



STONEFIELD
engineering & design

ENVIRONMENTAL IMPACT STATEMENT

**PROPOSED RESIDENTIAL DEVELOPMENT
BLOCK 1702, LOT 22
21 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY**

PREPARED FOR:

21 & 25 GROVE ASSOCIATES, LLC

PREPARED BY:

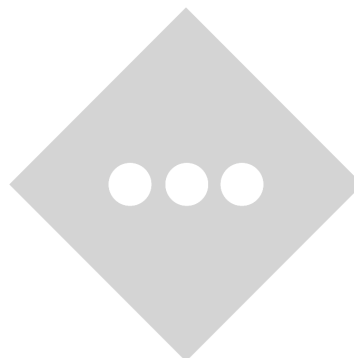
STONEFIELD ENGINEERING & DESIGN, LLC
OCTOBER 11, 2019, LAST REVISED: March 4, 2021
T-19059

MATTHEW J. SECKLER PE
NEW JERSEY PROFESSIONAL ENGINEER LICENSE # 48731



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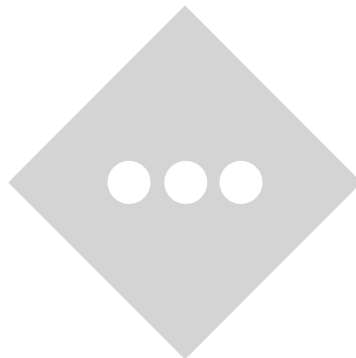
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1.0 SITE DESCRIPTION

21 & 25 Grove Associates, LLC is proposing the construction of a residential development with 35 dwelling units. The subject property is designated Block 1702, Lot 22 commonly known as 21 Grove Avenue. The subject property is located within the Township of Verona Professional Office and Business (C-2) Zone and is bounded by residential uses to the north and East, and commercial uses to the west and south. The total project area is 31,197 SF (0.72 acres) the extent of land disturbance is 32,673 square feet (including areas within the public right-of-way). Project Figures can be found in Appendix A of this Report.

Under existing conditions, the project site is composed of two buildings and one shed. The majority of the site is covered with impervious surfaces, including building and asphalt. The proposed development includes the construction of a 19,199 SF (total of 74,075 SF) residential development with 35 units and supporting improvements inclusive of parking facilities, landscape, utilities, site lighting, and stormwater management facilities.

This Environmental Impact Statement has been prepared per the Township of Verona requirements to investigate the existing conditions of the property, evaluate the potential impacts of the proposed redevelopment, and discuss the measures to mitigate environmental impacts, if any.

2.0 INVENTORY OF EXISTING ENVIRONMENTAL CONDITIONS

2.1 SOILS

The site is underlain by the following soil classifications, based upon the County Soil Survey (Appendix B), the Geotechnical Report, and the site survey:

TABLE I: ON-SITE SOIL GROUPS

Soil Description	Hydrologic Soil Group	Permeability Rate (in/hr)	Approximate Project Coverage
Urban Land, Peckmantown Substratum Complex	C	0.06 to 0.20	100%

The entire site is classified as Peckmantown Substratum Complex. Peckmantown Substratum Complex has a low permeability rate with a depth to water table of 20 to 40 inches. The hydrologic soil group is C due to the soil being classified as urban land.

2.2 TOPOGRAPHY

Under existing conditions, the topography of the site generally slopes from East to West, towards the rear yard. The front yard of the site, adjacent to Grove Avenue, the topography is predominantly flat with slopes of 2%-3% and gradually increases to 5%-6% in the western most corner of the lot.

2.3 GEOLOGY

Per NJDEP Geoweb, the surficial geology onsite and in the surrounding region is the Late Wisconsinan Glacial Delta Deposits. It consists mainly of sand, pebble-to-cobble gravel, and minor silt. The bedrock geology onsite is Feltville Formation which consists of sandstone, siltstone, silty mudstone, calcareous siltstone and mudstone, and carbonaceous limestone.

2.4 VEGETATION

Under existing conditions, vegetation on-site is limited to the grass along Grove Avenue and trees along the southerly property line.

2.5 WILDLIFE OR THREATENED & ENDANGERED SPECIES

Per the NJDEP's Natural Heritage Database (NHD), there are endangered or threatened fauna, flora, and habitats on-site. The species recorded within the immediate vicinity of the project site are summarized in the following table:

TABLE II: RARE WILDLIFE SPECIES OR WILDLIFE HABITAT WITHIN THE IMMEDIATE VICINITY OF THE PROJECT SITE

<i>Scientific Name</i>	<i>Common Name</i>	<i>Federal Protection</i>	<i>State Protection</i>	<i>Global Rank</i>	<i>State Rank</i>
Ardea herodias	Great Blue Heron	NA	Special Concern	G5	S3B,S4N
Pandion haliaetus	Osprey	NA	State Threatened	G5	S2B,S4N
Glyptemys insculpta	Wood Turtle	NA	State Threatened	G3	S2

A search for species within a one mile radius of the site detected ecological records as summarized in the following table:

TABLE III: RARE WILDLIFE SPECIES OR WILDLIFE HABITAT WITHIN A ONE MILE RADIUS OF THE SITE

<i>Scientific Name</i>	<i>Common Name</i>	<i>Federal Protection</i>	<i>State Protection</i>	<i>Global Rank</i>	<i>State Rank</i>
Strix varia	Barred Owl	NA	State Threatened	G5	S2B,S2N
Ardea herodias	Great Blue Heron	NA	Special Concern	G5	S3B,S4N
Pandion haliaetus	Osprey	NA	State Threatened	G5	S2B,S4N
Buteo lineatus	Red-shouldered Hawk	NA	Special Concern	G5	S1B,S3N
Glyptemys insculpta	Wood Turtle	NA	State Threatened	G3	S2

2.6 SCENIC OR HISTORIC FEATURES

Under existing conditions, the site is currently developed with two commercial building. There are no portions of the site which would be considered to have unique, scenic and/or historic qualities.

2.7 FLOODING AND/OR FLOOD PLAINS

Per FEMA flood mapping, the site does not lie within a flood plain.

2.8 WETLANDS

Per NJDEP Geoweb Mapping, no wetlands are located on site.

3.0 ENVIRONMENTAL IMPACT ASSESSMENT

3.1 SOILS

Soils on-site will be unaffected by the proposed development, and existing soil conditions have been considered when designing the stormwater management practices to be utilized.

3.2 TOPOGRAPHY

The proposed topography of the project site will mimic the existing topography with the site sloping at a 5%-6% slope toward the westerly corner of the site. Slopes will increase to a 10% slope along the driveway and a retaining wall will be placed around the driveway and parking.

3.3 GEOLOGY

The geology on-site is to remain unchanged by the proposed development.

3.4 VEGETATION

A landscaping plan has been designed for the proposed development inclusive of Native Trees and Shrub plantings. The Northerly and Easterly portion of the site are landscaped to comply with the 15-foot landscaping buffer.

3.5 WILDLIFE OR THREATENED & ENDANGERED SPECIES

As no threatened or endangered species are located on-site per NJDEP Geoweb, the proposed development will have no negative influence on threatened or endangered species. Development impacts do not extend off-site and will therefore not affect nearby threatened or endangered species.

3.6 SCENIC OR HISTORIC FEATURES

There are no portions of the site which would be considered to have unique, scenic and/or historic qualities.

3.7 FLOODING AND/OR FLOOD PLAINS

There are no flood plains located on-site.

3.8 WETLANDS

There are no wetlands located on-site.

4.0 LICENSES, PERMITS, AND APPROVALS REQUIRED

The following licenses, permits, and approvals are anticipated in conjunction with this application:

- Township of Verona
 - Preliminary & Final Major Site Plan Approval
 - Building Permit
- Essex County
 - Site Plan Approval
- Hudson-Essex-Passaic Soil Conservation District

- Soil Erosion and Sediment Control Plan Certification

At the time of this Statement, all approvals are still pending.

5.0 STEPS TO MINIMIZE ENVIRONMENTAL IMPACTS

The development of the project and site plan design enhances the property and minimizes environmental damage by completing the following:

- Development is limited to existing impervious surfaces
- Striping is proposed to organize parking areas
- Additional use generates greater taxable revenue for Township and Applicant
- Vegetation enhances site aesthetics and screens industrial uses

APPENDIX A PROJECT FIGURES

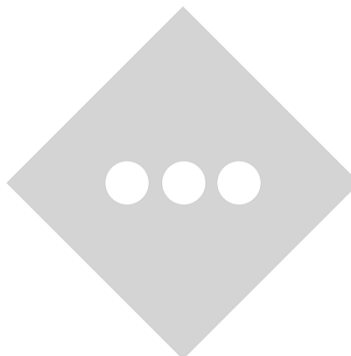
INVENTORY

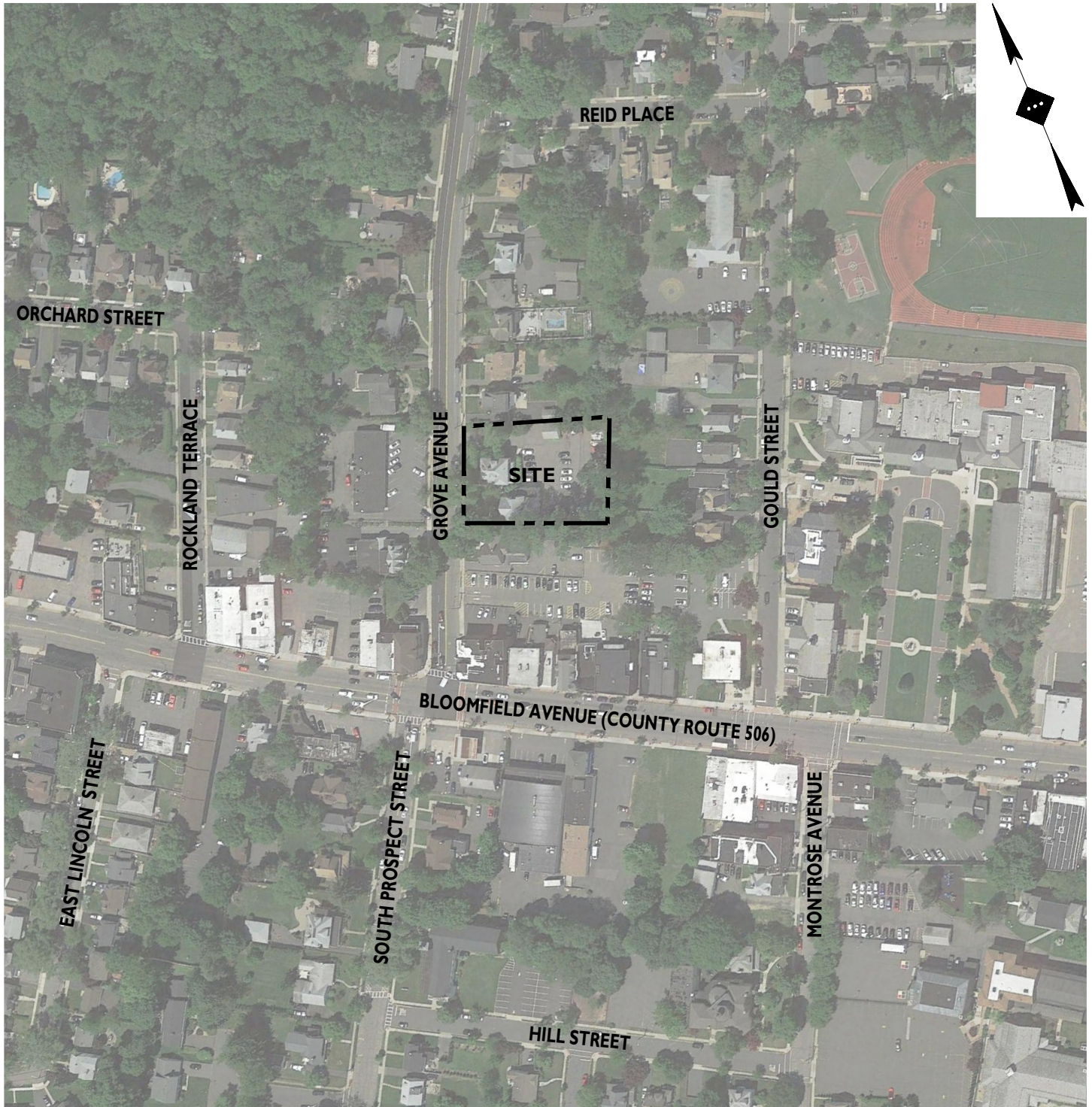
AERIAL MAP

TAX AND ZONING MAP

USGS LOCATION MAP

FEMA MAP





GRAPHIC SCALE IN FEET

1" = 200'

AERIAL MAP

SOURCE: GOOGLE EARTH PRO, RETRIEVED 07/31/2019

WEISS REALTY PROPOSED MIXED-USE DEVELOPMENT

BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

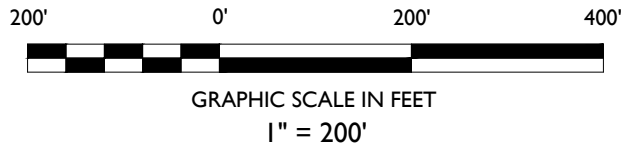
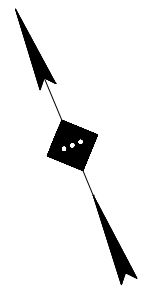
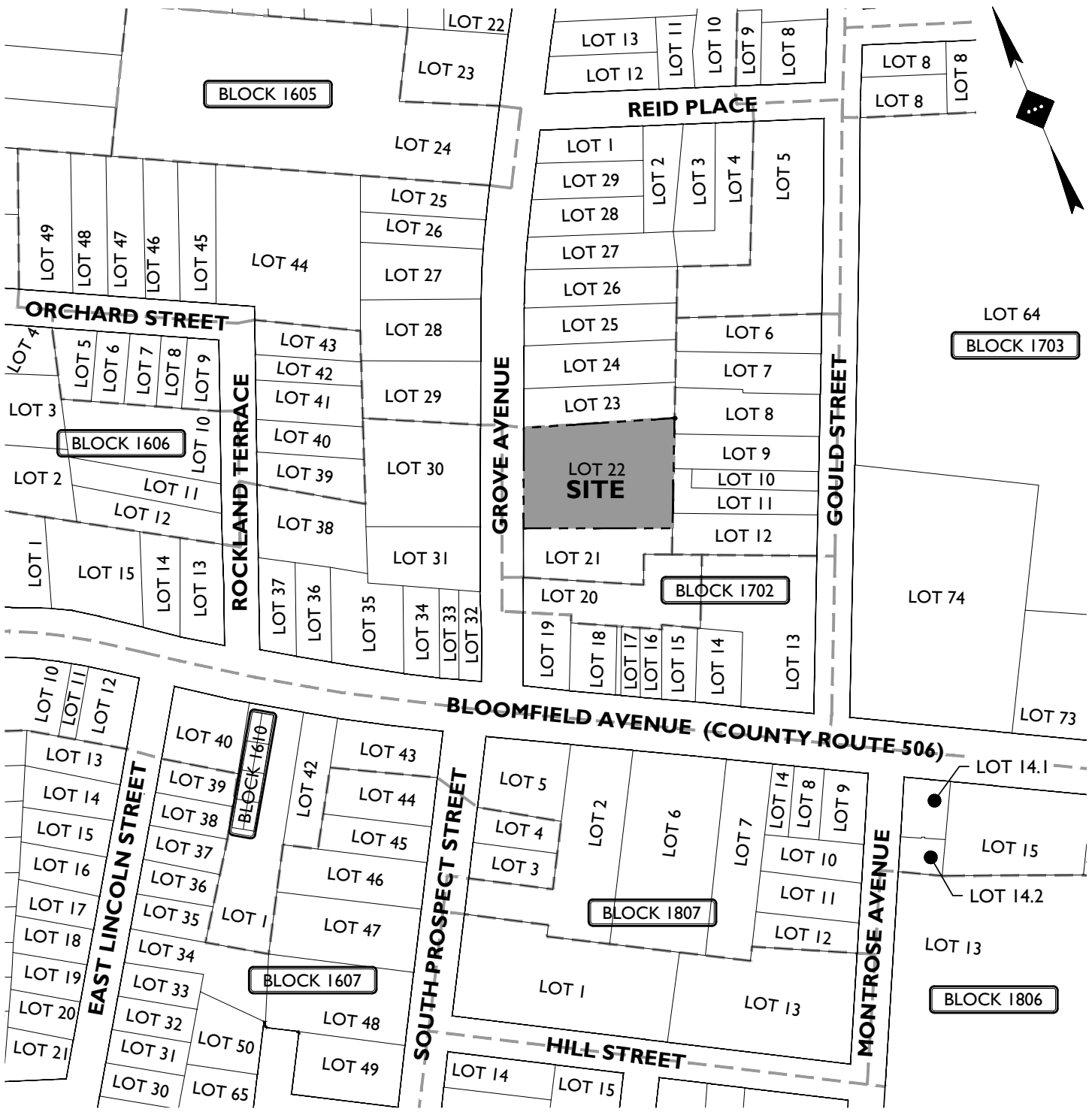
DRAWN BY:	CRP
CHECKED BY:	MEM
DATE:	07/31/2019
SCALE:	1" = 200'
PROJECT ID:	T-19059



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Rutherford, NJ · New York, NY
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com

Headquarters: 92 Park Avenue, Rutherford, NJ 07070
Phone 201.340.4468 · Fax 201.340.4472



TAX AND ZONING MAP

SOURCE: TOWNSHIP OF VERONA TAX MAP, SHEETS 6, 16, 17 & 18. TOWNSHIP OF VERONA ZONING MAP, DATED 11/27/2015.

WEISS REALTY PROPOSED MIXED-USE DEVELOPMENT

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ESSEX COUNTY, NEW JERSEY

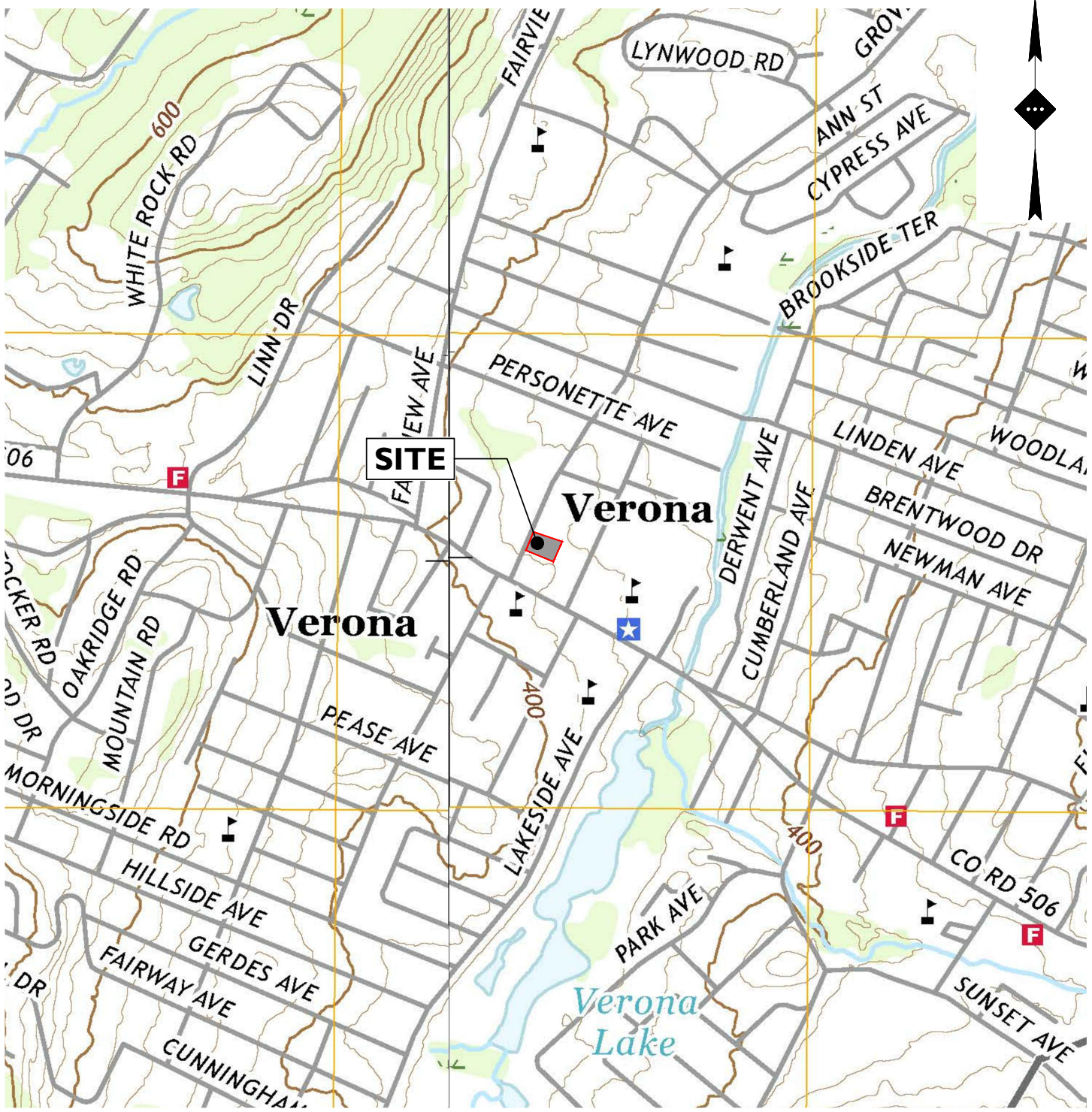
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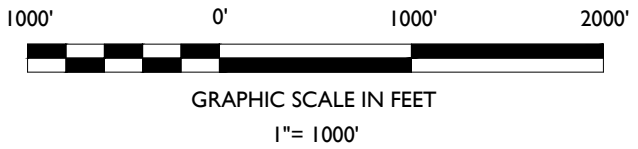
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USGS QUADRANGLE MAP



SOURCE: UNITED STATES GEOLOGICAL SURVEY QUADRANGLE MAPS, VERONA, NEW JERSEY, 7.5 MINUTE SERIES, 2016.

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EFFECTIVE FEMA FLOOD INSURANCE RATE MAP



GRAPHIC SCALE IN FEET

1" = 1000'

SOURCE: FLOOD INSURANCE RATE MAP, ESSEX COUNTY, NEW JERSEY, MAP NUMBERS 34013C0084F & 34013C0103F, DATED JUNE 4, 2007.

WEISS REALTY PROPOSED MIXED-USE DEVELOPMENT

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21-25 GROVE AVENUE
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ESSEX COUNTY, NEW JERSEY

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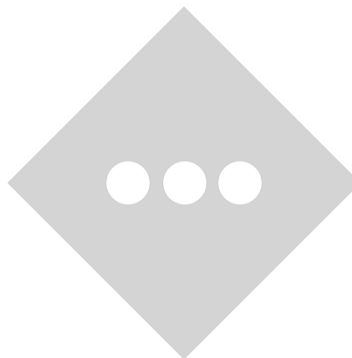
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APPENDIX B

NRCS COUNTY SOIL SURVEY





United States
Department of
Agriculture

NRCS

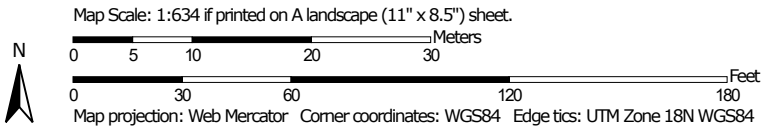
Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Essex County, New Jersey**



Custom Soil Resource Report Soil Map



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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

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

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

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

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

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

Soil Survey Area: Essex County, New Jersey
 Survey Area Data: Version 14, Sep 13, 2018

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

Date(s) aerial images were photographed: Aug 25, 2014—Sep 27, 2014

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PecuuB	Peckmantown - Urban land, Peckmantown substratum complex, 0 to 8 percent slopes	1.0	100.0%
Totals for Area of Interest		1.0	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Essex County, New Jersey

PecuuB—Peckmantown - Urban land, Peckmantown substratum complex, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: w8qf
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days
Farmland classification: Not prime farmland

Map Unit Composition

Peckmantown and similar soils: 55 percent
Urban land, peckmantown substratum: 40 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Peckmantown

Setting

Landform: Outwash plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-silty glaciolacustrine deposits derived from basalt

Typical profile

A - 0 to 2 inches: silt loam
Ap - 2 to 8 inches: loam
BAt - 8 to 14 inches: loam
Bt - 14 to 27 inches: silt loam
Btx1 - 27 to 37 inches: loam
Btx2 - 37 to 40 inches: silt loam
BCtx - 40 to 59 inches: silt loam
2C1 - 59 to 63 inches: gravelly loamy coarse sand
2C2 - 63 to 74 inches: coarse sand
2C3 - 74 to 88 inches: coarse sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to fragipan
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C

Custom Soil Resource Report

Hydric soil rating: No

Description of Urban Land, Peckmantown Substratum

Setting

Landform: Outwash plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Surface covered by pavement, concrete, buildings, and other structures underlain by disturbed and natural soil material

Typical profile

H1 - 0 to 12 inches: material

H2 - 12 to 59 inches: silt loam

2C1 - 59 to 63 inches: gravelly loamy coarse sand

2C2 - 63 to 74 inches: coarse sand

2C3 - 74 to 88 inches: coarse sand

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8s

Hydric soil rating: Unranked

Minor Components

Udorthents, peckmantown substratum

Percent of map unit: 5 percent

Landform: Outwash plains

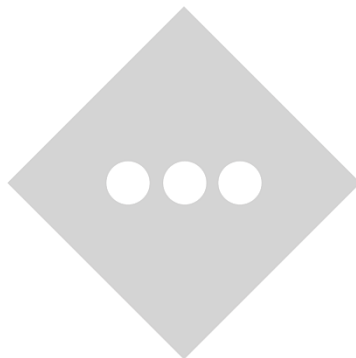
Landform position (three-dimensional): Tread, rise

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

APPENDIX C
NATURAL HERITAGE DATABASE 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

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

August 12, 2019

Victoria Lotorto
Stonefield Engineering & Design, LLC
92 Park Avenue
Rutherford, NJ 07070

Re: 21 Grove Avenue
Block(s) - 1702 (91), Lot(s) - 22
Verona Township, Essex County

Dear Ms. Lotorto:

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.

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 are 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. 19-4007472-17267

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

Invoice

	Date	Invoice #
	8/12/2019	17267

Bill to: Stonefield Engineering & Design, LLC 92 Park Avenue Rutherford, NJ 07070	Make check payable to: DEP - Office of Natural Lands Management And forward with a copy of this statement to: Mail Code 501-04 Office of Natural Lands Management P.O. Box 420 Trenton, New Jersey 08625-0420
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Quantity (hrs.)	Description	Rate (per hr.)	Amount
1	Natural Heritage Database search for locational information of rare species and ecological communities. Project: 19-4007472-17267	\$ 70.00	\$ 70.00
Victoria Lotorto Project Name: 21 Grove Avenue		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	No	0 pages 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

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	No	0 pages 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>Aves</i>								
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B,S4N
<i>Reptilia</i>								
	Wood Turtle	Glyptemys insculpta	Occupied Habitat	3	NA	State Threatened	G3	S2

**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	No	0 pages 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	No	0 pages included

<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>
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Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<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
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B,S4N
	Red-shouldered Hawk	Buteo lineatus	Non-breeding Sighting	2	NA	Special Concern	G5	S1B,S3N
<i>Reptilia</i>								
	Wood Turtle	Glyptemys insculpta	Occupied Habitat	3	NA	State Threatened	G3	S2

**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
Potential vernal habitat area	2055
Total number of records: 1	

