Environmental Assessment Report

For the

Rockefeller Group Logistics Facility at Eastampton

Block: 800 Lot: 9.03

Eastampton Township

Burlington County, New Jersey

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CONTENTS

INTRODUCTION	
EXECUTIVE SUMMARY	
1.0 PROJECT LOCATION AND DESCRIPTION	3
2.0 Overall SITE DESCRIPTION AND INVENTORY	5
2.1 Geology	5
2.2 Soils	5
2.3 Hydrology, Water Quality, Flood Hazard Areas	6
2.4 Topography	6
2.5 Vegetation and Wildlife	7
2.5.1 Vegetation	7
2.5.2 Wildlife	7
2.5.3 Endangered or Threatened Species	8
2.5.4 Wetlands	8
2.6 Utilities	8
2.7 Noise Assessment	9
2.8 Historic and Archeological Resources	10
2.9 Transportation	10
2.10 Air Quality	
3.0 SITE IMPACT ASSESSMENT	11
3.1 Geology	
3.2 Soil Erosion and Sedimentation	
3.4 Water Quality and Hydrological Impacts	11
3.4.1 Stormwater Management	
3.4.2 Surface and Groundwater Degradation	12
3.4.3 Reduction in Groundwater Capabilities	
3.5 Topography – Soil Movement	
3.5.1 Soil Movement	
3.6 Vegetation and Wildlife Impacts	
3.6.1 Destruction of Vegetation and Natural Resources	
3.6.2 Wetland Disturbance	
3.7 Noise Impact Assessment	
3.8 Scenic, Historic, and Archeological Resources	
3.9 Desirable Growth Pattern & Zoning	
3.10 Community Services, Public Health, and Conservation Measures	
3.11 Aesthetic Value	
3.12 Air Quality	
3.13 Consistency with Municipal Plans	
4.0 UNAVOIDABLE ADVERSE IMPACTS	
5.0 MITIGATION POTENTIAL	
6.0 ALTERNATIVES	
7.0 PERMITS AND APPROVALS for Driveway	
8.0 REFERENCES	
9.0 AUTHOR'S CREDENTIALS	22
APPENDIX: Manning Units and Correspondence	

INTRODUCTION

The following Environmental Assessment Report has been prepared by Menlo Engineering Associates Inc. pursuant to the Eastampton Township site plan checklist requiring an applicant submitting a Major Site Plan application to complete an environmental report. This report does not encompass a Phase 1 Environmental Audit, nor did representatives from Menlo Engineering conduct any research or field investigation of the property for any potential hazardous materials.

This report is the result of an investigation of the site features obtained from both site inspections and a review of available published data. The published information consulted for this report may be viewed within the reference section. This report is intended to be reviewed in conjunction with the project Site Plans prepared by Menlo Engineering Associates, last revised February 12, 2021.

EXECUTIVE SUMMARY

The applicant, Rockefeller Group Development Corporation, is requesting a major site plan approval for the construction of a 345,600-sf warehouse/office building on Block 800, Lot 9.03 in Eastampton Township. The new building is expected to house one or more logistic operations including the office space required by the tenants. Typically, these types of structures include warehousing and storage of goods, offices, staff lounge, restrooms, a utility room, and a reception-lobby area. Ancillary to the proposed structure, the development plan includes 445 parking spaces with 263 of the spaces indicated as "land-banked spaces" to be constructed, if required at a later date, (91) trailer storage spaces, security fencing with an external guard house, and stormwater management facilities.

The parcel fronts along New Jersey Route 206 and is found approximately 4,000 feet south of the New Jersey Route 206 and Monmouth Road intersection in the Township's northeast corner. The site's northern boundary is located about 36 feet south of Lina Lane along the south bound side of Route 206.

The 27.64-acre tract occupies 611 linear feet of frontage along the southbound side of New Jersey Route 206 and lies within the Business Park Zone (BP District) which lists warehousing as a permitted use and office and trailer storage as permitted accessory uses. Similar light industrial and commercial uses lie to the north and south of the property with a solar field complex and vacant farmland found across Route 206 from the site. A residential community lies to the west of the site with Powell Run, a surface water feature, acting as the common boundary between the development parcel (Block 800 Lot 9.03) and the residential lands (Block 700 Lot 9) to the west. Except for the stormwater management basin, all site improvements are more than 150 feet from the residential property line.

The project adheres to all the BP District bulk standards including all the building setbacks, the floor area ratio, maximum lot impervious coverage and maximum building height. The project also respects the 150-foot residential buffer as well as the all the parking and improvement setbacks. A few minor design waivers are noted for the spacing of parking area trees and the construction of a bike path / pedestrian path along Route 206. However, the plans do provide an easement for the future construction of the pathway.

The site is predominantly cultivated lands but does contain a band of trees, regulated wetlands and a floodplain associated with Powell Run. Fragmented hedgerows are found along Route 206, along the very

northern edge and perpendicular to the southern property boundary. According to the New Jersey Department of Environmental Protection (NJDEP) Geo-Web interactive mapping tool the parcel does not contain any recorded sightings or suitable habitat for any Threatened or Endangered Species. The regular land cultivation reduces the quantity and habitat value required to support a diversity of wildlife. The composition of the woodland area found onsite is typical for the New Jersey's Coastal Plain and found within most of Eastampton Township. No rare or unusual or significant vegetative or wildlife specimens or species were observed onsite. A Natural Heritage database search has been requested to support these field finding.

The parcel contains regulated wetland areas, wetland transition zones, a riparian zone and a delineated flood hazard area associated with Powell Run along the western boundary. The extent of regulated wetland areas, the flood hazard limits, and riparian zones were verified by the issuance of the NJDEP Letter of Interpretation-Line Verification (NJDEP File No.: 0311-08-0001.1, FWW 160001, issued on November 23, 2016) as well as NJDEP Flood Hazard Area Permits (NJDEP FHA 0311-08-0001.1 FHA 16001 & 16002) issued on October 6, 2017. The permits were issued in conjunction with the Lennar residential community under construction along the west side of Powell Run. Copies of the NJDEP Letter of Interpretation, as well as the NJDEP Flood Hazard permits are included in the Appendix. The project will require a new NJDEP Freshwater Wetland Statewide General Permit (GP #11) and a NJDEP Flood Hazard Permit for the construction of two outlet structures as well as some minor wetland transition zone averaging. The NJDEP Permits required are minor and are designed in conformance with the NJDEP Rules governing the particular General Permit and Flood Hazard Permits.

The facility will also require New Jersey Department of Transportation Permits for the two proposed driveways; the northernmost, a full movement entrance-exit and the southern driveway being a limited right turn in and out movement driveway. No other access points are required for the facility to operate efficiently and effectively. The applicant conducted an informal meeting with representatives of the NJDOT to discuss the required improvements confirming the conceptual configuration was acceptable.

A surface wet-pond stormwater detention system as well as subsurface infiltration beds are required for this development to ensure that the post-development peak flows match the pre-development discharge rate with any required reductions. In addition to addressing the runoff volume and rates, the project must address stormwater quality and groundwater recharge.

The basin is designed in accordance with the NJDEP Stormwater Management Rules; therefore, the project will not cause any offsite flooding or adverse impacts to any downstream receiving bodies. An outlet control structure containing a weir restricts the outflow rate leaving the pond as well as storing the water quality storm addressing both discharge rates and stormwater quality prior to discharge.

Based on the soil testing most the site's soils have low infiltration rates however the project is required to provide additional infiltration zones to match the pre-development ground water recharge onsite. The plans depict subsurface infiltration beds along the building's southern side which will recharge the clean building roof runoff to match the pre-development groundwater recharge.

The project's stormwater management program is designed in accordance with the NJDEP Stormwater Management Rules, Burlington County Standards, the Burlington County Soil Conservation District standards, and the Eastampton Township requirements

Menlo Engineering Associates, Inc. established and evaluated the potential impacts of the proposed development on the existing baseline environmental conditions. These baseline conditions were compiled from site inspections, local published information, and various federal, state, and municipal documents. Potential impacts were evaluated for the period during construction activities and upon occupation of the completed development. Based on this review, the impacts on-site and to nearby environmental features resulting from the construction of warehouse facility will be negligible and do not exceed the projected impacts anticipated by the zoning, state permit thresholds or projects of similar size and nature.

1.0 PROJECT LOCATION AND DESCRIPTION

The applicant proposes the construction of a 345,600-square foot warehouse/office building located on a 27.6-acre parcel (identified on the municipal tax map as Block 800, Lot 9.03) within the northeast portion of Eastampton Township, Burlington County, New Jersey. The project site is located along the southbound side of New Jersey State Highway Route 206 about 4000 feet south of the Route 206-Monmouth Road intersection. The northern boundary of the property lies approximately 36 feet south of Lina Lane. Various commercial, light industrial uses and farmland front along this portion of the highway. The parcel is bounded to the north and south by commercially used properties while a solar field and farmland lie to the east across Route 206 for the property. Route 206, in this vicinity is comprised of a single travel lane in both directions with a paved shoulder on each side and traffic signals controlling the major intersections to the north and south of the property.

An age-restricted single family and multifamily residential community (Block 700, Lot 9) lies to the west of the site across Powell Run, a regulated surface water feature which acts as the boundary line between the two parcels.

The development plans indicate the proposed warehouse structure. The proposed building cover, building setbacks, impervious cover, required parking and buffer requirements all adhere to the Business Park District requirements. The plans depict (445) parking spaces wrapping the west, south and east sides of the building with the southern parking (263 spaces) shown as "land-banked" to be constructed in the future if required by the building occupancy demands. The plans also depict (91) 12 ft. x 60 ft. trailer spaces, a stormwater management wet pond, security fencing with a guard house as well as the ancillary utility connections, lighting, and landscape elements.

The project site falls within the Township's sewer service area and an emerging growth area of the state where the necessary infrastructure to support development may require extensions to fully service the new construction. While the majority of infrastructure including electric, water and sewer is found either within the Route 206 right-of-way or has been extended to the site via the residential development to the west, currently, a gas line does not exist across the site's frontage. The applicant has opened discussions with PSE&G to determine the viability of extending the gas main approximately 3000 feet northward along Route 206 from the 16-inch main located at the intersection Woodlane/North Pemberton Road-Route 206 intersection to service the vicinity.

An onsite sanitary lift station located off the southwest building corner will be required to pump the site generated effluent under Powell Run to the newly constructed pump station servicing the new residential development west of the site. Likewise, the water connection serving the project will be extended from

the adjacent residential development under Powell Run via directional drilling to the property's southwest corner.

The parcel has 611 linear feet (If) of frontage along Route 206, which according to the NJDOT standards is sufficient to support the project requiring two driveways. The northern driveway is designed as a full movement driveway with a widening to accommodate a northbound left-turn lane proposed. The southern driveway is expected to be a restricted movement driveway with only right turns in and out. The northbound left turn lane widening extends to the Lina Lane intersection providing a protected northbound left turn lane at that intersection as well as at the driveway. The widening and tapers do not require any additional right-of-way taking.

The undeveloped tract is largely an open actively cultivated farm field devoid of significant vegetative cover. Some fragmented tree hedgerows are found along the Route 206 frontage along the southern boundary and in the site's northmost corner. A more significant wooded area is found along the western property line associated with the stream and wetland areas. The wooded area's canopy is a mix of red maples, sweetgums, hickory, and oaks. The community is a mid-stage successional woodland with trees ranging from less than 6" Diameter Breast Height (dbh) up to a single oak with a 36" (dbh). The species within the site's wooded community are indicative of a typical transitional community found between wetland areas and uplands across New Jersey's Coastal Plain. The plant community onsite does not contain any rare or endangered species.

A surface wet-pond stormwater detention system as well as subsurface infiltration beds are required for this development to ensure that the post-development peak flows match the pre-development discharge rate with any required reductions. The basin is designed in accordance with the NJDEP Stormwater Management Rules; therefore, the project will not cause any offsite flooding or adverse impacts to any downstream receiving bodies. In addition to addressing the runoff volume and rates, the project must address stormwater quality and groundwater recharge.

An outlet control structure containing a weir, which restricts the outflow rate leaving the wet pond, and stores the water quality storm addressing both discharge rates and stormwater quality prior to discharge.

Based on the soil testing most the site's soils have low infiltration rates however the project is required to provide additional infiltration zones to ensure the project matches the pre- and post-construction groundwater infiltration. Subsurface infiltration beds recharging the clean building roof runoff are indicated along the building's southern side. The project's stormwater management program is designed in accordance with the NJDEP Stormwater Management Rules, Burlington County Standards, the Burlington County Soil Conservation District standards, and the Eastampton Township requirements.

Finally, the development plans, when completed, will depict proposed plantings to provide an aesthetically pleasing landscape design. Plantings will include ornamental, shade, and evergreen trees, shrubs and ornamental herbaceous vegetation. These plantings serve to provide continuity throughout the development and provide limited cover for generalist wildlife species, which may visit or rest onsite.

The applicant's design philosophy is to construct this new 345,600-sf warehouse/office building along with the 445 parking spaces, (land-banking 263 spaces), with as minimal environmental effect as feasible while constructing a viable, attractive development that will blend with the growing surrounding suburban environment. In order to achieve this goal, the project team thoroughly evaluated alternative building configurations in relationship to the overall development potential and the associated impacts. The

application represents a solution that achieves the minimum required program while minimizing impacts to the extent practical.

The project conforms to the district setbacks, floor area ratio, impervious cover and building height as outlined within Eastampton Township Ordinances. The proposed use represents an appropriate development fronting along a New Jersey State Highway.

As with any form of development, will result in certain unavoidable impacts. These unavoidable impacts will be minimized through mitigation measures employed by the applicant within the construction program and all necessary permits will be obtained from the various reviewing agencies prior to construction.

2.0 OVERALL SITE DESCRIPTION AND INVENTORY

2.1 Geology

Eastampton Township lies within the northwestern third of the Coastal Plain Province, one of the four physiographic regions of New Jersey. The Coastal Plain Province is the largest of the physiographic regions, extending southeast below a fall line from Trenton to Woodbridge offshore to the edge of the Continental Shelf. The unconsolidated deposits of the Coastal Plain are generally comprised of low-lying terrain separated by gently sloping divides dipping to the southeast. According to the NJDEP interactive mapping tool, NJ-Geo-Web, the site falls on the line between two geologic formations; the Mount Laurel Formation which underlies nearly the entire site and the Navesink Formation that under lies a small portion of the site's southeast corner. The Mount Laurel formation is comprised of fine to coarse quartz sands while the Navesink is described as clayey glauconite sand. The Coastal plain sediments thicken to a depth of over 6,500 feet in Cape May County.

2.2 Soils

The soil types found on the parcel are shown on the soil inventory map, compiled from the <u>Soil Survey of Burlington County</u>, <u>New Jersey</u>, prepared by the United States Department of Agriculture, Soil Conservation Service (i.e., SCS), in cooperation with the New Jersey Agricultural Experiment Station and the USDA Natural Resources Conservation Service Web Soil Survey. The project area is mapped with three different soil series: Adelphia fine sandy loam (AdmA), Collington fine sandy loam (ComB) and Fluvaquents loamy (FmhAt). The Adelphi series, the largest mapping unit onsite (53%) is mapped across the southern half and the Collington soil (42%) is mapped across the northern half. The Fluvaquents is mapped within the wetland areas associated with Powell Run along the western property line. (see Appendix).

AdmA – Adelphia fine sandy Loam – 0 to 2% slopes: This series consist of nearly level or gently sloping, loamy soils that contain moderate amounts of glauconite. These soils are moderately to somewhat poorly drained and have a fluctuating water table. Typically, the profile consists of a dark grayish-brown fine sandy loam about 10 inches thick followed by an olive-brown subsurface layer which is 4 inches thick. The subsoil is an olive-brown distinctly mottled sandy clay loam nearly 16 thick. The permeability of this soil is described as moderate to moderately slow and the available water capacity is high to moderately high. The organic matter is moderate.

<u>ComB- Collington sandy loam – 2 to 5% slopes:</u> The Collington series consists of a well-drained soil found on gently sloping divides. These soils formed in glacial till over red shale, siltstone, and fine sandstone. Typically, the surface

layer is a dark brown sandy loam 11 inches thick with a dark brown loam and sandy clay loam subsoil ranging from 21 to 29 inches deep with a dark brown sandy loam to 32 inches. The soils are noted as having medium natural fertility, a moderately slow to moderate permeability, a high available water capacity, and moderate organic matter.

<u>FmhAt</u>— <u>Fluvaquents loamy</u> — 0 to 3% <u>slopes</u>: This series is generalized series of young soils occurring in areas containing alluvium such as flood plains and low lying and wet mineral areas (marshes). They are frequently inundated and saturated.

2.3 Hydrology, Water Quality, Flood Hazard Areas

The extend of regulated wetland areas, the flood hazard limits, and riparian zones were verified by the NJDEP through the issuance of the NJDEP Letter of Interpretation-Line Verification (NJDEP File No.: 0311-08-0001.1, FWW 160001, issued on November 23, 2016) as well as NJDEP Flood Hazard Area Permits (NJDEP FHA 0311-08-0001.1 FHA 16001 & 16002) issued on October 6, 2017. The permits were issued in conjunction with the residential community under construction along the west side of Powell Run. The Letter of interpretation assigned a 50-foot standard wetland transition zone for the regulated wetlands and the NJDEP Flood Hazard Area Verification assigns a 50-foot-wide riparian zone from the top of bank for Powells Run tributary.

An unnamed tributary of Powells Run (FW2-NT) flows southward along the western property boundary from its northern headwater approximately 2400 feet north of the site to its confluence with the main stem of Powells Run approximately 5700 feet south of the site. The stream continues southward to a confluence with the North Branch of the Rancocas Creek. The Rancocas Creek then drains 13 miles westward to the Delaware River.

The flood hazard area associated with the Powells Run tributary along the site's western property line was also established and verified by the NJDEP (NJDEP FHA 0311-08-0001.1 FHA 16001 & 16002) issued on October 6, 2017.

The tract generally drains in a southwest and southward direction from the highest elevations found northwestern portion of the site to the lowest elevation at the site's southwest property corner. The topographic elevations range from a high point elevation of (61) to the lowest elevation at the site's southwest corner adjacent to the Powells Run tributary (elev. 44). The surface elevations split the runoff areas into two subdrainage areas. The westerly subdrainage area drains directly to the parcel's southwest corner while the eastern subdrainage area flows to a offsite ditch that also drains to the Powells Run tributary south of the development parcel.

The NJDEP NJ-GeoWeb-Geology depicts the parcel in moderate (ranked B-12 inches) area for groundwater recharge and a B ranking (12 inches) with the soils along Powells Run shown as (W) for wetlands. The soil textures and descriptions and physical topography support the findings. However, onsite soil testing did not support the projected groundwater recharge rate throughout the entire site.

2.4 Topography

The tract does not contain significant topographical features. The property drains to the south and southwest from the higher elevations (elev. 61) found in the parcel's northern section west of the adjacent parcel, Block 800 Lot 9.06. The site drains southward but splits into two creases a result of an

intermediate high along the southern property line (elev. 57.6). The western portion drains directly to the Powells Run tributary at the property's southwest corner while the eastern crease drains southward to a ditch leading further south and offsite. This ditch also drains to Powell Run interconnecting with the tributary about 500 feet south of the property.

The elevations along tributary range from an elevation of 45, in the southwest property corner up to elevation 48.5 in the parcel's northwest corner. A distinctive embankment ranging from 6-8 feet lies along the property's side of Powells Run tributary except in the very southwest corner where the embank becomes broad and flat. The residential community plans previously established the flood hazard line that is depicted on the site plans shown along the stream corridor.

Except for the stream embankment, the tract's topography can be described as flat to gently sloping and does not contain any steep slopes, or significant features.

2.5 Vegetation and Wildlife

2.5.1 Vegetation

The development area is almost entirely cultivated farmland except for a mid-stage successional woodland along the western property line associated with the stream. The site does contain some fragmented hedgerows found along the Route 206 frontage, and again in the northern portion of the site and perpendicular to the southern property line. A review of historic aerials from the 1930's through present day confirms the property remained actively cultivated throughout and the only treed areas were along the stream bed.

The wooded area along the western property line can be classified as a typical outer coastal plain secondary growth woodland occurring in wetlands or wetland transition zone. Based on MEA's site inspection, the wooded area contains individuals ranging from saplings to a 36-inch DBH oak. Red maples (Acer rubrum, FAC) and sweetgums (Liquidambar straciflua, FAC) were identified as the dominant species across the wooded area. Other species identified include: Red oak (Quercus rubra, FACU), shagbark hickory (Carya ovata, FACU) and green ash (Fraxinus pennsylvanica, FACW).

The woodland habitat also contains a modest, invasive species infested, shrub understory and herbaceous plant stratum. The limited shrub understory is dominated by multiflora rose (Rosa multiflora, FACU) and fragrant honeysuckle (Lonicera fragrantissima, FACU) and greenbrier (Smilax rotundifolia, FAC). The herbaceous stratum is highly infested with Japanese stilt grass (Mirostegium vimineum, FAC) and other species observed include poison ivy (Toxicodendron radicans, FAC), goldenrods (Solidago spp.), and pokeweed (Phytolacca americana, FACU). No unusual or rare species were observed during our site inspections.

The hedge-row community includes highly invasive pear species as a co-dominate and should be removed.

2.5.2 Wildlife

Actively farmed sites are not typically habitats suitable for a diversity of wildlife. The following list of wildlife can be expected to be present or visit urban disturbed areas:

Mammals:

Common Name

Botanical Name

opossum Didelphis virginiana raccoon Procyon loter striped skunk Mephitis

eastern cottontail

little brown bat

eastern chipmunk

white-footed mouse
red-backed mole

white-tail deer

Sylvilagus flezridanus

Myotis lucifugus

Tamias striatus

Peromyscus leucopus

Clethrinonomys gapperi

Odocoileus virginianus

Birds:

Common Name Botanical Name

Catbird Dumetella carolinensis

American robin Turdus migratorius

Black-capped chickadee Parus atricapillus

Brown-headed cowbird Molothurs ater

Crown brackychynchys

Crow Cocrus brackyshynchus
Bluejay Eyancitta cristata
Tufted titmouse Parus bicolor
Turkey vulture Cathartes aurea
Northern mockingbird Mimus polyaluttis

During our site inspections, a few of the above-mentioned bird species were sighted and heard in the vicinity. However, the sightings were limited to members on this list and no sightings of other mammals or amphibians were recorded. The limited diversity of the wildlife for the property areas arises from the relative uniformity in habitat and the intensity of the surrounding land uses.

2.5.3 Endangered or Threatened Species

No evidence or sightings of any endangered or threatened species was recorded during the site inspections. In addition, the NJDEP <u>NJ-GeoWeb</u> interactive mapping indicates that there are no records for rare plants, animals, or natural communities on the site.

2.5.4 Wetlands

A wetland delineation was previously conducted and a NJDEP Letter of Interpretation-Line Verification (NJDEP File No.: 0311-08-0001.1, FWW 160001), was issued on November 23, 2016 and remains valid for a period of five years after the date of issuance. The NJDEP-LOI assigned a 50-foot standard wetland transition zone for the areas deemed wetlands on Block 800 Lot 9.03.

2.6 Utilities

The tract falls within a developing area where the utility infrastructure is expanding. While water, sanitary sewer and electric infrastructure exists either in the Route 206 right-of-way or will be extended to the site from the residential community under construction to the west, natural gas service will require an offsite extension. The applicant has contacted PSE&G regarding the possibility of constructing a natural gas line extension, from the existing 16-inch main found at the Woodlane/North Pemberton Road -Route 206 intersection but no details have been provided at this time.

Water will be supplied by New Jersey American Water-Mt Holly to the site via a water main extension across the stream from the newly constructed residential development to the west to the site using

direction drilling. The previously approved residential development plans note to extend a 14" HDPE water main from the residential development to Block 800 Lot 9.03 in the parcel's' southwest corner. The residential development plans also indicate a 12-inch steel casing will be installed under the stream within the same utility easement for use as a sleeve for a future sanitary force main serving the proposed warehouse facility.

The plans call for a pump station to service the proposed building. The site generated effluent will drain via gravity to a small pump station located off the building's southwest corner which will pump the effluent via force main to a newly constructed municipal pump station located in the newly constructed residential development. The Mount Holly Municipal Utilities Authority Utilities Authority governs the sanitary sewerage system with the region.

2.7 Noise Assessment

The property's immediate proximity to the traffic on Route 206 represent the greatest influence. For a suburban/rural site near human activities such as a state highway, noise levels are expected to be between 60-80 decibels (dB); other suburban sites further removed from intensely used roadways are found to be in the mid-fifties decibel range. The site falls within the Business Park Zone District, which encourages large-scale commercial and service facilities and permits warehousing and distribution uses.

The following table provides a comparison of the decibel scale to perceived loudness of common activities.

DECIBEL LEVELS ASSOCIATED WITH COMMON ACTIVITIES *

	dB**	
Threshold of Hearing	0	Absence of Activity
Upper Limit of "Quiet"	10	Gentle Rustle of Leaves
(Subjective Classification)		
	20	Inside Empty Theater
	30	Inside Quiet Apartment
	40	Private Office
Normal Vocal Communication	50	Inside an Active (Noisy) Office
(Face to Face Classification)		
	60	Window Mounted Air Conditioner
Vocal Communication Difficult	70	Vacuum Cleaner, Air Compressor
	80	Inside Speeding Automobile, Busy City St.
Possibility of Hearing Loss	90	Newspaper Press
Vocal Communication Impossible	100	Power Lawn Mower
Threshold of Pain	110	Amplified Rock Band
	120	Pneumatic Hammer
	130	Jet Aircraft Take-off
	140	Jet Aircraft, Artillery Fire (close proximity)

^{*}Perceived sound levels for specific activities are normally distributed as a range centered at the specified decibel level.

^{**}Decibel levels listed reflect measurement of sound on an A-weighted sound level meter.

2.8 Historic and Archeological Resources

According to the both the current <u>New Jersey and National Registers of Historic Places</u> (last updated December 28, 2020, as posted on the NJDEP Historic Preservation Office website), the site is neither adjacent to, nor contains any historic places or structures.

2.9 Transportation

The parcel contains 611 If of frontage along New Jersey State Highway 206. At this location in Burlington County, NJSH 206 is a single lane highway with a full shoulder in each direction. The project will require new driveway connections to Route 206 which are subject to the New Jersey Department of Transportation review and approval. A widening to accommodate a left turn lane into the site as well as into Lina Lane is indicated on the plans to provide for safer left turns and through traffic.

2.10 Air Quality

The traffic traversing the site and surrounding roadways will generate mobile source air pollutants when the proposed facility becomes operational. Stationary source pollutants resulting from the incomplete combustion of heating fuels, such as sulfur dioxides and suspended particulate matter, for projects of this scale are negligible because of stringent State requirements related to allowable sulfur content of commercial heating oil. Furthermore, if electric heat or natural gas is used as "fuel," the pollutant generation is zero to extremely small values. Thus, this analysis concerned itself solely with the potential for mobile source pollutants and the potential for the vehicular trips on the new driveway and surrounding roadways.

It has been estimated by the U.S. Council on Environmental Quality (C.E.Q.) that, on a nationwide basis, 70% of the CO generated is by emissions due to incomplete combustion of gasoline by motor vehicles. Since CO can be lethal to human beings at concentrations of the order of 750 to 1,000 parts per million (ppm), the Clean Air Act of 1970 prescribed recommended air quality standards for CO concentrations for the eight-hour maximum average at 9 ppm.

A review of the NJDEP Bureau of Air Monitoring 2019 Air Quality Report (published in November 2020) provides evidence that the air quality within the state meets the standards promulgated by the USEPA. The State now uses the national Air Quality Index (AQI) to monitor a broader spectrum of pollutants, such as carbon monoxide, sulfur dioxide, particulate matter, ozone, and nitrogen dioxide. The report lists the days on which the AQI was over 100 (meaning the NAAQS were exceeded). The 2019 report's executive summary indicates there were 14 days rated as 'Unhealthy for Sensitive Groups'. Twelve of those days were result of ozone exceedance with the other two days due an exceedance of nitrogen dioxide for one day and fine particulate matter for the other. The summary does not indicate the State experienced any 'Unhealthy' days.

According to Figure 1-5 within the 2019 Report, the 2nd highest 8-hour Average Concentration of Carbon Monoxide (CO) was less than 2 ppm, far below the 8-Hour Primary Standard of 9 ppm.

Although the population and the resultant traffic volume are increasing within the State, the trend in air quality is toward improvement. This countervailing trend is the result of more stringent and effective emission controls on vehicle exhausts and on industrial emissions.

3.0 SITE IMPACT ASSESSMENT

3.1 Geology

The Coastal Plain is comprised of unconsolidated beds of sand, silt, gravel, and clay. It is not expected that the underlying geologic formations will be impacted. According to the NJDEP interactive mapping tool, NJ-Geo-Web, the Mount Laurel and the Navesink Formations are identified as the bedrock geology underlying the site. The Mount Laurel Formation is described as 33-feet thick while the Navesink is described as having a depth of between 45 feet to 65 feet. Therefore, the construction of the proposed warehouse facility and the stormwater basin, will neither impact the geology of the region, nor will the formations cause a hazard for construction.

3.2 Soil Erosion and Sedimentation

Any activity exposing soil results in an increase in sedimentation and erosion due to surface runoff. With the construction of this project, it is imperative that a soil erosion and sediment control plan be developed to ensure averting transportation of soil off-site during construction. The soil erosion and sediment control plan prepared for this application will be submitted to the Burlington County Soil Conservation District for review and approval. The plan incorporates several methods to mitigate soil erosion and off-site sediment transportation during construction, including silt fence, inlet protection, construction entrance, and temporary and permanent seeding.

In addition, if temporary stockpiles are created on-site, they will have sediment barriers so that, during the regrading of the site, stockpiled soils to be used will be prevented from eroding and being transported off-site. The installation of a construction entrance stabilizes, if not totally alleviates, soil tracking by trucks off the subject site. Finally, the site's gentle topography aids in reducing the erosion potential of the site's soils.

It should be noted that some soils within Burlington County are described as extremely acidic (i.e., a pH factor of less than 4.0, as defined by the Soil Conservation Service), with only moderate to low fertility in their natural state. These soils require rapid re-seeding and considerable amounts of lime and fertilizer to create fertility for quick re-establishment of vegetative cover. Exposing these soils for an extended period may be detrimental to surrounding areas. Therefore, an efficient construction sequence and the provision of a temporary liming program with an expeditious re-seeding program must be implemented to minimize the project impacts.

The surface layers of both the Adelphia and Collington and soils mapped across the parcel are noted as having a pH of less than 4.0 (3.5-5.5).

The project's construction sequence minimizes soil exposure to the maximum extent practical through an aggressive timetable.

3.4 Water Quality and Hydrological Impacts

3.4.1 Stormwater Management

The development plans are considered a "major development" under the NJDEP Stormwater Rules and is required to fully meet the NJDEP Stormwater Management Rules at N.J.A.C. 7:8 for runoff volume reduction, stormwater quality treatment and groundwater recharge.

In accordance with the NJ Stormwater Rules and the Flood Hazard Area Control Act, the post-development peak flows from the site will be attenuated to be equal to, or less than, the pre-development conditions. The design criteria utilized for the project's Stormwater Management Plan is required to be in conformance with all standards and guidelines as stipulated by the NJDEP, SCS, and Eastampton Township.

The proposed development will create impervious surfaces, but the construction of the surface and subsurface collection systems, lawn areas, swales, and surface "wet" stormwater management basin and subsurface infiltration trench ultimately will control volume, rate, quality of the proposed runoff and required infiltration.

The surface "wet" detention basin is required to control the post development rate and volume of stormwater discharge leaving the site. The pond will use an outlet control structure containing a weir to regulate the discharge rate and maintain the water surface elevation. The basin outlet directs the discharge southwest to Powells Run tributary. Since the parcel slopes down from the highest elevations in the property's northern side to the lowest point in the property's southwest corner, directing the proposed runoff through the detention system and to the same discharge point within the property replicates the existing drainage patterns for most of the parcel.

The remaining subareas draining to the south will also be directed through the basin rather than directing the runoff to an eroding, unstable ditch. This post development runoff will also be directed to the basin and detained. Ultimately subdrainage areas flow to the Powells run tributary, therefore, the downstream receiving body remains unchanged by the proposed development.

The project addresses stormwater quality treatment through the surface "wet" detention pond. According to the calculations provided in the Stormwater Management Report, prepared by MEA the "wet" pond achieves a 90% Total Suspended Solid (TSS) removal rate through a detention time of more than 24 hours. In addition, low impact development strategies have been implemented in the design to the extent practical to further reduce stormwater runoff and improve stormwater runoff quality.

The plans also indicate the installation of infiltration trenches to support groundwater recharge. The drainage system collects the new building runoff and directs it to an underground trench system along the building's southern façade. According to the Stormwater Management Report, the perforated pipes and clean stone trenches result in no net loss of groundwater recharge in the post development condition as required by the NJDEP Stormwater Management Rules.

The project, through the implementation of the site's stormwater management plan effectively mitigates potential adverse environmental impacts to flood prone areas, improves the stormwater quality through the use of a "wet "detention basin and matches the pre and post development drainage patterns and groundwater infiltration as required by state, county and local regulations.

3.4.2 Surface and Groundwater Degradation

The proposed project anticipates a building connection to sanitary sewers thereby minimizing the potential for groundwater pollution. With a sanitary sewer system, wastes will be effectively conveyed off-site, eliminating potential groundwater degradation from the on-site system.

3.4.3 Reduction in Groundwater Capabilities

The proposal does not intend to utilize any on-site source for water supply. However, the construction of new buildings ultimately increases water demand in the area in turn to some extent, reduces local groundwater capabilities.

3.5 Topography - Soil Movement

3.5.1 Soil Movement

The project's proposed grading requires only the soil movement necessary to properly grade and drain the facility. If imported or exported material is required, the soils will be clean, debris-free subsoil. All existing topsoil shall remain on-site and be redistributed within the disturbed areas. The redistribution of the topsoil ensures that the existing dormant seed bank remains on-site, thereby reducing potential impacts from soil removal and grading.

3.5.2 Construction Sequence

The construction sequence for this project is as follows:

Con	nmencement Date	Fall 2021
1.	Installation of Silt Fence	3 Days
2.	Installation of Stone at Construction Entrance	1 Day
3.	Site Demolition/Temporary Stabilization	2 Days
4.	Rough Clearing and Grubbing	1 Day
5.	Rough Grading & Temporary Seeding	2 Weeks
6.	Installation of Utilities, Walls & Foundations	6 Weeks
7.	Curbing	2 Weeks
8.	Pavement Sub-base	3 Days
9.	Finished Grading & Lighting	6 Weeks
10.	Final Pavement	3 Days
11.	Landscaping & Permanent Seeding	4 Weeks

^{*}Note: When a C.O. for the building is applied for, all site work around the building shall be completed (No. 11 subject to weather conditions and to be completed between 1-2 months).

The above schedule is subject to weather conditions and material availability.

3.6 Vegetation and Wildlife Impacts

3.6.1 Destruction of Vegetation and Natural Resources

The project area is largely active cultivated lands. Therefore, the project's implementation only requires a few trees within the fragmented hedgerows and some trees in the immediate vicinity of the new stormwater outlets to be removed. While the amount of tree removal is very minor, the destruction of the vegetation does decrease the habitat suitable for a minimal amount of wildlife. The extent of clearing only encompasses the area necessary for the construction and the proper grading of the project. Any loss in habitat may result in a reduction of native wildlife species residing at the site, due to the removal of food sources and cover; however, the few generalist wildlife species that may be found across actively cultivated fields will generally disperse to other surrounding areas and infill the site post construction activities.

During our site inspections, we did not observe any unique wildlife residing onsite. The ongoing human activity reduces the quality of habitat in turn reducing the diversity of wildlife. During our site inspections, only transient visitation by a few bird species and the presence of gray squirrels and white tail deer were noted. The commencement of the intense construction activities will temporarily remove the site from transient visitations.

The parcel has been reviewed by the NJDEP through the issuance of a Letter of Interpretation. Based on the transition zone assigned by the Department to the wetland areas, determined that the on-site wetland areas do not support any threatened or endangered species.

3.6.2 Wetland Disturbance

The proposed development requires an New Jersey Department of Environmental Protection (NJDEP) Freshwater Wetlands General Permits #11, (Outfalls) as well as Flood Hazard Area Individual Permit for the outfalls and the riparian zone disturbance associated with the construction of the outfalls. The project also requires a NJDEP Transition Area Waiver, averaging plan for a minor modification of the wetland transition zone for the construction of the stormwater basin. The permitting is detailed on the Grading and Utility Plans. All the work is expected to be within the requirements of the permit therefore the impacts to the surrounding environment do not exceed the anticipated impacts authorized by the permits.

3.7 Noise Impact Assessment

Eastampton Township's performance standards (Section 540-27) as well as the State Noise Regulations apply to the proposed facility. The following outlines the New Jersey regulations;

Noise Quality Regulations for New Jersey

In 1974, the State of New Jersey developed standards in a document entitled, <u>The State of New Jersey Noise Control Regulations</u> (New Jersey Administrative Code, NJAC7:29), adopted and effective January 18, 1974, with revisions to March 18, 1985, stipulates that:

"No person shall allow or permit sound from any industrial and commercial operation which when measured at any residential property line is in excess of the following:

1. From 7:00 A.M. to 10:00 P.M.:

Continuous airborne sound which has sound levels in excess of 64 decibels, or an impulsive sound level in excess of 80 decibels.

2. From 10:00 P.M. to 7:00 A.M.:

Continuous airborne sound which has sound levels in excess of 50 decibels, or an impulsive sound level in excess of 80 decibels."

The major generators of noise in the area are the roadways and jet fly-by. The noise emitted from the roadways can be characterized as "moderate" with a level within the mid to upper sixties dB immediately adjacent to Route 206 during the daytime.

The primary amount of noise from this project will be generated during construction. This noise will be limited to the normal working day and will be subject to any restrictions of the Municipal codes. Construction and commercial noise, as characterized above, will be intermittent and vary in intensity depending upon the type of equipment and its use. Noise suppressers, where applicable, will be installed

on equipment and the hours of construction operation shall be restricted to a normal working day operation.

The development's vehicular activities are more than 150 feet from a residential property line therefore it is expected that the facility will operate within the State Noise Control Regulations. If necessary, additional mitigation measures will be implemented to ensure the facility meets the lower nighttime sound level limits for the site's operations.

3.8 Scenic, Historic, and Archeological Resources

No evidence of historic structures was observed during our site inspections. According to the current New Jersey and National Registers of Historic Places (last updated 12/28/20), as posted on the NJDEP Historic Preservation Office website), the site is neither adjacent to, nor contains any historic places or structures. Therefore, the proposed development poses no threat nor causes any impacts on scenic, historic, or archeological resources.

3.9 Desirable Growth Pattern & Zoning

The completed project represents a suitable level of development for a property with road frontage along a state highway. The proposed development does not exceed any of the current zoning coverage standards and is an intensity less than contemplated by zoning and the Master Plan. The future development also provides a beneficial use and benefits the regional economy through the employment created, generated tax revenues, and the services offered to meet the community's needs.

The development focuses growth where existing infrastructure is largely "in the ground" and available. The plan furthers the planning goals for the region by providing non-industrial, employment-producing uses within an area designated for development while taking the site's constraints into consideration. Therefore, the project meets the goals and objectives of the Eastampton Township Master Plan.

NJSH 206 acts as the municipal boundary with Pemberton Township at this location. However, the parcel directly across Route 206 in Pemberton Township has been developed as a solar field, therefore the proposed development is not expected to impact any other municipality. The site falls within an area indicated on the NJDEP NJ-GeoWeb interactive mapping as a Rural Planning Area (PA-4), where growth is directed into specific areas where infrastructure exists or is intended for growth. This parcel is zoned BP (Business Park) were the municipality intended growth. The project's State Highway road frontage contains the necessary right of way to accommodate the roadway modifications required and lies in the sewer service area and has direct access to both water and sanitary (pipes in the ground) infrastructure. Therefore, the development of the parcel meets the guidance of the State Plan and is ideally suited for the proposed use.

3.10 Community Services, Public Health, and Conservation Measures

No severe demand on community services can be expected from this project, when compared with the Township's overall demand for such services. The consumption of energy during construction and operation represent the unavoidable, irreversible commitment of resources associated with human activities. The respective utility companies do not expect any problems meeting the energy needs for the future development buildings.

Water Supply

Water is supplied to the site by new Jersey American Water Company – Mt. Holly. As a portion of the previously approved adjacent residential development, a new 14-inch water main is shown being directionally drilled under Powells Run to the southwest corner of the site. The plans include a looped 8"-inch water line encircling the proposed building for service to new hydrants located at the four corners of the structure and the generator on the northside of the building. The plans also indicate a dedicated fire line serving the building's fire suppression system. The plans also depict an easement to New Jersey American Water Company for extending water service to the Route 206 frontage in the future.

Water conservation measures may include flow restrictors to regulate minimum flow and flush rates on faucets and water closets. These architectural details are typically incorporated into the current building construction codes and their application is to be determined by the architect and owner.

The estimated water consumption for the new building based on the NJDEP standards (NJAC 7:10-12.6) is as follows:

Establishment Type	Number of Measurement Units		Gallons per Day per Unit		Projected Demand (G.P.D.)
Professional Office	3,000 sf	Х	0.125 gpsf	=	375
Warehouse	100 employees*	Х	25 gpd		2,500
TOTAL				=	2,875

^{*}Estimated based on applicant's experience

Sanitary Sewer System

The disposal of solid and liquid waste by application to land presents a substantial threat to surface and ground water quality. The proposed development does not include any on-site disposal of wastes. The project will be connected to the Mount Holly Sewerage Authority's sanitary sewer system serving the region via an onsite pump station and a force main under Powells Run through a 12" sleeve installed as a portion of the residential development to the west.

The new warehouse building's gravity lateral will connect to an onsite pump station located off the building's southwest corner. The onsite lift station will discharge the effluent through 1.5-inch force main to a manhole on the adjacent residential development's property lying to the west. The manhole is connected to the residential system's regional pump station as part of the regional sanitary system. According to the plans provided to the applicant, the Lennar development is obligated to install a sleeve under Powells Run to accommodate the new force main.

The estimated daily sanitary sewer flow discharged from the new building is calculated as follows (based on NJAC 7:14A-23.3):

Establishment	Number of		Gallons per Unit		Projected Flow
Туре	Measurement Units		per Day		(G.P.D.)
Professional Office	3,000 sf	Х	0.10 gpsf/day	=	300
Warehouse	100 employees*	Х	25 gpd	=	2,500
TOTAL				=	2,800

^{*}Estimated number based on applicant's experience

Energy Statement

All portions of building construction will comply with the most recently published BOCA National Building Code.

Fire Protection Systems

The development plan incorporates sufficient design of the interior roadway to serve as access for fire and emergency vehicles. Building construction will meet all local fire codes.

Electrical Service

Public Service Electric & Gas will provide electrical service. All proposed utility work will be underground and coordinated with PSE&G. PSE&G has overhead wires along the east side of Route 206. PSE&G does not foresee a problem with meeting the future needs of this development.

Natural Gas Service

Public Service Electric & Gas will supply gas service to the site. Currently the developer is in discussions with PSE&G regarding the extension of a new gas main north along Route 206 from the Woodlane/North Pemberton Road-Route 206 intersection to the project site. The project anticipates a connection to this future gas main along the site's Route 206 frontage.

Telephone Service

Verizon, Inc. will provide necessary service to the project site. All proposed lines will be underground.

Solid Waste Management

The solid waste program will utilize a private contractor for the collection of solid wastes, rubbish, and mandated recyclables. No unusual volume of materials is anticipated. Private contract affords a beneficial impact on a solid waste program. The frequency of collection will be oriented around tenant demand and may be modified during the operational phase. A flexible program minimizes any adverse impacts associated with solid wastes. The site Development Plans provide specific compactor/dumpster and recyclable collection points.

3.11 Aesthetic Value

Aesthetic values, by their subjective nature, are not ones that are easily measured. The aesthetic qualities of an actively cultivated farm field will certainly be altered by the development. However, the provision of new trees, shrubs, and groundcovers, will aid in blending the new structure into the surrounding land use pattern. Those surrounding land use patterns include other commercial structures, solar fields, a towing yard, a furniture/ shed outlet, scrap metal recycling facility, an agricultural products supplier and farmland.

3.12 Air Quality

The ambient air quality, as outlined in Section 2.10 of this report, anticipates meeting the minimum State standards. The construction of the new facility will contribute an insignificant decrease in the area's air quality. Vehicular traffic on the adjacent roadways represents the largest source of pollution within the immediate area. Although the population and the resultant traffic volume are increasing within the State, the trend in air quality is toward improvement. This countervailing trend is the result of more stringent

and effective emission controls on vehicle exhausts and on industrial emissions. The proposal's projected traffic volumes comprise a minimal percentage of the overall volumes; therefore, no significant adverse impact on the regional air quality is foreseen by the development of the vacant portion of this site.

3.13 Consistency with Municipal Plans

The proposed development of this site is consistent with, and does not contradict, the State or Township Master Plans or any municipal ordinances relating to bulk requirements. Furthermore, the proposed development will be compatible with adjacent and surrounding land uses.

4.0 UNAVOIDABLE ADVERSE IMPACTS

The proposed warehouse facility is designed to minimize the project impacts on the environment. However, with development, some environmental impacts are unavoidable. The site contains a small secondary growth woodland and open farmland that provide limited habitat for very adaptable species. The construction of the new facility requires land disturbance and loss of some trees that may act as suitable habitat. However, the extent of tree removal for this project is extremely limited, therefore it is expected that, upon removal of the construction activities, some displaced fauna will return to the site. As with any development, habitat loss occurs; however, since the majority of the site is actively cultivated lands, it does not contain rare or high value habitat, thereby significantly limiting these impacts.

Any increase in traffic will ultimately have a minimal impact on the regional air quality along the adjacent roadway network. The countervailing trend of improved air quality and increased traffic volumes results from the more stringent emission control systems required on newer automobiles. Furthermore, the creation of impervious surfaces results in a negligible decrease of water-infiltrating underlying aquifers. To further mitigate the potential loss of groundwater recharge, the NJDEP 2004 Stormwater Management Rules require an applicant to match the site's pre-development groundwater recharge in the post development condition, resulting in no net loss of recharge.

The project has been designed with the minimum environmental impact as practical. Any negative effect of this development stems from the cumulative effects of many developments within the surrounding region.

5.0 MITIGATION POTENTIAL

Environmental impacts caused by the construction of the proposed warehouse development have been analyzed as required by the Eastampton Township Land Development Ordinance. The proposed development plan reduces and/or mitigates the project's impact on several components of the environment:

- 1. Future landscaping will provide visual integration of the project with the surrounding environment, along with providing a more diverse habitat for the return of selective species displaced from project implementation.
- 2. Sediment and soil erosion controls will mitigate soil loss and runoff pollution.

- 3. Road access and site circulation have been designed to minimally affect traffic circulation.
- 4. Energy and water conservation devices may be incorporated into the design of the buildings and other aspects of the project, reducing demand of service.
- 5. Stormwater peak runoff will not be greater than the existing peak flows.
- 6. The stormwater wet detention basin achieves a 90% TSS removal rate and the site's existing groundwater infiltration rate is matched in the post development condition.

The impacts have been assessed and, where possible, mitigated to the maximum extent practical for this project. These mitigation measures will be incorporated into the construction plans. The proposed development does not represent a substantial detriment to the surrounding environment or the public welfare.

6.0 ALTERNATIVES

During the design process, several alternatives were reviewed and evaluated for their environmental impacts, social impacts, and feasibility. The following schemes were reviewed:

- 1. Design and engineering alternatives.
- 2. No development.

Different alternative methods of layouts and engineering practices that could be incorporated into the plans were reviewed. The proposed development scheme is generally the summation of incorporating the most effective, efficient, and sensitive methods of construction and layout for this design program. Since the facility constitutes a conforming use and the client's design program is a conforming land use, no alternative land uses were evaluated. Different building scenarios were considered for the proposed development, as well as variations of the project layout, and were eliminated due either to economic viability, and or technical design issues.

The second alternative evaluates the impacts that the no-build scenario would have on Eastampton Township. While the no development scenario has less environmental impact on the site than permitting the infill of an underutilized parcel, it would deny the economic and social benefits derived from expanding a successful commercial use occupying frontage along a State highway.

Given the mitigation measures expected to be incorporated into the design of the project and the assessment of the impacts of the proposed construction, the proposed building represents an appropriate level of development for this parcel.

7.0 PERMITS AND APPROVALS

- 1. Eastampton Township Planning Board Major Site Plan
- 2. Burlington County Planning Board Site Plan Approval/Letter of No Jurisdiction
- 3. Burlington County Soil Conservation District Soil Erosion and Sediment Control Certification and RFA for Stormwater Discharge from Construction Activities
- 4. NJDEP Division of Land Use Regulation Freshwater Wetlands General Permit 11, Transition Area Waiver Averaging Plan
- 5. NJDEP Division of Land Use Regulation Flood Hazard Area Individual Permit- Outfall within the Flood Hazard Area Riparian Disturbance
- 6. NJDOT Major Access

NOTE: NO FEDERAL PERMITTING IS REQUIRED FOR THIS DEVELOPMENT

8.0 REFERENCES

- 1. Farrand, John Jr. Eastern Birds. New York: McGraw-Hill Book Company: Chanticleer Press, Inc.
- 2. Federal Government. <u>Federal Manual for Identifying and Delineating Jurisdictional Wetlands</u>. Government Printing Office. January 10, 1989.
- 3. Hightshoe, Gary L. <u>Native Trees, Shrubs, and Vines for Urban and Rural America</u>. New York: Van Nostrand Reinhold Company. 1989.
- 4. Macbeth Division of Kollmorgan Corporation. Munsell Color. <u>Munsell Soil Color Charts</u>. Baltimore, Maryland. 1975.
- 5. Eastampton Township. <u>Zoning Ordinance</u>. Amended through March 09, 2020, https://www.ecode360.com/EA0462
- 6. NJDEP Bureau of GIS. <u>NJ-GeoWeb</u>. Last updated December 21, 2020. http://www.nj.gov/dep/gis/apps.html
- 7. NJDEP Division of Air Quality. 2019 Air Quality Report. November 23, 2020.
- 8. NJDEP Division of Parks and Forestry. <u>New Jersey and National Registers of Historic Places</u>. Last updated December 28, 2020. https://www.nj.gov/dep/hpo/lidentify/nrsr lists/Burlington.pdf
- 9. NJDEP. Freshwater Wetland Protection Act Rules. (N.J.A.C. 7:7A). Last amended October 05, 2020.
- 10. NJDEP. Flood Hazard Area Control Act Rules. (N.J.A.C. 7:13). Last amended July 15, 2019.
- 11. NJDEP. NJ Stormwater Best Management Practices Manual. April 2004, Revised March, 2020.
- 12. NJDEP. Stormwater Management. (N.J.A.C. 7:8). Last updated April 14, 2020.
- 13. United States Department of Agriculture. <u>Soil Conservation Service, Soil Survey, Burlington County, New Jersey</u>. Washington, D.C.: Government Printing Office. Issued October 1971.
- 14. Widmer, Kemble. <u>The Geology and Geography of New Jersey</u>. Princeton, New Jersey: D. Van Nostrand Company, Inc. 1964.

9.0 AUTHOR'S CREDENTIALS

The following credentials are presented to document the professional skills of Mr. Kenneth R. Grisewood, ASLA. This information is presented as an overview of his education, field and professional experience.

BACHELOR'S DEGREE EDUCATION

Bachelor of Science in Landscape Architecture, College of Agriculture, University of Kentucky, 1980.

POST GRADUATE EDUCATION

Rutgers University, Graduate School of Management

CIVIC & PROFESSIONAL AFFILIATIONS:

Member, Holland Township Planning Board	2013-
Borough Councilman, Bloomsbury NJ	1999-2001
Chairman, Tewksbury Township Environmental Commission	1988-1992
Member, Tewksbury Township Parks Committee	1989-1992
Director, Chatham Jaycees	1988-1989
Tewksbury Township Landscape Architect	1995-1996
American Society of Landscape Architect, Member	1985-

PROFESSIONAL REGISTRATION

Licensed Landscape Architect, New Jersey, 1985 Registered Landscape Architect, Delaware, 2012 Registered Landscape Architect, Pennsylvania, 1993 Registered Landscape Architect, New York, 1991 Registered Landscape Architect, Kentucky, 1983 Professional Planner, New Jersey, 2010

PROFESSIONAL EXPERIENCE

Menlo Engineering Associates, Inc., Senior Landscape Architect, Environmental Specialist, 1993-present

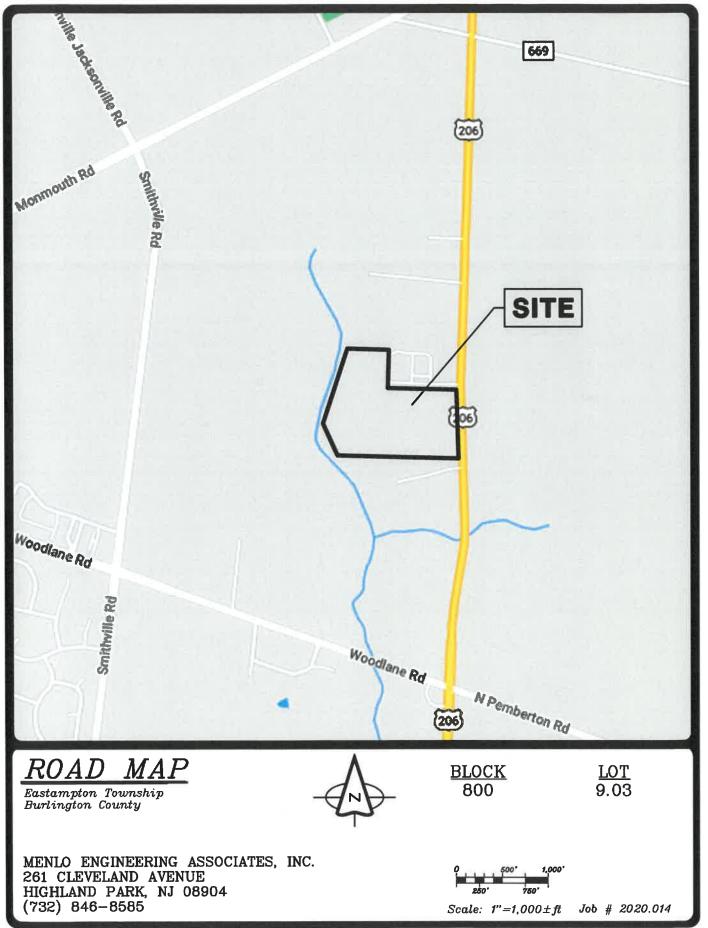
Simoff & Staigar Associates, Landscape Architect, Environmental Specialist and Regulatory Permit Specialist, 1985-1993

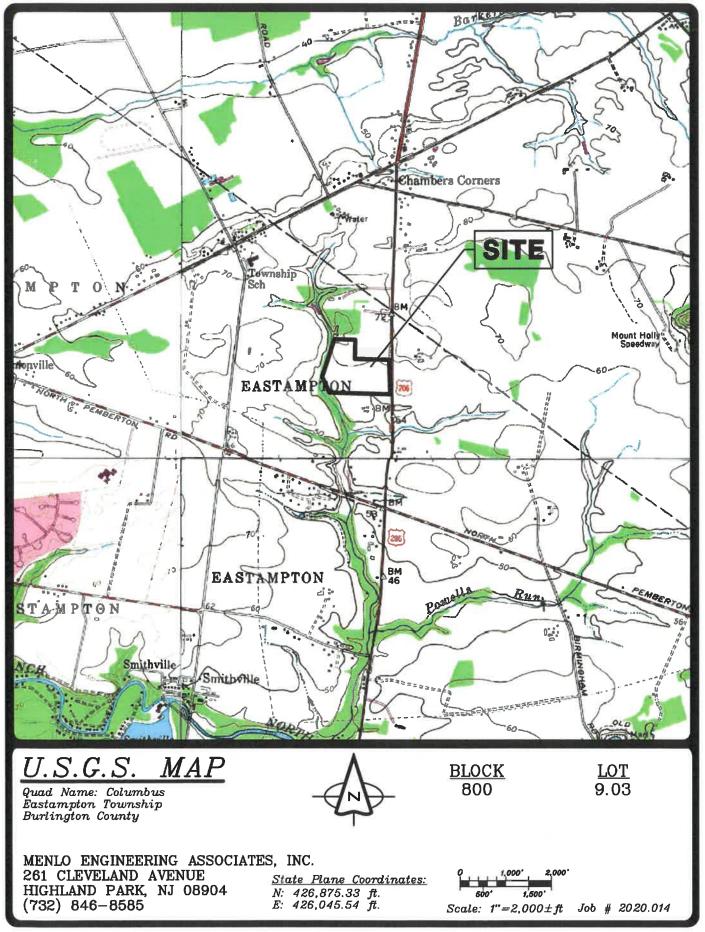
John Charles Smith Associates, Landscape Architect, Construction and Project Manager, 1980-1985

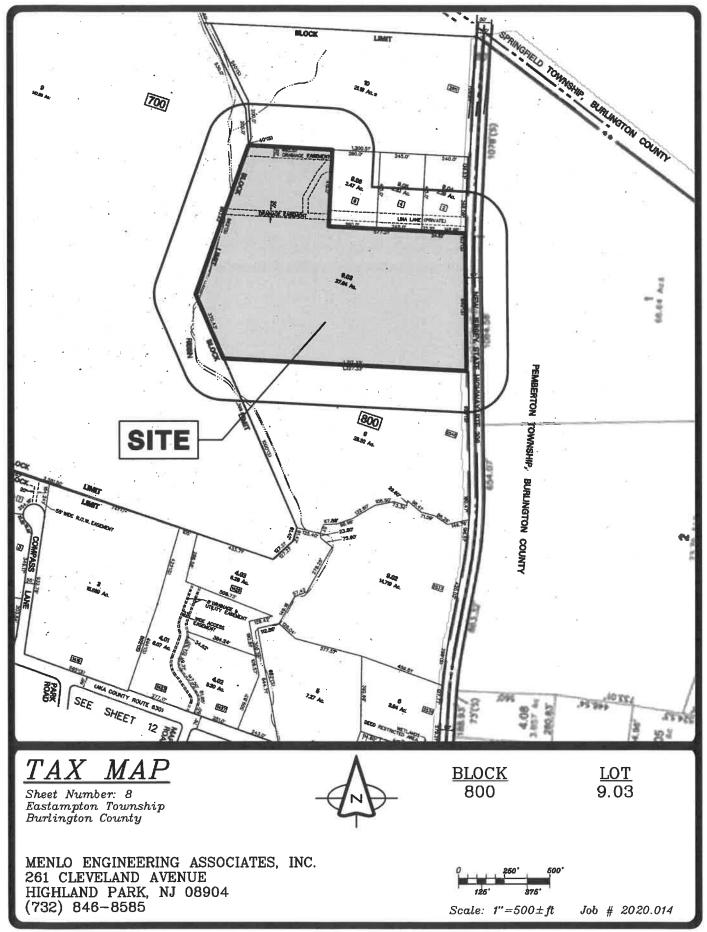
The experience acquired over 40 years includes responsibilities within the following:

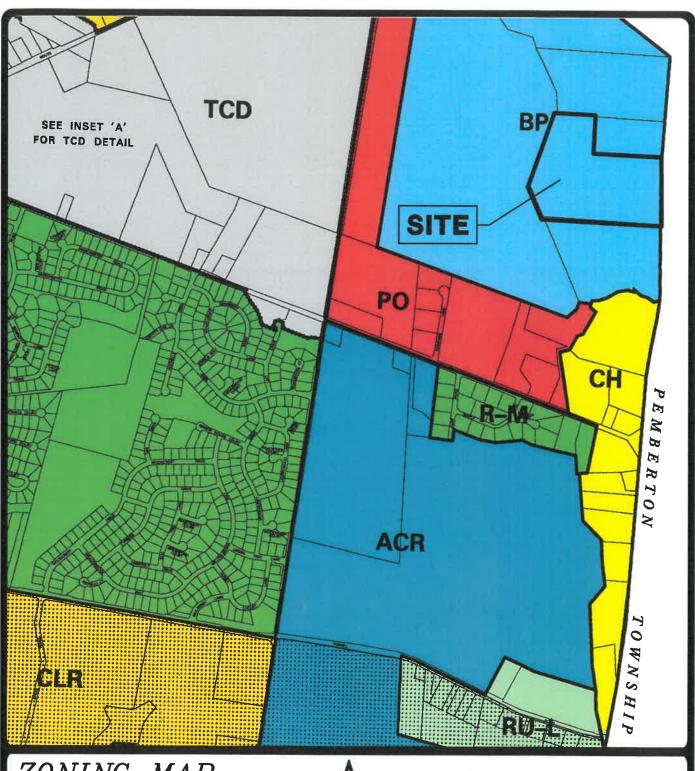
- Natural Resources Inventories
- Site Development Plans
- Environmental Impact and Analysis
- Development Permitting Process
- Endangered Species Reports
- Wetland Evaluation and Determination
- Expert Testimony
- On-Site Construction Review

APPENDIX









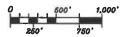
ZONING MAP

Zone: Business Park (BP) Eastampton Township Burlington County



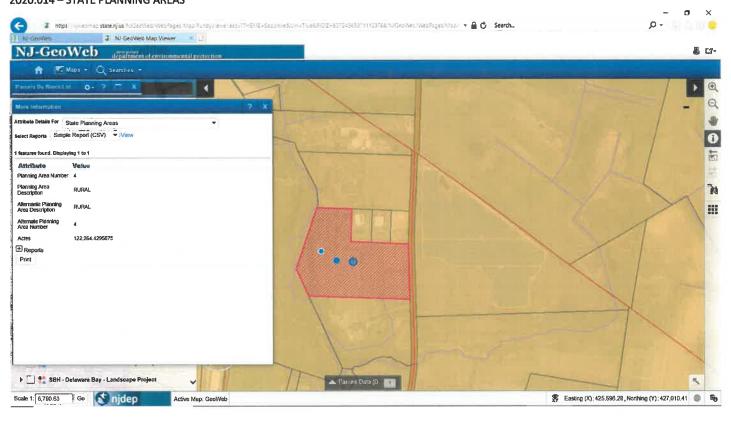
BLOCK 800 <u>LOT</u> 9.03

MENLO ENGINEERING ASSOCIATES, INC. 261 CLEVELAND AVENUE HIGHLAND PARK, NJ 08904 (732) 846-8585

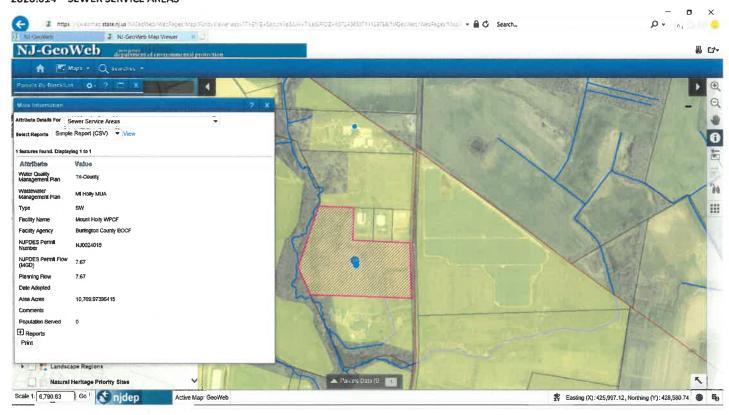


Scale: $1''=1,000\pm ft$ Job # 2020.014

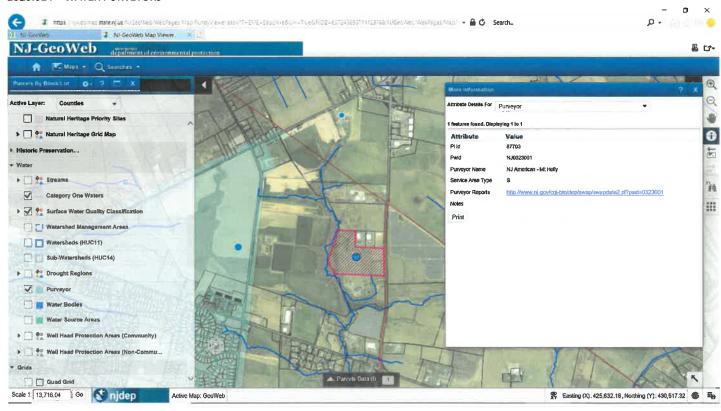
2020.014 - STATE PLANNING AREAS



2020.014 - SEWER SERVICE AREAS



2020.014 - WATER PURVEYORS



Public Water System Deficit/Surplus

NEW JERSEY AMERICAN WATER COMPANY - MOUNT HOLLY

PWSID: County: 0323001 Burlington

Last Updated: 02/19/2020

► Glossary of Terms Listed Below

Water Supply Firm Capacity: 11.798 MGD

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	255.000 MGM	57.900 MGM	312.900 MGM
Yearly Limit	2157.787 MGY	369.000 MGY	2526.787 MGY

Water Demand

	Current Peak	Date	Committed Peak	Total Peak
Daily Demand	6.046 MGD	08/2015	1.179 MGD	7.225 MGD
Monthly Demand	187.412 MGM	08/2015	18.275 MGM	205.687 MGM
Yearly Demand	1675.824 MGY	2015	143.445 MGY	1819.269 MGY

Water Supply Deficit or Surplus

Firm Capacity

Water Allocation Permit

4.573 MGD

107.213 MGM 707.518 MGY

Note: Negative values (a deficit) indicate a shortfall in firm capacity and/or diversion privileges or available supplies through bulk purchase agreements.

Bureau of Water System and Engineering Comments:

Allocated Demand accounts for water demand associated with previoulsy approved permits and water wheeled to Medford Township MUA. Updated with 2019 data

Bureau of Water Allocation and Well Permitting Comments:

Transfer from NJAWC - Western @ 2.15 MGD 57.90 MGM and 369 MGY, Water Allocation limits = 255 MGM and Annual = 2157.787 MGY.

For more information concerning water supply deficit and surplus, please refer to:

- Firm Capacity and Water Allocation Analysis (Pdf Format)
- ▶ Currently Effective Water Allocation Permits by County

This report displays all effective water allocation permits issued by the department.

- ▶ Pending Water Allocation and Dewatering Applications
 - All pending water allocation permits.
- ► Water Allocation Permits Made Effective within a Selected Timeframe

This report displays water alloction permits based on a specified date range.

Questions regarding demands and firm capacity please contact the Bureau of Water System and Engineering at 609-292-2957 or for questions concerning water allocation and status please contact the Bureau of Water Allocation and Well Permitting at 609-984-6831.

Questions may also be sent to the Division of Water Supply and Geoscience

back to search results

Glossary of Terms

Allocation Limit: The maximum allowed by a valid Water Allocation Permit or Water Use Registration issued by the Bureau of Water Allocation and Well Permitting. This may be surface or ground water, and may be expressed in MGD, MGM, MGY or some combination thereof. Withdrawals may also be limited by other factors and have seasonal or other restrictions such as passing flow requirements.

Committed Peak Demand: The demand associated with projects that have been approved for ultimate connection to the system, but are not yet constructed as indicated through the submission of construction certifications or certificates of occupancy. This is calculated by totaling the demand as included in Water Main Extension (WME) permits and the demand associated with projects not requiring a WME permit. This field may also include bulk sale contractual obigations. For various review purposes this quantity may be represented as MGD, MGM and/or MGY.

Contract Limit: Purchased water, where regulated by an approved service contract, will be included in the overall allocation quantity where appropriate. Contracts may exist with minimum, maximum, seasonal or other restrictions. In some instances, the value is an estimate, not an exact limit.

Current Peak Demand: This is the average day of the highest recorded demand month occurring within the last five (5) years. (For the purpose of this table, the calculation for current peak demand was based on 31 days. Systems will be reviewed on an individual basis.) This includes water from a system's own sources and all other sources of water (i.e. purchased water). This field may also include bulk sale contractual obigations.

Firm Capacity: Adequate pumping equipment and/or treatment capacity (excluding coagulation, flocculation and sedimentation) to meet peak daily demand, when the largest pumping unit or treatment unit is out of service. The value is represented in MGD.

Firm Capacity Deficit or Surplus = (Firm Capacity - Total Peak Daily Demand): The difference between the Firm Capacity and the sum of the peak daily demand and committed daily demand. This is a measure of the physical ability to provide treated water at adequate pressure when the largest pumping unit or treatment unit is out of service. Negative values indicate a shortfall in Firm Capacity.

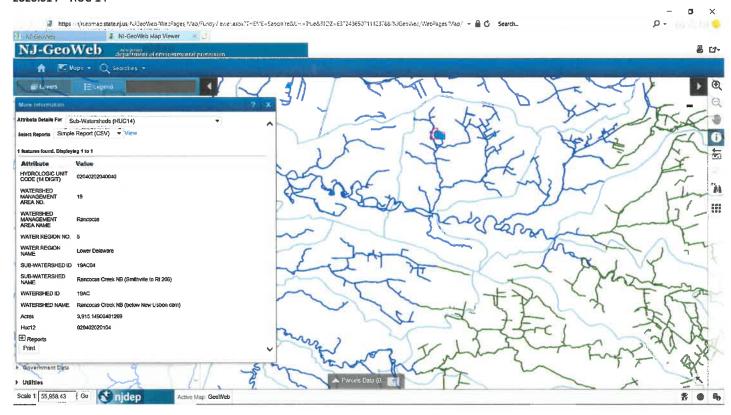
Total Peak Water Demand: The sum of the public water system's current peak demand and committed peak demand. The value is represented in MGD, MGM, and MGY.

Total Available Water Supply: The sum of the Allocation Limit and Contract Limit. This value is represented in MGM and MGY.

Water Supply Deficit or Surplus = (Total Water Allocation Permit Limit- Total Peak Demand): The monthly and/or annual limitations of an Allocation Permit or Water Use Registration minus the sum of the monthly and/or annual demands recorded based on the water use records plus the monthly and/or annual demand projected for approved but not yet constructed projects. Negative values indicate a shortfall in diversion privileges or available supplies through bulk purchase agreements.

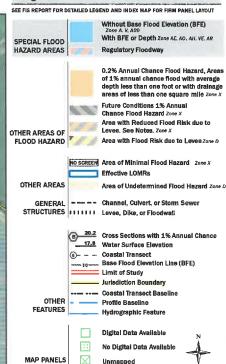
back to top

2020.014 - HUC-14



National Flood Hazard Layer FIRMette



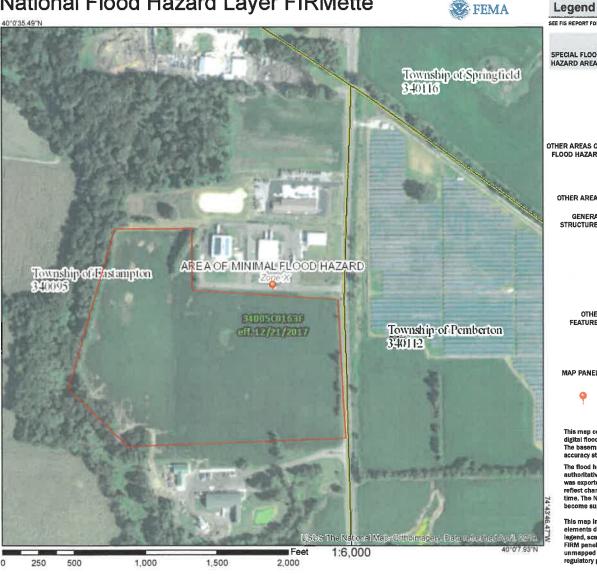


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 5/7/2020 at 11:25:42 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for

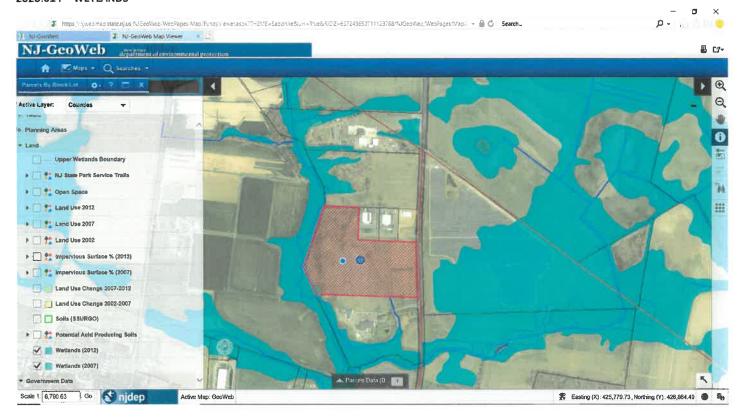


NJDEP GIS Data Viewer-landscape project



New Jersey Department of Environmental Protection Earl Community Maps Contributors, State of New Jersey, Building FootprintUSA, Esrl, HERE, Garmin, SafeGraph, INCREMENT P, METINASA, USGS, EPA, NPS, US Census Bureau, USDA | NUDEP | NUDEP, Bursau of Energy and Sustainability Edition 20190327 | New Jersey Office of Information Technology

2020.014 - WETLANDS







MAP LEGEND MAP INFORMATION Area of Interest (AOI) The soil surveys that comprise your AOI were mapped at Spoil Area 1:24,000. Area of Interest (AOI) ٥ Stony Spot Soils Warning: Soil Map may not be valid at this scale. Very Stony Spot 0 Soil Map Unit Polygons Enlargement of maps beyond the scale of mapping can cause Wet Spot Ŷ Soil Map Unit Lines misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of No. of Δ Other Soil Map Unit Points contrasting soils that could have been shown at a more detailed Special Line Features **Special Point Features** scale. **Water Features** Blowout (0) Please rely on the bar scale on each map sheet for map Streams and Canals Borrow Pit 8 Transportation Clay Spot 褑 Source of Map: Natural Resources Conservation Service Rails *** Web Soil Survey URL: **Closed Depression** \Diamond Interstate Highways Coordinate System: Web Mercator (EPSG:3857) Gravel Pit 36 US Routes 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 **Gravelly Spot** Major Roads Landfill 0 Albers equal-area conic projection, should be used if more Local Roads accurate calculations of distance or area are required. Lava Flow A. Background This product is generated from the USDA-NRCS certified data as Marsh or swamp Aerial Photography 盐 100 of the version date(s) listed below. Mine or Quarry 事 Soil Survey Area: Burlington County, New Jersey Miscellaneous Water 0 Survey Area Data: Version 15, Sep 16, 2019 Perennial Water 0 Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Rock Outcrop Date(s) aerial images were photographed: Aug 14, 2015—Apr 2, Saline Spot Sandy Spot The orthophoto or other base map on which the soil lines were Severely Eroded Spot compiled and digitized probably differs from the background 4 imagery displayed on these maps. As a result, some minor Sinkhole ٥ shifting of map unit boundaries may be evident. 3 Slide or Slip Sodic Spot Ø

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AdmA	Adelphia fine sandy loam, 0 to 2 percent slopes	15.7	52.9%
ComB	Collington fine sandy loam, 2 to 5 percent slopes	12.5	42.1%
FmhAt	Fluvaquents, loamy, 0 to 3 percent slopes, frequently flooded	1.5	4.9%
Totals for Area of Interest		29.6	100.0%



State of New Jersey

CHRIS CHRISTIE

Governor

KIM GUADAGNO

Lt. Governor

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

BOB MARTIN Commissioner

US Home Corporation dba Lennar c/o Robert Calabro 2465 Kuser Rd Hamilton, NJ 08690

NOV 2 3 2016

RE:

Freshwater Wetlands Letter of Interpretation: Line Verification

File No.: 0311-08-0001.1

Activity Number: FWW160001

Applicant: US Home Corporation dba Lennar c/o Robert Calabro

Block(s) and Lot(s): [700, 9] [800, 9.03] Eastampton Township, Burlington County

Dear Mr. Calabro:

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

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

Based upon the information submitted, and upon a site inspection conducted by Division staff on October 28, 2016, the Division has determined that the wetlands and waters boundary lines as shown on the plans entitled: "WETLAND MAP, LENNAR CORPORATION, BLOCK 700 - LOT 9, BLOCK 800 - LOT 9.03, TOWNSHIP OF EASTAMPTON, BURLINGTON COUNTY, NEW JERSEY", consisting of three (3) sheets, dated 6/17/15, last revised 11/08/16, and prepared by Omland Engineering Associates, Inc., is accurate as shown.

Freshwater Wetlands Letter of Interpretation: Line Verification DLUR File # 0311-08-0001.1 FWW160001 Page 2

Wetlands Resource Value Classification ("RVC")

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

Ordinary: Wetland flag points A36-A38, B11-B19, B31-B62, B134-B139, B141-B160, B182-B191, B197-B206, G1-G10, H1-H10, I1-I4, and I2A-I2J. [No wetland buffer]

Intermediate: All other freshwater wetland flag points on or immediately adjacent to the above referenced site. [50 foot wetland buffer]

RVC may affect requirements for wetland and/or transition area permitting. This classification may affect the requirements for an Individual Wetlands Permit (see N.J.A.C. 7:7A-7), the types of Statewide General Permits available for the property (see N.J.A.C. 7:7A-4 & 5) and any modification available through a transition area waiver (see N.J.A.C. 7:7A-6). Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules for additional information.

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

General Information

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

Regulated activities proposed within a wetland, wetland transition area or water area, as defined by N.J.A.C. 7:7A-2.2 and 2.6 of the Freshwater Wetlands Protection Act rules, require a permit from this office unless specifically exempted at N.J.A.C. 7:7A-2.8. The approved plan and supporting jurisdictional limit information are now part of the Division's public records.

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

Freshwater Wetlands Letter of Interpretation: Line Verification DLUR File # 0311-08-0001.1 FWW160001 Page 3

Appeal Process

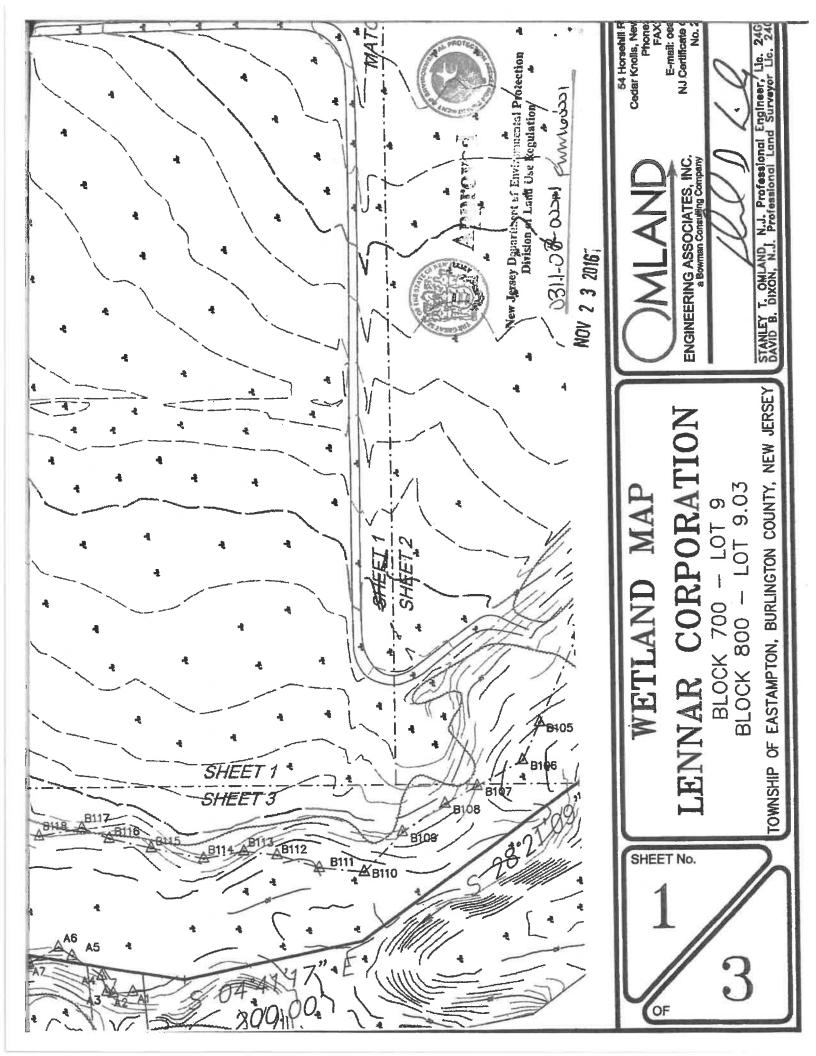
In accordance with N.J.A.C. 7:7A-1.7, any person who is aggrieved by this decision may request a hearing within 30 days of the date the decision is published in the DEP Bulletin by writing to: New Jersey Department of Environmental Protection, Office of Legal Affairs, Attention: Adjudicatory Hearing Requests, P.O. Box 402, Trenton, NJ 08625-0402. This request must include a completed copy of the Administrative Hearing Request Checklist found at www.state.nj.us/dep/landuse/forms. Hearing requests received after 30 days of publication notice may be denied. The DEP Bulletin is available on the Department's website at www.state.nj.us/dep/bulletin. In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see the website www.nj.gov/dep/odr for more information on this process.

Please contact Lisa Dunne of our staff by e-mail at <u>lisa.dunne@dep.nj.gov</u> or by phone at (609) 777-0454 should you have any questions regarding this letter. Be sure to indicate the Department's file number in all communication.

Sincerely,

Ryan J. Anderson, Supervisor Division of Land Use Regulation

c: Municipal Clerk
Municipal Construction Official
Agent (original)



080221-F0-001



STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF LAND USE REGULATION

Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420 Telephone: (609) 777-0454 or Fax: (609) 777-3656 www.state.nj.us/dep/landuse

PERMIT



Approval Date In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental OCT 0 6 2017' Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For **Expiration Date** the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." OCT n 5 2022 Violation of any term, condition or limitation of this permit is a violation of the implementing rules and may Permit Number(s): Type of Approval(s): **Enabling Statute(s):** Flood Hazard Area Individual Permit N.J.S.A. 13:9B-1 et seq. 0311-08-0001.1 FHA160001 Flood Hazard Area Verification N.J.S.A. 58:11A-1 et seq. 0311-08-0001.1 FHA160002 Freshwater Wetlands General Permit No. 6 N.J.S.A. 58:10A-1 et seq. 0311-08-0001.1 FWW160002 Freshwater Wetlands General Permit No. 7 N.J.S.A. 58:16A-50 et seq. 0311-08-0001.1 FWW160003 Freshwater Wetlands General Permit No. 11 N.J.S.A. 13:1D-29 et seq. 0311-08-0001.1 FWW160004 Freshwater Wetlands Transition Area Waiver N.J.S.A. 13:1D-1 et seq. 0311-08-0001.1 FWW160005 Permittee: Site Location: US Home Corporation dba Lennar Block(s) & Lot(s): [700, 9] [800, 9.03] c/o Robert Calabro Municipality: Eastampton Township 2465 Kuser Road County: Burlington Hamilton, NJ 08690

Description of Authorized Activities:

This permit verifies the limits of flood hazard area and riparian zone along Powell's Run and its two unnamed tributaries as well as verifies riparian zone limit along an unnamed tributary to Powell's Run with drainage area less than 50 acres under flood hazard area verification and this permit authorizes the construction of three stormwater outfall structures within verified flood hazard area and riparian zone as well as authorizes the placement and compensation of fill within verified flood hazard area under flood hazard area individual permit all in connection with a project that consists of construction of mix single-family and duplex units, a club house with swimming pool and retail space divided between three buildings at a site location described above as shown on the plans referenced on the page numbers 10 and 11 of this permit. In addition, this permit approves disturbance of approximately 0.05 acres (2,178 SF) of freshwater wetlands under freshwater wetlands general permit no. 7 and disturbance of 0.02 (871.20 SF) acres of freshwater wetlands as well as 0.12 acres (5,227.20 SF) of freshwater wetlands transition area under freshwater wetlands general permit no. 11 for the construction above mentioned residential subdivision. Also, this permit approves reduction of freshwater wetlands transition area by 1.20 acres (52,169 SF) under freshwater wetlands transition area averaging plan waiver with a compensation of 1.59 acres (69,360 SF) of freshwater wetlands transition area as shown on the plans referenced on the page numbers 10 and 11 of this permit.

The activities allowed by this authorization shall comply with applicable conditions noted at N.J.A.C. 7:7-4.3, 5.6, 5.7, 5.11, 6.2 and 13.1. Failure to comply with these conditions shall constitute a violation of the Freshwater Wetland Protection Act (N.J.S.A. 13:9B-1 et. seq.).

Prepared by:	Received and/or Recorded by County Clerk:
Dhruv Patel	
If the permittee undertakes any regulated activity authorized under a permit, such action shall constitute the permittee's acceptance of the permit in its entirety as well as the permittee's agreement to abide by the permit and all conditions therein.	

This permit is not valid unless authorizing signature appears on the last page.