plane Coordinates for the center of the Property are 496432 feet N and 648592 feet E.

III. PINE BARRENS TREEFROG (*Hyla andersonii*) PREFERRED HABITAT CHARACTERISTICS

The Pine Barrens Treefrog prefers specialized acidic habitats such as Atlantic White Cedar swamps and Pitch Pine lowlands with dense ground cover mats of Sphagnum moss. Structural characteristics of preferred habitats include an open canopy, dense shrub layer and heavy ground cover. Soil types include saturated sands and muck.

Temporary woodland ponds, Atlantic White Cedar swamps or cranberry bogs and seepage areas along tributaries of major streams also serve as breeding areas for the Pine Barrens Treefrog. The Pine Barrens Treefrog prefers ponds that support sphagnum moss, sedges, grasses and aquatic plants and are surrounded by dense woody vegetation. Although breeding pools may dry up by mid to late summer, acidic shallow water during breeding is required.

Although secure globally, in New Jersey, the Pine Barrens Treefrog was listed as State Endangered in 1979 due to its restricted range, habitat loss and pollution of breeding ponds. In areas of suitable habitat, the Pine Barrens Treefrog may seem abundant. However, protection of this

species is warranted as suitable habitat is limited to specialized Pine Barrens ecosystems which are disjunct in availability throughout the southeastern United States.

IV. SITE SPECIFIC HABITAT EVALUATION

Field evaluations of the Property were conducted in April, May and June of 2019 during the breeding season of the Pine Barrens Treefrog. This time frame includes the period of highest intensity of vocalization. During said field evaluations of the Property, no evidence of the occurrence of Pine Barrens Treefrog was documented on or in the immediate vicinity of the Property. During field inspections of the Property and surrounding lands, no other threatened or endangered species were observed nor was there any indication as to their occurrences.

Habitat characteristics associated with the WB, WC and WE wetlands areas which were classified as Exceptional Resource Value (ERV) were identified and evaluated along with other influencing factors inclusive of habitat size, habitat quality, continuity, disturbances and relation to disturbance.

WB (WB-0/WB-11) Wetland Area:

This designated wetland area which was classified as ERV is situated in the northern-central region of the Property. In accordance with correspondence provided by the NJDEP, this wetland area is considered to be isolated.

Canopy (tree layer) vegetation is high in coverage density (80-100% coverage) and consists predominantly of Red Maple and Silver Maple. Subcanopy (understory layer) vegetation is moderate in coverage density (50-70% coverage) and consists predominantly of Sassafras, Red Maple and

Silver Maple. Shrub layer vegetation is low in coverage density (10-20% coverage) and consists predominantly of Greenbriar, Barberry and Sweetgum. Ground cover vegetation is low to moderate in coverage density (20-50% coverage) and consists predominantly of Switchgrass along with some sporadic growth of Sensitive Fern, Rushes and Sedges. Soils consist of sands. Although there was some evidence of water stained leaves in limited portions of this wetland area, there was no observed evidence of short-term or long-term inundation. During field inspections conducted in April, May and June, this wetland area was not inundated. Given the lack of evidence of any short term or long term inundation, it is determined that this wetland area does not meet the definition of a vernal habitat in accordance with NJAC 7:7A-1.4.

WC (WC-0/WC-13) Wetland Area:

This designated wetland area which was classified as ERV is situated in the southeastern corner of the Property. This wetland area also extends off-site beyond the southeastern corner for a short distance. In accordance with correspondence provided by the NJDEP, this wetland area is considered to be isolated.

Canopy (tree layer) vegetation is high in coverage density (80-100% coverage) and consists predominantly of Black Gum along with Willow Oak. Subcanopy (understory layer) vegetation is low in coverage density (20% coverage) and consists predominantly of Black Gum. Shrub layer vegetation is low in coverage density (5-10% coverage) and consists primarily of Highbush Blueberry. Ground cover vegetation is low in coverage density (0-10% coverage) and consists predominantly of Switchgrass along with some sporadic growth of Rushes. Soils consist of sands. During field inspections, this wetland area was inundated with a depth of water of approximately one (1) foot.

WE (WE-0/WE-5) Wetland Area:

This designated wetland area which was classified as ERV is situated just off-site and to the south of the southeastern corner of the Property. This wetland area consists of a large wetland complex extending a distance to the south of the Property. This wetland area was not considered to be isolated by the NJDEP.

Canopy (tree layer) vegetation is high in coverage density (80-100% coverage) and consists predominantly of Red Maple and Willow Oak. Subcanopy (understory layer) vegetation is moderate in coverage density (30-40% coverage) and consists predominantly of Black Gum and Red Maple. Shrub layer vegetation ranges from low to moderate in coverage density (10-50% coverage) and consists primarily of Highbush Blueberry. Ground cover vegetation is low in coverage density (10% coverage) and consists predominantly of Cinnamon Fern. Soils consist of sands. During field inspections, this wetland area was inundated with a depth of water of at least one (1) foot.

V. SITE SPECIFIC OBSERVATIONS/DOCUMENTATIONS

Field evaluations of the Property and wetland areas of concern were conducted in April, May and June of 2019 to document vocalizations within these wetland areas of concerns. Data collected during said field inspections is provided as follows:

April 10, 2019; 5:00pm - 6:30pm; 65 degrees, sunny

WB Wetland Area:

No inundation

No amphibians documented by visual observation or vocalization

WC Wetland Area:

Inundated

No amphibians documented by visual observation or vocalization

WE Wetland Area:

Inundated

Spring Peeper, Chorus Frog

May 7, 2019; 5:00pm - 6:30pm; 75 degrees, partly sunny

WB Wetland Area:

No inundation

No amphibians documented by visual observation or vocalization

WC Wetland Area:

Inundated

No amphibians documented by visual observation or vocalization

WE Wetland Area:

Inundated

Spring Peeper, Pickerel Frog, Chorus Frog, American Toad

June 4, 2019; 5:00pm - 6:30pm; 75 degrees, sunny

WB Wetland Area:

No inundation

No amphibians documented by visual observation or vocalization

WC Wetland Area:

Inundated

No amphibians documented by visual observation or vocalization

WE Wetland Area:

Inundated

Spring Peeper, Green Frog, Chorus Frog, American Toad

V. DETERMINATIONS CONCERNING PINE BARRENS TREEFROG HABITAT SUITABILITY and OCCURRENCE

Field evaluations of the Property and Subject wetland areas was conducted during the breeding season of the Pine Barrens Treefrog so as to potentially document occurrence of this species either by visual identification or vocal identification. Additionally, the habitat characteristics of the subject wetland areas of concern could be identified and evaluated for utilization potential.

As discussed in Section III, The Pine Barrens Treefrog prefers specialized acidic habitats including Atlantic White Cedar swamps and Pitch Pine lowlands which consist of open canopies, dense shrub layer and with dense ground cover mats of Sphagnum moss. Although breeding pools may dry up by mid to late summer, acidic shallow water during breeding is required.

As discussed in Section IV, neither the WB, WC or WE wetland areas possess vegetational characteristics which are preferred by the Pine Barrens Treefrog. None of these wetland areas possess acidic water and/or a dense shrub layer and dense sphagnum moss ground cover. At the time of every field inspection, the WB wetland area did not exhibit any indication of inundation.

Although the WC and WE wetland areas did not possess preferred vegetational characteristics, these wetlands areas were inundated and possessed vernal habitat characteristics.

As discussed in Section V, there was no documentation of the Pine Barrens Treefrog within these wetland areas by visual documentation or vocalization documentation. No amphibian species documentation occurred within the WB or WC wetland areas during any of the field inspections. Although the Pine Barrens Treefrog was not documented within the WE wetland areas, certain species of amphibians were documented within the WE wetland complex during every inspection.

Although the Pine Barrens Treefrog was not identified within the WE wetland area, it was determined that this wetland complex which extends a distance to the south of the Property does possess vernal habitat characteristics and consists of a sufficient size to support a variety of amphibian species populations. Although this wetland area does not consist of the vegetational or structural characteristics specifically preferred by the Pine Barrens Treefrog, it is determined that it still possesses a utilization potential for this species given its size and characteristics. Given the locational proximity of the WC wetland area to the WE wetland area, potential utilization of the WC wetland could be possible.

It was determined that the WB wetland area does not possess any vegetational, structural or hydrological characteristics preferred by the Pine Barrens Treefrog. In fact, the WB wetland area was not determined to possess any characteristics compatible with a vernal habitat. This wetland area was never inundated during any of the conducted field inspections and no evidence of short or long term inundation is apparent within this wetland. Additionally, this wetland area occurs in the northern region of the Property along Victory Road and is separated from the aforementioned larger vernal habitat complex in and beyond the southeastern corner of the Property by a substantial distance. Consequently, it is determined that the WB wetland area possesses negligible, if any, utilization potential for the Pine Barrens Treefrog.

VII. SUMMARY CONCLUSIONS CONCERNING PINE BARRENS TREEFROG UTILIZATION POTENTIAL

Although the Pine Barrens Treefrog was not identified within the WC and WE wetland areas, it was determined that the wetland complex inclusive of WC and WE which extends a distance to the south of the Property does possess vernal habitat characteristics and consists of a sufficient size to support a variety of amphibian species populations. Although these wetland areas do not consist of the vegetational or structural characteristics specifically preferred by the Pine Barrens Treefrog, it is determined that they still possess a utilization potential for this species given the overall size and characteristics of the habitat complex. Accordingly, the Exceptional Resource Value classification assigned to the WC and WE wetland areas cannot be sufficiently disproved.

However, the WB wetland area does not possess any vegetational, structural or hydrological characteristics preferred by the Pine Barrens Treefrog. In fact, the WB wetland area was not determined to possess any characteristics compatible with a vernal habitat. This wetland area was never inundated during any of the conducted field inspections and no evidence of short or long term inundation is apparent within this wetland. Additionally, this wetland area occurs in the northern region of the Property along Victory Road and is separated from the aforementioned larger vernal habitat complex in and beyond the southeastern corner of the Property by a substantial distance. Consequently, it is determined that the WB wetland area possesses negligible, if any, utilization potential for the Pine Barrens Treefrog. Accordingly, it is determined that the Exceptional Resource Value classification assigned to the WB wetland area is not warranted and that the classification of the WB wetland area should be revised to Intermediate Resource Value.

VIII. APPENDICES

APPENDIX A

NJDEP WETLANDS LETTER OF INTERPRETATION



State of New Jersey

PHILIP D. MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION

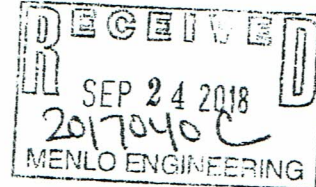
CATHERINE R. McCABE
Commissioner

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

SEP 12 2018

Gary Vialonga
c/o Stavola Realty Company
620 Tinton Avenue
Building B, Suite 200
Tinton Falls, NJ 07724



RE: Freshwater Wetlands Letter of Interpretation: Line Verification
File No.: 1319-18-0011.1
Activity Number: FWW180001
Applicant: Stavola Realty Company
Block(s) and Lot(s): [41, 17]
Howell Township, Monmouth County

Dear Mr. Vialonga:

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 NJDEP 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 a site inspection conducted by Division staff on July 10, 2018, the Division has determined that the wetlands and waters boundary line(s) as shown on the plan map entitled: "STAVOLA - PARCEL 31, TOWNSHIP OF HOWELL, MONMOUTH COUNTY, NEW JERSEY, WETLANDS MAP, BLOCK 41 LOT 17, TAX MAP SHEET: 19.90 ACRES", consisting of 1 sheet, dated May 16, 2018, last revised August 13, 2018, and prepared by Menlo Engineering Associates, Inc., 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:

Exceptional: Flag point WB-0 through WB-11, flag point WC-0 through flag point WC-13, and flag point WE-0 through flag point WE-5 [**150 foot wetland buffer**]

Intermediate: Flag point WA-0 through flag point WA-6, and flag point WD-0 through flag point WD- 3. [**50 foot wetland buffer**]

In addition, there are wetlands on the subject site which potentially meet the definition of a "vernal habitat" as found at N.J.A.C. 7:7A-1.4. These determinations may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-7), the types of Statewide General Permits available for the wetlands portion of this property (see N.J.A.C. 7:7A-5) and the modification available through a transition area waiver (see N.J.A.C. 7:7A-6). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules for additional information.

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."

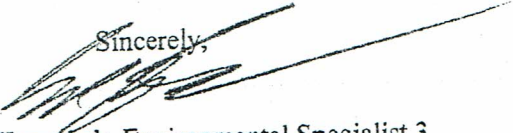
Failure to have this information recorded in the deed of each lot and/or to submit proof of recording to the Division constitutes a violation of the Freshwater Wetlands Protection Act rules and may result in suspension or termination of the letter of interpretation and/or subject the applicant to enforcement 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 Taryn Pittfield of our staff by e-mail at taryn.pittfield@dep.nj.gov or by phone at (609) 984-1386 should you have any questions regarding this letter. Be sure to indicate the Department's file number in all communication.

Sincerely,



Robert B. Kozachek, Environmental Specialist 3
Division of Land Use Regulation

cc: Municipal Clerk
Municipal Construction Official
Agent (original)

APPENDIX B

PHOTOGRAPHS OF THE STUDY AREA

EASTERN STATES
ENVIRONMENTAL ASSOCIATES
INC.



PHOTOGRAPH #1

WE Wetland Area beyond the southeastern corner of the Property.

EASTERN STATES
ENVIRONMENTAL ASSOCIATES
INC.



PHOTOGRAPH #2

WE Wetland Area beyond the southeastern corner of the Property.

EASTERN STATES
ENVIRONMENTAL ASSOCIATES
INC.



PHOTOGRAPH #3

WC Wetland Area in the southeastern corner of the Property.

EASTERN STATES
ENVIRONMENTAL ASSOCIATES
INC.



PHOTOGRAPH #4

WB Wetland Area in the northern region of the Property.

EASTERN STATES
ENVIRONMENTAL ASSOCIATES
INC.



PHOTOGRAPH #5

WB Wetland Area in the northern region of the Property.

APPENDIX C

PROFESSIONAL CREDENTIALS

EDWARD A. KUC
PROFESSIONAL CREDENTIALS and QUALIFICATIONS

EXPERIENCE:

Principal Natural Resource Specialist; Eastern States Environmental Associates, Inc., Effort, Pennsylvania

Responsible for the coordination, supervision, and implementation of natural resource inventories and evaluations (i.e. natural habitats and communities; terrestrial and aquatic vegetation, wildlife, fisheries, aquatics, threatened and endangered species habitat suitability and utilization potential, and freshwater wetlands), environmental feasibility assessment, environmental impact analysis, natural resources protection and mitigation/restoration programs, and ecological management programs (i.e. terrestrial and aquatic habitats, fisheries and wildlife). Serve as chief representative of public and private clientele of the Association throughout the United States for matters including project design, regulatory compliance, regulatory permit applications and expert testimony. Represented clientele include various state governments, municipalities, utility authorities, boards of education, private corporations, land development organizations, conservation organizations and land owners.

Natural Resource Specialist; Environmental Associates, Inc., Rockaway, New Jersey

Responsible for the coordination and supervision of the ecological staff and research projects consisting of natural resource inventories (habitat, vegetation, natural communities, wildlife, fisheries, threatened and endangered species); freshwater wetlands inventory, analysis and functional assessment; environmental feasibility; environmental impact assessment; and environmental protection and natural resource mitigation/restoration programs. Responsible for the coordination and review of associated environmental reports and publications.

Research and Management Environmental Specialist; New Jersey Department of Environmental Protection, Division of Fish, Game and Wildlife, New Jersey

Fisheries Research/Management:

Responsible for collection and analysis of biological information pertaining to fishery population inventories, population reproduction, trout waters classification, fishery population introduction, anadromous species migration, and stream encroachment reviews. Provided riparian habitat

suitability surveys with regard to various fish and wildlife species utilization. Provided recommendations for various stream and riparian conservation and enhancement programs along with fishery management.

Wildlife Research/Management:

Responsible for the capture of Black Bear and collection of biological information pertaining to individual and population condition, size, and reproduction. Responsible for the determination of population density and distribution of various furbearers in watersheds throughout New Jersey. Performed various laboratory procedures associated with the collection and analysis of information pertaining to the age composition, sex ratios, and condition of various furbearer populations. Check station supervisor responsible for the collection of biological information pertaining to the Whitetail Deer population. Responsible for the compilation and analysis of relevant whitetail deer harvest data for the determination of population condition and management objective revisions. Responsible for the trapping, banding and collection of biological information pertaining to various waterfowl species. Conducted nest, brood and habitat availability surveys pertaining to various waterfowl populations. Provided habitat suitability evaluations for various game and non-game species. Provided recommendations to various wildlife conservation and management programs.

Research Biologist; U.S.D.A. Forest Service, Clearwater National Forest, Orofino, Idaho

Fishery Research/Management:

Responsible for analysis of stream condition; riparian habitat availability and quality; sport fishery populations; and salmonid spawning area potential. Implemented stream and riparian habitat enhancement projects and determined and performed corrective procedures for salmonid migration barriers. Performed various surveys to determine fish species density and size for impact evaluation of various land use activities.

Wildlife Research:

Responsible for habitat evaluation and suitability evaluation and population analysis for various large-game, non-game and endangered species. Responsible for the determination of various wildlife species' population dynamics and seasonal range distributions.

Forest Fire Management:

Member of Initial Attack Forest Fire Suppression Strike Team with extensive training in fire behavior, weather prediction and helicopter operations.

EDUCATION:

Rutgers University - Cook College; New Brunswick, New Jersey

Bachelor of Science degree in Natural Resource Management. Independent research in Fishery Science regarding the migration of American Shad (*Alosa sapidissima*) in the Delaware River. Received the New Jersey Chapter of The Wildlife Society Outstanding Student in Wildlife Sciences Award. President and Treasurer of the Rutgers University Chapter of The Wildlife Society.

RELEVANT PROFESSIONAL CERTIFICATION and TRAINING:

Professional Wetland Scientist Certificate #000835

Certification based upon recognition of professional requirements mandated by the Society of Wetland Scientists Certification Program and verified by the Society's Certification Review Panel.

Advanced Wetland Delineation

Interagency Cooperative Program Certificate: U.S. Fish and Wildlife Service, U.S. Soil Conservation Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers. Office of Continuing Education, Cook College - Rutgers University, New Brunswick, New Jersey.

Watershed Management

Office of Continuing Education, Cook College - Rutgers University, New Brunswick, New Jersey.

Wetlands Identification and Delineation Methodology

Interagency Cooperative Program Certificate: U.S. Fish and Wildlife Service, U.S. Soil Conservation Service, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers. Office of Continuing Education, Cook College - Rutgers University, New Brunswick, New Jersey.

Wetland Systems of the Northeast

Office of Continuing Education, Cook College - Rutgers University, New Brunswick, New Jersey.

PROFESSIONAL AFFILIATIONS:

The Wildlife Society; New Jersey Chapter
Past President and Executive Board

New Jersey Division of Fish, Game and Wildlife Conservation Corps Program
Black Bear Project Research Team

Member: The Wildlife Society (National, NJ Chapter)
 American Fisheries Society
 Society of Wetland Scientists
 National Wildlife Federation
 The Nature Conservancy
 Audubon Society
 Association of Urban Wildlife Managers

PUBLICATIONS:

Numerous technical reports and articles have been authored pertaining to various natural resource related topics and issues. A listing of these reports and articles is available upon request.

SEMINARS/PRESENTATIONS:

Numerous seminars and presentations have been conducted pertaining to a variety of environmental topics and issues including natural resource evaluation and impact assessment, natural resource mitigation and restoration, wetlands management and regulatory compliance, wildlife resource management, environmental careers, etc. Seminars and presentations have been provided to numerous audiences including universities, colleges, corporations, New Jersey Association of Municipal Engineers, New Jersey Board of Realtors, and various special interest organizations.



State of New Jersey

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

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

CATHERINE R. McCABE
Commissioner

September 5, 2019

Edward A. Kuc
Eastern States Environmental Associates Inc
315 Mountain View Drive
Kunkletown, PA 18058

Re: Letter of Interpretation/Wetland Classification Modification for:

File No.: 1319-18-0011.1
Applicant: Stavola Realty Co
Block: 41 Lot: 17
Howell Township Monmouth County

Dear Mr. Kuc:

In a letter dated September 17, 2018, the Department advised that the wetlands on the referenced property, delineated by wetland flag points "WB", "WC", and "WE", were of exceptional resource value and would require an upland transition area or buffer of 150 feet. This letter also indicated that under NJSA 13:9B-7(a)(2), if the Department has classified a wetland as exceptional resource value based on a finding that the wetland is documented habitat for threatened and endangered 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.

In response to this finding, you prepared a document entitled "Critical Wildlife Habitat Evaluation, Pine Barrens Tree Frog Habitat Assessment, Block 41- Lot 17, Howell Township, Monmouth County." dated June 21, 2019. In this document you provided an assessment of the suitability of the onsite habitat for a list of various threatened or endangered species identified as having potential suitable habitat in the onsite wetlands. In general, your conclusions were that the "WB" wetland area in question did not feature suitable breeding or dispersal habitat for the documented species due to the area being separated from a vernal habitat complex and the area having no short- or long-term inundation.

Provided with this information, the Division conducted a re-assessment of the factors that led to the original resource value classification determination. Aside from your correspondence,

the Division reviewed the original LOI submission, notes from various site investigations, multiple years of aerial photography, and relevant habitat information associated with species identified on the Department's Landscape Project mapping. As a result of this re-assessment, we concur with your conclusion that the "WB" wetland area, as delineated, warrants a reclassification from exceptional resource value to intermediate resource value. Principally, the proximity to Victory Road and the separation from the larger, vernal habitat complex, renders this small wetland unsuitable for "breeding or dispersal" by the identified species.

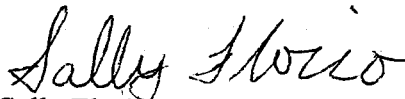
Please be advised, there are wetlands on the subject site that potentially meet the definition of a "vernal habitat" as found at N.J.A.C. 7:7A-1.3. These determinations may affect the requirements for an Individual Wetlands Permit, the types of Statewide General Permits available for the wetlands portion of this property and the modification available through a transition area waiver. Please refer to the Freshwater Wetlands Protection Act and implementing rules for additional information.

Based on this reassessment, the Division of Land Use Regulation has determined that the "WB" wetland and waters boundary line(s) as shown on the plan map consisting of one sheet entitled "STAVOLA- PARCEL 31, TOWNSHIP OF HOWELL, MONMOUTH COUNTY, NEW JERSEY, WETLANDS MAP, BLOCK 41, LOT 17, TAX MAP SHEET: 19.90 ACRES," dated May 16, 2018, revised August 13, 2018, and prepared by Alfred R. Coco of Menlo Engineering Associates Inc, should be reclassified from exceptional resource value to intermediate resource value and the standard wetland transition area adjacent to these wetlands should be reduced from 150 feet to 50 feet. Wetlands "WC" and "WE" will remain exceptional and the standard wetland transition areas adjacent to these wetlands will be 150 feet.

It should be noted that this determination of wetland classification is based on the best information presently available to the Department. The classification is subject to change if this information is no longer accurate, or as additional information is made available to the Department, including, but not limited to, information supplied by the applicant. If you have any further questions, I can be contacted at (609) 292-1765.

Unless the Department receives information to the contrary, a formal Letter of Interpretation letter modifying the existing resource value classification will be issued within 45 days of the date of this letter.

Sincerely,


Sally Florio
Environmental Specialist 1

c: Monmouth County Planning Board
Monmouth Township Planning Board
Monmouth Township Clerk
Monmouth Township Construction Official
Monmouth Township Environmental Commission
Taryn Pittfield, DLUR

APPENDIX D

Statement of Qualifications

Kyle Weise - Director of Land Use Services

KWeise@tridentenviro.com

732-818-8699

Experience

Trident Environmental, Toms River, New Jersey, August 2002 - Present

- Director of Land Use Services/Sr. Environmental Scientist

Qualification Highlights

- BS, Environmental Science, Western New England College, 2002
- NAHB Certified Green Professional-2009
- Rutgers University Wetland Delineation Certificate-2019
- Expert Witness Testimony

Summary of Qualifications

Mr. Weise is a Director of Land Use Services with the firm of Trident Environmental. He is responsible for the organization and execution of various environmental reports, permitting for a wide range of projects, and conducting environmental site investigations and assessments.

Mr. Weise is well versed in the rules and regulations set forth by the NJDEP in the form of the NJAC 7:7 - Coastal Program Rules, NJAC 7:7E- Coastal Zone Management Rules NJAC 7:7A Freshwater Wetland Protection Act Rules, and NJAC 7:13 Flood Hazard Area Control Act Rules and Pinelands CMP.

In the 19 years Mr. Weise has been with Trident Environmental Consultants, he has prepared and received approvals for Letters of Interpretation (LOI), Tidelands Conveyances, Waterfront Development Permits, CAFRA Permits, various State General and Individual Wetland Permits from New Jersey Department of Environmental Protection (NJDEP), Pinelands Commission, and United States Army Corps of Engineers. Mr. Weise also prepares Environmental Impact Statements (EIS) based on township requirements.

Mr. Weise has also conducted threatened/endangered surveys for Bog Turtles, Northern Pine Snakes, Barred Owls, and Indiana Bats in New Jersey, New York, Pennsylvania, Delaware, and Maryland. These activities include helping with directed visual surveys and implementing various trapping methods in various habitats and radio-telemetry projects.

Additionally, Mr. Weise is versed in geographical information systems (GIS), Global Positioning Systems (GPS), habitat assessments, wildlife surveys, laboratory testing, analysis, sediment sampling, and wetland mitigation. Mr. Weise helped design and received the necessary State approvals for the Nishisakawick Creek and Great Egg Harbor River, Marsh Bog Brook I & II, and Barkers Brook Mitigation Banks.

Expert Testimony:

Mr. Weise has provided expert testimony to municipal boards and environmental commissions.

Planning Boards: Upper Freehold Township, Monmouth County, New Jersey
Lakewood Township, Ocean County, New Jersey.

Zoning Boards: Neptune Township, Monmouth County, New Jersey

Environmental Commissions: Howell Township, Monmouth County, New Jersey Freehold Township
Monmouth County, New Jersey