STONEFIELD

ENVIRONMENTAL IMPACT STATEMENT

PROPOSED RESIDENTIAL DEVELOPMENT
BLOCK 110, LOTS 2.02 TO 2.13
430 GROVE STREET
NORTH PLAINFIELD
SOMERSET, NEW JERSEY

PREPARED FOR:
VILLANI REALTY GROUP

PREPARED BY:
STONEFIELD ENGINEERING & DESIGN, LLC
92 PARK AVENUE
RUTHERFORD, NEW JERSEY

REPORT DATE:
MARCH 18, 2024

REVISION DATE:
MARCH 18, 2024

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REPORT CONTENTS

APPENDICES

1.0 PROJECT DESCRIPTION

Villani Realty Group is proposing to develop Block 110/Lots 2.02 to 2.13, commonly known as 430 Grove Street located along the northern side of Grove Street approximately 350 feet from the intersection with U.S Route 22. The subject property is located within the Villa Maria Redevelopment Plan. The proposed development has residential uses to the north, west and south and is undeveloped to the east. The total project area is 90,048 SF (2.07 acres).

The project site has been historically developed with a nursing facility including eight (2) two-story buildings and additional improvements such as a full movement driveway, off-street parking lot and walkways that have been removed since July 2020. The existing development on site currently consists of areas with asphalt pavement in poor condition located throughout the property. The project site will be cleared entirely as part of the proposed development. The proposed development includes the construction of eight (8) two-family attached residential buildings (32 units total), 63 off-street parking spaces inclusive of three ADA spaces and nine electric vehicle make-ready parking spaces. Additional improvements include an off-street parking area, pedestrian walkways, lighting, landscaping, utility services, and stormwater conveyance systems.

The project site is 2.07 acres, the extent of land disturbance is 2.42 acres, and 1.38 acres of new impervious surfaces will be created by the project.

Refer to **APPENDIX A** for project maps of the subject site.

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

2.0 INVENTORY OF EXISTING ENVIRONMENTAL CONDITIONS

SITE HISTORY, DEMOGRAPHICS, AND AESTHETICS

The project site has been historically developed with a nursing facility including eight (2) two-story buildings and additional improvements such as a full movement driveway, off-street parking lot and walkways that have been removed since July 2020. The existing development on site currently consists of areas with asphalt pavement in poor condition located throughout the property. The most recent NJDEP land use map (2015) classifies the majority of the site as Urban or Built-Up Land.

The site is located in the Metropolitan Planning Area (PA-1) State Planning Area and the Highlands Planning Area. There are no historic, scenic, or unique qualities on the subject site. The existing vacant site currently contributes no social or economic impacts to the community. The site is not identified as a Historic Archeological Site.

TRAFFIC INFRASTRUCTURE

The subject site is located along Grove Street. This section of U.S. Route 22 is under Somerset County jurisdiction. The site is approximately 350 feet from the intersection of Grove Street and U.S. Route 22. Currently, no vehicular access to the site exists. Please refer to the Traffic Assessment Report prepared by our office for detailed information.

SITE TOPOGRAPHY & HYDROLOGY

The high points of the project site are located along the northern property line. General high points range between 168 FT and 162 FT along the northern property line. The low points of the project site are located along the southeastern property line ranging from 122 FT and 119 FT. The overall elevation change across the site is approximately 48.0 FT. Sheet flow within Grove Street drains to the southeast, discharging into the U.S Route 22 stormwater system, which ultimately discharges to Stony Brook. On-site topography slopes to the southeast towards the adjacent undeveloped open space. Grades on site generally range from 3% to 13% within the paved and open space areas.

Currently stormwater runoff flows over land via sheet flow from the upland areas along the northern lot line towards the lowland along the southeastern property line. No formal stormwater management features exist along Grove Street. No formal stormwater management features exist on site currently. The site is located in the Lower Raritan, South River and Lawrence Watershed (Region 2, Area 09). The site is approximately 300 feet from Stony Brook to the southeast.

FLOODING AND/OR FLOOD PLAINS

Per NJDEP Stormwater regulations, the proposed development is outside the Stony Brook flood hazard area. Based on the effective FEMA flood insurance rate mapping (FEMA Map #34035C0089E issued September 28, 2007), the entirety of the site is not located within the 100-year flood plain. The site is located within Zone X and has a design flood elevation of 116.00 feet.

GEOLOGY & SOIL CHARACTERISTICS

Soil mapping was obtained from the National Resource Conservation Service (NRCS) for the project site and immediate area. The project site is underlain with one soil type described as well drained.

TABLE 1: NRCS SOIL MAPPING RESULTS

Soil Unit Code	Soil Description	Approximate Project Coverage	Drainage Class	Hydrologic Soil Group
DunC	Dunellen Sandy Loam 8% to 15% Slopes	100.0%	Well drained	A

Additional information regarding the NRCS soil mapping can be found in **APPENDIX B**.

A Test Pit Investigation report was performed by Johson Soils Company (report dated October 17, 2023), which consisted of four soil test pits being performed onsite. The soils onsite primarily consisted of topsoil and roots from depths of 0.0 to 2.0 feet below grade. Beneath the surface and fill materials, the native soils generally consisted of red brown silt with some fine sand clay to a depth of 10.0 feet below grade. No ground water was encountered, and no seasonal high-water table was encountered.

VEGETATION

The site is mainly covered by grass areas with some areas with asphalt pavement in poor conditions. The site currently contains some deciduous trees throughout.

THREATENED OR ENDANGERED SPECIES

Per NJ-Geoweb, there are no endangered or threatened fauna, flora, or habitats on-site.

WETLANDS

Per NJ-Geoweb, there are no wetlands located on-site. The site is approximately 850 feet from the closest wetlands to the south.

WATER SUPPLY

Water service for the project site is provided by the New Jersey American Water. A 6-inch clay water main is located running along the centerline of Grove Street with multiple water valves along the frontage of the development.

SEWERAGE FACILITIES

Wastewater collection is provided by the Borough of North Plainfield Water & Sewer Department. An 8-inch sanitary main is located running along Grove Street. Wastewater treatment is provided by the Lower Raritan Middlesex County Utility Authority Treatment Plant.

SOLID WASTE DISPOSAL

There is no solid waste disposal for the existing undeveloped site.

AIR QUALITY

No instances of air quality violations have been found within available NJDEP records for the project site. There are currently no activities taking place on the project site therefore compliance with the NJDEP Air Quality Standards outlined in NJAC 7:27 is maintained.

NOISE

As there is currently an absence of activity on the subject site, a study of the existing noise levels has not been performed. There is minimal noise generated and the largest contributor to decibel levels would be from the adjacent traffic along Grove Street.

3.0 ENVIRONMENTAL IMPACT ASSESSMENT

PROPOSED SITE DEVELOPMENT

The proposed development will consist of eight (8) two-family attached residential buildings (32 units total), 63 off-street parking spaces inclusive of three ADA spaces and nine electric vehicle make-ready parking spaces. Additional improvements include an off-street parking area, pedestrian walkways, lighting, landscaping, utility services, and stormwater conveyance systems. The site will be accessed via one (1) ingress driveway from Grove Street and one (1) egress driveway to Grove Street.

Refer to **APPENDIX A** for a half-size Overall Site Plan depicting the proposed project improvements.

TRAFFIC ASSESMENT

Trip generation projections for the proposed multi-family development were prepared utilizing the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition. Estimated traffic (trip) generation was

calculated based on the proposed development to determine that the roadway network will operate at acceptable levels of service post-development. In summary, the proposed development would not have a significant impact on the traffic operations of the adjacent roadway network. Refer to the Traffic Impact Assessment Report prepared by our office for additional information regarding the data collection and analyses.

TOPOGRAPHIC & HYDROLOGIC ASSESMENT

Under proposed conditions, the existing drainage patterns and point of interest will be generally maintained. The proposed grading layout has been designed to maintain gentle slopes around the developed portion of the site per RSIS standards and federal ADA regulations and to balance earthwork volumes.

A formal stormwater management design is proposed to mitigate the stormwater runoff volume and runoff quality associated with the increase in impervious coverage and motor vehicle surface in accordance with NJDEP and Borough of North Plainfield regulations. Refer to the Stormwater Management Report prepared by our office for detailed hydrologic and hydraulic calculations of the various proposed facilities.

FLOODING AND/OR FLOOD PLAINS

There are no flood plains located on-site. The proposed buildings are to be at a minimum 16.0 higher than the 100-year flood elevation of 116.0 feet for Stony Brook to the south of the property. Similarly, all the parking areas are proposed to be at minimum 5.0 feet higher than the 100-year flood elevation of 116.0 feet for Stony Brook to the south of the property.

GEOLOGIC AND SOIL ASSESMENT

Soil testing was performed by Johson Soils Company (report dated October 17, 2023), to determine site specific percolation rates and depth to bedrock. Friable rock within limits of earthwork will be removed as required with the means and methods to be determined prior to construction by the general contractor and municipal construction officials. Procedures will be enacted prior to construction (installation of silt fencing, installation of protective tree fencing, enforcement of low-pressure construction equipment, etc.) to ensure that soil compaction and soil erosion is minimized during the installation of the proposed site improvements. Post-development remedial efforts will be made to de-compact soils as required by the Somerset-Union County Soil Conservation District.

VEGETATIVE ASSESMENT

The proposed development will create an additional 1.37 acres of impervious surfaces. To mitigate the loss of vegetative/tree cover along the site frontage, the proposed development will preserve all-natural vegetation and tree cover along the street frontage to preserve a natural-looking landscape. Additionally, all trees that are regulated per the Borough's ordinance that are proposed to be removed will be replaced at the required ratio. A total of 2 shade trees, 4 deciduous trees, and 16 evergreen trees will be planted as part of the landscaping design along with

supplemental shrubs and native groundcover. Refer to the Landscaping Plan within the Preliminary & Final Major Site Plans prepared by our office for additional planting details.

THREATENED OR ENDANGERED SPECIES

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

WETLANDS

Per NJ-Geoweb, there are no wetlands located on-site.

WATER SUPPLY DEMAND

The estimated water demand for the project is 4,705 gallons per day based on standardized NJDEP estimates. The proposed water service will be provided through a connection to the existing water main located along Grove Street. The applicant is awaiting confirmation of water service capacity from New Jersey American Water. Refer to the Utility Plan within the Preliminary & Final Major Site Plans prepared by our office for specific details of the water infrastructure improvements.

SEWERAGE FACILITIES DEMAND

The estimated sewer flow for the project is 6,600 gallons per day based on standardized NJDEP estimates. Proposed sewer connection will be provided via a sanitary sewer connection to the existing sewer main located along the centerline of Grove Street. The applicant agrees to coordinate and confirm feasibility of proposed connection with the North Plainfield Water & Sewer Department. Refer to the Utility Plan within the Preliminary & Final Major Site Plans prepared by our office for specific details of the water infrastructure improvements.

SOLID WASTE DISPOSAL

Applicant agrees to coordinate solid waste disposal with the Borough of North Plainfield for trash and recycling pickup.

AIR QUALITY ASSESMENT

Based on the nature of the proposed development (residential) compliance with the NJDEP Air Quality Standards outlined in NJAC 7:27 will be maintained. The general contractor will be responsible for controlling air quality and dust control during construction in accordance with Somerset County Conservation District regulations.

NOISE CONTROL

Based on the nature of the proposed development (residential) compliance with the NJDEP Noise Control Standards outlined in NJAC 7:29 will be maintained. The general contractor will be responsible for controlling noise levels during construction in accordance with municipal noise ordinances.

4.0 UNAVOIDABLE ENVIRONMENTAL IMPACTS

AIR AND WATER QUALITY

Increased traffic is unavoidable as the project is part of an affordable housing settlement and the applicant is constructing the density and use outlined in the settlement. As outlined above, residential uses are relatively benign in regards to air quality impacts.

The majority of environmentally sensitive features and water features will be maintained. The project will comply with stormwater water quality requirements as outlined by the NJDEP and the Borough's ordinance.

PLANT, TREE, AND WILDLIFE SYSTEMS

Vegetative impacts are unavoidable as the project is part of an affordable housing settlement and the applicant is constructing the density and use outlined by the settlement. As outlined above, tree replacement and landscaping design is being performed per the requirements set forth in the municipal ordinance.

TRAFFIC

Approximately 18 new trips will be generated during the critical weekday evening peak hour. More than adequate parking facilities are proposed on-site to accommodate residents and visitors per North Plainfield's parking regulations. Based on Transportation Impact Analysis for Site Development published by ITE, a trip increase of less than 100 vehicle trips would likely not change the level of service of the adjacent roadway system or appreciably increase the volume-to-capacity ratio of an intersection approach.

SOCIAL AND ECONOMIC IMPACTS

The social and economic impacts were considered by the borough in the affordable housing settlement agreement.

5.0 STEPS TO MINIMIZE ENVIRONMENTAL IMPACTS

The development project enhances the subject site and minimizes environmental impacts by proposing the following:

- Preservation of existing trees where possible throughout the property;
- Replanting of trees and landscaping design regulated by the borough ordinance;

- Preservation of all existing vegetation along Grove Street and most other property lines in order to maintain a visually natural aesthetic;
- Installation of a landscaping design that improves site aesthetics and enhances existing green spaces which utilizes a mix of native plantings;
- Installation of a formal stormwater management design that incorporates structural conveyance systems to mitigate the increase in impervious coverage;
- Installation of a formal stormwater management design that incorporates structural conveyance systems to fulfill the water quality NJDEP requirements;
- Implementation of soil erosion and sediment control measures during and after construction in accordance with Somerset-Union County Soil Conservation District regulations;
- Adhering to necessary restrictions during construction to mitigate noise, dust pollution, and soil compaction;
- Providing more than adequate vehicular parking facilities and drive aisles to mitigate traffic impacts; and
- Installation of LED lighting fixtures in appropriate locations on site that mitigate light pollution and energy consumption.

6.0 LICENSES, PERMITS, AND APPROVALS REQUIRED

The following list of entitlements are anticipated to be acquired by the Developer in conjunction with this Application:

- Borough of North Plainfield
    - Preliminary & Final Major Site Plan Approval
    - Sewer Connection Permits
    - Building Permit
    - Road Opening Permit
- Somerset-Union County Soil Conservation District
    - Soil Erosion and Sediment Control Plan Certification
- New Jersey American Water
    - Water Connection Permits
- New Jersey Department of Environmental Protection
    - General Permit for Construction Activities
- New Jersey Department of Transportation
    - Stormwater Connection Permit

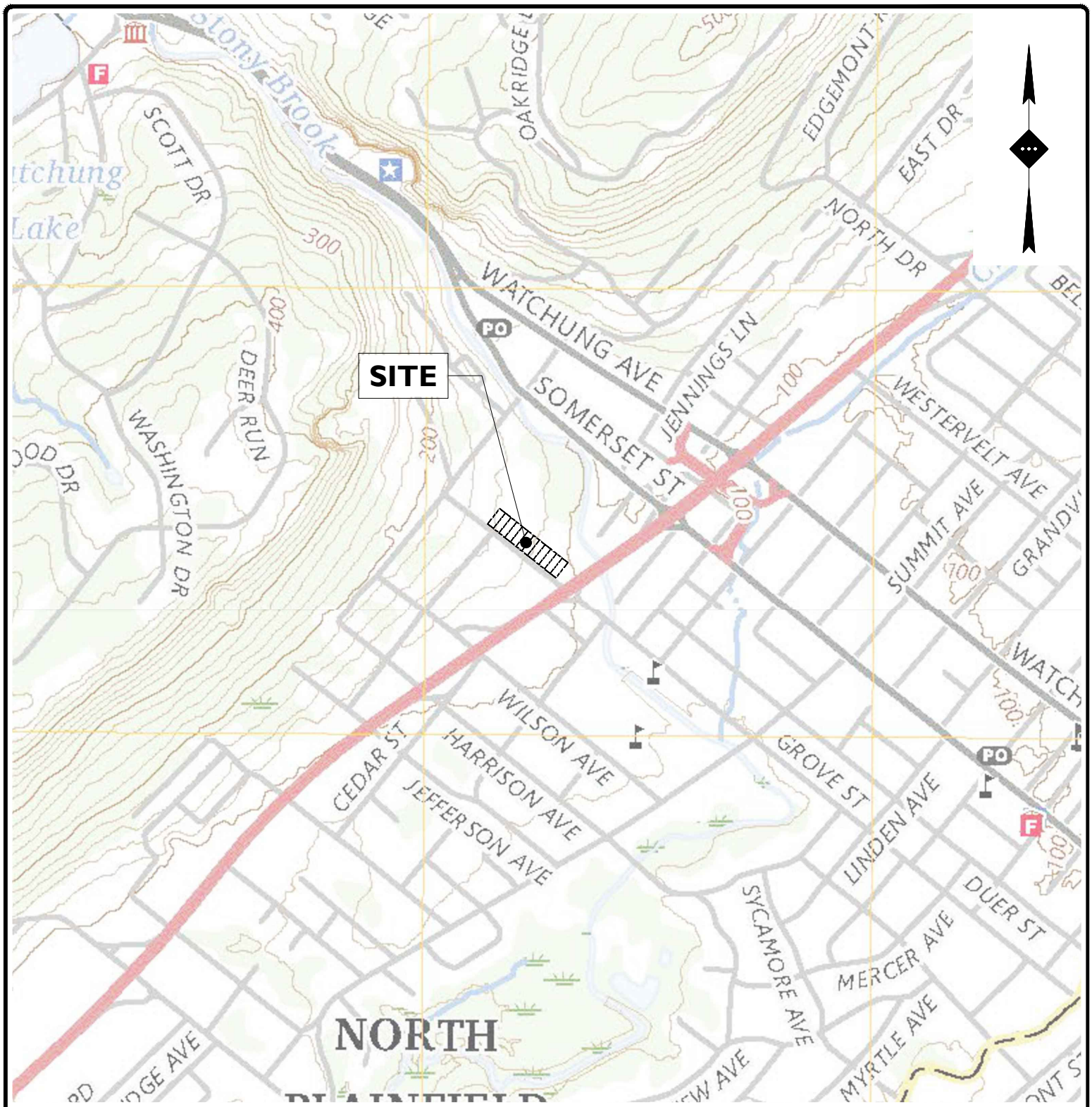
7.0 CONCLUSIONS

The proposed project has been designed to strike the right balance between meeting the obligations of the affordable housing settlement and minimizing tree removal, increased impervious coverage, increased traffic, and disturbance of natural vegetation and wildlife systems. Understanding the need to provide quality affordable housing within the municipality it is the opinion of our office that the impacts to the parcel are adequately mitigated.

APPENDIX A
PROJECT FIGURES

INVENTORY

APPENDIX B
NRCS SOILS REPORT



USGS QUADRANGLE MAP

1000' 0' 1000' 2000'

GRAPHIC SCALE IN FEET

1"= 1000'

SOURCE: USGS QUADRANGLE MAP, 7.5 MINUTE SERIES, CHATHAM, NJ, DATED 2023 & USGS QUADRANGLE MAP, 7.5 MINUTE SERIES, PLAINFEILD, NJ, DATED 2023

VILLANI REALTY GROUP

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BOROUGH OF NORTH PLAINFIELD, SOMERSET COUNTY, NEW JERSEY

DRAWN BY:	AMR
CHECKED BY:	SZ
DATE:	02/26/2024
SCALE:	1" = 1000'
PROJECT ID:	PRI-230101

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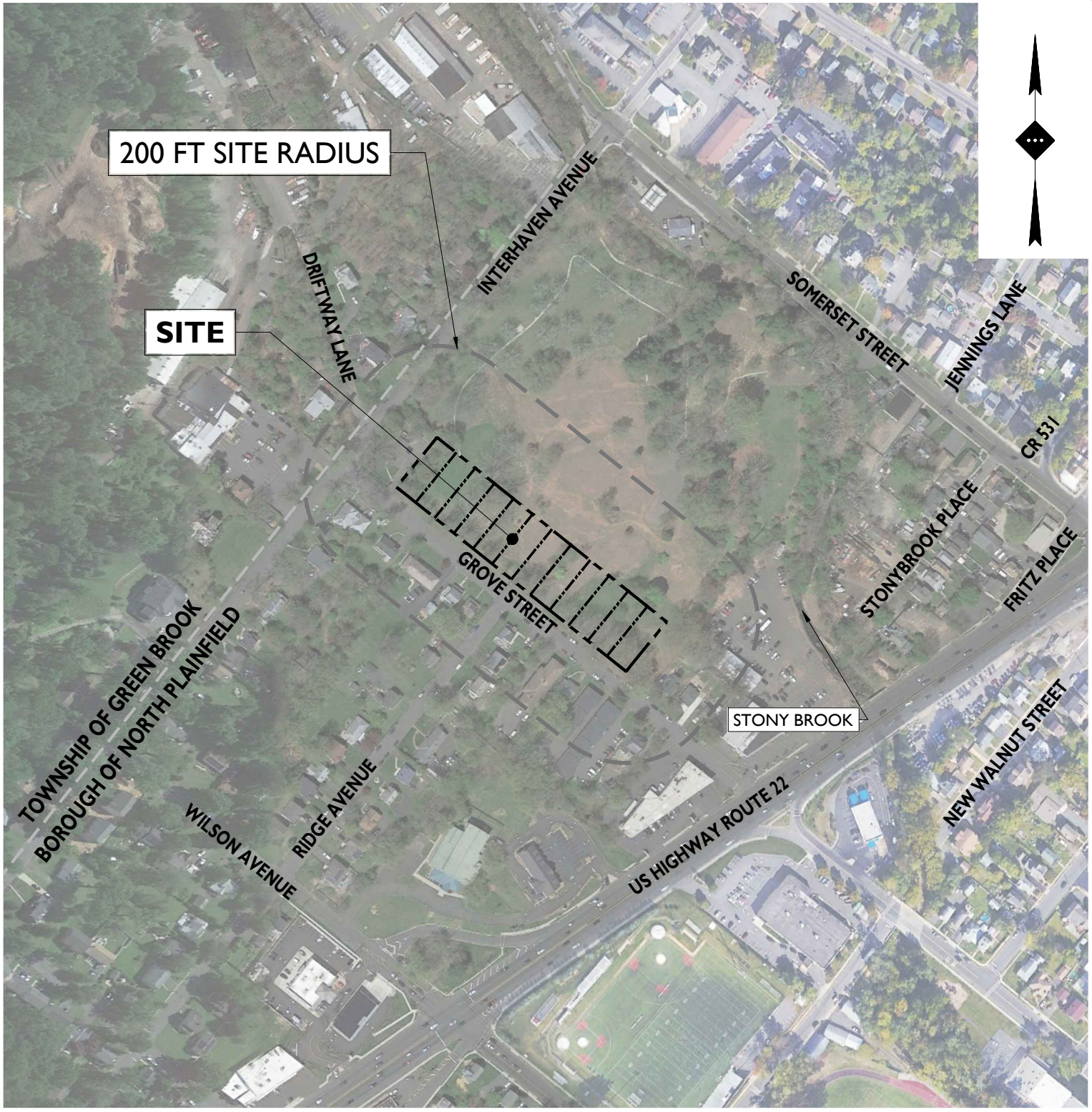

AERIAL MAP

300' 0' 300' 600'

GRAPHIC SCALE IN FEET

1"= 300'

SOURCE: GOOGLE EARTH PRO, IMAGE DATED 06/05/2022, RETRIEVED 10/09/2023

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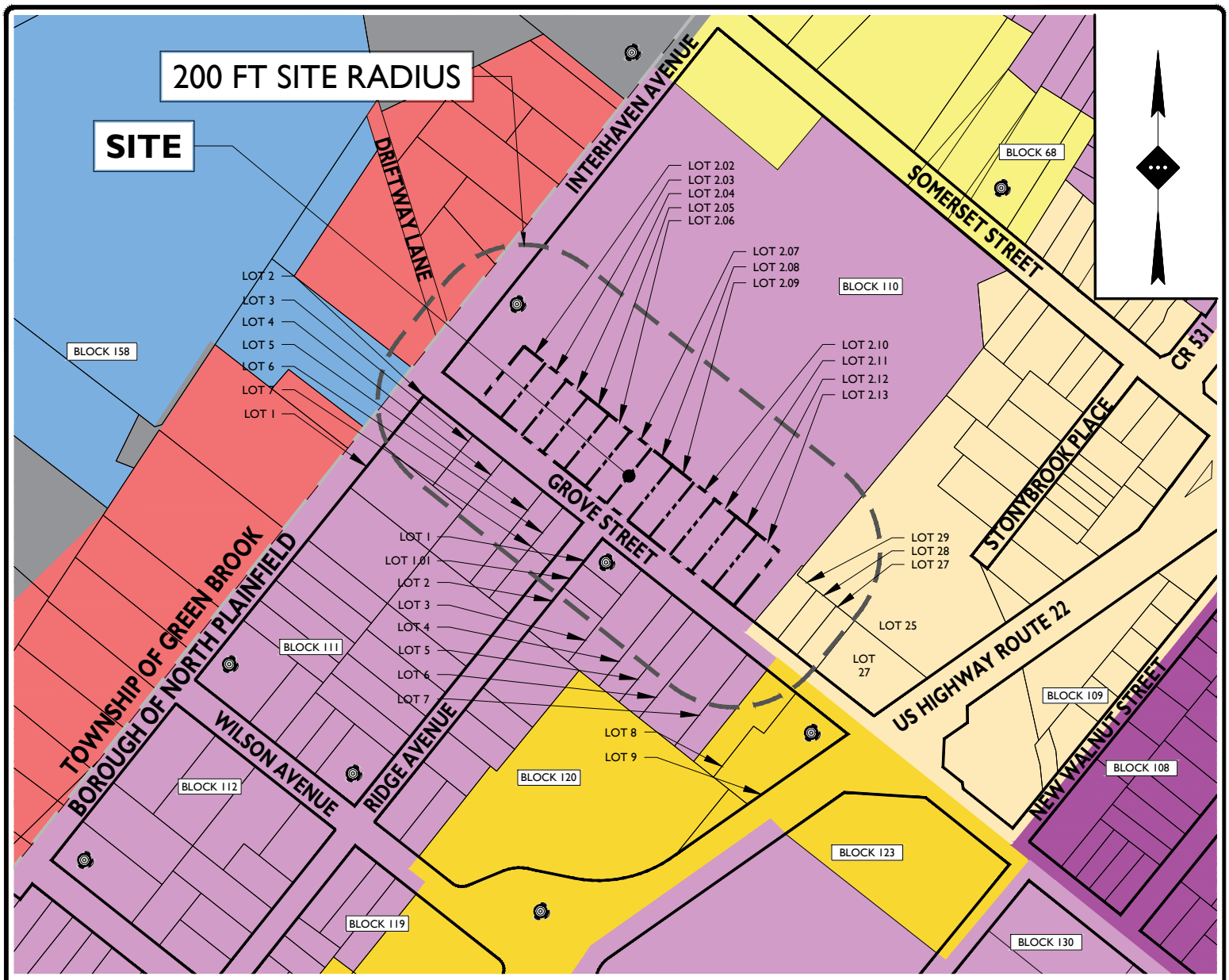

ZONING LEGEND

BOROUGH OF NORTH PLAINFIELD:

- (R-2) RESIDENTIAL ZONE TWO
- (R-3) RESIDENTIAL ZONE THREE
- (B-2A) BUSINESS ZONE TWO A
- (B-2) BUSINESS ZONE TWO
- (B-3) BUSINESS ZONE THREE
- (B-6) BUSINESS ZONE SIX

TOWNSHIP OF GREEN BROOK:

- (AHD-2) AFFORDABLE HOUSING DISTRICT TWO
- (MP) MOUNTAIN PRESERVATION
- (SMD) SPECIAL MOUNTAINSIDE DISTRICT

TAX & ZONING MAP

300' 0' 300' 600'

GRAPHIC SCALE IN FEET

1"= 300'

SOURCE: BOROUGH OF NORTH PLAINFIELD TAX MAP, DATED JANUARY 2007, BOROUGH OF NORTH PLAINFIELD ZONING MAP, DATED JANUARY 2012, TOWNSHIP OF GREEN BROOK TAX MAP, DATED NOVEMBER 2019 & TOWNSHIP OF GREEN BROOK ZONING MAP, DATED JUNE 2019

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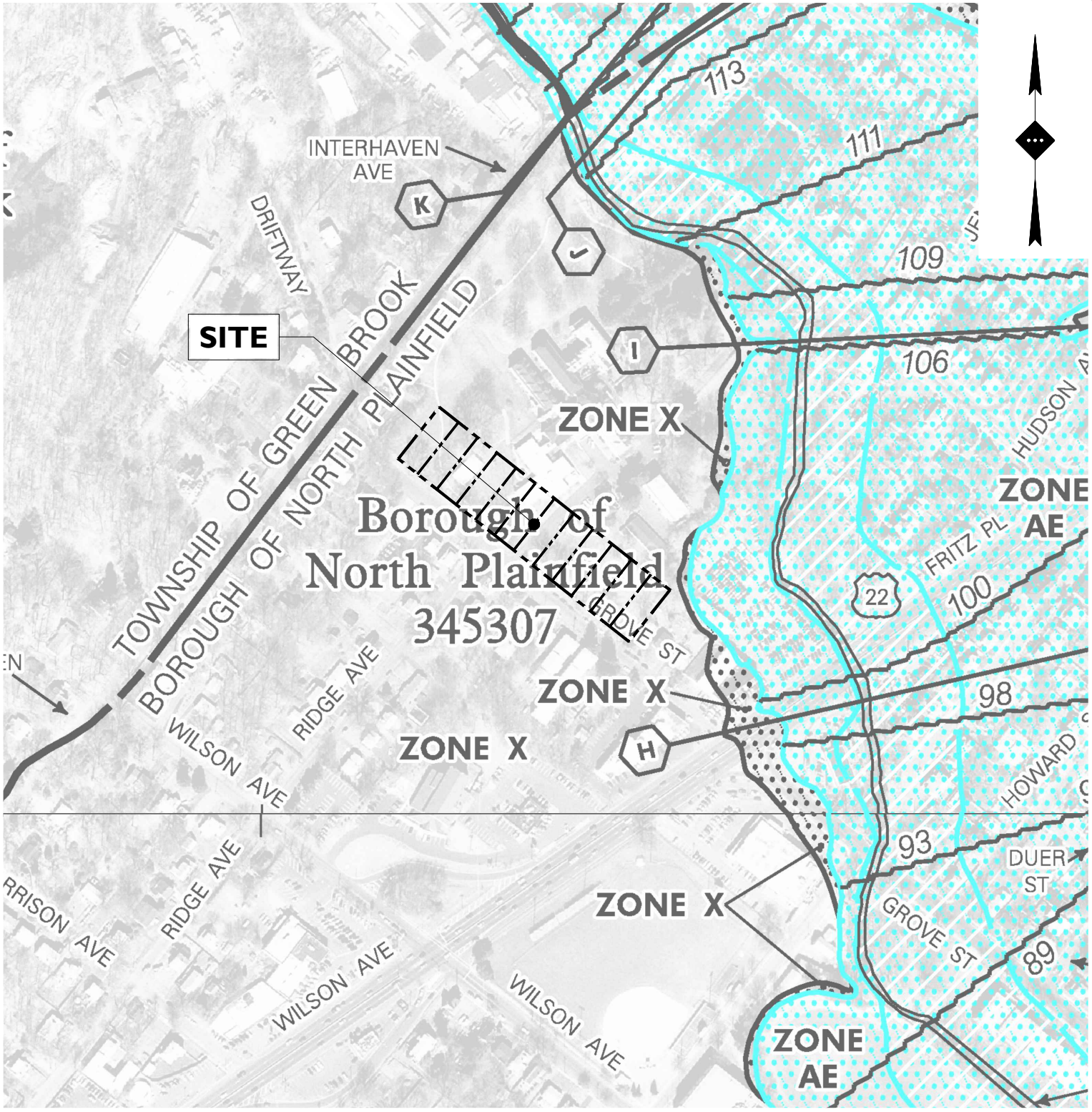

FEMA MAP

300' 0' 300' 600'

GRAPHIC SCALE IN FEET

1"= 300'

SOURCE: FEMA FLOOD INSURANCE MAP, SOMERSET COUNTY, NEW JERSEY, PANEL NUMBERS 34035C0089E AND 34035C0177E MAPS, DATED 09/28/2007

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LAND USE AND ZONING

BLOCK 110, LOTS 2.02 - 2.13

VILLA MARIA REDEVELOPMENT PLAN

PROPOSED USE

MULTIFAMILY DEVELOMENT — PERMITTED USE

ZONING REQUIREMENT	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	9,000 SF (0.21 AC)	90,048 SF (2.067 AC)	90,048 SF (2.067 AC)
MINIMUM LOT WIDTH	65 FT	140 FT	643.2 FT
MAXIMUM BUILDING HEIGHT	35 FT / 2.5 STORIES(*)(*)	0 FT	BUILDING 1: 30.9 FT / 2 STORIES BUILDING 2: 30.7 FT / 2 STORIES BUILDING 3: 32.0 FT / 2 STORIES BUILDING 4: 31.6 FT / 2 STORIES BUILDING 5: 31.6 FT / 2 STORIES BUILDING 6: 34.2 FT / 2 STORIES BUILDING 7: 34.3 FT / 2 STORIES BUILDING 8: 31.2 FT / 2 STORIES
MINIMUM FRONT YARD SETBACK	20 FT	N/A	BUILDING: 20.0 FT(**)
MINIMUM REAR YARD SETBACK	25 FT	N/A	BUILDING: 68.9 FT
MINIMUM SIDE YARD SETBACK	10 FT	N/A	BUILDING: 33.6 FT
MAXIMUM BUILDING COVERAGE	40% (36,019 SF)	0% (0 SF)	22.0% (19,844 SF)
MAXIMUM DWELLING UNITS	32 DU	N/A	32 DU
MINIMUM AFFORDABLE DWELLING UNITS	13 DU	N/A	13 DU
MAXIMUM IMPERVIOUS COVERAGE	75% (67,536 SF)	1.3% (1,184 SF)	66.6% (59,996 SF)

(*) PER §22-3 - VERTICAL DISTANCE MEASURED, IN THE CASE OF FLAT ROOFS, FROM THE CURB LEVEL TO THE HIGHEST POINT OF THE ROOF BEAMS, ADJACENT TO THE STREET WALL, AND IN THE CASE OF PITCHED ROOFS, FROM THE CURB LEVEL TO THE AVERAGEHEIGHT OF THE GRADE

(**) PER §22-115.22.A, THE PROJECTION OF STAIRS AND PORCHES ARE PERMITTED IN THE FRONT YARD AS LONG AS THE PORCH IS ONE STORY IN HEIGHT AND NOT PROJECTING GREATER THAN FIVE FEET

(*) PER § VILLA MARIA REDEV PLAN 4.B.1A - A MAXIMUM OF THREE STORIES SHALL BE PERMITTED WHERE THE THIRD STORY IS UTILIZED FOR THE SECOND STORY OF A DWELLING UNIT THAT IS CONNECTED BY A STAIRWAY IN THE INTERIOR OF THE UNIT (I.E. A DUPLEX APARTMENT)

N/A NOT-APPLICABLE

SIGNAGE REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 22-119.5.A	MAXIMUM AMOUNT OF FREESTANDING/WALL SIGN (WHICHEVER IS LESS SF): 1 SIGN	1 SIGN
§ 22-79.A	APPROPRIATE STREET SIGNS: LOCATION: ALL STREET INTERSECTIONS	4 SIGNS
§ 22-119.3.F	WALL SIGN LIMITS: EXTENSION: MUST BE BELOW ROOF AND PARAPET WALL LIMITS PROJECTION MAXIMUM: 8 INCHES	COMPLIES 8 INCHES
§ 22-119.5.C	WALL SIGN REQUIREMENTS: MAXIMUM SURFACE AREA: 1 SF FOR EACH FOOT OF WALL LENGTH OR 150 SF ONE DIMENSION OF THE SIGN, HORIZONTAL OR VERTICAL, SHALL EXCEED 2 FT	30 SF 2.1 FT
§ 22-119.5.B	FREESTANDING SIGN REQUIREMENTS: MAXIMUM SURFACE AREA:12 SF MINIMUM SETBACK: 10 FT FROM PROPERTY LINE MAXIMUM FREESTANDING SIGN HEIGHT: 42 IN	12 SF 10 FT 24 INCHES

FENCING STANDARDS

CODE SECTION	REQUIRED	PROPOSED
§ 25-3	FENCING LIMITATIONS: CANNOT ENCROACH ON PUBLIC RIGHT OF WAY OR WATERCOURSE	COMPLIES
	GATE SWING: MUST SWING INTO INTERIOR OF PROPERTY	COMPLIES
§ 25-4.1	FENCING HEIGHTS ABOVE ADJACENT GROUND ELEVATION: PARALLEL TO FRONT OF PROPERTY LINE MAXIMUM: 3 FT PARALLEL TO SIDE, FROM FRONT PROPERTY LINE TO FRONT YARD SETBACK: 4 FT PARALLEL TO SIDE, FROM FRONT YARD SETBACK TO REAR PROPERTY LINE: 6 FT PARALLEL TO REAR OF PROPERTY LINE MAXIMUM: 6 FT	8.0 FT (W) 9.0 FT (W) 14.5 FT (W) 14.0 FT (W)

TBD TO BE DETERMINED

OFF-STREET PARKING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ RSIS 5:21-4.14.G.4	TWO FAMILY (DUPLEX) REQUIRED PARKING SPACES: ONE BEDROOM: 1.8 SPACES REQUIRED (11 ONE BEDROOM UNITS)(1.8 SPACES) = 19.8 SPACES TWO BEDROOM: 2.0 SPACES REQUIRED (18 TWO BEDROOM UNITS)(2.0 SPACES) = 36 SPACES THREE BEDROOM: 2.1 SPACES REQUIRED (3 THREE BEDROOM UNITS)(2.1 SPACES) = 6.3 SPACES	58 SPACES 4 SPACES (EV BONUS)
	TOTAL: 19.8 SPACES + 36 SPACES + 6.3 SPACES = 62.1 SPACES = 62 SPACES	TOTAL: 62 SPACES
SENATE BILL S3223	MINIMUM REQUIRED EV MAKE-READY SPACES: 15% OF PROPOSED OFF-STREET PARKING: 58 SPACES X 0.15 = 8.7 = 9 TOTAL EV MAKE-READY SPACES	9 EV MAKE-READY SPACES
	MINIMUM REQUIRED ACCESSIBLE MAKE-READY EV SPACES: 5% OF TOTAL MAKE-READY SPACES: (9 MAKE-READY SPACES)(0.05) = 0.5 = 1 ACCESSIBLE MAKE-READY SPACE	1 ACCESSIBLE MAKE READY SPACES
	ADJUSTED PARKING SUPPLY CREDIT: MAXIMUM CREDIT OF 10% OF THE PARKING REQUIREMENT SHALL BE COUNTED TOWARDS TOTAL PARKING COUNT (62 SPACES)(0.1) = 6.2 SPACES	4 SPACES
§ 22-117.4.D	DRIVEWAY WIDTH: MINIMUM: 8 FT MAXIMUM: 18 FT	18 FT
§ 22-117.5.L	PARKING SPACE DIMENSION REQUIREMENTS: MINIMUM LENGTH = 18 FT MINIMUM WIDTH = 9 FT	18 FT 9 FT
§ 22-117.5.J	MINIMUM DRIVE AISLE WIDTH: (90 DEGREE): 24 FT	24 FT
§ VILLA MARIA REDEV PLAN 4.C.1.B	ACCESS POINT REQUIREMENTS: MAXIMUM: 2 FROM GROVE STREET	ONE ACCESS POINTS
§ VILLA MARIA REDEV PLAN 4.C.1.B	LOCATION FOR PARKING AREAS: REAR YARD	REAR YARD

ACCESSORY STRUCTURE STANDARDS

CODE SECTION	REQUIRED	PROPOSED
§ 22-115.3	MAXIMUM HEIGHT: 16 FT	COMPLIES
	MINIMUM ACCESSORY STRUCTURE SETBACKS: FRONT: 20 FT SIDE: 10 FT	87.0 FT 12.5 FT
	MINIMUM SETBACK FOR ACCESSORY STRUCTURE LOCATED IN REAR YARD: REAR PROPERTY LINE: 4 FT SIDE PROPERTY LINE: 4 FT	8.8 FT 12.5 FT
	MINIMUM DISTANCE FROM PRINCIPAL BUILDING: 20 FT	21.1 FT
	MAXIMUM AREA OCCUPANCY OF REAR YARD: 30%	0.5% (222 SF)
	CANNOT BE USED AS DWELLING	COMPLIES

DESIGN STANDARDS

CODE SECTION	REQUIRED	PROPOSED
§ 22-79.B	CONCRETE SIDEWALK REQUIREMENTS: WIDTH: 4 FT MINIMUM SETBACK FROM ROADWAY: 3 FT	5.0 FT 3.0 FT
§ 22-79.K	SHADE TREE REQUIREMENTS: MINIMUM: 2 TREES PER LOT MINIMUM DIAMETER: 2 INCHES MINIMUM HEIGHT: 8 FT	2 TREES COMPLIES COMPLIES
§ VILLA MARIA REDEV PLAN 4.B.2.A	MULTIPLE BUILDINGS ON SINGLE LOT: MULTIPLE BUILDINGS / DWELLING TYPES ARE PERMITTED ON A SINGLE LOT	COMPLIES
§ VILLA MARIA REDEV PLAN 4.B.2.B	MINIMUM BUILDING SEPARATION DISTANCE: 10 FT	12.0 FT
§ VILLA MARIA REDEV PLAN 4.C.2.A	MULTIFAMILY BUILDING APPEARANCE: COMPATIBLE WITH ONE OR TWO-FAMILY HOME	COMPLIES
§ VILLA MARIA REDEV PLAN 4.C.2.B	MULTIFAMILY DWELLING BUILDING SEPARATION(*): SIDE BY SIDE, STACKED OR BOTH	COMPLIES

(*) BUILDING MUST COMPLY WITH BULK STANDARDS

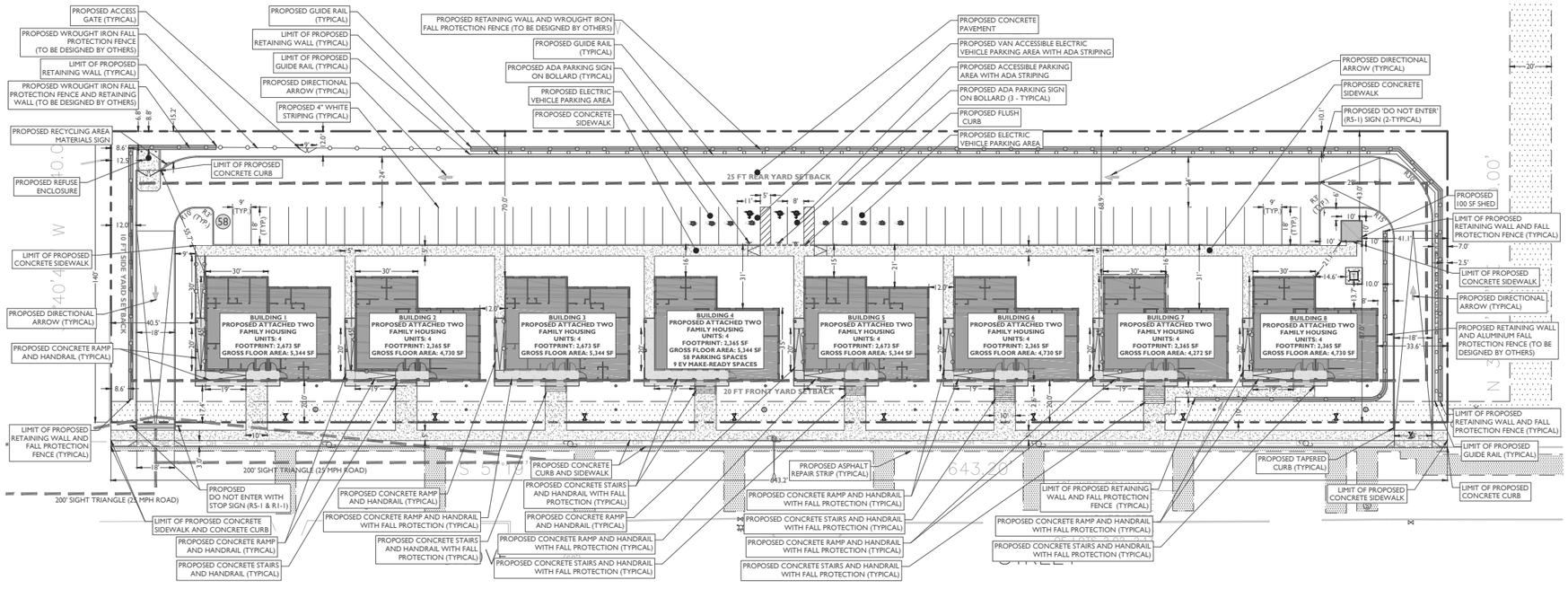
REFUSE/RECYCLING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 22-82.5	RECYCLING CONTAINER DESIGN: MUST BE COVERED AS TO PROTECT MATERIALS AGAINST ADVERSE ENVIRONMENTAL CONDITIONS	COMPLIES
§ 22-82.6	RECYCLING SIGNAGE: SIGNS REQUIRED AT ACCESS POINTS TO THE RECYCLING AREA TO IDENTIFY THE RESPECTIVE MATERIALS ACCEPTED THEREIN	COMPLIES
§ 22-82.7	RECYCLING SCREENING: APPROPRIATE LANDSCAPING AND/OR FENCING MUST FORM AROUND RECYCLING AREA	COMPLIES
§ 22-115.30	REFUSE SCREENING: APPROPRIATE FENCING IS REQUIRED ALONG ALL SIDES OF OUTDOOR STORAGE OF SOLID WASTE/GARBAGE CONTAINERS REFUSE SECURITY: REFUSE MUST BE SECURED FROM GROUND ENTRY VIA DOOR OR GATE	COMPLIES COMPLIES

TBD TO BE DETERMINED

SYMBOL / DESCRIPTION

- PROPERTY LINE
- SETBACK LINE
- PROPOSED SIGNS / BOLLARDS
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED FLUSH CURB
- PROPOSED BUILDING
- PROPOSED BUILDING OVERHANG
- PROPOSED CONCRETE
- PROPOSED RETAINING WALL
- PROPOSED CHAINLINK FENCE
- PROPOSED HAND RAIL
- PROPOSED FALL PROTECTION FENCE
- PROPOSED RETAINING WALL



GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC. BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.

30' 0' 30' 60'

GRAPHIC SCALE IN FEET
1" = 30'

ISSUE	DATE	BY	DESCRIPTION
1	03/18/2024	EGB	FOR MUNICIPAL SUBMISSION

NOT APPROVED FOR CONSTRUCTION

STONEFIELD engineering & design
Rutherford, NJ · New York, NY · Boston, MA
Princeton, NJ · Tampa, FL · Detroit, MI
www.stonefieldeng.com
Headquarters: 92 Park Avenue, Rutherford, NJ 07070
Phone 201.340.4468 · Fax 201.340.4472

PRELIMINARY & FINAL MAJOR SITE PLAN

VILLANI REALTY GROUP

PROPOSED RESIDENTIAL DEVELOPMENT

BLOCK 110, LOT 2.02 TO 2.13
430 GROVE STREET
SOMERSET COUNTY, NORTH PLAINFIELD
SOMERSET COUNTY, NEW JERSEY

JOSHUA H. KLINE, P.E.
NEW JERSEY LICENSE No. 54347
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

SCALE: 1" = 30' | PROJECT ID: PRI-230101

TITLE: SITE PLAN

DRAWING: C-4

Z:\PROJECTS\PRI\2023\PRI-230101 TAYLOR, ARCHITECTURE - 430 GROVE STREET, NORTH PLAINFIELD, NJ\CAD\PLOT\PLOT-04-SITE.DWG

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Somerset County, New Jersey

October 20, 2023

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,320 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DunC	Dunellen sandy loam, 8 to 15 percent slopes	2.1	100.0%
Totals for Area of Interest		**2.1**	**100.0%**

Map Unit Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

Somerset County, New Jersey

DunC—Dunellen sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: ldqk
Elevation: 50 to 2,000 feet
Mean annual precipitation: 30 to 64 inches
Mean annual air temperature: 46 to 79 degrees F
Frost-free period: 131 to 178 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Dunellen and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dunellen

Setting

Landform: Outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy outwash derived from sandstone

Typical profile

A1 - 0 to 8 inches: sandy loam
A2 - 8 to 14 inches: sandy loam
BA - 14 to 20 inches: sandy loam
Bt - 20 to 31 inches: sandy loam
C - 31 to 42 inches: sandy loam
2C - 42 to 70 inches: loamy sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Tunkhannock

Percent of map unit: 10 percent
Landform: Outwash terraces, kames, deltas

Landform position (three-dimensional): Riser, rise
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Udorthents, dunellen substratum

Percent of map unit: 5 percent
Landform: Outwash plains
Landform position (three-dimensional): Lower third of mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Custom Soil Resource Report
Map—Hydrologic Soil Group

Map Scale: 1:1,320 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 15 30 60 90

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
DunC	Dunellen sandy loam, 8 to 15 percent slopes	A	2.1	100.0%
Totals for Area of Interest			**2.1**	**100.0%**

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

JOHNSON SOILS COMPANY

66 Glen Avenue
Glen Rock, NJ 07452
Telephone: 201-301-1045
Fax: 201-857-8002
Email: info@johnsonsoils.com

October 17, 2023

VILLANI BUILDERS
376 North Avenue, Suite A
Dunellen, NJ 08812

Attn: Joe Villani

Re: Grove Street & Ridge Avenue
North Plainfield, NJ
JSC Job #23-722

Dear Mr. Villani :

The following test pits were inspected on October 10, 2023 at the proposed stormwater management locations. The test pits were dug with an excavator provided by others.

The test pit log is as follows:

TP-1

0" – 8"	Topsoil & Roots.
8"-10'	Red brown SILT, some fine Sand & Clay, trace Gravel (ML)

No Ground Water Encountered
No Seasonal High Water Table Encountered
The percolation rate at a depth of 8'6" is 0.09 in/hr.

TP-2

0" – 1'8"	FILL - Topsoil & Roots, Sand, Gravel, Silt
1'8"-4'6"	Red brown SILT, some fine Sand & Clay, trace Gravel (ML)
4'6"-10'	Yellow brown SILT, some fine Sand & Clay, trace Gravel (ML)

No Ground Water Encountered
No Seasonal High Water Table Encountered
The percolation rate at a depth of 7'6" is 0.1 in/hr.

Grove Street & Ridge Avenue
North Plainfield, NJ
JSC Job #23-722

TP-3

0" – 6"	FILL - Topsoil & Roots, Sand, Gravel, Silt
6"-3'8"	Brown fine to coarse Sand, little Silt and Gravel (SM)
3'8"-4'	Dark Brown fine Sand & Silt, trace Gravel (SM-ML)
4'-10'	Brown fine Sand & Silt, some Clay, some fine Sand & Clay, trace Gravel (SM-ML)

No Ground Water Encountered
No Seasonal High Water Table Encountered
The percolation rate at a depth of 8' is 0.4 in/hr.

TP-4

0" – 10"	FILL - Topsoil & Roots, Sand, Gravel, Silt
10"-5'	Red brown Sand, little Silt, some Clay (SM)
5'-5'8"	Gray fine Sand & Silt, little clay (SM-ML)
5'8"-10'	Red brown SILT, some fine Sand & Clay, trace Gravel (ML)

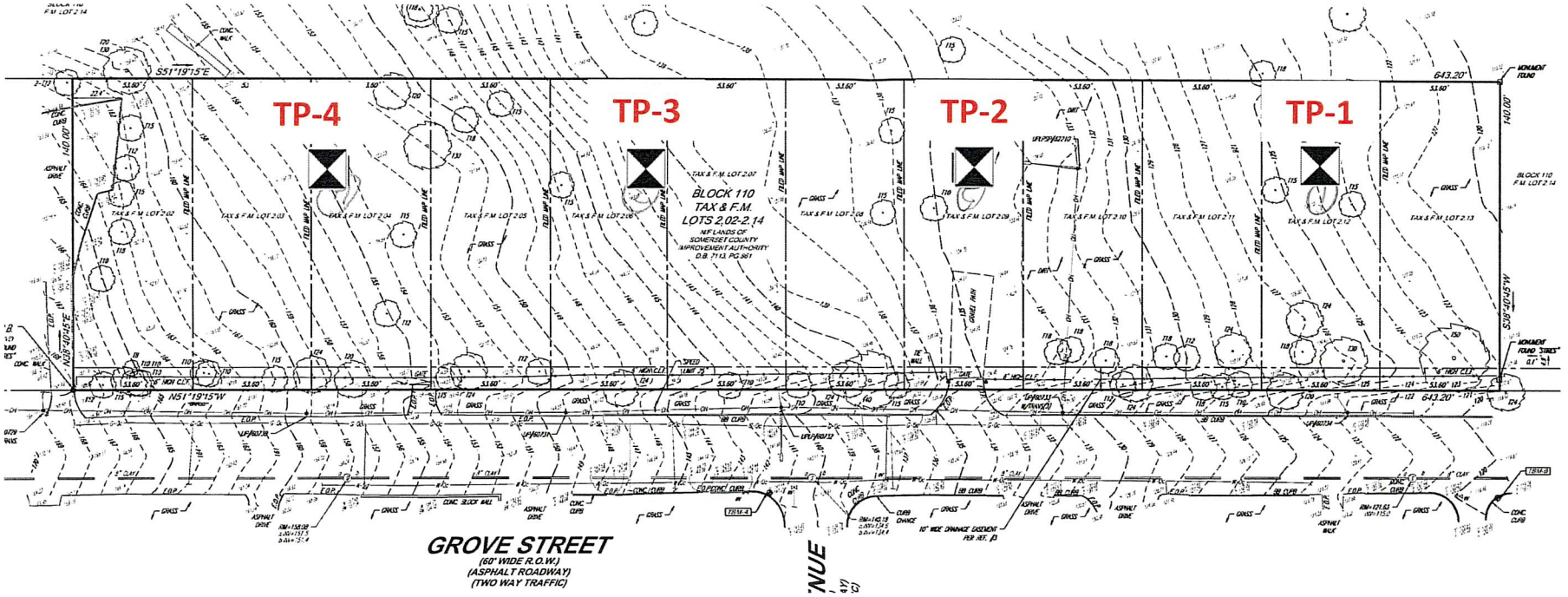
No Ground Water Encountered
No Seasonal High Water Table Encountered
The percolation rate at a depth of 8' is 0.2 in/hr.

If you have any questions please call.

Very truly yours,

Lisa V. Mahle-Greco, PE
Engineering Manager
NJ Lic. # 43197

DD/JG



Scale: N.T.S.

JOHNSON SOILS COMPANY	**Test Pit Location Plan**	JSC #23-722
	Grove Street & Ridge Avenue North Plainfield, NJ	PLATE 2