ENVIRONMENTAL IMPACT STATEMENT

MIXED-USE DEVELOPMENT
BLOCK 213.01, LOT 44
TOWNSHIP OF MARLBORO
MONMOUTH COUNTY, NEW JERSEY

MATRIXNEWORLD

Engineering Progress

Prepared For:

Marlboro Development Group
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Submitted To:

Township of Marlboro
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Matrix No. LD14-305

January 22, 2020

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1.0 EXECUTIVE SUMMARY

In accordance with the requirements of the Township of Marlboro Site Plan and Subdivision application guidelines (Ordinance section 220-159), an applicant is required to submit an Environmental Impact Statement (EIS) as part of a complete application. This EIS addresses potential environmental impacts associated with the application by the Marlboro Development Group ("Applicant") for a mixed-use development consisting of 85 townhome units, a 20-unit affordable housing apartment building, an 8,000 sf retail building and a 4,000 sf retail building. Per Township tax records, the subject site is identified as Block 213.01, Lot 44 and is located in the new Generational Housing (GH-1) district with the underlying zone being the Village Commercial District (C1).

This EIS examines the existing environmental conditions at the subject site. In addition, the EIS provides an evaluation and assessment of impacts of the proposed development on the environment.

The site is currently vacant and partially covered with trees. The site was previously utilized for agriculture and based upon review of historical aerials the site began to become naturally vegetated in the mid-2000s. The site contains wetlands and to-date Matrix has received a Freshwater Wetlands Letter of Interpretation permit/approval for the proposed property from the NJDEP Division of Land Use Regulation. Based upon review of the Flood Insurance Rate Map (FIRM), the site is not located within any flood hazard areas. The environmental constraints are discussed in more detail within the report. The proposed development will require a Wetland Statewide General Permit for filling of isolated wetlands and a Wetland Transition Area Waiver (averaging plan) from the NJDEP.

This EIS concludes that the development of the proposed development is not anticipated to cause any significant or adverse on-site or off-site environmental impacts for the reasons outlined in this report.

2.0 PROJECT DESCRIPTION

2.1 Site Description and Surrounding Land Uses

The subject site is bound by Stevenson Drive to the north, Bucks Lane to the south, North Main Street (N.J.S.H. Route 79) to the west, and the Henry Hudson Trail to the east. Township tax records identify the subject site as Block 213.01, Lot 44 and having a lot area of approximately 13.8 acres, the site was historically utilized for agricultural uses until sometime in the mid-2000s when the site was left to revegetate naturally and is now covered with areas of shrubs, trees and grasslands.

Surrounding developments includes Marlboro Motors on the adjacent lot to the south, the Henry Hudson Trail and then residential to the east, vacant land across Stevenson Drive, and commercial/office uses and vacant land across North Main Street (NJSH Route 79). **Figure 1** is an aerial map and **Figure 3** is a tax map of the site.

The existing site's topography generally slopes towards the northern side of the property towards Stevenson Drive. Small portions of the site slope towards the existing wetlands located along the southern property line with Lot 45 and towards North Main Street. According to Web Soil Survey information for Monmouth County, New Jersey, made available by USDA Natural Resources Conservation Services, the project site soils consist of the following:

- *Adelphia loam (AdnA), HSG C*
- *Tinton loamy sand (ThgB), HSG A*
- *Tinton-urban land (ThhB), HSG A*

The site's existing trees/vegetation will be maintained as much as possible and a Tree Location and Removal Plan has been prepared as part of the site plans and shows how much vegetation will need to be removed as part of this project.

2.2 Zoning and Project Description

The subject site is in the Generational Housing (GH-1) zone and the use, bulk, design, and other requirements are outlined within the newly adopted "Generational Housing Districts" ordinance. The proposed uses are specifically permitted within the GH-1 zone and the proposed project will not require any variances.

As part of the proposed development, the tract will be subdivided into four (4) lots. The largest of these lots will contain 85 townhouse units, while the smaller lots will contain a 20-unit affordable housing apartment building, an 8,000 sf commercial building, and a 4,000 sf commercial building respectively. The proposed development includes the required amount of parking spaces for each use.

2.3 Operation of Proposed Project

Employment

The proposed development will contain approximately 12,000 sf of retail/commercial spaces which is estimated to require approximately 30 potential employees on-site. The affordable housing apartment building is anticipated to require a handful of employees for maintenance and oversight.

Noise

Site sound emissions from this facility are regulated by State and local noise codes. The State of New Jersey Noise Control Regulation, found at N.J.A.C. 7:29 Noise Control, generally requires that steady sound from commercial properties contribute no more than 65 dB(A) at the property line of any residential or commercial receptor. During the nighttime hours (2200-to-0700 hours), the limit drops to 50 dB(A) at residential receptors. Note that no code limits apply at vacant properties or rights-of-way.

The State regulation also provides limits in octave frequency bands that correspond to the 65 dB(A) and 50 dB(A) A-weighted limits. These frequency bands cover the audible spectrum,

from low-pitched sounds to high. The limits are more permissive at lower frequencies because the human hearing mechanism is less sensitive at low frequencies.

The Township of Marlboro discusses noise in Ordinance Chapter 241: Noise. This ordinance section includes provisions that exempt construction noise that occurs during approved town hours. Construction occurring outside of those hours must meet code limits.

Proposed Mitigation Measures:

All construction phase work will occur within the allowable town hours, the non-noise-sensitive daytime hours, to minimize impacts on surrounding properties. As feasible, construction noise mitigation techniques include:

- Limiting the number of equipment operating near one receptor at a given time to avoid exposing any one receptor to high sound levels for an extended period
- Locating stationary equipment such as generators, compressors, and office trailers away from receptors to the extent possible
- Avoiding having construction parking or laydown areas near receptors

Specific noise issues can be individually evaluated for tailored noise mitigation recommend-dations should traditional methods above not be sufficient.

When the buildings are operational, site sound emissions will comprise steady sound from rooftop HVAC equipment and intermittent on-site vehicle activity noise from cars and trash collection vehicles. HVAC noise is low in level, not anticipated to cause any noise issues, and will fully comply with State and local noise code limits. The proposed commercial/retail uses are not proposed near any existing residential uses but will be adjacent to the proposed residential uses. The proposed development meets all the required setbacks and extensive landscape buffering is proposed between the commercial uses and the Townhouse development. It is also noted that the proposed commercial/retail uses will be subject to operating between the hours permitted by the Township and it is not anticipated that the businesses will be open late night or very early morning.

Operation of the site is expected to comply with all State and local noise code limits.

Air Quality

Air pollution can damage vegetation, corrode buildings and bridges, soil clothes, and create health hazards to humans and animals. Sources of air pollution include industrial emissions, car and truck traffic, and heating equipment. Mobile source automobile traffic and diesel truck traffic can result in potential emissions of carbon monoxide, particulate matter and nitrogen oxides. These three pollutants are classified as "criteria air pollutants" by the U.S. Environmental Protection Agency (USEPA).

The Clean Air Act requires the USEPA to set National Ambient Air Quality Standards (NAAQS) for six "criteria air pollutants". The Clean Air Act identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The current NAAQS can be found in the table below (Source - : (https://www.epa.gov/criteria-air-pollutants/naaqs-table) website visited 12/10/19.

POLLUTANT	AVERAGING PERIOD	PRIMARY NAAQS	SECONDARY NAAQS	FORM
NO_2	1-hour	100 ppb		98th percentile of 1-hour daily maximum concentrations averaged over 3 years
	Annual	53 ppb	53 ppb	Annual mean, never to be exceeded
CO	1-hour	35 ppm		Not to be exceeded more than once per year
	8-hour	9 ppm		Not to be exceeded more than once per year

POLLUTANT	AVERAGING PERIOD	PRIMARY NAAQS	SECONDARY NAAQS	FORM
SO_2	1-hour	75 ppb		99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	3-hour		0.5 ppb	Not to be exceeded more than once per year
Ozone (O3)	8-hour	.070 ppm	.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
$PM_{2.5}$	24-hour	35 $\mu g/m^3$	35 $\mu g/m^3$	98th percentile, averaged over 3 years
	Annual	12 $\mu g/m^3$	15 $\mu g/m^3$	Annual mean, averaged over 3 years

The potential impact of emissions from adjacent roads and from on-site traffic will be additive to the prevailing background concentrations in the area. The background levels of each pollutant of concern can be conservatively estimated by looking at ambient air quality monitoring conducted by the New Jersey Department of Environmental Protection (NJDEP). The NJDEP publishes an annual report summarizing air quality conditions throughout the state. The NJ air quality monitoring station closest to the Subject Site is at Rutgers University in New Brunswick, which is located approximately 17 miles from the Subject Site. The Rutgers station does not test for all applicable pollutants and therefore where required, the Elizabeth Station was utilized. The data collected by this monitoring station should be representative of the ambient air quality at the Subject Site in Marlboro since the monitoring station is in relative proximity to the Subject Site. Data gathered at this station indicates that existing regional area air quality complies with the current NAAQS. Ambient air quality monitoring data collected at the Rutgers and Elizabeth stations for 2018 can be found in the table below (Source: 2018 Air Quality Report located at www.njaqinow.net).

POLLUTANT	AVERAGING PERIOD	NJ AMBIENT AIR MONITORING CONCENTRATION	LOCATION AND FORM
NO_2	1-hour	41 ppb	Rutgers University 3-yr avg 98th percentile
	Annual	8 ppb	Rutgers University Avg
CO	1-hour	2.8 ppm	Elizabeth 2nd highest*
	8-hour	2.7 ppm	Elizabeth 2nd highest*
SO_2	1-hour	4.6 ppb	Elizabeth 3-yr avg 99th percentile*
	3-hour	0.0051 ppm	Elizabeth 2nd highest*
Ozone (O3)	8-hour	0.080 ppm	Rutgers University, highest daily maximum
$PM_{2.5}$	24-hour	19 $\mu g/m^3$	Rutgers University 3-yr avg 98th percentile
	Annual	8.2 $\mu g/m^3$	Rutgers University average

***For Sulfur Dioxide (S02) and Carbon Dioxide (CO), Elizabeth station was used since no data available for the Rutgers University station**

The only exceedances recorded over the last year was on the Ozone standards at Rutgers station. It should be noted that the Rutgers Station is in a region of the state with many major highways converging and experiences a high volume of traffic and congestion almost daily.

Proposed Mitigation Measures: Any impact to ambient air quality will be associated with the construction of the project and a slight increase in traffic to the site upon the project's completion. Short term impacts are those impacts that will be experienced during the construction phase. Sources of pollution during construction include the increase in local truck traffic related to the delivery of materials and supplies, increased vehicular traffic related to the transport of workers to and from the site, and the use of heavy equipment for clearing, grading, and excavation. Dust generated by the grading and excavation activities can also contribute to the airborne particulate concentration. A final source of short-term air pollution will be fumes generated by the paving of roadways, parking lots, and related activities.

Long term impacts are those that will be experienced post-construction. There will be an increase in the number of vehicles on-site upon completion of the proposed development.

Although some traffic related pollutants are unavoidable, the overall impact to the ambient air quality is expected to be minimal. There will be no visible smoke or deleterious chemical changes produced in the atmosphere by heating or incinerating devices or by processing of any materials. Furthermore, by providing sufficient parking, the proposed expansion can limit or reduce the number of idling vehicles as they look or wait for a space to become available.

Glare, Vibration, Heat, Odor, and Water Pollution

There will be minimal to no glare, vibration, heat, odor, or water pollution from the operation of the proposed development.

Proposed Mitigation Measures: As no mitigation measures are anticipated to be required, no mitigation measures are proposed.

3.0 ASSESSMENT OF POTENTIAL IMPACTS

3.1 Subject Site

The Subject Site does contain environmental constraints as discussed previously which include the existing wetlands on site. The proposed site has been designed to fill the two (2) areas of wetlands and will require a transition area waiver for the wetlands area to remain. This work would be subject to NJDEP approval.

In addition, the proposed development has been designed to minimize any significant adverse impacts on environmental elements, such as soil erosion and to improve the stormwater management system to minimize any potential adverse impacts associated with stormwater.

Where necessary and possible, landscaping will be provided to enhance the appearance of the project. The design of the proposed project is depicted on the Site Plans submitted within the proposed development's application. Construction of the proposed project will be in accordance with applicable laws.

3.2 Potential Off-Site Impacts

The land use zoning for the site permits the proposed uses and the site is particularly suited to the use and is compatible with the surrounding development pattern. The project will not have an adverse impact on adjacent properties, the neighborhood, or the Township Master Plan. Potential off-site impacts pertaining to noise, air quality, and traffic are not anticipated due to project implementation. More detailed information regarding these aspects is included within previous sections of this Report for each topic noted above.

3.3 Natural Environment

As mentioned previously, this site was previously utilized for agricultural purposes and is most recently vacant with grasses and trees. This site does contain some environmental constraints in the form of the on-site wetlands. Please note that Matrix contacted the New Jersey Natural Heritage Program for information regarding presence of threatened or endangered species on or in the vicinity of the project site. Their report indicates that no T & E species or habitat will be impacted by the proposed development and it is noted that the approved NJDEP Wetlands LOI assigned 50-foot buffers and classified the wetlands as intermediate resource value wetlands which is indicative that the wetlands are not T&E habitat. As part of this development portions of the on-site wetlands area are proposed to be filled and a transition area waiver (TAWP) will be required and both are subject to NJDEP approval.

The proposed improvements will have their own on-site stormwater management measures that conform to local and State guidelines and are not anticipated to adversely impact the surrounding area. The project will comply with the Soil Erosion and Sediment Control Plan.

3.4 Traffic and Circulation

The Townhouse portion of the development has access via Stevenson Drive and Bucks Lane while the Commercial/retail and Affordable housing section will be accessed via North Main Street (NJSH Rt 79) and Stevenson Drive. Based upon the proposed use it is not anticipated that the development will have any significant negative impact on existing traffic conditions. A traffic

report has been prepared for the development and will be submitted under separate cover. The site parking and site circulation will allow for both trucks and cars to safely utilize the site.

3.5 Aesthetic Impact

A review of New Jersey and National Registers of Historic Places and NJDEP GEOweb indicates that there are no historic or archaeological resources within the proposed project area. The site is particularly suited to the use and is compatible with the surrounding development pattern. As mentioned previously, the landscaping proposed on-site is anticipated to significantly improve aesthetics. Based upon the information provided above, the proposed project is not anticipated to have an adverse visual impact on adjacent properties or the neighborhood and is in accordance with this aspect of the Township's Master Plan.

3.6 Utilities

Matrix is proposing new connections from the site to existing utilities, including sewer, water, electric, and gas.

3.7 Solid Waste Recycling and Disposal

Solid waste generated during the construction phase of the project will be disposed of off-site in accordance with all applicable State and local regulations. No open burning or landfilling on-site will occur.

Within the commercial and affordable housing sections, trash enclosures have been provided for collection of trash and recyclables. Within the Townhome section, trash and recyclables will be stored within each unit's garage and rolled out to the curb on collection day. In it envisioned that a private hauler will be utilized for the entire project.

3.8 Drainage

As noted in Section 3.3 above, there will be on-site stormwater management measures that conform to local and State guidelines. Proposed stormwater measures are addressed in a separate drainage report.

3.9 Permits/ Approvals

The following permits/approvals are expected to be required for this project:

- Township of Marlboro Land Use Planning Board
- Monmouth County Planning Board
- Local Sewer and Water
- NJDEP BWSE
- NJDEP TWA
- NJDOT
- NJDEP Freshwater Wetlands Letter of Interpretation- Approval received at this time
- NJDEP Statewide General Permit Application
- NJDEP Transition Area Averaging Waiver (averaging plan)
- Freehold Soil Erosion District
- Local Officials: Local police and fire will need to be consulted and their approval will be needed to make sure the site is in conformance with their standards. The project is not anticipated to cause any significant impact to the public services

4.0 ALTERNATIVES

4.1 No-Build

The subject property has been designated as an Affordable housing site for the Township and as part of the proposed development, 20 affordable apartment units will be constructed. The construction of these affordable units will benefit the Township. The proposed commercial/retail buildings will provide opportunities for new businesses within the Township which not only provides needed services but may provide jobs for residents.

4.2 Alternative Sites

The developer has owned this property for multiple decades and the site has also been designated by the Township for affordable housing, therefore, their obtaining an alternate site within the Township is not feasible.

4.3 Alternative Designs

Design alternatives are limited by the existing land use zoning requirements, shape of the property and the location of the wetlands.

5.0 CONCLUSION

The development of the project will be accomplished per local and State regulations governing engineering and environmental practices associated with projects of this nature. This mixed-use development has been designed to limit/avoid adverse impacts to the environment. The findings of the analysis included above indicate that the implementation of the proposed development is not anticipated to cause any significant adverse on-site or off-site environmental impacts.

6.0 REFERENCES

The following reference materials and agencies were consulted and/or utilized in conjunction with the preparation of this document.

Literature & Documents

1. New Jersey Department of Environmental Protection, 2018 New Jersey Air Quality Report.
2. New Jersey Department of Environmental Protection, Bureau of Air Monitoring. (www.njaqinow.net).
3. New Jersey Department of Environmental Protection, DataMiner.
4. New Jersey Department of Environmental Protection, GeoWeb.
5. New Jersey Department of Environmental Protection, New Jersey Geographic Information Systems Information.
6. National Park Service, National Register of Historic Places.
7. United States Environmental Protection Agency, Criteria Air Pollutants (NAAQS).
8. New Jersey Department of Environmental Protection, Noise Control Act.
9. Township of Marlboro, Municipal Code book and Generational Housing (GH-1) draft zoning.

FIGURES

Source:
- Imagery: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN and the GIS User Community.
- Soil Data: US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) SURGO Soils database (https://websoilsurvey.nrcs.usda.gov)

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AERIAL MAP

MATRIX NEW WORLD
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BLOCK 213.01, LOT 44
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MONMOUTH COUNTY, NEW JERSEY

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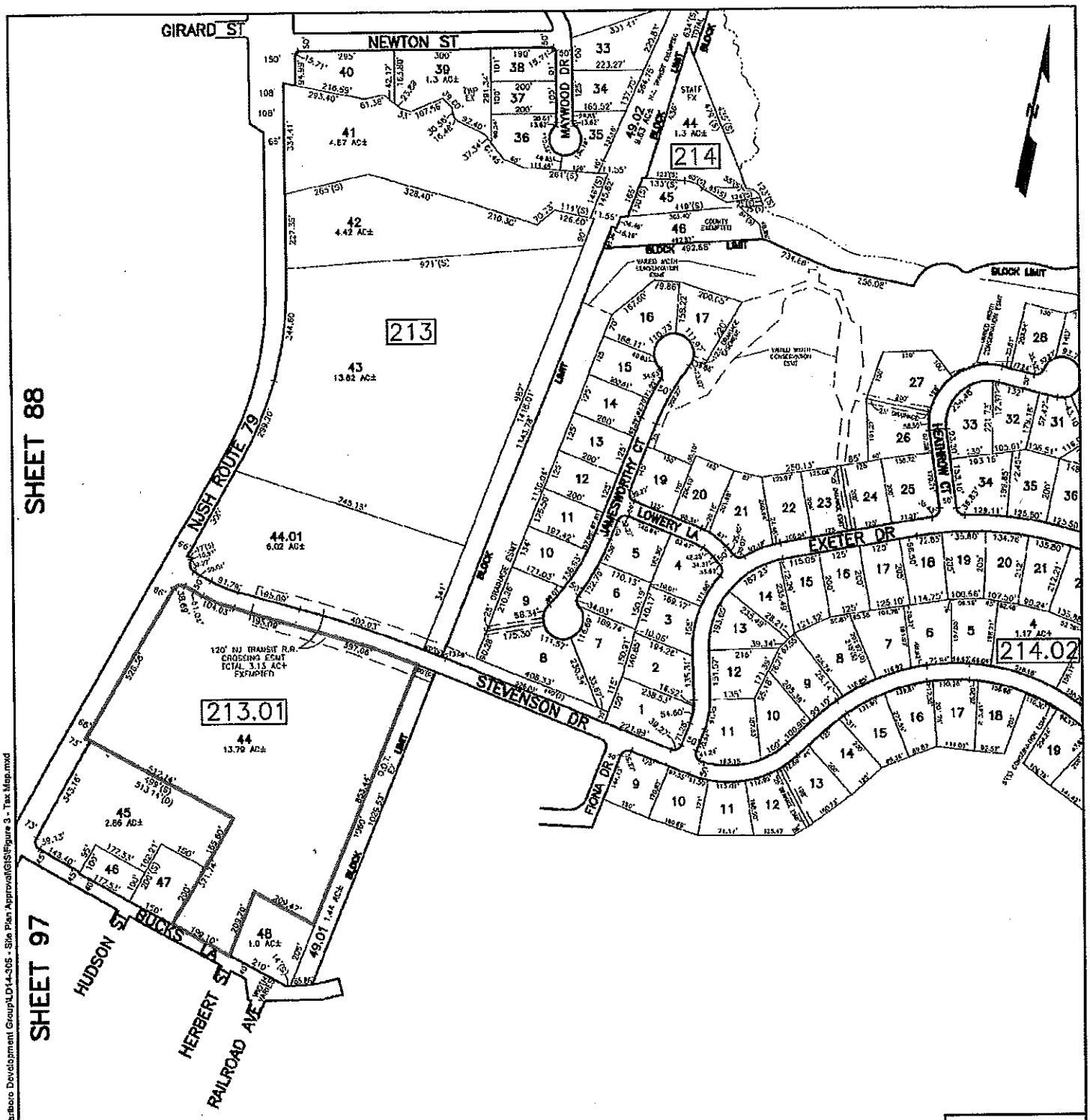

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MUNICIPAL TAX MAP

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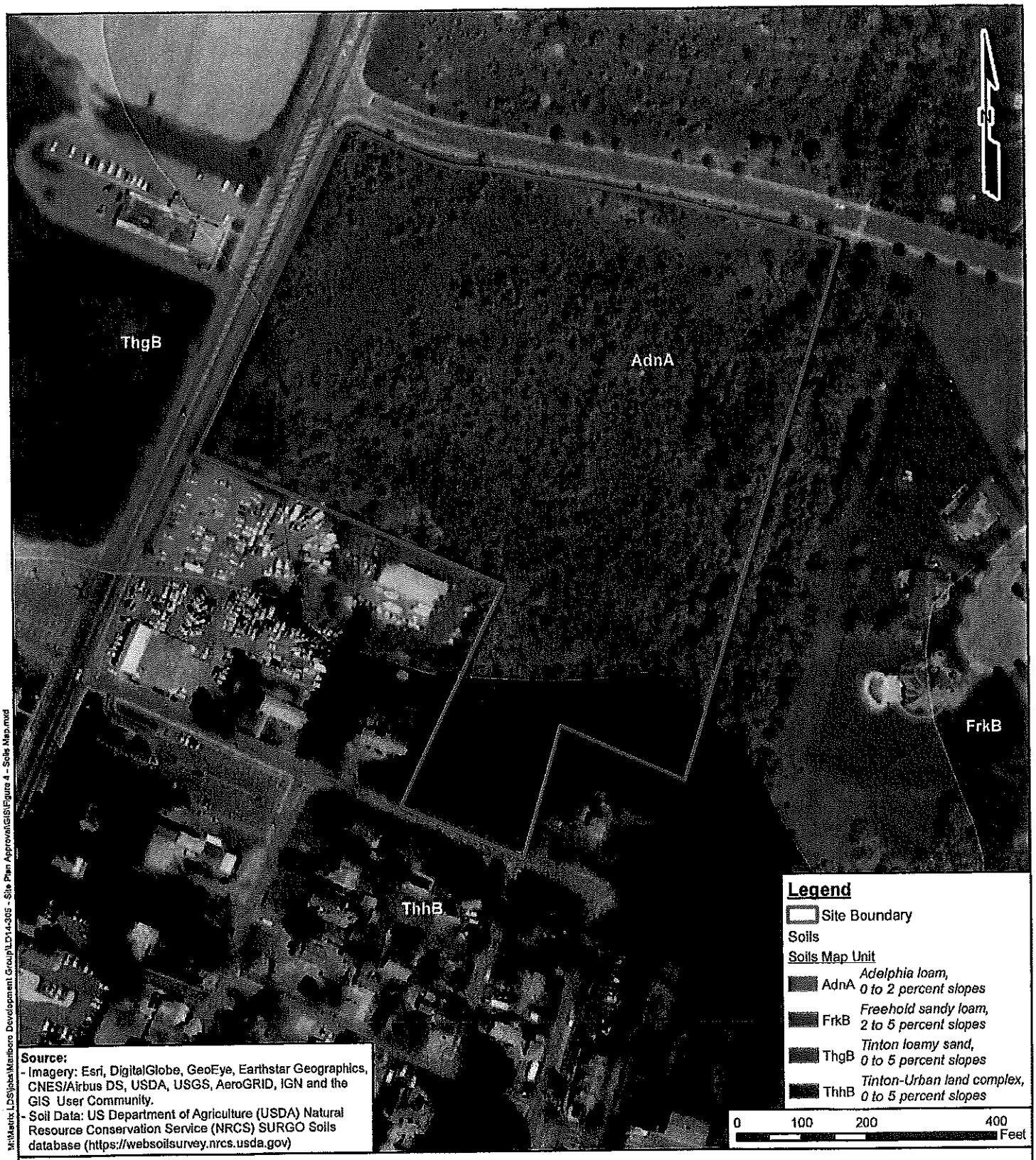

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- Imagery: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN and the GIS User Community.
- Soil Data: US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) SURGO Soils database (https://websoilsurvey.nrcs.usda.gov)

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USDA-NRCS SOIL SURVEY MAP

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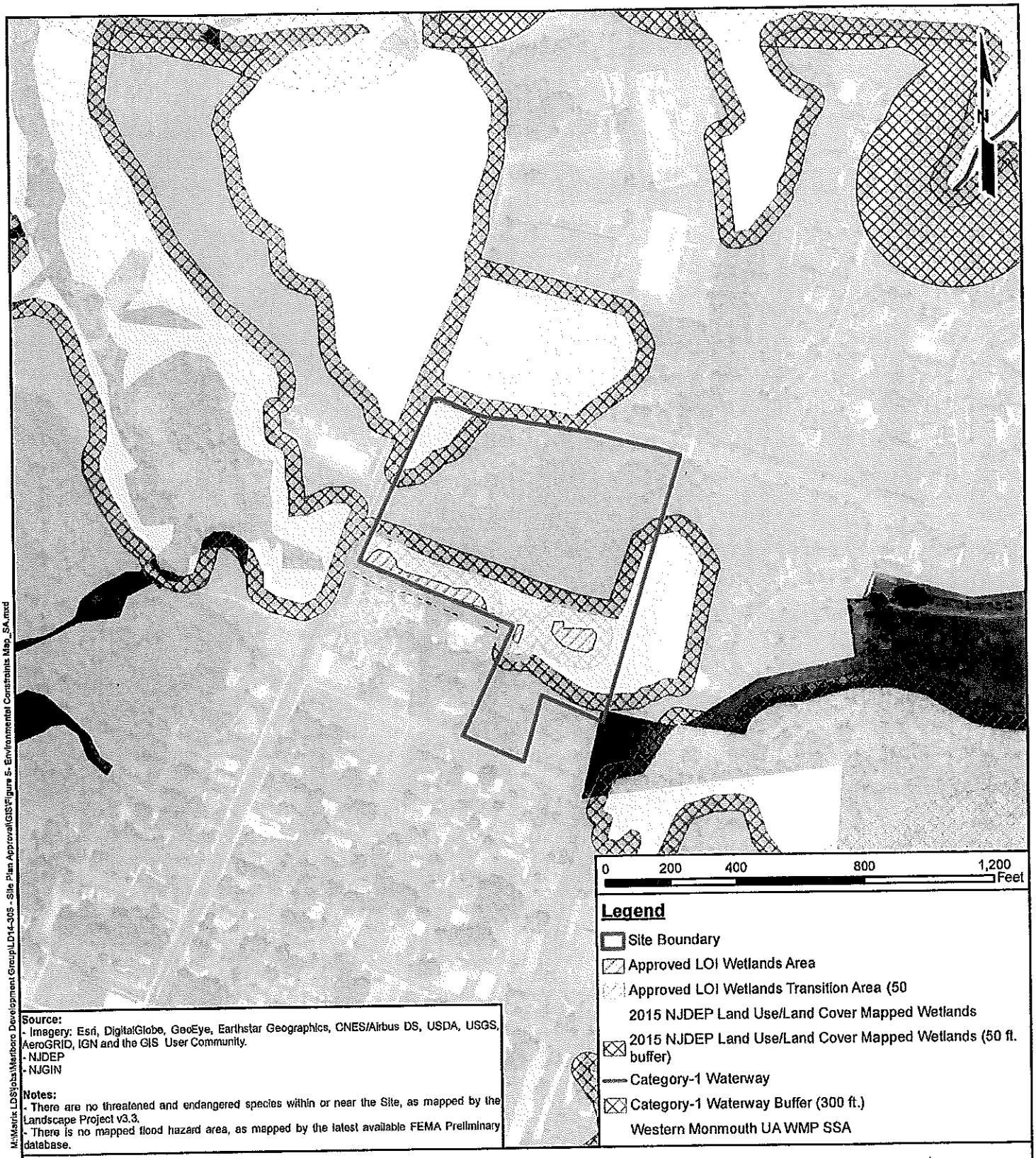

M:\Matrix LDS\Jobs\Marlboro Development Group\LD14-305 - Site Plan Approval\GIS\Figure 5- Environmental Constraints Map_SA.mxd

Source:
- Imagery: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN and the GIS User Community.
- NJDEP
- NJGIN

Notes:
- There are no threatened and endangered species within or near the Site, as mapped by the Landscape Project v3.3.
- There is no mapped flood hazard area, as mapped by the latest available FEMA Preliminary database.

ENVIRONMENTAL CONSTRAINTS MAP

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SCALE:	DATE:	JOB NO.:	DRAWN BY:	FIGURE NO.:
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