
TOWNSHIP OF FRANKLIN

PRELIMINARY & FINAL MAJOR SITE PLAN APPLICATION

ENVIRONMENTAL IMPACT ASSESSMENT

For:

**PSE&G BENNETTS LANE SUBSTATION
UPGRADES**

**160 SOUTH MIDDLEBUSH ROAD (Block 84.03, Lots 1 & 2.02)
135 DAHMER ROAD (Block 84.03, Lot 2.10)
TOWNSHIP OF FRANKLIN
SOMERSET COUNTY, NEW JERSEY**

January 2026



Applicant/Owner:

Public Service Electric and Gas Company
Delivery Projects & Construction
Licensing & Permitting
4000 Hadley Road, South Plainfield, NJ 07080



Prepared By:

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1.0 EXECUTIVE SUMMARY

Public Service Electric and Gas Company (PSE&G) proposes to upgrade the existing Bennetts Lane 230/69/13kV Substation (the “Substation”) on PSE&G property located at 160 South Middlebush Road and 135 Dahmer Road in the Township of Franklin, Somerset County, New Jersey. The property is identified on Township of Franklin Tax Map as Block 84.03, Lots 1, 2.02 and 2.10.

The Substation upgrades will improve reliability and increase the output of the Substation to service the surrounding communities.

The project property (the “property”) is known as:

PSE&G’s Bennetts Lane Substation
160 Middlebush Road – Block 84.03, Lots 1 & 2.02
135 Dahmer Road – Block 84.03, Lot 2.10

Property Owner/Applicant:

Public Service Electric and Gas Company (PSE&G)
c/o Cady Piarulli, Permitting Specialist IV
4000 Hadley Road, Mail Code 430
South Plainfield, New Jersey 07080

This Environmental Impact Assessment (EIA) is submitted to the Zoning Board of Adjustment of the Township of Franklin pursuant to Chapter 112, Section 199 of the Land Development Ordinance concurrently with application for preliminary and final major site plan, height variances, and expansion of existing conditional use approval. Even though an EIA may not be needed since the proposed Substation improvements do not exceed the threshold limits in Section 112-199B, Applicability of Provisions, PSE&G wishes to completely address any concerns the Township may have.

The EIA utilizes a standard approach to identify and evaluate existing natural and man-made resources of the site and to determine the Substation improvements’ impact potential. The assessment of potential environmental impacts was completed using plan analysis, literature review and site reconnaissance.

The EIA concludes that the Bennetts Lane Substation improvements have been designed to minimize potential environmental impacts to the greatest extent practicable. The potential for increased soil erosion and airborne dust during construction would be mitigated through implementation of a Soil Erosion and Sediment Control Plan. The noise analysis for the Substation improvements concludes that proposed work will meet all the applicable noise regulations. A stormwater bioretention basin was designed to accommodate storm water runoff from the proposed improvements.

2.0 SITE LOCATION AND LAND USE

2.01 *Site Location*

PSE&G’s Bennetts Lane Substation is located at 160 Middlebush Road/135 Dahmer Road and situated in the northwestern portion of Franklin Township, Somerset County, New Jersey. The property is identified as Block 84.03, Lots 1 and 2.02 / Block 84.03, Lot 2.10 per

Franklin Township Tax Map Sheets 45 and 55 (*refer to Figure 2 and Figure 3*) and consists of approximately 8.296 acres. The center of the is located at New Jersey State Plane (NAD 83) coordinates N 601,783 feet, E 483,723 feet (*refer to Figure 1*). There is a stream that bisects the property along the eastern portion of the site near South Middlebush Road.

2.02 *Site Description and Land Use*

The Substation is located at 160 South Middlebush Road and is identified as Block 84.03, Lots 1 and 2.02. In 2022, PSEG purchased 135 Dahmer Road; Block 84.03, Lot 2.10 as “property for future use” and is enclosed by a 6-foot-high perimeter chain-link fence. Lots 1 and 2.02 are currently developed as an electrical Substation with a combination of transformers, breakers, control building, mechanical building and a switchgear.

The Substation yard is surfaced with loose crushed gravel, a macadam access drive, concrete pads and several buildings. The Substation is enclosed with a 7-foot-high chain-link fence topped with 1-foot of barbed wire, except along Bennetts Lane. Access to the Substation is provided from Bennetts Lane.

The Substation is divided between the Agricultural (A) Zone and the Single Family Residential (R-40) Zone whereas Lot 2.10 is situated in the R-40 Zone. Public utility installations are listed as conditional uses in the A and R-10 Zones.

2.03 *Surrounding Land Uses*

The property is bordered by South Middlebush Road to the west and Bennetts Lane to the south, beyond which are agricultural properties. The property is bordered to the north by a wooded area, with residential properties beyond, and Dahmer Road to the east, with residential properties beyond. Properties owned by the Franklin Township Sewerage Authority and NJDEP are located to the northwest.

3.0 PROJECT DESCRIPTION

The Bennetts Lane Substation proposed improvements include demolition of the existing 13kV feeder rows and control house, installation of a six (6) row a 13kV sheltered aisle switchgear with twelve (12) 13kV circuits; new 69kV breaker to expand the existing ring bus to a seven breaker ring bus, new 230/69kV transformer, expansion of the existing 69kV control house that will store 13kV relaying and communication equipment, demolition of one (1) existing lattice tower and installation of one (1) new monopole and “double” A-frames and construction of a new stormwater bioretention basin.

The existing perimeter fence will be removed, and the Substation will be primarily enclosed with new 10-foot-high anti-climb/anti-cut security fence. No barbed wire is proposed on the new fence. A new 13-foot-high pre-cast concrete wall is proposed along the northwest side of the Substation to provide protection for critical infrastructure.

PSE&G intends to use Lot 2.10 for temporary construction trailers and temporary parking for the duration of construction for the proposed Substation improvements. All disturbed areas will be restored to existing conditions once construction is complete.

Soil disturbance will be made throughout much of the site for the construction of the below-grade installations such as foundations, duct banks, conduits, grounding cable and new water and sewer connections. Upon completion of grading, construction of utility process

equipment, construction of a stormwater bioretention basin, and installation of landscaping, total impervious coverage will be 2.54 acres, an increase of 0.11 acres

The upgrades to the Substation are being facilitated as part of a larger new Class H Substation project in the Harlingen area. Once installed, the proposed Substation upgrades will help to satisfy the growing electric energy requirements in the area as well as offload the overloaded Sunnymead and Mount Rose Substations.

4.0 SITE INVENTORY AND ENVIRONMENTAL IMPACT

4.01 Soils

The U.S. Department of Agriculture, Natural Resources Conservation Service Survey Geographic (SSURGO) Database identified the following soil types on the Bennetts Lane Substation (*refer to Figure 4*).

- *Penn silt loam*, 2 to 6 percent slopes (PenB) is on hills on piedmonts. The parent material consists of fine-loamy residuum weathered from acid reddish shale, siltstone, and fine-grained sandstone. Depth to a root restrictive layer, bedrock, paralithic is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Organic matter content in the surface horizon is about 2 percent. Non-irrigated land capability classification is 2e. This soil does not meet hydric criteria.
- *Rowland silt loam*, 0 to 2 percent slopes, frequently flooded (RorAt) is on floodplains on piedmonts. The parent material consists of red and brown fine-loamy alluvium derived from sandstone and shale and/or conglomerate. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded and ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, November and December. Organic matter content in the surface horizon is about 3 percent. Non-irrigated land capability classification is 5w. This soil does not meet hydric criteria.
- *Royce silt loam*, 2 to 6 percent slopes (RoyB) is on alluvial flats on piedmonts. The parent material consists of fine-loamy residuum weathered from shale. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 72 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded or ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Non-irrigated land capability classification is 2e. This soil does not meet hydric criteria.

A subsurface exploration was performed by GZA GeoEnvironmental, Inc. in August 2024. The boring and test pit explorations generally encountered topsoil underlain by a thin layer of clayey silts with varying amounts of sand and gravel-sized shale fragments, underlain by shale bedrock. Soil logs are included in the Soils and Foundation Investigation Report provided in Appendix E of the Stormwater Management Report.

Soil Erosion and Sediment Control Measures

All soil disturbance, excavation and grading activities will conform to the Soil Erosion and Sediment Control Plan prepared for the Project, which will be subject to certification by the Somerset-Union Soil Conservation District. The project plans demonstrate the use of soil erosion and sediment control measures in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey (July 2017). These measures include, but are not limited to, silt fence/silt sock located on the downslope sides of all proposed disturbance, stabilized construction entrances, inlet filters, tree protection, and a topsoil/subsoil stockpile area enclosed via silt fence. Erosion will be minimized and maintained through the use of temporary and permanent seeding and/or landscaping on exposed soils. Potential adverse impacts which could result from grading, erosion or sedimentation will be prevented by the implementation of the required soil erosion and sediment control measures described above during construction.

4.02 *Topography*

The property generally slopes to the west, with the highest elevation, 108.5 feet above NAVD88 occurring at the northeast corner of Lot 2.10 along Dahmer Road. The lowest elevation, at 71 feet above NAVD, occurs in the stream that bisects the property along the eastern portion of the property near South Middlebush Road. Ground elevations within the Substation yard range from 90 to 107 feet above MSL. Topography in the area of the proposed Substation improvements is generally flat with gentle slopes. Refer to the Boundary and Topographic Survey for details.

4.03 *Geology*

The Township of Franklin is located within the Piedmont physiographic province of New Jersey. The sediments of this province are from the Late Triassic to Early Jurassic periods. They range in age from 190 to 230 million years old. The sediments included in the general area of the proposed development include conglomerate sandstone and shale.

The Piedmont physiographic province consists of varied topography, ranging from lowlands to peaks and ridges of moderate altitude and relief. The Piedmont province is comprised of intrusive, sedimentary and volcanic rocks associated with the Newark Basin that range in age from Late Triassic to Early Jurassic (240 to 200 million years old) (NJGS, 2000). The Newark Basin is one of a series of rift basins located along the eastern seaboard of North America that was formed during the opening of the Atlantic Ocean. Rock within the Newark Basin is considered part of a larger area known as the Newark Super Group and typically includes basalt, diabase, siltstone, mudstone, sandstone, and conglomerate. Predominant depositional environments within the Newark Super Group are lacustrine, fluvial, and volcanic.

Bennetts Lane Substation is located entirely within the Passaic Formation which was formed during the Jurassic and Triassic Periods of the early Mesozoic Era (approximately 155 to 255 million years ago) and is part of the Newark Super Group. The thickness of the Passaic formation in the vicinity of the loop is approximately 11,000 feet. The formation typically is composed of cyclical reddish-brown to maroon and purple fine grained sandstone, siltstone, and mudstone, with beds ranging in thickness from 10 to 23 feet. The red beds are indicative of playa-lake-mudflat sequences and upward fining fluvial deposits. Inter-bedded throughout

the red beds are gray bed sequences composed of siltstone and mudstone. They range in thickness from 7 to 16 feet and are indicative of a lacustrine deposition (NJGS, 2000).

4.04 Hydrology

Surface Waters

Pursuant to review of the NJDEP's GIS databases and survey maps, a stream bisects the property along the eastern portion of the site near South Middlebush Road. The stream is identified as Middlebush Brook UNT and classified as FW2-NTC1.

The property is located within Watershed Management Area 10 – Millstone. It is located within the Millstone River (below/incl Carnegie Lk) watershed and the Sixmile Run (below Middlebush Rd) sub-watershed.

Freshwater Wetlands / Transition Areas

Wetlands boundaries are shown on the Site Plan and confirmed through a New Jersey Department of Environmental Protection (NJDEP) Letter of Interpretation (LOI) (NJDEP File No. 1808-24-0005.1 LLI 240001 dated July 28, 2025). Freshwater wetlands of intermediate resource value are present on the property (field points WL 1-1 to WL 1-8; WL 2-1 to WL 2-10) which possess a 50-foot transition area.

There are no proposed impacts to wetlands or wetland transition areas as part of this project, and no additional NJDEP permits are required.

Flood Hazard Area

FEMA Flood Insurance Rate Map (FIRM) 34035C0260E, effective date September 28, 2007, indicates that a portion of the undeveloped Substation property is located within the 0.2 percent annual chance floodplain or outside of the 100-year floodplain (1% annual chance flood). This flood area coincides with the stream along the northwestern part of the property, approximately 450 feet west of the Substation yard. The average streambed elevation is approximately 71-72 feet whereas the Substation yard is elevated 15-18 feet higher.

There are no proposed impacts to the flood hazard area as part of this project, no additional NJDEP permits are required.

Riparian Zone

The surface water quality classification for the Middlebush Brook UNT is FW2-NTC1. As such, the associated riparian zone for the stream would be 300 feet measured outward from the top of banks.

There are no proposed impacts to the riparian zone as part of this project, no additional NJDEP permits are required.

Drainage - Existing Stormwater Runoff

The Substation generally slopes to the west. An existing stormwater conveyance system collects runoff from most of the site and diverts runoff to the existing detention basin north of the Substation. Stormwater discharges the detention basin through an existing outlet control structure. Runoff from the outlet control structure is routed to a riprap energy dissipation pad

and allowed to sheet flow offsite. Runoff from remainder of the site also occurs as sheet flow and follows existing contours, as illustrated on the Boundary and Topographic Survey.

Drainage - Proposed Stormwater Runoff

The site will be graded to approximately match the existing drainage patterns at the site. Portions of the existing stormwater system will be removed and replaced with a new stormwater conveyance system to fit the proposed electrical equipment layout. The existing detention basin will remain, and the runoff volume directed to the detention basin under proposed conditions will be maintained to the maximum extent feasible.

The southeast side of the Substation and south vegetated areas are routed into the proposed concrete encased bioretention basin via overland flow or by flowing through a vegetated ditch. The total area tributary to the bioretention basin is 0.51 acres which is less than the maximum allowable drainage area of 2.50 acres as specified by the NJDEP Best Management Practices (BMP) Manual. Stormwater will discharge from the bioretention basin through an outlet control structure. Runoff from the outlet control structure will be routed through a 12-inch RCP outlet pipe to the southwest corner of the site.

Refer to the Preliminary and Final Site Plans as well as the Stormwater Management Plan report for details pertaining to site grading, the proposed stormwater management system, and compliance with N.J.A.C. 7:8, N.J.A.C. 7:45 and Franklin Township Stormwater Management Ordinance.

There are no impacts to regulated areas including freshwater wetlands, flood hazard area, riparian zone and stream corridor. The entire project area has been previously developed and disturbed.

4.05 *Vegetation*

The existing Substation yard and associated access drive are unvegetated and comprised of loose gravel, macadam, asphalt, foundations for the electrical equipment, and the two buildings.

As part of the proposed project, PSE&G completed a comprehensive tree survey. All trees located on-site, deciduous or coniferous species, which reach a typical mature height of ten feet and a typical mature DBH of four inches (4") or greater were survey-located and identified by size, species, and condition. Trees meeting these parameters are identified on the Tree Location Plan (Sheet 1 of 2) and the Tree Location and Removal Plan (Sheet 2 of 2), submitted in support of the proposed project as part of the application materials.

NJDEP Natural Heritage Program (NHP) / Landscape Project correspondence dated December 23, 2025 (copy provided in Appendix B), indicates that there are no rare plant species or ecological communities located on or proximate to the subject property.

Trees that are required to be removed to facilitate construction and operation of the proposed project are illustrated, graphically and in tabular form, on the Tree Location and Tree Removal Plan (Sheet 2 of 2). Pursuant to Chapter 222 – Trees and Vegetation, Article 1 – Tree Removal, Section 222-5.1 – Tree Replacement Plan, as calculated via the replacement formula tables, a total of 19 trees require replacement (formula tables are also illustrated on the Tree Location and Tree Removal Plan (Sheet 2 of 2)).

The Substation will be landscaped as shown on the submitted landscape plans prepared by E2 Project Management, LLC, dated January 5, 2026. In addition to providing the number of replacement trees required (landscape plan proposes a total of 31 trees, resulting in a net gain of twelve trees), the purpose of the proposed plantings are to improve the aesthetics of the site, particularly along the Bennetts Lane frontage and to conserve valuable existing vegetation where possible, most notably along the southern side of the subject property.

All proposed plantings are required to and will comply with the Board of Public Utilities (BPU) and PSE&G’s vegetation requirements that limit vegetation distances and heights under overhead wires and horizontal distances from underground conduits and structures.

4.06 *Threatened and Endangered Species*

As indicated in the NJDEP Natural Heritage Program (NHP) / Landscape Project correspondence dated December 23, 2025 (copy provided in Appendix B), the following rare species and/or habitats are / may be located on, within the immediate vicinity of, and/or within one mile of the subject property:

Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.4 Species Based Patches and Other Animal Species on the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program

American Kestrel	Breeding Sighting / Nest	State Threatened
Bobolink	Breeding Sighting	State Threatened
Eastern Meadowlark	Breeding Sighting	State Threatened
Grasshopper Sparrow	Breeding Sighting	State Threatened
Great Blue Heron	Foraging	Special Concern
Upland Sandpiper	Breeding Sighting-Confirmed	State Endangered
Vesper Sparrow	Breeding Sighting-Confirmed	State Endangered

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 and Other Animal Species on the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program

American Kestrel	Breeding Sighting / Nest	State Threatened
Bobolink	Breeding Sighting	State Threatened
Eastern Meadowlark	Breeding Sighting	State Threatened
Grasshopper Sparrow	Breeding Sighting	State Threatened
Great Blue Heron	Foraging	Special Concern
Northern Harrier	Breeding Sighting	State Endangered
Upland Sandpiper	Breeding Sighting-Confirmed	State Endangered
Vesper Sparrow	Breeding Sighting-Confirmed	State Endangered

As noted above in Section 4.05, the NJDEP Natural Heritage Program (NHP) / Landscape Project correspondence dated December 23, 2025 (copy provided in Appendix B), indicates that there are no rare plant species or ecological communities, including vernal habitats) located on or proximate to the subject property.

4.08 *Wildlife*

It is unlikely that PSE&G's property and the segment located in and around the existing Substation, supports significant wildlife populations due to surrounding developed areas. Urban wildlife and bird species common to the area are likely to include the whitetail deer (*Odocoileus virginianus*), Eastern garter snake (*Thamnophis sirtalis sirtalis*), groundhog (*Marmota monax*), gray squirrel (*Sciurus carolinensis*), raccoon (*Procyon lotor*), field mouse (*Peromyscus maniculatus*), opossum (*Didelphis virginiana*), Eastern cottontail (*Sylvilagus floridanus*), Northern mockingbird (*Mimus polyglottos*), American robin (*Turdus migratorius*), American crow (*Corvus brachyrhynchos*), European starling (*Sturnus vulgaris*) and mourning dove (*Zenada macroura*).

4.09 *Scenic and Historical Resources*

South Middlebush Road is considered a "scenic roadway" as depicted on the Township Zoning Map. The scenic corridor extends 1,000 linear feet in both directions from the center line of South Middlebush Road. As shown on the attached Site Plan, a portion of the Substation including some of the proposed upgrades falls within the designated scenic corridor. All upgrades to the Substation will occur within the existing Substation yard footprint other than some replacement landscaping and a proposed stormwater bioretention system which will also encroach upon the scenic corridor. The proposed upgrades will not have an adverse impact on the scenic corridor along South Middlebush Road.

A review of NJDEP NJ GeoWeb mapping tool, accessed on October 31, 2025, indicates the site is located in a Fringe planning area and Rural Environmentally Sensitive planning area and no Natural Heritage Priority sites were identified within a half-mile of the Substation. A review of the Franklin Township's Historic Resources map (part of the Township's Master Plan) accessed from the Township official web site also indicates no landmark preservation areas are located in the vicinity of the Substation improvements. The existing Substation is located just outside the boundary for the Six Mile Run Historic District (ID#25000) and diagonally across South Middlebush Road from the Hageman Farm Complex (ID#2497). The proposed improvements are proposed on the property as far from the Hageman Farm as possible. The proposed improvements will not negatively affect either historic area or their associated view sheds.

5.0 ENVIRONMENTAL PERFORMANCE CONTROLS

The following information describes in detail the measures that will be employed during the construction and operation phases of the project that will minimize or eliminate any adverse impacts, on and off property, that could occur.

5.01 *Drainage and Soil Erosion and Sediment Control*

All soil disturbance, excavation, and grading activities will conform to the Soil Erosion and Sediment Control Plan(s) which will be submitted to the Somerset-Union Soil Conservation District for certification. The Engineering Plans provided as part of the site plan application demonstrate the use of soil erosion and sediment control measures in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey. These measures include, but are not limited to a stabilized construction entrance, silt fence/silt sock barriers and soil stockpile. Potential adverse impacts which could result from grading, erosion or

sedimentation will be prevented by the implementation and maintenance of the required soil erosion and sediment control measures during construction.

5.02 *Sewage Disposal*

The proposed upgrades to the Substation include demolition of the existing control house building serviced by potable well and septic system. The existing well will be decommissioned, and the septic system will be removed in accordance with applicable NJDEP, County and Municipal regulations. The expanded 69kV control house will include a new restroom facility with connection to public water and sewer proposed. The proposed sewer service will connect to the existing main along Bennetts Lane.

The Substation will be unmanned and visited approximately once a week by authorized PSE&G technicians to inspect and maintain equipment. Based on the infrequency of use of the Substation, this Project will have de minimis impact on the demand of the existing sewer system.

5.03 *Water Supply and Water Conservation*

As previously mentioned above, the new restroom facility within the expanded control house will require public water service connection. The proposed connection is to be made to the existing water main along Dahmer Road. Please refer to the Engineering Plans submitted as part of this application for location and specifics.

Based on the infrequency of use of the Substation, this Project will have no impact on the demand of the existing public water supply.

5.04 *Energy Conservation Measures*

The Township's Municipal Code requires, as applicable, that an EIS address energy conservation measures. This Project is unique in that it is primarily about the management and distribution of energy for consumption, and hopefully conservation, by the public. Nonetheless, the Project does include energy conservation measures in its lighting design for the proposed control house expansion. At a minimum, the lighting proposed in the regulating building will be provided by energy-efficient LED fixtures and the site lighting will be controlled by photocells such that they operate dusk-to-dawn.

5.05 *Noise and Vibration Reduction Techniques*

PSE&G contracted Ostergaard Acoustical Associates to prepare an acoustical study to specifically evaluate the current and proposed noise levels that would be generated by the proposed improvements. Please refer to this report for further information.

During construction, PSE&G will require contractors to monitor vibration levels during the demolition of existing structures. All contractors shall conform to PSE&G requirements of limiting vibration to less than two inches per second.

6.0 ENVIRONMENTAL IMPACTS

The following section discusses, where applicable, both the positive and negative environmental impacts this Project will have.

6.01 *Soil Erosion and Sedimentation Resulting from Surface Runoff*

All soil disturbance, excavation and grading activities will conform to the Soil Erosion and Sediment Control Plans that will be certified by the Somerset-Union Soil Conservation District. Potential adverse impacts which could result from grading, erosion or sedimentation will be prevented by the implementation of the required soil erosion and sediment control measures described above during construction.

6.02 *Surface Water, Flooding and Floodplain Disruption*

While a portion of the undeveloped property is located within flood zone A with no determined base flood elevation, the proposed upgrades are situated approximately 450 feet east of the stream and primarily within the Substation yard. Additionally, the average streambed elevation is approximately 71-72 feet whereas the Substation yard is elevated 15-18 feet higher.

The site will be graded to approximately match the existing drainage patterns at the site. Portions of the existing stormwater system will be removed and replaced with a new stormwater conveyance system to fit the proposed electrical equipment layout. The existing detention basin will remain, and the runoff volume directed to the detention basin under proposed conditions will be maintained to the maximum extent feasible.

The southeast side of the Substation and south vegetated areas are routed into the proposed concrete encased bioretention basin via overland flow or by flowing through a vegetated ditch. The proposed basin has been designed in accordance with the NJ BMP Manual.

There are no impacts to regulated areas including freshwater wetlands, flood hazard area, riparian zone and stream corridor. The entire project area has been previously developed and disturbed.

Refer to the Preliminary and Final Site Plans as well as the Stormwater Management Plan report for details pertaining to site grading, the proposed stormwater management system, and compliance with N.J.A.C. 7:8, N.J.A.C. 7:45 and Franklin Township Stormwater Management Ordinance.

6.03 *Disruption of Wildlife Habitats of Threatened or Endangered Species*

The proposed upgrades are primarily limited to the existing Substation which does not contain suitable habitat for threatened or endangered wildlife or vegetation species. There will be minor tree removal but compensatory planting will be provided where practicable. The temporary disturbance from construction activity is limited to the Substation and will not result in disruption of habitats associated with threatened or endangered species. The surrounding wooded area will remain as is and will not be disrupted and remain a suitable habitat for wildlife and vegetation species. It should be noted that all of the species (with exception of the great blue heron) listed by the NHP data as occurring on and/or within the immediate vicinity of the project site are grassland birds where native grasslands/fallow agricultural lands comprise suitable habitat. Native grasslands/fallow agricultural lands will not be impacted by the proposed project.

6.04 *Air Quality Impacts*

Local air quality may be temporarily affected by emissions from heavy construction equipment and delivery trucks to mobilize materials on and off the site. This effect should be minimal as emissions will not be excessive and dispersion of particulates is rapid over a spatial area. An approved Soil Erosion and Sediment Control Plan will be implemented to mitigate the potential of dust hazards during construction activities.

6.05 *Traffic and Noise Impacts*

The proposed upgrades to the Substation will have minimal short-term traffic impacts during the construction phase. PSE&G will use an on-site area for construction laydown and equipment storage and a temporary area on Lot 2.10 for contractor parking/trailers. All delivery trucks will access the site on a scheduled basis to prevent traffic disruption. The street intersections approximate to the project will remain accessible for residents and local traffic during construction.

Upon project completion, the Substation will be unmanned with nominal traffic generation. Since there will be minimal impact on the public right-of-way during the normal operation of the facility, a traffic study is not required for this application.

Anticipated noise-generating sources shall include all construction heavy machinery, power mechanical hand tools, and trucks mobilizing material on and off the site between deliveries. PSE&G contracted Ostergaard Acoustical Associates to prepare an acoustical study to specifically evaluate the current and proposed noise levels that would be generated by the proposed improvements. Please refer to this report for further information.

7.0 ALTERNATIVES

The No-Action (i.e., “No Build” scenario) alternative is not to construct the upgrades and continue to use the property as is. Existing conditions at the Substation would not be modified and would continue in their current state. This alternative would result in no “new” impacts or disruptions to the existing environment. The "No Action" alternative, however, would not achieve the basic purpose of the project, which is to relieve system overloads and enhance reliability to the Township of Franklin.

The proposed upgrade (Build Alternative) was developed by PSE&G to accommodate the increase in electrical energy supplies to the area and offload the overloaded Sunnymeade and Mount Rose Substations. The Build Alternative will consist of new line positions, new transformers, new switchgear, new circuits, and associated landscaping and stormwater management.

8.0 COMMUNITY IMPACT STATEMENT

The proposed improvements to the existing Substation will have no adverse impacts to the community such as population, schools, municipal facilities and services (i.e. police, emergency services, fire department, garbage collection, etc.) or fiscal impacts.

At completion of the project, the upgrades will provide an overall benefit to the Township of Franklin and surrounding area by providing safe, reliable, and adequate electric supplies in an area suitable for public utilities.

9.0 LICENSES, PERMITS AND OTHER APPROVALS REQUIRED BY LAW

The following approvals, permits and/or certifications are required for this project:

- Franklin Township Zoning Board of Adjustment for Conditional Use and Height Variances, Preliminary and Final Major Site Plan Approval
- Delaware and Raritan Canal Commission Individual Approval
- Somerset County Planning Board Site Plan Exemption
- Somerset-Union Soil Conservation District for Soil Erosion and Sediment Control Certification
- Township of Franklin Construction Office for Construction Permits
- Township of Franklin Engineering Permits including but not limited to: Soil Import/Export Permits, Tree Removal and Road Opening Permits

10.0 DOCUMENTATION

- New Jersey Department of Agriculture (NJDA) (January 2014, Revised July 2017). The Standards for Soil Erosion and Sediment Control in New Jersey. Accessed November 2025 at: <https://www.nj.gov/agriculture/divisions/anr/pdf/2014NJSoilErosionControlStandardsComplete.pdf>
- New Jersey Department of Environmental Protection (NJDEP) NJ-GeoWeb, last updated December 3, 2025 at: <https://www.nj.gov/dep/gis/geoweb splash.htm>
- Franklin Township Municipal Code at: <https://ecode360.com/FR0703>
- Franklin Township Master Plan Amendments, dated June 2007, July 2008, Fall 2009, October 2012 and Fall 2013, Reexamination Master Plan & Development Regulations, Adopted March 2, 2016
- Franklin Township Historic Preservation Plan dated July 19, 2019
- Franklin Township Environmental Resource Inventory May 2019

APPENDIX A –

MAP FIGURES

FIGURE 1 - USGS QUAD MAP

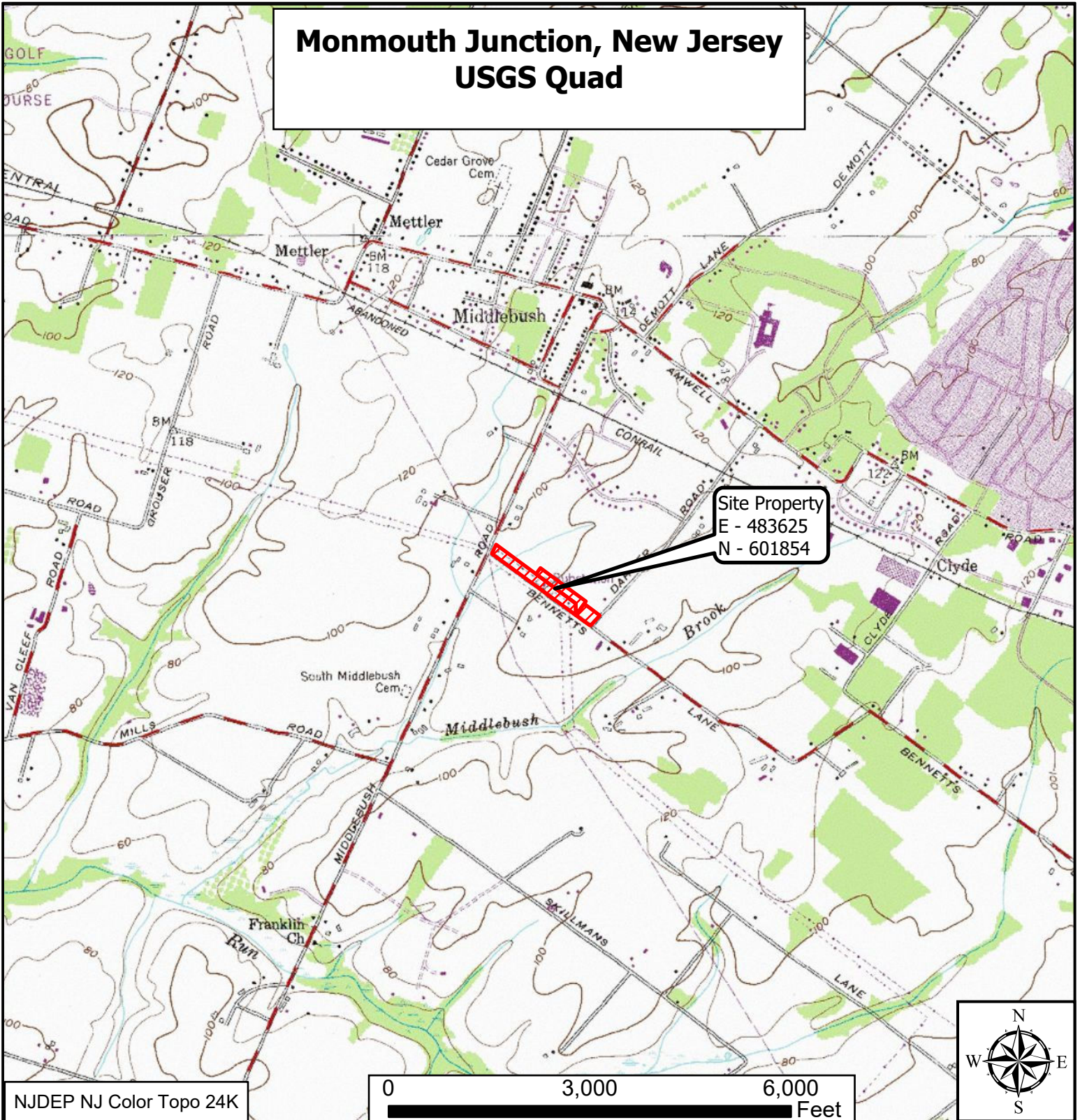
FIGURE 2 - ROAD MAP (NJDOT 2015)

FIGURE 3 - TAX MAP

FIGURE 4 - SOILS MAP

FIGURE 5 - FEMA FLOOD MAP

Monmouth Junction, New Jersey USGS Quad



NJDEP NJ Color Topo 24K



PSEG

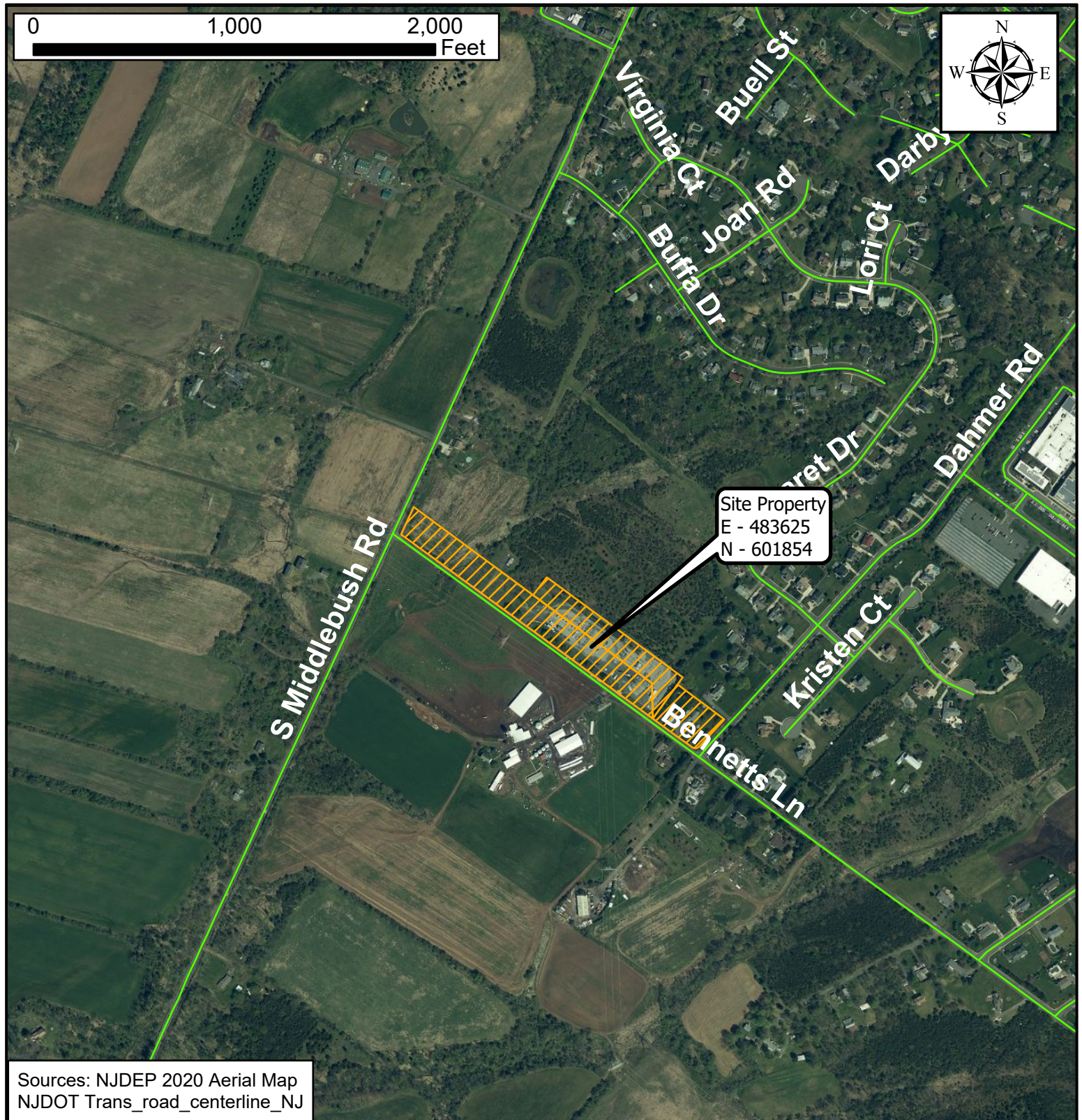
4000 Hadley Road
South Plainfield
New Jersey 07080

BENNETTS LANE SUBSTATION
Block 84.03, Lots 1, 2.02 & 2.10
160 SOUTH MIDDLEBUSH ROAD
TOWNSHIP of FRANKLIN
SOMERSET COUNTY, NEW JERSEY

Topo Map

Figure 1

0 1,000 2,000 Feet



Sources: NJDEP 2020 Aerial Map
NJDOT Trans_road_centerline_NJ

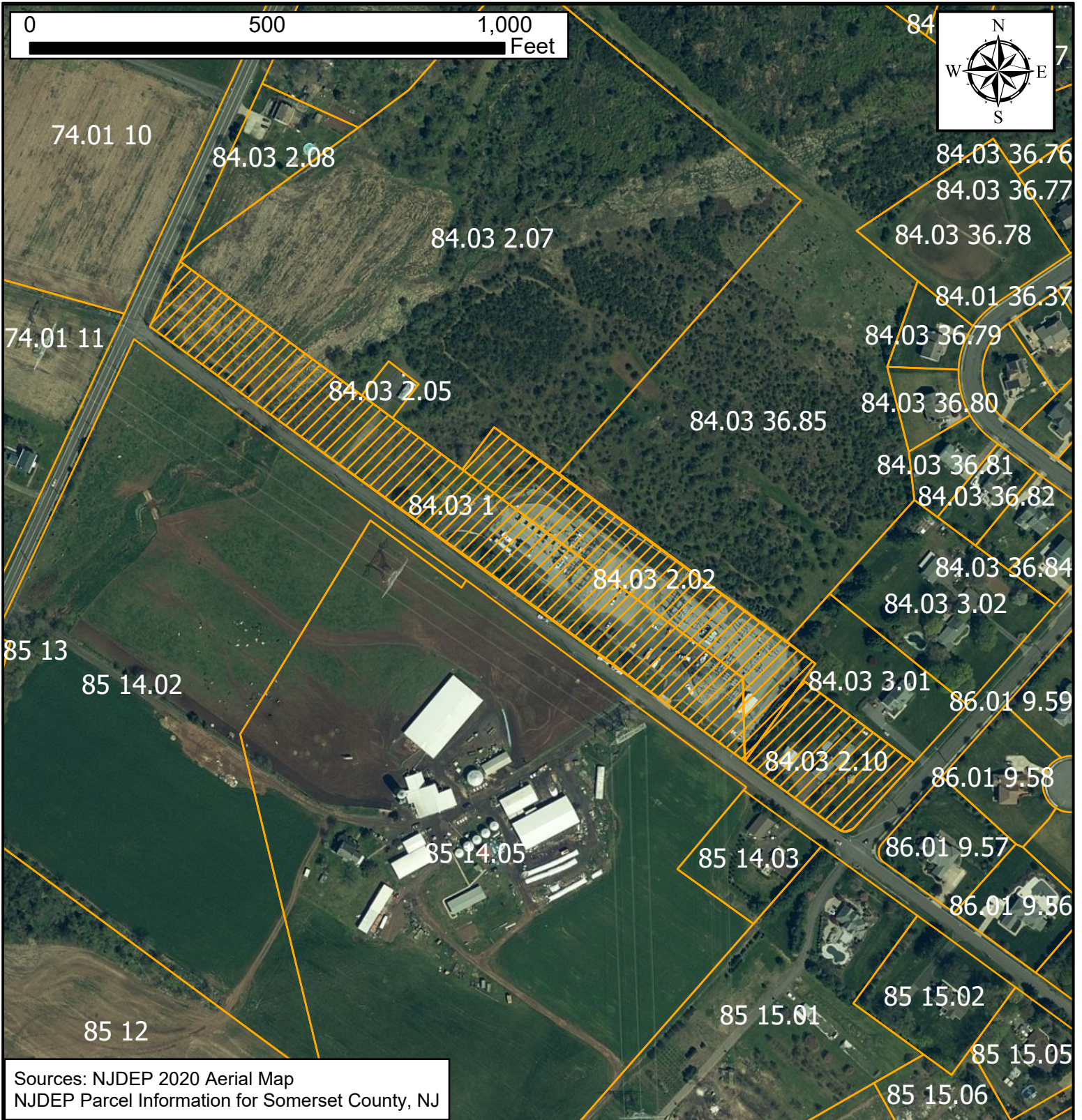


4000 Hadley Road
South Plainfield
New Jersey 07080

BENNETTS LANE SUBSTATION
Block 84.03, Lots 1, 2.02 & 2.10
160 SOUTH MIDDLEBUSH ROAD
TOWNSHIP of FRANKLIN
SOMERSET COUNTY, NEW JERSEY

Road Map

Figure 2



Sources: NJDEP 2020 Aerial Map
 NJDEP Parcel Information for Somerset County, NJ



4000 Hadley Road
 South Plainfield
 New Jersey 07080

BENNETTS LANE SUBSTATION
 Block 84.03, Lots 1, 2.02 & 2.10
 160 SOUTH MIDDLEBUSH ROAD
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 SOMERSET COUNTY, NEW JERSEY





Tax Map

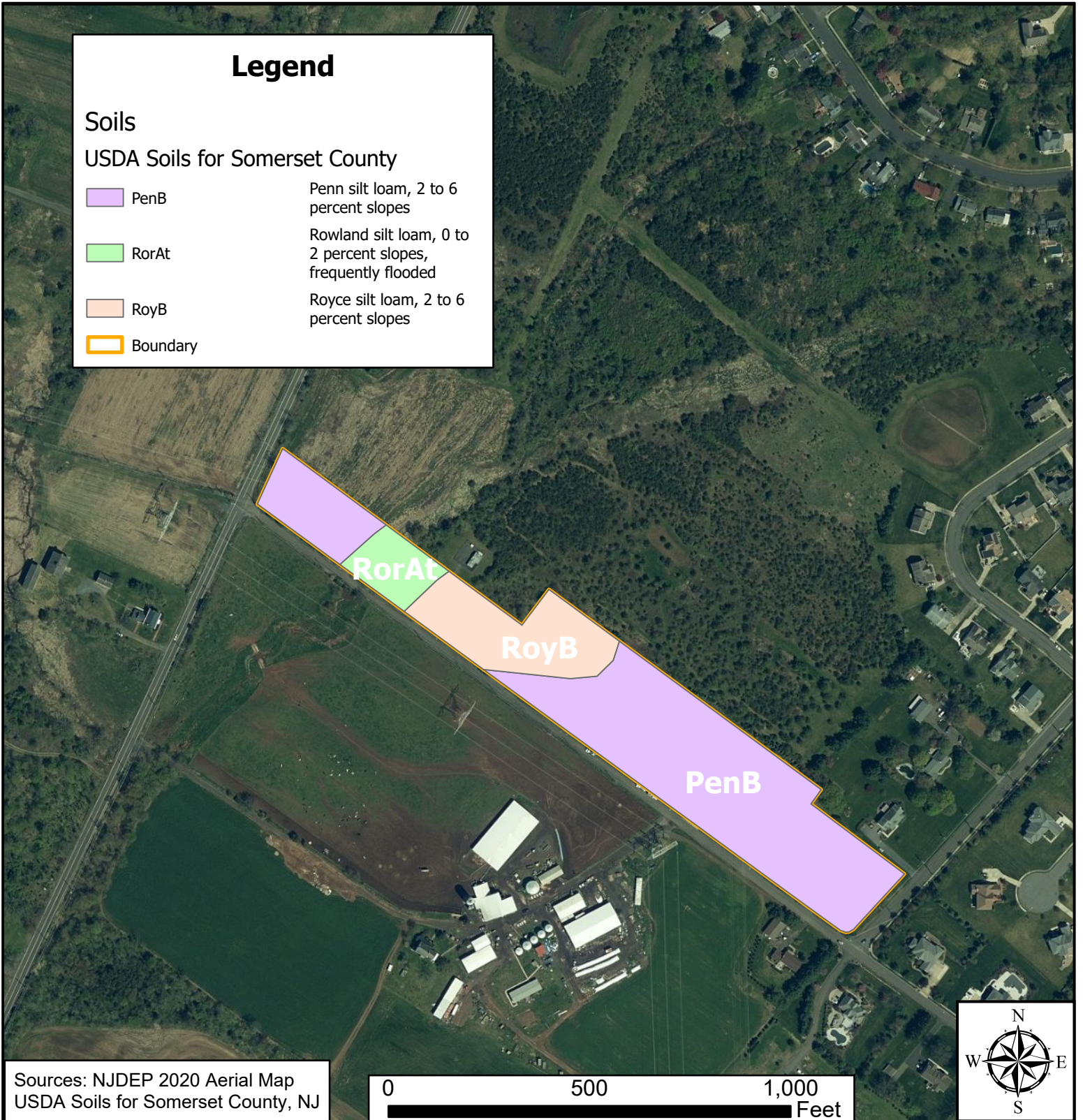
Figure 3

Legend

Soils

USDA Soils for Somerset County

-  PenB Penn silt loam, 2 to 6 percent slopes
-  RorAt Rowland silt loam, 0 to 2 percent slopes, frequently flooded
-  RoyB Royce silt loam, 2 to 6 percent slopes
-  Boundary



Sources: NJDEP 2020 Aerial Map
USDA Soils for Somerset County, NJ

0 500 1,000 Feet



4000 Hadley Road
South Plainfield
New Jersey 07080

BENNETTS LANE SUBSTATION
Block 84.03, Lots 1, 2.02 & 2.10
160 SOUTH MIDDLEBUSH ROAD
TOWNSHIP of FRANKLIN
SOMERSET COUNTY, NEW JERSEY

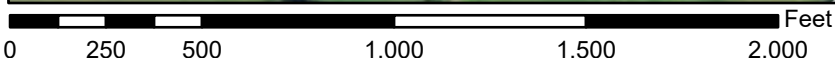
Soil Map

Figure 4

National Flood Hazard Layer FIRMMette



74°32'4"W 40°29'19"N



1:6,000 74°31'27"W 40°28'52"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D

OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D

GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall

OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance
		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature

MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **1/2/2026 at 4:09 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Figure 5

APPENDIX B –

NHP/LANDSCAPE PROJECT DATA



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://www.nj.gov/dep/parksandforests/natural/index.html>

PHILIP D. MURPHY

Governor

SHAWN M. LATOURETTE

Commissioner

TAHESHA L. WAY

Lt. Governor

December 23, 2025

Cady Piarulli
PSE&G
4000 Hadley Road, Mail Code 446
South Plainfield, NJ 07080

Re: PSE&G Bennetts Lane Substation
Block(s) - 84.03, Lot(s) - 1, 2.02, 2.10
Franklin Township, Somerset County

Cady Piarulli:

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.

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 and 2 (attached) to determine if any priority sites are located on or in the immediate vicinity of the 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://nj.gov/dep/parksandforests/natural/docs/nhpcodes_2010.pdf.

NHP File No. 25-4007445-35525

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://dep.nj.gov/njfw/landscapeapp/>, 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. 25-4007445-35525

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

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites On Site	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.4 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
<i>Aves</i>								
	American Kestrel	Falco sparverius	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	American Kestrel	Falco sparverius	Nest	3	NA	State Threatened	G5	S2B,S2N
	Bobolink	Dolichonyx oryzivorus	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Eastern Meadowlark	Sturnella magna	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Grasshopper Sparrow	Ammodramus savannarum	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Upland Sandpiper	Bartramia longicauda	Breeding Sighting-Confirmed	4	NA	State Endangered	G5	S1B,S1N
	Vesper Sparrow	Poocetes gramineus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N

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

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. Natural Heritage Priority Sites within the Immediate Vicinity	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.4 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	Strank
<i>Aves</i>								
	American Kestrel	Falco sparverius	Breeding Sighting	3	NA	State Threatened	G5	S2B,S2N
	American Kestrel	Falco sparverius	Nest	3	NA	State Threatened	G5	S2B,S2N
	Bobolink	Dolichonyx oryzivorus	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Eastern Meadowlark	Sturnella magna	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Grasshopper Sparrow	Ammodramus savannarum	Breeding Sighting	3	NA	State Threatened	G5	S2B,S3N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Northern Harrier	Circus hudsonius	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N
	Upland Sandpiper	Bartramia longicauda	Breeding Sighting-Confirmed	4	NA	State Endangered	G5	S1B,S1N
	Vesper Sparrow	Poocetes gramineus	Breeding Sighting	4	NA	State Endangered	G5	S1B,S3N