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ENVIRONMENTAL IMPACT STATEMENT

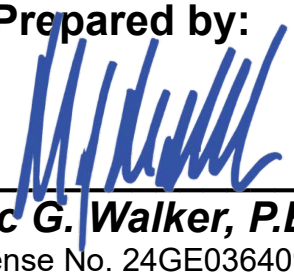
FOR

NICHOLAS FAMILY LLC
PRELIMINARY AND FINAL SITE PLAN
BLOCK 407, LOTS 1 & 20

Situated in the

TOWN OF DOVER
MORRIS COUNTY, NEW JERSEY

Prepared by:



Marc G. Walker, P.E.
NJ License No. 24GE03640900
M.S. Environmental Engineering

October 15, 2026

21 BOWLING GREEN PARKWAY, SUITE 204 • LAKE HOPATCONG, NJ 07849
PHONE (973) 663-6540 • FAX (973) 663-0042 • www.dykstrawalker.com

TABLE OF CONTENTS

I. INTRODUCTION 1
A. Purpose 1
II. PROJECT DESCRIPTION 2
A. Overall Description 2
B. Compatibility with Planning Goals 4
III. SITE DESCRIPTION AND INVENTORY 4
A. Geology and Topography 4
B. Soils 7
C. Hydrology 7
1. Wetlands 7
2. Floodplains 8
3. Surface Drainage 8
4. Ground Water 9
D. Vegetation and Wildlife 9
E. Air Quality 10
F. Man Made Conditions and Structures 11
1. Land Use 11
2. Noise Characteristics and Levels 12
G. Aesthetics 14
IV. AREA AND REGIONAL DESCRIPTION 14
A. Surrounding Environments 14
B. Infrastructure 14
V. ASSESSMENT OF POTENTIAL IMPACTS 14
A. Overview 14
B. Soil Erosion and Sedimentation 15
C. Flooding and Floodplain Protection 16
D. Wetlands 16
E. Surface Water Quality 16
F. Groundwater Quantity and Quality 17
G. Vegetation 18
H. Wildlife 18
I. Hazardous Waste 19
J. Affordable Housing 19

TABLE OF CONTENTS (CONTINUED)

K. Zoning analysis 19
L. Other Environmental Considerations 20
1. Solid Waste Disposal 20
2. Energy Demand 20
3. Air Quality 20
4. Noise Pollution 21
M. Population Increases 22
N. Social and Economic Impact 23
O. Infrastructure 23
1. Traffic 23
2. Water and Sewer Service 24
3. Utilities 25
VI. RECOMMENDED ACTIONS AND MITIGATION 26
A. Overview 26
B. Erosion and Sedimentation Control 26
C. Stormwater Management and Groundwater Protection 27
VII. LICENSES, PERMITS, OTHER APPROVALS 28
VIII. SUMMARY OF RECOMMENDATIONS AND CONCLUSION 28
IX. STATEMENT OF ALTERNATIVES 29
X. REFERENCES 31
APPENDIX A – SITE PHOTOGRPAH 1
APPENDIX B – QUADRANGLE MAPS 3
APPENDIX C – SOILS INFORMATION 9
APPENDIX D – FLOOD MAPPING 11
APPENDIX E – NATURAL HERITAGE DATABASE 13

ENVIRONMENTAL IMPACT STATEMENT
BLOCK(S) 407, LOT(S) 1 & 20
TOWN OF DOVER
MORRIS COUNTY, NEW JERSEY

I. INTRODUCTION

A. Purpose

This report presents the results of an Environmental Impact Assessment of the proposed development of Block 407, Lots 1 & 20, in the Town of Dover, Morris County, New Jersey. The purposes of this assessment are: (1) to provide an analysis of the relationship between the proposed development project and the natural environment; (2) to identify potential environmental impacts; (3) to recommend mitigating measures where possible, and; (4) to provide a reference for municipal authorities to assist in the decision-making process. This report is an adjunct to, and should be reviewed with, other plans and drawings submitted for the application process.

Applicant:	Nicholas Family LLC 7 Chelsea Drive Randolph, NJ Zip 07869
Location:	Block 407, Lots 1 & 20 180 & 220 Ann Street Town of Dover Morris County, New Jersey
Engineer:	Dykstra Walker Design Group 21 Bowling Green Parkway, Suite 204 Lake Hopatcong, New Jersey 07849

The subject property is located at the easterly side of Ann Street and the westerly side of Prospect Street in the Town of Dover. The site is abnormally shaped, consists of approximately 9.096 acres, and is currently mostly undeveloped. There is an existing single-family dwelling and associated improvements on the subject property today. The entirety of the property outside of this development is wooded. There are no freshwater wetlands or state open waters on the subject property, and the property has sections of steep slopes. Refer to **Appendix A** for a photograph of the existing site. Adjacent to the subject property, single-family residential development exists. Refer to **Appendix B** for a USGS Quadrangle map of the site and surrounding area.

The information, format, and analyses provided are designed to comply with the Town of Dover ordinances governing environmental impact reports. Several planning documents were consulted to ensure environmentally sound judgements in a regional context. Field visits to the proposed project site were conducted to complete the project's background research tasks.

II. PROJECT DESCRIPTION

A. Overall Description

This project proposes to subdivide the subject property with the construction of 18 new homes lots with 1 existing home lot. Access to the site will be provided by a proposed public road off of Ann Street which is the extension of Beaufort Avenue across the street.

There are 9 lots fronting on Ann Street and 10 lots fronting on the proposed Beaufort Avenue including the cul-de-sac.

Water service to the site will be provided with an extension of the municipal water system in Ann Street. Sewer at the site will be handled by connection to the municipal wastewater system on Prospect Street. Telephone, electric, cable, and gas services are also available at Ann Street and will be extended with the proposed right-of-way.

There are no freshwater wetlands, transition areas, regulated waters, or riparian zones on or within the subject property per review of NJ Geoweb and FEMA mapping. This project is compliant with any environmental regulations set forth by the New Jersey Department of Environmental Protection (NJDEP).

Land Disturbance associated with development will be greater than one (1) acre and impervious surfaces on-site will be increased by more than one-quarter (1/4) of an acre. Therefore, the proposed development is considered a major development under the NJDEP's Stormwater management regulations at N.J.A.C. 7:8. Increase in stormwater runoff will be managed in accordance with applicable regulations by a subsurface basin under the proposed roadway and a surface basin at the southeast side of the property.

Land use at the site will consist of single-family residential dwellings. This development will increase both the population and number of school age children in the municipality as a result of this development.

B. Compatibility with Planning Goals

The subject property is located within the R-1 (Single Family) zone district. This zone allows uses such as single-family homes, perishes, rectories, single rooming units in homes, and community residences. The proposed use is consistent with the allowable uses in this zone district.

III. SITE DESCRIPTION AND INVENTORY

A. Geology and Topography

The project area is located within the Highlands Physiographic Province (refer to **Appendix B**).

The Highlands Province is generally characterized by rugged topography consisting of a series of discontinuous rounded ridges separated by deep narrow valleys. In this area, the Highlands Province is underlain by sedimentary and igneous rocks.

According to the *Bedrock Geologic Map of the Dover Quadrangle, Morris county, New Jersey,* 1989, published by the New Jersey Geological Survey, the bedrock geology beneath the proposed project is Pyroxene granite (Mesoproterozoic), the Hypersthene-

quartz-plagioclase gneiss (Mesoproterozoic), and the Biotite-quartz-feldspar gneiss (Mesoproterozoic). The Pyroxene granite (Mesoproterozoic) consists of buff or white-weathering, greenish-gray, medium to coarse-grained, foliated granite containing mesoperthite to microantiperthite, quartz, oligoclase, and hedenbergite. Common accessory minerals include titanite, magnetite, apatite, and trace amounts of zircon and pyrite. The hypersthene-quartz-plagioclase gneiss (Mesoproterozoic) consists of light-gray or tan-weathering, greenish gray or greenish-brown, medium-grained, moderately layered and foliated, greasy lustered gneiss composed of andesine or oligoclase, quartz, augite, hornblende, hypersthene, and magnetite. It commonly contains conformable layers of amphibolite and quartz-plagioclase gneiss containing hornblende and augite. The Biotite-quartz-feldspar gneiss (Mesoproterozoic) consists of Pale pinkish-white, pinkish-gray, or gray-weathering, locally rusty-weathering, pinkish-gray, tan, or greenish gray, fine to coarse-grained, moderately layered and foliated gneiss containing microcline microperthite, oligoclase, quartz, biotite, and garnet and very locally contains kornerupine. Graphite and pyrrhotite are confined to the variant that weather rusty. The rusty variant is commonly associated with thin, layered quartzite containing biotite, feldspar, graphite, and pyrrhotite. Refer to **Appendix B** for the referenced Bedrock Geologic Map.

Per the *Surficial Geology of the Dover Quadrangle, Morris County, New Jersey,* 1989, published by the New Jersey Geological Survey, surficial geology in the project vicinity

consists largely of olluvium which is unstratified and unsorted boulders, cobbles, and pebbles of angular bedrock debris and some rounded erratics in an orange-brown silty sand matrix, partly of late Wisconsinan age. It may be as much as 50 feet thick at the base of long steep slopes. The bedrock also consists of colluvium and weathered bedrock, which is discontinuous colluvium, as above, generally less than 10 feet thick, overlying weathered bedrock. The weathered bedrock ranges from sandy (minor clayey sand) saprolite to a rubble of angular cobbles and boulders of fractured rock with little or no matrix. It may be as much as 50 feet thick, but thickness is quite variable. In places the colluvium may be replaced by a diamict produced by in-place mixing of pre-late Wisconsinan till and underlying weathered bedrock, with little or no downslope movement. Partly of late Wisconsinan age. Refer to **Appendix B** for a copy of the referenced Surficial Geology map.

Topographically, the area in the vicinity of the site is sloping from Ann Street at the West down to Prospect Street at the East. Ground elevations at the subject property vary from approximately 874 feet above mean sea level (msl) at the southwestern portion of the site and 736 feet above msl at the northeastern of the property.

B. Soils

The United States Department of Agriculture (USDA), Natural Resource Conservation Service web soil survey shows three (3) mapped soil series within the vicinity of the site. Refer to **Appendix C** for a copy of the soil survey. The mapped soils are:

Map unit name	Map unit symbol
Parker-Gladstone complex, 0 to 15 percent slopes, extremely stony	PauCc
Parker-Gladstone complex, 15 to 25 percent slopes, extremely stony	PauDc
Urban land-Gladstone complex, 8 to 15 percent slopes	USGKAC

Per the web soil survey, the depth to bedrock at the subject property is greater than 6.5 feet. This is the deepest indicator the web soil survey will measure to. On site soil testing was done on the property with test pits as deep as roughly 12 feet. No rock was discovered on the subject property during soil testing.

C. Hydrology

1. Wetlands

According to the New Jersey Department of Environmental Protection (NJDEP) NJ-GeoWeb mapping tool, no freshwater wetlands are located on the subject property.

2. Floodplains

The subject property is located on the Federal Emergency Management Agency (FEMA) Flood insurance Rate Map number 34027C0139F, dated November 17, 2025. The subject property is not located within any possible flood hazard areas associated with any surrounding regulated waters. Refer to **Appendix D.**

3. Surface Drainage

Under proposed conditions, surface water runoff is generally maintained from existing drainage patterns. Surface water runoff drains by overland flow to a series of inlets in the road and separate drywell units for some of the subdivided lots. The roadway inlets are treated by a water quality unit and discharge to a subsurface basin beneath the road. Some of the lots will collect future impervious coverage into a drywell system which either discharges to grade or will tie into the basins. The surface basin overflows to the existing drainage system in Prospect Street.

The proposed development has been designed in accordance with the NJDEP Stormwater Management Rules at N.J.A.C. 7:8 and the NJ Best Management Practices (BMP) manual, and the Standards for Soil Erosion & sediment Control in New Jersey. Where the above standards provide conflicting requirements, the more restrictive requirement was utilized.

4. Ground Water

No surficial aquifer exists at the subject property per the New Jersey Geologic Survey mapping.

A deep bedrock aquifer maybe located at the subject property within the igneous and metamorphic rocks of the highlands region. The United States Geological Survey ranks bedrock and surficial aquifers based on the median yield for wells installed in each aquifer. The bedrock aquifers are primarily comprised of morainic deposits, which have a ranking of D. A rank of D indicates a median potential well yield of twenty-five (25) to 100 gallons per minute (gpm). Refer to **Appendix B** for a copy of the Aquifers of New Jersey map.

D. Vegetation and Wildlife

The wildlife that are generally present at the subject property include the following:

Mammals – white tailed deer, gray squirrel, chipmunk, raccoon, opossum, striped skunk, cottontail, red fox, coyote, and woodchucks

Birds - American robin, northern cardinal, blue jay, American crow, mourning dove, house sparrow, European starling, downy woodpecker, red-tailed hawk, wild turkey

Reptiles - Common garter snake, eastern rat snake, eastern painted turtle

Amphibians - American bullfrog, green frog, American toad

Invertebrates - eastern tiger swallowtail, dragonflies, native bees and other common pollinating insects.

A search of the Natural Heritage Database for information on rare species and ecological communities was performed via the NJDEP Office of Natural Lands Management. Refer to **Appendix E** for a copy of the results of this database search.

A review of the New Jersey Department of Environmental Protection's Natural Heritage database identified the Indiana bat (*Myotis sodalis*), a federally endangered species, in association with the project area. This database finding is acknowledged as part of the environmental review of the proposed major subdivision and does not, by itself, establish the presence of an occupied roost or maternity colony within the limits of disturbance.

The NJDEP has seasonal restrictions on the clearing of woody vegetation to reduce the harm of state listed bat species, like the Indiana Bat. The restriction is from April 1 through September 30.

E. Air Quality

The NJDEP monitors air quality for a variety of pollutants at various locations throughout the state. The pollutants sampled include sulfur dioxide, total suspended particulates, carbon monoxide, ozone and nitrogen dioxide. There are no air quality monitoring sites in Dover NJ, so exact pollutant counts in the proximity to the site are not

available. The nearest monitoring station is located in Paterson in Passaic County and information corresponding to the subject property can be cited from that station. Pollutant levels at the site are generally considered to be same as or better than those levels reported at the Paterson station. The ambient air quality of the site is reflective of the encompassing environment inclusive of the surrounding road system and nearby land uses. In the immediate area of the site, the only influences on air quality occur from mobile emission sources (cars, trucks, etc.) utilizing the surrounding road system. The impact on air quality is dependent upon such factors as wind speed, atmospheric temperature inversion, sunlight, precipitation , and traffic intensity. It can be expected that the greatest degradation of local air quality occurs during the morning and evening rush hours on normal workdays. Although no on-site air quality testing was performed, air quality can be classified as good in proximity to the site.

F. Man Made Conditions and Structures

1. Land Use

The subject property is approximately 9.086 acres in size and located within the Single Family Residential (R-1) zone district. The proposed single-family residential use is an allowable use in the R-1 zone. Development within this area consists of adjoining lots developed with single-family residences.

2. Noise Characteristics and Levels

The noise levels generally encountered on this site will be those mainly associated with traffic along the nearby roadways and surrounding land uses. Noise levels are expected to peak during morning and evening rush times. The projected decibel rating associated with traffic is determined to be between seventy (70) and eighty-five (85) decibels (db). A decibel range of forty (40) and sixty (60) db is determined to be the range of average to moderate rural neighborhood traffic. Noise levels within buildings are anticipated to be greatly reduced by the walls and interior air space. The use of insulating building materials (exterior and interior walls and insulating glass) will further reduce or eliminate the exposure to these outside noise levels.

On-site noise will be from vehicles entering and exiting the development and activities associated with the proposed use, as well as seasonal use of property maintenance equipment such as power lawnmowers and plowing, etc. Noise levels are anticipated to typically be less than the seventy (70) to eighty-five (85) db range generated by moderate traffic and therefore, it is not anticipated to adversely impact adjoining properties.

Noise levels in decibels and comparative descriptions are identified on the following chart:

NOISE LEVELS

Decibels (db)	Description
140	Threshold of pain
130	50 horsepower sirens at 100 feet
120	Pneumatic Riveter
110	
100	Air Hammer
90	Heavy city traffic Beginning of hearing damage
80	
70	Average Traffic
60	Conversational Speech, 3 ft.
50	Business office
40	Average residence Soft whisper
30	Room in a quiet house at night
20	Motion picture studio
10	
0	Threshold of hearing

Source: Environmental Pollution and Control, P. Aarne Vesilind, Ann Arbor Science Publishers, Inc. 1978.

G. Aesthetics

There are no sites of historic, scenic, or aesthetic significance on the subject property.

IV. AREA AND REGIONAL DESCRIPTION

A. Surrounding Environments

As noted in the previous section of this report, the subject property is located within a developed area. Adjoining lots are developed with single-family houses.

B. Infrastructure

The Town of Dover is predominantly a suburban area. Services provided to the residents and businesses include a public school system, roadway maintenance, snow removal, and solid waste disposal. Centralized utility systems are also in place, including water, sewer, gas, and electric facilities. Other services include fire and police protection and emergency response.

V. ASSESSMENT OF POTENTIAL IMPACTS

A. Overview

This section provides a description and assessment of potential and actual impacts to be expected from the implementation of this project proposal. The following subsections present possible impacts on the natural environment and impact on the socioeconomic infrastructure of the Town of Dover.

Recommended mitigation measures and a discussion of unavoidable impacts are presented in Section VI.

B. Soil Erosion and Sedimentation

Some degree of soil erosion and sedimentation must be expected from almost any construction project. Soil erosion and sedimentation are inevitable and unavoidable as there will be ground disturbance from construction, temporary and permanent alteration of portions of the natural topography and existing vegetation, impervious surfaces, and a stormwater management system. Stabilizing the disturbed areas during construction, utilizing best management practices, and establishing permanent cover will limit soil loss.

Site preparation will involve clearing and rough grading of the site. Construction equipment can loosen and move soil, making it subject to potential wind and water movement. The modification of impervious surfaces will alter present run-off patterns. Any stormwater management system is subject to sporadic surges of water and sediments.

These impacts are a necessary by-product of development and can be controlled so that the loss is held to acceptable levels. The implementation and maintenance of both construction phase and post-construction phase soil erosion and sediment control measures are important.

C. Flooding and Floodplain Protection

No streams, riparian zones, floodplains, or other NJDEP regulated features are located on or near the site. There will be no flooding or floodplain disruption as a result of the proposed development.

D. Wetlands

There are no freshwater wetlands located on or within 150 feet of the proposed development based on NJ Geoweb Mapping. There will be no adverse impacts to wetlands or their associated transition areas as a result of the proposed development.

E. Surface Water Quality

Treatment of stormwater runoff from the proposed development will be required to ensure compliance with state water quality regulations. A comprehensive stormwater management plan is required for this project, which includes water quality treatment facilities. This project will be reviewed by the Town of Dover Planning Board Engineer, Morris County Engineering Department, and the Morris County Soil Conservation District to confirm compliance with state standards. Proper soil erosion measures during site construction and adherence to the maintenance schedule will also prevent the sedimentation/siltation of the stormwater system and help ensure adequate treatment of surface water runoff.

F. Groundwater Quantity and Quality

Groundwater quantity is directly related to the amount of impervious surface Introduced and the methods used to treat and infiltrate runoff. In this case, runoff from a majority of the impervious surfaces added to the site will be infiltrated.

Another important issue is maintaining groundwater quality. Some potential for groundwater pollution is associated with the contaminants and particles associated with driveways and parking areas such as oils, greases and salts. In order to maintain groundwater quality, the stormwater drainage system for the site must include water quality treatment for runoff from paved surfaces prior to infiltration to comply with state regulations. This project will comply with the conditions and best management practices listed in the state regulations by treating all stormwater runoff from paved surfaces prior to infiltration into the water table and discharge.

The design of stormwater management facilities for the project incorporates the use of green infrastructure that provides water quality treatment. Infiltration at the site will occur at the proposed infiltration basins which ensures that the average annual groundwater recharge is not reduced from predevelopment conditions. As a result, this project will have no adverse impacts on the groundwater at the project site.

A full stormwater management report has been prepared. For further details see “Stormwater management Calculations, for, Preliminary & Final Subdivision Plan, Block

407 – Lots 1 & 20, Situated in, Town of Dover, Morris County, New Jersey" prepared by Dykstra Walker Design Group, dated July 9, 2026.

G. Vegetation

Existing on-site vegetation will be disturbed by construction activities and a certain amount of loss is inevitable and acceptable in this type of land use transition. There are roughly 108 trees within the limit of disturbance proposed to be saved during the construction of individual lots. There are also about 43 street trees to be planted for the proposed roadway to offset the removal of trees on site.

H. Wildlife

There may be minor disruptions to wildlife as a result of this project. Based on the amount of disturbance relative to the overall property size, it is not likely that entire habitats unique to a particular species will be removed. The development has been designed to maintain existing wooded areas at the rear of the site and to allow the remaining forested areas to remain contiguous. The habitat disruption and the noise and activity of construction will cause certain animal species on-site to leave and migrate to another location, either temporarily or permanently.

The proposed development has been designed to accommodate the intended residential use of the property while considering existing environmental conditions. The proposed subdivision will involve the clearing of approximately 6 acres of land, while

approximately 3 acres will be conserved as open space. The retention of these conserved areas will preserve a portion of the site's existing natural vegetation and habitat. This is a natural by-product of land use development where zoning allows for this type of development.

I. Hazardous Waste

There are no sources of hazardous waste located on the subject property. proposed users on-site are prohibited from using or transporting hazardous waste.

J. Affordable Housing

The Town of Dover requires development fees for residential affordable housing (COAH). Per Article VA of the Town of Dover municipal code, the fee is 1% of the equalized assessed value of each property.

K. Zoning analysis

This project generally complies with the requirements of the R-1 single-family residential zone of the Town of Dover. The proposed single-family residential use is an allowable use. There are no variances and/or design waivers required as a part of this application. No adverse impacts on nearby properties will occur as a result of the proposed development. The project was envisioned under the Town's master plan.

L. Other Environmental Considerations

Air quality, noise pollution, energy demands, and solid waste disposal comprise another set of potential environmental impacts considered to be secondary for such a small project.

1. Solid Waste Disposal

Solid waste and recycling pickup for the proposed development will be by the Town of Dover contracted waste hauler. Solid waste and recycling materials will be stored on each residential lot to be organized by the individual homeowner. The contracted waste hauler will remove solid waste and recycling from each property on a regular bases.

2. Energy Demand

No unusual energy demands are anticipated for the proposed project.

3. Air Quality

The proposed project will have a minimal effect on air quality on both a short-term and long-term basis. Upon completion of this project, the primary source of any increase in air pollution will be during peak hours when residents commute to and from the development. This is a relatively short term and low level of impact. Some impacts on air quality may occur during project construction. This is a short-term temporary increase with no effect on the site or its environment.

4. Noise Pollution

On-site noise will be from vehicles entering and exiting the development and activities associated with the proposed residential use. The most significant noises to be generated by this proposal will result from the construction work to be performed at the site. Heavy equipment and trucks will produce noise that may impact the surrounding areas. Anticipated construction related noise levels are summarized on the following table:

CONSTRUCTION RELATED NOISE EMISSIONS

CONSTRUCTION EQUIPMENT	NOISE LEVEL AT 50' (dba)	NOISE LEVEL AT 100' (dba)	NOISE LEVEL AT 200' (dba)	NOISE LEVEL AT 200' STRUCTURE ATTENUATION (17 dba)
Backhoe	72-94	66-88	60-82	43-65
Front End Loader	72-84	66-88	60-72	43-55
Bulldozer	80-87	74/81	68/75	53-60
Tandem Truck	83-88	77-81	71-75	56-60

Source: Federal Highway Administration Policy and Procedure Memorandum 90-2, April 1972.

Short-term impacts of construction noise will be minimized by contemporary Occupational Safety and Health Administration (OSHA) regulations regarding heavy machinery noise. It should be noted that noise of this nature is temporary and will be limited to normal working hours to the greatest extent possible. These regulations will not only ensure the health and safety of machinery operators and bystanders alike but will also minimize noise levels at the fringes of the property.

M. Population Increases

The proposed project will result in a population increase of forty-nine to fifty (49-50) persons as calculated using the multipliers from the Rutgers University, Center for Urban Policy Research, residential demographic multipliers, November 2006, for all housing values.

Total population increase calculation is as follows:

QTY	DESC	HOUSING VALUE	MULTIPLIER	SUM
18	Single-Family Detached 3 bedrooms	Newer units, all values	2.762	49.716

There will be an increase of approximately eight to nine (8-9) children in local schools from the proposed project as calculated using multipliers from the Rutgers University, Center for Urban Policy Research, residential demographic multipliers, November, 2006 for all housing values.

Child increase for school system calculated as follows:

QTY	DESC	HOUSING VALUE	MULTIPLIER	SUM
18	Single-Family Detached 3 bedrooms	Newer units, all values	0.446	8.028

It is not an unusual demand for services, but it is part of a cumulative demand in every school system that impacts property taxes. This increase is not expected to place a burden on the local schools. School tax revenues from the development will far exceed any increases in services.

N. Social and Economic Impact

No unusual demands for services are anticipated from this project. Protection against fire and crime are already present for the adjoining areas. From a socioeconomic viewpoint, this project is an extension of existing, adjoining uses. Concern from infrastructure burdening is not warranted.

O. Infrastructure

1. Traffic

Per the Residential Site Improvements Standards, traffic generation has been determined in conformance with the Institute of Transportation Engineers (ITE) Trip Generation, 10th edition. The proposed development will generate an approximate increase of 215 trips per day with 33 trips into and out of the facility during the peak hour. There is already an existing dwelling on the subject property which generates approximately 12 trips per day, the increase in trips is based on 18 new lots. Each residential lot will handle parking on site with a garage and driveway. Deliveries will be coordinated by each homeowner as well.

Ann Street is a local road that is not frequently traveled which connects to relevant important roadways and residences. The traffic generated by the proposed development will constitute a small percentage of the overall traffic on Ann Street.

There will be temporary impacts to Ann Street as a result of construction activity, including the movement of construction equipment, import and/or export of soil, and the ingress and egress of construction workers to and from the site. This is an unavoidable by-product of construction and the movement of all construction equipment and transport of soil will comply with local limitations and regulations.

2. Water and Sewer Service

Water service will be provided to the proposed building by an extension of the municipal water system and sanitary sewer service will be provided by an extension of the municipal sewer system.

The approximate projected sanitary sewer flows for the development have been calculated as follows per the standards at N.J.A.C. 7:14A-23.3 using an average of 3-bedroom single family detached dwelling units.

- 1 existing 3-bedroom home = 1 home x 300 GPD = 300 GPD

- 18 3-bedroom homes = 18 homes x 300 GPD = 5,400 GPD

- Net increase = 5,400 GPD – 300 GPD = 5,100 GPD

The approximate average daily water demand for the development has been calculated as follows per the standards at N.J.A.C. 7:10 using an average of 3-bedroom single family detached dwelling units.

- 1 existing 3-bedroom home = 1 home x 225 GPD = 225 GPD

- 18 proposed 3-bedroom homes = 18 homes x 225 GPD = 4,050 GPD

- Net increase = 4,050 GPD – 225 GPD = 3,825 GPD

The proposed use at the subject property will not generate a significant amount of sewage or be a water intensive use. Approval will be required from the NJDEP for a treatment works approval and water extension permit.

3. Utilities

Other Utilities such as electric, telephone, and cable are readily available, along Ann Street. Utilities provided to the site will be through underground conduit.

VI. RECOMMENDED ACTIONS AND MITIGATION

A. Overview

The proposed project has some potential environmental impacts for which mitigating measures should be examined.

B. Erosion and Sedimentation Control

Soil erosion and sedimentation are concerns where ground disturbance activities are proposed, even with relatively level terrain. Some soil loss is inevitable, but sound construction and post-construction practices must be implemented to mitigate adverse impacts.

From initial clearing and demolition through completion of the project, an erosion and sedimentation control program are required and must meet the specifications of the Morris County Soil Conservation District. The district will issue a certification and conduct regular inspections to ensure that conditions of the approval are being met and that erosion and sedimentation is not occurring.

Standard practices and any other measures necessary to ensure erosion control should be followed. These standard schedules and any adjustments agreed upon as a part of the approval from the district are viewed as an acceptable amount of soil loss. Upon completion of construction, measures to assure continued sediment and erosion control will be put in place. A final planting of approved grass seed mixtures, complete

with hay or straw mulch for stabilization, will be spread on exposed areas. A layer of topsoil will be spread before planting and mixed with fertilizer and ground limestone. The exposed areas are not large but require attention.

Vegetation removal should occur at one time from either the entire project or a defined phase, so soil is not exposed to erosional forces during one particular event. Erosion and sedimentation control measures designed for a denuded surface should be put in place uniformly. Coordinated vegetation removal is important to controlling erosion and shall comply with any applicable municipal requirements.

C. Stormwater Management and Groundwater Protection

Land disturbance and the construction of impervious surfaces at the subject property will result in changes to the stormwater runoff and groundwater recharge patterns at the site. Mitigation is required through the construction of stormwater management facilities that provide the necessary water quantity controls, groundwater recharge, and water quality treatment to meet state standards.

This project has been designed to comply with the NJDEP's stormwater management regulations at N.J.A.C. 7:8 and the municipality's stormwater management ordinance. This project will be reviewed by the Town of Dover Planning board engineer, Morris County Engineer, and Morris County Soil Conservation District to conform compliance

with the applicable standards and ensure that any stormwater impacts are appropriately mitigated.

VII. LICENSES, PERMITS, OTHER APPROVALS

Preliminary and Final Site Plan Approval	Town of Dover
Site Plan Approval	County Planning Board
Utility Opening Permit	County
Road Opening Permit	Town of Dover
Soil Erosion & Sediment Control Certification	Morris County Soil Conservation District
Building Permits	Town of Dover
Certificate of Occupancy	Town of Dover

VIII. SUMMARY OF RECOMMENDATIONS AND CONCLUSION

This application proposes to subdivide the subject property with 18 new home construction lots with 1 existing home lot to remain. The proposed development will be served by municipal water and sewer. A stormwater management system will ensure that stormwater impacts are mitigated to the state's standards.

The proposed site activities along with an analysis of project plans revealed a limited set of environmental concerns. The potential environmental issues are related to soil erosion during construction and stormwater runoff generated by the proposed development. regulations and standards at the state level define the acceptable limits of environmental impact.

IX. STATEMENT OF ALTERNATIVES

Alternatives considered for this project include the no build option, a scaled back site design, and the construction of facilities for an alternate use permitted in the R-1 single-family residential zone district.

The no build option leaves the site in its current, mostly vacant condition. Avoiding further development of the subject property would eliminate any potential environmental impacts from the project. However, as noted above, the potential environmental impacts can be effectively managed through proper construction practices, a comprehensive stormwater management plan and conformance with applicable requirements. Further, the proposed development meets the intent and requirements of the Town of Dover zoning ordinance and therefore, this type of development was contemplated by the municipality's master plan for this site. The no build option was rejected because with proper mitigation measures, the proposed development is reasonable, and a property owner has a right to reasonable use of the land.

The project as proposed is scaled back design. The existing property is 9.3 acres and there are 18 new home lots proposed with one existing home to remain, which puts the proposed density at about 2 lots per acre. If the minimum lot area of 7,500 SF were to be utilized, and estimating an acre for the right-of-way, the allowable density for the property would have a density of about 5 lots per acre. The project is also maintaining

approximately 33% of open space. Since this application meets regulatory requirements and minimizes environmental impacts by proper mitigation, a further scaled back design was also rejected because a property owner has a right to reasonable use of land.

Alternate uses of the property permitted in the R-1 single-family residential zone include, but are not limited to, parish houses, rectories, and community residences. The permitted alternate uses would require the construction of a driveway, parking area, building, site lighting, stormwater management facilities, water, and sewer systems. The potential environmental impacts associated with the proposed development would still be present with an alternate use at the site. Therefore, the construction of facilities for an alternate use at the site has been rejected because it would not change the environmental impacts or result in a development more in conformance with local regulations.

The project design as described in this report and accompanying materials was driven by zoning, land use ordinances, the municipal master plan, and applicable state and county regulations. Disturbance has been limited to the fullest extent practical and the proposed development will comply with the necessary local, county, and state standards. The present application is considered to be a reasonable land use at this location. The application reflects an awareness of environmental concerns as required in the Town of Dover Land Use and Zoning Ordinances.

X. REFERENCES

Dykstra Walker Design Group. 2026. Preliminary and Final Site plan.

Herman, Gregory C., et al. 1998. Aquifers of New Jersey

New Jersey Department of Environmental Protection New Jersey Geological and Water Survey. 2016

Stanford, Scott. D. 2006. Surficial Geology of the Dover Quadrangle Essex and Morris Counties, New Jersey.

Volkert, Richard A.. 2013. Bedrock Geologic Map of the Morristown Quadrangle, Essex and Morris Counties, New Jersey.

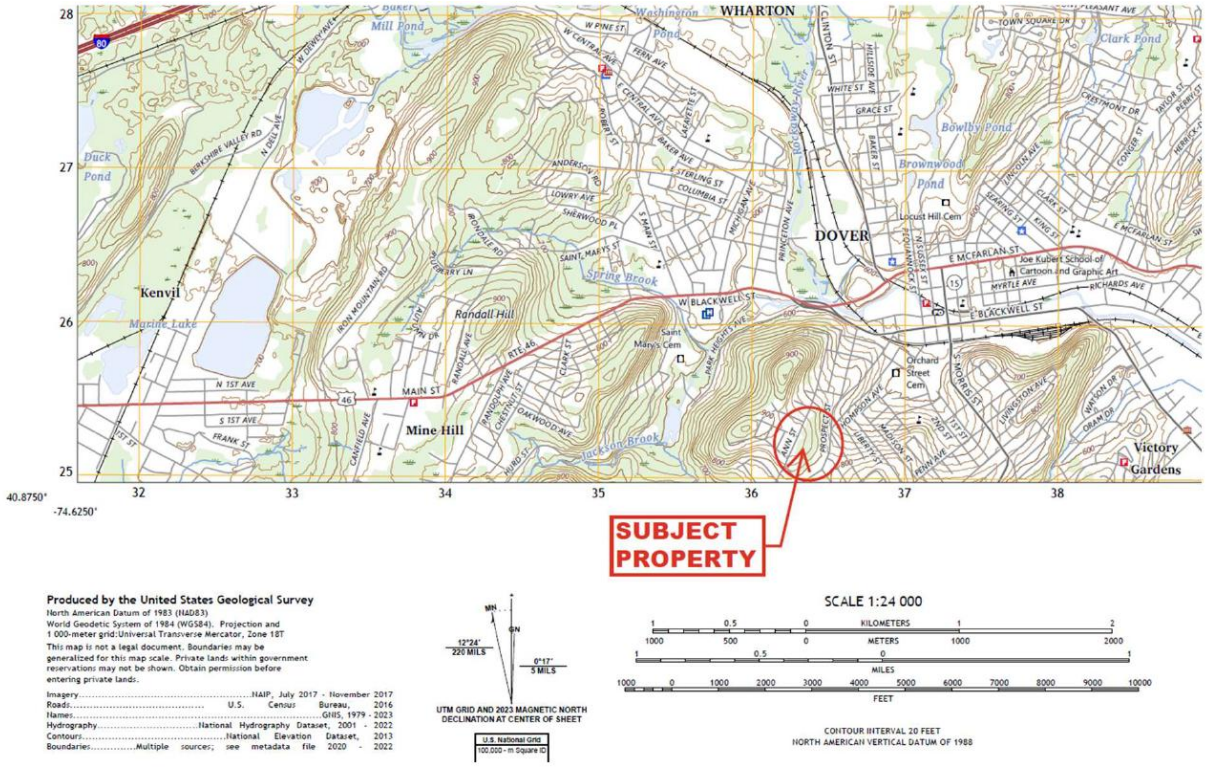
Voicu, Alexandry and Listokin, David. 2018. Who Lives in New Jersey Housing? Rutgers, The State University of New Jersey.

APPENDIX A – SITE PHOTOGRPAH

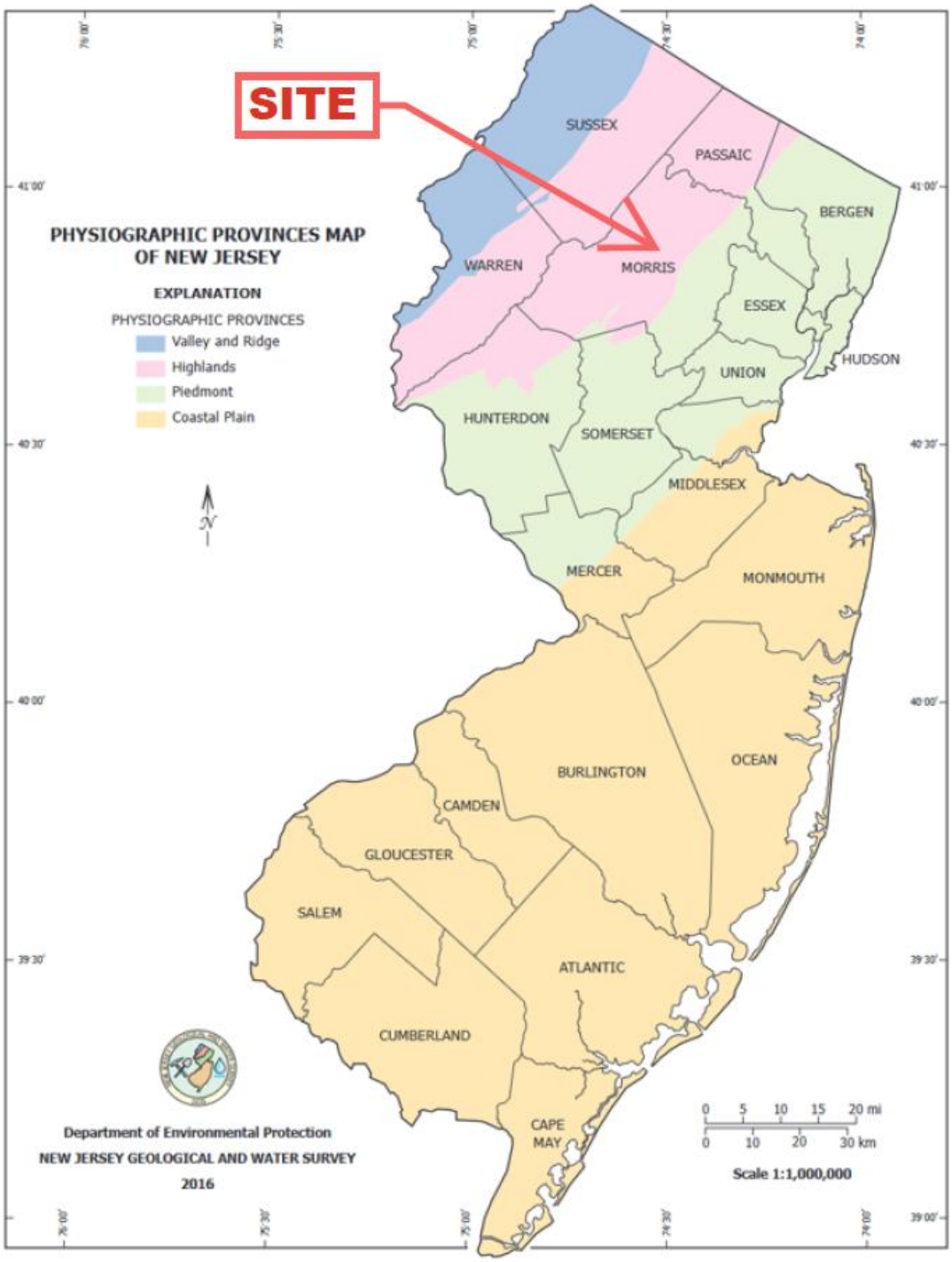
21 BOWLING GREEN PARKWAY, SUITE 204 • LAKE HOPATCONG, NJ 07849
PHONE (973) 663-6540 • FAX (973) 663-0042 • www.dykstrawalker.com
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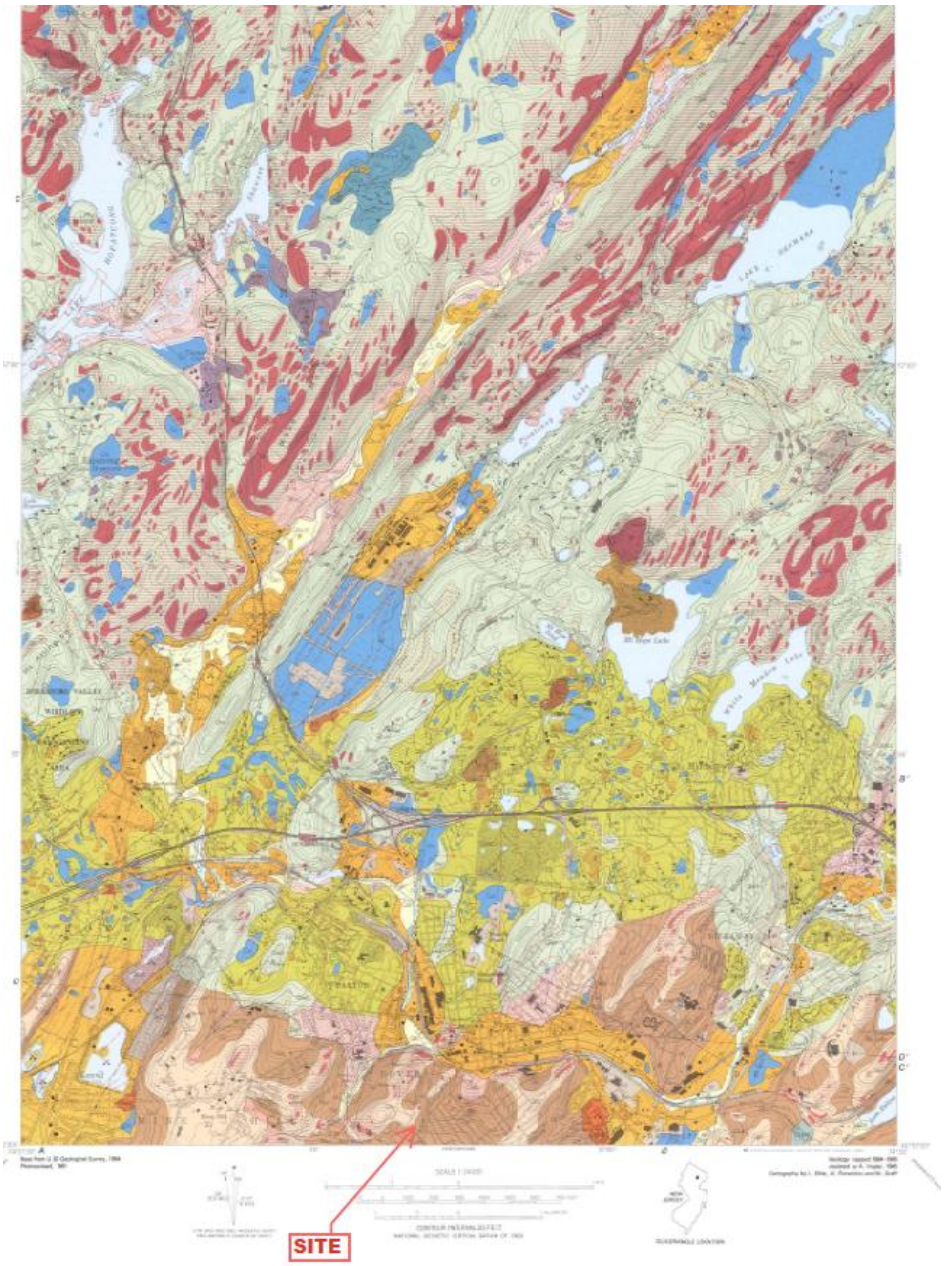


APPENDIX B – QUADRANGLE MAPS

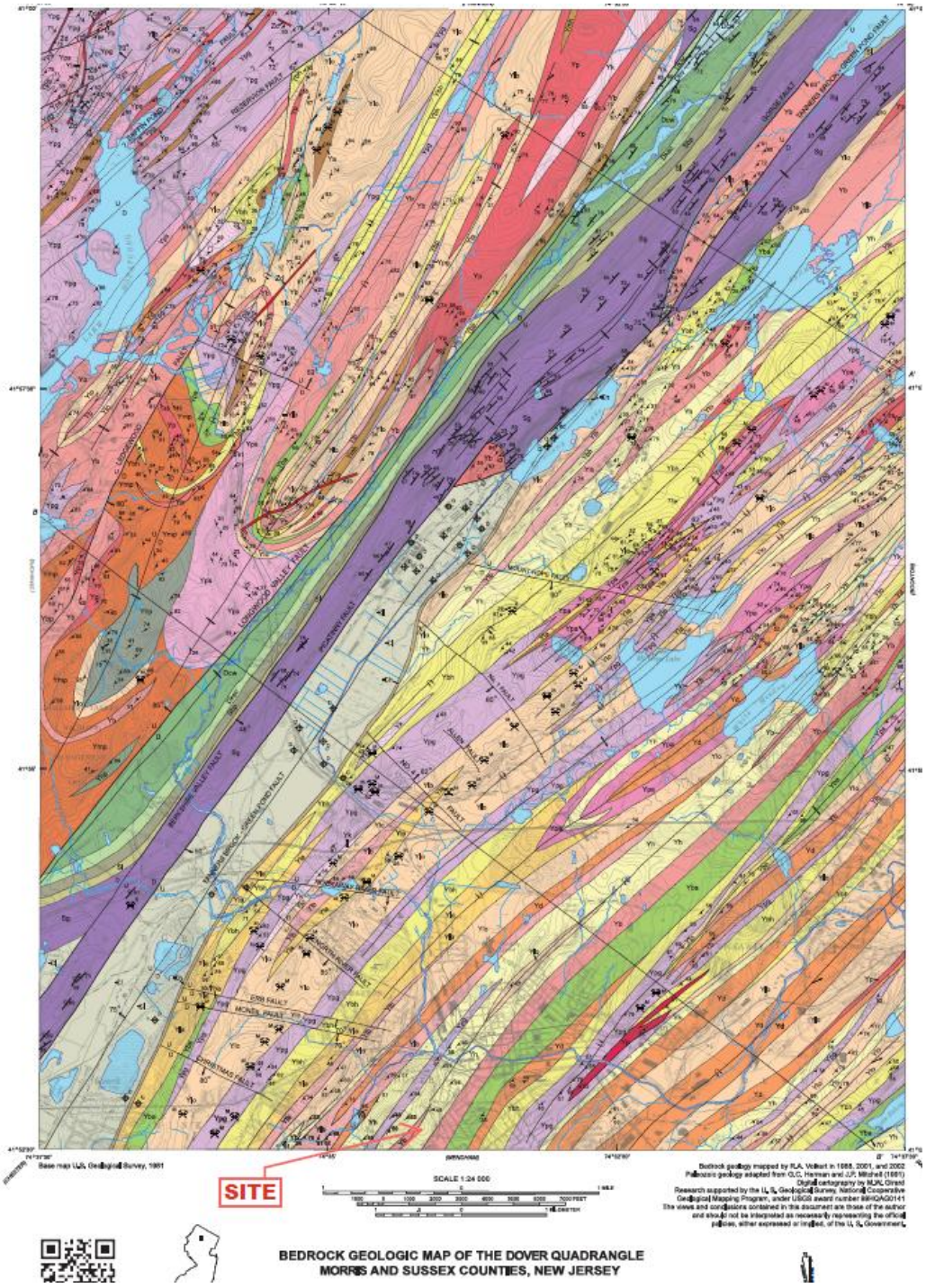


USGS DOVER QUADRANGLE

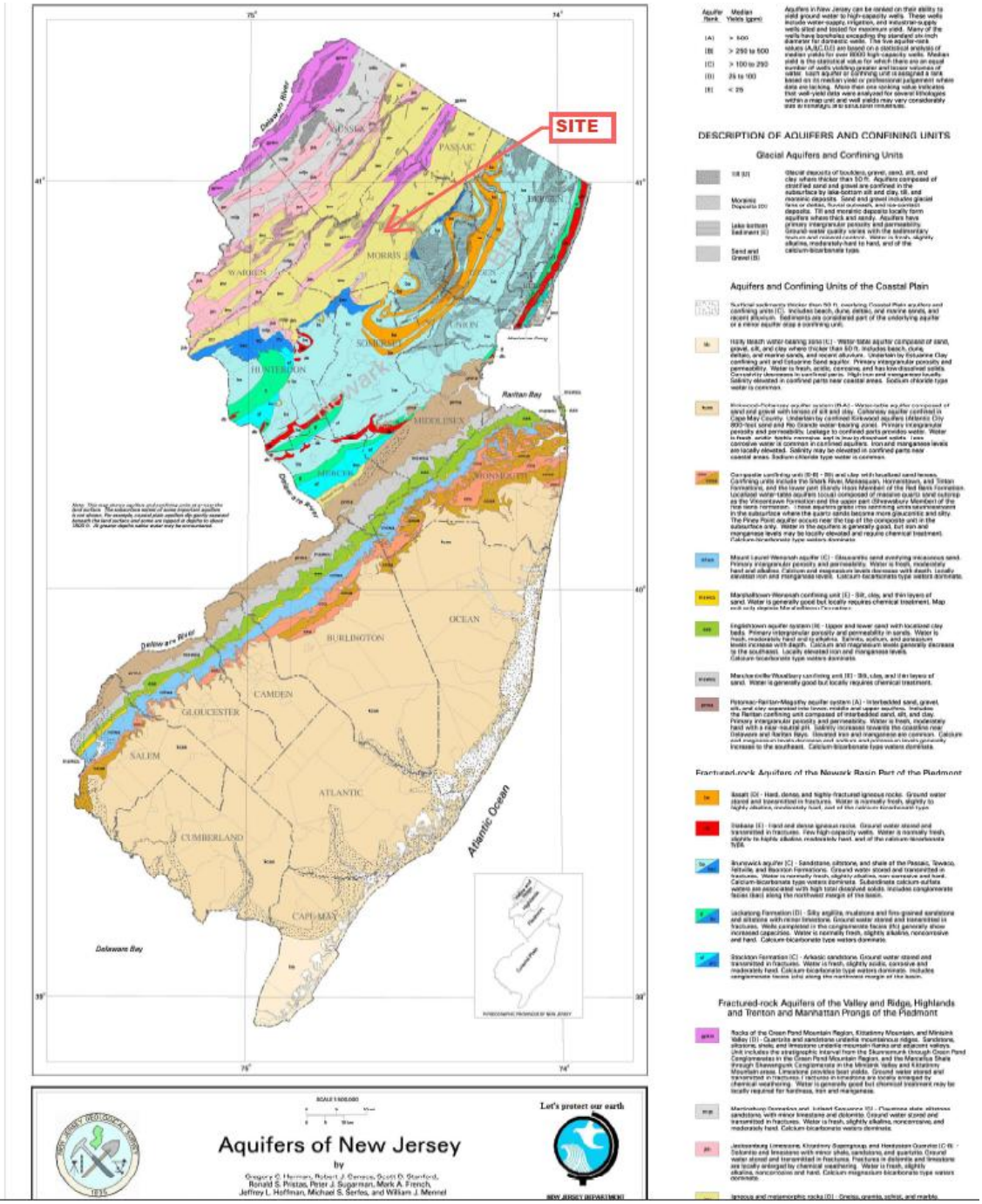

SITE
PHYSIOGRAPHIC PROVINCES MAP
OF NEW JERSEY
EXPLANATION
PHYSIOGRAPHIC PROVINCES
Valley and Ridge
Highlands
Piedmont
Coastal Plain
SUSSEX
PASSAIC
BERGEN
WARREN
MORRIS
ESSEX
HUDSON
UNION
HUNTERDON
SOMERSET
MIDDLESEX
MERCER
MONMOUTH
BURLINGTON
OCEAN
CAMDEN
GLOUCESTER
SALEM
ATLANTIC
CUMBERLAND
CAPE
MAY
Department of Environmental Protection
NEW JERSEY GEOLOGICAL AND WATER SURVEY
2016
0 5 10 15 20 mi
0 10 20 30 km
Scale 1:1,000,000



SURFICIAL GEOLOGY OF THE DOVER QUADRANGLE,
NEW JERSEY
by
Scott D Stanford
1989


SITE
SCALE 1:24 000
BEDROCK GEOLOGIC MAP OF THE DOVER QUADRANGLE
MORRIS AND SUSSEX COUNTIES, NEW JERSEY

DYKSTRA WALKER DESIGN GROUP



APPENDIX C – SOILS INFORMATION


Soil Map—Morris County, New Jersey
PauCc
USGKAC
PaoC
PauCc
PauDc
USGKAC
Prospect
Madison St
Thompson Ave
Liberty St
Grant St
Audrey Pl
Clarendon Ter
Ann St
Soil Map may not be valid at this scale.
Map Scale: 1:3,070 if printed on A landscape (11" x 8.5") sheet.
Meters
0 45 90 180 270
Feet
0 100 200 400 600
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84
Natural Resources Conservation Service
Web Soil Survey
National Cooperative Soil Survey
7/9/2026
Page 1 of 3

APPENDIX D – FLOOD MAPPING


ZONE AE
BONNET VIEW DRIVE
JARONE STREET
DRAKE AVENUE
BASSETT HIGHWAY
Township of
Mine Hill
340550
Town of
Dover
340340
Township of
Randolph
340355
SITE
LIMIT OF STUDY
745000 FT
40° 52' 30"
74° 35' 37.5"
74° 33' 45"

APPENDIX E – NATURAL HERITAGE DATABASE

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE PARKS, FORESTS & HISTORIC SITES
OFFICE OF NATURAL LANDS MANAGEMENT
501 East State Street
P.O. Box 420, Mail Code 501-04
Trenton, New Jersey 08625-0420
Tel. (609) 984-1339 * Fax (609) 984-1427
https://dep.nj.gov/parksandforests/conservation/natural-lands/

Mikie Sherrill
Governor

Ed Potosnak
Commissioner

October 14, 2026

James Young
Dykstra Walker Design Group
21 Bowling Green Parkway, Suite 204
Lake Hopatcong, NJ 07849

Re: 180 Ann Street
Block(s) - 407, Lot(s) - 1, 2
Dover Town, Morris County

James Young:

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

We have checked the Landscape Project habitat mapping for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Biotics 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 for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Biotics 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 for all occurrences of rare wildlife species or wildlife habitat within one mile of the referenced site. Please refer to Table 3 (attached) to determine if any rare wildlife species or wildlife habitat is documented within one mile of the project site. Detailed reports are provided for each category coded as 'Yes' in Table 3. These reports may include species that have also been documented on the project site.

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

provided for each category coded as 'Yes' in Table 3. These reports may include species that have also been documented on, or in the immediate vicinity of, the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1, 2 and 3 (attached) to determine if any priority sites are located on, in the immediate vicinity, or within one mile of the project site.

A list of rare plant species and ecological communities that have been documented from the county (or counties), referenced above, can be downloaded from https://nj.gov/dep/parksandforests/natural/heritage/database.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 https://dep.nj.gov/wp-content/uploads/parksandforests/nhpcodes_2010.pdf.

Beginning January 6, 2025, the Natural Heritage Program reports for wildlife species will utilize data from Landscape Project Version 3.4. 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://experience.arcgis.com/experience/24e1435701b94fbab4fa7f789b2efad9/, or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

Occurrences of Bald Eagle nest and roost habitat have "special concern" rank and are included in Landscape Project Version 3.4. The DEP also recognizes that the U.S. Fish & Wildlife Service maintains additional jurisdiction pursuant to the Bald and Golden Eagle Protection Act (BGEPA). They provide guidance to avoid negative impacts in the "National Bald Eagle Management Guidelines" document found at https://www.fws.gov/sites/default/files/documents/national-bald-eagle-management-guidelines_0.pdf. They also provide a screening tool to help identify activities that may require a Federal permit, at https://www.fws.gov/media/northeast-bald-eagle-project-screening-form.

For occurrences of Osprey nests and other bird nests that persist year to year, active nests continue to be protected from disturbance that can result in "take" (i.e., disturbance that can cause abandonment or loss) pursuant to the NJ Endangered and Nongame Species Conservation Act (ENSCA) and the Federal Migratory Bird Treaty Act. As a result of delisting of Osprey to "stable" conservation status, Osprey nests are not represented in Landscape Project maps, but nest locations are available online at www.Osprey-Watch.org.

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.

Information supplied by the Natural Heritage Program summarizes existing data known to the program at the time of the request regarding the biological elements (species and/or ecological communities) or their locations. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

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

Sincerely,



Robert J. Cartica
Administrator

c: NHP File No. 26-4007485-38455

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

Report Name	Included	Number of Pages
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 3.4 Species Based Patches	Yes	1 page(s) included
4. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.4	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.4 Stream Habitat File	No	0 pages included

Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.4 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Mammalia								
	Indiana Myotis	Myotis sodalis	Active Season Sighting	5	Federally Listed Endangered	State Endangered	G2	S1

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

Report Name	Included	Number of Pages
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 3.4 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 3.4	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 3.4 Stream Habitat File	No	0 pages included

Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.4 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Insecta								
	Tiger Spiketail	Cordulegaster erronea	Territorial Display	2	NA	Special Concern	G4	S3
Mammalia								
	Indiana Myotis	Myotis sodalis	Active Season Sighting	5	Federally Listed Endangered	State Endangered	G2	S1
	Northern Myotis	Myotis septentrionalis	Active Season Sighting	5	Federally Listed Endangered	State Endangered	G2G3	S1

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

Report Name	Included	Number of Pages
1. Rare Plant Species Occurrences for Riparian Zone Width Determination (Flood Hazard Area Control Act Rule Appplication) - 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 3.4 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 3.4	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 3.4 Stream Habitat File	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 3.4 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
Amphibia								
	Spotted Salamander	Ambystoma maculatum	Occupied Habitat	2	NA	Special Concern	G5	S3
Aves								
	Bald Eagle	Haliaeetus leucocephalus	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Pied-billed Grebe	Podilymbus podiceps	Breeding Sighting-Confirmed	4	NA	State Endangered	G5	S1B,S3N
	Wood Thrush	Hylocichla mustelina	Breeding Sighting	2	NA	Special Concern	G4	S3B,S4N
Insecta								
	Tiger Spiketail	Cordulegaster erronea	Territorial Display	2	NA	Special Concern	G4	S3
Mammalia								
	Big Brown Bat	Eptesicus fuscus	Active Season Sighting	2	NA	Special Concern	G5	S3
	Bobcat	Lynx rufus	On Road	3	NA	State Threatened	G5	S2
	Indiana Myotis	Myotis sodalis	Active Season Sighting	5	Federally Listed Endangered	State Endangered	G2	S1

Rare Wildlife Species or Wildlife Habitat for Riparian Zone Width Determination
Within One Mile of the Project Site
Based on Search of Landscape Project 3.4 Species Based Patches

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Indiana Myotis	Myotis sodalis	Hibernaculum	5	Federally Listed Endangered	State Endangered	G2	S1
	Little Brown Myotis	Myotis lucifugus	Hibernaculum	4	NA	State Endangered	G3G4	S1
	Northern Myotis	Myotis septentrionalis	Active Season Sighting	5	Federally Listed Endangered	State Endangered	G2G3	S1
	Northern Myotis	Myotis septentrionalis	Hibernaculum	5	Federally Listed Endangered	State Endangered	G2G3	S1
	Tricolored Bat	Perimyotis subflavus	Hibernaculum	4	NA	State Endangered	G3G4	S1
Reptilia								
	Wood Turtle	Glyptemys insculpta	Occupied Habitat	3	NA	State Threatened	G2G3	S2