

ENVIRONMENTAL IMPACT STATEMENT

Pursuant to Borough of Keyport Municipal Code

**HUDSON POINTE AT KEYPORT, LLC
BLOCK 120 * LOTS 8 AND 9
BLOCK 130 * LOTS 42, 48, 49, 50, 51 & 52
BOROUGH OF KEYPORT, MONMOUTH COUNTY
NEW JERSEY**

PREPARED FOR:

**HUDSON POINTE AT KEYPORT, LLC
234 BOUNDARY ROAD, UNIT 104
MARLBORO, NJ 07746**

PREPARED BY:



**DuBois and Associates, LLC
190 N. Main Street
Manahawkin, NJ 08050
609-488-2857**

A handwritten signature in black ink that reads "Kristin F. Wildman".

**Kristin Wildman
Senior Environmental Consultant**

TABLE OF CONTENTS

	<u>Page No.</u>
1.0 Introduction	1
2.0 Methodology.....	1
3.0 Site Location & Existing Land Use/Land Coverage.....	1
4.0 Project Description.....	2
5.0 Site Inventory & Environmental Assessment.....	2
5.1 Planning, Zoning & Demographics.....	2
5.1.1 The State Plan.....	3
5.1.2 Zoning.....	3
5.1.3 Demographics.....	3
5.2 Geology & Subsurface Water.....	4
5.2.1 Bedrock Geology.....	4
5.2.2 Bedrock Aquifer.....	4
5.2.3 Surface Geology.....	4
5.3 Monmouth County Soil Survey.....	5
5.4 Sewerage.....	7
5.5 Freshwater Wetlands, Hydrology & Surface Water Quality.....	8
5.6 Topography & Slope.....	8
5.7 Vegetation Communities.....	8
5.8 Wildlife.....	9
5.9 Threatened/Endangered Species.....	10
5.9.1 Fauna.....	10
5.9.2 Flora.....	10
5.10 Air Quality.....	11
5.11 Cultural, Historic & Archeological Resources.....	13
5.12 Noise Characteristics.....	14
5.13 Aesthetics.....	14
5.14 Hazardous or Miscellaneous Non-hazardous Materials / Solid Waste.....	15
6.0 Required Licenses, Permits & Approvals.....	17
7.0 Alternatives Analysis.....	17
8.0 Adverse Environmental Impacts that Cannot be Avoided.....	17
9.0 Summary & Discussion.....	17
10.0 References.....	19

TABLES

	<u>Page No.</u>
Table 1: Physical properties, suitabilities and/or limitations of on-site soils in regards to building site development.....	6
Table 2: National Ambient Air Quality Standards (NAAQS).....	12
Table 3: Approvals Status.....	16

FIGURES

Figure 1 -	Borough of Keyport Township Tax Map
Figure 2 -	New Jersey Road Map
Figure 3 -	SW Keyport USGS Quadrangle Map
Figure 4 -	NJ State Planning Areas Map
Figure 5 -	Aerial Map
Figure 6 -	Borough of Keyport Zoning Map
Figure 7 -	NJ Bedrock Geology Map
Figure 8-	NJ Surface Geology Map
Figure 9 -	Monmouth County Soil Survey
Figure 10 -	NJDEP Freshwater Wetlands Map
Figure 11 -	NJDEP Landscape Project and NHP Map
Figure 12 -	FEMA Flood Hazard Area Map
Figure 13 -	Vegetation Communities Map
Figure 14 -	NJDEP Historic Properties Map

APPENDICES

Appendix A -	Photographs of the Site
Appendix B-	NJDEP Natural Heritage Program Correspondence
Appendix C-	Qualifications of Preparers

1.0 INTRODUCTION

DuBois and Associates (DuBois) was retained by Hudson Pointe at Keyport, LLC to prepare an Environmental Impact Statement for a proposed residential development, parking areas and associated stormwater management system on parcels of land designated as Block 120, Lots 8 and 9 and Block 130 Lots 42, 48, 49, 50, 51 and 52 (herein termed, “the site”) located within the Borough of Keyport, Monmouth County, New Jersey. This Environmental Impact Statement (EIS) presents an assessment of the probable or potential impacts the proposed development project may have upon natural resources at the project site and the surrounding area, and provides an overview of measures taken to minimize any adverse environmental impacts that may be caused by the development.

As outlined within the context of this EIS, the proposed project has been designed to have minimal impact on environmental resources to the maximum extent practicable. The site is in a location that is well suited to the proposed residential development is compatible with the surrounding development.

2.0 METHODOLOGY

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

- Borough of Keyport Land Use Ordinance;
- NJ State Plan;
- NJDEP Bureau of Geographic Information Systems;
- NJDEP NJ-GeoWeb Map Viewer;
- NJDEP Historical Preservation Office;
- NJDEP Natural Heritage Database;
- Monmouth County Soil Survey;
- Federal sources including USDA, USFWS, USEPA and FEMA;
- Project materials supplied by the applicant, including:
 - Preliminary and Final Major Site for Hudson Pointe at Keyport, LLC, Borough of Keyport, Monmouth County, New Jersey prepared by WJH Engineering revised 3/1/21;
 - Stormwater Management Report for Hudson Pointe prepared by WJH Engineering, revised 3/1/21;
 - Traffic Impact Analysis by McDonough and Rea Associates

DuBois performed a comprehensive site investigation of the entire site on March 10, 2021. On-site soils, surrounding vegetation communities, wildlife, ecotone areas, and existing and surrounding land uses were evaluated in relation to probable or potential impacts that may be imposed upon these resources by the proposed project. Weather was clear during the site investigation.

3.0 SITE LOCATION & EXISTING LAND USE/LAND COVERAGE

The site is comprised of 2.86 acres and is in the northern portion of the Borough of Keyport as shown on Sheet No. 11 of the official Tax Map of the Borough of Keyport (refer to *Figure 1: Borough of Keyport Tax Map*). The site has frontage along Manchester Avenue, Maple Place and Seventh Street (refer to *Figure 2: New Jersey Road Map*). The site is located on the SW Keyport U.S. Geological Survey Quadrangle with NAD 83 state plane coordinates of E(x) 577,588 N(y) 583,819 at the approximate center of the site (refer to *Figure 3: SW Keyport USGS Quadrangle Map*). The site is within the Monmouth Watershed Management Area (WMA 12), the Raritan/Sandy Hook Bay tributaries watershed (HUC 12: 020301040403 and within

the Chingarora Creek to Thoms Creek sub-watershed (HUC 14: 02030104060040). The site is in a Metropolitan Planning Area (PA 1), (refer to *Figure 4: NJ State Planning Area Map*).

The project site is currently composed of an abandoned industrial structure and garage, one (1) residential dwelling, parking and gravel areas. The remaining acreage of the site is composed of vegetated areas along the property's perimeter. Predominate vegetation species are Norway maple, black oak, sassafras, black cherry, and red mulberry. Refer to *Figure 5: Aerial Map* for a depiction of the land coverage present on and in the vicinity of the site. Representative photographs of the site are presented in *Appendix A*. Residential properties surround the project site.

4.0 PROJECT DESCRIPTION

The project proposes the construction of a 64-unit residential development, parking areas and associated stormwater management systems as depicted on the "Preliminary and Final Major Site Plans of Block 120, Lots 8 & 9 And Block 130, Lots 42, 48, 49, 50, 51 & 52 for Hudson Pointe at Keyport, LLC, Borough of Keyport, Monmouth County, New Jersey" prepared by WJH Engineering, revised through March 1, 2021. All existing buildings will be demolished. The proposed project includes two (2) 24-unit apartment buildings (48 units total), six (6) duplex buildings (12 units total), one (1) two-family dwelling and two (2) single-family dwellings, for a total of 64 residential units as provided on the Dimension Plan (Sheet 4 of 13). The project also includes a clubhouse building and parking areas. The development will connect to existing water and sewer service within Manchester Avenue.

The site after development will collect runoff in a proposed system of inlets and perforated pipes within stone bedding to promote recharge to the water table. An outfall has also been provided to discharge runoff into the swale and culvert indicated in the pre-developed condition. All runoff that exceeds the capacity of the pervious pavement storage bed are discharged into the underground collection system for discharge off-site. All areas that are not retained continue to drain towards the street and eventually to the same culvert to the north west (WJH Engineering, 2021). For detailed information regarding utilities, refer to the Utility Plan (Sheet 6 of 13).

5.0 SITE INVENTORY & ENVIRONMENTAL ASSESSMENT

5.1 Planning, Zoning & Demographics

5.1.1 The State Plan

According to the New Jersey State Development and Redevelopment Plan (NJSDRP), prepared by the State Planning Commission in June 1992, and re-adopted in March 2001, the project is located within a Metropolitan Planning Area (refer to *Figure 4: NJ State Planning Area Map*).

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

- provide for much of the state's future development;
- revitalize cities and towns;
- promote growth in compact forms;
- stabilize older suburbs;
- redesign areas of sprawl; and
- protect the character of existing stable communities.

The Land Use Policy Objectives of the Metropolitan Planning Area are to promote redevelopment and development in Cores and neighborhoods of Centers and in Nodes that have been identified through cooperative regional planning efforts. Promote diversification of land uses, including housing where appropriate, in single use developments and enhance their linkages to the rest of the community. Ensure efficient and beneficial utilization of scarce land resources throughout the Planning Area to strengthen its existing diversified and compact nature.

The Housing Policy Objectives of the Metropolitan Planning Area are to provide a full range of housing choices through redevelopment, new construction, rehabilitation, adaptive reuse of nonresidential buildings and the introduction of new housing into appropriate nonresidential settings. Preserve the existing housing stock through maintenance, rehabilitation and flexible regulation.

The Natural Resource Conservation Policy Objectives of the Metropolitan Planning Area are to reclaim environmentally damaged sites and mitigate future negative impacts, particularly to waterfronts, scenic vistas, wildlife habitats and to Critical Environmental Sites, and Historic and Cultural Sites. Give special emphasis to improving air quality. Use open space to reinforce neighborhood and community identity, and protect natural linear systems, including regional systems that link to other Planning Areas.

5.1.2 Zoning

According to the Borough of Keyport Zoning Map, the subject site is mapped as lying within the Light Industrial Zone (LI) (refer to *Figure 6: Borough of Keyport Zoning Map*).

According to the 2017 Borough of Keyport Master Plan's Land Use Plan Element, the entire Borough of Keyport was designated as a Rehabilitation Area in 2007, pursuant to the Local Redevelopment and Housing Law (LRHL). As defined by the LRHL, rehabilitation includes areas where there is a continuing pattern of vacancy, abandonment, or under-utilization of properties in the area and a program of rehabilitation may be expected to prevent further deterioration and promote the overall development of the community.

To further the rehabilitation process, the Borough passed Resolution 290-29 identifying the subject properties as a Redevelopment Area known as Hudson Pointe at Keyport and approving and adopting a redevelopment plan which identifies and describes the proposed residential project.

5.1.3 Demographics

According to the 2017 Master Plan, the population was 7,145 people which was a decrease from the 2010 census population of 7,240 people. In 2010 there were 3,067 households, and 1,693 families residing in the Borough. The population density was 5,188 per square mile (2,003.3/km²). There were 3,272 housing units at an average density of 2,344.8 per square mile (905.3/km²). Of the 3,067 households 23.4% had children under the age of 18, 39.7% were married couples living together, 11.0% had a female householder with no husband present, and 44.8% were non-families. Of the total households, 37.3% were made up of individuals, and 19.0% had someone living alone who was 65 years of age or older. The average household size was 2.35 and the average family size was 3.15. The population was 19.8% under the age of 18, 8.5% from 18 to 24, 28.9% from 25 to 44, 27.1% from 45 to 64, and 15.8% who were 65 years of age or older. The median age was 40.6 years. (United States Census Bureau).

Planning, Zoning & Demographics impact assessment

The project will promote the Land Use Policy Objectives of the Metropolitan Planning area by promoting diversification of land uses, including housing where appropriate, and ensuring efficient and beneficial utilization of scarce land resources throughout the Planning Area. The project also promotes the goals to revitalize cities and towns and to protect the character of existing stable communities. The Housing Policy Objectives will be advanced by providing a full range of housing choices through new construction. The project site is not environmentally sensitive and the project will therefore promote the Conservation Policy Objectives of the State Plan. The project is compatible with the surrounding residential development.

The site has been identified as an area in need of redevelopment and the subject project has been authorized by the Borough through a redevelopment agreement. The proposed project will serve to address the current demand for housing and will provide newly constructed residences with a mix of housing options to the community.

Steps taken to minimize environmental impacts

The project site consists of an abandoned industrial use which has been identified as an area in need of redevelopment. No environmentally sensitive areas exist on the site. The project site is surrounded by residential development. The proposed residential project is an appropriate form of development compatible with the objectives and goals of the Master Plan.

5.2 Geology & Subsurface Water

5.2.1 Bedrock Geology

The site lies within the Inner Atlantic Coastal Plain Physiographic Province. The Inner Coastal Plain Province is characterized by relatively flat lowlands formed of metamorphic, and igneous rocks that are interbedded with layers formed by oceanic (marine) deposition. According to the Geographic Information Systems (GIS) data layer entitled “Bedrock Geology for New Jersey”, provided by the NJDEP New Jersey Geological Survey (NJGS), the site is underlain by the Merchantville Formation (refer to *Figure 7: NJ Bedrock Geology Map*). The Merchantville Formation is made up of glauconite sand to quartz-glauconite sand, clayey and silty (Rutgers University).

5.2.2 Bedrock Aquifer

The site is underlain by the Merchantville-Woodbury confining unit aquifer system. This aquifer system is silt, clay and thin layers of sand. The water is generally good but locally requires chemical treatment. (New Jersey Geological and Water Survey, Rutgers University)

5.2.3 Surface Geology

According to the GIS data layer entitled “Surface Geology for New Jersey”, provided by the NJDEP NJGS, the surficial geology underlying the site is composed of lower stream terrace deposits (refer to *Figure 8: New Jersey Surface Geology Map*). Lower stream terrace deposits are composed of sand, pebble gravel, minor silt and cobble gravel; reddish brown, yellowish brown, reddish yellow, as much as 30 feet thick. This formation forms nonglacial stream terraces with surfaces 5 to 20 feet above modern floodplains. Terraces

grade to late Wisconsinan glaciofluvial deposits in the Delaware, Millstone, and Raritan valleys. (NJGS 2006).

Geology & Subsurface Water impact assessment

Minimal disturbance of the lower stream terrace deposits will occur as a result of grading, subsurface utility installation, foundation construction, and associated earth disturbances. Such disturbances will displace and modify underlying sands and gravel, which will remain on-site during construction of the site improvements. There are no geologic limitations including faults or impermeable bedrock that may pose development limitations.

The site after development will collect runoff in a proposed system of inlets and perforated pipes within stone bedding to promote recharge to the water table. The stormwater system has been designed in accordance with the NJDEP Stormwater Regulations (N.J.A.C. 7:8 last amended March 2, 2020). According to the Stormwater Report prepared by WJH Engineering, the use of the proposed underground storage system as well as the change in cover to modern and clean materials provides water quality benefits. In addition, non-structural strategies such as pervious pavement and disconnected impervious areas have been proposed to improve the quality of runoff leaving the site.

The project will be serviced by public sewer and water. No well features or individual subsurface septic systems are proposed that would have the potential to impact groundwater or other geologic features.

Steps taken to minimize environmental impacts

All excavation and grading shall be performed in accordance with an approved site plan which contains soil erosion and sediment control provisions to prevent the displacement and translocation of exposed geologic sediments. The applicant will adhere to an approved Soil Erosion and Sediment Control Plan which will follow BMPs contained within the *Standards for Soil Erosion and Sediment Control in New Jersey*. This is necessary to avoid adverse impacts of displaced soil (geologic substrate) on adjacent lands. It will include engineering standards and vegetative standards to control land disturbance activities. Standards to be employed include:

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

Proper grading will protect against soil loss from erosion, enhance establishment of permanent vegetative cover and help to properly manage stormwater runoff all of which will reduce off-site discharge of pollutants.

5.3 Monmouth County Soil Survey

Based on the New Jersey Department of Environmental Protection (NJDEP) Geographic Information Systems (GIS) digital data and publication entitled, Soil Survey of Monmouth County, New Jersey, prepared

by the United States Department of Agriculture (USDA), Soil Conservation Service, issued April 1980, one (1) soil series representing one (1) soil type has been identified on the subject property, (refer to *Figure 9: Monmouth Soil Survey Map*). The following descriptions are referenced from the Monmouth County Soil Survey (USDA, 2019):

PegB – Pemberton loamy sand, 0 to 5 percent slopes

Component: Pemberton (85%)

The Pemberton component makes up 85 percent of the map unit. Slopes are 0 to 5 percent. This component is on flats on coastal plains, low hills. The parent material consists of eolian sands over old alluvium and/or glauconitic bearing marine 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 moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during January, February, March, April, May, June, November, and December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. Irrigated land capability classification is 3w. This soil does not meet hydric criteria.

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

Soil Name	Shallow Excavations	Dwellings Without Basements	Local Roads and Streets	Lawns and Landscaping
PegB	Severe, wetness	Severe, wetness	Moderate	Moderate, wetness

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

Soil Survey mappings are an approximation as to the extent of on-site soil types, and field verification is necessary to determine the accuracy of the mappings. DuBois conducted field investigations upon and in the vicinity of the project site to determine the accuracy of Soil Survey mappings on the property; soils are generally consistent with the mapping and series descriptions.

Soils Impact assessment

The proposed development project will remove topsoil and will result in the displacement of Pemberton soils through grading, subsurface utility installation, foundation construction and associated earth disturbances. Pursuant to the Stormwater Management Report reviewed as part of this evaluation, underlying soils in the area of the proposed improvements are generally well drained to efficiently infiltrate and treat stormwater.

Steps taken to minimize environmental impacts

The site is presently developed and the project requires minimal grading for the roadways and the buildings. Grading will occur as necessary to accommodate the stormwater design.

During construction there is a potential for soil erosion since soils will be exposed to water and wind. The project incorporates stone tracking pads at the entrance locations and silt fence protection around the limits of disturbance.

The project will comply with the Monmouth County Soil Conservation District (SCD). Disturbed areas will be re-vegetated with low maintenance, meadow grasses such as strong creeping red fescue, Kentucky bluegrass, redtop and white clover as required and approved by the SCD.

5.4 Sewerage

The site will be serviced by public sanitary sewer service. The Borough of Keyport Water and Sewer Department will service the site from the existing sewer utility in Manchester Avenue. Details of the sanitary sewer lines are presented on the Utility Plan (Sheet 6).

Sewerage impact assessment

Sewerage is collected and treated at the Bayshore Regional Sewerage Authority Treatment Plant. Adequate capacity will be confirmed that the sewerage treatment plant can handle and treat the additional flows from the proposed project.

Steps taken to minimize environmental impacts

Since public sewer is available to the project site, no environmental impact to the soil, groundwater or surface waters will occur.

5.5 Freshwater Wetlands, Hydrology & Surface Water Quality

According to the NJDEP freshwater wetland GIS mappings, no freshwater wetlands are mapped on the site (refer to *Figure 10: NJDEP Freshwater Wetlands Map*). The closest NJDEP mapped freshwater wetlands and surface water, the Chingarora Creek, is located approximately 500 feet to the east of the site.

DuBois evaluated the site for wetlands, including the ditch feature in the northwestern portion of the site. The ditch connects to a culvert beneath the adjacent right-of-way. No standing water was observed and wetland conditions were not encountered. Wetland vegetation did not dominate the area and soils exhibited matrix of 10YR3/2, 10YR4/6 and 10YR5/6 with no mottling.

The site does not contain freshwater wetland resources or associated transition areas; therefore, the project is not regulated pursuant to the Freshwater Wetlands Protection Act Rules (N.J.A.C.7:7A).

Freshwater Wetlands, Hydrology and Surface Water Quality impact assessment

No wetlands or associated transition areas are located on the property. No watercourses were observed on-site or within 150 feet of the site boundary. The site is within the Monmouth Watershed Management Area

(WMA 12), the Raritan/Sandy Hook Bay tributaries watershed (HUC 12: 020301040403 and within the Chingarora Creek to Thoms Creek sub-watershed (HUC 14: 02030104060040). The site is located outside of a mapped flood hazard area based on the updated preliminary flood hazard maps (refer to *Figure 12: FEMA Flood Map*). The project will not impact freshwater wetlands, hydrology or surface water quality.

Steps taken to minimize environmental impacts

The site is located outside of a flood hazard area. The stormwater design complies with the NJDEP Stormwater Management Regulations (N.J.A.C. 7:8) and Best Management Practices for a major development thereby promote recharge to the water table.

5.6 Topography and Slope

The site can be generally described as gently sloping towards the northern and eastern portions of the site. A peak located in the center of the site has a maximum elevation of 25 feet, gently sloping towards the northern and eastern portion of the site, with low elevations of 22.51' and 24 feet, respectively. The Pemberton soil series underlying the site is classified as well drained.

Topography and Slope impact assessment

The property is currently developed and relatively flat. The site will be graded as necessary to accommodate the development, which will change existing topographic contours to the minimum extent practical for efficient design of the roadways and the buildings. Excavation to the proper depth is required to handle post-construction runoff.

Steps taken to minimize environmental impacts

Grade changes will result in the minimum disturbance to surface and subsurface soils. BMPs for soil erosion and sediment control will be followed to mitigate the negative effects of exposed and displaced soil. These BMPs are outlined above under Chapter 5.2.

5.7 Vegetation Communities

The site is located in the New Jersey Inner Coastal Plain Subsection as recognized by the U.S. Forest Service. DuBois documented existing vegetation communities on-site and assembled a list of the dominant vegetation present. Refer to *Appendix A: Site Photographs* for a depiction of the below described vegetation communities. Refer to *Figure 13: Vegetation Communities Map* for a depiction of the areas described below.

The majority of the property contains abandoned commercial and residential development, appurtenant structures and grassed/gravel areas. The perimeter of the site contains a vegetated fringe. This area contains canopy species such as Norway Maple (*Acer platanoides* L., UPL), Black Oak (*Quercus velutina* Lam., NI), Mulberry (*Morus* L., NI), Black cherry (*Prunus serotina* Her, FACU), Sassafras (*Sassafras albidum*, FACU), Silver maple (*Acer saccharinum*, FACW), Autumn holly (*Ilex opaca*, FACU). The understory is composed of saplings of the tree species, with an herbaceous layer dominated by Common mugwort (*Artemisia vulgaris*, UPL), Wild garlic (*Allium vineale*, FACU), Garlic mustard (*Alliaria petiolate*, FACU) and various grasses.

Vegetation Communities impact assessment

A complete vegetation inventory was compiled for the site, and a background investigation was conducted to ensure the site is not associated with any rare, threatened or endangered floral species. It is the determination of DuBois that the proposed project will not result in adverse impacts to vegetation of critical and sensitive biotic communities.

Steps taken to minimize environmental impacts

An abandoned industrial building with parking and gravel areas and a single-family dwelling exist on the site. A comprehensive inventory of vegetative species was conducted on the site. There are no rare, threatened or endangered plant species identified on the site that will be disturbed.

The majority of the site includes disturbed vegetated communities. The proposed project includes significant new landscaped areas, including native tree and shrub species. The proposed landscaped areas will be seeded and planted with native species to the maximum extent practicable.

5.8 Wildlife

The subject site is located within the Piedmont Plains landscape region, as identified by the NJDEP NJ Wildlife Action Plan. Within the Piedmont Plains landscape region, the Southern Piedmont Plains zone is the largest zone in the state, with more than 60 percent of the area considered suitable habitat for wildlife of conservation concern. This zone also contains many public natural lands and open space areas including Trenton Marsh, Delaware & Raritan Canal State Park, Rancocas State Park, Parvin State Park, Glassboro WMA, Union Lake WMA, Thundergut Pond WMA, Mannington Meadows WMA, Mad Horse Creek WMA, Abbotts Meadow WMA, Supawna Meadows NWR, Fort Mott, and PSE&G's Alloways Creek. (NJDEP 2008).

NJDEP Office of Natural Lands Management, Natural Heritage Program (NHP) Database records for potential threatened/endangered species occurrences, as well as NJDEP Landscape Project Mappings which depict habitat polygons used to value areas for potential critical wildlife habitat were reviewed to obtain a list of species with potential to occur within the local area. According to the NJDEP Landscape Mapping of Endangered, Threatened and Other Priority Wildlife (version 3.3), there are no known occurrences of such wildlife or vegetation on-site of any rank on the site, indicating that the site is not habitat for threatened or endangered species, or any other species of special concern. This was confirmed by DuBois based on field investigations and current and historic land use on-site and within the general vicinity. (refer to Figure 11: Landscape Project v3.3 Map and Appendix B: Natural Heritage Program Response)

DuBois also reviewed the NJDEP Landscape Project Version 3.3 for potential and certified vernal habitat areas mapped on or within the vicinity of the site. "Vernal habitat" includes a vernal pool - or the area of ponding - plus any freshwater wetlands adjacent to the vernal pool. Vernal habitats contain pools that are confined depressions, either natural or man-made, that maintain ponded water for part of the year and are devoid of breeding fish populations. These temporary wetlands provide habitat to many species of amphibians, several of which breed exclusively in vernal pools, as well as a multitude of insects, reptiles, plants, and other wildlife. Landscape Project Version 3.3 identifies not only vernal and potential vernal pools themselves, but also a 300-meter buffer surrounding the habitat that allows for successful breeding, dispersal, foraging, overwintering, and migration of species that use vernal pools. According to the Landscape Project mapping, a no potential vernal habitat is located on site or immediate site vicinity.

Wildlife impact assessment

The properties are presently developed and surrounded by residential development, and the site is not associated with any contiguous suitable biotic communities that are identified as critical or suitable wildlife habitat. Therefore, it is the determination of DuBois that the proposed project will not result in adverse impacts to wildlife habitats.

Steps taken to minimize environmental impacts

The project site is surrounded by residential development and roadway networks. There are no natural areas on the site that meet the criteria to be considered suitable habitat. The proposed project will not result in any adverse impacts to wildlife habitat on the site.

5.9 Threatened & Endangered Species

5.9.1 Fauna

NJDEP Office of Natural Lands Management, Natural Heritage Program (NHP) Database records for potential threatened/endangered species occurrences, and NJDEP Landscape Project Mappings which depict habitat polygons used to value areas for potential threatened and endangered wildlife habitat were reviewed to obtain a list of species with potential to occur within the local area. Based on these records and the NHP response received on November 24, 2020, there have been no known occurrences for state threatened or state endangered species on the subject site. This was confirmed by DuBois through field investigations and current and historic land use on-site and within the general vicinity. It is notable that the limits of mapped wetlands 500 feet east of the site are identified as a Rank 3 habitat, which indicates the area is potentially suitable habitat for a state threatened species (refer to *Figure 11: Landscape Project Version 3.3 Map*). The species mapped include the Rank 3 state-threatened yellow-crowned night-heron (*Nyctanassa violacea*) and black-crowned night-heron (*Nycticorax nycticorax*). The NHP documents these species and least tern (*Sternula antillarum*) in the vicinity of the site (refer to *Appendix B* for a copy of the NHP correspondence). The site and surrounding residential home developments have been determined by DuBois to not possess the habitat necessary to supporting these species.

5.9.2 Flora

DuBois reviewed the NJDEP GIS Natural Heritage Priority Sites Maps. The Natural Heritage Priority Sites Coverage was created to identify critically important areas to conserve New Jersey's biological diversity, with particular emphasis on rare plant species and ecological communities. According to the NJDEP, the site lies outside of any Natural Heritage Priority Sites.

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

A request was made to the NJDEP NHP for identification of any endangered plant species or ecological communities that may be present upon and in the vicinity of the subject property. DuBois has reviewed the November 24, 2020 NHP correspondence for the site which states that the Natural Heritage Database does not have any records for rare plants or ecological communities on the site (refer to *Appendix B* for a copy of the NHP correspondence).

Threatened & Endangered Species impact assessment

No records for rare flora or fauna are documented on the site, and no rare flora or fauna species were observed during any site investigations.

Steps taken to minimize environmental impacts

It is the determination of DuBois that the project will not result in any direct or indirect impacts to threatened or endangered species habitat.

5.10 *Air Quality*

Each year, the NJDEP Bureau of Air Monitoring produces an Air Quality Report, which summarizes air quality data for the entire State. The most recent report available is based on 2019 data. This report provides concentrations of individual pollutants and compares them to the National Ambient Air Quality Standards (NAAQS). The major objectives of monitoring air pollutant levels are:

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

In 2019, the NJDEP Bureau of Air Monitoring operated 3 ambient air monitoring stations. The stations vary in the number and type of monitors operating at each site. The NJDEP air monitoring program is primarily focused on the measurement of pollutants for which NAAQS have been established, also known as criteria pollutants. Criteria pollutant monitoring is regulated by the United States Environmental Protection Agency (USEPA), which prescribes the design and siting of the monitoring networks, the acceptable monitoring methods, and the minimum quality assurance activities. Only data which meet USEPA requirements can be used to determine compliance with the NAAQS. There are six criteria air pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), and particulate matter (PM).

In this area of the state, a monitoring site is located at Rutgers University for nitrogen dioxide (NO₂), particulate matter (PM) and ozone (O₃).

Table 2: National Ambient Air Quality Standards (NAAQS)

	Primary	Secondary
Total suspended Particulates (ug/m ³)		
12-month geometric mean ^b	10.2 ug/m ^{3a}	-
Average 24-hour concentration ^b	26.3 ug/m ^{3c}	-
Inhalable Particulates (PM10) (ug/m ³)		
Annual arithmetic mean	37 ug/m ³	-
24-hour average	150 ug/m ³	150 ug/m ³
Sulfur Dioxide (SO ₂) (ug/m ³)		
12-month arithmetic mean	80 ug/m ³ (0.03 ppm)	60 ug/m ³ (0.02 ppm) ^b
Average 24-hour concentration	365 ug/m ³ (0.14 ppm) ^a	260 ug/m ³ (0.10 ppm) ^a
Average 3-hour concentration	-	1300 ug/m ³ (0.50 ppm) ^a
Average 1-hour concentration	75 ppb	-
Nitrogen Dioxide (NO ₂) (ug/m ³)		
12-month arithmetic mean	100 (0.05 ppm)	100 (0.05 ppm)
Annual average	100 ug/m ³ (0.53 ppm)	100 ug/m ³ (0.53 ppm)
1-hour average guideline	190 ug/m ³ (0.100 ppm)	-
Carbon Monoxide (CO) (ug/m ³)		
Average 8-hour concentration	10 mg/m ³ (9 ppm)	10 (9 ppm) ^f
Average 1-hour concentration	40 mg/m ³ (35 ppm)	40 (35 ppm) ^f
Ozone (O ₃) (ug/m ³)		
Maximum daily 1-hour average	235 ug/m ³ (0.12 ppm) ^f	160 ug/m ³ (0.08 ppm) ^b
1-hour average	-	235 ug/m ³ (0.12 ppm) ^f
8-hour average	0.075 ppm	0.075 ppm

* ug/m³ - micrograms per cubic meter

* ppm - parts per million

* ppb – parts per billion

* mg/m³ - milligrams per cubic meter

Notes:

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

Source: New Jersey Department of Environmental Protection, Bureau of Air Monitoring, 2019 Air Quality Report.

The Air Quality Report includes a listing of the Highest Pollutant Standards Index with the location for days that were Unhealthy (UH), Very Unhealthy (VUH), and Unhealthy for Sensitive Groups (USG). In 2019, there were 162 “Good” days, 190 were “Moderate,” and 13 were “Unhealthy for Sensitive Groups.” This indicates that in 2019 air quality in New Jersey was good on 44% of days, and moderate on 52% of days.

However, air pollution was still bad enough on 4% of days to potentially affect sensitive people. This indicates that air quality in New Jersey is considered good or moderate most of the time, but that pollution is still bad enough to adversely affect some people on about one day in thirty.

Existing sources of air contaminants surrounding the site would primarily be emissions from vehicular traffic associated with surrounding roadways and residences.

Air Quality Assessment

Temporary pollutant emissions and impacts to air quality will result from the construction of the project requiring the use of trucks and other vehicle traffic. More permanent impacts from vehicular traffic associated with the residences will occur.

Steps taken to minimize environmental impacts

The impacts from vehicular traffic associated with the proposed residential project are not expected to impact the existing air quality of the site and surrounding areas. Air quality impacts are expected to be minimal and temporary during the construction phase and will not exceed any federal or state air quality standard. Should the control of dust be necessary at the work site, the site shall be sprinkled with water until the surface is wet, and temporary vegetative cover shall be established for dust control.

5.11 Cultural, Historical and Archeological Resources

DuBois conducted a desktop search of the NJDEP Historic Preservation Office (HPO) records for the presence of any cultural, historical or archeological resources located on or in the vicinity of the project site. The NJDEP NJ-GeoWeb Map Viewer data layers entitled “NJDEP Historic Properties of New Jersey”, “NJDEP Historic Districts of New Jersey” and “NJDEP Archaeological Site Grid of New Jersey” were reviewed (refer to *Figure 14: NJDEP Historic and Archeological Resources Map*). The Historic Properties, Historic Districts and Archaeological Site Grid data layers display historic properties and archaeological grids that are either included in the New Jersey or National Registers of Historic Places, have been determined eligible for inclusion through federal or state processes as administered by the New Jersey HPO, or have been identified through cultural resource survey or other documentation on file at the HPO.

No historic districts or archeological site grids are mapped on the project site. The Historic Properties layer maps two (2) historic properties on the site, known as the “C.S. Bucklin Canning Factory” and “1 Maple Place”. It appears that both sites were surveyed (Monmouth County Historic Sites Inventory: Keyport Borough: 1322, (Survey Update), Survey ID 8159) in 2007 and the survey resulted in a determination as “not eligible” for listing. The site’s designated status is listed as “Identified INDV” and is not a National Historic Landmark.

Cultural, Historical and Archeological Resources impact assessment

NJDEP reports that there are no restrictions for the identified site; it is not expected that the proposed project would impact properties which are listed or are eligible for listing on the New Jersey or National Register of Historic Places. Richard Grubb & Associates performed an Intensive-level historic architectural survey in conjunction with the proposed Hudson Pointe at Keyport development. It was recommended the surveyed resource not eligible for listing in the National Register. As such, there are no anticipated adverse impacts to cultural, historical or archeological resources resulting from the proposed project.

Steps taken to minimize environmental impacts

As no potential cultural, historical or archeological resources were identified on the site, steps to minimize environmental impacts are not proposed.

5.12 Noise Characteristics

Consistent contributors to existing local and regional noise levels in the area are primarily associated with the traffic from adjacent roadway and surrounding existing residential development. Noise levels will likely increase along adjacent roadways during peak traffic hours in the morning and evening hours during the week.

Noise assessment and impact

During the construction phase of this project, noise levels will be temporarily increased from heavy equipment, trucks, and various construction practices. Construction activities will occur during permitted working hours to minimize impacts. The anticipated contributors to local noise levels with the post-construction conditions of the facility will be from incidental movement of vehicles associated the residential development. The noise levels are anticipated to be generally consistent with the surrounding residential land use. It is not anticipated that a Noise Study is warranted.

Steps taken to minimize environmental impacts

Site preparation and construction will be performed during permitted work hours of the workday. Work will not be done in the early morning or late evening. The project will follow the requirements presented in the Noise Control regulations at N.J.A.C.7:29. Furthermore, the noise levels will be associated with intermittent movement of cars and trucks into and out of the area and will not be associated with a “continuous airborne sound”. The noise levels from the built project are anticipated to be generally consistent with the surrounding residential land use and are not expected to cause a significant impact. Therefore, a noise analysis should not be required for this project and the development will be compliant with state and local standards.

5.13 Aesthetics

Visual resources that define a landscape’s aesthetic quality are the lines, forms, spaces, colors, and textures experienced from where people live, work, recreate and travel. The quality of visual resources is important to those who reside in and travel through a landscape (USDA NRCS 2004). The site was previously utilized as an industrial property. The use has been abandoned and the site is not visually attractive, nor does it fit with the surrounding residential uses.

Aesthetics assessment and impact

The Borough adopted a resolution on December 15, 2020 designating the site as a condemnation area in need of redevelopment. The proposed project is compatible with the residential development surrounding the property. Landscape buffers are proposed along the property boundaries and adjacent roadways. The perimeter of the site will be augmented with evergreens which lie adjacent to residential uses, as depicted on the Landscape Plan (Sheet 11).

Steps taken to minimize environmental impacts

The proposed residential project will improve the aesthetics of the site and will be compatible with the residential uses surrounding the site. The project will have a positive impact on the aesthetics of the site and surrounding community.

5.14 Hazardous or Miscellaneous Non-hazardous Materials and Solid Waste

In May, 2019, DuBois was retained by the applicant to conduct a Preliminary Assessment (PA) to identify potential areas of concern (AOC) on and within the vicinity of the subject property, which may represent potential environmental concerns for the property. The findings of the PA revealed the property was historically used for industrial, commercial and limited residential purposes dating back to the late-1890s. The PA identified several AOCs, some of which required additional investigation. The PA did not identify any AOCs associated with offsite properties in the vicinity of the subject property. In August, 2019 and August-September, 2020, DuBois was retained to conduct site investigation activities at the property at the location of AOCs. Site investigation activities included but were not limited to surface and subsurface soil sampling activities, a geophysical investigation, a subsurface soil test pit investigation, a ground water investigation and so on. The results of the site investigation activities revealed impacts to shallow soils in three (3) isolated areas of the property as well as potential ground water contamination. More specifically, soil impacts included two (2) metal compounds (vanadium & lead), which were identified in shallow soils (i.e. within the first 2.5-feet below the ground surface) in three (3) isolated area at concentrations that exceeded their NJDEP's Residential Direct Contact Soil Remediation Standards (RDCSRS). Ground water impacts revealed the presence of lead at concentrations above its applicable NJDEP Ground Water Quality Standards (GWQS) in five (5) temporary well points located on the property. As a result, DuBois proposed additional investigation of soil and ground water in the form of a Remedial Investigation (RI) pursuant to N.J.A.C. 7:26E-4.1-4.9. The RI included the horizontal and vertical delineation of the impacted soils with concentrations of vanadium and/or lead above their respective NJDEP RDCSRS, the horizontal and vertical delineation of previous soil sample locations that revealed concentrations of metals above their applicable NJDEP default Impact to Ground Water Soil Screening Levels (IGWSSLs), and the installation of a series of permitted ground water monitoring wells followed by the collection of two (2) consecutive rounds of ground water samples using low-flow sampling methodology. The RI of soils at the property resulted in all areas with exceedances of the NJDEP default IGWSSLs and RDCSRS being successfully delineated both horizontally and vertically. Consequently, DuBois proposed a Remedial Action (RA) investigation pursuant to applicable requirements of N.J.A.C. 7:26E-5.1-5.7 in order to address the three (3) isolated areas with soil contamination above its respective NJDEP RDCSRS. In November 2020, DuBois completed the RA investigation of soils in three (3) isolated areas of the property. More specifically, these areas were located along the northwestern, northern and eastern exteriors of the existing former industrial building onsite. RA activities included the excavation and offsite disposal of the previously delineated impacted soils from these three (3) areas followed by the restoration of each area by backfilling the remedial excavations with certified clean fill material. Each remedial excavation area was restored to grade and to its natural condition, as applicable. As such, at this time, no soil contamination, which would represent a special hazard to the proposed redevelopment of the property, remains onsite. In November 2020 following the RA of soils, five (5) ground water monitoring wells were installed to confirm whether the concentrations of lead in initial ground water samples collected from temporary well points at the property was representative of the current condition of ground water beneath the property or was a result of turbidity in the samples. On November 30, 2020, the first round of confirmatory ground water samples was collected from the five (5) permitted monitoring wells using low-flow sampling methodology. The first round of confirmatory ground water samples revealed lead concentrations in each sample was reported as not detected (ND). On January 18,

2021, the licensed low-flow sampling technician mobilized to the property and completed the second round of confirmatory ground water sampling activities. The results of the second round of confirmatory ground water samples revealed lead concentrations as ND in all samples collected. As a result, DuBois confirmed the lead concentrations identified in the initial ground water samples collected at the property during the SI and using temporary well points were attributed to turbidity in the ground water samples and were not truly representative of the actual conditions of ground water beneath the property. Thus, it was confirmed that ground water beneath the property was not impacted and therefore, no further investigation of the same was necessary.

Currently, the NJDEP has previously been notified of the soil contamination, which resulted in the NJDEP issuing incident/case #20-11-30-1100-58 for the property. DuBois subsequently filed a Confirmed Discharge Notification (CDN) to the NJDEP, which resulted in the property being issued Program Interest (PI) #G000013215. A Licensed Site Remediation Professional (LSRP) has previously been retained and is responsible for overseeing and certifying the findings of the aforementioned investigations performed at the property. It should also be noted that during the completion of various remedial phase investigations conducted at the property, the LSRP retained provided direction and oversight. DuBois is currently in the process of preparing the remaining remedial phase reports, and NJDEP forms and documents, which shall be reviewed and certified by the LSRP retained for the property for the purposes of receiving an unrestricted use, Response Action Outcome for the entire site (RAO-E). Inclusive to the aforementioned, DuBois will be submitting all remedial phase reports, applicable NJDEP forms and documents, and the RAO-E to the NJDEP via their online portal, as required. Based on the aforementioned findings, at this time, no special hazard areas/conditions remain present on the property, which would preclude the proposed residential redevelopment of the property.

Solid waste and recycling will be handled in accordance with local requirements. No on-site individual subsurface sanitary sewer facilities or septic fields are proposed on-site; therefore, no impacts are anticipated as a result of wastewater generation or discharge. Implementation of specific environmental performance controls are not necessary for this project.

6.0 **REQUIRED LICENSES, PERMITS, AND APPROVALS**

Table 3: Approvals Status

Granting Authority	License, Permit or Approval	Status
Borough of Keyport Planning Board	Preliminary and Final Site Plan Approval	Subject of this application
Monmouth County Planning Board	Preliminary and Final Site Plan Approval	Concurrent Application
Monmouth County Soil Conservation District	Soil Erosion and Sediment Control Plan	Concurrent Application
NJDEP	CAFRA Individual Permit	Concurrent Application

7.0 ALTERNATIVES ANALYSIS

The following alternatives were evaluated in demonstrating the suitability of the proposed location and design of the proposed townhouse project.

- No Development Alternative: The site has been designated as an Area in Need of Redevelopment by the Borough. The project will promote the Land Use Policy Objectives of the Metropolitan Planning Area and the goals of the Borough of Keyport Master Plan. A no-development alternative will not result in the desired redevelopment of the site.
- Alternate Location: The site is an appropriate location for the proposed development based on the stated goals of the State Plan, and the Hudson Pointe at Keyport redevelopment goals. The project is compatible with the surrounding residential development. An alternate location may not be as well suited to redevelopment.
- Reduction of Scope: The project provides a mix of different residential uses appropriate to the area. The post-development levels of service for traffic will operate at a level of serve “B” or better, and stormwater runoff will not impact surrounding properties when the project is complete. Accordingly, the project scope is appropriate for the site.

8.0 ADVERSE ENVIRONMENTAL IMPACTS THAT CANNOT BE AVOIDED

Some undesirable environmental impacts are unavoidable during and after construction.

- Traffic conditions within the area of the project will increase during the construction phase of the project;
- An increase in traffic will occur from the completed project. Refer to the “Traffic Impact Analysis” prepared by McDonough and Rea Associates, Inc. which concludes that the residential development will operate compatibly with future traffic conditions in the area;
- Locally, temporary increases in noise levels will be encountered as a result of site preparation, heavy machinery, construction, and increased traffic conditions during construction;
- During construction, clearing and grading may give rise to wind-blown dust, soil erosion, sedimentation, and a reduction of air and water quality within the site. These adverse environmental impacts shall be controlled to the maximum extent possible through proper implementation of BMP environmental performance controls.
- The stormwater design will efficiently collect stormwater and off-site surface water run-off will not increase;

9.0 SUMMARY & DISCUSSION

The project site has been determined to be a property in need of redevelopment because the site is in a deteriorated, abandoned condition. The proposed residential project has been designed in compliance with local and State regulations. The properties do not contain environmentally sensitive features. The majority of the impacts will be during construction and are temporary. These impacts will end once the construction

is complete. The residential project is compatible with the development patterns of the area and the site is suitable for such development. The project will not result in an increase in air pollution, contamination, noise or the degradation of ground or surface water quality. A traffic study has concluded that the project will have minimal impact. According to sampling performed by DuBois, no special hazard areas exist.

Measures taken to minimize and mitigate adverse environmental impacts stemming from the project will be performed through the proper implementation of environmental performance controls. The project will be constructed in accordance with all applicable soil erosion and sediment control BMPs contained within the *Standards for Soil Erosion and Sediment Control in New Jersey*.

As determined within the context of this report, the proposed project will have a minimal temporary adverse impact on the natural environment due to the proper planning and implementation of the proposed project. Careful planning, construction, and management of the project shall limit the possibility of future adverse environmental impacts.

10.0 REFERENCES

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

Breden, T.F., Y.R. Alger, K.S. Walz, A.G. Windisch. 2001. Classification of vegetation communities of New Jersey: Second iteration. Association for Biodiversity Information and New Jersey Natural Heritage Program, Office of Natural Lands Management, Division of Parks and Forestry, NJ Dept. of Environmental Protection. Trenton, NJ.

Van den Kooy, Peter, March 23, 2017. "Master Plan Borough of Keyport, Monmouth County, New Jersey".

Borough of Keyport Land Use Ordinance

Borough of Keyport Zoning Map

Federal Emergency Management Agency (FEMA). Website resources and GIS data. Accessed April 2021.
<http://www.fema.gov/index.shtm>

Golden, D. Beans, B.E. and Larry Niles (eds). 2003. Endangered and Threatened Wildlife of New Jersey. Rutgers University Press, New Brunswick, NJ.

National Environmental Title Research, LLC. 2017. NETR Online. Historical Aerial Imagery. Available Online at <http://www.historicaerials.com/>. Accessed April 2021.

New Jersey Department of Environmental Protection, Bureau of Air Monitoring. 2017 Air Quality Report.
New Jersey Department of Agriculture, 2017, Revised Erosion Control Standards. Standards for Soil Erosion and Sediment Control in New Jersey.

New Jersey Department of Environmental Protection, Bureau of Geographical Information Systems, Accessed April 2021. Available Online at <http://www.nj.gov/dep/gis/>

New Jersey Department of Environmental Protection, Division of Watershed Management. New Jersey Stormwater Best Management Practices Manual, updated March 2021.

New Jersey Department of Environmental Protection and New Jersey Department of Agriculture, May, 2000, Stormwater and Nonpoint Source Pollution Control - Best Management Practices Manual.

New Jersey Department of Environmental Protection, Division of Fish and Wildlife. 2017. New Jersey Landscape Project, Version 3.3. New Jersey Department of Environmental Protection, Division of Fish and Wildlife, Endangered and Nongame Species Program.

New Jersey Department of Environmental Protection, Division of Fish and Wildlife, Endangered and Nongame Species Program. 2008. New Jersey Wildlife Action Plan for Wildlife of Greatest Conservation Need. Trenton, NJ.

New Jersey Department of Environmental Protection, Division of Land Use Regulation. 2016. Surface Water Quality Standards N.J.A.C. 7:9B.

New Jersey Department of Environmental Protection, Division of Water Monitoring and Standards, Bureau of Water Quality Standards and Assessment. 2014 New Jersey Integrated Water Quality Monitoring and Assessment Report. New Jersey Department of Environmental Protection, Freshwater Wetland Protection Act Rules N.J.A.C. 7:7A.

New Jersey Department of Environmental Protection, Office of Natural Lands Management, Natural Heritage Program correspondence. NHP File No.: 20-3907541-20351

New Jersey Geological and Water Survey. 2014. Merchantville-Woodbury Aquifer System Information Circular. Trenton, NJ.

New Jersey State Planning Commission. 2001. New Jersey State Development and Redevelopment Plan.

United States Census Bureau. DP-1 - Profile of General Population and Housing Characteristics: 2010 for Borough of Keyport, Monmouth County, New Jersey. Accessed April 2021.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2004. Ecological Principles for Resource Planners. National Biology Handbook Subpart B – Conservation Planning. 190-VI-NBH.

U.S. Department of Agriculture, Natural Resources Conservation Service. 2016. Web soil Survey. Available Online at <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Accessed April 2021.

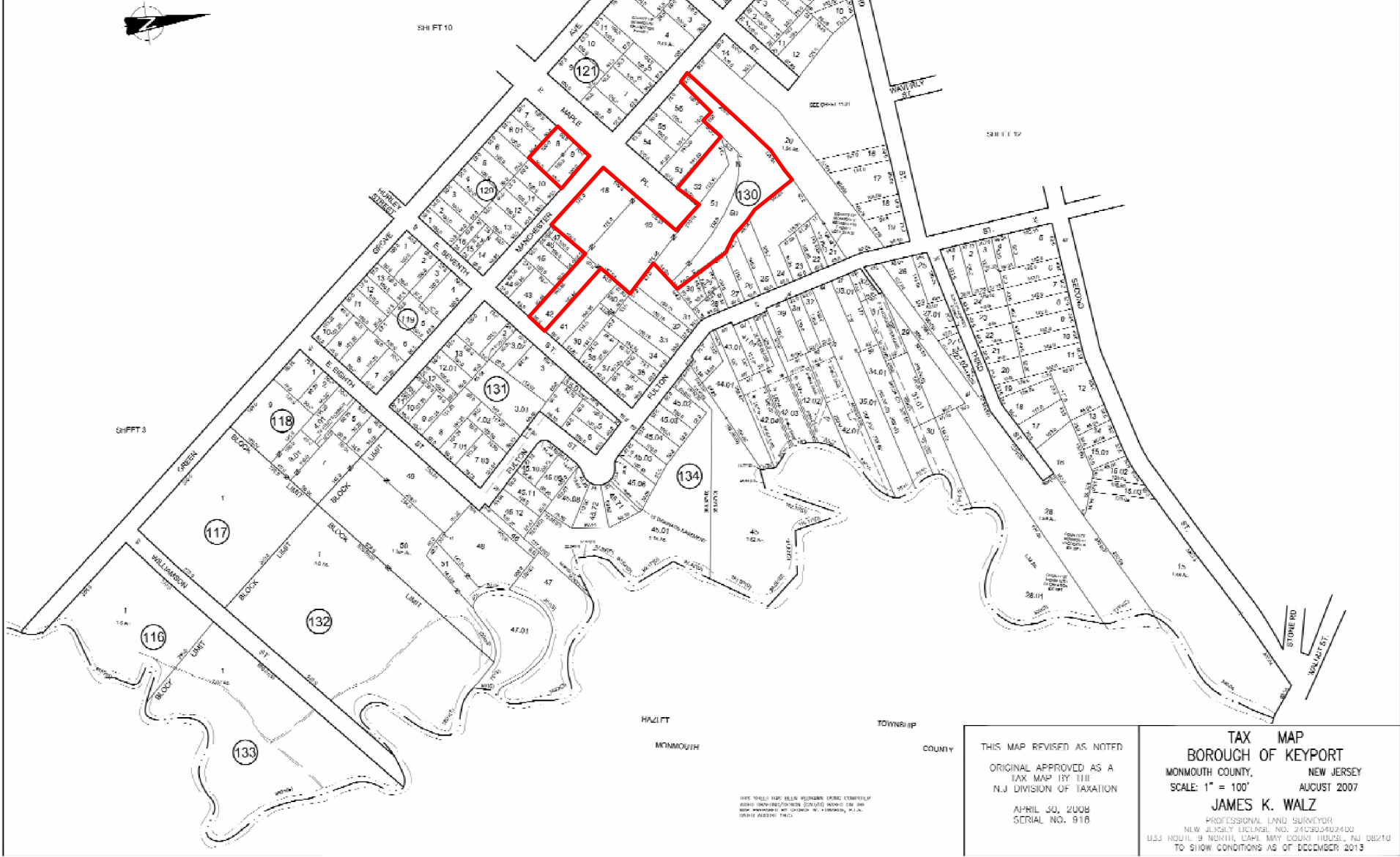
U.S. Fish & Wildlife Service, New Jersey Field Office. New Jersey Field Office Procedures for Project Review. Available online at <http://www.fws.gov/northeast/njfieldoffice/endangered/consultation.html>. Accessed April 2021.

WJH Engineering, March 1, 2021. “Preliminary and Final Major Site Plans of Block 120, Lots 8 & 9 And Block 130, Lots 42, 48, 49, 50, 51 & 52 for Hudson Pointe at Keyport, LLC, Borough of Keyport, Monmouth County, New Jersey”

WJH Engineering, March 1, 2021 “Stormwater Management Report for Hudson Pointe”.

Figures

REVISIONS		
DATE	NAME	LOC. NO.
11/20/13	MICHAEL S. PRINCE, P.E.	0154000



THIS MAP REVISED AS NOTED ORIGINAL APPROVED AS A TAX MAP BY THE N.J. DIVISION OF TAXATION APRIL 30, 2008 SERIAL NO. 918	TAX MAP BOROUGH OF KEYPORT MONMOUTH COUNTY, NEW JERSEY SCALE: 1" = 100' AUGUST 2007 JAMES K. WALZ PROFESSIONAL LAND SURVEYOR NEW JERSEY LICENSE NO. 245303402400 U.S. ROUTE 9 NORTH, CAPE MAY COUNTY HOUSE, NJ 08210 TO SHOW CONDITIONS AS OF DECEMBER 2013



Borough of Keyport Tax Map

Block 120 * Lots 8 & 9
 Block 130 * Lot 42, 48, 49, 50, 51 & 52
 Borough of Keyport, Monmouth County, NJ



Figure 1

Job No.: D1294.012
Date: 4/2/2021
Drawn By: CP



New Jersey Road Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



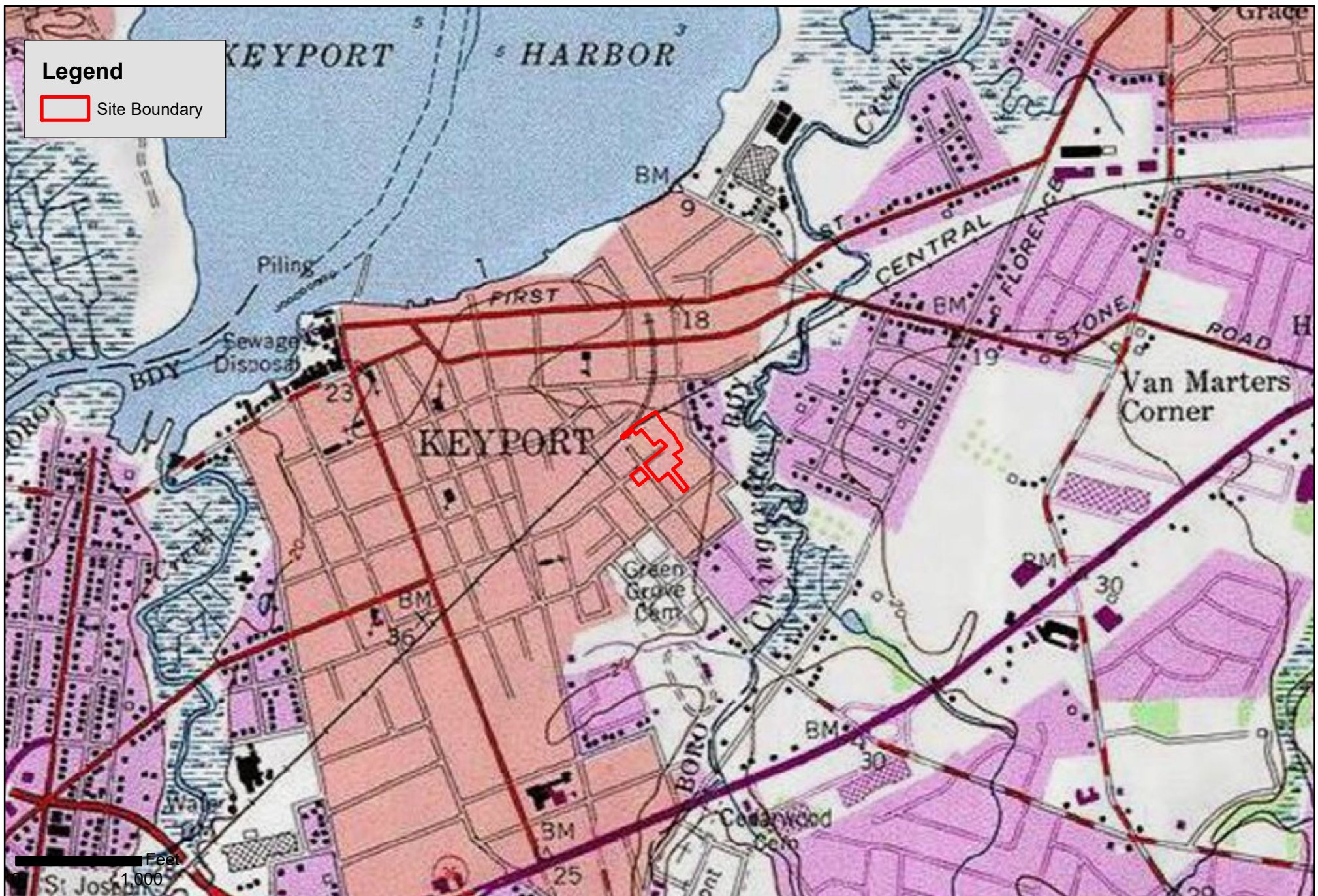
Figure 2

Job No.: D1294.012

Scale: 1 in = 600 ft

Date: 4/2/2021

Drawn By: CP



SW Keyport USGS Quadrangle Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 3

Job No.: D1294.012
Scale: 1 in = 1,000 ft
Date: 4/2/2021
Drawn By: CP



NJ State Planning Areas Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 4

Job No.: D1294.012
Scale: 1 in = 150 ft
Date: 4/2/2021
Drawn By: CP

Legend

 Site Boundary



Aerial Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 5

Job No.: D1294.012

Scale: 1 in = 100 ft

Date: 4/2/2021

Drawn By: CP

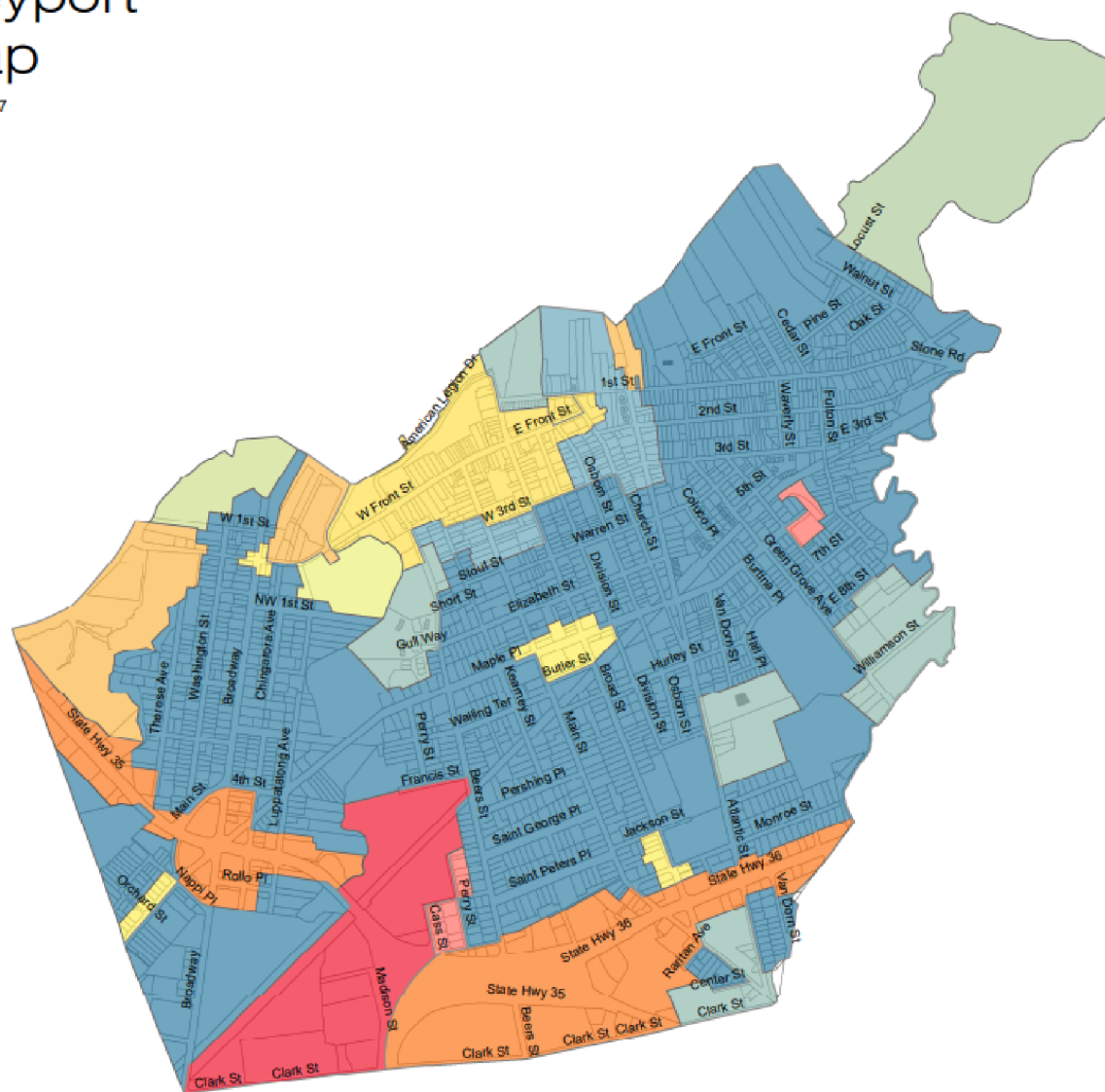
Borough of Keyport Zoning Map

Revisions per Master Plan March 2017
DRAFT - Issued October 25, 2017
Last Revised February 22, 2018

Legend

Zoning Districts

- RA
- RB
- RC
- A-M RDV
- B-P RDV
- L-B RDV
- NC
- GC
- GMC
- HC
- LI
- I



Prepared by DMiller
G:\Projects\KUPBIG1801\GIS\Projects\zoning map.mxd


11 Tindall Road
Middletown, NJ 07748
732-671-6400
www.tandmassociates.com



Borough of Keyport Zoning Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 6

Job No.: D1294.012

Scale: 1 in = 150 ft

Date: 4/2/2021

Drawn By: CP

Legend

 Site Boundary

Merchantville Formation

0 150 Feet



NJ Bedrock Geology Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 7

Job No.: D1294.012

Scale: 1 in = 150 ft

Date: 4/2/2021

Drawn By: CP



NJ Surface Geology Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 8

Job No.: D1294.012

Scale: 1 in = 150 ft

Date: 4/2/2021

Drawn By: CP



Monmouth County Soil Survey Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 9

Job No.: D1294.012

Scale: 1 in = 100 ft

Date: 4/2/2021

Drawn By: CP

Legend

-  Site Boundary
-  Surface Waters
-  NJDEP Mapped Wetlands (2012)



NJDEP Freshwater Wetlands Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 10

Job No.: D1294.012

Scale: 1 in = 100 ft

Date: 4/2/2021

Drawn By: CP

Legend

nhpgrid

-  BOTH - Both 'M' and 'S' Occurrences
-  M - Documented Location Known Within 1.5 Miles
-  S - Documented Location Known Precisely

Natural Heritage Priority Sites

Type

-  Macrosite (usually <3200 acres in size)
-  Standard Site (usually >3200 acres in size)

Piedmont Landscape Region

Wildlife Rank

-  3 - State Threatened
-  4 - State Endangered
-  5 - Federal Listed
-  Site Boundary



NJDEP Landscape Project and NHP Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 11

Job No.: D1294.012

Scale: 1 in = 200 ft

Date: 4/2/2021

Drawn By: CP



FEMA Flood Hazard Area Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 12

Job No.: D1294.012
Scale: 1 in = 150 ft
Date: 4/2/2021
Drawn By: CP



Vegetation Communities Map

Block 120 * Lots 8 & 9
 Block 130 * Lots 42, 48, 49, 50, 51 & 52
 Borough of Keyport, Monmouth County, NJ



Figure 13

Job No.: D1294.012

Scale: 1 in = 100 ft

Date: 4/2/2021

Drawn By: CP



NJDEP Historic Properties Map

Block 120 * Lots 8 & 9
Block 130 * Lots 42, 48, 49, 50, 51 & 52
Borough of Keyport, Monmouth County, NJ



Figure 14

Job No.: D1294.012

Scale: 1 in = 150 ft

Date: 4/2/2021

Drawn By: CP

Appendix A

Site Photographs



1. View of existing abandoned commercial development.



2. View northeast along Maple Place. Site shown in background and to the right.



3. Representative view of conditions within the disturbed portions of the site.



4. View southeast along the site frontage of Manchester Avenue. Site shown to the left.



5. Representative view of site conditions within Block 120.



6. View northwest from Seventh Street of conditions within Lot 42.



7. Representative view of existing residential development along Maple Place.



8. Representative view of ditch and culvert within the northern portion of the site.



9. Representative view of ditch and culvert within the northern portion of the site.



10. Representative view of non-wetland soils encountered within the ditch.

Appendix B

Natural Heritage Program
Correspondence



State of New Jersey

MAIL CODE 501-04

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF PARKS & FORESTRY

NEW JERSEY FOREST SERVICE

OFFICE OF NATURAL LANDS MANAGEMENT

P.O. BOX 420

TRENTON, NJ 08625-0420

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

PHILIP D. MURPHY

Governor

SHEILA Y. OLIVER

Lt. Governor

CATHERINE R. McCABE

Commissioner

November 24, 2020

Kristin Wildman
DuBois Environmental Consultants, LLC
190 North Main Street
Manahawkin, NJ 08050

Re: Manchester
Block(s) - 120 / 130
Lot(s) - 8 and 9 / 42, 48, 50 and 51
Keyport Borough, Monmouth County

Dear Ms. Wildman:

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

NHP File No. 20-4007442-20464

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,

A handwritten signature in blue ink, appearing to read 'Robert J. Cartica', is positioned above the printed name.

Robert J. Cartica
Administrator

c: NHP File No. 20-4007442-20464

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>								
	Black-crowned Night-heron	Nycticorax nycticorax	Foraging	3	NA	State Threatened	G5	S2B,S3N
	Least Tern	Sternula antillarum	Foraging	4	NA	State Endangered	G4	S1B,S1N
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B,S4N
	Snowy Egret	Egretta thula	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Yellow-crowned Night-heron	Nyctanassa violacea	Foraging	3	NA	State Threatened	G5	S2B,S2N

***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	2 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	No	0 pages 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

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

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Strank
<i>Aves</i>								
	American Kestrel	Falco sparverius	Non-breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	American Oystercatcher	Haematopus palliatus	Nesting Area	2	NA	Special Concern	G5	S3B,S3N
	Black-crowned Night-heron	Nycticorax nycticorax	Foraging	3	NA	State Threatened	G5	S2B,S3N
	Glossy Ibis	Plegadis falcinellus	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Least Tern	Sternula antillarum	Foraging	4	NA	State Endangered	G4	S1B,S1N
	Little Blue Heron	Egretta caerulea	Foraging	2	NA	Special Concern	G5	S3B,S3N
	Migratory Shorebird Concentration Site	Shorebird Migratory Concentration Area	Non-breeding Concentration	4	NA	State Endangered	GNR	SNR
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B,S4N
	Osprey	Pandion haliaetus	Nest	3	NA	State Threatened	G5	S2B,S4N
	Snowy Egret	Egretta thula	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Yellow-crowned Night-heron	Nyctanassa violacea	Foraging	3	NA	State Threatened	G5	S2B,S2N
	Yellow-crowned Night-heron	Nyctanassa violacea	Nesting Colony	3	NA	State Threatened	G5	S2B,S2N

Reptilia

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
--

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Atlantic Loggerhead	Caretta caretta	Occupied Habitat	5	Federally Listed Threatened	State Endangered	G3	S1

Appendix C

Statements of Qualifications



Education:

B.S. Environmental Science
Concentration: Atmospheric
Science
University of Delaware – 2002

Certifications:

Professional Wetland Scientist-
Society of Wetland Scientists

Continuing Education:

Rutgers University
Methodology for Delineating
Wetland, Hydric Soils &
Wetland Vegetation
Identification

The Role of the Environmental
Consultant in Litigation

NJDEP Coastal Project Review

NJDEP Flood Hazard Area
Control Act Rules

Environmental Audits & Site
Assessments

Environmental Data Resources
Vapor Intrusion Risk & Due
Diligence Challenges in the Real
World

MAPPs Training Workshop
Hydric Soils

Professional Affiliations:

The Society of Wetland
Scientists
- Member

Environmental Assessment
Association
-Certified Environmental
Inspector
2007 – present

Career Positions:

The Lomax Consulting Group,
LLC
Cape May Court House, NJ-
Environmental Analyst 2004-
2007

Fields of Competence:

Kristin Wildman has over 17 years of experience in the fields of land use regulatory compliance, wetland science, soil science, biology and ecology. She has extensive experience in managing a variety of projects from the initial field study stage through various regulatory application and approval processes, including coordination with regulatory personnel. Mrs. Wildman has the knowledge and experience to identify applicable regulations, develop appropriate permitting strategies, prepare required permit applications and oversee NJDEP, NJPC and USACE application review. Mrs. Wildman has a respected professional relationship with various municipal and county agencies, NJDEP, NJPC, USFWS and USACE personnel. She conducts various environmental site assessments, development feasibility studies, dune delineations, wetland delineations, rare species habitat evaluations and population surveys.

Professional Experience:

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

Mrs. Wildman coordinates directly with professional engineers, attorneys, clients, and regulatory agencies to evaluate compliance and design of projects pursuant to various environmental regulations, inclusive of the Coastal Zone Management Rules, Freshwater Wetlands Protection Act Rules, Flood Hazard Area Control Act Rules, Pinelands Comprehensive Management Plan, Section 10 of the River and Harbors Act and Section 404 of the Clean Water Act. Mrs. Wildman works diligently on behalf of our clients, to obtain regulatory approvals and permits related to activities and projects involving the CAFRA Area, Waterfront Area, wetlands and waterways and their regulated buffer zones and other environmentally sensitive areas. Based on the permit analyses and project designs, she prepares compliance statements and provides all logistical and technical support to obtain environmental permits pursuant to the NJDEP and USACE regulations. She also prepares and oversees applications for NJDEP Bureau of Tidelands Management conveyance instruments. Mrs. Wildman continuously stays up to date with changing environmental regulations.

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

Mrs. Wildman is responsible for conducting development feasibilities, wetland delineations, natural resource inventories, threatened/endangered species habitat assessments and directed surveys, and monitoring activities. Mrs. Wildman has experience with the survey and sampling protocols required under the jurisdiction of the USFWS, NJDEP, and Pinelands Commission for threatened and endangered species surveys. Mrs. Wildman also conducts vegetation inventories within a variety



Environmental Consultant
2007-2010
Senior Consultant / Director of
Technical Services 2010-2016

DuBois and Associates, LLC
Manahawkin, NJ –
Sr. Environmental Scientist /
Project Manager
2017 – Present

of biotic communities throughout New Jersey. These have included species specific surveys for numerous target plants considered rare State and/or Federally listed.

Mrs. Wildman has prepared lectures and presented to numerous local and state agencies. These presentations include *Amphibian/Reptiles of the New Jersey Coastal Plains* to local schools, *New Jersey Department of Environmental Protection Division of Land Use Regulation Regulatory Reform* to the New Jersey Department of State Red Tape Review Commission and *Environmental Constraints at the Cape May and Millville Airports* to the Delaware River & Bay Authority.

Mrs. Wildman has also conducted numerous volunteer survey efforts in coordination with the USFWS. These survey efforts include federally directed amphibian / reptile surveys and swamp pink population surveys.

Representative Projects of Relevance:

Atlantic Capes, Lund's Fisheries and Cold Spring Fish & Supply Co. Ports Rehabilitation
Ecological and environmental work was completed to assist commercial fisheries clients in conducting environmental constraints evaluations and permit analyses for improvements to their commercial facilities. Mrs. Wildman works directly with the engineers in assisting with design of the project to ensure compliance of proposed improvements pursuant to State waterfront development, CAFRA, freshwater wetlands, and flood hazard regulations. Mrs. Wildman also coordinates with the NJDEP and USACOE with regard to permit requirements and to ensure no adverse impacts to documented state and federal threatened and endangered species habitat. Mrs. Wildman prepared all necessary permit applications and ensured continued cooperative coordination with the regulatory agencies to ensure receipt of the applicable permit approvals for the port projects.

Nichomus Run Solar and Sheep Farm

Provided environmental and ecological support to a major development firm to assist in the state and local approvals of a large scale solar energy project. Mrs. Wildman prepared an Environmental Impact Report upon land proposed for the construction of a 150 Megawatts photovoltaic (PV) facility. She supervised site investigations of the entire site to observe and inventory hydrology, freshwater wetlands, soils, vegetation communities, wildlife, ecotone areas, and existing and surrounding land uses. Mrs. Wildman was also responsible for the delineation of on-site wetlands, testimony at the municipal zoning board use variance hearing, preparation of an application report and environmental report pursuant to N.J.A.C. 7:13 for a Flood Hazard Verification and N.J.A.C. 7:7A for a Freshwater Wetland Letter of Interpretation Line Verification application to New Jersey Department of Environmental Protection.

Logan Generating Station Dredging

Conducted sediment sampling and analysis of subaqueous material, and submitted permit applications and received approval from the NJDEP, USACE and DNREC to authorize dredging of berthing areas at the Logan Generating Plant's coal unloading pier in the Delaware River in Logan Township, Gloucester County. The activities required a NJDEP Waterfront Development Individual Permit, USACE Nationwide Permit and DNREC Subaqueous Lands Permit. This project included multi-jurisdictional coordination and project management, that also involved collaboration with USACE regarding the Federal dredging project of the Delaware River channel.